

₹ 110/-  
JANUARY 2022



(Creating A Way For Govt. Jobs)  
**Banking Academy**  
(Preparation for All Types of Competitive Exams)

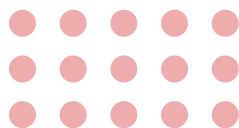


## Important Highlights of the Month

- ▶ Cambridge Dictionary crowns 'perseverance' as 2021 word of the year
- ▶ Indian tech wizard Parag Agrawal takes over as CEO of Twitter
- ▶ Magnus Carlsen claims fifth FIDE World Chess Championship
- ▶ Lionel Messi wins Ballon d'Or for a record-extending 7th time
- ▶ Bipin Rawat: India's top general dies in helicopter crash
- ▶ Elon Musk named Time's 2021 'Person of the Year'
- ▶ Global Multidimensional Poverty Index Explained
- ▶ India wins Miss Universe crown after 21 years
- ▶ Farm laws and their Repealing: Explained
- ▶ World Athletics Awards 2021 Announced



**BIPIN RAWAT**



**MAGNUS CARLSEN**



**LIONEL MESSI**



**PARAG AGARWAL**



**HARNAAZ  
SANDHU**

## 250 High Level MCQ's

- |                   |             |             |
|-------------------|-------------|-------------|
| ▶ Statement Based | ▶ History   | ▶ Physics   |
| ▶ Current Affairs | ▶ Polity    | ▶ Chemistry |
| ▶ Economics       | ▶ Geography | ▶ Biology   |

## Mock Tests 2022

IBPS PO Prelims  
SSC CGL Prelims  
RRB NTPC Mains



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# Banking Academy

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The Current Affairs January-2022 Magazine covers the current events that happened in the month of December 2021. Current Affairs is a crucial component of any competitive exams including IAS\PCS, SSC, Banking and MBA.

Current Affairs plays the bigger role in many competitive and government exams. It holds the power of making or breaking your chance of success. Therefore, the candidates should cover the Current Affairs thoroughly and smartly.



However, there are huge numbers of students who are confused about how to prepare for the current affairs section of the different competitive exams. To clear such doubts and confusion, Banking Academy has come up with this idea.

We at Banking Academy work tirelessly to create this magazine and bring it to you with a great sense of gratitude every month. We always strive for excellence and therefore, our research team continuously endeavors to give you the best material.

The Current Affairs January-2022 magazine is divided into different sections keeping in mind the need of various exams. The sections covered namely are Books and Authors, Revision of the previous Month, Recent Appointments, National News, International Events, Banking & Economy, MoU's Signed, Awards & Recognitions, Sports, Science & Technology, Obituaries, Miscellaneous Events, Trending Topics, Important Days along with 3 Model papers (IBPS PO Prelims, SSC CGL Prelims & RRB NTPC Mains).

Every news item in each section is chosen on the basis of its importance in competitive exams. We also kept a close eye on some of the recent analytical stories which may have a direct impact on your understanding of the issue.

Highlights of the issue are: Farm Laws & their Repealing, World Athletics Awards and Global Multidimensional Poverty Index.

Presentation of the given Current Affairs has been planned meticulously. It has been planned in such a way that it remains in the minds of readers for a longer duration.

**Chetan Bhimani**  
Director



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### ABOUT US:

**Edition:** JANUARY 2022

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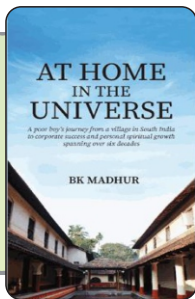
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**News Credit:** BBC/ Reuters/ Aljazeera/ PIB/ PTI/ Business Standard/ The Hindu/ Indian Express/ Times of India/ Economic Times/ Business Line/ India Today/ Moneycontrol and all other leading Newspapers



## Books and Authors



**Book:** At Home In The Universe

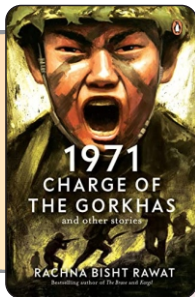
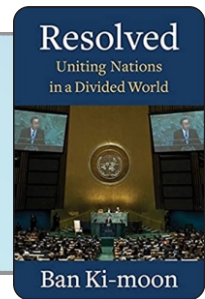
**Author:** Bala Krishna Madhur

**About:** The book is the autobiography of B K Madhur, a former CEO at DHFL Property Services Ltd, and one of the key personalities in establishing Dewan Housing.

**Book:** Resolved: Uniting Nations in a Divided World

**Author:** Ban Ki-moon

**About:** This book is an autobiography of the Former United Nations Secretary-General Ban Ki-moon elaborating his life experiences and challenges faced during his tenure.



**Book:** 1971: Charge of the Gorkhas and Other Stories

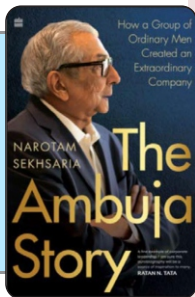
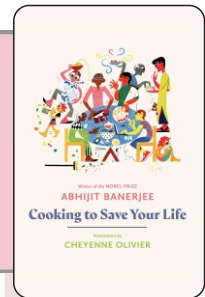
**Author:** Rachna Bisht Rawat

**About:** The book includes the story of the flight lieutenant who went missing after his plane crashed inside Pakistan to the 'last khukri attack' in modern military history.

**Book:** Cooking to Save your Life

**Author:** Abhijit Banerjee

**About:** In this book the author elaborates his cooking skills via which he has delighted his friends, colleagues and students.



**Book:** The Ambuja Story

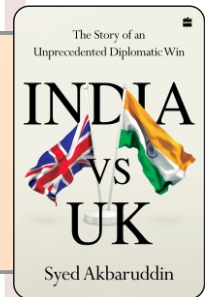
**Author:** Narotam Sekhsaria

**About:** The book features the story of author's rise from a small cotton trader to setting up one of the largest cement companies in the country, Ambuja cement.

**Book:** India vs UK: The Story of an Unprecedented Diplomatic Win

**Author:** Syed Akbaruddin

**About:** The book features the behind-the-scenes details on India's victory against the UK in the elections to the International Court of Justice (ICJ) in 2017.



**Book:** Indian Innings: The Journey of Indian Cricket from 1947

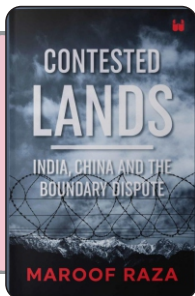
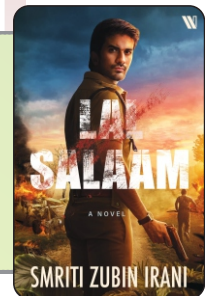
**Author:** Ayaz Memon

**About:** It is an anthology of Indian Cricket and marked several insights of Indian cricket of the last 70 years.

**Book:** Lal Salaam: A Novel

**Author:** Smriti Zubin Irani

**About:** The novel is inspired by the killings of 76 Central Reserve Police Force (CRPF) personnel during the Maoist attack in Dantewada, Chhattisgarh in April 2010.



**Book:** Contested Lands: India, China and the Boundary Dispute

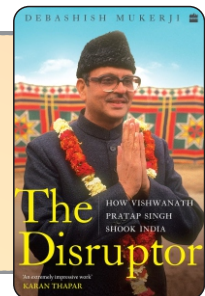
**Author:** Maroof Raza

**About:** The book features the history of India's boundary making with Tibet and China and analyses the current India-China boundary contestation.

**Book:** The Disruptor: How Vishwanath Pratap Singh Shook India

**Author:** Debashish Mukerji

**About:** The book presents a detailed account on India's eighth PM, Vishwanath Pratap Singh, who served as PM between December 1989 to November 1990.



## Let's Recap

1. Who has been appointed as Permanent Chief Executive Officer of International Cricket Council? **Geoff Allardice**
2. Recently, who has become the first female acting President of the United States? **Kamala Harris**
3. PM Modi has launched the NCC Alumni Association. Who has been enrolled first member of the association? **Narendra Modi**
4. Who has been appointed as the brand ambassador of TRIFED Aadi Mahotsav? **Mary Kom**
5. Which state government has appointed actor Salman Khan as Covid vaccination ambassador? **Maharashtra**
6. Who has been appointed as the new Chairman of the ICC Men's Cricket Committee? **Sourav Ganguly**
7. Who has been appointed as United Nations Resident Coordinator in India? **Shombi Sharp**
8. Name the former Indian batsman who will take charge as Head of National Cricket Academy? **VVS Laxman**
9. Who has been elected to the International Law Commission for a 5-year-term at the United Nations? **Bimal Patel**
10. Who has been appointed as the new Secretary General of Rajya Sabha by replacing P P K Ramacharyulu? **Pramod Chandra Mody**
11. Who has been appointed as Director-General of Narcotics Control Bureau? **Satya Narayan Pradhan**
12. Who has been named as Goodwill Ambassador of UN-World Food Programme? **Daniel Brühl**
13. Which Indian cricketer has been appointed as Brand Ambassador of My11Circle app? **Mohammed Siraj**
14. Who has been re-elected as the Prime Minister (PM) of Japan? **Fumio Kishida**
15. Recently, the government has appointed whom as the chief of Central Armed Police Forces and National Disaster Response Force? **Sheel Vardhan Singh**
16. Who has been appointed as new Director General of National Disaster Response Force? **Atul Karwal**
17. Who has been appointed as the next Chief of Naval Staff? **R Hari Kumar**
18. The International Human Rights Foundation (IHRF) has appointed whom as the High Representative for Youth? **Spaniard Daniel del Valle**
19. Who has been re-elected as the President of the International Gymnastics Federation for a period of three years? **Morinari Watanabe**
20. Who has been taken charges as the CMD of PTC India? **Rajib Kumar Mishra**
21. Recently, Bandhan Bank has named Zubeen Garg as brand ambassador for which state? **Assam**
22. Who has become the new chief of British multinational universal bank Barclays? **CS Venkatakrishnan**
23. Who will be the head of three-member committee setup by supreme court to look into allegations of unauthorized surveillance using Pegasus? **Justice R V Raveendran**
24. Which neobank for Indian Small to Medium-sized Businesses (SMBs), announced Padma Shri Awardee actor Manoj Bajpayee as the brand ambassador? **FloBiz**
25. Name the Indian-Origin Canadian politician who has selected as the new Defence Minister of Canada? **Anita Anand**
26. Who has been re-elected as President of Uzbekistan? **Shavkat Mirziyoyev**
27. Who is the Chairman of the seven-member Economic Advisory Council, that has been reconstituted recently? **Bibek Debroy**
28. Karthika Purnima, which is also known as Boita Bandana has been celebrated in which state? **Odisha**
29. Which station of Indore has been renamed as Tanya Mama railway station? **Patalpani Railway station**
30. Recently, Home Minister lays foundation stone of Rani Gaidinliu Tribal Freedom Fighters Museum in which state? **Manipur**
31. Prime Minister Narendra Modi has inaugurated the Arjun Sahayak Project in which state? **Uttar Pradesh**
32. Recently, President Ram Nath Kovind has been inaugurated Adarsh Village "Sui" in which state? **Haryana**
33. First anti-air pollution tower of Uttar Pradesh has been inaugurated in which city? **Noida**

34. Recently a village in India named "Pochampally" has selected as one of the best tourism villages in the country. It is located in which state? **Telangana**
35. India's first fisheries business incubator launched in which city? **Gurugram**
36. The revamped Rezang La War memorial has been inaugurated by Defence Minister Rajnath Singh in which state/UT? **Ladakh**
37. Food Corporation of India, as a novel initiative has launched India's First Food Museum in which state? **Tamil Nadu**
38. The Central Government has given its approval to the new Rajya Sainik Board for which Union Territory? **Ladakh**
39. Defence Minister Rajnath Singh has inaugurated three days long "Rashtra Raksha Samarpan Parv" in which state? **Uttar Pradesh**
40. Which state government has launched "Ration Aapke Gram Scheme" as its first phase has been started recently? **Madhya Pradesh**
41. Which state government has adopted "Pakke Declaration" on climate change? **Arunachal Pradesh**
42. The recently inaugurated Purvanchal expressway in Sultanpur district connects which two cities of Uttar Pradesh? **Lucknow and Ghazipur**
43. India's first Grass Conservatory has launched by the research wing in which state? **Uttarakhand**
44. Which state has approved "Kaiser-i-Hind" as its state butterfly? **Arunachal Pradesh**
45. Prime Minister Narendra Modi has inaugurated the Bhagwan Birsa Munda Museum in which city of Jharkhand on Janjatiya Gaurav Divas? **Ranchi**
46. Which state has become first to approve Tissue Culture-Based Seed Potato Rules? **Punjab**
47. Which state government has signed an MoU with the United States-based Rocky Mountain Institute (RMI), to provide technical support for state's Electric Vehicle (EV) policy? **Maharashtra**
48. Which Indian motor company, has joined the United Nations Global Compact, the world's largest voluntary corporate sustainability initiative? **TVS motor company**
49. Which state has become first in the country to have metro facilities in five districts? **Uttar Pradesh**
50. Recently The 5<sup>th</sup> edition of the three day-long Ganga Utsav has been organised. In context to same what does C stands for in the abbreviation NMCG? **Clean**
51. What is the new name of the Mumbai-Karnataka region comprising seven districts in Karnataka? **Kittur-Karnataka**
52. The Government of Madhya Pradesh has written to the Central Government to rename Habibganj Railway Station in Bhopal after whom? **Rani Kamplapati**
53. Which city of Telangana has been added as a destination in the IRCTC's Ramayana Circuit train? **Bhadrachalam**
54. Which state has launched a first of its kind road safety initiative named "Rakshak" to train first responders of road accidents? **Odisha**
55. Union Minister of Housing and Urban Affairs & Petroleum and Natural Gas, Hardeep S. Puri has unveiled the statue of Rani Lakshmi Bai in which state? **Haryana**
56. Prime Minister Narendra Modi will dedicate India's first world-class railway station in which city of Madhya Pradesh? **Bhopal**
57. Which state government has launched an Anti-Open Burning Campaign from November 11 to curb open burning and air pollution? **Delhi**
58. Which edition of Cyber security conference has been inaugurated by Chief of Defence Staff Bipin Rawat? **14th**
59. Which Indian city has joined UNESCO's Creative Cities Network 2021? **Srinagar**
60. Which state government has launched the Shramik Mitra scheme to ensure all construction workers in the state? **Delhi**
61. Meghalaya government has approved a proposal to upgrade which town of West Khasi Hills district to a full-fledged district? **Mairang**
62. India's first rooftop drive-in theatre launched in which city? **Mumbai**
63. India International Trade Fair (IITF) will be organized in which city from 14th of November to 27th November? **New Delhi**
64. What is the name of Indian manned Ocean Mission that has been launched by Union Minister Jitendra Singh in Chennai? **Samudrayan**
65. Civil Aviation Minister Jyotiraditya Scindia has launched Krishi Udan 2.0 scheme to implement in how many airports under which cargo-related infrastructure will be built? **53**
66. Recently, Union Home Minister Amit Shah has been launched "Ghasiyari Kalyan Yojana" in which city of Uttarakhand? **Dehradun**



67. Which Central American country has planned to build the world's first "Bitcoin City"? **El Salvador**
68. Which edition of International Emmy Awards took place in New York City? **49th**
69. Which country has set a new Guinness World Record for the largest orchestra with 8,573 musicians playing together for more than five minutes? **Venezuela**
70. Which country formed a Parliamentary Friendship Association with India recently? **Sri Lanka**
71. Which country is set to host the UN climate change conference COP27 in 2022? **Egypt**
72. Which country has launched a campaign to attract over 30000 talents globally to study, work and establish start-ups by 2023? **Finland**
73. Which country has been re-elected to the UN Cultural and Educational Organisation Executive Board for a four-year term from 2021 to 2025? **India**
74. Five new Integrated Check Posts will be set up by India on the which border to ensure security and better connectivity? **India-Bangladesh**
75. Which government has invited the IAF to participate with the Sarang and Suryakiran Aerobatics Teams in the Dubai Air Show? **UAE**
76. Which organisation released a report titled "Sustainable Urban Cooling Handbook"? **UNEP**
77. Which country has launched a ship named after a gay rights activist Harvey Milk? **USA**
78. Which country has launched an electric vehicle awareness web portal called "e-Amrit" at the ongoing COP26 Summit in UK? **India**
79. Which country has recently become the 101st member country of the International Solar Alliance? **United States**
80. Which country has unveiled commemorative £5-coin celebrating legacy of Mahatma Gandhi? **UK**
81. Name the CFO of ByteDance who will be stepping down to focus on his role as CEO of TikTok? **Shou Zi Chew**
82. Recently The 2021 G20 (Group of Twenty) Summit was held in Rome, Italy, under the chairmanship of: **Mario Draghi**
83. Which Bank has got the award for the best "Digital Financial Services" under the "Regional Rural Banks" category by Associated Chambers of Commerce and Industry of India? **Karnataka Vikas Grameena Bank**
84. Recently Indian Navy frigate Tushil was launched. In context to the same Talwar class frigates are built by which country for Indian Navy? **Russia**
85. The 19th India-Bangladesh Line of Credit (LOC) review meeting has recently been held in which city? **Dhaka**
86. The UN Disarmament Week is observed annually during which month? **October**
87. Which institution has released the "Global Threat Assessment report 2021"? **WeProtect Global Alliance**
88. Which country has recently reported hundreds of cases of infection caused by the bacteria salmonella? **USA**
89. Which country has recently given in-principle support for net zero by 2050? **Australia**
90. Which country has recently proposed a "Wealth Tax"? **USA**
91. Reserve Bank of India has authorized which bank to collect Direct Taxes? **RBL Bank**
92. "Retail Direct Scheme" and "Integrated Ombudsman Scheme" have been launched by which organisation? **Reserve Bank of India**
93. Which institution has launched the "Swavalamban Challenge Fund (SCF)"? **SIDBI**
94. Which multilateral development bank has given its approval for a USD 150 million loans to the Indian Government for the implementation of the Sustainable Urban Services Program for the Chennai Metropolitan Area? **Asian Infrastructure Investment Bank**
95. Which financial company has launched "Voice Trading" powered by artificial intelligence (AI) that will allow users to place a trade? **Paytm**
96. The Swiss brokerage firm, UBS Securities has revised India's real GDP growth projection for 2021-22 to what per cent? **9.5%**
97. Cryptocurrency exchange Coinbase bought which AI-driven autonomous voice agent startup, in its first startup acquisition in India? **Agara**
98. The Reserve Bank of India has announced to introduce the Internal Ombudsman mechanism for which types of Financial Company? **Non-Banking Financial Company**
99. Small Industries Development Bank of India has entered into a collaboration with which tech giant for piloting a social impact lending programme? **Google India**



100. Which government bank has signed an agreement with Jamshedpur Football Club to promote football? **State Bank of India**
101. Indian Oil Corporation Limited has tied up to collaborate in Renewable Energy with which company? **National Thermal Power Corporation**
102. Recently, India has signed a \$60 million loan pact with which international bank for Agartala City Urban Development Project? **Asian Development Bank**
103. Financial Service Company Junio has tied up with which company for debit card for pre-teens and teenagers? **RuPay**
104. Defence Research and Development Organisation has signed an agreement with which country for development of dual-use technologies? **Israel**
105. Recently India has signed two agreements for deepening bilateral relations with which country? **Gambia**
106. Ministry of Electronics and Information Technology has partnered with which tech giant to launch "Appscale Academy"? **Google**
107. Government of India and Asian Development Bank (ADB) has signed a \$112 million loan in order to develop water supply infrastructure in which state? **Jharkhand**
108. Which bank has signed a memorandum of understanding with the National Small Industries Corporation for providing credit support to the MSME sector? **HDFC Bank**
109. Recently centre has signed Karbi Anglong Agreement to establish peace in Karbi Anglong region. In context to same the Karbi Agreement related to which Indian state? **Assam**
110. Which state Administration has signed an MoU with BRO for upgradation of road network in the state/UT? **Ladakh**
111. Recently, Indian Army has signed a contract with a Bengaluru-based company for how many SkyStrikers? **100**
112. Which nation signed a Project Agreement with India for Air-Launched Unmanned Aerial Vehicle? **US**
113. Which classical music streaming service has been acquired by Apple to include its audio streaming service Apple Music? **Primephonic**
114. Recently, which company has acquired Indian payments company BillDesk for \$4.7 billion? **PayU**
115. Bank of Baroda has been partnered with which company to provide Banking Service through business correspondent (BC) model? **PayPoint**
116. Recently, Defence Ministry has signed a historic deal with which company for procurement of 56 C-295 aircraft? **Airbus**
117. Who has been awarded by the "Tata Literature Live!" Lifetime Achievement Award 2021? **Anita Desai**
118. Which state has been awarded as the best marine State in India in the Fisheries awards 2021 held in Bhubaneswar? **Andhra Pradesh**
119. Which Indian Air Force ace pilot has accorded by "Vir Chakra" by the President of India in Gallantry Awards 2021? **Abhinandan Varthaman**
120. Which city has been awarded the "Cleanest City" of India award for the 5th consecutive year in the "more than 1 lakh" population category? **Indore**
121. Which police station in Delhi has been ranked as the best police station of India for the year 2021 by the Ministry of Home Affairs? **Sadar Bazar Police Station**
122. Which Indian badminton player has been selected for the prestigious Lifetime Achievement Award for 2021 by the Badminton World Federation Council? **Prakash Padukone**
123. Who has won the 2021 Booker Prize? **Damon Galgut**
124. Which Indian actress has facilitated with the Indian Film Personality of the Year award at the International Film Festival of India 2021? **Hema Malini**
125. Which novel writer has received Manipur State Award for his novel? **Beryl Thanga**
126. The Which road construction authority has received the Guinness World Records certificate for constructing the world's highest motorable road at 19,024 feet at Umlingla Pass in Ladakh? **BRO**
127. Name the author who has won the 2021 JCB prize for Literature, for his book "Delhi: A Soliloquy"? **M Mukundan**
128. Who has won the men's singles title at the 2021 Indonesia Masters Super 750 badminton tournament? **Kento Momota**
129. The Confederation of Indian Industry (CII) has decided to organise its flagship event "Connect 2021" from November 26 to 27 in which city of India? **Chennai**

130. Which Indian skier has qualified for the Beijing Winter Olympics 2022? **Arif Khan**
131. Who has won the 2021 F1 Qatar Grand Prix? **Lewis Hamilton**
132. Garbine Muguruza, who has won the 2021 WTA Finals, hails from which country? **Spain**
133. Which tennis player has been won The Vienna Tennis Open 2021? **Alexander Zverev**
134. The Asian Shooting Confederation has increased the Olympic quota places for Asia from 38 to how much? **48**
135. Who will lead the Indian men's junior hockey team in the FIH Junior Hockey World Cup 2021 in Bhubaneswar? **Vivek Sagar Prasad**
136. Who will lead Team India in the first test match against New Zealand on November 25th? **Ajinkya Rahane**
137. Who has been named as India's 72nd Grandmaster? **Mitrabha Guha**
138. Novak Djokovic has won the 6th Paris Title and his record 37th Masters Title by defeating whom? **Danill Medvedev**
139. Which bowler has become youngest to take 400 T20 wickets? **Rashid Khan**
140. Which state has developed country's "first-ever" bamboo made cricket bat and stumps? **Tripura**
141. Which IT company of India has joined British racing team Jaguar Racing as the title partner, ahead of the ABB FIA Formula E World Championship? **TCS**
142. Who has become the seventh male boxer to win a medal at World Boxing Championships? **Akash Kumar**
143. Who has become the first Indian male to sign up for Big Bash League (BBL)? **Unmukt Chand**
144. Who was the Australian player to achieve the feat of scoring 100 runs as well as take 10 wickets in a single Test match? **Alan Davidson**
145. Who has become the "2021 MotoGP World Champion"? **Fabio Quartararo**
146. Who has become the first Indian woman wrestler to win a Silver medal in the women's 57-kg category finals at the World Wrestling Championships in Oslo, Norway? **Anshu Malik**
147. What is the height of biggest cricket bat designed by Pernod Ricard India Ltd, on Tank Bund? **56.10 feet**
148. Who has won the Mens' single 2021 Denmark Open Badminton held at the Odense Sports Park, Denmark? **Viktor Axelsen**
149. Which two cities will be the part of the Indian Premier League (IPL) from 2022? **Ahmedabad and Lucknow**
150. Which state will host 2022 South Asian Federation Cross Country Championships? **Nagaland**
151. Which country has successfully test fired The Hypersonic Cruise Missile "Zircon"? **Russia**
152. Which Union Ministry has launched a unified mobile app for the "Azadi Ka Amrit Mahotsav" events? **Ministry of Culture**
153. Which social media platform has recently launched two cyber safety campaigns named "Safe Stree" and "My Kanoon"? **Instagram**
154. What is the name of the famous meteor shower that occurs every year in November? **Leonids Meteor Shower**
155. What is the name given to the Eiffel Tower sized asteroid heading towards Earth in December? **4660 Nereus**
156. Which spaceagency has selected a new Earth Science mission to study the behaviour of tropical storms and thunderstorms, including their effect on the weather and climate change? **NASA**
157. Which Petroleum refineries company has launched an automated fuelling technology called "UFill", to provide a swift, secure and smart experience? **Bharat Petroleum Corporation Limited**
158. The Starlink Satellite Communications Private Limited, a 100% owned subsidiary of \_\_\_\_\_, opened in India. **SpaceX**
159. Under which project, Amazon is planning to launch its first satellites for internet services in the fourth quarter of 2022? **Kuiper**
160. The Radio over Internet Protocol System has been inaugurated for the first time in which port? **Syama Prasad Mookerjee Port**
161. Facebook's Mark Zuckerberg has renamed the social networking site and application Facebook as - **Meta**
162. Which country has successfully launched a state-of-the-art satellite namely "Syracuse 4A" into orbit which was carried off by Ariane 5 rocket? **France**
163. The Defence Research and Development Organisation (DRDO) carried successful test-firing of surface-to-surface which ballistic missile? **Agni-V**

164. Which country has recently launched its first indigenously developed rocket, known as "Nuri"? **South Korea**
165. Which country has launched a new satellite named Shijian-21 to test and verify space debris mitigation technologies? **China**
166. Which space agency is preparing to launch the Double Asteroid Redirection Test (DART) mission to prevent collision of Earth with an asteroid? **NASA**
167. Recently, the Defence Research and Development Organisation (DRDO) has carried a successful maiden test flight of a new version of which missile? **Akash Missile**
168. What is the name of High-Speed Expendable Aerial Target which has successfully flight tested from the Integrated Test Range? **ABHYAS**
169. Hubble Space Telescope observations have revealed the presence of persistent water vapour in "Europa" the icy moon of Jupiter. Hubble Space Telescope belongs to which space organisation? **NASA**
170. Which tech giant has launched a new initiative for nurturing and scaling start-ups in India? **Microsoft**
171. Which country has launched its first solar exploration satellite into space from the Taiyuan Satellite Launch Centre? **China**
172. Babasaheb Purandare, who passed away recently, was associated with which profession? **Historian**
173. Novy Kapadia, who passed away recently, was related to which field? **Sports**
174. Mannu Bhandari, who has passed away recently, was a famous - **Author**
175. Anand Shankar Pandya, who has passed away recently, was the Vice President of which organization? **Vishwa Hindu Parishad**
176. Koneru Ramakrishna, who has passed away recently, was a famous - **Philosopher**
177. Senior political leader Subrata Mukherjee has passed away recently. He was associated with which political party? **TMC**
178. Name the son of Former Union Minister Buta Singh who was also the leader of Delhi Congress, died recently? **Arvinder Singh**
179. Sardar Balvinder Singh Nakai, who has passed away recently, was the chairman of which company? **IFFCO**
180. Nedumudi Venu, who has passed away recently, was a famous - **Actor**
181. Dr Abdul Qadeer Khan of Pakistan has passed away recently; He is known as the father which invention in Pakistan? **Nuclear Bomb**
182. Name the former PM Atal Vihar Vajpayee's Former Private Secretary, who passed away recently? **Shakti Sinha**
183. Name the actor, best known for his role as 'Raavan' in Ramanand Sagar's TV serial Ramayan, who passed away recently? **Arvind Trivedi**
184. Abolhassan Banisadr, who has passed away recently, was the first president of which country? **Iran**
185. Nelliode Vasudevan Namboothiri, who has died recently, was associated with which dance form? **Kathakali**
186. S.S. 'Babu' Nayaran, who has passed away recently, was a legend of which sport? **Football**
187. Women rights activist, poet, and author Kamla Bhasin has been passed away recently. In which year she was awarded by "The Laadli Lifetime Achievement Award"? **2017**
188. YS Dadwal, who has passed away recently, was the former governor of which country? **Arunachal Pradesh**
189. Jimmy Greaves, who has passed away recently, was the famous footballer of which country? **England**
190. Name the Inventor of pocket calculator, who died recently? **Sir Clive Sinclair**
191. Thanu Padmanabhan, who has passed away recently, was a famous - **Physicist**
192. Double Olympic gold medallist Yuriy Sedykh, who has been passed away recently, was related to which sport? **Hammer throw**
193. Keshav Desiraju passed away recently. He associated with which field? **Politics**
194. Jacques Rogge, who has passed away recently, was the former president of which sport association? **International Olympic Committee**
195. Name the author of the book "Sri mad ramayanam" which has been launched by Vice President M Venkaiah Naidu? **Sasi kiran acharya**
196. A book titled as "The Disruptor: How Vishwanath Pratap Singh Shook India" has been authored by whom? **Debashish Mukerji**
197. A book titled "Unshackling India: Hard Truths and Clear Choices for Economic Revival" authored by whom? **Ajay Chhibber, Salman Anees Soz**



198. A newly launched book "Sunrise over Ayodhya – Nationhood in our Times" is authored by whom? **Salman Khurshid**
199. A new book titled as "The Cinema of Satyajit Ray" authored by whom? **Bhaskar Chattopadhyay**
200. Who have authored a new book "Kamala Harris: Phenomenal Woman", a biography of Kamala Harris? **Chidanand Rajghatta**
201. Which government agency has launched a Digi-book named "Innovations for You"? **NITI Aayog**
202. Name the editor of Ruskin Bond who made an anthology of author Ruskin Bond "Writing for My Life"? **Premanka Goswami**
203. Which state's police has topped the "IPF Smart Policing" Index 2021, among 29 states and Union Territories? **Andhra Pradesh**
204. World Television Day is commemorated on which day of November every year? **21 November**
205. What is the theme of this year's World Diabetes Day? **Access to Diabetes Care**
206. When is the "World Pneumonia Day" observed across the world? **November 12**
207. According to the latest report by the World Bank titled "World Bank's Remittance Prices Worldwide Database" which country has become the world's largest recipient of remittances? **India**
208. What is the theme of this years' "World Children's Day"? **A Better Future for Every Child**
209. What is the rank of India in TRACE Bribery Risk Matrix (TRACE Matrix) that measures business bribery risks? **82nd position**
210. "World Toilet Day" has recently been observed on which day of November? **19th November**
211. Guru Nanak Jayanti 2021, also known as Gurupurab, is being celebrated on November 19, 2021. This year it will mark which birth anniversary of Guru Nanak Dev? **552nd**
212. Which state retained its top spot in the National Logistics Index - LEADS 2021? **Gujarat**
213. Which day is celebrated on the Third Thursday of November each year which has fallen on 18 November this year? **World Philosophy Day**
214. Koozhangal, is a which language movie that will be screened at the Indian Panorama segment in the 52 International film festival Goa? **Tamil**
215. Which city has placed at the last of IQAir's pollution index? **Krakow**
216. National Press Day 2021 has recently been observed on which day of November? **16 November**
217. Which state has observed the 44th edition of "Wangala", the festival of 100 Drums Festival? **Meghalaya**
218. World Diabetes Day has been observed on which day of November recently? **14 November**
219. "Clean Green Village week" has been observed under which scheme? **MGNREGS**
220. Which state has observed its foundation day on November 9? **Uttarakhand**
221. Inti tanager (Heliothraupis oneilli), a recently discovered species is a? **Bird**
222. Which edition of the India-Thailand Coordinated Patrol (Indo-Thai CORPAT) is being conducted from 12–14 November 2021? **32nd**
223. Recently, The Union Cabinet has declared which date of November as Janjatiya Gaurav Divas to commemorate the brave tribal freedom fighters? **15 November**
224. National Education Day is celebrated every year on November 11 to commemorate the birth anniversary of whom? **Maulana Abul Kalam Azad**
225. India has been placed at which spot in the global Climate Change Performance Index (CCPI) 2022 released by German watch on the side-lines of the COP26? **10th**
226. What is the rank of India out of 30 countries in the 1st edition of the Global Drug Policy Index released by the Harm Reduction Consortium? **18th**
227. World Science Day for Peace and Development is celebrated each year on which day of November every year? **10 November**
228. Falguni Nayar who has become India's wealthiest self-made woman billionaire is the founder of which company? **Nykaa**
229. Astronaut Wang Yaping has become the first woman from which country to walk in space? **China**
230. Which Indian actor has become the first to have his own digital avatar in a game-based metaverse? **Kamal Haasan**
231. Every year, when is "World Tsunami Awareness Day" observed? **November 5th**
232. India has decided to achieve more than 40 percent cumulative electric power installed capacity from non-fossil-fuel energy resources by which year? **2030**



233. The National Legal Services Day is observed on which day of November annually in India? **09 November**
234. Which government agency has released a comprehensive report titled as "Health Insurance for India's Missing Middle" that brings out the gaps in the health insurance coverage across the country? **NITI Aayog**
235. The Indian Army celebrates October 27 every year as the which day? **Infantry Day**
236. India's first buffalo calf of which breed born in Gujarat by "test tube"? **Banni**
237. World Polio Day has recently been celebrated on which day of October? **October 24**
238. Which state has celebrated "Kittur Rani Chennamma Jayanthi" on October 23, 2021? **Karnataka**
239. The book titled "The Origin Story of India's States" is written by whom? **VS Srinivasan**
240. What is the rank of India in the World Justice Project's (WJP) Rule of Law Index 2021 out of 139 countries and jurisdictions? **79th**
241. Who is the author of the book "Veer Savarkar: The Man Who Could Have Prevented Partition" launched by the Defence Minister Rajnath Singh? **Uday Mahurkar, Chirayu Pandit**
242. What is the rank of India in 2021 Global Food Security Index? **71st**
243. Who has authored the book "The Stars in My Sky: Those Who Brightened My Film Journey"? **Divya Dutta**
244. Name the fifth bilateral maritime exercise started between India-Japan? **JIMEX-21**
245. Which day is observed every year on October 21 since 1959? **Police Commemoration Day**
246. Recently, India and Australia have participated in which edition of the biennial maritime series 'AUSINDEX'? **fourth**
247. What is the rank of India in 2021 Mercer CFS Global Pension Index survey? **40th**
248. The book "Sir Syed Ahmad Khan: Reason, Religion and Nation" is authored by whom? **Prof Shafey Kidwai**
249. Which day is observed all over the world on October 20 every five years? **World Statistics Day**
250. National Security Guard (NSG) force, popularly known as Black Cats, observes its Raising Day on which day of October? **October 16**

**01 DECEMBER**

**Importance:** To show support for people living with HIV, and to commemorate those who have died from an AIDS-related illness.

**By:** James W. Bunn and Thomas Netter

**Motto:** To raise awareness of the AIDS pandemic caused by the spread of HIV infection and mourning those who have died of the disease.

**2021 Themes:** End inequalities. End AIDS

**Note:** World AIDS Day was the first ever international day for global health.

**02 DECEMBER**

**Importance:** This day is observed in the memory of those who have lost their lives in the Bhopal Gas tragedy on 2nd December, 1984.

**Motto:** To control the Industrial disaster and to reduce the level of pollution.

**Bhopal Gas Tragedy:**

- A gas leak incident on the night of 2–3 December 1984 at the Union Carbide India Limited (UCIL) pesticide plant in Bhopal(M.P), India.
- Considered among the world's worst industrial disasters.
- Causing Agent: Methyl isocyanate
- Deaths: Over 16,000 claimed
- Non-fatal injuries: At least 558,125

## Recent Appointments

### Pradeep Kumar Rawat appointed India's next Ambassador to China



Pradeep Kumar Rawat has been appointed India's next Ambassador to China. Mr Rawat, currently India's Ambassador to the Netherlands, will replace Vikram Misri, who completed his three-year term earlier this month and has left for Delhi. Mr Rawat, a Mandarin-speaking career diplomat, will take up the assignment shortly in Beijing.

#### China:

- Currency: Renminbi
- Capital: Beijing
- President: Xi Jinping

### Austria: Karl Nehammer sworn in as new chancellor



Karl Nehammer was sworn in as new Austria's chancellor by Alexander Van der Bellen, President of Austria in a ceremony in Hofburg Palace, Vienna, Austria. He is succeeding the career diplomat Alexander Schallenberg who took charge as chancellor in October 2021. He is the 3rd person to hold the role of Austria's Chancellor in the last two months. Nehammer, from the ruling conservative Austrian People's Party (ÖVP), was formerly the country's interior minister. The Vienna-born Nehammer worked in the army for several years. He

then started working as a communications adviser before becoming a politician in 2017. He was made interior minister in January 2020. While he was in office, Austria experienced its first Islamist terrorist attack, in which four people were killed last November.

#### Austria:

- Capital: Vienna
- Currency: Euro
- President: Alexander Van der Bellen

### Rishabh Pant named Uttarakhand's brand ambassador for sports and general health



Uttarakhand Chief Minister Pushkar Singh Dhami has announced that Indian wicket-keeper batsman Rishabh Pant has been appointed as the brand ambassador of the state. The 24-year Pant, who was rested for the New Zealand Tests, is currently in South Africa as the Indian Team is all set to face Proteas in the three-match Test series, starting December 26. Rishabh Rajendra Pant is an Indian cricketer who plays as a middle-order wicket-keeper batsman for India, Delhi, and the Delhi Capitals in the Indian Premier League. In December 2015, he was named in India's squad for the 2016 Under-19 Cricket World Cup.

#### Uttarakhand:

- Capitals: Dehradun (Winter), Gairsain (Summer)
- Governor: Lt Gen Gurmit Singh
- Chief minister: Pushkar Singh Dhami

### Sindhu re-elected as BWF Athletes' Commission member

Two-time Olympic medallist PV Sindhu was re-elected as the member of the Badminton World Federation (BWF) Athletes' Commission. The-26-year-old was named alongside five others who will serve as members till 2025.





It is Sindhu's second term as she was first elected in 2017. Notably, the 2019 world champion was the only member who stood for re-election.

#### **Badminton World Federation:**

- President: Poul-Erik Høyer Larsen
- Headquarters: Kuala Lumpur, Malaysia
- Founded: 5 July 1934

#### **Gabriel Boric wins Chile's presidential election**



Leftist and former student leader Gabriel Boric, 35, will become Chile's youngest President after he won a presidential runoff election. With 99.95% of ballots counted, Boric won with 55.87% of the vote, securing victory over his right-wing opponent, Jose Antonio Kast, who trailed with 44.13%. Boric will be sworn in as President on March 11.

#### **Background:**

This election comes two years after massive protests and riots shook the country in October 2019, with protesters demanding improved pensions, better education, and the end of an economic system they said favors the elite. The unrest led to now-outgoing President Pinera to agree to a referendum to change the constitution, which was inherited from Pinochet's bloody dictatorship. Last year, Chileans overwhelmingly voted to draft a new one. That process is now in the works, with the new constitution to be voted on in a plebiscite sometime in mid-2022.

#### **Chile:**

- Capital: Santiago
- Currency: Chilean peso

#### ➤ Continent: South America

#### **Hyundai appoints Unsoo Kim as new MD**



Hyundai Motor India said Unsoo Kim, who is currently with the parent company in South Korea, has been appointed as the new Managing Director effective January 1. He will replace Seon Seob Kim (SS Kim), who will lead the Global Operations Division in Hyundai headquarters in Seoul, South Korea. HMIL, a wholly-owned subsidiary of HMC is India's first smart mobility solutions provider and the number one car exporter in India. He played a key role in positioning the company as a smart mobility solutions provider and bringing Internet-enabled connected cars and kick-starting the electric mobility journey in India with the launch of Kona, an all-electric SUV.

#### **Hyundai Motor India Limited:**

- Founded: 6 May 1996
- Headquarters: Gurugram, Haryana, India

#### **Indian-origin Leena Nair named as new global CEO of Chanel**



French fashion house Chanel named 52-year-old Indian national Leena Nair as its new global CEO. Prior to this, Nair was associated with Unilever for the last 30 years. She was the first female, first Asian and the youngest ever Chief Human Resources Officer of Unilever. She'll join Chanel at the end of January and be based in London.

**Chanel:**

Chanel is a French luxury fashion house that was founded by couturière Coco Chanel in 1910. It focuses on women's ready-to-wear clothes, luxury goods and accessories

- Founder: Coco Chanel
- Headquarters: Neuilly-sur-Seine, France

**Indian-origin professor Neeli to become 1st woman Prez of US' Penn State University**


Indian-origin professor Neeli Bendapudi has been named next President of US' Pennsylvania State University. Bendapudi, who will be the first woman President at the university, is currently President of University of Louisville. The former executive vice chancellor of University of Kansas earned her bachelor's degree in English and master of business administration degree from Andhra University. She is currently serving as the president and professor of marketing at the University of Louisville in Kentucky. With a nearly 30-year career in academia, she has taught marketing and served in a variety of administrative roles over the years, including as provost and executive vice chancellor at the University of Kansas, dean of the School of Business at the University of Kansas.

**Olaf Scholz sworn in as chancellor, ending Germany's Merkel era**


German lawmakers elected Social Democrat Olaf Scholz as chancellor, ending 16 years of conservative

rule under Angela Merkel and paving the way for a pro-European government that has promised to boost green investment. Scholz, 63, who over the past four years served as vice chancellor and finance minister in coalition with Merkel, got a clear majority of 395 votes from lawmakers in the lower house of parliament. Scholz, a member of the center-left SPD party, will lead a three-party coalition with the Greens and the pro-business FDP party. Their coalition deal has stood out from previous plans due to an intention to ramp up investment across the country. Merkel, first elected as chancellor back in 2005, received a standing ovation at the German Parliament in her last moment in the Bundestag as leader. Scholz was formally nominated by President Frank-Walter Steinmeier in the nearby Bellevue Palace before returning to parliament and become Germany's ninth chancellor since the end of World War Two.

**Germany:**

- Chancellor: Olaf Scholz
- Capital: Berlin
- Currency: Euro
- President: Frank-Walter Steinmeier

**Adama Barrow win 2021 re-election**


The President of Gambia, Adama Barrow, won the second term as President during Gambia's presidential election by achieving over 53% votes from 50 of 53 constituencies. He defeated his main challenger Ousainou Darboe who won 27.7% of vote. The results of the election were declared by Electoral commission Chairman Alieu Momarr Njai. Adama Barrow's assumption as President 5 years ago ended more than 20 years of the dictatorship of former dictator Yahya Jammeh.

**Gambia:**

- Capital: Banjul
- Currency: Gambian dalasi



### Jasprit Bumrah signs up as Unix Brand Ambassador



Unix, an Indian Mobile Accessories manufacturing brand, has signed Indian Cricket Fast Bowler, Jasprit Bumrah as its Brand Ambassador to increase the visibility of their products. The products include wearable mobile electronics such as Chargers, Earphones, Data Cables, Power Banks, Wireless Speakers, Smartphone Batteries, Bluetooth neckbands and TWS are mostly manufactured and marketed across India through distributors. Since its inception in 2006, UNIX has been headquartered in Mumbai and a manufacturing facility in Gujarat.

### Ujjivan Small Finance Bank appoints Ittira Davis as MD & CEO



The Board of Directors of Ujjivan Small Finance Bank appointed Ittira Davis as the MD and CEO of the bank. Davis has been appointed as the MD and CEO for a period of 3 years from the date of approval of the RBI or such other period as may be approved by RBI. Davis was the MD and CEO of Ujjivan Financial Services Limited from July 2018 from where he resigned in 2021.

#### Ujjivan Small Finance Bank:

- Headquarters: Bengaluru
- Founder: Samit Ghosh
- Founded: 28 December 2004

### Hindustan Unilever MD Sanjiv Mehta appointed as FICCI President



The Federation of Indian Chambers of Commerce & Industry (FICCI) has appointed Hindustan Unilever's Chair and Managing Director Sanjiv Mehta as its President. Mehta, who served as FICCI's Senior Vice President. He will succeed Uday Shankar, the former President of The Walt Disney Company Asia Pacific. Mr Mehta is also the President of Unilever South Asia (India, Pakistan, Bangladesh, Sri Lanka & Nepal), and is a member of the 'Unilever Leadership Executive' which is Unilever's Global Executive Board.

#### FICCI:

- Founded: 1927
- CEO: Sangita Reddy
- Headquarters: New Delhi
- Secretary General: Dilip Chenoy
- Founders: Ghanshyam Das Birla, Purshottamdas Thakurdas

### Pradip Shah named as Chairman of National Asset Reconstruction Company



Pradip Shah, the founder of IndAsia Fund Advisors, has been appointed chairman of the National Asset Reconstruction Company (NARCL). Shah, an MBA from Harvard and chartered accountant, is credited for establishing India's first and largest housing finance company, HDFC, and rating firm Crisil. While Aditya Birla Asset Reconstruction Company managing director Sanjay Jain will be the chief executive of India Debt Resolution Company (IDRCL), the

privately-owned asset management company (AMC) mandated to resolve bad loans acquired by NARCL.

#### **NARCL:**

NARCL has been incorporated under the Companies Act and has applied to Reserve Bank of India for license as an Asset Reconstruction Company (ARC). NARCL has been set up by banks to aggregate and consolidate stressed assets for their subsequent resolution. PSBs will maintain 51% ownership in NARCL.

#### **India Tourism Development Corporation appoints Sambit Patra as chairman**



Sambit Patra has been appointed as the chairman of India Tourism Development Corporation (ITDC) by the Appointments Committee of the Cabinet. IAS officer, G. Kamala Vardhana Rao will hold the post of managing director of ITDC. The India Tourism Development Corporation is a hospitality, retail, and education company owned by the Government of India, under the Ministry of Tourism. Earlier, Patra had served as an independent Director of ONGC. Appointment of Dr Sambit Patra as Part-Time Non-Executive Director & Chairman of ITDC for a period of three years from the date of assumption of charge, or until further orders, whichever is earlier.

#### **India Tourism Development Corporation:**

- Founded: 1 October 1966
- Headquarters: New Delhi

#### **Turkish President appointed Nureddin Nebati as the new Finance Minister**



Turkish President Recep Tayyip Erdogan has appointed Nureddin Nebati as the new Finance Minister amid looming economic crisis. This comes as the Turkish currency, Lira fell by 27% last month making it one of the worst-performing currencies in the world. Earlier, Nebati had lauded Erdogan's drive to slash interest rates.

#### **Turkey:**

- Capital: Ankara
- President: Recep Tayyip Erdoğan
- Currency: Turkish lira

#### **India-born Gita Gopinath to become IMF's second-highest ranking official in 2022**

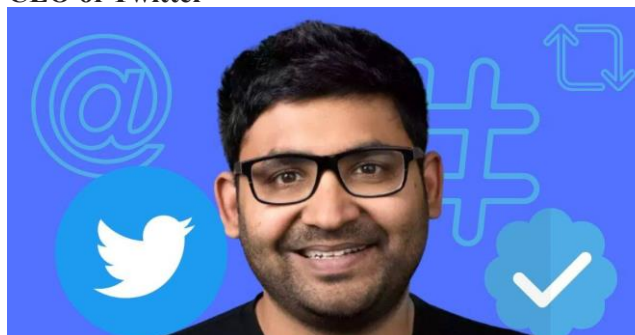


Indian-American Gita Gopinath, the chief economist of the International Monetary Fund, is being promoted as IMF's First Deputy Managing Director. She would replace Geoffrey Okamoto who plans to leave the Fund early next year. Gopinath, who was scheduled to return to her academic position at Harvard University in January 2022, has served as the IMF's chief economist for three years.

#### **International Monetary Fund:**

- Formation: 27 December 1945
- Headquarters: Washington, D.C., U.S.
- Membership: 190 countries (189 UN countries and Kosovo)
- Managing Director: Kristalina Georgieva
- Parent organization: United Nations

#### **Indian tech wizard Parag Agrawal takes over as CEO of Twitter**





Indian tech wizard Parag Agrawal takes over as CEO of the social media platform Twitter following the departure of its co-founder CEO. Twitter co-founder Jack Dorsey has stepped down as chief executive of the company paving way for the current chief technical officer, Parag Agrawal, to take over. Mr Dorsey has been serving as chief executive of both Twitter and payment firm Square. Parag Agrawal, IIT alumnus, joins the likes of Sundar Pichai and Satya Nadella as Indian-origin techies at the help of the biggest tech companies of the world. A Computer Science and Engineering graduate from IIT Bombay, Agrawal is a Ph.D. from Stanford University.

#### Twitter:

- Founded: March 21, 2006
- Headquarters: San Francisco, California, U.S.
- Chair: Patrick Pichette
- CFO: Ned Segal

#### IRS officer Vivek Johri appointed CBIC chairman



1985-batch Indian Revenue Service officer Vivek Johri has been appointed as the chairman of the Central Board of Indirect Taxes and Customs CBIC. Mr Johri is currently working as the member in the CBIC. He succeeds M Ajit Kumar who is completing his tenure tomorrow.

#### CBIC:

- The Central Board of Indirect Taxes and Customs (CBIC) is the nodal national agency responsible for administering Customs, GST, Central Excise, Service Tax & Narcotics in India.
- The Central Board of Indirect Taxes & Customs (CBIC) is headed by a chairperson and consists of six members
- Formed: 26 January 1944

#### Ace mountaineer from Uttarakhand becomes first woman president of Indian Mountaineering Foundation



Noted mountaineer from Uttarakhand, Harshwanti Bisht has earned the distinction of being elected the first woman president of the Indian Mountaineering Foundation (IMF). The 62-year-old Bisht won 60 out of a total of 107 votes to get elected to the coveted post. It is for the first time that a woman has been elected as the president of the IMF, which was founded in the year 1958.

#### Czech Republic President appoints Petr Fiala as new Prime Minister



Petr Fiala has been sworn in as the new Prime Minister of the Czech Republic by President Milos Zeman. Fiala, 57, heads the three-party coalition Together (Civic Democratic Party, Christian Democrats, TOP 09 party), which garnered 27.8% of the vote in early October. Fiala succeeds Andrej Babis. The alliance narrowly defeated the ANO movement led by billionaire Babis. The centrist group of the Mayors and Independents and the left-wing Pirate Party joined with Fiala's coalition to remove Babis, who had served as prime minister since 2017.

#### Czech Republic:

- Capital: Prague
- Currency: Czech koruna

### Disney names Susan Arnold as its 1st woman Chairman in 98-year history



Walt Disney has elected a woman to become its chairman for the first time in its 98-year history. Susan Arnold, who has been a board member for 14 years, will succeed Bob Iger as Chairman on December 31. Iger, who stepped down as Disney's CEO in 2020 after 15 years in the role, will leave the company later this month.

#### The Walt Disney Company:

- Founded: October 16, 1923
- Founders: Walt Disney, Roy O. Disney
- Headquarters: California, U.S.
- CEO: Bob Chapek

### Zara Co-founder's 37-yr-old daughter Marta Ortega to lead the parent company



Marta Ortega, the 37-year-old daughter of Zara Co-founder Amancio Ortega, has been named the next Chairwoman of Zara's parent company Inditex following a "generational handover process". Spanish retail giant Inditex owns high street chains Zara, Bershka and Massimo Dutti. Marta Ortega, who's been with the firm for 15 years, will take over as Chairwoman of Inditex from April 1, 2022.

#### ZARA:

The company specializes in fast fashion, and products include clothing, accessories, shoes, swimwear, beauty, and perfumes. It is the largest company in the Inditex group, the world's largest apparel retailer.

- Founded: 1975

- Founders: Amancio Ortega, Rosalía Mera
- Headquarters: Spain
- chairman: Amancio Ortega
- Parent: Inditex

### General Atlantic appoints Mastercard's ex-CEO Banga as Vice Chairman



Private equity firm General Atlantic has appointed former Mastercard CEO Ajay Banga as its Vice Chairman. Banga will advise on strategic matters for the firm, its investment teams and its portfolio of more than 165 growth companies around the world. Banga, who started his career at Nestle India, has also served as CEO of Citigroup Asia Pacific.

#### General Atlantic:

- Founded: 1980
- Founder: Charles F. Feeney
- Headquarters: New York, United States
- CEO: Bill Ford

### Admiral R Hari Kumar assumes charge as 25th Chief of the Naval Staff



Admiral R. Hari Kumar assumed charge as the 25th Chief of the Naval Staff. He received Guard of Honour at the South Block lawns in New Delhi as the new Chief of Naval Staff. Admiral Hari Kumar succeeds Admiral Karambir Singh. Admiral R. Hari Kumar was commissioned on 1st January 1983 into the Executive Branch of the Indian Navy. During his long and distinguished service spanning nearly 39



years, he has served in a variety of Command, Staff and Instructional appointments. He has been decorated with the Param Vishist Seva Medal, Ati Vishist Seva Medal and Vishist Seva Medal.

### Saudi Arabia's 1st female racer made ambassador of Formula One GP



Reema Juffali, Saudi Arabia's first female racing driver has been appointed an ambassador for the country's Formula One Grand Prix in Jeddah. Saudi Arabia lifted its ban on women driving in 2018, the same year Juffali became its first female license holder to compete in a series. The 29-year-old competed in the British Formula Three championship this year.

#### Saudi Arabia:

- Capital: Riyadh
- Currency: Saudi riyal
- King: Salman bin Abdulaziz

### India's candidate, Praveen Sinha, elected as Delegate for Asia on Executive Committee of INTERPOL



India's candidate, Praveen Sinha, Special Director of Central Bureau of Investigation was elected as Delegate for Asia on the Executive Committee of the International Criminal Police Organization (INTERPOL). The four contestants were China, Singapore, South Korea and Jordan. The elections were held in Istanbul, Turkey during the ongoing 89th INTERPOL General Assembly.

#### INTERPOL:

The International Criminal Police Organization commonly known as the Interpol is an international organization that facilitates worldwide police cooperation and crime control.

- Formed: September 1923
- Countries: 194 member states
- Headquarters: Lyon, France
- President: Ahmed Naser Al-Raisi

**"There is a powerful driving force inside every human being that, once unleashed, can make any vision, dream, or desire a reality."**

## National News

### Minister of State for Health and Family Welfare Bharti Praveen Pawar inaugurated the National Oxygen Management Program

Taking cognizance of the role of medical oxygen as a life saving public health item and the need for capacity building of healthcare workers in handling medical oxygen, Dr. Bharti Praveen Pawar, Union Minister of State for Health and Family Welfare inaugurated the National Oxygen Management. The initiative aims to empower all healthcare workers engaged in Oxygen management and administration with the essential knowledge and skills to ensure rational utilization and avoid any wastage of medical Oxygen, especially in resource constraint settings. It envisages to identify and train at least one "Oxygen Steward" in each district across the country. These trained professionals would be responsible for leading the training on Oxygen therapy and management in their respective districts and also support audit of oxygen delivery and preparedness for a surge scenario. Government of India has sanctioned more than 1500 Pressure Swing Adsorption (PSA) oxygen generation plants of which 1463 have been commissioned which include, 1225 PSA plants which have been installed and commissioned under PMCARES Fund in every district of the country.

### Nagaland creates three new districts Tseminyu, Niuland, Chumukedima

Nagaland government has announced the creation of three new districts, namely Tseminyu, Niuland and Chumoukedima. This comes less than a year after the 12th district of the state—Noklak—was inaugurated. With the addition of the three new districts, Nagaland will now have 15 districts. While the Tseminyu sub-division in Kohima district has been upgraded to a district, Niuland and Chumukedima have been carved out of Dimapur district. Though there were demands from at least 11 tribes for the creation of new districts, the Cabinet could consider only three of them as some districts are inhabited by only one tribe and those cannot be divided.

#### Nagaland:

- Formation: 1 December 1963

- Capital: Kohima
- Governor: Jagdish Mukhi (additional charge)
- Chief Minister: Neiphiu Rio

### Jharkhand passes Bill to prevent mob violence & lynching

The Jharkhand Assembly has passed Prevention of Mob Violence and Mob Lynching Bill, 2021, which aims at providing "effective protection" of constitutional rights and the prevention of mob violence in the state. After including one amendment, the Bill was passed and sent to the Governor for his assent. Once notified, Jharkhand will become the fourth state to bring in such a law after West Bengal, Rajasthan and Manipur.

#### What Does the Bill Say?

- The aim of the Bill is to provide "effective security" to people, protect constitutional rights and create a deterrence for mob violence.
- The Bill provides for jail terms between three years to life as well as fines of as much as Rs 25 lakh against those involved in mob lynching which could lead to either death or injury of a person.
- It also provides for compensation for victims of mob violence and their families.
- The Bill seeks punishment for "conspiracy or abetment or attempt to lynch"; "obstructing legal process" as well as "dissemination of offensive material".
- The Bill also provides for punishment for those creating a "hostile environment" - threatening or coercing victims, their family members and or anyone providing assistance to them.

#### Jharkhand:

- Founded: 15 November 2000
- Capital: Ranchi
- Chief minister: Hemant Soren

### PM Modi to inaugurate Kashi Vishwanath corridor in Varanasi

Prime Minister Narendra Modi will inaugurate the Kashi Vishwanath corridor in Varanasi. The entire event will be aired live across the country. Over 3,000

saints and dignitaries from all over the country will participate in the event. The Kashi Vishwanath Dham project has been completed at a cost of 800 crore rupees. The project will shorten the period and set a direct link between the temple and the river Ganga. The multi-crore corridor project was designed by Bhimal Patel, the architect behind the proposed Central Vista redevelopment project. Known to be Prime Minister's dream project this Corridor will shorten the period and will set a direct link between the temple and the Ganga river. According to Patel, the Kashi Vishwanath Corridor Project includes the construction of Temple Chowk, Varanasi city gallery, museum, multipurpose auditoriums, hall, devotee facilitation centre, public convenience, salvation home, Godowlia Gate, Bhogshala, shelter for priests and sevadars, spiritual books.

### Haiderpur Wetland added to Ramsar site

The Haiderpur Wetland abutting the Madhya Ganga barrage, 10 km from Bijnor in western Uttar Pradesh, has been recognised under the 1971 Ramsar Convention on Wetlands. Uttar Pradesh is now home to 9 Ramsar wetlands. The wetland has also been identified under Namami Gange, a central flagship, as a model wetland along the Ganga. With this, there are now a total of 47 such designated areas in the country. The Site supports more than 25,000 waterbirds, serves as a breeding site for the near-threatened Indian grassbird and provides refuge to the northern subspecies population of the vulnerable swamp deer during its seasonal flood-driven migration. The Site also regularly supports more than 1% of the population of greylag goose and bar-headed goose.

#### What is Ramsar site?

A Ramsar site is a wetland site designated to be of international importance under the Ramsar Convention, an intergovernmental environmental treaty established in 1971 by UNESCO, which came into force in 1975. It provides for national action and international cooperation regarding the conservation of wetlands, and wise sustainable use of their resources. Ramsar identifies wetlands of international importance, especially those providing waterfowl habitat.

**"Knowing Is Not Enough; We Must Apply. Wishing Is Not Enough; We Must Do."**

### DMK Government declares Tamil Thai Vaazhthu the State song

Tamil Nadu government has announced 'Tamil Thaaai Vaazhthu' as the state anthem. It should be sung before the start of any functions in all educational institutions, universities, government offices, and public sector undertakings. The decision comes in the wake of the Madras High Court recently ruling that 'Tamil Thai Vaazhthu' is a prayer song and not an anthem. Government Order to this effect has been issued, mandating that all barring the differently-abled persons should remain standing when the 55-second long song is sung. The 'Tamil Thai Vaazhthu' enjoy official status since 1970. It is the official song of the union territory of Puducherry as well. Jaya Bharata Jananiya Tanujate is the official state anthem of Karnataka and Bande Utkal Janani is the official state anthem of Odisha.

#### Tamil Nadu:

- Capital: Chennai
- Chief Minister: MK Stalin
- Governor: R.N.Ravi

### Odisha CM inaugurates state's longest river bridge over Mahanadi

Odisha CM Naveen Patnaik inaugurated the state's longest river bridge over the Mahanadi river at Cuttack's Gopinathpur. The 3.4-kilometre-long bridge, connecting Singhanath Temple and Baideswar, will reduce the distance by 45 kilometres. The 'T' shaped bridge has been built at a cost of Rs 111 crore.

In July 2017, Patnaik had inaugurated Netaji Subash Chandra Bose Setu over the river Kathajodi at Trisulia, which is 2.88 kilometre long and till now held the title of Odisha's longest bridge. The bridge connects the cities of Bhubaneswar and Cuttack via Barang.

#### Odisha:

- Governor: Ganeshi Lal
- Capital: Bhubaneswar
- Chief minister: Naveen Patnaik

### Lok Sabha passes electoral reforms bill that links Aadhaar to voter ID

Lok Sabha has passed a bill to link electoral roll data with Aadhaar eco system amid protest by opposition members over the Lakhimpur Kheri violence issue.



The Election Laws (Amendment) Bill 2021, piloted by Law Minister Kiren Rijiju, was passed by a voice vote after a brief discussion during which some opposition members demanded that it be referred to a parliamentary panel. The minister further said that the bill will cleanse the election system.

#### **Why it was opposed?**

The bill will curb the people's personal liberty. The voting is a legal right and it is beyond the legislative competence of the Aadhaar Act to be linked with the electoral laws. The bill violates the Constitution guarantees to each individual a fundamental right to privacy. The bill will suppress people's right to exercise franchise freely. By linking the Aadhaar with the electoral process, we are potentially giving the voting rights to non-citizens

#### **'Khel Nursery Scheme 2022-23' to promote sports in Haryana**

Haryana's Minister of State for Sports and Youth Affairs, Sandeep Singh launched 'Khel Nursery Scheme 2022-23' to promote sports in the state. The players of Haryana have given a new identity to the state at the international level with their sports talent. The state government is always striving to develop new sports talents in the state. The scheme promotes sports nurseries that will be started in government, private educational institutions and private sports institutions. The sports nurseries are being opened for the sports included in the Olympic, Asian and Commonwealth Games.

#### **Haryana:**

- Capital: Chandigarh
- Governor: Bandaru Dattatreya
- Chief Minister: Manohar Lal Khattar

#### **Hemant Soren launches sports scheme for Maoist-hit areas**

The Chief Minister of Jharkhand, Hemant Soren has launched a Sports Action toward Harnessing Aspiration of Youth (SAHAY) scheme aimed at nurturing young sporting talents in Maoist-hit districts of the state. This scheme has been launched to curb the Left Wing Extremism (LWE) which affected 19 of the state's 24 districts. Boys and girls in the 14-19 age group from villages to ward level will be registered under the scheme and will be given opportunities to

display their skills in basketball, volleyball, hockey and athletics.

#### **Objectives:**

In order to instil a culture of sports and identify talent in the state, CM Hemant Soren had earlier given directions to sports department officials to work on a special sports scheme named Sahay for youth from Naxalite-affected areas. Officials were asked to work extensively to connect youth below the age of 19 with the Jharkhand Sahay Scheme. Under Sahay Yojana, potential sports talent will be identified from the panchayat level and taken to the block level and district level where they will be prepared for national and international sports events.

#### **Uttarakhand CM Launches 'Milk Price Incentive Scheme' to Benefit over 50,000 People**

Chief Minister of Uttarakhand, Pushkar Singh Dhami has launched the 'Milk Price Incentive Scheme' in Dehradun. The scheme is aimed to provide incentives benefiting around 53,000 people of Uttarakhand. The state government is targeting to spend INR 444.62 crore to open 500 milk sales centres in Uttarakhand. It is a Direct Bank Transfer (DBT) scheme, the amount under the scheme would go directly into the accounts of the beneficiaries through their linked bank accounts. In the Dehradun district, milk production and consumption are completely contradictory. On one hand, the government is making many attempts to enhance milk production, all government claims of promoting products are proving to be fictitious. Despite thousands of hours of labour, milk is not produced in accordance with demand.

#### **Uttarakhand:**

- Capitals: Dehradun (Winter), Gairsain (Summer)
- Governor: Lt Gen Gurmit Singh
- Chief minister: Pushkar Singh Dhami

#### **PM to lay foundation stone of Ganga Expressway in Shahjahanpur on Dec 18**

Prime Minister Narendra Modi will lay the foundation stone of the Ganga Expressway in Uttar Pradesh's Shahjahanpur. The 594-km long six-lane expressway will be built at a cost of over Rs 36,200 crore. The inspiration behind the expressway is the vision of the Prime Minister to provide fast-paced connectivity across the country. Starting near the Bijauli village in Meerut, the expressway will extend till near the

Judapur Dandu village in Prayagraj. It will pass through Meerut, Hapur, Bulandshahr, Amroha, Sambhal, Budaun, Shahjahanpur, Hardoi, Unnao, Rae Bareilly, Pratapgarh and Prayagraj. Upon completion, it will become the longest expressway of Uttar Pradesh, connecting the western and eastern regions of the state. A 3.5-km long airstrip for assisting emergency take-off and landing of Air Force planes will also be constructed on the Expressway in Shahjahanpur. An industrial corridor is also proposed to be built along the expressway.

### **Union Home Minister Amit Shah laid foundation stone for Maa Umiya Dham Development Project in Gujarat**

Union Home Minister Amit Shah has laid the foundation stone of Umiya Mata Dham temple and temple premises under Maa Umiya Dham Development Project at Umiya Campus in Sola in Ahmedabad, Gujarat. They will be developed at a cost of Rs 1,500 crore on 74,000 square yards of land. Prime Minister Narendra Modi has virtually attended and addressed the foundation stone laying of the project. He stated the Project as an example of the notion of 'SabkaPrayas' (Efforts of everyone).

#### **The Umiya Mata Temple:**

- Umiya Mata Temple is the Temple of Goddess Umiya, who is worshipped as the clan-deity or kuldevi of Kadava Patidars.
- The temple is located in the centre of Unjha in the Mehsana district of Gujarat. It celebrated its silver jubilee in November 2009.
- Apart from Temple, a trust running the main temple in Unjha will also construct a 13-storey complex adjacent to the temple in order to provide training and a hostel facility to Patidar youths who are preparing for UPSC and GPSC entrance tests.

#### **Gujarat:**

- Capital: Gandhinagar
- Governor: Acharya Devvrat
- Chief minister: Bhupendra Patel

### **Askot wildlife sanctuary declared eco-sensitive zone**

Ministry of Environment, Forest and Climate Change (MoEF&CC), an area of 454.65 square kilometres around the boundary of Askot Wildlife Sanctuary in the Pithoragarh district of Uttarakhand has been

declared as the Askot Wildlife Sanctuary Eco-sensitive Zone (ESZ). The notified area extends from 0 to 22 km around the Askot Wildlife Sanctuary. The Askot Wildlife Sanctuary was established to protect the endangered flagship species Musk Deer and its habitat. The Askot Wildlife Sanctuary is also known as Musk Deer Park.

#### **Uttarakhand:**

- Founded: 9 November 2000
- Governor: Gurmit Singh
- Chief minister: Pushkar Singh Dhami

### **Union Cabinet approves implementation of Pradhan Mantri Krishi Sinchayee Yojana for 2021-26**

The Cabinet has approved implementation of Pradhan Mantri Krishi Sinchayee Yojana for 2021-26. The scheme will benefit 22 lakh farmers, including 2.5 lakh Scheduled Caste and two lakh Scheduled Tribe farmers. An outlay of over ninety three thousand crore rupees will be spent. Out of ninety three thousand crore rupees, thirty seven thousand four hundred fifty four crore rupees will be central assistance to States.

### **PM Modi to inaugurate Saryu Nahar National Project in UP's Balrampur**

Prime Minister Narendra Modi has inaugurated the Saryu Nahar National Project in Balrampur, Uttar Pradesh. The project will provide assured water for irrigation to over 14 lakh hectares of land and benefit 29 lakh farmers, mainly in eastern Uttar Pradesh. Uttar Pradesh Governor Anandiben Patel, Chief Minister Yogi Adityanath, Union Minister for Jal Shakti Gajendra Singh Shekhawat, Deputy Chief Minister Keshav Prasad Maurya were among those present at the project inauguration programme.

#### **Project:**

- The project has been completed at a cost of over Rs 9,800 crore, out of which more than Rs 4,600 crore was provisioned in the last four years.
- The project will cater to the problem of water shortage mainly in eastern UP/ Purvanchal with assured water for irrigation.
- The Saryu canal project also involves the interlinking of five rivers — Ghaghara, Saryu, Rapti, Banganga and Rohini — to ensure optimum usage of water resources of the region.

### Center grants GI Tag to Bihar's Mithila Makhana

The Geographical Indications Registry (GIR) under the Central Ministry of Commerce has accepted the petition to rename Bihar Makhana as Mithila Makhana and has also suggested further changes to the brand logo to better reflect its origins. It also suggested amendments in the brand logo to highlight its origins and protect the product's Geographical Indications (GI) rights. The Sabour based Bihar Agriculture University (BAU) initiated an application on behalf of the Mithilanchal Makhana Utpadak Sangh (MMUS) to name their produce as Mithila Makhana for the welfare of fox nut growers in the Mithila region.

#### Some GI tags of Bihar:

- Madhubani Paintings
- Katarni Rice
- Magahi Paan
- Silao Khaja
- Shahi Litchi
- Bhagalpuri Zardalu

### Lok Sabha passes Narcotic Drugs and Psychotropic Substances (Amendment) Bill, 2021

The Lok Sabha passed the Narcotic Drugs and Psychotropic Substances (NDPS) (Amendment) Bill, 2021, which aims at correcting "drafting errors" in the NDPS Act, 1985. The bill will replace an ordinance that the government promulgated in September. However, the opposition called the amendment "unconstitutional" as the legislation is set to be applied retrospectively from 2014, and alleged that the government was trying to legislate through ordinances and bypass parliamentary procedure.

#### The amendment:

The NDPS Act, 1985, regulates the manufacture, transport and consumption of narcotic drugs and psychotropic substances. In 2014, the Act was amended and the clause number of the definition of "illicit activities" changed. However, the section on penalties for financing such activities was not changed.

### NITI Aayog to set up 1,000 Atal Tinkering Labs in Jammu and Kashmir

The NITI Aayog has planned to establish 1000 Atal Tinkering Laboratories in Jammu and Kashmir. Out of

1000 Atal Tinkering Laboratories, 187 will be established by the end of the financial year 2021-22.

Out of 187 ATLs, 31 are being established across government schools of J&K while 50 will be established in several educational institutions like KVs, JNVs, and Private schools.

#### The Atal Tinkering Labs:

Atal Tinkering Labs (ATL) is a sub-mission under the Atal Innovation Mission (AIM) of the Central Government in India. It is the flagship initiative of AIM, that seeks to nurture an innovative mindset amongst high school students across India.

#### NITI Aayog:

- Formed: 1 January 2015
- Headquarters: New Delhi
- Chairperson: Narendra Modi
- Vice Chairperson: Rajiv Kumar
- CEO: Amitabh Kant

### RATS SCO seminar on cyber security organised by India

India assumed the Chairmanship of Council of Regional Anti-Terrorist Structure of Shanghai Cooperation Organization (RATS SCO) for 1 year from October 28, 2021. The National Security Council Secretariat (NSCS), Government of India, in association with Data Security Council of India (DSCI), as a Knowledge Partner, organized a 2-day Practical Seminar on 'Securing Cyberspace in the Contemporary Threat Environment' for delegates from SCO member States. The seminar is the 1st event to be hosted by India during its Chairmanship of Council of RATS SCO. This Seminar addressed key areas like Policies and Strategies, Cyber Terrorism, Ransomware, and Digital Forensics amongst others. The representatives from the Executive Committee (EC) of RATS SCO and all SCO member countries attended this Seminar.

#### SCO:

- Headquarters: Beijing, China
- Founded: 15 June 2001;
- Secretary-General: Vladimir Norov

### UP CM launches free food distribution programme in the state

CM Yogi Adityanath has launched the Nishulk Khadyan Vitaran (Free Food Distribution) programme, aiming to provide free food to the state's



poor till Holi next year. The programme has been launched under the National Food Security Act.

#### **PMGKAY**

Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) is a food security welfare scheme announced by the Government of India in March 2020, during the COVID-19 pandemic in India. The program is operated by the Department of Food and Public Distribution under the Ministry of Consumer Affairs, Food and Public Distribution. The scheme aims to feed the poorest citizens of India by providing grain through the Public Distribution System, to all the priority households (ration card holders and those identified by the Antyodaya Anna Yojana scheme). PMGKAY provides 5 kg of rice or wheat (according to regional dietary preferences) per person and 1 kg of dal to each family holding a ration card. The scale of this welfare scheme makes it the largest food security program in the world.

#### **UP:**

- Governor: Anandiben Patel
- Capital: Lucknow (Executive Branch)
- Chief minister: Yogi Adityanath

#### **Parliament passes Assisted Reproductive Technology (Regulation) Bill, 2021**

Parliament has passed the Assisted Reproductive Technology (Regulation) Bill, 2021 with the Rajya Sabha approving. The Upper House also passed the Surrogacy (Regulation) Bill, 2020 with amendments moved by the government. The Assisted Reproductive Technology (Regulation) Bill, 2021 provides for the regulation and supervision of the assisted reproductive technology clinics and the assisted reproductive technology banks. The Bill provides that every ART clinic and bank must be registered under the National Registry of Banks and Clinics of India. The Surrogacy (Regulation) Bill, 2020 aims at constituting National Surrogacy Board, State Surrogacy Boards and appointment of appropriate authorities for regulation of the practice and process of surrogacy. The bills have been brought with the objective of prevention of commercialization of Assisted Reproductive Technology -ART Clinics and surrogacy and unethical practices. There is also a provision for punishment for violation of the rules in ART Bill. The punishment includes a fine between five and ten lakh rupees for the first contravention and for subsequent contraventions, the person who

commits offences will be punishable with imprisonment for a term between eight and 12 years, and a fine between 10 and 20 lakh rupees. The Surrogacy (Regulation) Bill, 2020 also specifies a range of offences and penalties for contraventions of the provisions of the Bill which include imprisonment up to 10 years and a fine upto 10 lakh rupees.

#### **Delhi becomes no. 1 city in world in terms of CCTV coverage per sq km**

Delhi has become the number one city in terms of CCTV coverage per square kilometre in the world. The survey was conducted in 150 cities across the world. There are 1,826 CCTV cameras in Delhi per square mile. London comes to the second place with 1,138 CCTV cameras per square mile. So Delhi is far ahead of London, Singapore, and Paris. In India, Chennai comes second place in terms of CCTV cameras.

#### **Delhi:**

- Capital: New Delhi
- Lt. Governor: Anil Bajjal
- Chief Minister: Arvind Kejriwal
- Deputy Chief Minister: Manish Sisodia

#### **Govt names 4 airports where it plans to launch facial recognition-based boarding system**

Minister of State in the Ministry of Civil Aviation General VK Singh has said that Airports Authority of India is working on Facial Recognition Technology-based Biometric Boarding System, which is expected to be launched in March 2022. The technology, part of the first phase of Digi Yatra Implementation, is planned to be launched at Varanasi, Pune, Kolkata and Vijayawada airports.

#### **Safeguards taken by the Government to prevent the leakage of passenger data:**

As per the Digi Yatra policy, registering for the Digi Yatra Central Ecosystem is optional to the passenger. For availing of the Digi Yatra services, passengers would send the travel details (Pax details, PNR and Facial Biometrics) through an app to the Biometric Boarding System of the respective departing airport. The Digi Yatra Central Ecosystem envisages assessments (by independent teams to assess the level of security and system resilience to protect PII) and periodic audits by governing/regulatory bodies twice every year. Data shared by the Passenger is to be used

for the purpose defined and would not be shared with any other external stakeholders. It is important to note that data shared by passengers is to be retained during the transit of the passenger at the airport and will not be retained for more than 24 hours after Take-off/departure of the flight.

### **Centre Constitutes 5 member committee to monitor implementation of Central Vista Project; Head- Ratan P Watal**

The Ministry of Housing and Urban Affairs has formed a five-member committee for timely completion of various projects executed under the Central Vista Redevelopment Plan. The committee will be headed by former finance secretary Ratan P Watal. Other members of the panel are Deputy Comptroller and Auditor General (CAG) - P K Tiwari, Former director of L&T – Shailendar Roy, IIT Delhi professor – Prof. Mausam, Joint secretary of Ministry of Housing and Urban Affairs

#### **The terms of reference of the ‘Central Vista Oversight Committee’ will be to ensure :**

coordination among multi-agency and stakeholder for seamless integration of different project works of Central Vista continuous monitoring of the pace of execution of various projects to ensure their timely completion. The Central Vista Redevelopment Project is the ongoing reconstruction and renovation of the Central Vista, India's central administrative buildings located near Raisina Hill, New Delhi.

### **7th India International Science Festival (IISF) to be held in Panaji, Goa in December 2021**

The 7th edition of the four-day India International Science Festival (IISF) is scheduled to be held in Panaji, Goa, from December 10 to 13, 2021. The festival theme in 2021 is 'Celebrating Creativity in Science, Technology and Innovation for Prosperous India'. The first IISF was held in New Delhi in 2015.

The Goa-based National Centre for Polar and Ocean Research (NCPOR), under the Ministry of Earth Sciences is the nodal agency to organise IISF 2021. The festival will be organised jointly with the Departments of Atomic Energy (DAE), Science and Technology (DST), Biotechnology (DBT), and Space (DoS) and the Council for Scientific and Industrial Research (CSIR).

### **World's tallest railway bridge pier to come up in Manipur**

The Indian Railways is constructing the tallest pier railway bridge of the world in Manipur. The ambitious project of the Railways in Manipur is part of the Jiribam-Imphal railway line, which ultimately is part of a new broad gauge line being constructed to connect the northeastern state with the rest of the country. Currently, the tallest pier bridge record is held by 139-metre high Mala-Rijeka viaduct built at Montenegro in Europe.

#### **Bridge:**

- The bridge is being built at a height of 141 metres.
- The total length of the Manipur bridge will be 703 metres.
- Once completed, the project will enable passengers to cover 111 km of distance in 2-2.5 hrs.

### **Govt to launch Scheme for development of Scheduled Castes students on 6th Dec**

The government will launch Scheme for Residential Education for Students in High Schools in Targeted Areas (SRESHTA) for socio economics upliftment and overall development of Scheduled Castes students. The scheme will be launched on 6th December on Mahaparinirvan Diwas of Dr B R Ambedkar. The scheme will enable bright SC students to have a better future by getting a high-quality education. It will also aid in controlling dropout rates of SC students from class 9th to 12th. In the next five years the Ministry will extend support to around 25 thousand meritorious SC students involving 300 crore rupees for providing them quality residential education.

### **Kerala Tourism launches STREET project for experiential tourism**

Kerala Tourism launched the 'STREET' project to promote and take tourism deep into the interiors and rural hinterland of Kerala. The project would help visitors experience the diversity of offerings in these locales. The STREET is an acronym for Sustainable, Tangible, Responsible, Experiential, Ethnic, Tourism hubs. The STREET project aims to present the unique identity of the state of Kerala before to travellers. It also offers a huge potential for growth in the tourism

sector and would bring in significant changes. The project will foster mutually beneficial organic relationships between tourism development and the ordinary lives of people in the state of Kerala. The project, conceived by the Responsible Tourism Mission, is inspired by the 'Tourism for Inclusive Growth' slogan of The United Nations World Tourism Organization.

#### **Kerala:**

- Capital: Thiruvananthapuram
- Governor: Arif Mohammad Khan
- Chief Minister: Pinarayi Vijayan

#### **Bihar, Jharkhand, UP among poorest states; Kerala, Goa have lowest poverty: Niti Aayog**

Bihar, Jharkhand and Uttar Pradesh have emerged as the poorest states in India, according to Niti Aayog's first Multidimensional Poverty Index (MPI) report. As per the index, 51.91 per cent population of Bihar is poor, followed by 42.16 per cent in Jharkhand, 37.79 per cent in Uttar Pradesh. While Madhya Pradesh (36.65 per cent) has been placed fourth in the index, Meghalaya (32.67 per cent) is at the fifth spot. Kerala (0.71 per cent), Goa (3.76 per cent), Sikkim (3.82 per cent), Tamil Nadu (4.89 per cent) and Punjab (5.59 per cent) have registered the lowest poverty across India and are at the bottom of the index. Among union territories (UTs), Dadra and Nagar Haveli (27.36 per cent), Jammu & Kashmir, and Ladakh (12.58), Daman & Diu (6.82 per cent) and Chandigarh (5.97 per cent), emerged as the poorest UTs. Puducherry having 1.72 per cent of its population as poor, Lakshadweep (1.82 per cent), Andaman & Nicobar Islands (4.30 per cent) and Delhi (4.79 per cent) have fared better. According to the report, India's national MPI measure uses the globally accepted and robust methodology developed by the Oxford Poverty and Human Development Initiative (OPHI) and the United Nations Development Programme (UNDP). Importantly, as a measure of multidimensional poverty, it captures multiple and simultaneous deprivation faced by households, it added. The report said India's MPI has three equally weighted dimensions, health, education and standard of living – which are represented by 12 indicators namely nutrition, child and adolescent mortality, antenatal care, years of schooling, school

attendance, cooking fuel, sanitation, drinking water, electricity, housing, assets and bank accounts.

#### **Union Minister Jitendra Singh launches World's First Multimodal Brain Imaging Data and Analytics 'SWADESH'**

The Union Minister of State (Independent Charge) for the Ministry of Science and Technology Dr. Jitendra Singh inaugurated Project SWADESH. The project SWADESH is a first of its kind large-scale multimodal neuroimaging database designed specifically for Indian population. The unique brain initiative has been developed by the DBT-National Brain Research Centre (DBT-NBRC), Gurgaon, Haryana. SWADESH brings big-data architecture and analytics for various neurological disease under one platform. It will enable the researchers in conducting multimodal brain studies to understand and manage Alzheimer's disease and several neurological disorders. DBT-NBRC is the only institute in India dedicated to Neuroscience Research and Education.

#### **Indores Patalpani railway station to be named after tribal icon Tantya Bhil**

Madhya Pradesh Chief Minister, Shivraj Singh Chouhan has announced the renaming of Indore's Patalpani railway station after tribal icon Tantya Bhil, who was well known as 'Indian Robin Hood' by the tribals. CM also announced that 2 other landmarks, the Bhanwar Kuan intersection, and MR 10 bus stand, in Indore will also be named after Tantya Bhil. Notably, Bhopal's Habibganj railway station was recently named after Rani Kamalapati, a tribal queen. Tantya Bhil is hailed as one of the revolutionaries who waged an armed struggle against the British rule for 12 years. It is said that Tantya used to loot the treasuries of the British government and distribute the wealth among the poor.

#### **Madhya Pradesh:**

- Chief Minister: Shivraj Singh Chouhan
- Governor: Mangubhai C. Patel

**"The Best Way To Get Started Is To Quit Talking And Begin Doing."**



## International Events

### UAE signs deal to buy 80 Rafale fighter jets from France

The United Arab Emirates (UAE) has signed a deal with France to buy French-made 80 Rafale fighter jets. The French Defence Ministry said that the deal is France's largest-ever weapons contract for export. This is an outcome of the strategic partnership between the two countries, consolidating their capacity to act together for their autonomy and security. Manufacturer Dassault Aviation said the UAE is buying the upgraded F4 version of its multi-role combat aircraft. That will make the Emirates Air Force the first Rafale F4 user outside of France

#### UAE:

- Capital: Abu Dhabi
- President: Khalifa bin Zayed Al Nahyan
- Prime Minister & Vice President: Mohammed bin Rashid Al Maktoum
- Currency: UAE dirham

### Dubai becomes the first government in the world to go 100% paperless

In the first, Dubai has become the very first government in the world to turn 100% paperless. All the external and internal transactions and the procedures in Dubai Government are now 100% digital. They are now managed from a comprehensive digital government service platform. Dubai Paperless Strategy comprises of being a fully paperless government, meaning that 100% of the internal processes and customer-facing services were to be digitized from 2021. The ambitious Dubai paperless strategy was implemented in 5 consecutive phases. Each of them enlisted a different group of the Dubai Government's entities. The UK, United States, Canada, and Europe also expressed plans of digitizing their government operation on a larger scale, which will encompass the government procedures citizen identifications.

#### What is Dubai Paperless Strategy?

Dubai Paperless Strategy comprises of being a fully paperless government, meaning that 100% of the internal processes and customer-facing services were to be digitized from 2021. Dubai Paperless Strategy means that the Government will no longer be issuing

or asking for paper documents across all of its operations.

### South Korea to get world's first floating city by 2025

South Korea is soon going to get the world's first floating city, to deal with the problem of flood due to rising sea levels. The floating city project is a joint effort by the UN Human Settlement Programme (UN-Habit) and OCEANIX. The city will be built off the coast of Busan in South Korea and is likely to be completed by 2025. The floating city will have 'flood-proof infrastructure' and comprise several man-made islands to eliminate the risk of flooding. The self-sufficient city will be specifically designed to withstand natural disasters like tsunamis, floods, and Category 5 hurricanes.

#### South Korea:

- Capital: Seoul
- Currency: South Korean won
- President: Moon Jae-in

### Finland to buy 64 US F-35 fighter jets in deal worth over \$9.4 bn

Finland has chosen U.S. defence giant Lockheed Martin's F-35 fighters to replace ageing F/A-18 combat jets and plans to order 64 planes with weapons systems in a \$9.4 billion deal. The procurement from Lockheed, including weapons as well as service and maintenance until 2030, is estimated to cost 8.378 billion euros (\$9.44 billion). The construction of hangars and other equipment will add a further 777 million euros, and 824 million euros will be reserved for the final optimised weapons package and to control future contract amendments.

Note: Unlike Norway, Finland is not a member of the North Atlantic Treaty Organisation (NATO) but it has forged stronger ties with the organisation in recent years and chosen military equipment compatible with NATO members.

#### Finland:

- Prime minister: Sanna Marin
- Capital: Helsinki
- Currency: Euro

### UNGA grants Observer Status to International Solar Alliance

The UN General Assembly (UNGA) has conferred Observer Status to the International Solar Alliance (ISA). The launch of the ISA was announced by Prime Minister Narendra Modi, and former French President Francois Hollande in November 2015, at the 21st session of the UN Climate Change Conference of the Parties in Paris, France. The fourth general assembly of the International Solar Alliance (ISA), was held earlier in October. A total of 108 countries participated in the Assembly, including 74 Member Countries and 34 Observer and Prospective Countries, 23 Partner Organizations and 33 Special Invitee Organisations.

#### International Solar Alliance:

- Headquarters: Gurugram
- Founded: 30 November 2015, Paris, France
- Director General: Ajay Mathur
- Purpose: Bring together a group of nations to endorse clean energy, sustainable environment, public transport and climate

### Romania to present World War I female officer on banknote

Romania's central bank unveiled a new banknote to commemorate World War I in the honor of the first female lieutenant Ekaterina Teodoroiu to be depicted on Romanian money. The new 20 lei (\$4.56) note, which features an image of Teodoroiu – the first female army officer. It will be in vogue from December. "It responds to a widely supported legitimate public interest in promoting and integrating

gender equality and the major role female characters have played in Romania's history and society." Born in 1894, Teodoroiu initially served as a nurse during World War I, and became a combatant after her four brothers died in battle. She rose through the ranks and won commendations for valour. She died on the front lines in 1917 at age 23.

#### Romania:

- Capital: Bucharest
- Currency: Romanian leu
- President: Klaus Iohannis

### India & Germany launches WISER program for lateral entry for women researchers in joint R&D projects

The Indo-German Science & Technology Centre (IGSTC) has launched a first-of-its-kind programme to promote women researchers in the field of research and development (R&D) through lateral entry. The programme is called Women's Involvement in Science and Engineering Research (WISER). WISER will encourage women researchers in joint R&D projects. IGSTC is a joint initiative of the Department of Science and Technology (DST), Government of India and the Federal Ministry of Education and Research (BMBF), Government of Germany.

#### Germany:

- Capital: Berlin
- President: Frank-Walter Steinmeier
- Currency: Euro (€)

"Keep on going, and the chances are that you will stumble on something, perhaps when you are least expecting it. I never heard of anyone ever stumbling on something sitting down."

"You Learn More From Failure Than From Success. Don't Let It Stop You. Failure Builds Character."

## Banking & Economy

### ₹1 crore fine each imposed by RBI on One Mobikwik Systems, Spice Money

RBI has imposed monetary penalty on two payment system operators, One Mobikwik Systems Private Limited and Spice Money Limited, for violation of norms. They've been fined ₹1 crore each. These actions are based on deficiencies in regulatory compliance and are not intended to pronounce upon...validity of any transaction or agreement entered into by the entities with...customers, said RBI. In a statement, the RBI said it has imposed the penalty on the two payment system operators for "committing offences of the nature referred to in Section 26 (6) of the Payment and Settlement Systems Act, 2007 (PSS Act)."

#### Mobikwik:

- Founded: April 2009
- Founders Bipin Preet Singh, Upasana Taku
- Headquarters: Gurgaon, Haryana

#### Spice Money:

- Spice Money is one of the largest Rural Fintech Companies in India
- Founder: Dilip Modi
- Chief Executive Officer: Sanjeev Kumar
- Corporate Office: Noida

### NSE Launches 'NSE Prime' to Raise Corporate Governance Standards

The National Stock Exchange (NSE) launched a new corporate governance initiative -- NSE Prime, which the companies listed on the exchange can adopt voluntarily. NSE Prime is a framework that prescribes higher standards of corporate governance for listed companies than those required by regulations. Additional disclosure requirements have also been prescribed to provide for higher quality of public information and greater transparency. Listed companies that voluntarily choose to be a part of NSE Prime will need to comply with pre-defined norms on an ongoing basis, which will be monitored by the NSE. This initiative will raise the bar for corporate governance standards in India, enable investors to identify companies which have voluntarily signed up for higher standards of corporate governance, broaden

the quality of investors in listed companies and further strengthen trust in the Indian capital markets.

#### NSE:

- Founded: 1992
- Headquarters: Mumbai, Maharashtra
- CEO & MD: Vikram Limaye

### RBI enforces 20-digit LEI for cross-border deals above Rs 50 crore

The Reserve Bank of India (RBI) made Legal Entity Identifier (LEI) mandatory for cross-border transactions for capital or current account transactions of Rs 50 crore and above, from October 1 next year. LEI is a 20-digit number used to uniquely identify parties to financial transactions worldwide to improve the quality and accuracy of financial data systems. The LEI numbers are maintained in a global LEI database available on the website of the Global Legal Entity Identifier Foundation (GLEIF). LEI has been introduced by the Reserve Bank in a phased manner for over the counter (OTC) derivative, non-derivative markets, large corporate borrowers and large value transactions in centralised payment systems. Banks will have to obtain LEI numbers from local companies undertaking capital or current account transactions of Rs 50 crore and above, for each transaction. For firms with LEI, it is mandatory to furnish the LEI number in all transactions of that entity, irrespective of transaction size.

#### Policy Rates at a glance

- Repo Rate: 4.00%
- Reverse Repo Rate: 3.35%
- Marginal Standing Facility Rate: 4.25%
- Bank Rate: 4.25%
- CRR: 4.00%
- SLR: 18.00%

### PNB Fined ₹ 1.8 Crore, ICICI Bank Gets Reserve Bank Penalty Too

A penalty of Rs 1.8 crores has been imposed on Punjab National Bank (PNB) by the Reserve Bank of India (RBI), while ICICI Bank has been fined Rs 30 lakh for deficiencies in regulatory compliances. According to a statement issued by the central bank, PNB was found guilty of contravening provisions of



the Banking Regulation Act, 1949, related to pledge of shares by it. In the case of ICICI Bank, the RBI said that after conducting a statutory inspection for supervisory evaluation of the bank, it found non-compliance with directions related to levy of charges for non-maintenance of minimum balance in saving accounts. The RBI however made it clear that in both the cases, penalties were levied on deficiencies in regulatory compliances and it was not a pronouncement on the validity of any transaction or agreement entered into by the banks with their respective customers.

#### **RBI:**

- Headquarters: Mumbai, India
- Established: 1 April 1934
- Governor: Shaktikanta Das

#### **PhonePe is first payments firm to tokenise cards on Visa, Mastercard, Rupay**

Walmart-owned digital payments firm PhonePe, said it has become the first payments platform to tokenise cards on all three major payment networks - Visa, Mastercard and Rupay. PhonePe's tokenisation solution will help businesses save significant time and effort by removing the need to integrate with multiple card networks while complying with RBI guidelines. PhonePe SafeCard offers businesses a headstart over the competition by utilising access to millions of PhonePe customers' tokenized cards.

#### **How it works?**

Tokenisation provides users an added layer of security by converting sensitive cardholder data to a string of randomly generated numbers known as a token. PhonePe's tokenisation solution, 'PhonePe Safecard', enables businesses to offer tokenisation on their own platforms via a simple API (application programming interface) integration and a minimum turnaround time. With this solution, businesses can create, process, delete and modify tokens for online card payments with customers' consent.

#### **PhonePe:**

- Founded: December 2015
- CEO: Sameer Nigam
- Headquarters location: Bengaluru

#### **ADB approves \$112 million loan for Assam Skill University**

The Asian Development Bank (ADB) has approved a \$112 million loan to strengthen skills education and

training through the establishment of the Assam Skill University (ASU). The Loan will create a path for skill development to enhance the productivity and competitiveness of Assam's economy and industries. An additional \$1 million grant from the Japan Fund for Poverty Reduction will support the introduction of technologies for smart campus management, integrated teaching, learning, and career development management. The project will help develop the ASU's management and operating systems, business models, and faculty and staff, and support the design and construction of environmentally sustainable and climate-resilient university campus and facilities to ensure efficient and sustainable operations. It will also support the design and delivery of industry-aligned and flexible skills education and training programs, including cutting-edge digital skills programs, career development programs and services, and continuing education programs.

#### **Assam:**

- Capital: Dispur
- Governor: Jagdish Mukhi
- Chief Minister: Himanta Biswa Sarma

#### **Bajaj Allianz General Insurance launches '#Care4Hockey' campaign**

A leading private general insurer in India, Bajaj Allianz General Insurance has started its '#Care4Hockey' Campaign to elevate field Hockey's recognition in India. The company has partnered with Padma Shri (2020) Rani Rampal, Indian Women's Hockey Team Captain, who will be the face of the campaign. '#Care4Hockey' is a one of its kind campaign which aims to support the development of Hockey in India from the grass-root level.

#### **The '#Care4Hockey' campaign:**

'#Care4Hockey' is a one of its kind campaign from the Company with a goal to support the development of Hockey in India from the grass-root level. As a part of this association, the Company will contribute towards supporting underprivileged children pursuing hockey in terms of coaching, nutrition, and equipment. With this campaign, the company hopes to support in the development of hockey at the grassroots level, thus providing an opportunity for many, in making their mark in the world and become future role models of tomorrow.

#### **Bajaj Allianz General Insurance:**

- Founded: 2001
- Headquarters: Pune, Maharashtra

➤ CEO & MD: Tapan Singhel

### **ADB cuts India's GDP growth estimate to 9.7% for 2021-22**

The Asian Development Bank (ADB) has cut India's GDP growth forecast for 2021-22 to 9.7% from its previous estimate of 10%. This is the second time in three months that the bank has scaled down India's growth estimate. The reduction comes amid supply chain issues that are affecting industry.

#### **Asian Development Bank (ADB):**

- Formation: 19 December 1966
- Purpose: Social and Economic Development
- Headquarters: Ortigas Center, Mandaluyong, Metro Manila, Philippines
- Membership: 68 countries
- President: Masatsugu Asakawa (from 17 January 2020)

### **PNB launches android app for differently-abled employees**

Punjab National Bank (PNB) launched the PNB Pride-CRMD module tool, an android-based application for differently-abled employees to monitor and effectively follow up with the special mention account (SMA) borrowers. The Pride-CRMD module has built-in TalkBack software that allows the visually impaired to access the system freely and to interact with customers by tapping on their phones. Punjab National Bank emphasized the abilities of differently-abled staff members and the utilization of their skills in the conceptualization of PNB warriors and implementation of PNB Pride. The app aims to promote the rights and well-being of persons with disabilities, it said, adding that the platform opens new vistas of opportunities for 'PNB Warriors' with visual or any other physical impairment, helping them to make a valuable and tangible contribution. This tool shall be compatible with iOS also very soon, it said. SMA accounts are stressed loans recognized early, enabling banks to initiate timely remedial actions, and preventing such borrowers from slipping to the non-performing assets (NPA).

#### **Punjab National Bank:**

- Founded: 1894
- Headquarters: New Delhi
- MD & CEO: S. S. Mallikarjuna Rao

### **Boost for school learning: ADB nod to \$500-million loan**

The Asian Development Bank (ADB) has approved a \$500 million loan to the Government of India to help improve the quality of the country's school education and mitigate the impact of the Covid-19 pandemic on students' learning. The loan supports the Integrated Scheme for School Education (Samagra Shiksha) and the new Exemplar School Initiative of the Ministry of Education (MOE) to improve education quality by focussing on inclusive and equitable learning outcomes. 1,800 government schools will be transformed into exemplar schools in Assam, Gujarat, Jharkhand, Tamil Nadu, and Uttarakhand. Exemplar schools will demonstrate quality learning environments and effective learning, which will become a model for replication in other government schools across the country.

### **LIC gets RBI nod to increase stake in Kotak Mahindra Bank to 9.99%**

Kotak Mahindra Bank said the RBI has granted its approval to Life Insurance Corporation of India (LIC) to increase holding in the bank to up to 9.99%. The approval is valid for a period of one year, it added. LIC has 4.96% stake in the bank as of September 30 and is its fifth largest shareholder, according to Refinitiv data.

#### **LIC:**

- Chairperson: M R Kumar
- Headquarters: Mumbai
- Founded: 1 September 1956

### **RBI announces higher cap on promoter stake in private banks at 26% after 15 yrs**

The Reserve Bank of India had formed an Internal Working Group (IWG) in June 2020, to review the extant guidelines on ownership and corporate structure for Indian private sector banks. The IWG had 5 members with Shri Shrimohan Yadav as the convenor. The Internal Working Group (IWG) had made 33 recommendations to RBI. Now RBI has accepted 21 recommendations out of these 33. The initial lock-in requirements will continue as minimum 40 per cent of the paid-up voting equity share capital of the bank for first five years. The cap on promoters' stake in long run of 15 years has been raised from 15

percent (earlier) to 26 percent of the paid-up voting equity share capital of the bank.

**The minimum initial capital requirement for licensing new banks has been increased as below:**

- **For Universal Banks:** The initial paid-up voting equity share capital/ net worth required to set up a new universal bank has been increased to ₹1000 crore (from present ₹500 crore).
- **For SFBs:** The initial paid-up voting equity share capital/ net worth required to set up a new SFB, has been increased to ₹300 crore (from present ₹200 crore).
- **For UCBs transiting to SFBs:** The initial paid-up voting equity share capital/ net worth has been increased to ₹150 crore (from present ₹100 crore) which has to be increased to ₹300 crore in five years (from present ₹200 crore).
- All the new Small Finance Banks which are setup now, should be listed (on stock exchange) within 'eight years from the date of commencement of operations'. Note that Universal banks shall continue to be listed within six years of commencement of operations.

### **RBI Imposes ₹ 1 Crore Penalty On State Bank Of India For Violating Norms**

The Reserve Bank of India (RBI) imposed a monetary penalty of ₹ 1 crore on the country's largest lender State Bank of India (SBI) For holding shares in the borrower companies of an amount exceeding 30 per cent of the paid-up share capital of those companies. The RBI imposed the penalty for the contravention of sub-section (2) of section 19 of the Banking Regulation Act, 1949, according to its statement on

Friday, November 26. Sub-section (2) of the Banking Regulation Act, 1949, states that no banking company can hold shares in any company, as pledgee, mortgagee or absolute owner, of an amount exceeding 30 per cent of the paid-up share capital of that company or thirty per cent of its own paid-up share capital and reserves.

#### **SBI:**

- Chairperson: Dinesh Kumar Khara
- Founded: 1 July 1955
- Headquarters: Mumbai

### **ADB approves USD 1.5 bn loan to India for purchasing COVID-19 vaccines**

The Asian Development Bank (ADB) has approved \$1.5 billion loan (approx Rs 11,185 crore) to help the Government of India purchase safe and effective vaccines against the coronavirus (COVID-19) The fund will be used to procure at least 66.7 crore COVID-19 vaccine doses for an estimated 31.7 crore people of the country.

#### **Asian Development Bank:**

- Formation: 19 December 1966
- Purpose: Social and Economic Development
- Headquarters: Philippines
- Membership: 68 countries
- President: Masatsugu Asakawa (from 17 January 2020)

**"If You Are Working On Something That You Really Care About, You Don't Have To Be Pushed. The Vision Pulls You."**

**"People Who Are Crazy Enough To Think They Can Change The World, Are The Ones Who Do."**



## MoU's Signed

### India, US agree on transitional approach on Equalisation Levy 2020

India and United States have agreed on a transitional approach on Equalisation Levy 2020. India and United States have agreed that the same terms that apply under the October 21 Joint Statement shall apply between the two countries with respect to India's charge of two per cent equalisation levy on e-commerce supply of services and the United States' trade action regarding the Equalisation Levy. However, the interim period that will be applicable will be from 1st of April 2022 till implementation of Pillar One or 31st March 2024, whichever is earlier. Ministry of Finance in a statement said that India and United States will remain in close contact to ensure that there is a common understanding of the respective commitments and endeavor to resolve any further differences of views on this matter through constructive dialogue. It said, the final terms of the Agreement will be finalised by 1st of February next year. On 8th of October this year, India and United States joined 134 other members of the Organisation for Economic Co-operation and Development and G20 Inclusive Framework in reaching agreement on the Statement on a Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalization of the Economy. On 21st of October, the United States, Austria, France, Italy, Spain, and the United Kingdom reached an agreement on a transitional approach to existing Unilateral Measures while implementing Pillar 1. The agreement is reflected in the joint statement that was issued by these countries.

### India, German Development Bank sign agreements for Euro 140 M reduced interest loan, Euro 2 M grant for Energy Reform Programme in Madhya Pradesh

The Government of India and the German Development Bank signed agreements for 140 million Euro reduced interest loan and 2 million Euro grant for Energy Reform Programme in Madhya Pradesh. Rajat Kumar Mishra, Additional Secretary, Department of Economic Affairs in the Finance Ministry signed the agreements on behalf of Government. Dr. Juergen Welschhof, Head of Division,

Energy, South Asia signed for German Development Bank. The project comprises two components. These are implementation of smart meters and Advanced Metering Infrastructure (AMI) and, separation of agriculture and non-agriculture feeders. The Project will contribute to a more stable, secure and climate and environmentally friendly energy supply in India by upgrading and strengthening distribution networks in Madhya Pradesh.

### India, EIB sign contract for first tranche loan of Euro 250 million for Agra Metro Rail Project

Government and European Investment Bank signed a Finance Contract for first tranche loan of 250 million euros for Agra Metro Rail Project. Prime Minister Narendra Modi had inaugurated construction work of Agra Metro project in Agra last year through video conference. European Investment Bank had approved a total loan of 450 million euros to fund the Agra Metro Rail Project. The project aims to provide safe, reliable, affordable and environment friendly public Mass Rapid Transit System for Agra city. It will improve mobility and support endeavour for planned urban development in Agra. The financing from EIB will help to fund construction of 29.4 km metro corridor. The project will also enhance economic productivity of the city and catalyse job creation.

#### European Investment Bank:

- Founded: 1958
- Type: International financial institution
- Location: Kirchberg, Luxembourg
- Owner: EU member states
- President: Werner Hoyer

### REC signs agreement with KfW Development Bank to finance Power Sector and Renewable Energy Projects

REC Limited has entered into an agreement with KfW Development Bank for availing ODA term loan of USD 169.5 million under Indo-German Bilateral Partnership in accordance with the approval granted by Department of Economic Affairs, Ministry of Finance, Government of India. Proceeds of ODA loan will be deployed for part financing of innovative Solar PV Technology based generation Projects in India at

competitive interest rates. This is the fifth credit line signed between REC Limited and KfW for financing of Power Sector Projects and third credit line for financing of Renewable Energy Projects. REC is continuously re-shaping its policies to align with market requirements and developing financial solutions and mechanisms that create scalable and effective ways of channelizing both Private and Public investments in the Renewable Energy space. As a testament to this, REC offers the lowest interest rates to renewable energy sector among all the segments being financed by the corporation.

### Central Bank of India signs Co-lending deal with U GRO Capital

Central Bank of India signed a co-lending deal with fintech platform U GRO Capital. Under this partnership, the two entities aim to disburse up to ₹1000 crore to U GRO Capital's varied MSME segments under its programmes like Pratham, Sanjeevani, Saathi, GRO MSME and Machinery financing, in the next 12 months.

#### The co-lending arrangement:

- The co-lending arrangement with Central Bank of India will work towards providing formal credit to underserved MSMEs at affordable rates across all product categories of U GRO Capital.
- Central Bank of India will provide co-lending support through GRO-Xstream platform with the loans originated by U GRO Capital's distribution network.
- GRO-Xstream is an online platform, it integrates Application Programming Interface (APIs) with Banks on one side and with multiple FinTechs, NBFCs, NeoBanks, Market places and other digital platforms on the other.
- The bank will also leverage GRO-Xstream platform driven by a Data Tripod of GST, Banking and Bureau coupled with its sectoral analysis to solve the problem of credit for small businesses.

### India, Germany Development Bank sign 442.26 mn loan pact for Surat Metro Rail Project

Government of India and the Germany Development Bank- KfW (Kreditanstalt für Wiederaufbau) signed a 26 million euros loan for a 40.35 km Surat Metro Rail project in Gujarat. The total cost of the project is Euro

1.50 billion, out of which KfW is financing Euro 442.26 million. The project is co-financed by French Development Agency, AFD (Agence Française de Développement) with Euro 250 million. Prime Minister Narendra Modi had launched the Ahmedabad Metro Rail Project Phase-II and the Surat Metro Rail Project in January this year. The project is aimed at reducing traffic congestion and long delays on major travel corridors in Surat city and urban areas.

#### Details:

The 40.35 km Surat Metro project aims to strengthen the transport infrastructure of the urban part of Surat. It comprises two corridors. While corridor-1 is 21.61 km long and is from Sarthana to Dream City. Corridor-2 is 18.74 km long and is from Bhesan to Saroli.

### Federal Bank and Star Health Insurance tie-up for bancassurance

Federal Bank has joined hands with India's first standalone health insurance Company, Star Health and Allied Insurance Co Ltd as a corporate agent to provide a wide range of innovative health insurance products for the Bank's 8.90 million customers spread over 1,291 branches across the country. The Bank's customers can avail benefits of Star Health's retail products and group affinity products through the Bank's various distribution channels thus helping customers address their complete financial needs.

#### Bancassurance:

It is a partnership between a bank and an insurance company that would enable them to offer insurance products to the bank's customers.

#### Federal Bank:

- Headquarters: Aluva
- CEO: Shyam Srinivasan
- Founder: K.P Hormis
- Founded: 23 April 1931

### Zee Entertainment, Sony India sign merger agreement; Punit Goenka to be CEO

Sony Pictures Networks India (SPNI) and Zee Entertainment Enterprises announced the signing of definitive agreements to merge the two companies. As per the deal, Sony Pictures Entertainment (SPE) will indirectly hold 50.86% stake in the merged entity, ZEEL founders will hold 3.99% and public shareholders will hold 45.15%. Punit Goenka will be

the MD and CEO of entity. Under the new agreement, SPNI will have a cash balance of \$1.5 billion.

#### **Background:**

The merger is also expected to ease the pressure that ZEE is facing from its top shareholders, who had called for a management reshuffle in September this year. The demands of the top shareholders also included the removal of ZEE CEO Goenka from the company's Board.

#### **Zee Entertainment**

- CEO: Punit Goenka
- Founder: Subhash Chandra
- Founded: 15 December 1991
- Headquarters: Mumbai
- Subsidiaries: Dish TV, Siti Networks, Zee Music Company, etc.
- Parent organization: News Corporation

#### **Mahindra group inks pact with Maha govt to set up vehicle-scrapping units**

Mahindra group has signed a memorandum of understanding (MoU) with the Maharashtra government for setting up multiple vehicle-scrapping units in the state. Mahindra MSTC Recycling Pvt Ltd, which operates recycling facilities under the Cero brand, already has a recycling facility at Pune and is looking to set up four additional facilities in Mumbai, Nagpur, Aurangabad and Nashik. The scrappage centres will be equipped with recycling end-of-life 2/3-wheelers, passenger and commercial vehicles in accordance with all legal and environmental norms, with a planned capacity of 40,000 vehicles annually. A joint venture between Mahindra Accelo (a Mahindra group company) and MSTC (a government of India enterprise under Ministry of Steel) -- Mahindra MSTC Recycling Pvt Ltd currently has 11 recycling units in different parts of India.

#### **Mahindra Group**

- Owner & CEO: Anand Mahindra
- Founded: 2 October 1945
- Headquarters: Mumbai
- Subsidiaries: Mahindra & Mahindra, Tech Mahindra, etc.

#### **ICICI Pru first insurer to sign UNPRI on ESG issues**

ICICI Prudential Life Insurance became the first Indian insurance company to sign United Nations-

supported Principles for Responsible Investment (UNPRI), to demonstrate commitment towards the environmental, social and governance (ESG) issues.

In order to promote sustainability, IPRULIFE is integrating ESG factors into its investment management framework. The UNPRI is an investor initiative in partnership with the two bodies of the United Nations – the UN Environment Programme Finance Initiative and the UN Global Compact. Climate change is impacting lives and livelihoods around us and as one of the largest domestic financial institutions in the country, it is incumbent on us to act proactively and responsibly on ESG factors to save the planet.”

#### **ICICI Prudential Life Insurance:**

- Established: 2000
- Headquarters: Mumbai, Maharashtra
- CEO & MD: Narayanan Srinivasa Kannan

#### **Isro signs pacts with four countries for satellite launches**

The Indian Space Research Organisation (ISRO) has signed six agreements with four countries for launching foreign satellites during 2021-2023. 132 million Euros would be earned through the launching of these foreign satellites on a commercial basis. The ISRO-Indian space agency, founded in 1969 to develop an independent Indian space program. Minister of State for Atomic Energy and Space Dr Jitendra Singh has said that ISRO has launched a total of 342 satellites from 34 countries since 1999. ISRO through its commercial arm, New Space India Limited (NSIL), has been launching satellites belong to other countries from Polar Satellite Launch Vehicle (PSLV). Total 124 indigenous satellites have been put into Earth's orbit including 12 student satellites.

#### **ISRO:**

- Chairman: K.Sivan
- Headquarters: Bengaluru, Karnataka
- Established: 15 August 1969

#### **HAL signs Rs 2,400 cr contract with BEL for supply of avionics for LCA**

Hindustan Aeronautics Limited (HAL) has signed a Rs 2,400 crores contract with Bharat Electronics Limited (BEL) for the development and supply of 20 types of systems for 83 LCA (Light Combat Aircraft) Tejas Mk1A fighter aircraft programme. The duration



of the contract is 5 years i.e., from 2023 to 2028. Notably, this is HAL's biggest order on any Indian company thus boosting the 'Atmanirbhar Bharat' campaign. The order for the supply of these systems will be executed by two units of BEL at Bengaluru (Karnataka), and Panchkula (Haryana).

#### **Hindustan Aeronautics Limited:**

- Founded: 1940
- Headquarter: Bengaluru, Karnataka
- CMD: R Madhavan

### **India, Vietnam sign Letter of Intent to establish partnership in Digital Media**

India and Vietnam signed a Letter of Intent to establish partnership in Digital Media. It was signed by Union Minister for Information and Broadcasting Anurag Thakur and Vietnam's Minister of Information and Communication Nguyen Manh Hung. The Letter of Intent envisages sharing of information and experience in establishing policies and regulatory frameworks on digital media and social networks. It also envisages conducting capacity building and training programs for media professionals and officials in the two countries. The meeting would shape the bilateral cooperation in the field of new technologies and challenges such as the "infodemic" which all countries are grappling with during the COVID-19 pandemic.

#### **Vietnam:**

- Capital: Hanoi
- President: Nguyễn Xuân Phúc
- Prime Minister: Phạm Minh Chính
- Currency: đồng

### **Mission Shakti Living Lab Launched in Odisha**

Odisha inked an agreement with United Nations Capital Development Fund (UNCDF) to launch "Mission Shakti Living Lab" for the financial empowerment of women. A Global Centre for Financial Health, to launch Mission Shakti Living Lab empowering women economically and drive gender equality. With the use of digital technologies and e-commerce, it will increase the income and financial well-being of women, self-help groups (SHGs) and households by helping them in the factors of planning, saving, borrow or spending better. It will address the barriers related to the autonomy and financial freedom of women.

#### **The Mission Shakti:**

Mission Shakti was launched in 2001 to enhance the holistic development of women, there are 6.02 lakh self-help groups (SHGs) comprising 70 lakh members across rural and urban areas of Odisha under the initiative. This initiative led to an increase in the income of SHG members from Rs 3,000 to 15,000 per month in Odisha.

#### **UN Capital Development Fund:**

- Founded: 1966
- Headquarters: New York, United States
- Executive Secretary: Preeti Sinha

### **Axis, Swift tie up to digitise trade banking**

Axis Bank is working with new digital services from provider Swift to provide a comprehensive digital solution to clients. The bank is integrating with different digitization initiatives by government bodies and service providers to extend an end-to-end service to business clients. Axis bank's B2B (business-to-business) digitization efforts are being supported by Swift, a cooperative of global banks that acts as an intermediary between banks and sets standards.

#### **Axis Bank:**

- Founded: 3 December 1993
- Headquarters: Mumbai
- MD & CEO: Amitabh Chaudhary
- Chairperson: Shri Rakesh Makhija

### **SBI to sign MoU with Kendriya Sainik Board**

State Bank of India (SBI) has signed an MoU with Kendriya Sainik Board to support and educate the children of war veterans, ex-servicemen, and war widows. India's largest bank said it will provide a grant of ₹ 1,000 per month to 8,333 war veterans'. The bank has contributed ₹ 10 crores to the Armed Forces Flag Day Fund. The Armed Forces Flag Day is celebrated on December 7. According to the statement, the bank has contributed ₹10 crores to the Armed Forces Flag Day Fund. The Armed Forces Flag Day is celebrated on December 7.

#### **State Bank of India:**

- Founded: 1 July 1955
- Headquarters: Mumbai
- Chairman: Dinesh Kumar Khara

### Paytm has partnered with AWS to offer startup toolkits for entrepreneurs

Paytm, a leading digital ecosystem for consumers and merchants has partnered with Amazon Web Services (AWS) to offer Paytm Startup Toolkit with exclusive payment services to early-stage Indian startups. Paytm will help entrepreneurs to grow businesses with payment, distribution, and growth solutions who are operating in India in the AWS Activate. The Paytm Startup Toolkit is a single-stop platform that offers solutions in the domain of payments, payouts, banking and distribution with services including Paytm Payment Gateway, which helps businesses accept digital payments on their website, app; Paytm Payouts, which helps companies streamline their payments to employees, vendors, distributors and channel partners; and Paytm Payments Bank including nodal banking, which provides truly digital banking.

#### Paytm:

- Founded: August 2010
- Headquarters: Noida, Uttar Pradesh, India
- CEO: Vijay Shekhar Sharma

### India, ADB sign 150-million-dollar loan agreement to provide affordable housing for urban poor in Tamil Nadu

India and Asian Development Bank signed a 150-million-dollar loan agreement to provide affordable housing for urban poor in Tamil Nadu. The agreement was signed between Additional Secretary, Department of Economic Affairs, Rajat Kumar Mishra and Country Director of Asian Development Bank's India Resident Mission Takeo Konishi. The project is aligned with the Government's development priorities and policies on urban sector development, particularly the flagship program Pradhan Mantri Awas Yojana, Housing for All. In addition, ADB will provide a \$1.5 million technical assistance (TA) grant from its Technical Assistance Special Fund to support the capacity building of government agencies responsible for delivering affordable housing and regional planning in Tamil Nadu.

#### ADB:

- Formation: 19 December 1966
- Headquarters: Philippines
- Membership: 68 countries
- President: Masatsugu Asakawa (from 17 January 2020)

### Walmart announces MoU with MP government to train and support MSMEs

Walmart and its subsidiary Flipkart have signed an MoU with the Department of Micro, Small, and Medium Enterprises, Government of Madhya Pradesh to create an ecosystem of capacity building for MSMEs in Madhya Pradesh. Under this MoU, Walmart, Flipkart, and MSME Department will assist MSMEs to digitize their business and enable them to sell their products through online retail. This initiative comes under the Walmart Vridhhi Supplier Development Programme (Walmart Vridhhi), delivered by knowledge partner Swasti, which aims to train around 50000 Indian MSMEs with business skills to become successful as suppliers to Walmart, sellers on global marketplace platforms like Flipkart. Under this programme, Walmart and Flipkart have partnered with various states including Haryana and Tamil Nadu.

#### Madhya Pradesh:

- Capital: Bhopal
- Governor: Mangubhai C. Patel
- Chief Minister: Shivraj Singh Chouhan

### Kerala, German agency sign MoU to provide jobs to nurses

Pinarayi Vijayan-led Kerala government signed an MoU with German Federal Employment Agency for the recruitment of nurses from the state. The German scheme 'Triple Win' can provide over 10,000 employment opportunities for nurses. The MoU was part of the efforts of the government to find new destinations of migration for Keralites other than the traditional hubs against the backdrop of the changes in the global employment scenario. The MoU has opened the way for recruitment to Germany, one of the most powerful and industrialised countries in the world. It's the "first step towards tapping the possibilities of migration to European countries.

#### Kerala:

- Governor: Arif Mohammad Khan
- Capital: Thiruvananthapuram
- Chief minister: Pinarayi Vijayan

### India and EU agrees to set up Clean Energy and Climate Partnership

India and European Union (EU) have agreed to step up their Clean Energy and Climate Partnership. India-

EU Energy Panel was co-chaired by India's Ministry of External Affairs Secretary (West), Reenat Sandhu, and Deputy Director-General for Energy, European Commission Mechthild Wördsörfer. They jointly agreed on a detailed work programme until 2023 to implement the 2016 India-EU Clean Energy and Climate Partnership. The Panel agreed on increased technical cooperation in energy efficiency, renewable energy, green hydrogen, grid integration, storage, power market design, interconnection, cold chain, and sustainable financing. The Panel also agreed to explore further avenues to strengthen India-EU cooperation within the context of the International Solar Alliance. EU expressed its support for the close cooperation between India and the International Energy Agency. India and EU also agreed to exchange closely on clean energy in the frame of G20.

### **SBI has signed an MoU with Usha International to empower women entrepreneurs**

State Bank of India (SBI) has signed an agreement with Usha International Limited (UIL) for empowering women entrepreneurs by providing financial assistance. The financial assistance will be provided under the Joint Liability Group model. This is the first of its kind collaboration between UIL and SBI in coming forward together for the upliftment of the social and economic status of women entrepreneurs in rural areas of the country by making them self-reliant and providing equal opportunity for achieving financial growth and inclusion.

#### **Details:**

As per the Memorandum of Understanding (MoU) signed between SBI and UIL, branches of the bank in Uttarakhand, Delhi, Western UP, and NCR Haryana will be financing women entrepreneurs to Usha Silai

School to purchase sewing machines for enhancement and up-gradation of technical sewing skills or to purchase thread of clothes, etc. Related to above for running their livelihood. UIL has already been providing necessary training to these women through USHA Silai Schools across the country. This relationship will bring a new synergy among the women entrepreneurs and lead towards holistic development, SBI has given the name 'NAVCHETNA' to this relationship.

### **State Bank of India, PONLAIT ink pact on loan to dairy farmers**

The State bank of India (SBI) has signed an MoU with Pondicherry Co-op. Milk Producers' Union Ltd (PONLAIT) for financing individual dairy farmers up to Rs 3 Lakh. The Loan will be made available through YONO application of the SBI Bank. SBI has introduced a technology product, named 'SAFAL-Simple And Fast Agriculture Loan' for financing individual Dairy farmers, who are supplying milk to commercial dairies on a regular basis. Around 3,500 dairy farmers supplying milk to 98 primary milk societies of PONLAIT would be benefited by the arrangement. This was the first MoU signed in the Chennai circle of the bank which plans to enter into such agreements with commercial dairies throughout the country to finance farmers supplying milk to the dairies. The present arrangement to boost milk production with the help of bank loans would help the administration of the union territory to meet the daily requirement of milk.

#### **SBI:**

- Chairperson: Dinesh Kumar Khara
- Headquarters: Mumbai
- Founded: 1 July 1955

**“You Are Never Too Old To Set  
Another Goal Or To Dream A New  
Dream.”**



## Awards & Recognition

### JGU wins “Digital Innovation of the Year” at the Times Higher Education Asia Awards 2021

O. P. Jindal Global University (JGU) has won the ‘Digital Innovation of the Year Award’ in the prestigious Times Higher Education (THE) Asia Awards 2021 for creating a free, cloud-based application to help schools and universities manage data. JGU was the only Indian University to be shortlisted for the “Digital Innovation of the Year”. The university was awarded under the ‘Technological or Digital Innovation of the Year’ category for its transformative work in the last 2 years. This award is also a reflection of JGU’s commitment to ensure continued education for its students during the ongoing pandemic. In March 2020, we were faced with one of the most unprecedented crises of our time.

**Times Higher Education Awards Asia 2021 winners:**

- Leadership and Management Team of the Year: Kalinga Institute of Industrial Technology (India)
- Workplace of the Year: Saint Joseph University of Beirut (Lebanon)
- International Strategy of the Year: Hangzhou Dianzi University of Hong Kong
- Teaching and Learning Strategy of the Year: National University of Singapore
- THE Datapoints Social Impact Award: Institute Teknologi Sepuluh Nopember (Indonesia)
- THE Datapoints Improved Performance Award: University Utara (Malaysia)
- Excellence and Innovation in the Arts: Hong Kong Baptist University
- Technological or Digital Innovation of the Year: O.P. Jindal Global University (India)
- Outstanding Support for Students: University Teknologi Petronas (Malaysia)
- Student Recruitment Campaign of the Year: Hanoi University of Science and Technology (Vietnam)

### SAIL receives prestigious Golden Peacock Environment 2021

Steel Authority of India Ltd. (SAIL), under the Ministry of Steel, has been awarded with the

prestigious Golden Peacock Environment Management Award 2021 for successive three years.

The Award is given to organizations for significant achievements in Environment Management by Environment Foundation (WEF) since 1998. The company’s environmental protection measures are focused on adopting various environmental measures including, upgrading of pollution control facilities, water conservation efforts with the aim to achieve Zero Liquid Discharge, efficient handling of different solid wastes (viz. process waste, hazardous waste, canteen/township waste), carbon sequestration through afforestation, eco-restoration of the mined-out area and etc. Carbon footprint reduction has become an integral part of the company’s corporate policies and operations. Deployment of state-of-the-art environment-friendly technology, R&D initiatives in association with academic institutes of repute for resource efficiency, creation of carbon sinks by massive plantation drives, gradual shift to LED lighting, enhancing the share of renewable energy etc.

#### SAIL:

- Founded: 19 January 1954
- Headquarters: New Delhi
- CEO: Soma Mondal

### Emma Raducanu wins BBC Sports Personality of the Year 2021

Tennis star Emma Raducanu is the BBC’s Sports Personality of the Year for 2021. She beat Tom Daley (diver) and Adam Peaty (swimmer) into second and third place, while England’s men’s footballers were named team of the year and Gareth Southgate the coach, as a triumphant period for British sport across the board was commemorated at a ceremony in Salford. Tom Daley won gold for the first time at his fourth Olympics in Tokyo.

#### Other award winners at Sports Personality 2021:

- Helen Rollason Award: Jen Beattie
- Coach of the Year: Gareth Southgate
- Team of the Year: England men’s football team
- World Sport Star: Rachael Blackmore
- Lifetime Achievement: Simone Biles
- Unsung Hero: Sam Barlow
- Young Sports Personality of the Year: Sky Brown

### Federer wins ATP Fans' Favourite Award for 19th year in a row

Ex-world number one Roger Federer won the 'Fans' Favourite Award' in singles for 19th consecutive year at ATP Awards 2021. The 20-time Grand Slam champion played 13 matches this year, winning nine of them. Overall, it's the Swiss' 40th ATP award. In doubles, French duo of Pierre-Hugues Herbert and Nicolas Mahut won the 'Fans' Favourite Award' for the first time.

#### List of Winners at ATP Awards 2021:

- ATP No. 1 presented by FedEx: Novak Djokovic
- ATP Doubles No. 1 presented by FedEx: Nikola Pietrangeli & Mate Pavić
- Comeback Player of the Year: Mackenzie McDonald
- Most Improved Player of the Year: Aslan Karatsev
- Newcomer of the Year: Jensen Brooksby
- Stefan Edberg Sportsmanship Award: Rafael Nadal
- Arthur Ashe Humanitarian Award: Marcus Daniell
- Fans' Favourite Award (Singles): Roger Federer
- Fans' Favourite Award (Doubles): Pierre-Hugues Herbert and Nicolas Mahut
- Coach of the Year: Facundo Lugone
- Ron Bookman Media Excellence Award: Prajwal Hegde
- ATP Masters 1000 Tournament of the Year: BNP Paribas Open (Indian Wells)
- ATP 500 Tournament of the Year: Erste Bank Open (Vienna)
- ATP 250 Tournament of the Year: Qatar ExxonMobil Open (Doha)

### TiE names Kumar Mangalam Birla as Global Entrepreneur of the year

Aditya Birla Group's chairman, Kumar Mangalam Birla has received the Global Entrepreneur of the Year Award- Business Transformation from The Indus Entrepreneurs (TiE) based out of Silicon Valley. Birla is the first Indian Industrialist to receive the award for global entrepreneurship along with top global business leaders Satya Nadella, Elon Musk, and Jeff Bezos. The awardees were selected by an independent jury chaired by Venture Capitalist, Tim Draper, Founder, Draper University.

### Aditya Birla Group:

- Chairman: Kumar Mangalam Birla
- Director & Chief executive officer: Sanjiv Misra
- Founder: Seth Shiv Narayan Birla
- Founded: 1857
- Headquarters: Mumbai

### Bhutan confers highest civilian award on PM Modi

Bhutan has announced its highest civilian award on Prime Minister Narendra Modi. Prime Minister of Bhutan Dr Lotay Tshering said that his majesty Jigme Khesar Namgyel Wangchuck has pronounced Prime Minister Narendra Modi's name for the highest civilian decoration Ngadag Pel gi Khorlo. Bhutan received the first consignment of 1.5 lakh doses of Covid-19 vaccine Covishield as a gift from India in January. Bhutan was the first country to receive the Government of India's gift of the coronavirus vaccines, manufactured by the Serum Institute of India (SII).

#### Before this, the current Prime Minister of India had been accorded the respective top honours:

1. Order of Abdulaziz Al Saud (Saudi Arabia)
2. State Order of Ghazi Amir Amanullah Khan (Afghanistan)
3. Grand Collar of the State of Palestine Award (Palestine)
4. Order of Zayed Award (United Arab Emirates)
5. Order of St. Andrew award (Russia)
6. Order of the Distinguished Order of Nishan Izzuddin (Maldives)
7. Champions of the Earth Award (United Nations Environment Programme)
8. Global Goalkeeper award (Bill and Melinda Gates Foundation)

#### Bhutan:

- Capital: Thimphu
- King: Jigme Khesar Namgyel Wangchuck
- Prime minister: Lotay Tshering

### DBS Bank India clinches two awards at ET BFSI Excellence Awards 2021

DBS Bank India's persistent efforts to drive digital transformation for its customers have been awarded at the ET BFSI Excellence Awards 2021. An initiative of The Economic Times, ET BFSI Excellence Awards honours the best innovations & practices implemented

by the BFSI industry in a dynamic and competitive environment. DBS Bank India was awarded in the 'Innovative API/Open Banking model' category for DBS RAPID. The bank has designed a real-time, digital payments solution for Transport Corporation of India Limited (TCI) – one of India's largest transportation and logistics players. This unique solution leverages the UPI, allowing TCI to make real-time advance payments to the transport owners enabling them to withdraw cash from any ATMs. The solution has resulted in an annual savings of 4.5 million hours for TCI and helped transport owners make timely deliveries.

#### **The bank has won two awards:**

- 'DBS Rapid (Real-time API)' solution in the 'Innovative API/Open Banking model' category
- 'Intelligent Banking' in the 'Best Digital Customer Experience initiative' category.

#### **DBS Bank India:**

- Headquarters: Mumbai, Maharashtra
- MD & CEO: Surojit Shome

#### **Elon Musk named Time's 2021 'Person of the Year'**

Time Magazine named Elon Musk, the CEO of Tesla and SpaceX and the world's richest person, the 'Person of the Year 2021'. According to Bloomberg Billionaires Index, Elon Musk is the wealthiest person, with an estimated net worth of \$266 billion. Elon Musk took over the title from US President Joe Biden and Vice President Kamala Harris, who received the title last year. Musk is the founder and CEO of SpaceX, and leads brain-chip startup Neuralink and infrastructure firm The Boring Company. Tesla's market value soared to more than \$1 trillion this year, making it more valuable than Ford Motor and General Motors combined.

#### **What is Time magazine famous for?**

Since its founding in 1923, TIME Magazine has been one of the most authoritative and informative guide to what is happening in current affairs, politics, business, health, science and entertainment. Every week over 20 million subscribers worldwide turn to Time for award winning exclusive coverage.

#### **India wins Miss Universe crown after 21 years as 21-yr-old Harnaaz Sandhu named winner**

India won the Miss Universe crown after 21 years when the 21-year-old Harnaaz Sandhu from

Chandigarh was named the winner of the 70th edition of the beauty pageant held in Israel. Paraguay's Nadia Ferreira was named first runner-up and South Africa's Lalela Mswane was the second runner-up. Lara Dutta last won the Miss Universe title for India in 2000.

#### **Which Indians have won the Miss Universe title so far?**

India's Harnaaz Sandhu was crowned Miss Universe 2021, making her the third Indian to win the title. The first Indian woman to be crowned Miss Universe was actress Sushmita Sen in 1994. Actress Lara Dutta was crowned Miss Universe in 2000.

Note: Twenty-one-year-old Harnaaz is the second youngest Indian to be crowned Miss Universe.

#### **Miss Universe Organisation**

- Formation: June 28, 1952
- Headquarters: New York, USA
- President: Paula Shugart (since 1997)
- Parent organization: IMG (Endeavor)
- Budget: US\$100 million (annually)

#### **Acclaimed Indian architect Balkrishna Doshi who worked with the legendary Le Corbusier will receive the Royal Gold Medal for 2022**

Acclaimed Indian architect Balkrishna Doshi who worked with the legendary Le Corbusier will receive the Royal Gold Medal for 2022, one of the world's highest honours for architecture. Given in recognition of a lifetime's work, the Royal Gold Medal is approved personally by Queen Elizabeth of the UK and is given to a person or group of people who have had a significant influence on the advancement of architecture. With a 70-year career and over 100 built projects, Balkrishna Doshi, 94, has influenced the direction of architecture in India and its adjacent regions through both his practice and his teaching. His buildings combine pioneering modernism with vernacular, informed by a deep appreciation of the traditions of India's architecture, climate, local culture and craft. His projects include administrative and cultural facilities, housing developments and residential buildings. The citation for Doshi says he has become internationally known for his visionary urban planning and social housing projects, as well as his work in education, both in India and as a visiting professor at universities around the world.

#### **The Royal Gold Medal:**

The Royal Gold Medal for architecture is awarded annually by the Royal Institute of British Architects



on behalf of the British monarch, in recognition of an individual's or group's substantial contribution to international architecture.

### **IIT-Kanpur scientist Ropesh Goyal wins "Young Geospatial"**

Ropesh Goyal from IIT-Kanpur won the 'Young Geospatial Scientist' award in recognition of his unique contribution to developing the Indian Geoid Model and computation software. Member of Space Commission, Government of India, and former ISRO Chairman AS Kiran Kumar presented the award to Goyal during the inaugural event of the DigiSmart India 2021 conference hosted by the Geospatial World.

#### **Details:**

The 'Young Geospatial Scientist' award and a gold medal have been presented every year since 2011 to promising scientists below 35 years of age in memory of Rachapudi Kamakshi, a strategic analyst with a strong inclination towards geography and geospatial studies. The Rachapudi Kamakshi Memorial Trust is an organisation founded to help and encourage students and young and talented individuals with great ideas and research work in the field of geospatial sciences.

### **Ram Nath Kovind presents President's Standard award to 22nd Missile Vessels Squadron of Indian Navy**

President Ram Nath Kovind presented the President's Standard award to the 22nd Missile Vessels Squadron of the Indian Navy at a ceremony held in the naval dockyard on morning. The President's Standard is the highest honour bestowed by the Supreme Commander of the Armed Forces to a military unit in recognition of the service rendered to the nation. The 22nd Missile Vessels Squadron was formally established at Mumbai in October 1991 with 10 Veer Class and three Prabal Class missile boats. However, the genesis of 'Killers' dates back to the year 1969, with the induction of OSA I Class missile boats from the erstwhile USSR to bolster the strength of the Indian Navy. During the 1971 war, the youngest warriors of a young Indian Navy drew first blood when they launched a devastating offensive on the Pakistan Navy.

Indian Navy ships Nirghat, Nipat and Veer fired their Styx missiles and sank Pakistan Navy ships Khyber and Muhafiz, delivering a deathly blow to aspirations of the Pakistan Navy.

### **Konkani writer Damodar Mauzo conferred with 57th Gyanpith Award**

Renowned Konkani writer Damodar Mauzo has been conferred with 57th Gyanpith Award for the year 2022. Noted Assamese poet Nilmani Phookan has bagged 56th Gyanpith award for the year 2021. Mauzo is second Konkani writer to receive the highest literary award, earlier being given to Writer Ravindra Kelekar in 2006. Mauzo is short story writer, novelist and screenplay writer. His novel Karmelin had bagged Sahitya Akademi award in 1983. His several short stories are translated into other languages and have appeared in various magazines. Stories of Mauzo depict the struggle of poor people, their agonies and sorrows.

#### **Gyanpith Award:**

- Established: 1961
- First awarded: 1965

### **Cambridge Dictionary crowns 'perseverance' as 2021 word of the year**

Perseverance, a word that captures the undaunted will of people across the world to never give up, despite the many challenges of the last 12 months, is Cambridge Dictionary's Word of the Year 2021. Perseverance has been looked up more than 243,000 times on the website in 2021, the first time it has made a noticeable appearance. NASA's Perseverance Rover made its final descent to Mars on 18 February.

#### **Cambridge Dictionary:**

The Cambridge Advanced Learner's Dictionary was first published in 1995 under the name Cambridge International Dictionary of English, by the Cambridge University Press. The dictionary has over 140,000 words, phrases, and meanings.

### **Nizamuddin Basti project wins two UNESCO heritage awards**

Nizamuddin Revival Project, India's project on the holistic urban revitalisation of the historic Nizamuddin Basti community, in New Delhi has won the UNESCO Asia-Pacific Awards for Cultural

Heritage Conservation 2021. The project involves the meticulous restoration of over 20 historic monuments clustered around the 14th-century mausoleum of the revered Sufi saint, Hazrat Nizamuddin Auliya. Nizamuddin Revival Project won these awards under 2 categories - Award of Excellence & Special Recognition for Sustainable Development. The settlement around the tomb of Noted Sufi saint Hazrat Nizamuddin Auliya, who settled in a Delhi village Ghiyaspur located on the tributary of River Yamuna, is known as the Hazrat Nizamuddin Basti. The Nizamuddin area comprises the Humayun's Tomb, Hazrat Nizamuddin Basti and Sunder Nursery, Batashewala Tomb-Garden Complex, the tomb of courtier poet Khan I Khanan 'Rahim', and the Mughal-period caravanserai of Azimganj Serai. The jury of Heritage experts honoured 9 projects from 6 countries (Bangladesh, China, India, Japan, Malaysia, and Thailand) with the UNESCO Asia-Pacific Awards for Cultural Heritage Conservation 2021.

### **Sruthy Sithara from Native Kerala Wins Miss Trans Global 2021 Title**

Sruthy Sithara, a resident of Kerala bags the title of Miss Trans Global 2021. The 25-year-old Kerala native is the first Indian to hold this title. A native of Vaikom, Sithara is one of four trans people who were given a government job in Kerala and she was a part of the transgender cell at the Social Justice Department. The model-actress runs a campaign called 'The Kaleidoscope' to advocate for the rights of the LGBTQ+ community. Miss Trans Global is an international online pageant for trans and gender nonconforming people from all backgrounds, which was started to raise awareness on transgender and LGB issues around the world

### **Ratan Tata to get Assam's highest civilian award**

On the occasion of Assam Divas, the state government of Assam has decided to accolade renowned industrialist Ratan Tata with the 'Asom Bhaibav' award, the highest civilian state award for his contribution to cancer care in the state. The awards that precede it are Asom Saurav, followed by Asom Gaurav. With healthcare as one of its top priorities, the Assam government is showing its appreciation towards Tata's push to cancer care in the region. The Tata Trust, in collaboration with the Assam

government, had decided to set up 19 cancer care units during the 'Advantage Assam – Global Investment Summit' in 2018 and an MoU had been signed between the Assam government and Tata Trusts. The hospitals were to be set up on a three-tier system and constructed under the divisions L1, L2 and L3, which signified the standard of care that would be provided by them. Ratan Tata had laid the foundation stone for the cancer care units in the state.

### **Anju Bobby George Crowned Woman of the Year by World Athletics**

Legendary Indian athlete, Anju Bobby George has been bestowed with the Woman of the Year Award by World Athletics for grooming talent in the country and for her advocacy of gender equality. In 2016, she formed a sports academy for young girls. Through this, she has helped India advance in sports and also inspire more women to follow in her footsteps. She is also presented with the award for advocating gender equality. Anju, the only Indian to have won a medal in the World Championships with a long jump bronze in the 2003 edition.

#### **Anju Bobby George:**

She is a gold medallist in the 2005 IAAF World Athletics Finals. She was the first Indian athlete to win a bronze medal in the long jump at the World Championships in Athletics held in 2013 in Paris. In the 2004 Olympics, she finished sixth.

#### **Awards:**

Anju was awarded the Arjuna award in 2002, Padma Shri in 2004, Khel Ratna in 2003. In 2021, she won the BBC lifetime achievement award in the category of Best Athlete.

### **'Lingui, The Sacred Bonds' wins ICFT-UNESCO Gandhi Medal at 52nd IFFI**

The internationally co-produced drama film Lingui: The Sacred Bonds has won the ICFT-UNESCO Gandhi Medal at IFFI 52 in Goa. The ICFT-UNESCO Gandhi Medal award is given to the IFFI film that best reflects Mahatma Gandhi's ideals of peace, tolerance and non-violence. Lingui was co-produced by Belgium France Germany and was made in Arabic and French. The film reflects the story of the sacred relationship between a mother and daughter and their survival against the harsh laws set by men.

**International Film Festival of India:**

The International Film Festival of India (IFFI), founded in 1952, is one of the most significant film festivals in Asia. Held annually, currently in the state of Goa, on the western coast of the country. The festival is conducted jointly by the Directorate of Film Festivals (under Ministry of Information and Broadcasting) and the state Government of Goa.

**NDTV & The Week's Journalists jointly honoured with International Press Institute India award**

The International Press Institute (IPI) India Award for Excellence in Journalism 2021 has been awarded jointly to Sreenivasan Jain and Mariyam Alavi of NDTV, and Lakshmi Subramanian and Bhanu Prakash Chandra of The Week. Meanwhile the IPI India Award for Excellence in Journalism 2020 had been awarded to Ritika Chopra of The Indian Express. The awardees for 2020 and 2021 will be felicitated in New Delhi in December 2021 or January 2022. The award comes with cash prize of Rs 1 Lakh, a trophy and a citation. The Vienna-based International Press Institute (IPI) is a global organisation dedicated to the promotion and protection of press freedom and the improvement of journalism practices.

**Dhanush wins Best Actor award for Asuran at 6th BRICS Film Festival**

Actor Dhanush's stellar performance in director Vetrimaran's Tamil film 'Asuran' fetched him the Best Actor Award at the BRICS Film Festival, which was held alongside the 52nd edition of the International Film Festival of India (IFFI) that came to a close. Interestingly, Dhanush had won a National Award for the same film earlier this year.

**Award winners:**

- Best Film – jointly shared by South African film 'Barakat' and Russian film 'The Sun above Me Never Sets'
- Best Actor (Male) – Dhanush for Asuran (Hindi)
- Best Actor (Female) – Lara Boldorini for On Wheels (Brazil)

**"The Future Belongs To The Competent. Get Good, Get Better, Be The Best!"**

- Special Jury Mention Award – Director Yan Han for A Little Red Flower (China)

**Who won what at 2021 Ballon d'Or awards ceremony?**

At 2021 Ballon d'Or awards ceremony, Barcelona's 19-year-old Pedri won Kopa trophy for the best under-21 players. Bayern Munich's Robert Lewandowski won the Best Striker of the Year award. The Yashin Trophy for the best goalkeeper was awarded to PSG's Gianluigi Donnarumma, Men's Ballon d'Or award was won by Lionel Messi, while Barcelona's Alexia Putellas won women's Ballon d'Or award.

**Ballon d'Or:**

The Ballon d'Or is an annual football award presented by French news magazine France Football that is one of the oldest and generally regarded as the most prestigious individual award for football players.

- First awarded: 1956
- Most awards: Lionel Messi (Argentina) (7 awards)
- Most nominations: Cristiano Ronaldo (Portugal) (17 nominations)

**Collins Dictionary names NFT as 2021 word of the year**

Collins Dictionary has named the term 'NFT' as the Word of the Year 2021. NFT is the acronym for "non-fungible token. As per Collins Dictionary, NFT is defined as "a unique digital certificate, registered in a blockchain, that is used to record ownership of an asset such as an artwork or a collectible." Collins English Dictionary is published by HarperCollins in Glasgow.

**"Fake It Until You Make It! Act As If You Had All The Confidence You Require Until It Becomes Your Reality."**



## Sports

### Indian skier Aanchal Thakur bags Bronze medal at FIS Alpine Skiing Competition

Ace Indian skier Aanchal Thakur has bagged Bronze medal at the FIS Alpine Skiing Competition in Montenegro. She finished 3rd with an overall timing of 1:54:30. Georgia Epiphaniou, who won Silver medal was just 2 seconds ahead of Aanchal. With this, Aanchal has become the first Indian Ski athlete to win two medals at international level. She has previously won a bronze medal in the 2018 FIS Alpine 3200 Cup held in Turkey.

#### FIS Alpine Skiing Competition:

- The International Ski Federation (FIS) Alpine Ski World Cup is the premier circuit for alpine skiing competition.
- The inaugural season launched in January 1967, and the 2021–22 season marks the 56th consecutive year for the FIS World Cup.
- This season began in October 2021 in Sölden, Austria, and is intended to conclude in mid-March 2022 at the finals in Courchevel/Méribel, France.

### Asian Champions Trophy men's hockey tournament in Dhaka: India win bronze by beating Pakistan 4-3

Olympic bronze medallist India defeated arch-rivals Pakistan 4-3 in a pulsating third-fourth place play-off match to win the bronze medal at the Asian Champions Trophy men's hockey tournament here. India, who were the defending champions along with Pakistan in the last edition of the tournament in Muscat, will return with a bronze medal after having lost to Japan 3-5 in the semifinals. Indian men's hockey team won the bronze medal at Asian Champions Trophy after beating Pakistan 4-3 in third-place play-off match. Earlier, India suffered defeat at the hands of Japan with a 3-5 scoreline in the semifinals the previous day after having topped the round-robin stages with an unbeaten record. In the other semifinal, South Korea beat Pakistan 6-5.

### India won 16 Medals at Commonwealth Weightlifting Championships 2021

India concluded the Commonwealth Weightlifting Championships 2021 with 16 medals – 4 Gold, 7

Silver, and 5 Bronze, held at Tashkent, Uzbekistan. Bindyarani Devi was India's only medallist at the World Weightlifting Championships 2021, that was also held parallelly at Tashkent. South Korea's Son Young-hee won the gold medal at the world championships with an overall lift of 282kg (122+159). New Zealand's David Liti won the gold medal for a total of 407kg (176+231) followed by Pakistan's Muhammad Nooh Dastgir Butt, who lifted 390kg (165+225).

#### India's Medal Winners:

- Gold medal: Jeremy Lalrinnunga (67kg) (Men), Achinta Sheuli (73kg) (Men), Ajay Singh (81kg) (Men), Purnima Pandey (+87kg) (Women)
- Silver medal: Guru Raja (61kg) (Men), Lovepreet Singh (109kg) (Men), Jhili Dalabehera (49kg) (Women), S Bindyarani Devi (55kg) (Women), Hazarika Popy (59kg) (Women), Harjinder Kaur (71kg) (Women), Punam Yadav (76kg) (Women)
- Bronze medal: Vikas Thakur (96kg) (Men), Gurdeep Singh (+109kg) (Men), Lalchhanhimi (71kg) (Women), R Arockiya Alish (76kg) (Women), Anuradha Pavunraj (87kg) (Women)

### Avani Lekhara Bags 'Best Female Debut' Honour At 2021 Paralympic Awards

Indian shooter Avani Lekhara, who has created history by winning India's first Gold medal in Shooting at the 2020 Tokyo Paralympics, won the "Best Female Debut" honour at the 2021 Paralympic Sport Awards. The Awards were announced by the International Paralympic Committee. She became the 1st Indian woman to win 2 Paralympic medals in a single edition of the Paralympic Games. India won an unprecedented 19 medals at the Paralympic Games including 5 Gold, 8 Silver & 6 Bronze.

### Kidambi Srikanth bags historic silver in BWF World Championships in Spain

In Badminton, Kidambi Srikanth bagged a historic silver medal after losing to Loh Kean Yew of Singapore 15-21, 20-22 in the Men's singles final of BWF World Championships at Huelva in Spain. Srikanth is the first Indian to finish runners-up. Former World Number one, Srikanth etched his name

in the history books after becoming the first Indian men's badminton player to reach the singles final of a World Championships. Lakshya Sen finished with the bronze medal. This is the first time that India got two medals in the men's singles in the same edition of the Badminton World championships. Before this, India got two bronze medals in the Men's singles at the Badminton world championships with Prakash Padukone in 1983 and B Sai Praneeth in 2019.

#### Winners List:

- Men's singles: Loh Kean Yew (Singapore)
- Women's singles: Akane Yamaguchi (Japan)
- Men's doubles: Takuro Hoki (Japan), Japan Yugo Kobayashi(Japan)
- Women's doubles: Chen Qingchen(China), China Jia Yifan(China)
- Mixed doubles: Dechapol Puavaranukroh (Thailand), Sapsiree Taerattanachai (Thailand)

#### India to host Women's U-18, U-19 SAFF Championships next year

India will host Women's Under-18 and Under-19 SAFF championships next year. While SAFF Under-18 Women's Championship will be held from March 3 to 14, the SAFF Under-19 Championship will take place from July 25 to August 3. This was announced by All India Football Federation. Bangladesh, Bhutan, Nepal, Sri Lanka and hosts India will compete in the SAFF U-18 Women's Championship. The five teams will face each other once in a round-robin format before the top two sides square off in the final. The SAFF U-19 Championship will be a six-team affair. Bhutan, Bangladesh, Maldives, Nepal and Sri Lanka will be the other teams apart from hosts India. The six teams will be divided into two groups of three each. The group stage will be played in a round-robin format with each team facing each other once. The top two teams from each group will qualify for the semifinals.

#### All India Football Federation:

- Founded: 23 June 1937
- Headquarters: Dwarka, Delhi
- President: Praful Patel
- Vice-President: Subrata Dutta

#### India win 41 medals at Asian Youth Para Games

India claimed 41 medals (12 Gold, 15 Silver, 14 Bronze) at the 4th Asian Youth Para Games (AYPG), Asia's biggest event held at Riffa city, Bahrain.

The event is organized by the National Paralympic Committee (NPC) of Bahrain with the support of the local government. Over 700 athletes from around 30 countries participated in the event from 2nd to 6th December 2021. The 5th edition of the Asian Youth Para Games 2025 will be hosted by Tashkent, Uzbekistan.

#### The Asian Youth Para Games 2021:

- Host city: Manama, Bahrain
- Motto: Together. Rising. Stronger.
- Nations participating: 30
- Events: 9 sports

#### Top 5 nations in Medal Tally:

Rank	Nation	Gold	Silver	Bronze	Total
1	Iran	44	53	25	122
2	Thailand	33	25	17	75
3	Japan	30	11	14	55
4	South Korea	14	11	22	47
5	India	12	16	13	41

#### Indian women's football team beat Bhutan by 3-0 to secure their second consecutive victory in SAFF U-19 Championship

Indian under-19 women's football team secured their second consecutive victory in the SAFF U-19 Championship after beating Bhutan 3-0, in Dhaka Bangladesh. Starting the match in a dominating fashion, Indis's Sumati Kumari opened the scoring in the 7th minute. Priyanka Devi doubled India's lead with a sensational free-kick just before half-time. Priyanka netted her second and India's third only a few minutes after half-time, sending the Indian team top of the table with six points from two matches. The young blue tigresses had earlier beaten Sri Lanka in the tournament opener.

#### 2021 SAFF U-19 Women's Championship:

- The 2021 SAFF U-19 Women's Championship is the 2nd edition of the SAFF U-19 Women's Championship, an international football competition for women's under-19 national teams organized by SAFF. The tournament is hosting from 11–22 December 2021 at BSSS Mostafa Kamal Stadium, Dhaka in Bangladesh.
- Top scorer: Naorem Priyanka Devi, India (3 goals)

### India bags three more medals at Commonwealth Weightlifting Championships in Tashkent, taking total tally to 12

Indian weightlifters Punam Yadav, Arockiya Alish and Vikas Thakur have added three more medals to the country's tally at the ongoing Commonwealth Weightlifting Championships 2021 in Tashkent, Uzbekistan. Punam bagged a silver medal in the women's 76kg category, having lifted a total of 220kg with 98kg snatch and a 122kg in clean and jerk. 2018 Commonwealth Games gold medallist compatriot R Arockiya Alish clinched bronze in the same category for a total lift of 214kg with 91/123. In this category, Canada's Maya Laylor won the Commonwealth gold for a total of 229kg with 99/130. Earlier, twice CWG medallist Vikas Thakur clinched the bronze medal in the men's 96kg at the championships. The seven-time national champion pulled off a combined lift of 339kg with 150/189. So far, India have won 12 medals at the Commonwealth championships, including three golds. Indian contingent is competing simultaneously at the IWF Senior World Championships as well as the Commonwealth Senior Championships in Uzbekistan. Meanwhile, Indian weightlifters Jeremy Lalrinnunga and Achinta Sheuli have secured direct qualification to the 2022 Birmingham Commonwealth Games. The two earlier clinched gold medals in their respective categories at the ongoing Commonwealth Weightlifting Championships in Tashkent.

### Norway's Magnus Carlsen claims fifth FIDE World Chess Championship

Reigning world chess champion Magnus Carlsen of Norway defended his title and won the FIDE World Championship in Dubai. He beat Ian Nepomniachtchi of Russia, securing the one point he needed to cross the seven-point threshold to win the global tournament held at Dubai's Expo 2020 this month in the United Arab Emirates. Carlsen clinched his fifth world championship title. Carlsen wins 60% of the 2 million-euro prize offered by the championship.

#### FIDE:

- Headquarters: Lausanne, Switzerland
- Founded: 20 July 1924, Paris, France
- President: Arkady Dvorkovich
- Membership: 195 national associations

### Verstappen overtakes Hamilton on last lap to win his maiden F1 world championship title

Red Bull's 24-year-old Dutch driver Max Verstappen won Abu Dhabi Grand Prix, the last race of the season, to win the Formula One 2021 world championship. This is the 24-year-old's maiden world championship title. Seven-time world champion Lewis Hamilton, who led for almost all of the Abu Dhabi Grand Prix, was overtaken by Verstappen on the last lap.

#### Abu Dhabi Grand Prix:

- Number of times held: 13
- First held: 2009
- Most wins (drivers): Lewis Hamilton (United Kingdom)
- Most wins (constructors): Mercedes (Germany)

### Abu Dhabi Grand Prix extends contract with Formula One to 2030

The Abu Dhabi Grand Prix will remain on the Formula One calendar until 2030 at least, after a contract extension was announced by the Chief Executive of Formula One, Stefano Domenicali. Abu Dhabi first hosted an F1 race in 2009. The final race of the current Formula One season will take place in Abu Dhabi this weekend. The Abu Dhabi Grand Prix is a Formula One motor racing event. It was announced in early 2007 at the Abu Dhabi F1 Festival in the United Arab Emirates. The first race took place on 1 November 2009, held at the Hermann Tilke designed Yas Marina Circuit.

- First held: 2009
- Most wins (drivers): Lewis Hamilton (United Kingdom)
- Most wins (constructors): Mercedes (Germany)

### Rohit Sharma replaces Virat Kohli as full-time Team India ODI captain

Rohit Sharma has replaced Virat Kohli as India ODI captain. Rohit had earlier replaced Kohli as India T20 International captain after Kohli quit T20I captaincy following the T20 World Cup 2021. Rohit's first assignment as full-time Team India ODI captain will be a three-match ODI series against South Africa, which will begin on January 19. Rohit was also appointed as India's new Test vice-captain. Rohit



replaced Ajinkya Rahane who had been struggling his form.

Virat Kohli, who took over as India's limited-overs captain from MS Dhoni in 2017, led the team in 95 ODIs, winning 65 of them with of 68 matches. Kohli led India in the Champions Trophy and the 2019 World Cup but India lost in the final to Pakistan in the former tournament and were eliminated in the semi-final of the 50-over showpiece event.

#### **BCCI:**

- Headquarters: Mumbai
- Founded: December 1928
- President: Sourav Ganguly
- Vice president: Rajeev Shukla
- Secretary: Jay Shah

#### **Commonwealth Weightlifting Championships: Sanket Mahadev Sargar wins gold medal in Men's 55 kg snatch category**

Sanket Mahadev Sargar won the gold medal in the Men's 55kg snatch category at the ongoing Commonwealth Weightlifting Championships 2021 in Tashkent. For the top-podium finish, the Indian lifted the weight of 113kg. With this lift, Sargar also created the new snatch national record. The Commonwealth Weightlifting Championships 2021 is currently being held concurrently in Tashkent along with World Weightlifting Championships 2021 from December 7 to 17. India, being a Commonwealth nation is competing in both.

#### **Indian badminton contingent finish with 16 medals at Asian Youth Para Games**

Indian badminton contingent ended their Asian Youth Para Games 2021 campaign with sixteen medals in Bahrain. Tokyo Paralympian Palak Kohli, Sanjana Kumari, and Hardik Makkar clinched three medals each. The para-badminton contingent won four gold, seven silver, and five bronze medals in total in Manama. It was the fourth edition of the Para Games. Indian para shuttlers won 4 gold, 7 silver and 5 bronze at Riffa city.

#### **IV Asian Youth Para Games:**

- Host city: Manama, Bahrain
- Motto Together. Rising. Stronger.
- Nations participating: 30
- Athletes participating: 750
- Events: 9 sports

- Officially opened by: Khalid bin Hamad Al Khalifa

- Main venue: Bahrain International Circuit

#### **What is Asian Youth Para Games?**

The Asian Youth Para Games is a multi-sport event held every four years for youth athletes with physical disabilities. The first Games was held in 2009 in Tokyo, Japan. The Asian Youth Para Games superseded the FESPIC Youth Games which last held in 2003.

#### **Rahi wins 3rd straight 25M Pistol gold at National Shooting Championship**

Reigning Asian Games champion Rahi Sarnobat won her third successive gold medal in women's 25M Sports Pistol on the concluding day of 64th National Shooting Championship. Rahi Sarnobat beat Namyaa Kappor and Manu Bhaker to win her third successive national title. Shriyanka Sadangi won the women's 50m rifle 3 positions crown. Notably, the 14-year-old Naamyaa is the world junior champion in the same event. Manu Bhaker won the bronze.

#### **Hamilton wins Saudi GP to level with Verstappen ahead of season's final race**

Mercedes' Lewis Hamilton won the Saudi Arabian GP after Red Bull's Max Verstappen was penalised for their collision on lap 37 of the 50-lap race. This was Hamilton's eighth win of the season and the 103rd of his career. Hamilton is now level on 369.5 points with Verstappen ahead of the season's final race in Abu Dhabi next weekend.

#### **Saudi Arabia:**

- Capital: Riyadh
- Currency: Saudi riyal
- King: Salman of Saudi Arabia

#### **Russia beats Croatia to win their 1st Davis Cup title since 2006**

Russia defeated Croatia 2-1 in their tie to win their first Davis Cup title since 2006. Russia's Andrey Rublev secured the lead after beating Croatia's Borna Gojo 6-4, 7-6(7-5) and then world number two Daniil Medvedev defeated Croatia's Marin Cilic 7-6(9-7), 6-2 to secure the tournament. It is Russia's third Davis Cup title after having won in 2002 and 2006.

**Davis Cup:**

The Davis Cup is the premier international team event in men's tennis. It is run by the International Tennis Federation (ITF)

- Founded: 1900
- Founder: Dwight F. Davis
- Most recent champion: Russia (3rd title)
- Most titles: United States (32 titles)

**Mills becomes first basketball player to win top Aus sporting award**

Patty Mills became the first basketball player to win Australia's highest sporting honour, the Don Award, after leading Australia to win bronze at the Tokyo Olympics. Mills also became Australia's first indigenous flag bearer during the Tokyo Olympics. The Don Award, named after Australian cricketer great Don Bradman, is presented annually at the Sport Australia Hall of Fame awards to the athlete or team who has most inspired the nation over the year.

**Sport Australia Hall of Fame:**

- Established: 1985
- Location: Melbourne Cricket Ground
- Chairperson: John Bertrand

**Lionel Messi wins Ballon d'Or for a record-extending 7th time**

Argentina and PSG forward Lionel Messi won Ballon d'Or for a record-extending seventh time. Messi's Ballon d'Or win comes after he won Copa America for first time in July. Messi got 613 points, while Bayern Munich's Robert Lewandowski got 580 points. Jorginho, who won Champions League with Chelsea and Euro 2020 with Italy, ended up third on 460.

**Ballon d'Or:**

The Ballon d'Or is an annual football award presented by French news magazine France Football that is one of the oldest and generally regarded as the most prestigious individual award for football players.

- First awarded: 1956
- Most awards: Lionel Messi (Argentina) (7 awards)
- Most nominations: Cristiano Ronaldo (Portugal) (17 nominations)

**Saurav Ghosal becomes first Indian to win Malaysian Open Squash Championship**

Indian Squash star Saurav Ghosal has scripted history as he has become the first Indian squash player to win the Malaysian Open Championships. The second-seeded Ghosal beat Miguel Rodriguez of Colombia 11-7, 11-8 and 13-11 in the men's singles final on November 27, 2021 in Kuala Lumpur to win the 2021 Malaysian Open Squash Championships title. On the other hand, the women's single title of the 2021 Malaysian Open squash championships has been won by Malaysia's Aifa Azman.

**Malaysia:**

- Prime minister: Ismail Sabri Yaakob
- Capital: Kuala Lumpur
- Currency: Malaysian ringgit

**Former world number 4 tennis player Johanna Konta retires aged 30**

Britain's former world number four Johanna Konta announced her retirement from tennis aged 30. She achieved a career-high ranking of world number four in 2017, after reaching the semi-finals at Wimbledon. In June, Konta won the Nottingham Open, becoming the first British woman to lift a WTA title on home soil since Sue Barker in 1981. But that victory was soon overshadowed by the astounding success of then 18-year-old compatriot Emma Raducanu in becoming the first qualifier to win a Grand Slam when she took the women's singles title at the US Open in September.

**"For Every Reason It's Not Possible, There Are Hundreds Of People Who Have Faced The Same Circumstances And Succeeded."**

## Science & Technology

### NASA awards Blue Origin, 2 others \$400 mn for private space stations

NASA has awarded over \$400 million in contracts to Nanoracks, Blue Origin and Northrop Grumman to develop private space stations under NASA's Commercial LEO Destinations project. Nanoracks won the largest individual award with \$160 million, while Blue Origin and Northrop Grumman received \$130 million and \$125.6 million, respectively. Blue Origin is calling its station concept "Orbital Reef".

#### NASA:

- Formed: July 29, 1958
- Headquarters: Washington, D.C.
- Administrator: Bill Nelson
- Deputy Administrator: Pamela Melroy

### NASA selects Indian-origin physician Anil Menon as one of astronauts for future missions

Indian-origin physician, Anil Menon has been selected by NASA along with nine others to be astronauts for future missions. 5 years old Menon, a lieutenant colonel at the US Air Force, was SpaceX's first flight surgeon, helping to launch the company's first humans to space during Nasa's SpaceX Demo-2 mission. In a statement, Nasa announced that it has chosen 10 new astronaut candidates from a field of more than 12,000 applicants to represent the US and work for humanity's benefit in space. Menon previously served Nasa as the crew flight surgeon for various expeditions taking astronauts to the International Space Station. Earlier, aeronautical engineer Sirisha Bandla in July became the third Indian-origin woman to fly into space after Kalpana Chawla and Sunita Williams. Till now, Wing Commander Rakesh Sharma is the only Indian citizen to travel in space. The former Indian Air Force pilot flew aboard Soyuz T-11 on April 3, 1984, part of the Soviet Interkosmos programme.

### DRDO successfully tests Pinaka Extended Range rocket launcher system

The Defence Research and Development Organisation's (DRDO) has announced that it has successfully tested the extended range Pinaka (Pinaka-

ER) Multi Barrel Rocket Launcher System at Rajasthan's Pokhran Range. The system has been designed by DRDO Laboratory Armament Research and Development Establishment (ARDE) along with High Energy Materials Research Laboratory (HEMRL), Pune, the technology has been transferred to the Indian industry.

#### WHAT IS PINAKA-ER?

The Pinaka-ER is the upgraded version of the earlier Pinaka, which has been in service with the Indian Army for the last decade. The system has been designed in light of emerging requirements with advanced technologies. The extended range of the new Pinaka is over 70 km, as opposed to the 45 km the system currently has. Pinaka is an all-weather, artillery multi-barrel rocket system. It can fire 72 rockets in 44 seconds.

### Indian Army launches contemporary messaging app 'ASIGMA'

Indian Army launched a contemporary messaging application named ASIGMA. ASIGMA stands for Army Secure IndiGeneous Messaging Application. It is a new generation, state-of-the-art, web based application developed entirely in-house by team of officers of the Corps of Signals of the Army. The application is being deployed on the Army's internal network as a replacement of Army Wide Area Network messaging application which has been in service for past the 15 years. The application has been fielded on Army owned hardware. It meets all futuristic user requirements and provides enhanced user experience. It has a variety of contemporary features including multi-level security, message prioritisation and tracking. This future ready messaging application will meet real time data transfer and messaging requirements of the Army, especially in the backdrop of current geo political security environment. It is in line with the Government's Make in India initiative.

### DRDO successfully conducts flight test of indigenously developed High-speed Expendable Aerial Target - Abhyas

DRDO has successfully conducted the flight test of Indigenously developed High-speed Expendable



Aerial Target (HEAT) 'Abhyas' from Integrated Test Range at Chandipur off the coast of Odisha. During the flight trial, high subsonic speed trajectory at a very low altitude with high endurance was demonstrated. Two boosters provided initial acceleration during launch and a small turbojet engine was used to sustain high subsonic speed with long endurance. The indigenous data link designed by Bengaluru based Industry partner has been successfully flown and tested during the flight. The performance of the system during the entire flight duration has been confirmed from the data captured by various Range instruments deployed.

#### **The Missile:**

- Role: Unmanned Aerial Vehicle
- Manufacturer: Hindustan Aeronautics Limited
- Designer: Aeronautical Development Establishment

#### **Docprime Health Locker: India's 1st ABDM integrated health locker launched by Docprime Technologies**

Docprime Technologies Private Limited, a wholly owned subsidiary of PB Fintech has launched, India's first Health Locker integrated with Ayushman Bharat Digital Mission (ABDM) namely 'Docprime Health Locker'. The Locker has received the ABDM Sandbox approval. Initially restricted to select UTs, it was nationally rolled out by the Prime Minister of India Narendra Modi.

#### **Facts:**

- With the Docprime health locker, users can create digital Health IDs for themselves and their family members, activate their ABDM integrated health locker to securely upload, store and manage all their health records electronically.
- The records can be shared with doctors, as per user's consent.
- It also enables users to fetch and store their CoWin vaccination certificates.
- PB Fintech, is also the parent company of Policybazaar and Paisabazaar.
- ABDM, an initiative of the Ministry of Health & Family Welfare (MoHFW) was launched in August 2020 to develop an integrated digital health infrastructure, with digital Health IDs of citizens, standardized health facility and health professional's registries, and to store all of the user's health record.

#### **DRDO conducts first flight test of indigenously developed surface-to-surface missile 'Pralay'**

DRDO successfully conducted the maiden flight test of indigenously developed surface-to-surface missile 'Pralay'. The advanced missile has been developed in a way that it is able to defeat the interceptor missiles and also has the ability to change its path after covering certain range mid-air.

#### **'Pralay' Missile:**

- The mission of flight testing surface to surface missile Pralay was met with all its objectives as it followed the desired quasi ballistic trajectory and also reached the designated target with high degree accuracy, validating the guidance, control, and mission algorithms.
- Pralay missile is powered by a solid-propellant rocket motor and many other technologies.
- The surface-to-surface missile has a range of 150-500 kilometers and also can be launched from a mobile launcher.
- The guidance system of the Pralay missile includes a state-of-the-art navigation system and integrated avionics.
- The new generation surface-to-surface missile is equipped with modern technologies.

#### **Army Chief inducts indigenously developed AERVs into Corps of Engineers**

The first set of indigenously developed next-generation Armoured Engineer Reconnaissance Vehicle (AERV) was inducted into the Corps of Engineers of the Army. Army chief General M M Naravane inducted the vehicles and flagged them off in a ceremony at the Bombay Engineer Group (BEG) at Khadki near Pune. The system has been designed by the Defence Research and Development Organisation (DRDO) and manufactured by Ordnance Factory Medak & Bharat Electronics Limited, Pune.

#### **AERV:**

The AERV, which has been developed by modifying the amphibious infantry fighting vehicle BMP-II, has been designed to meet the tactical and combat requirements of military engineers carrying out terrestrial and under-water surveys in hostile terrains, primarily for the construction of assault bridges in desert, flat and even riverine areas for both offensive and defensive operations. The Indian Army has ordered 53 units of the AERV, which will be deployed

with the individual engineering formations, mainly on the Western front.

### India successfully test fires advance version of nuclear capable Agni-missile

India has successfully test-fired new generation nuclear-capable ballistic missile 'Agni P', from Dr APJ Abdul Kalam island off the coast of Odisha. The Agni Prime, known also as the Agni P, is a medium-range ballistic missile developed by the Defence Research and Development Organisation as a successor for Agni-I and Agni-II missiles. It is the sixth missile in the Agni (missile) series of ballistic missile. According to the DRDO, the 'Agni P' is a two-stage canisterised solid propellant ballistic missile with dual redundant navigation and guidance system. In simple terms, canisterisation of missiles reduces the time required to launch the missile while improving its storage and mobility. It has a range of 1,000-2,000 kilometres, making it capable of covering vital targets all across Pakistan. The Agni P, according to defence experts, weighs 50 percent lesser than the Agni 3 missile and can be launched from rail or road.

### ISRO developing SSLV with pvt participation, to be launched in Q1 of 2022

Union Minister Jitendra Singh said that the Indian Space Research Organisation (ISRO) is developing a Small Satellite Launch Vehicle (SSLV) with private participation and it will be launched in the first quarter of 2022. The SSLV will provide a payload capability of 500 kg to a 500 km planar orbit. The development of SSLV is in the final stages and the first developmental flight of SSLV is targeted during the first quarter of 2022. The government has sanctioned a total cost of Rs169 Crores for the development project including the development and qualification of the vehicle systems and the flight demonstration through three development flights (SSLV-D1, SSLV-D2 and SSLV-D3).

#### SSLV

The Small Satellite Launch Vehicle is a small-lift launch vehicle being developed by the Indian Space Research Organisation.

- Has use: Launch vehicle
- Cost per launch: ₹30 crore
- Stages: 4
- Altitude: 500 km

- Mass: 300 kg

### NASA spacecraft touches solar atmosphere for the first time in history

NASA's spacecraft Parker Solar Probe by NASA has successfully entered the Corona of the Sun which is an extreme environment that's roughly 2 million degrees Fahrenheit. A historic moment has achieved because of a large collaboration of scientists and the engineers. The goal of NASA's Parker Solar Probe Mission is to learn how the Sun works and as per the scientists it can be accomplished by flying into the solar atmosphere.

#### Corona:

- The Corona is the outermost layer of the Sun's atmosphere where the strong magnetic fields bind the plasma and prevents the turbulent solar winds from escaping.
- The Alfven Point is when the solar winds go beyond a critical speed and break free of the Corona as well as the magnetic fields of the Sun.

#### NASA:

- Headquarters: Washington, D.C., United States
- Founder: Dwight D. Eisenhower
- Founded: 29 July 1958, United States
- Subsidiaries: NASA Johnson Space Center
- Administered by: Steve Jurczyk, Bill Nelson

### Apple launches AirTag app for Android to help users detect unknown AirTags

Apple has launched an app for Android called 'Tracker Detect' to help users detect unexpected AirTags and other Find My network-equipped products that may be nearby or traveling with them without their knowledge. The tech giant released the app in an effort to boost privacy and help users stay safe. The Cupertino-based tech company released 'Tracker Detect' app on Google's Play Store. The app looks for item trackers that are separated from their owner and that are compatible with Apple's Find My network. "These item trackers include AirTag and compatible devices from other companies.

#### What are AirTags?

Apple launched AirTag earlier this year which is a tracking device. AirTags are small devices that can be attached to items such as keys, wallets and bags to locate them in case they are lost.

### India launched Supersonic Missile Assisted Torpedo System (SMAT) from Abdul Kalam Island

India successfully launched Supersonic Missile Assisted Release of Torpedo System (SMART) from Abdul Kalam Island, off the Odisha coast. During the mission, full range capability of the missile was successfully demonstrated. SMART system has been designed for enhancing anti-submarine warfare capability far beyond the conventional range of torpedo. This was a textbook launch, in which entire trajectory of the test was monitored by the electro optic telemetry system and several range radars, including down range instrumentation & down range ships. SMART carried a torpedo, release mechanisms and parachute delivery system. It was launched from a ground mobile launcher and can cover a range of distances. The Defence Research and Development Organization (DRDO) has developed the weapon for Indian Navy.

#### Supersonic Missile Assisted Torpedo (SMART):

SMART is a next-generation, missile based standoff torpedo delivery system. It has been designed to enhance the anti-submarine warfare capability. Missile will work beyond the conventional range of the torpedo. It is a canister-based missile system comprising of advanced two-staged solid propulsion, precision inertial navigation and electromechanical actuators.

### IIT-Kanpur develops portable device for soil testing

The Indian Institute of Technology, Kanpur, has developed a portable testing device that can detect soil health in just 90 seconds through a mobile application using merely five grams of soil as a sample. This first-of-its-kind invention is based on near Infrared spectroscopy technology that provides real-time soil analysis reports on smartphones with an embedded mobile application, named Bhu Parikshak, available on Google Play Store. After the analysis, the results appear on the screen in the form of a soil health report, which is accessible on the Bhu Parikshak cloud service with a unique ID. The report also comes with a recommended dose of fertilizers. The device can detect six important soil parameters, including nitrogen, phosphorus, potassium, and organic carbon. It also recommends the required dose of fertilizers for

the field and crops. The device was developed by a team comprising Prof Jayant Kumar Singh from Department of Chemical Engineering, Pallav Prince, Ashar Ahmad, Yashasvi Khemani, and Mohd Aamir Khan.

### NTA launches 'National Test Abhyas' Mobile App for aspirants to access mock tests online

The National Testing Agency (NTA), has launched a Mobile App namely 'National Test Abhyas' to facilitate candidates' access to high-quality mock tests online free of cost. Over 14 lakh NEET students and more than 9 lakh JEE students have registered in the app and over 81 lakh Sessions of Mock Test for NEET and over 50 lakh for JEE have been conducted. Government has also launched Study Webs of Active Learning for Young Aspiring Minds, which offers interactive course content such as video lectures, reading material, self-assessment through tests and quizzes, and online discussion forum for clearing doubts for students from Class 9 to Post Graduation. The content can be accessed free of cost by anyone, anywhere at any time. Another initiative of the Government called Indian Institute of Technology - Professor Assisted Learning provides video content in Biology, Chemistry, Mathematics, and Physics prepared by IIT Professors for Class 11th and Class 12th students aspiring to join IITs and other Institutions. The content is available free of cost on dedicated DTH channels of SWAYAM PRABHA.

#### NTA:

National Testing Agency (NTA) has been established as a premier, specialist, autonomous and self-sustained testing organization to conduct entrance examinations for admission/fellowship in higher educational institutions.

### SpaceX launches NA'SA mission that will observe black holes

SpaceX has launched NASA's Imaging X-ray Polarimetry Explorer (IXPE) mission. NASA Imaging X-ray Polarimetry Explorer (IXPE) satellite was launched by a SpaceX Falcon 9 rocket. It is NASA's "first" mission dedicated to measuring the polarisation of X-rays from the most extreme and mysterious objects in the universe, supernova remnants, supermassive black holes and dozens of other high-energy objects. IXPE carries three space telescopes



with special polarisation-sensitive detectors. US space agency NASA launched its new X-ray Mission to unlock the secrets of extreme cosmic objects. IXPE is NASA's first mission to explore the polarisation signatures of a variety of X-ray sources. The spacecraft includes three identical space telescopes with sensitive detectors capable of measuring the polarisation of cosmic X-rays.

#### SpaceX:

- Founder: Elon Musk
- Founded: 6 May 2002
- CEO: Elon Musk
- Headquarters: Hawthorne, California, United States

### BrahMos Supersonic Missile successfully test fired by DRDO

The air version of the BrahMos supersonic cruise missile was successfully test-fired from Sukhoi 30 MK-I off the Odisha coast. The test was carried out from the Integrated Test Range, Chandipur, off the coast of Odisha on December 08, 2021. The missile hit the target successfully with pin-point accuracy after performing high-level and extremely complex manoeuvres. The missile launched from the aircraft followed the planned trajectory, achieving all mission objectives. BrahMos as 'prime strike weapon' will ensure the warship's invincibility by engaging naval surface targets at long ranges, thus making the destroyer another lethal platform of Indian Navy. The highly versatile BrahMos has been jointly designed, developed and produced by India and Russia. BrahMos missiles will add to the capabilities of Indian Armed Forces in many ways.

**Note:** The BrahMos is a joint venture between India (DRDO) and Russia (NPOM) for the development, production and marketing of the supersonic cruise missile. BrahMos is a potent offensive missile weapon system that is already being used by the Armed Forces.

#### DRDO:

- Headquarters: DRDO Bhavan, New Delhi
- Founded: 1958
- Jurisdiction: India
- Subsidiary: Gas Turbine Research Establishment

### India's First Survey Vessel (Large) Launched by GRSE

Indian shipbuilder Garden Reach Shipbuilders & Engineers (GRSE) has achieved a new milestone with

the launch of the first large survey vessel for the Indian Navy. Called Sandhayak, the vessel is the first in the series of four ships being built under the Survey Vessel Large (SVL) project. It has been built at GRSE. Indian State Defence Minister Ajay Bhatt, who was present at the launch ceremony, said that the ship's launch is a new milestone for the country's vision of 'New India' by 2030. In October 2018, the Indian Ministry of Defence and GRSE signed the contract to build the four survey ships. Featuring over 80% indigenous content by cost, the ships are fully designed by GRSE and are being built using 'Integrated Construction' concepts.

#### GRSE:

- Chairman & Managing Director: Rear Admiral V K Saxena
- Headquarters: Kolkata, West Bengal

### India to have nine nuclear reactors by 2024

The nation will have nine nuclear reactors by 2024 and a new nuclear project, the first in northern India, will come up 150 kms away from Delhi in Gorakhpur of Haryana, the government informed the Rajya Sabha. By 2024, India will have nine nuclear reactors plus 12 new additional ones which were approved during the Covid times with a capacity of 9000 MW. The minister said that nuclear energy will soon emerge as one of the most important sources of alternative or clean energy for the increasing power demand of the country. India is counting on its nuclear program to help meet its Paris climate commitments to reduce the emissions intensity of its economy by a third from 2005 levels by 2030.

### Indian Navy commissions 4th Scorpene-class submarine INS Vela at Naval Dockyard Mumbai

The Indian Navy formally commissioned the fourth Scorpene-class submarine INS Vela at the Naval Dockyard in Mumbai. INS Vela is the fourth in the series of six submarines being developed under the Kalvari-class submarine Project-75. It has been built by Mazagon Dock Shipbuilders Ltd in collaboration with M/s Naval Group of France.

#### Indian Navy:

- Founded: 26 January 1950
- Commander-in-Chief: President Ram Nath Kovind

- Chief of the Naval Staff: Admiral Karambir Singh, PVSM, AVSM
- Vice Chief of the Naval Staff: Vice Admiral Satish Namdeo Ghormade
- Deputy Chief of the Naval Staff: Vice Admiral Ravneet Singh

### Russian Navy test-fires hypersonic missile in White Sea

Russian Navy has successfully test-fired a prospective hypersonic missile from the White Sea. The Zircon cruise missile hit a target located at a distance of 400 kilometres. Earlier this month, Russian President Vladimir Putin had said that tests of Zircon cruise missile were nearing their completion and deliveries to the Navy would begin in 2022. Zircon would be capable of flying at 9 times the speed of sound. Zircon has a range of 1,000 kilometers (620 miles). Zircon is intended to arm Russian cruisers, frigates and submarines. It is one of several hypersonic missiles under development in Russia.

### Russia:

- Capital: Moscow
- President: Vladimir Putin
- Currency: Russian ruble

### 'Call your cop' mobile app launched in Nagaland

Nagaland DGP T. John Longkumer officially launched the 'Call your Cop' mobile App at Police Headquarters in Kohima. The App was developed by Excellogics Tech Solutions Pvt Ltd. The App will enable all citizens of the state especially those in distress to get in touch directly with the police as easily available with just one click away. The features in the App include a directory, alerts, tourist tips, SOS, nearest police station and search. Citizens can download the app from the google store on any android phone. One can download the app from the google store. With this app, you can also receive notifications like news, updates, advisory, etc.

### Nagaland:

- Capital: Kohima
- Chief Minister: Neiphiu Rio
- Governor: Jagdish Mukhi

02 DECEMBER

### INTERNATIONAL DAY FOR THE ABOLITION OF SLAVERY



Inception: 2004

Edition: 17th

**Importance:** To mark adoption of the declaration by UNGA for the Suppression of the Traffic in Persons and of the Exploitation of the Prostitution of Others (Dated 2 December 1949)

**Organisation Involved:** ILO

**Motto:** To highlight the importance of eradicating contemporary forms of slavery including trafficking in persons, sexual exploitation, child labour, forced marriage, etc.

**Note:** According to the UN, an estimated 40.3 million people are in modern slavery, including 24.9 in forced labour and 15.4 million in forced marriage.

03 DECEMBER

### WORLD DAY OF THE HANDICAPPED



Inception: 1992

**Importance:** To mark the proclamation by UNGA in 1992 to promote an understanding of disability issues and mobilize support for the dignity, rights and well-being of persons with disabilities.

**Motto:** To increase awareness from the integration of persons with disabilities in every aspect of political, social, economic and cultural life.

**2021 Theme:** Leadership and participation of persons with disabilities toward an inclusive, accessible and sustainable post-COVID-19 world

### Note:

- It was originally called "International Day of Disabled Persons"
- Also known as the International Day of People with Disability (IDPwD).



## Obituary

### Bipin Rawat: India's top general dies in helicopter crash

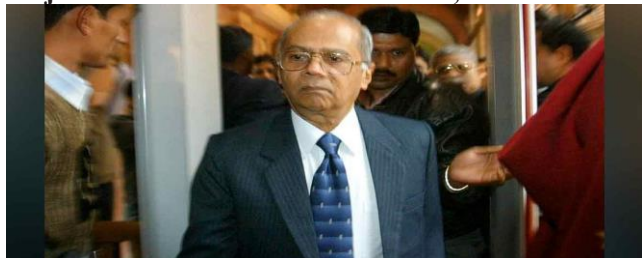


General Bipin Rawat, India's first Chief of Defence Staff, and his wife died after a military chopper crashed in Tamil Nadu, killing 13 on board. The only survivor, an Air Force Group Captain, is being treated for severe burns. The helicopter crashed shortly after it took off from the Air Force base in Sullur at 11.45 am, Coimbatore, for Wellington in the Nilgiri Hills. General Rawat, 63, took charge as India's first Chief of Defence Staff in January 2020. The position was created to integrate the three services - the Army, the Navy and the Air Force. The Chief of Defence Staff is the Permanent Chairman of the Chiefs of Staff Committee and has to be the main military adviser to the Defence Minister besides giving impartial advice to the political leadership. A former Army Chief, General Rawat was also appointed the head of the newly-created Department of Military Affairs.

#### Bipin Rawat:

- Years of service: 16 December 1978 – 8 December 2021
- Rank: General
- Unit: 5/11 Gorkha Rifles
- Awards: Param Vishisht Seva Medal, Uttam Yudh Seva Medal, Ati Vishisht Seva Medal, Yudh Seva Medal, Sena Medal & Vishisht Seva Medal

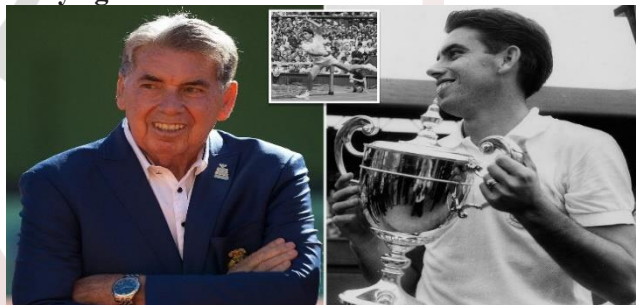
### Former SC Judge GT Nanavati, Who Headed Gujarat and Anti-Sikh Riots Panels, Dies



Justice (retired) Girish Thakorlal Nanavati, who headed commissions probing the 2002 Gujarat riots and the 1984 anti-Sikh riots, passed away. He was 86 years old and a resident of Ahmedabad. Justice Nanavati was an advocate in the Bombay High Court since 1958. He was appointed as a permanent judge in Gujarat High Court almost 21 years later in July 1979. In 1993, he was transferred to the Orissa High Court.

Note: In 2014, Justices Nanavati and Akshay Mehta had submitted their final report on 2002 riots to then Gujarat CM Anandiben Patel.

### Santana the 1st Spaniard to win Wimbledon passes away aged 83



Manuel Santana, the first Spanish Wimbledon champion, passed away at the age of 83 in Marbella, Spain. Santana won four major singles titles. He took the French Open in 1961 and 1964, the US Open at Forest Hills in 1965 and Wimbledon in 1966. He also won the gold medal in singles and the silver in doubles in Mexico City in 1968, where tennis was a demonstration event at that year's Olympics. Santana was born in 1938, the son of a father imprisoned for his political beliefs during the early years of the Franco dictatorship (1939-1975).

### Serum Institute of India (SII) Executive Director Dr. Suresh Jadhav died





Dr. Jadhav was instrumental in the development of the Covishield vaccine on Covid-19. Born in a small village in Vidarbha, Dr. Jadhav had completed his degree from Nagpur University. He made significant contributions to the research on the Covid-19 vaccine. Dr. Jadhav represented Serum Institute of India on the GAVI board and was also instrumental in the liaison between the national and international regulatory authorities. He played a pivotal role in getting WHO pre-qualifications of several products.

#### **Serum Institute:**

- CEO: Adar Poonawalla
- Founder: Cyrus S. Poonawalla
- Founded: 1966
- Parent organization: Poonawalla Investments & Industries Pvt. Ltd.
- Subsidiaries: Schott Kaisha Pvt Ltd

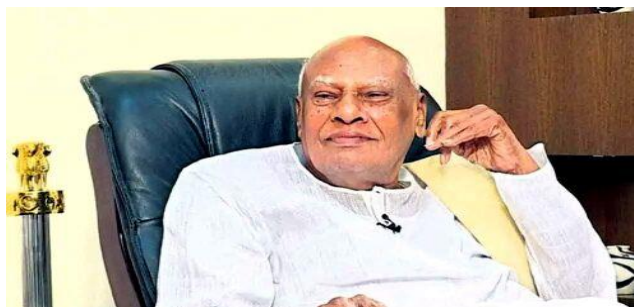
#### **Producer Martha De Laurentiis passes away aged 67 due to brain cancer**



Producer Martha De Laurentiis passed away at the age of 67 after battling brain cancer. Martha was the producer of films like Hannibal (2001), and Red Dragon (2002). Martha De Laurentiis was credited as Martha Schumacher for her first associate producer credit on the 1984 Stephen King adaptation Firestarter. She recently earned an executive producer credit for the upcoming Firestarter film reboot due out in 2022. De Laurentiis was a producer on several adaptations of novels by Thomas Harris, including Hannibal in 2001, Red Dragon in 2002 and Hannibal Rising in 2007. She was an executive producer on the Hannibal series that ran on NBC from 2013 to 2015. She was a jury member at the 65th Berlin International Film Festival in 2015

#### **Former CM of undivided Andhra Pradesh Konijeti Rosaiah passes away aged 88**

Former Chief Minister of undivided Andhra Pradesh and former governor of Tamil Nadu, Konijeti Rosaiah passed away aged 88.



Apart from serving as the chief minister of the undivided Andhra Pradesh, Rosaiah also served as the Governor of Tamil Nadu from August 31, 2011 to August 30, 2016. Rosaiah's political journey began in 1968 as an MLC. He served as Chief Minister of the AP from September 3 after the demise of YS Rajasekhara Reddy till November 25.

#### **Andhra Pradesh:**

- Governor: Biswabhusan Harichandan
- Chief minister: YS Jagan Mohan Reddy

#### **Sahitya Akademi winning eminent Assamese Poet Sananta Tanty passes away at 69**



Sahitya Akademi Award-winning Indian poet of Assamese literature Sananta Tanty has passed away after a prolonged illness. He was 69. Tanty received several awards and recognitions. He received the Sahitya Akademi in 2016 for his collection of poems in Assamese titled 'Kailoir Dinto Amar Hobo' (Tomorrow Will Be Ours).

#### **Sahitya Akademi Award:**

- The Sahitya Akademi Award is a literary honour in India, which the Sahitya Akademi, India's National Academy of Letters, annually confers on writers of the most outstanding books of literary merit published in any of the 24 major Indian languages
- Established in 1954, the award comprises a plaque and a cash prize of ₹ 1,00,000.

### National Award-winning Choreographer Shiva Shankar Master passes away



The renowned National Award-winning choreographer and actor, Shiva Shankar Master passed away in Hyderabad, Telangana. He was born on 7 December 1948 in Chennai, Tamil Nadu. He was an Indian dance choreographer, worked in South Indian movies. He received the National Award for 'Best Choreographer' for the movie 'Magadheera'.

#### Telangana:

- Capital: Hyderabad
- Governor: Tamilisai Soundararajan
- Chief minister: K. Chandrashekar Rao

### Golfer Lee Elder, the 1st Black player to compete in Masters dies aged 87



The PGA Tour said that Lee Elder, the first Black man to compete in the Masters in 1975, passed away at the age of 87. He was also the first Black man to represent the US Ryder Cup team in 1979. He won four events on the PGA Tour, and recorded eight wins on the PGA Tour Championships.

**"I Think Goals Should Never Be Easy, They Should Force You To Work, Even If They Are Uncomfortable At The Time."**

### Ryder Cup:

- Established: 1927
- The Ryder Cup is a biennial men's golf competition between teams from Europe and the United States.
- The competition is contested every two years with the venue alternating between courses in the United States and Europe.
- The Ryder Cup is named after the English businessman Samuel Ryder who donated the trophy.

### Former South Korean President Chun Doo-hwan passes away at 90



Former South Korean President Chun Doo-hwan has passed away due to cancer. He was 90 years old. The South Korean politician was also a former army general, who led 1979 military coup that sparked massive democracy protests in the country. He had served as the fifth president of South Korea from 1980 to 1988.

#### South Korea

- President: Moon Jae-in
- Capital: Seoul
- Currency: South Korean won

**"One Of The Lessons That I Grew Up With Was To Always Stay True To Yourself And Never Let What Somebody Else Says Distract You From Your Goals."**



## Miscellaneous Events

### Barbados becomes world's newest Republic, removes UK's Queen as head

Nearly 400 years after the country became a British colony, Barbados has become the world's newest republic. The Caribbean island nation removed Queen Elizabeth II as the head of the state. Dame Sandra Prunella Mason, who was selected to become the first president of Barbados last month, took over as the President of the country. At a joint meeting of both the Houses of Parliament of Barbados, Speaker of the House of Assembly Arthur Holder announced the selection of Mason as the President of the country.

Mason, 72, has been the governor-general of the island since 2018.

#### Barbados:

- Capital: Bridgetown
- Currency: Barbadian dollar

### Three senior executives quit Paytm

Three senior executives at Paytm have quit the financial services firm that recently listed on the Indian stock exchange. The three officials who have resigned are Abhishek Arun, COO of Paytm Payments Bank, Renu Satti, COO of offline payments, and Abhishek Gupta, senior vice-president and COO, lending. Arun, who spent more than five years at Paytm, announced his exit in a LinkedIn post. He previously worked as a senior vice-president at RBL Bank. Satti has been with Paytm since 2006, having served in many roles across business lines. Gupta, who joined Paytm last year as senior vice-president and COO-lending, has resigned and is currently serving his notice. Earlier this year, five senior Paytm executives had quit ahead of its initial public offering (IPO). Amit Nayyar, Paytm president, Rohit Thakur, chief HR officer, and three other vice-presidents had resigned from their positions.

#### Paytm:

Paytm (a partial abbreviation for "pay through mobile") is an Indian multinational technology company that specializes in digital payment system, e-commerce and financial services.

- CEO: Vijay Shekhar Sharma
- Founder: Vijay Shekhar Sharma
- President: Amit Nayyar

- Founded: August 2010
- Headquarters: Noida, Uttar Pradesh, India
- Parent organization: One97 Communications

### Agriculture minister Narendra Singh Tomar releases book titled "Spices Statistics at a Glance 2021"

Agriculture Minister Narendra Singh Tomar has released the book titled 'Spices Statistics at a Glance 2021'. The book is a compendium of all the spices statistics like area, production, productivity, export, import, price and value of output of various spices produced in the country. The book has been published by the Directorate of Arecanut and Spices Development, the nodal agency for collection and compilation of area and production estimates of spices at the National level. The book highlights the growth achieved in spices sector during the last seven years. Spices production in the Country has grown from over 67 lakh tonnes in 2014-15 to over 106 lakh tonnes in 2020-21 with an annual growth rate of 7.9 percent. Among the major spices, Cumin, Garlic, Ginger, Fennel, Coriander, fenugreek, Red chilli and Turmeric have shown significant growth rate in production. Spices export has grown from nearly 9 lakh tonnes to 16 lakh tonnes during this period logging an annual growth rate of 9.8 percent in terms of volume. In terms of value, the annual growth rate of spices export has been 10.5 percent during this period.

### David Lloyd Announces Retirement from Cricket Commentary After 22 Years

David Lloyd, the former England cricketer announced his retirement from Sky Sports after 22 years working as a commentator. The 74-year-old former England coach, nicknamed 'Bumble', joined Sky in 1999 after his three-year stint with the national team. He played nine Tests and eight one-day internationals for England between 1973 and 1980.

#### Sky Sports:

Sky Sports is a group of British subscription sports channels operated by the satellite pay television company Sky Group (a division of Comcast)

- Launched: 27 March 1990
- Broadcast area: United Kingdom, Ireland



- Headquarters: Sky Campus, Isleworth, London, England

### Foundational literacy index: Bengal tops, Bihar last among large states

West Bengal topped the chart and Bihar languished at the bottom in the 'large states' category on the 'Index on Foundational Literacy and Numeracy' -- an indicator of literacy among children below 10 years. In the 'small states' category, Kerala grabbed the top spot and Jharkhand was adjudged the worst performer on the index. Lakshadweep (52.69) and Mizoram (51.64) are top-scoring regions in the Union Territory and Northeast state category, respectively. As far as worst performers are concerned, Ladakh has featured at the bottom in the list of UTs, while Arunachal Pradesh came last in the North East category. There are four categories in which regions have been divided -- large states, small states, Union Territories and North East. The Index includes five pillars comprising 41 indicators. The five pillars are -- educational infrastructure, access to education, basic health, learning outcomes and governance.

Note: The report on the 'Index on Foundational Literacy and Numeracy' was prepared by 'Institute for Competitiveness' and released by Economic Advisory Council to the Prime Minister (EAC-PM) chairman Bibek Debroy.

### Maharashtra tops the list of Atmanirbhar Bharat Rozgar Yojana beneficiaries

Maharashtra has topped the list of states with the maximum number of beneficiaries under the Atmanirbhar Bharat Rozgar Yojana (ABRY), followed by Tamil Nadu and Gujarat. As many as 6,49,560 beneficiaries were recorded in Maharashtra, followed by Tamil Nadu (5,35,615), Gujarat (4,44,741) and Karnataka (3,07,164). In Maharashtra, the beneficiaries have been provided with a total of Rs 409.72 crore under the scheme to new employees of 17,524 establishments.

#### Atmanirbhar Bharat Rozgar Yojana:

- The government had launched ABRY to incentivize employment generation in Employees' Provident Fund Organisation (EPFO) registered establishments during COVID-19 for a period from October 1, 2020, to March 31, 2022.

- This scheme, being implemented through the Employees Provident Fund Organisation (EPFO), reduces the financial burden of the employers of various sectors/industries and encourages them to hire more workers.

### World Talent Ranking Report 2021: India ranked 56th

International Institute for Management Development (IMD) World Competitive Centre published its "World Talent Ranking Report". In the report, Europe has dominated the ranking in 2021. Global top 10 countries are from this region. Switzerland has retained its top spot. India has been ranked at 56th position. In the Middle East & North Africa, UAE maintained its second position, following Israel (first in this region). Israel has been ranked 22nd. In the Arab world, UAE maintained its top position. The UAE has improved its global talent ranking by one position to 23rd. Taiwan has been ranked at third place in Asia while at 16th place in Asia, Taiwan has been ranked behind Hong Kong (11) and Singapore (12) but ahead of South Korea (34), China (36), and Japan (39).

#### Top 5 in World Talent Ranking report 2021:

Rank	Country
1	Switzerland
2	Sweden
3	Luxembourg
4	Norway
5	Denmark

#### IMD:

- IMD is an independent academic institution, having Swiss roots and a global reach. It was founded 75 years ago for business leaders by business leaders.
- It has been a pioneering force in developing leaders who can transform organizations and contribute to society.

### Prabhas tops UK newspaper's 2021 South Asian celebrity list

Actor Prabhas, known for starring in 'Baahubali', has been named the number one South Asian celebrity in the world for 2021 by UK's weekly newspaper 'Eastern Eye'. Other Indian actors to feature on the list include Priyanka Chopra, who ranked third, and

Amitabh Bachchan, who has been placed at the 32nd spot. Singer Shreya Ghoshal ranked fifth on the list.

#### **Eastern Eye:**

The Eastern Eye is a British weekly newspaper. It was created in 1989 and was first published by The Guardian, before becoming a standalone newspaper.

Editor: Ramniklal Solanki CBE

#### **India's 10 most valuable companies in 2021 as per Hurun**

Oil-to-telecom conglomerate Reliance Industries Ltd (RIL) has topped the list of 500 most valuable companies in the country, that was released by research agency Hurun India in coordination with Axis Bank's private banking business Burgundy Private. While RIL with a value of Rs 16.65 lakh crore has been ranked first in the 'Burgundy Private Hurun India 500' list. TCS and HDFC Bank with a value of ₹13.09 lakh crore and ₹9.05 lakh crore, respectively, stood second and third. They are followed by Infosys with ₹7.51 lakh crore, ICICI Bank, HDFC, Bajaj Finance and Kotak Mahindra Bank. Kotak Mahindra Bank was ranked eighth, followed by Bharti Airtel ninth and Wipro tenth.

#### **FM Nirmala Sitharaman Ranked 37th on Forbes' 2021 World's 100 Most Powerful Women**

Union finance minister Nirmala Sitharaman made it Forbes' 100 most powerful women in the world for the third time in a row. This year, she is ranked at number 37, up from last year when she was placed at 41. Forbes announced its 18th annual ranking of The World's 100 Most Powerful Women, the definitive audit of the foremost CEOs and iconic entrepreneurs, heads of state, pioneer philanthropists, and policymakers who are solving for society's most intractable problems. Sitharaman is the first full-time female finance minister of India. Representational Image FM Nirmala Sitharaman, Nykaa's Falguni Nayar make it to Forbes' 100 most powerful women list "She is India's first full-time female finance minister. She has served as a member of the National Commission for Women," Ranked 88, Falguni Nayar, the founder and CEO of beauty and lifestyle retail company Nykaa. Besides Sitharaman and Nayar, Indians to feature on the list include HCL Corporation CEO Roshni Nadar Malhotra at 52) Biocon Executive Chairperson Kiran Mazumdar-Shaw at 72. Other

notable faces on the list are Facebook's whistleblower Frances Haugen (100), Bangladeshi Prime Minister Sheikh Hasina Wajed (43).

#### **IFFCO ranks first in World Cooperative Monitor report 2021**

The Indian Farmers Fertiliser Cooperative Limited (IFFCO) has been ranked 'number one Cooperative' among the top 300 cooperatives in the world. The ranking is based on the ratio of turnover over the gross domestic product (GDP) per capita. It signifies that IFFCO is contributing significantly to the GDP and economic growth of the nation. The 2021 edition of the 10th Annual World Cooperative Monitor (WCM) report, withholding its position from the 2020 edition.

##### **Details:**

- The 2021 WCM report is published by the International Cooperative Alliance (ICA) and European Research Institute on Cooperative and Social Enterprises (Euricse). WCM is a project designed to collect robust economic, organizational, and social data cooperatives worldwide.
- The report is the 10th annual one and explores the economic and social impact of the largest cooperatives and mutual worldwide, providing a ranking of the top 300, sector rankings, and an analysis of responses to the current global challenges: Covid and climate change.

#### **WhatsApp's India grievance officer quits in less than 6 months**

Advocate Pares B Lal, who was appointed as WhatsApp's Grievance and Nodal Officer, under India's new IT rules, has quit in less than six months since his appointment. Varun Lamba, a partner at AZB & Partners, has taken up an interim role. According to WhatsApp's website, reports that go to the grievance cell will now be addressed by Lamba. Lal had been with WhatsApp as the 'Attorney-Grievance Officer and Nodal Officer' between May to October 2021 and the reason for his exit is still unknown. Previously, Twitter India's interim Resident Grievance Officer Dharmendra Chatur had quit his post in less than four weeks of his appointment in June this year.

**Note:** India's new IT rules mandate 'significant' intermediaries to appoint a Chief Compliance Officer,

a nodal contact person and a grievance officer — all three of whom are required to be residents of India.

### List of world's most expensive cities to live in released; Tel Aviv tops list

Tel Aviv is the world's most expensive city to live in, according to this year's Worldwide Cost of Living index by Economist Intelligence Unit. Paris and Singapore have been ranked 2nd, while Zurich, Hong Kong and New York City have been ranked 4th, 5th and 6th respectively. Geneva has been ranked 7th, Copenhagen (8th), Los Angeles (9th) and Osaka (10th). The Worldwide Cost of Living is a twice-yearly survey conducted by EIU that compares more than 400 individual prices across 200 products and services in 173 cities.

#### Other key findings in the study include:

- Rome saw the biggest drop in the ranking from 32nd to 48th place
- Tehran leaped from 79th to 29th place after the reimposition of U.S. sanctions on Iran
- Hong Kong had the most expensive petrol prices, at \$2.50 per liter
- Branded cigarette prices went up 6.7% on average
- The Syrian capital of Damascus remains the world's cheapest city

### Sweden's first woman PM Magdalena Andersson steps down within hours of being elected

Magdalena Andersson who was appointed as the first ever female Prime Minister of Sweden has resigned within few hours of appointed. Andersson was forced to resign after she presented her government's budget in the Parliament and the Swedish parliament voted in favour of the budget presented by the opposition.

#### Sweden:

- Capital: Stockholm
- Prime Minister: Stefan Löfven
- Currency: Swedish krona

### Art historian BN Goswamy pens book titled 'Conversations'

Renowned art historian and critic Brijinder Nath Goswamy has announced his new book based on and around the Indian arts. The book is titled "Conversations: India's Leading Art Historian Engages with 101 themes, and More". The new book will be published by Penguin Random House India (PRHI) and will hit stands in 2022.

#### Details:

- In this book, B.N Goswamy explores a wide range of subjects on or around the arts.
- With this book, Goswamy opens a window to a wide range of subjects: on and around the arts.
- It not only invites those interested and literate in arts but also the general readers who want to take a dive into the field of the arts.

### New Wage Rate Index Series released; Base Year revised to 2016 From 1963-65

Ministry of Labour & Employment has changed the base year for Wage Rate Index (WRI) from 1963-65=100 to 2016=100. The government had formed an Expert Group on Minimum Wages & National Floor Wages headed by Prof. S.P.Mukherjee. Based on the recommendation of this committee, the base year has been changed. Further, new series of Wage Rate Index (WRI) from July 2016 to July 2020 based on the new series 2016=100 has been released by the government. This is compiled and maintained by Labour Bureau, an attached office of Ministry of Labour & Employment. A total of 37 industries have been covered in the new WRI basket (2016=100) as against 21 industries in the 1963-65=100 series. The New WRI Series with base 2016=100 would be compiled twice a year on a point-to-point half-yearly basis, as on 1st January and 1st July of every year.

**"A Clear Vision, Backed By  
Definite Plans, Gives You A  
Tremendous Feeling Of  
Confidence And Personal Power."**

**"There Are No Limits To What You  
Can Accomplish, Except The  
Limits You Place On Your Own  
Thinking."**



## Defence Exercise of the Month

### EKUVERIN



The 11th edition of Exercise EKVURIN between India and Maldives will be conducted at Kadhdhoo Island, Maldives. It will conclude on 19th of this month. The exercise will enhance synergy and interoperability between Armed Forces of both the nations in terms of understanding transnational terrorism both on land and at sea, conducting Counter-Terrorism and Counter-Insurgency Operations and sharing best military practices and experiences. The joint military exercise will also include cultural and sports activities to enhance defence cooperation and bilateral relations. The exercise will go a long way in strengthening India's relations with Maldives amidst emerging security dynamics in the Indian Ocean Region.

#### Maldives:

- Capital: Malé
- President: Ibrahim Mohamed Solih
- Currency: Maldivian rufiyaa (MVR)

### Dakshin Shakti



**"Leaders Think And Talk About The Solutions. Followers Think And Talk About The Problems."**

The Indian Army had organised the biggest military exercise called Dakshin Shakti in Rajasthan's Jaisalmer. Exercise Dakshin Shakti witnessed the participation of over 30,000 troops from the Army, Navy, IAF, Coast Guard, BSF and intelligence. The drills were undertaken in the deserts of Thar to the Rann of Kutch. The main objective of this exercise was to test the capability of the troops in the marshy and marine areas and to see how well the forces worked together and how well they connected. The aim was also to establish the best coordination among armed forces, space technology and artificial intelligence.

### Dosti



The 15th edition of the biennial Trilateral Coast Guard Exercise 'Dosti' between the Maldives, India, and Sri Lanka was held from November 20 to 24 in Maldives. Indian Coast Guard was represented by ICGS Vajra and ICGS Apoorva. The aim of this exercise is to further strengthen the friendship, enhance mutual operational capability, and interoperability and build cooperation between the Coast Guards of the three nations. Exercise Dosti was launched in 1991 between Indian and Maldives Coast Guards. Sri Lanka joined the drill for the first time in 2012.

**"Leaders Concentrate Single-Mindedly On One Thing- The Most Important Thing, And They Stay At It Until It's Complete."**

## Important Days of the Month

Day	Observed/Celebrated As	Motto/Importance
Jan-01	Global Family Day	To promote the idea that the Earth is one Global family and we should live in peace.
Jan-04	World Braille Day	To mark the birth anniversary of Louis Braille
Jan-09	NRI Day (Pravasi Bhartiya Diwas)	To commemorate the return of Mahatma Gandhi from South Africa to Mumbai on 9 January, 1915
Jan-10	World Hindi Day	To mark the birth anniversary of first World Hindi Conference which was held in 1975.
Jan-12	National Youth Day	To mark the birth anniversary of the Swami Vivekananda
Jan-15	Army day	On this day, Field Marshal K. M. Cariappa became the 1st Army Chief of Independent India in 1949.
24-Jan	National Girl Child Day	To increase awareness among the people and ensure every girl gets equal importance as their counterparts.
Jan-25	National Voters day	To mark the foundation day of the Election Commission of India (ECI) which came into existence on 25 Jan 1950
Jan-26	India's Republic Day	To mark the adoption of the constitution on 26 January 1930.
Jan-27	International Holocaust Remembrance Day	To commemorate the tragedy of the Holocaust(सर्व-नाश/प्रलय) that occurred during the Second World War.
Jan-30	Martyrs' Day (Shaheed Diwas)	To mark the assassination of Mohandas Karamchand Gandhi Ji in 1948, by Nathuram Godse.
January (last Sunday)	World Leprosy Eradication Day	To increase the public awareness of the Leprosy or Hansen's Disease.

## Trending Topic of the Month

### Farm laws and their repealing: Explained



PM Modi said the laws will be withdrawn in Parliament during the coming winter session. Here's a look at what these laws, kept in suspension by the Supreme Court, are all about.

#### These laws are:

1. The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act
2. The Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Act
3. The Essential Commodities (Amendment) Act

**1. The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act** provides for setting up a mechanism allowing the farmers to sell their farm produces outside the Agriculture Produce Market Committees (APMCs). Any licence-holder trader can buy the produce from the farmers at mutually agreed prices. This trade of farm produces will be free of mandi tax imposed by the state governments.

**2. The Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Act** allows farmers to do contract farming and market their produces freely.

**3. The Essential Commodities (Amendment) Act** is an amendment to the existing Essential Commodities Act. This law now frees items such as foodgrains, pulses, edible oils and onion for trade except in extraordinary (read crisis) situations.

#### Government's motto behind these:

The government had presented these laws as reforms akin to the 1991-opening of the Indian economy linking it with the globalised markets. It had argued that the three laws open up new opportunities for the farmers so that they can earn more from their farm produces. According to the government, the new laws will help to strengthen basic farm sector infrastructure through greater private investments. Successive governments have found financial constraints in investing in farm and rural infrastructure. It is argued that with food markets growing exponentially in India, private players would make agriculture profitable for the farmers.

#### Farmer's worry:



The MSP assurance emerged as the main sticking point in the farmers' protest. There has been an apprehension among the farmers that allowing outside-APMC trade of farm produces would lead to lesser buying by the government agencies in the approved mandis. According to them the new laws would thus make the



MSP system irrelevant and they would not have any assured income from their farming. Right now, the government announces fixed MSP for around two dozen crops. However, paddy, wheat and some pulses are the ones that are procured by the government agencies at the APMC mandis.

### Reason behind protesting:



The working of the MSP system has been such over the years that it benefits only a handful of farmers at all-India level. The Shanta Kumar committee set up by the Narendra Modi government in 2015 said only six per cent farmers benefit from the MSP regime. The catch here is that for farmers of some states such as Punjab and Haryana, the MSP system has worked well. In these two states procurement of paddy and wheat range around 75-80 per cent. So, the fear that the MSP system may crumble and get dismantled after the new farm laws are implemented became a very emotive issue for the farmers of Punjab and Haryana. And, that is why they have been most vocal in their protest against the farm laws, demanding that the MSP should be made mandatory for both APMC and private mandis.

**"Successful people do what unsuccessful people are not willing to do. Don't wish it were easier; wish you were better."**

### Why was the government reluctant?



The MSP system is politically sensitive and financially unviable for the government. Some economists have called the MSP system of India one of the costliest government food procurement programmes in the world. There are around 7,000 APMC mandis across the country from where the government agencies including the Food Corporation of India (FCI) purchase farm produces. However, in a practical sense, only the paddy and wheat are procured by the FCI. The FCI sells these foodgrains to the Below Poverty Line (BPL) families through the Public Distribution System (PDS) at a concessionary rate. This is loss-making or welfare-oriented practice.

The MSPs have seen consistent increase making the FCI pay more for the farm produces and bear more losses as the PDS rates remain almost the same. Rising procurement means the FCI godowns are overflowing, and rising MSP means that the FCI cannot sell its stocks in the international market at a profit. The government compensates the FCI for its losses, and at times sells foodgrains to some countries under an agreement.

The rising food bill under the existing MSP system of the government translates into pressure on the fiscal deficit in the annual budget. This is the reason why every government in the past several years has tried to find a way out.

**"Success is not final; failure is not fatal: It is the courage to continue that counts."**

## World Athletics Awards 2021



The World Athletics Awards 2021 staged as a virtual event on 1 December and it is a celebration of the sport, also honouring and recognising organisations and individuals from around the world in what has been another memorable and sometimes challenging year. Ten awards were presented at the World Athletics Awards 2021. The ceremony was hosted by marathon great Paula Radcliffe and long jump star Jazmin Sawyers.

**Awards that were bestowed during the ceremony:**

### Coaching Achievement Award

Given to a coach who has helped athletes thrive.



### Member Federations Award

First awarded last year, the Member Federation Award honours a national governing body that has gone above and beyond to serve its athletes, fans and greater community.

### Inspiration Award



This award will recognise an individual or group of individuals whose efforts have resulted in a particularly inspiring athletics event or experience.

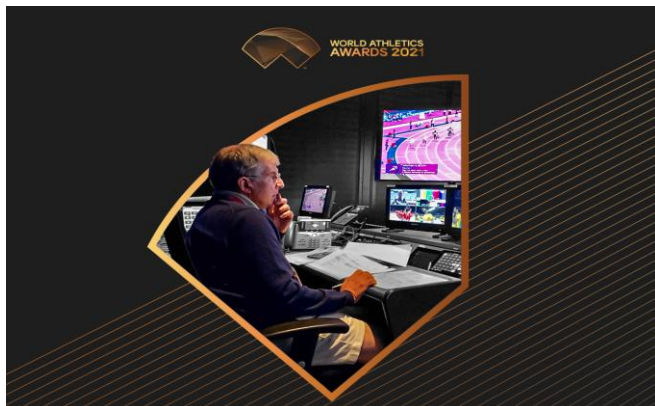
### Woman of the Year Award

Recognising a woman who has dedicated her life to the sport of athletics.



### President's Award

This award recognises and honours exceptional service to athletics.



**Athletics Photograph of the Year**



Awarded to the best athletics photograph of 2021, as decided by an expert panel of judges, who whittled down 112 entries to this year's finalists.

### Here is the complete list of 2021 winners:

- ❖ Male World Athletes of the Year: Karsten Warholm (Norway)
- ❖ Female World Athletes of the Year: Elaine Thompson-Herah (Jamaica)
- ❖ Female Rising Star: Athing Mu
- ❖ Male Rising Star: Erriyon Knighton
- ❖ Member Federations Award: Federacion Costarricense de Atletismo (Costa Rica)
- ❖ Inspiration Award: Mutaz Barshim and Gianmarco Tamberi
- ❖ President's Award: Peter Diamond (Executive Vice President of NBC Olympic programming)
- ❖ Coaching Achievement Award: Bobby Kersee
- ❖ Woman of the Year Award: Anju Bobby George

- ❖ Jean-Pierre Durand World Athletics Photograph of the Year: Ryan Pierse's photograph of the women's high jump qualifying at the Tokyo Olympic Games

### Who is Anju Bobby George, a retired Indian sprinter who was awarded 'Woman of the Year' trophy?



Anju Bobby George from India has been honoured with the 'Woman of the year' award for being a constant voice for gender equality in her role as the Senior Vice-President of the Indian Athletics Federation. She is a retired Indian athlete who had made history by winning the bronze medal in the long jump at the World Championship in Athletics held in Paris in 2003. She became the first Indian athlete to win a medal in the World Championships in Athletics. Later in 2005, she also went on to win a gold medal at the IAAF World Athletics Final.

Anju Bobby George is still actively involved in the sport. In 2016, the former International long jump star from India opened an academy for the young girls of the country which has already given a world U20 medalist. George also mentors young school girls for future leadership positions within the sport.

**Awards & Honours:** Arjuna Awards(2002), Khel Ratna(2003) & Padma Shri(2004)





## Global Multidimensional Poverty Index

The global Multidimensional Poverty Index (MPI) produced by the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative measures poverty by considering various deprivations experienced by people in their daily lives, including poor health, insufficient education and a low standard of living. It also shows how, within a country, multidimensional poverty among different ethnic groups can vary immensely. For example, the difference in the percentage of people who are multidimensionally poor across ethnic groups is more than 70 percentage points in Gabon and Nigeria.

### Characteristics:

The MPI assesses poverty at the individual level. If a person is deprived in a third or more of ten (weighted) indicators, the global MPI identifies them as 'MPI poor'. The extent – or intensity – of their poverty is also measured through the percentage of deprivations they are experiencing. The global MPI shows who is poor and how they are poor and can be used to create a comprehensive picture of people living in poverty. It permits comparisons both across countries and world regions, and within countries by ethnic group, urban/rural area, subnational region, and age group, as well as other key household and community characteristics. For each group and for countries as a whole, the composition of MPI by each of the 10 indicators shows how people are poor. This makes the MPI and its linked information platform invaluable as an analytical tool to identify the most vulnerable people – the poorest among the poor, revealing poverty patterns within countries and over time, enabling policy makers to target resources and design policies more effectively.

### India's scenario

In its first Multidimensional Poverty Index (MPI) report by Niti Aayog, Bihar, Jharkhand and Uttar Pradesh were found to be the poorest states in the country. They were followed by Madhya Pradesh and Meghalaya in the index.

### Top 5 States:

1. Kerala: 0.71%
2. Goa: 3.76%
3. Sikkim: 3.82%
4. Tamil Nadu: 4.89%
5. Punjab: 5.59 %

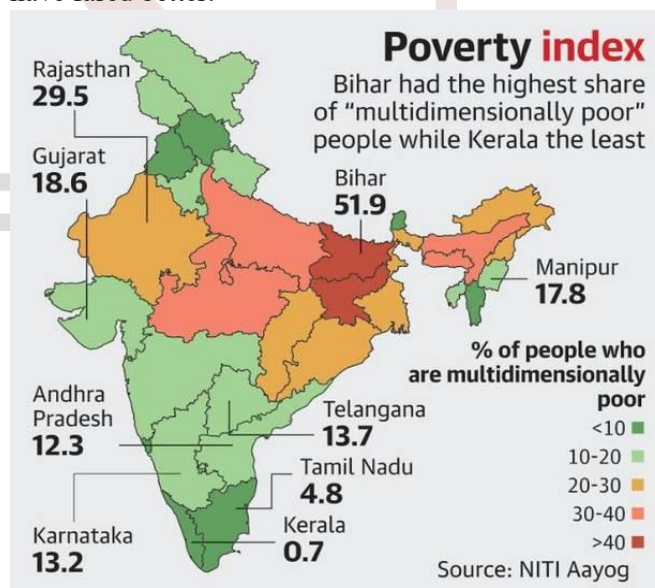
### Bottom 5 states:

1. Bihar: 51.91%
2. Jharkhand: 42.16%
3. UP: 37.79%
4. MP: 36.65%
5. Meghalaya: 32.67%

### Bottom 5 UT's:

1. Dadra and Nagar Haveli: 27.36%
2. Jammu & Kashmir : 12.58%
3. Ladakh: 12.58%
4. Daman & Diu: 6.82%
5. Chandigarh: 5.97%

**Note:** Puducherry, with 1.72 per cent of its population as poor, Lakshadweep (1.82 per cent ), Andaman & Nicobar Islands (4.30 per cent) and Delhi (4.79 per cent) have fared better.





## JANUARY

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## FEBRUARY

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## MAY

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## JUNE

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## SEPTEMBER

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## OCTOBER

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# 2022

## CALENDAR

### MARCH

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### APRIL

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### JULY

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### AUGUST

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### NOVEMBER

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### DECEMBER

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## GS Question Bank (250 Que include)

### Statement Based Current Affairs

1. Lieutenant Governor of Ladakh, RK Mathur, launched the YounTab scheme for students. Under the scheme, about 12,300 tablets were distributed among them in Leh.  
Consider the following statements regarding Ladakh -  
(1) Ladakh was established as separate UT in 2018.  
(2) It is bordered by Tibet Autonomous Region in west and Jammu & Kashmir in east.  
(3) It is the 2nd least populated UT in India.  
Which of the above is/are correct?  
(A) Only (1) and (2) (B) Only (2) and (3)  
(C) Only (3) and (1) (D) All are correct
2. Recently, NITI Aayog has released the Multidimensional Poverty Index (MPI).  
Consider the following statements regarding to Government Initiatives -  
(1) National Livelihoods Mission (NRLM) was launched by the Ministry of Rural Development (MoRD), Government of India in 2011.  
(2) Pradhan Mantri Awas Yojana- Gramin was launched by Ministry of Rural development.  
(3) The Public distribution system (PDS) is an Indian food Security System established under the Ministry of Home Affairs.  
Which of the above is/are correct?  
(A) Only (1) and (3) (B) Only (2) and (1)  
(C) Only (3) and (2) (D) None of the above
3. The Prime Minister paid tributes to revolutionary freedom fighter Shyamji Krishna Varma on his birth anniversary (4th October).  
Consider the following statement regarding Shyamji Krishna Varma -  
(1) Shyamji Krishna Varma was born on 4th October, 1857 in Gujarat.  
(2) He was an expert in Marathi and English language.  
(3) He founded the Indian Home Rule Society, India House and The Indian Sociologist in London.  
Which of the above is/are correct?  
(A) Only (1) and (3) (B) Only (1) and (2)  
(C) Only (3) and (2) (D) All are correct
4. Recently, two United States-based scientists, David Julius and Ardem Patapoutian, have been awarded the 2021 Nobel Prize for Physiology/Medicine for their discoveries of receptors for temperature and touch.  
Consider the following statements -  
(1) Somatosensation is a collective term for the sensations of touch, temperature, body position, and pain.  
(2) It includes processes such as "mechanoreception, thermoreception, proprioception."  
(3) Mechanosensitive channels are fascinating proteins, being able to serve both as sensors and effectors.  
Which of the above is/are correct?  
(A) Only (1) and (2) (B) Only (2) and (3)  
(C) Only (3) and (1) (D) All are correct
5. Recently, National Health Accounts reported that the government has increased the expenditure on health.  
Consider the following statements regarding National Health Systems Resource Centre -  
(1) It was established in 2003-04 under the National Rural Health Mission.  
(2) It aims to serve as an apex body for technical assistance.  
(3) Its mandate is to assist in policy and strategy development in the provision and mobilization of technical assistance.  
Which of the above is/are correct?  
(A) Only (1) and (3) (B) Only (2) and (1)  
(C) Only (3) and (2) (D) None of the above
6. Recently, Barbados has officially removed Queen Elizabeth II as its head of state and become the world's newest republic nearly 400 years after the country became a British colony.  
Consider the following statements regarding Commonwealth of Nations -  
(1) It is an international intergovernmental organization of countries that were territories of the British Empire.  
(2) It was established by the London Declaration in 1947 at the time of Indian freedom fight.  
(3) The current membership includes 54 Countries.  
Which of the above is/are correct?  
(A) Only (1) and (2) (B) Only (2) and (3)  
(C) Only (3) and (1) (D) All are correct

7. Recently, Scientists have found a clue to the mystery behind the high abundance of Lithium in some evolved stars.  
Consider the following statements regarding Properties of Lithium -  
(1) It is a chemical element with the symbol Li.  
(2) It is a soft, silvery-white metal.  
(3) It is highly reactive and flammable, and must be stored in mineral oil.  
Which of the above is/are correct?  
(A) Only (1) and (2) (B) Only (2) and (3)  
(C) Only (3) and (1) (D) All are correct
8. Recently, the Government has approved setting up of 7 PM Mega Integrated Textile Region and Apparel (PM MITRA) Parks.  
Consider the following statements regarding India's Textile Sector -  
(1) It is one of the oldest industries in the Indian economy.  
(2) It contributes more than 15% to Indian Gross Domestic Product.  
(3) India is the 6th largest producer of Technical Textiles with 6% Global Share.  
Which of the above is/are correct?  
(A) Only (1) and (3) (B) Only (2) and (1)  
(C) Only (3) and (2) (D) None of the above
9. Recently, Nagaland has celebrated its 59th Statehood day on December 1st 2021.  
Consider the following statements -  
(1) After India became independent in 1947, the Naga territory initially remained a part of Assam.  
(2) In 1957, the Naga Hills region of Assam and the Tuensang frontier division to the northeast were brought together.  
(3) In 1963 it was resolved that Nagaland should become a constituent state of the Indian union.  
Which of the above is/are correct?  
(A) Only (1) and (2) (B) Only (2) and (3)  
(C) Only (3) and (1) (D) All are correct
10. Recently, the Worldwide Cost of Living report has been released highlighting that Tel Aviv (Israel's capital) is the world's most expensive city to live in.  
Consider the following statements regarding Economist Intelligence Unit -  
(1) The Economist Intelligence Unit is the research and analysis division of The Economist Group.  
(2) The EIU also releases the Democracy Index.  
(3) India ranks at 53rd position in EIU's Democracy Index.  
Which of the above is/are correct?  
(A) Only (1) and (2) (B) Only (2) and (3)  
(C) Only (3) and (1) (D) All are correct
11. Recently, several tribal outfits in Tripura have joined hands to push their demand for a separate state.  
Consider the following statements regarding constitutional provision to formation of new states  
(1) According to Article 2, Parliament may by law admit into the Union, or establish, new States on such terms and conditions as it thinks fit.  
(2) Article 3 empowered the Parliament to make law relating to the formation of new states and alteration of existing states.  
(3) Sikkim state became a part of the country under Article 4.  
Which of the above is/are correct?  
(A) Only (1) and (3) (B) Only (2) and (1)  
(C) Only (3) and (2) (D) None of the above
12. Recently, Rajya Sabha reserved its decision to allow the introduction of a Private Member's Bill to amend the Preamble to the Constitution.  
Consider the following statements regarding Amendability of Preamble -  
(1) Any Member of Parliament (MP) who is not a minister is referred to as a private member.  
(2) As a part of the Constitution, the preamble can be amended under Article 362 of the Constitution.  
(3) As of now, the preamble is only amended once through the 42nd Amendment Act, 1976.  
Which of the above is/are correct?  
(A) Only (1) and (3) (B) Only (2) and (1)  
(C) Only (3) and (2) (D) None of the above
13. Recently, the Public Accounts Committee (PAC) has completed 100 years.  
Consider the following statements regarding Public Accounts Committee -  
(1) The Public Accounts Committee is also called Montford Reforms.  
(2) The Chairman of the Committee is appointed by the President of India.  
(3) It presently comprises 22 members with a term of one year only.  
Which of the above is/are correct?

- (A) Only (1) and (2) (B) Only (2) and (3)  
(C) Only (3) and (1) (D) All are correct

14. Recently, the National Investigation Agency (NIA) has filed an appeal against the Bombay High Court order, which granted statutory bail to lawyer-activist Sudha Bharadwaj. Consider the following statements regarding Types of Bail in India: -  
(1) Regular Bail is a direction given by the Court to release a person.  
(2) For Interim Bail, a person can file an application under Section 437 and 439 of the CrPC.  
(3) Article 22 grants protection to persons who are arrested or detained.  
Which of the above is/are correct?  
(A) Only (1) and (3) (B) Only (2) and (1)  
(C) Only (3) and (2) (D) None of the above
15. Recently, the Bureau of Energy Efficiency (BEE) felicitated various industrial units, institutions and establishments with 31st National Energy Conservation Awards. Consider the following statements regarding Bureau of Energy Efficiency: -  
(1) The BEE is a statutory body established through the Energy Conservation Act, 2001 under the Union Ministry of Power.  
(2) It assists in developing policies and strategies with the primary objective of reducing the energy intensity of the Indian economy.  
(3) BEE coordinates with designated consumers, designated agencies, and other organizations to identify and utilize the existing resources and infrastructure, in performing its functions.  
Which of the above is/are correct?  
(A) Only (1) and (2) (B) Only (2) and (3)  
(C) Only (3) and (1) (D) All are correct
16. Recently, the President of India paid tributes to Chhatrapati Shivaji Maharaj. Consider the following statements regarding to him: -  
(1) His father Shahaji Bhonsle was a Maratha general who held the jagirs of Pune.  
(2) Shivaji displayed his military zeal for the first time in 1645.  
(3) He successfully got control of the Torna Fort which was under Bijapur in 1629.  
Which of the above is/are correct?

- (A) Only (1) and (2) (B) Only (2) and (3)  
(C) Only (3) and (1) (D) All are correct

17. Recently, the NDPS (Amendment) Bill, 2021 was introduced in the Lok Sabha. Consider the following statements regarding Narcotic Drugs and Psychotropic Substances Act, 1985 -  
(1) The Narcotics Control Bureau was also constituted in 1980 under the Act.  
(2) It also provides for death penalty in some cases where a person is a repeat offender.  
(3) It also provides for forfeiture of property derived from psychotropic substances.  
Which of the above is/are correct?  
(A) Only (1) and (3) (B) Only (2) and (1)  
(C) Only (3) and (2) (D) None of the above
18. According to a report by Stockholm International Peace Research Institute (SIPRI), three Indian companies are among the world's top 100 for combined arms sales in 2020. Consider the following statements regarding Stockholm International Peace Research Institute -  
(1) The SIPRI is a non-profit inter-government organization.  
(2) It was established in 1966 at Stockholm.  
(3) It dedicated to research into conflict, armaments, arms control and disarmament.  
Which of the above is/are correct?  
(A) Only (1) and (2) (B) Only (2) and (3)  
(C) Only (3) and (1) (D) All are correct
19. Recently, ICAR – (CCARI) celebrated "World Soil Day" (WSD) on 5th December 2021. Consider the following statements -  
(1) It was recommended by the International Union of Soil Sciences (IUSS) in 2002.  
(2) The United Nations has supported the formal establishment of WSD.  
(3) 5th December 2014 was designated as the first official WSD by the UN General Assembly (UNGA).  
Which of the above is/are correct?  
(A) Only (1) and (2) (B) Only (2) and (3)  
(C) Only (3) and (1) (D) All are correct
20. According to the Lok Sabha, Shyama Prasad Mukherji Rurban Mission (SPMRM) has performed significantly well in the last four years.



Consider the following statements regarding Provision of Urban Amenities to Rural Areas -

(1) PURA was mooted by the former President Dr. Abdul Kalam in January 2003.

(2) PURA 2.0 as a central sector scheme was launched in 2013.

(3) It was launched in order to ensure Provision of livelihood opportunities and urban amenities in rural areas.

Which of the above is/are correct?

(A) Only (1) and (3) (B) Only (2) and (1)

(C) Only (3) and (2) (D) None of the above

21. Recently, the Ministry of Mines has notified the Minerals Concession Rules, 2021.

Consider the following statements Mining Sector in India -

(1) India holds a fair advantage in production and conversion costs in steel and alumina.

(2) India is the world's third-largest coal producer as of 2021.

(3) India is the world's second-largest crude steel producer, as of 2020.

Which of the above is/are correct?

(A) Only (1) and (2) (B) Only (2) and (3)

(C) Only (3) and (1) (D) All are correct

22. Recently, the Ministry of Information and Broadcasting has issued draft guidelines for new accessibility standards.

Consider the following statements regarding Constitutional and Legal Framework for Disabled People: -

(1) According to Article 14, The State shall not deny to any person equality before the law.

(2) India is a signatory to the United Nations Convention the Right of Persons with Disabilities, which came into force in 2007.

(3) The Government of India enacted The Rights of Persons with Disabilities Act in 2014.

Which of the above is/are correct?

(A) Only (1) and (2) (B) Only (2) and (3)

(C) Only (3) and (1) (D) All are correct

23. Recently, the researchers at the Indian Institute of Science, Bengaluru (IISc) have found a way to make a substitute for single-use plastic (SUP). Consider the following statements regarding Plastic Waste in India -

(1) According to the Central Pollution Control Board (CPCB), India generates close to 26,000 tonnes of plastic a day.

(2) According to a Federation of Indian Chambers of Commerce and Industry (FICCI) study the plastic processing industry is estimated to grow to 22 million tonnes (MT) a year by 2020.

(3) India's per capita plastic consumption of less than 11 kg, is nearly a tenth of the United States of America (109 kg).

Which of the above is/are correct?

(A) Only (1) and (3) (B) Only (2) and (1)

(C) Only (3) and (2) (D) All of the above

24. World Rhino Day is observed on 22th September to spread awareness for all five species of rhino and work being done to save them.

Consider the following statements -

(1) The day was first announced by the World Wildlife Fund (WWF) - Kenya in 2010.

(2) The species of rhinoceros are on the verge of extinction due to persistent poaching and habitat loss over several decades.

(3) There are five species of rhino – white and black rhinos in Africa, and the greater one-horned, Javan and Sumatran rhino species in Asia.

Which of the above is/are correct?

(A) Only (1) and (3) (B) Only (1) and (2)

(C) Only (3) and (2) (D) All are correct

25. Recently, the Indian Institute of Technology (IIT), Guwahati, has developed a super-hydrophobic cotton composite with Metal-Organic Framework (MOF) that can clean-up marine oil-spill.

Consider the following statements regarding Oil Spills -

(1) It refers to any uncontrolled release of crude oil, gasoline, fuels, or other oil by-products into the environment.

(2) The severe water contamination threatens the health of humans as well as other living species.

(3) It has become a major environmental and economic problem, chiefly as a result of intensified petroleum exploration and production on continental shelves.

Which of the above is/are correct?

(A) Only (1) and (2) (B) Only (2) and (3)

(C) Only (3) and (1) (D) All are correct

## Statement Based General Awareness

1. Consider the following statements:  
 1. In 1917, Mahatma Gandhi organised a satyagraha to support the peasants of the Kheda district of Gujarat.  
 2. Sanchi Stupa was built by Ashoka.  
 Which of the statements given above is/are correct?  
 (A) 1 only (B) 2 only  
 (C) Both 1 and 2 (D) Neither 1 nor 2
2. Consider the following statements:  
 1. Mahatma Gandhi raised the slogan "Swaraj is my birthright and I shall have it".  
 2. Rana Sanga has built the Vijay Stambha (Tower of Victory) in Chittorgarh.  
 Which of the statements given above is/are correct?  
 (A) 1 only (B) 2 only  
 (C) Both 1 and 2 (D) Neither 1 nor 2
3. Consider the following statements:  
 1. The founder of Satyashodhak Samaj was Jyotiba Phule.  
 2. Vedanta Sabha was founded by Swami Vivekananda.  
 Which of the statements given above is/are correct?  
 (A) 1 only (B) 2 only  
 (C) Both 1 and 2 (D) Neither 1 nor 2
4. Consider the following statements:  
 1. In 1798 AD, East India Company started production of coffee experimentally.  
 2. Business production of coffee commences from India in 1820 AD.  
 Which of the statements given above is/are NOT correct?  
 (A) 1 only (B) 2 only  
 (C) Both 1 and 2 (D) Neither 1 nor 2
5. Consider the following statements:  
 1. The Mars planet's satellite is Phobos and Deimos.  
 2. On Mars, the highest mountain in the Solar System is Nix Olympia.  
 3. Nix Olympia is three times higher than the Everest.  
 Which of the statements given above is/are correct?  
 (A) Only 1 (B) 1 and 2 only  
 (C) 1 and 3 only (D) 1, 2 and 3
6. Consider the following statements:  
 1. India has about 2.45 percent of the world's surface area and 4 percent of water resources.  
 2. About 16 percent of world population is found in India.  
 Which of the statements given above is/are correct?  
 (A) 1 only (B) 2 only  
 (C) Both 1 and 2 (D) Neither 1 nor 2
7. Consider the following statements:  
 1. The parliamentary government is also called the cabinet government or responsible government or government of Westminster.  
 2. It is popular in UK, Japan, and Canada etc.  
 Which of the statements given above is/are correct?  
 (A) 1 only (B) 2 only  
 (C) Both 1 and 2 (D) Neither 1 nor 2
8. Consider the following statements:  
 1. Length of 1-degree latitude is 110.569 km on Equator.  
 2. This length is 111.7 km on the poles.  
 Which of the statements given above is/are correct?  
 (A) 1 only (B) 2 only  
 (C) Both 1 and 2 (D) Neither 1 nor 2
9. Consider the following statements:  
 1. Earth rotates 15 degrees in one hour.  
 2. Earth revolves from west to east.  
 Which of the statements given above is/are correct?  
 (A) 1 only (B) 2 only  
 (C) Both 1 and 2 (D) Neither 1 nor 2
10. Which of the following statements is true?  
 I. In monopoly market form, a market or an industry is dominated by a single seller.  
 II. Employment is a measure of employment and labor utilization in the economy.  
 Select the correct option.  
 (A) Only I (B) Only II  
 (C) Both I & II (D) Neither I nor II

11. Which of the following statements is true?  
I. The free market is an economic system based on supply and demand with little or no government control.  
II. Seasonal unemployment is the result of employment transitions within an economy.  
Select the correct option.  
(A) Only I (B) Only II  
(C) Both I & II (D) Neither I nor II
12. Which of the following statements is true?  
I. Current account can be regarded as one of the primary components of the balance of payments of a nation.  
II. The current account represents a country's imports and exports of goods and services  
Select the correct option  
(A) Only I (B) Only II  
(C) Both I & II (D) Neither I nor II
13. Consider the following statements.  
1. The best and the poorest conductors of heat are respectively silver and gold.  
2. Tungsten has the highest melting point of 3,410 °C (6,170 °F) over all metals.  
Which is/are correct statement?  
(A) Only 1 (B) Only 2  
(C) 1 and 2 (D) None of these
14. Consider the following statements.  
1. Light travels at the fastest speed in the air.  
2. Sound is a longitudinal wave, while light is a transverse wave.  
Which is/are correct statement?  
(A) Only 1 (B) Only 2  
(C) 1 and 2 (D) None of these
15. Consider the following statements.  
1. Intensity of sound at a point is inversely proportional to its distance from the source.  
2. Radio telescopes are better than optical telescopes because they can work even in cloudy conditions.  
Which is/are correct statement?  
(A) Only 1 (B) Only 2  
(C) 1 and 2 (D) None of these
16. Consider the following statements.  
1. Mercury is commonly used as a thermometric fluid rather than water because specific heat of mercury is more than water.
2. The optical fiber works on the principle of total internal reflection.  
Which is/are correct statement?  
(A) Only 1 (B) Only 2  
(C) 1 and 2 (D) None of these
17. Consider the following statements.  
1. Chlorine is the most electronegative element and extremely reactive metal, as it reacts with all other elements, except for argon, neon, and helium.  
2. Electronegative indebtedness moves from bottom to top in groups, and from left to right in the period.  
Which is/are correct statement?  
(A) Only I (B) Only 2  
(C) Both 1 and 2 (D) None of these
18. Which of the following statements is true?  
I. Nitric acid acids is present in ant bites.  
II. Calcium carbonate is a dietary supplement.  
Select the correct option.  
(A) Only I (B) Only II  
(C) Both I & II (D) Neither I nor II
19. Consider the following statements.  
1. The resistance of a current carrying conductor is directly proportional to the area of cross section of the conductor.  
2. The SI unit of electrical resistance is the ohm ( $\Omega$ ), while electrical conductance is measured in siemens (S).  
3. Superconductor is materials that have exactly zero resistance and infinite conductance, because they have  $V = 0$  and  $I \neq 0$ .  
Which is/are correct statement?  
(A) Only 1 (B) both 1 and 2  
(C) both 2 and 3 (D) All of these above
20. Consider the following statements.  
1. The blue colour of the clear sky is due to dispersion of light.  
2. The brightness of a diamond is due to reflection, refraction, and deflection.  
Which is/are correct statement?  
(A) Only 1 (B) Only 2  
(C) 1 and 2 (D) None of these
21. Consider the following statements.  
1. A magnifying glass is a convex lens that is used to produce a magnified image of an object.



2. A convex lens is called as diverging lens or Negative lens.

Which is/are correct statement?

- (A) Only 1 (B) Only 2  
(C) 1 and 2 (D) None of these

22. Consider the following statements:

1. Cutting and peeling of onions bring tears to the eyes because of the presence of amino acid in the cell.

2. The antimalarial drug quinine is made from cinchona.

Which of the statements given above is/are NOT correct?

- (A) 1 only (B) 2 only  
(C) Both 1 and 2 (D) Neither 1 nor 2

23. Consider the following statements:

1. German silver is an alloy of copper, zinc, and nickel.

2. Stainless steel is an element.

Which of the statements given above is/are NOT correct?

- (A) 1 only (B) 2 only  
(C) Both 1 and 2 (D) Neither 1 nor 2

24. Which of the following statements is true?

I. Bombay Stock Exchange was established in 1875.

II. Central Food Technological Research Institute is located at Lucknow.

Select the correct option.

- (A) Only I (B) Only II  
(C) Both I & II (D) Neither I nor II

25. Which of the following statements is true?

I. A capital gain refers to profit that results from a sale of a capital asset.

II. Gift tax is the direct tax.

Select the correct option.

- (A) Only I (B) Only II  
(C) Both I & II (D) Neither I nor II

## Current Affairs

1. Recently which freedom fighter has been remembered on his 71st death anniversary on 15th December?

- (A) Sardar Vallabhbhai Patel  
(B) Jawaharlal Nehru  
(C) Subhas Chandra Bose  
(D) Rajendra Prasad  
(E) Sarvepalli Radhakrishnan

2. Which spacecraft sent by the National Aeronautics and Space Administration has entered the outer layer of the Sun "Corona"?

- (A) Solar Orbiter  
(B) Pioneer-E  
(C) Parker Solar Probe  
(D) Genesis  
(E) Helios B

3. Who has been appointed as the chief executive officer of French Luxury brand Chanel?

- (A) Vineet Nayar (B) Nitin Paranjpe  
(C) Alina Manwani (D) Leena Nair  
(E) Harshita Jope

4. The Parliament has recently passed the Central Vigilance Commission (Amendment) Bill 2021 to

extend the term of ED Director to a maximum of how many years?

- (A) 4 Years (B) 6 Years  
(C) 5 years (D) 7 Years  
(E) 3 Years

5. Prime Minister Narendra Modi will lay the foundation stone of the 594 km long Ganga Expressway project in which state?

- (A) Uttarakhand (B) Uttar Pradesh  
(C) Bihar (D) West Bengal  
(E) Jharkhand

6. Which petroleum company has tied up with Bhabha Atomic Research Centre to scale-up Alkaline Electrolyze technology for Green Hydrogen production?

- (A) Bharat Petroleum  
(B) Hindustan Petroleum  
(C) Indian Oil Corporation  
(D) Oil and Natural Gas Corporation  
(E) GAIL Limited

7. The prestigious TIME magazine has named whom as the "2021 Person of the Year"?

- (A) Jeff Bezos  
(B) Talulah Riley  
(C) Mark Zuckerberg  
(D) Elon Musk  
(E) Bernard Arnault
8. Which Bank has been awarded at the ET Banking, financial services and insurance Excellence Awards 2021?  
(A) OCBC Bank  
(B) United Overseas Bank  
(C) POSB Bank  
(D) Citibank  
(E) DBS Bank
9. Which General Insurance company has started its "#Care4Hockey" Campaign to elevate field Hockey's recognition in India?  
(A) Bajaj Allianz General Insurance  
(B) Bharti AXA General Insurance  
(C) Cholamandalam MS General Insurance  
(D) Edelweiss General Insurance  
(E) Future Generali India Insurance
10. Which state's Police has launched e-learning platform "Unnati"?  
(A) Punjab (B) Delhi  
(C) Haryana (D) Bihar  
(E) Assam
11. Who will be the head of recently formed oversight committee for the direct reporting of the Char Dham Project?  
(A) Justice Arjan Kumar Sikri  
(B) Justice Sharad Arvind Bobde  
(C) Justice Ranjan Gogoi  
(D) Justice Dipak Misra  
(E) Justice Jagdish Singh Khehar
12. National Energy Conservation Day is celebrated across India every year on which day of December?  
(A) 13th December (B) 14th December  
(C) 11th December (D) 15th December  
(E) 10th December
13. India has launched the second edition of water innovation challenges with the Royal Embassy of which nation?  
(A) Norway (B) Sweden  
(C) Denmark (D) Switzerland  
(E) Netherlands
14. Which among the following institutes has developed Bhu Parikshak device to detect soil health in 90 seconds?  
(A) IIT Madras (B) IIT Delhi  
(C) IIT Bombay (D) IIT Kanpur  
(E) IIT Dhanbad
15. India has inducted how many athletes in the first list of TOPS Athletes for 2024 Paris Olympics?  
(A) 150 (B) 172  
(C) 134 (D) 148  
(E) 141
16. Which payment bank has tied up with National Payments Corporation of India's bill payments system Bharat BillPay?  
(A) Airtel Payment Bank  
(B) Fino Payment Bank  
(C) Paytm Payment Bank  
(D) Jio Payment Bank  
(E) India Post Payments Bank
17. As per the Global Health Security (GHS) Index 2021, what is the rank of India out of 195 countries in the index?  
(A) 63<sup>rd</sup> (B) 52<sup>nd</sup>  
(C) 66<sup>th</sup> (D) 69<sup>th</sup>  
(E) 72<sup>th</sup>
18. Which state has held the top position in the highest number of Registered Electric Vehicles?  
(A) Uttarakhand (B) Uttar Pradesh  
(C) Delhi (D) Maharashtra  
(E) Goa
19. Which state government has signed a Letter of Understanding (LoU) with the UNDP as a part of the State-level initiative "Code-Unnati"?  
(A) Karnataka (B) Kerala  
(C) Andhra Pradesh (D) Maharashtra  
(E) Telangana
20. The Reserve Bank of India made Legal Entity Identifier (LEI) mandatory for cross-border transactions. The LEI has how many digits?  
(A) 20 (B) 18  
(C) 22 (D) 14  
(E) 12

21. Who has been crowned Formula One world champion after season-ending at Abu Dhabi Grand Prix recently?  
 (A) Lewis Hamilton (B) Max Verstappen  
 (C) Sergio Pérez (D) Toto Wolff  
 (E) Sebastian Vettel
22. Which city in the United Arab Emirates has become first in the world to go 100% paperless?  
 (A) Abu Dhabi (B) Sharjah  
 (C) Quwain (D) Dubai  
 (E) Ajman
23. Who has been crowned as the 70th Miss Universe?  
 (A) Manasa Chudasama (B) Adline Castolino  
 (C) Harnaaz Sandhu (D) Vartika Singh  
 (E) Beatrice Luigi
24. The DRDO and IAF has flight tested the "SANT" Missile from Pokhran Range. What does "S" stand for in the abbreviation of "SANT"?  
 (A) Stand-Off (B) Standardize  
 (C) Standoffish (D) Stand-Holder  
 (E) Stallholder
25. To strengthen the research and development of the NavIC messaging service, Indian Space Research Organisation has signed an agreement with which company?  
 (A) Xiaomi (B) Samsung  
 (C) Realme (D) Huawei  
 (E) Oppo

## History

1. Which of the following was obtained from the remains of the Cro-Magnon human?  
 (A) Australia (B) France  
 (C) Germany (D) Britain
2. The relic of Homo sapiens human beings find from which place?  
 (A) Central Asia (B) Eastern Europe  
 (C) Australia (D) East Africa
3. Which mughal ruler is known to have installed a 'Bell of Justice' to facilitate his subjects in getting their cries for justice to be heard?  
 (A) Akbar (B) Jahangir  
 (C) Aurangzeb (D) Humayun
4. Whose reign was called the Golden age of Mughal Era?  
 (A) Akbar (B) Jahangir  
 (C) Shahjahan (D) Humayun
5. Who wrote Panchatantra?  
 (A) Sudraka (B) Vishnu Gupta  
 (C) Vishnu Sharma (D) Bharata Muni
6. The Cellular Jail built by Britishers in the Andaman and Nicobar Islands is known by which of the following name?  
 (A) Maut Ka Kuan (B) Kala Pani  
 (C) Antim Yatra (D) Band Darwaja
7. How was the Gomati River known In the Vedic period?  
 (A) Kabul River (B) Kurram  
 (C) Gomal (D) Swat
8. What was the capital of the Anga Mahajanapada?  
 (A) Varanasi (B) Shravasti  
 (C) Champa (D) Rajgir
9. What was the capital of the Shurasen Mahajanapadas?  
 (A) Virat Nagar (B) Takshashila  
 (C) Ujjain (D) Mathura
10. What was the capital of Gandhar Mahajanapadas?  
 (A) Kushawati (B) Kaushambi  
 (C) Takshashila (D) Hatak
11. Ibn Battuta came to India during reign of the following?  
 (A) Devaraya I  
 (B) Jalaluddin  
 (C) Muhammad Tughlaq  
 (D) Krishnadevaraya
12. Ralph Fisch came to India during whose reign?  
 (A) Jahangir (B) Akbar  
 (C) Humayun (D) Shah jahan



13. Peter Mundy came to India during whose reign?  
 (A) Jahangir (B) Akbar  
 (C) Humayun (D) Shah jahan
14. People who discover historical facts by Excavation is called -  
 (A) Scientist (B) Historian  
 (C) Archaeologist (D) Geologist
15. Mesopotamian civilization was flourished on-  
 (A) Along the banks of the river Nile  
 (B) Along the bank of river Indus  
 (C) Along the bank of dajla farat river  
 (D) The edge of Yangtisiviyang river valley
16. The number of Vedas is-  
 (A) One (B) Two  
 (C) Three (D) Four
17. Kalibanga is located in the site related to the Harappan civilization-  
 (A) In Gujarat (B) In Rajasthan  
 (C) In Uttar Pradesh (D) In Bengal
18. Who was the 24th Tirthankar of Jainism-  
 (A) Rishabh dev (B) Mahavir Swami  
 (C) Parshvanath (D) Aristhenemi
19. Dahir was the ruler of which of the following?  
 (A) Multan (B) Kabul  
 (C) Sindh (D) Balochistan
20. Which Muslims invaded India first?  
 (A) Turk (B) Arab  
 (C) Khurasani (D) Mamaluk
21. Who got the title of Jahansoz?  
 (A) Mahmud Ghazni (B) Sabuktagin  
 (C) Sultan alauddin (D) khwarezm shah
22. Jaypal fought the war against whom?  
 (A) Mahmud Ghazni (B) alpatgin  
 (C) Sabuktagin (D) Muhammad Ghori
23. When was the second battle of tarain fought?  
 (A) 1192 (B) 1526  
 (C) 1556 (D) 1761
24. The Gandhara art - a style of Buddhist visual art that developed between 1st century BCE and the 7th century CE, flourished largely during the \_\_\_\_ dynasty.  
 (A) Kushan (B) Gupta  
 (C) Pallava (D) Maurya
25. Which ruler of Bengal had relations with China?  
 (A) Ghiyasuddin Azamshah  
 (B) Sikandar Shah  
 (C) Nusrat Shah  
 (D) Hussein Shah

### Geography

1. Which of the following country does not pass from the Tropic of Capricorn?  
 (A) Chile (B) Poland  
 (C) Namibia (D) South Africa
2. Which of the following country passes from the Tropic of Capricorn?  
 (A) India (B) China  
 (C) Australia (D) England
3. Canterbury grasslands are found in which of the following countries?  
 (A) New Zealand (B) Argentina  
 (C) U.S.A. (D) South Africa
4. Amazon River flows through which of the following country?  
 (A) USA (B) Chile
5. Which is the correct sequence of Godavari, Mahanadi, Narmada and Tapti in descending order of length of rivers?  
 (A) Godavari, Mahanadi, Narmada, Tapti  
 (B) Godavari, Narmada Mahanadi, Tapti  
 (C) Narmada, Godavari, Tapti, Mahanadi  
 (D) Narmada, Tapti, Godavari, Mahanadi
6. Which of the following region is covered by tropical evergreen forest?  
 (A) Eastern Ghat (B) Vindhyanchal  
 (C) Aravalli (D) Western Ghat
7. The final boundary between the Earth and the outer space is called \_\_\_\_\_.  
 (A) Magnetosphere (B) Ionosphere

- (C) Mesopause (D) Magnetopause
8. In which city is the Forest Research Institute of India located?  
(A) New Delhi (B) Kolkata  
(C) Dehradun (D) Shimla
  9. Which one among the following cities never get the vertical rays of the Sun all through the year?  
(A) Chennai (B) Mumbai  
(C) Shimla (D) Srinagar
  10. Which Indian state has the largest share of the Wastelands in India?  
(A) Rajasthan (B) Bihar  
(C) Karnataka (D) Uttar Pradesh
  11. Which is the highest peak in Andaman and Nicobar islands?  
(A) Mount Koya (B) Mount Diavolo  
(C) Saddle Peak (D) Mount Thuiller
  12. Jallikattu practiced in Tamil Nadu is a part of which festival?  
(A) Onam (B) Pongal  
(C) Natuanjali (D) Hampi
  13. Which of the following neighbouring country of India is not a landlocked country?  
(A) Nepal (B) Myanmar  
(C) Bhutan (D) Afghanistan
  14. Veliconda hills, which is a part of Eastern Ghats, is situated in  
(A) Goa (B) Kerala  
(C) Maharashtra (D) Andhra Pradesh
  15. Arrange the following states from north to south?  
(A) Srinagar, Kerala, Madhya Pradesh, Maharashtra  
(B) Punjab, Haryana, Delhi, Madhya Pradesh  
(C) Maharashtra, Madhya Pradesh, Andhra Pradesh, Uttar Pradesh  
(D) Himanchal Pradesh, Bihar, Kerala, Rajasthan
  16. The mahatma Gandhi National Marine Park is located in.  
(A) Pirotan Island (B) Rameswaram  
(C) Ganga Sagar Island (D) Wandoor
  17. Bhakra Nangal Project is a joint venture of the Panjab, Haryana and \_\_\_\_\_  
(A) Uttar Pradesh (B) Himachal Pradesh  
(C) Rajasthan (D) Uttarakhand
  18. The Sirhind Project is situated on which river?  
(A) River Krishna (B) River Ganga  
(C) River satluj (D) River Ghagra
  19. What are The Lakshadweep and Andaman and Nicobar Islands classified as in India?  
(A) Desert (B) State  
(C) Union territories (D) All of the above
  20. Which environmental phenomenon is causing the meltdown of Tibetan plateau that may affect the Indus River in the future?  
(A) Climate Change (B) Drought  
(C) Ozone depletion (D) Greenhouse gas effect
  21. To which of the following State the folk-dance 'Yakshagaan' is related?  
(A) Andhra Pradesh (B) Karnataka  
(C) Kerala (D) Tamilnadu
  22. On which of the following rivers the Nizam sagar project is located in Telangana?  
(A) Godavari (B) Krishna  
(C) Tungabhadra (D) Manjira
  23. Which of the following rivers does not flow into the Arabian Sea?  
(A) Tungabhadra (B) Sabarmati  
(C) Mandovi (D) Narmada
  24. Most of the fresh water on Earth's planet exists in the form of ice, caps and glacier. Out of the remaining freshwater the largest proportion-  
(A) is found in the atmosphere as moisture and clouds  
(B) is found in freshwater lakes and rivers  
(C) exists as ground water  
(D) exist as soil moisture
  25. Name the state of India, where the Brahmaputra River enters first?  
(A) Sikkim (B) Arunachal Pradesh  
(C) Assam (D) Manipur

## Polity

1. Who among the following is the present Chairperson of the National Commission for women?  
(A) Girija Vyas (B) Rekha Sharma  
(C) Malini Bhattacharya (D) Yasmeen Abrar
2. The first hour of business of the Lok Sabha is known as-  
(A) Public hour (B) Privileges hour  
(C) Zero-hour (D) Question hour
3. The first law commission was established in 1834 by the British Government under the chairmanship of —  
(A) Lord Macaulay (B) Lord Dalhousie  
(C) Lord Canning (D) Lord North Brook
4. Under which one of the following constitution amendment Acts, four languages were added under the eighth schedule of the Constitution of India, thereby raising their number to 22?  
(A) 90th Constitutional Amendment Act  
(B) 92th Constitutional Amendment Act  
(C) 93rd Constitutional Amendment Act  
(D) 94th Constitutional Amendment Act
5. \_\_\_\_\_ makes laws on matters included in Union List and Concurrent List.  
(A) Parliament  
(B) Ministry of Defense  
(C) Prime Minister's Office  
(D) Securities and Exchange Board of India
6. When was the Panchayati Raj System introduced in India?  
(A) 1950 A. D. (B) 1945 A. D.  
(C) 1949 A. D. (D) 1959 A. D.
7. What is the literal meaning of 'Certiorari'?  
(A) We command  
(B) To have the body of  
(C) To forbid  
(D) To be certified (or) to be informed
8. Lokayukta was first introduced in which state?  
(A) Uttar Pradesh (B) Punjab  
(C) Maharashtra (D) Tamil Nadu
9. Which of the following is not a constitutional body?  
(A) Election Commission  
(B) Finance Commission  
(C) National Advisory Council  
(D) Inter State Council
10. The right of property was deleted from the list of fundamental rights by the 44th amendment act, 1978. It is made a \_\_\_\_\_.  
(A) Legal act under -300A  
(B) Legal act under -30A  
(C) Legal act under -302A  
(D) Legal act under -304A
11. Under the constitution of India who are the ultimate Sovereign?  
(A) Indian People  
(B) Prime Minister of India  
(C) President of India  
(D) All elected leaders of India
12. "Prevention of cruelty to animals" is listed in the \_\_\_\_\_ list given in the Seventh Schedule in the Constitution of India.  
(A) Union (B) State  
(C) Global (D) Concurrent
13. The philosophical part of the Indian Constitution is derived from:  
(A) The Irish Constitution  
(B) The American Constitution  
(C) The British Constitution  
(D) Both the Irish Constitution and the American Constitution
14. In the Government of India Table of precedence which of the following comes above the Chief Justice of India?  
(A) Attorney General of India  
(B) Former Presidents  
(C) Former prime ministers  
(D) Speaker of Lok Sabha
15. In the Government of India Table of precedence which of the following comes below the Chief Justice of India? Repeated  
(A) Deputy prime minister



- (B) Former prime ministers  
(C) Prime minister  
(D) Vice president
16. Which one of the following articles/Schedules in the Constitution of India deals with Autonomous District Councils?  
(A) Eighth Schedule (B) Article 370  
(C) Sixth Schedule (D) Article 250
17. Quorum for the meeting of Rajya Sabha is-  
(A) One tenths of the total members of Lok sabha.  
(B) One tenth of the total members of the house.  
(C) 50 members of Rajyasabha.  
(D) 30 members of Rajyasabha.
18. Which Article provides that all the Panchayats seat would be reserved for scheduled casted and scheduled tribes in proportion to their population?  
(A) 243 -E (B) 243 -D  
(C) 243 -C (D) 243 -B
19. Which of the following fundamental right is given in Article 21?  
(A) Right to property (B) Right to equality  
(C) Right to speech (D) Right to life
20. Which among the following article states that there should be no discrimination on grounds of caste, religion, race, sex, place of birth?  
(A) Article 15 (B) Article 21  
(C) Article 25 (D) Article 30
21. In \_\_ government each adult citizen must have one vote and each vote must have one value.  
(A) Democratic (B) Autocratic  
(C) Monarchic (D) Authoritarian
22. Who among the following gave the concept of 'Distributive Justice'?  
(A) Aristole (B) Plate  
(C) Hegel (D) Ritchie
23. Which Fundamental Right in the Indian Constitution includes equal access to shops, bathing, ghats, hotels etc.?  
(A) Right to Liberty and Personal Freedom  
(B) Right to Freedom of Religion  
(C) Right to Equality  
(D) Cultural and Educational Rights
24. Controller and Auditor General of India is appointed for how many years?  
(A) 2 (B) 3  
(C) 5 (D) 6
25. Who is the custodian of Contingency Fund of India?  
(A) The Prime Minister (B) The President  
(C) The Finance Minister (D) All of the above

## Economics

1. Who is the author of a book named 'Pakistan or the Partition of India'?  
(A) B.R. Ambedkar  
(B) Pattabhi Sitaramaiya  
(C) Sarojini Naidu  
(D) Jai Prakash Narayan
2. Who takes the decision regarding the savings and loan activities in a Self-Help Group (SHG)?  
(A) Finance ministry  
(B) Reserve Bank of India  
(C) Members of group  
(D) Non-Government Organizations
3. Which of the following Acts gives the power to the Indian Legislative Council to debate on the budget?  
(A) Indian council act 1861  
(B) Indian council act 1862  
(C) Indian council act 1892  
(D) Indian council act, 1909
4. Which of the following Country does have a written Constitution?  
(A) Israel (B) UK  
(C) The U.S.A. (D) Saudi Arabia
5. In the Indian Parliamentary System, 'Vote on Account' is valid for how many months (except the year of elections)?

- (A) 2 months (B) 3 months  
(C) 6 months (D) 9 months
6. Which law states that for every 1% increase in the unemployment rate, a country's GDP will be roughly an additional 2% lower than its potential GDP?  
(A) Okun's law (B) Phillips curve  
(C) Friedman's law (D) Marshall's law
7. In the year 1943, the United States established an International Fund which is known as \_\_\_\_?  
(A) White plan (B) Keynes plan  
(C) Walker plan (D) Smith plan
8. If the \_\_\_\_\_ firm has zero costs or only has fixed cost, the quantity supplied in equilibrium is given by the point where the marginal revenue is zero.  
(A) Perfect Competition  
(B) Monopoly  
(C) Oligopoly  
(D) Monopolistic Competition
9. What is the full form of IMPS in banking sector?  
(A) Intermediate Payment Service  
(B) International Payment Service  
(C) Initial Payment Service  
(D) Immediate Payment Service
10. In which year was the Skill India Mission started?  
(A) 2014 (B) 2015  
(C) 2016 (D) 2017
11. What is the full form of RTGS in banking?  
(A) Real Time Gap Settlement  
(B) Real Time Gross Settlement  
(C) Real Term Gap Settlement  
(D) Real Time Gross Sell out
12. What is the full form of NEFT in banking sector?  
(A) National Electronic Fund Transparent System  
(B) National Electronics Funds Transfer System  
(C) National Electronic Fund Transfer System  
(D) National Electrical Fund Transparent System
13. Goods for which the quantity that a consumer chooses, increases as the consumer's income increases and decreases as the income decreases are called?  
(A) Inferior Goods  
(B) Normal Goods  
(C) Complementary Goods  
(D) Substitute Goods
14. In which year the Export Import (EXIM) Bank of India was set up?  
(A) 1980 (B) 1981  
(C) 1982 (D) 1989
15. Sukanya samriddhi yojana was launched by Prime Minister Narendra modi on \_\_\_\_\_ as a part of the Beti Bachao, Beti Padhao campaign.  
(A) 22 January 2015 (B) 15 July 2015  
(C) 8 November 2016 (D) 1 April 2018
16. Which among the following is an example of micro-economic variable?  
(A) National Income  
(B) Aggregate Supply  
(C) Employment  
(D) Consumer's Equilibrium
17. Courier service comes under which sector?  
(A) Primary  
(B) Secondary  
(C) Tertiary  
(D) Both Secondary and Tertiary
18. Which among the following is not an instrument of fiscal policy?  
(A) Taxation (B) Public expenditure  
(C) Public debt (D) Credit Rationing
19. IRDAI is an autonomous apex statutory body, which regulates and develops the insurance industry in India. IRDAI's headquarter at.  
(A) New Delhi (B) Mumbai  
(C) Kolkata (D) Hyderabad
20. Which tax is collected by Panchayat?  
(A) Sales Tax (B) Custom Duty  
(C) Land Revenue (D) Tax on Local fairs
21. Open market operations of a Central Bank are sale and purchase of  
(A) Foreign Currencies  
(B) Corporate Securities  
(C) Trade bills  
(D) Government Securities

22. Telecom gear maker Ericsson has signed a MoU with IIT \_\_\_\_ to jointly work on a programme for 5G technology development in India.  
 (A) Kanpur (B) Roorkee  
 (C) Delhi (D) Madras
23. In which state Indian Navy has unveiled the Integrated Automatic Aviation Meteorological System (IAAMS)?  
 (A) Andhra Pradesh (B) Kerala  
 (C) Karnataka (D) Tamil Nadu
24. The head office of Securities & exchange board of India is located at?  
 (A) Delhi (B) Chennai  
 (C) Mumbai (D) Kolkata
25. A market in which there are large numbers of sellers of a particular product, but each seller sells somewhat differentiated but close products is termed as.  
 (A) Perfect Competition  
 (B) Monopoly  
 (C) Monopolistic Competition  
 (D) Oligopoly

### Physics

1. \_\_\_\_\_ are such substance which when placed in a magnetic field acquire a feeble magnetism in the direction of the field.  
 (A) Diamagnetic substance  
 (B) Paramagnetic substance  
 (C) Ferromagnetic substance  
 (D) All of the above
2. The force acting on an object does not produce which one of the following effects?  
 (A) Change in the size of the object  
 (B) Change in the shape of the object  
 (C) Change in the temperature of the object  
 (D) Change in the motion state of the object
3. Which one of the following is not the fundamental international system quantity?  
 (A) Length  
 (B) Amount of substance  
 (C) Luminous intensity  
 (D) Torque
4. The coil wire in the electric room heater or electric cooking heater is called \_\_\_\_\_.  
 (A) Circuit (B) Element  
 (C) Filament (D) Cells
5. The bending of light when it passes around a corner or a slit is due to \_\_\_\_\_.  
 (A) Reflection  
 (B) Refraction  
 (C) Diffraction  
 (D) Total internal reflection
6. When an object revolves around its axis, then what is its speed called?
7. When an object moves on both sides of its mean position, then this type of motion is called?  
 (A) Oscillation speed (B) Circular motion  
 (C) Rotational motion (D) Linear motion
8. How many dynes in a Newton?  
 (A) 1000 (B) 10000  
 (C) 100000 (D) 1000000
9. A rotational motion rotates a particle with certain angle in a second, it is called the \_\_\_\_\_ of the particle.  
 (A) Angular velocity  
 (B) Linear velocity  
 (C) Centripetal Acceleration  
 (D) Centrifugal Force
10. When we tied a piece of stone with one end of the string, then we have to put a strain on the string, this strain work as?  
 (A) Centripetal force (B) Centrifugal force  
 (C) Balanced force (D) Unbalanced force
11. Which one of the following materials is ferromagnetic?  
 (A) Gold (B) Nickel  
 (C) Wood (D) Manganese
12. When a glass rod is rubbed with silk then which type of charge is created on it?  
 (A) Electric charge (B) Positive charge  
 (C) Negative charge (D) None of the above



13. The speed of sound is maximum in  
(A) Air (B) Water  
(C) Vacuum (D) Steel
14. Momentum of a particle of mass  $m$  is  $p$ . Its kinetic energy will be  
(A)  $mp$  (B)  $p^2m$   
(C)  $p^2/m$  (D)  $p^2/2m$
15. Which physical unit is obtained by the ratio of momentum and velocity of matter?  
(A) Velocity (B) Acceleration  
(C) Mass (D) Force
16. The dot product of two vectors A and B is equal to the product of the magnitudes of A and B and \_\_\_\_\_?  
(A) the cosine of the greatest angle between them  
(B) the sine of the greatest angle between them  
(C) the cosine of the smallest angle between them  
(D) the sine of the smallest angle between them
17. Kaleidoscope was invented by \_\_\_\_\_?  
(A) Ray Tomlinson (B) Tim Berners-Lee  
(C) Alan Bloomlin (D) David Brewster
18. What is the principle by which a cooling system (radiator) in a motor car works?  
(A) only conduction  
(B) only convection  
(C) Radiation only  
(D) both conduction and radiation
19. The instrument used to study the vibrations in a rope is \_\_\_\_\_.  
(A) Hydrometer (B) Sonometer  
(C) Sphygmomanometer (D) Electrometer
20. TeachText is a text editor in which of the following operating systems?  
(A) Windows (B) Google Chrome  
(C) UC Browser (D) Macintosh
21. If there is no atmosphere then the average temperature on the surface of the earth will be?  
(A) more  
(B) less  
(C) same as today  
(D) zero degree Celsius
22. The strength of a force is usually expressed by its \_\_\_\_\_  
(A) Acceleration (B) Direction  
(C) Interaction (D) Quantity
23. The transfer of thermal energy from the Sun to the Moon is  
(A) by radiation only  
(B) by radiation and conduction  
(C) by radiation and convection  
(D) by radiation, conduction, and convection
24. The force of gravity between two bodies does not depend on-  
(A) at their distance  
(B) the product of their masses  
(C) on the sum of their masses  
(D) at the gravitational constant
25. Which one of the following physical quantities remains constant when a ball is thrown vertically up?  
(A) Energy (B) Displacement  
(C) speed (D) acceleration

## Chemistry

1. The process of heating the ore above its melting point in excess of air to obtain pure metal known as \_\_\_\_\_.  
(A) Rusting (B) Smelting  
(C) Roasting (D) Calcination
2. Non luminous zone is which part of gas flame:  
(A) Outer part (B) Inner part  
(C) Hottest part (D) Darkest part
3. Which of the following is less harm to catch fire?  
(A) Nylon (B) Terrycot  
(C) Cotton fabric (D) Polyester
4. Carboplatin a cancer drug is a compound of which of the following metals?  
(A) Silver (B) Radium  
(C) Platinum (D) Magnesium

5. The most malleable metal is:  
(A) Platinum (B) Silver  
(C) Lithium (D) Gold
6. Which of the following gases soluble in rainwater causes acidic?  
(A) Hydrogen peroxide  
(B) Nitrogen monoxide  
(C) Carbon dioxide  
(D) Sulphur dioxide
7. Greenhouse gas, which is present in the highest quantity in atmosphere, is  
(A) Propane (B) Ethane  
(C) Carbon dioxide (D) Methane
8. Which one of the following is not used to making glass?  
(A)  $\text{CaOCl}_2$  (B)  $\text{Na}_2\text{CO}_3$   
(C)  $\text{CaCO}_3$  (D)  $\text{SiO}_2$
9. Lemon is classified as a type of fruit mainly because it contains seeds. Lemon fruit is rich source of-  
(A) Tartaric acid (B) Malic acid  
(C) Citric acid (D) Acetic acid
10. The Bhopal Gas Tragedy of 1984 was due to the leakage of which of the following gases?  
(A) Methyl isocyanate  
(B) Nitrous oxide  
(C) Methane  
(D) Carbon monoxide
11. Method involved in Dhokla preparation is  
(A) Fermentation (B) Shallow frying  
(C) Deep-frying (D) Boiling
12. The chemical substance which is used to relieve pain.  
(A) Antihistamine (B) Antiseptic  
(C) Tranquilizer (D) Analgesic
13. What are isobars?  
(A) Elements with same atomic number but different mass number.  
(B) Elements with different atomic number but same mass number.  
(C) Elements with different atomic number and different mass number.  
(D) All of the above.
14. Which is also known as picric acid?  
(A) T.N.T. (B) T.N.G.  
(C) T.N.P. (D) R. (D)X.
15. For artificial respiration mixture of \_\_\_\_\_ is used in gas cylinder.  
(A) Oxygen and Nitrogen  
(B) Oxygen and Helium  
(C) Helium and Chlorine  
(D) Nitrogen and Phosphine
16. Which is not true about noble gases?  
(A) They are non-metallic in nature  
(B) They exist in atomic form  
(C) They are radioactive in nature  
(D) Xenon is the most reactive among them
17. Which metal does not undergo corrosion due to the formation of the oxide layer?  
(A) Zinc (B) Aluminum  
(C) Iron (D) Copper
18. What is nature of pH of Milk?  
(A) Slightly Acidic (B) Slightly Basic  
(C) Highly Acidic (D) Highly Basic
19. Which among the following is not an example of emulsion?  
(A) Chocolate-Milk (B) Butter  
(C) Whipped Cream (D) Curd
20. The bonds formed by the partnership between the electrons couples between the atoms are called –  
(A) Ionic bond (B) Covalent bond  
(C) Co-ordinate bond (D) None of the above
21. What is the chemical formula for Sodium Chloride (Salt)?  
(A)  $\text{NaCl}_2$  (B)  $\text{NaCl}$   
(C)  $\text{Na}_2\text{Cl}$  (D)  $\text{Na}_2\text{C}$
22. Which of the following is a characteristic of an exothermic reaction?  
(A) Release of heat  
(B) Absorption of heat  
(C) Doesn't involve any change in temperature.  
(D) All of the above.
23. The catalyst is the substance that-  
(A) Stops chemical reactions  
(B) Helps in starting chemical reactions

- (C) Changes the speed of chemical reactions  
(D) Reduces the speed of chemical reactions
24. Which method of water purification does not kill microorganism?  
(A) Boiling (B) Filtration  
(C) Chlorination (D) UV-irradiation
25. Which among the following is used to treat Indigestion?  
(A) Antacid (B) Antiseptic  
(C) Analgesic (D) Antibiotic

### Biology

1. Christmas factor is involved in :  
(A) Blood coagulation (B) Excretion  
(C) Digestion (D) Respiration
2. Which of these is the hereditary material that is transferred from parents to offspring?  
(A) Hormones (B) Genes  
(C) Pathogens (D) Antigens
3. Which of the following is not source of carbohydrate?  
(A) Wheat (B) Potato  
(C) Sesame oil (D) Maize
4. The members of Rhodophyceae are commonly called \_\_\_\_\_ algae.  
(A) Green (B) Brown  
(C) Red (D) Yellow
5. Aurelia (Medusa) and Adamsia (Polyp) are examples of which Phylum?  
(A) Ctenophora (B) Annelida  
(C) Coelenterata (D) Aschelminthes
6. Which of the following plants are used as insecticides?  
(A) Pyrethrum (B) Derris  
(C) Tephrosia (D) All of these
7. Who among the following devised the technique IVF (In vitro Fertilization)?  
(A) Sir Frank Whittle (B) Robert Edwards  
(C) Edward Jenner (D) Karl land Steiner
8. Who was discovered Gibberellins plant hormone?  
(A) Charles Darwin  
(B) William M. Welles  
(C) E. Kurosawa  
(D) Letham
9. What is the location of islets of langerhans?  
(A) Part of the pancreas  
(B) By the side of the kidney  
(C) On both sides of lungs  
(D) Below the left portion of the liver
10. Which of the following is Sanguinivorous organism?  
(A) Deer (B) Rabbit  
(C) Mosquito (D) Lizard
11. Which one of the following is a female sex-hormone?  
(A) Androsterone (B) Testosterone  
(C) Oestrogen (D) Thyroxine
12. The process of becoming Gametes of human reproductive organs in reproductive glands is called?  
(A) Gametogenesis (B) Spermatogenesis  
(C) Oogenesis (D) Parthenogenesis
13. Which one of the following is present in chlorophyll which gives a green colour to plant leaves?  
(A) Calcium (B) Magnesium  
(C) Iron (D) Manganese
14. Which one of the following animals breathe through the skin?  
(A) Fish (B) Pigeon  
(C) Frog (D) Cockroach
15. What is botanical name of Apple?  
(A) Pyrus malus (B) Pyrus communis  
(C) Pisum sativum (D) Triticum Aestivum
16. Which enzyme is present in bile juice?  
(A) Bilin (B) Bilirubin  
(C) Bilverdin (D) None of these



17. The cavity present in the Graafian follicle is  
(A) Amniotic cavity (B) Archenteron  
(C) Antrum (D) Ostium
18. What is the meaning of word 'C' in BCG vaccine?  
(A) Calmette (B) Cough  
(C) Chlorine (D) Calcium
19. Which of the following diseases is caused due to allergic reaction?  
(A) Leprosy (B) Typhoid  
(C) Asthma (D) Tetanus
20. The word vaccination has been derived from a latin word which relates to-  
(A) Cat (B) Horse  
(C) Cow (D) Dog
21. Which of the following is an example of Ball and Socket joint in humans?  
(A) Wrist Joint (B) Hip Joint  
(C) Finger Joint (D) Neck Joint
22. Which of the following contains highest amount of Vitamin C?  
(A) Apple (B) Tomato  
(C) Grape (D) Lemon
23. Which of the following glands secrete growth hormone?  
(A) Adrenal (B) Pituitary Gland  
(C) Gonads (D) Pancreas
24. In stems, the protoxylem lies towards the centre and the metaxylem lies towards the periphery of the organ. This type of primary xylem is called \_\_\_\_\_.  
(A) Xylem fibres (B) Xylem parenchyma  
(C) Exarch (D) Endarch
25. What is the other name of Platelets?  
(A) Leucocytes (B) Erythrocytes  
(C) Platelets (D) Thrombocytes

04 DECEMBER



## INDIAN NAVY DAY

**Importance:** To commemorate the Operation Trident on 4 Dec 1971, in which Indian Navy attacked Karachi harbour during 1971's Indo-Pakistan war.

**Motto:** To recognize the achievements and role of the Indian Navy to the country

### Indian Navy Facts:

- President is the Commander-in-Chief of Indian Navy.
- Chhatrapati Shivaji Bhosle is considered as the "Father of the Indian Navy".
- Navy Day does not commemorate the day the Indian Navy was founded. Ezhimala Naval Academy in Kerala is the largest naval academy in Asia.
- INS Viraat was the navy's 1st aircraft as well as carrier and the oldest aircraft carrier in the world.

05 DECEMBER



## WORLD SOIL DAY

1<sup>st</sup> Observed: 2014

Edition: 7th

**Importance:** To mark the birth anniversary of H.M. King Bhumibol Adulyadej, King of Thailand, who was one of the main proponents of this initiative.

**2021 Theme:** Halt soil salinization, boost soil productivity

**Motto:** To raise awareness of the importance of sustaining healthy ecosystems and human well-being.

**Organisation Involved:** FAO & United Nation

### Note:

- The FAO unanimously endorsed World Soil Day in June 2013 and requested its official adoption.
- But in December 2013, UNGA responded by designating 5 December 2014 as the first official World Soil Day.

## Answer key

### Statement Based Current Affairs

1-(C)	2-(B)	3-(A)	4-(D)	5-(C)
6-(C)	7-(D)	8-(A)	9-(A)	10-(D)
11-(B)	12-(A)	13-(C)	14-(A)	15-(D)
16-(A)	17-(C)	18-(B)	19-(C)	20-(A)
21-(C)	22-(A)	23-(D)	24-(C)	25-(D)

### Polity

1-(B)	2-(D)	3-(A)	4-(B)	5-(A)
6-(D)	7-(D)	8-(C)	9-(B)	10-(A)
11-(A)	12-(D)	13-(B)	14-(B)	15-(B)
16-(C)	17-(B)	18-(B)	19-(D)	20-(A)
21-(A)	22-(B)	23-(C)	24-(D)	25-(B)

### Statement Based General Awareness

1-(B)	2-(D)	3-(A)	4-(D)	5-(D)
6-(C)	7-(C)	8-(C)	9-(C)	10-(A)
11-(A)	12-(B)	13-(B)	14-(B)	15-(C)
16-(C)	17-(B)	18-(D)	19-(C)	20-(A)
21-(D)	22-(D)	23-(A)	24-(A)	25-(B)

### Economics

1-(A)	2-(C)	3-(C)	4-(C)	5-(A)
6-(A)	7-(B)	8-(B)	9-(D)	10-(B)
11-(B)	12-(C)	13-(C)	14-(C)	15-(A)
16-(D)	17-(C)	18-(D)	19-(D)	20-(D)
21-(D)	22-(C)	23-(D)	24-(C)	25-(C)

### Current Affairs

1-(A)	2-(C)	3-(D)	4-(C)	5-(B)
6-(A)	7-(D)	8-(E)	9-(A)	10-(B)
11-(A)	12-(B)	13-(C)	14-(D)	15-(D)
16-(E)	17-(C)	18-(B)	19-(A)	20-(A)
21-(B)	22-(D)	23-(C)	24-(A)	25-(E)

### Physics

1-(A)	2-(A)	3-(D)	4-(B)	5-(C)
6-(C)	7-(A)	8-(C)	9-(A)	10-(A)
11-(B)	12-(A)	13-(D)	14-(D)	15-(C)
16-(D)	17-(D)	18-(B)	19-(B)	20-(D)
21-(D)	22-(D)	23-(A)	24-(C)	25-(D)

### History

1-(B)	2-(D)	3-(B)	4-(C)	5-(C)
6-(B)	7-(C)	8-(C)	9-(D)	10-(C)
11-(C)	12-(B)	13-(D)	14-(C)	15-(C)
16-(D)	17-(B)	18-(B)	19-(C)	20-(B)
21-(C)	22-(C)	23-(A)	24-(A)	25-(A)

### Chemistry

1-(C)	2-(A)	3-(C)	4-(C)	5-(D)
6-(D)	7-(C)	8-(A)	9-(C)	10-(A)
11-(A)	12-(D)	13-(B)	14-(C)	15-(B)
16-(C)	17-(B)	18-(A)	19-(D)	20-(A)
21-(B)	22-(A)	23-(C)	24-(B)	25-(A)

### Geography

1-(B)	2-(C)	3-(A)	4-(C)	5-(B)
6-(D)	7-(D)	8-(C)	9-(D)	10-(A)
11-(C)	12-(B)	13-(B)	14-(D)	15-(B)
16-(D)	17-(C)	18-(C)	19-(C)	20-(A)
21-(B)	22-(D)	23-(A)	24-(C)	25-(B)

### Biology

1-(A)	2-(B)	3-(C)	4-(C)	5-(C)
6-(D)	7-(B)	8-(C)	9-(A)	10-(C)
11-(C)	12-(A)	13-(B)	14-(C)	15-(A)
16-(D)	17-(C)	18-(A)	19-(C)	20-(C)
21-(B)	22-(D)	23-(B)	24-(D)	25-(D)

**"Leaders Are Innovative,  
Entrepreneurial, And Future-  
Oriented. They Focus On Getting  
The Job Done."**

**"The Future Belongs To The  
Competent. Get Good, Get Better,  
Be The Best!"**

## IBPS PO Prelims Solved Paper

### English Language

**Direction (1-5):** Which of the phrases (1), (2), (3), (4) given below each sentence should replace the phrase printed in bold type to make the sentence grammatically correct? If the sentence is correct as it is mark (5) i.e. 'No correction required' as the answer

1. Evan Spiegel, the billionaire creator of Snapchat, **is put to be crowned the** highest-paid US chief executive of 2017, after his total pay hit \$638m.  
 (1) is setup to being crowned the  
 (2) is set to being crowned the  
 (3) is setup to be crowned the  
 (4) is set to be crowned the  
 (5) No correction required
2. Silvio Berlusconi, Italy's 81-year-old media mogul, **has sought the stamping of his authority on his unruly** centre-right coalition ahead of next month's general election, dismissing the rise of his Eurosceptic right wing allies and touting his own moderate choice as the country's prime minister.  
 (1) sought the stamp of his authority on his unruly  
 (2) sought to stamp his authority on his unruly  
 (3) sought for stamping his authority on his unruly  
 (4) sought to stamping his authority on his unruly  
 (5) No correction required
3. Radu Mazare is a showman former Romanian mayor who has been on the cover of Playboy **and provoked outrage by wearing Nazi uniform to a fashion show**  
 (1) and provoked outrage by wearing Nazi uniform at a fashion show  
 (2) and provoked outrage by wearing Nazi uniform on a fashion show  
 (3) and provoked outrage by wearing Nazi uniform upon a fashion show  
 (4) and provoked outrage by wearing Nazi uniform up to a fashion show  
 (5) No correction required
4. Emmanuel Macron has unveiled a €5bn investment plan for France's agricultural

sector, **urging off farmers to embrace** a "cultural revolution" and move away from EU subsidies and intensive production methods.

- (1) urged the farmers to embrace a
- (2) urging the farmers to up and embrace a
- (3) urging farmers to embrace a
- (4) urging off farmers to embrace the
- (5) No correction required

5. North Korea will send a hardline military figure to the closing ceremony of the Winter Olympic Games **in a move likely to role** many South Koreans and test Seoul's flexibility with Pyongyang.  
 (1) in a move likely to rile  
 (2) in a move likely to rale  
 (3) in a move likely to rule  
 (4) in a move likely to rele  
 (5) No correction required

**Directions (6-15):** Read the following passage carefully and answer the questions given below.

The Narendra Modi government in New Delhi has decided to make a host of political concessions — in the form of conciliatory moves, positive responses and toned-down rhetoric — *vis-à-vis* Jammu and Kashmir (J&K), and Pakistan. More notably, we are also perhaps witnessing a cautious, and sensible, adoption of diplomacy and soft power in the final lap of the Modi government's term in office. While that is indeed welcome, has its willingness to play down its aggressive rhetoric and dismount from the moral high horse come a bit too late in the day to make a difference?

Over the past month or so, New Delhi has offered to reach out to the separatists in Kashmir (junking its earlier resolve not to engage them), reportedly carried out backchannel parleys with the separatist leadership in Srinagar, declared a ceasefire during the month of Ramzan, and agreed to maintain the 2003 ceasefire agreement on the Line of Control (LoC) and International Border (IB) with Pakistan. The India-Pakistan ceasefire was declared on May 29, which has so far continued with a few exceptions. The tone and tenor of the Bharatiya Janata Party (BJP)



leadership's statements towards the Kashmiris has suddenly demonstrated some much-needed warmth and 'love'.

These **conciliatory** moves have come against the backdrop of several worrying developments within J&K and on the border. For one, the intensity of ceasefire violations had been steadily rising, with damage to civilian habitats and civilian and military casualty rates going up. India reported 19 military casualties and 12 civilian casualties due to ceasefire violations last year, and Pakistan reported 50 civilian casualties (Pakistan does not report military casualties on the LoC/IB but unofficial data show higher military casualties than India). Past experience suggests that fire assaults and cross-border raids on the LoC are **fraught** with potential for bilateral escalation.

Within Kashmir, an increasing number of local boys are joining the ranks of militancy, and terrorist attacks on civilian and military targets have been on the rise. In 2013, the number of Kashmiri youngsters joining militancy was 16, which rose to 126 in 2017, and 27 in the first three months of 2018. In 2013 there were 170 terror-related incidents in J&K, which went up to 342 in 2017.

It is in this broad political and security context that we should assess the significance and desirability of the bilateral India-Pakistan ceasefire and the internal Ramzan ceasefire. There is little doubt that the two ceasefires and the associated peace moves make perfect sense in helping normalise the situation both internally and bilaterally. However, the crucial question is this: why has the Modi government, which has derived domestic political mileage from a hawkish and aggressive posture, suddenly decided to change track and experiment with conciliatory moves?

First, there seems to be a counterintuitive rationale behind it. While the BJP has traditionally benefitted from a hardline policy in Kashmir, and towards Pakistan, the diminishing returns of such a policy have started kicking in. Not only has government not delivered on its hardline promises (such as the abolition of Article 370, or keeping infiltration and terror attacks under check), but the use of force has failed to achieve its objectives. Hence, the

potential to use the Kashmir or Pakistan bogey for electoral gains is limited for now.

In fact, the reverse logic has gained salience: it would be risky for the government to have a violent border and a troubled Kashmir going into the 2019 campaign. For the BJP, it's time to focus internally, and a semblance of peace on the border and in Kashmir would help. More so, with the 'Modi wave' on the wane, it needs to keep its allies close: the BJP's coalition partner in J&K, the Peoples Democratic Party (PDP), has been insisting on both the internal and India-Pakistan ceasefires.

Second, while the BJP's hardline policy on the border initially received popular support in the Jammu region, such support is drastically fading now, given the displacement of tens of thousands of civilians from the border villages and the attendant misery for the local population.

Third, India's policy of disproportionate bombardment against Pakistani forces, especially last year, has also not helped. For instance, India violated the ceasefire more than twice as Pakistan did in 2017 (i.e.) India fired twice as much), but tables have already turned in 2018: Pakistan violated the ceasefire 1,252 times till May this year whereas India violated the ceasefire on 1,050 occasions. In other words, India's policy of disproportionate bombardment on the border has not only not helped matters but it has now become a major problem for the locals. (It is equally true that Pakistani civilians also suffer but that may not create problems for the civilian government in Islamabad).

Similarly, both infiltration into J&K and militant attacks in the State have been on the rise. In 2014, 65 terrorists infiltrated into J&K, with the number steadily rising since then. In 2016 it was 119, and last year it went up to 123. In other words, New Delhi's hardline policy has not only not worked, it has actually had the reverse effect.

Finally, India and Pakistan have been signalling to each other for some time about the possibility of a **rapprochement**. Pakistan's Army Chief General Qamar Javed Bajwa, has on several occasions spoken of the need to build peace with India. Defence Minister Nirmala Sitharaman, in responding to his suggestion for the peaceful resolution of India-Pakistan disputes, recently said that "any comment on wanting peace will definitely be taken seriously". This desire for

rapprochement is also a continuation of positive bilateral engagement since the resolution of the diplomatic row arising over the harassment of each other's diplomats.

Clearly, both India and Pakistan, and in particular the people of J&K, will immensely benefit for these two ceasefires. But how long will they last? As for the internal ceasefire, I am skeptical about New Delhi's ability to engage Kashmiri dissidents in a durable dialogue process. New Delhi may have reached out, but does it have a clearly-articulated blueprint for bringing peace to Kashmir? In particular, the BJP may find it exceptionally difficult to be seen as making 'concessions' in Kashmir, and Kashmiri **dissidents** may not be able to come on board without major political concessions from New Delhi.

The bilateral ceasefire is also not without problems. First, experience suggests that without political dialogue between India and Pakistan, especially on Kashmir, ceasefire agreements tend to break down. More so, there are fundamental structural flaws in the India-Pakistan ceasefire agreement which make it prone to breaking down even when the decision-makers in India or Pakistan do not intend to break it. If indeed such 'local/tactical' factors do trigger ceasefire violations, a number of measures — such as formalising the ceasefire agreement through a written down document and regular scheduled meetings of Directors-General of Military Operations, among others — would need to be taken by the two countries to sustain the ceasefire. Finally, and perhaps most important, there is an undeniable direct link between the Kashmir insurgency on the one hand, and India-Pakistan dialogue, maintenance of the ceasefire agreement, terrorist infiltration into J&K and terrorist violence in Kashmir on the other. Put differently, unless New Delhi takes effective measures to reassure Kashmiris, there is no guarantee that the two ceasefires will survive. With **hawkishness** and aggression having evidently failed, it's time to invest in negotiations, political concessions and soft power. And Pakistan must make efforts to control terrorist infiltration into Kashmir for these to be successful.

6. Choose the synonym for **Conciliatory**  
(1) crushing (2) appeasing

- (3) stubborn (4) antagonistic  
(5) None of these

7. Choose the synonym for **Fraught**  
(1) crawl (2) destitute  
(3) laden (4) devoid  
(5) None of these

8. Choose the synonym for **Rapprochement**  
(1) harmony (2) trespass  
(3) flinger (4) hopper  
(5) None of these

9. Choose the antonym for **Dissident**  
(1) pedant (2) rebel  
(3) recusant (4) frigid  
(5) None of these

10. Choose the antonym for **Hawkish**  
(1) timid (2) militant  
(3) dovish (4) lax  
(5) None of these

11. Choose the antonym for **Articulated**  
(1) inexplicit (2) enunciated  
(3) truce (4) bale  
(5) None of these

12. What is author's tone in the passage?  
(1) Critical (2) Analytical  
(3) Stupendous (4) all of the above  
(5) None of these

13. Choose a suitable title for the passage  
(1) Modi and alliance: on Kashmir issue  
(2) Intentions and Accidents: Kashmir problem  
(3) Modi wave on wane  
(4) All of the above  
(5) None of these

14. Why has the Modi govt.'s stance shifted recently?  
(1) Due to up and coming elections the govt. Realises the mistakes made  
(2) Opposition is ready to give in considering the work done  
(3) every possible outcome was thought of  
(4) Both 1 and 2  
(5) None of these

15. Why is the author sceptical of New Delhi?

- (1) Because of there non-availability in times of crisis
- (2) Because they have not made the people understand there motives clearly
- (3) Because corruption and insurgency are interlinked
- (4) Both 2 and 3
- (5) None of these

**Directions (16-25):** In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

On September 19th Toys “R” Us, one of the biggest players in America’s toy market, filed for bankruptcy. At about the same time Tories “R” Us, one of the biggest players in Britain’s political market, was doing everything possible to prove that it is heading in the same direction. Voters dislike nothing more than a party at war with itself. The Tories went to war over the most important problem facing the country—one that is largely of their own making. Boris Johnson, the foreign secretary, (16) the conflict with a lengthy article on Brexit in the Daily Telegraph, a week before Theresa May was due to give a big speech on the same subject in Florence. Amber Rudd, the home secretary, accused him of “back-seat driving”. Sir David Norgrove, Britain’s chief statistician, criticised his “clear misuse of official statistics” in reviving the claim that Brexit would give Britain a (17) of £350m (\$475m) a week to spend on the National Health Service. In Mr. Johnson’s defence Jacob Rees-Mogg, a backbench Tory, suggested that he should be given a knighthood. As The Economist went to press Mr. Johnson was preparing to demonstrate his loyalty to Mrs. May by sitting in the front row for her speech, having proclaimed, poetically, that the cabinet was a “nest of singing birds”, as if voters cannot discriminate between (18) nightingales and hissing vipers. What does this soap opera tell us, other than that Britain is ruled by an (19) clique of frenemies who delight in turning even the most serious issues into melodramas? The most obvious thing is that Britain’s prime minister is as weak as it is possible to be while still residing

in Downing Street. Mr. Johnson challenged her authority on the most (20) issue in British politics at a (21) sensitive time but still kept his job. Sir Vince Cable, the Liberal Democrats’ sharp-tongued leader, compared Mrs May to a headmistress “barricaded in her own office” for fear of unruly pupils. This does not bode well for negotiations which, if they are to succeed, will require Mrs May to persuade her party to sign off on all sorts of concessions and trade-offs. Still, in exposing Mrs. May’s weakness, Mr. Johnson has revealed his own. Not so long ago he was the Conservatives’ leader-in-waiting. His success in getting himself elected mayor of London—a left-leaning and multicultural city—proved that he possessed “the Heineken factor”, refreshing parts that other Tories could not reach. Part Bertie Wooster and part Jack the Lad, he went down well at both Toryfetes and in city boozers. Today he is (22) by liberals and distrusted by many party loyalists. As mayor, he was frequently hailed as a hero when cycling through the city. Now he is subject to abuse. A recent poll of Tory activists about who should be the next leader gave him less than 8% of the vote, well behind his fellow Woosterimitator, Mr. Rees-Mogg. The result is an (23). The leader of the government is too weak to impose her authority; the leader of the hard-Brexit faction of her party is too weak to depose her; and Jeremy Corbyn, the hard-left leader of the Labour Party, gets ever stronger. Even more worryingly, the Johnson affair reveals how poorly Britain’s preparations for Brexit are going. Mr. Johnson’s critics such as Kenneth Clarke, a liberal Tory grandee, argue that the foreign secretary should have obeyed the rules of collective cabinet responsibility: ministers ought to air their views within the cabinet and then defend the collective line. But it turns out that Mrs. May has never engaged in a big cabinet debate to determine the line. Instead she has limited discussion to various subcommittees, from which Mr. Johnson was pointedly excluded. He was driven to write his article because he thought that the government was (24) towards a “soft Brexit” on the basis of (25) rather than open argument.

16. (1) obstipated (2) destined
- (3) thrown (4) ignited
- (5) None of these



17. (1) windmill (2) windfall  
(3) trodden (4) groped  
(5) None of these
18. (1) tiring (2) trilling  
(3) thrilling (4) trifling  
(5) None of these
19. (1) incestuous (2) extravagant  
(3) industrious (4) preposterous  
(5) None of these
20. (1) taught (2) fight  
(3) fraught (4) naught  
(5) None of these
21. (1) peculiarly (2) unruly  
(3) truly (4) lovingly  
(5) None of these
22. (1) reimbursed (2) reviled  
(3) revisited (4) refurbished  
(5) None of these
23. (1) Onpasse (2) Enpasse  
(3) Empasse (4) impasse  
(5) None of these
24. (1) frowning (2) crouch  
(3) slouching (4) trough  
(5) None of these.
25. (1) subterfuge (2) hop  
(3) centrifuge (4) jam  
(5) None of these

**Direction (26-30):** In the question below, three idioms are given, each followed by a situation where the idiom may or may not apply. From the options, choose the combination of idioms that apply in their respective situations.

26. 1. Get in the someone's hair  
A. Her constant questioning over every little issue was bothering me, but I managed to remain calm and answer her questions.  
2. Get into deep water  
B. The boys broke the window of their old neighbour while playing cricket in the backyard and were punished later.  
3. Get off the track

C. In the middle of his speech, the man went off-topic and started discussion modern-day Marxism in the United States.

- (1) Only 1 (2) Only 1 and 2  
(3) Only 1 and 3 (4) Only 2 and 3  
(5) All 1, 2 and 3

27. 1. Get the picture  
A. I was unable to find a gift for my aunt on her birthday, so I asked my assistant to find one for her.  
2. Get out of a jam  
B. Even though I was late to office and was about to be scolded by the boss, I managed to explain my situation and was let off.  
3. Gain ground  
C. Our new product became popular very soon.  
(1) Only 2 (2) Only 1 and 2  
(3) Only 1 and 3 (4) Only 2 and 3  
(5) All 1, 2 and 3

28. 1. Have a face like thunder  
A. She looked very angry and upset at the same time, when I hesitatingly told her the truth.  
2. Have a lot on one's plate  
B. Ever since his father passed away, he has been dealing with multiple problems that include paying off the debt, supporting his mother and attending college.  
3. Have an axe to grind  
C. He has thought highly of me ever since he came to know that I was not involved in this prank.  
(1) Only 1 (2) Only 1 and 2  
(3) Only 1 and 3 (4) Only 2 and 3  
(5) All 1, 2 and 3

29. 1. Have big ears  
A. She always stands outside doors and listens to other people's conversations, a habit which I intensely dislike.  
2. Have friends in high places  
B. I happen to know a number of politicians and can manage to get this work done.  
3. Hit a home run  
C. We knew our performance had been successful when the audience gave us a standing ovation and requested another song.  
(1) Only 3 (2) Only 1 and 2  
(3) Only 1 and 3 (4) Only 2 and 3  
(5) All 1, 2 and 3

30. 1. Hit the road  
A. We decided to embark on our journey at 4:00 a.m. on Tuesday.  
2. Hit the nail on the head  
B. The teacher scolded the young boy for telling a lie.  
3. Hit the roof  
C. He lost his temper when asked if he had broken the vase.  
(1) Only 3 (2) Only 1 and 2  
(3) Only 1 and 3 (4) Only 2 and 3  
(5) All 1, 2 and 3

### Quantitative Aptitude

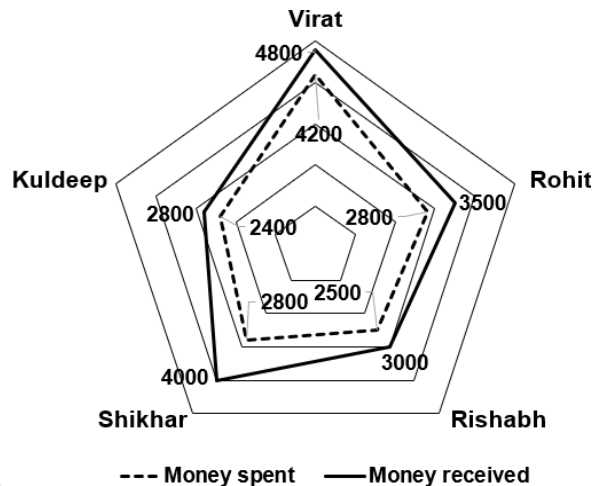
**Direction (31-33):** What should come in place of question mark (?) in the following question? (Approximation)

31.  $25.98 + 63.78 - 16.687 + 36.829 = ?$   
(1) 110 (2) 125  
(3) 155 (4) 140  
(5) 85
32.  $7/16 \times 8245.66 + 2/110 \times 24624.6 - 16\% \ 4235.3 = ?$   
(1) 2458 (2) 2564  
(3) 3554 (4) 3378  
(5) 3250
33.  $(456500)^{1/3} + 958.08 \times 779.98 / 24.01 = ?$   
(1) 24545 (2) 24786  
(3) 28817 (4) 23486  
(5) 31212

**Directions (34-38):** Answer the questions based on the information given below.

The amount of money (in Rs.) received by each person by their father for a fair, and the amount of money spent (in Rs.) by each of them in the fair is given in the radar chart.

Money saved by a person = Amount of money received – Amount of money spent.



34. Virat received the amount in the denomination of Rs. 50, Rs. 100 and Rs. 500, respectively. If the ratio of number of Rs. 50 notes, Rs. 100 notes, and Rs. 500 notes received by Virat from his father is 2:3:4, respectively, then find the amount received by Virat in the form of Rs. 500 notes.  
(1) Rs. 3500 (2) Rs. 4500  
(3) Rs. 4000 (4) Rs. 3000  
(5) None of the above
35. Find the ratio of the amount of money saved by Shikhar to the amount of money saved by Kuldeep.  
(1) 3:5 (2) 2:1  
(3) 4:3 (4) 3:1  
(5) 2:3
36. Rishabh spent one-third of the total money received by him for entertainment and one-fourth of rest of the money received by him on food. Find the amount spent by Rishabh on shopping if he spent money only on entertainment, food and shopping.  
(1) Rs. 1000 (2) Rs. 800  
(3) Rs. 1500 (4) Rs. 1200  
(5) None of the above
37. Rohit is left with only Rs. 50 notes after spending. If the number of Rs. 100 notes and Rs. 500 notes received by Rohit from his father is the same, then what will be the minimum number of Rs. 50 notes received by Rohit.  
(1) 22 (2) 24  
(3) 16 (4) 28  
(5) 20

**"Success seems to be connected with action. Successful people keep moving. They make mistakes, but they don't quit."**

38. Amount of money saved by Virat is what percentage of the amount of money saved by Rishabh?

(1) 140% (2) 120%  
(3) 125% (4) 80%  
(5) 150%

**Direction (39-40):** Find the exact value in the place of question mark in the following questions.

39.  $?^3 = [11(512)^{1/3} + \sqrt{9}]^5$   
(1) 121 (2) 432  
(3) 527 (4) 43  
(5) 444
40.  $? = (27 \times 24 - 10) \div (18 \times 12 + 4)$   
(1) 3.1 (2) 2.9  
(3) 4.1 (4) 3.8  
(5) 4.2

**Direction (41-43):** The question consists of two statements numbered "I and II" given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.

41. The sum of the surface area of a cube and area of a rectangle is  $3240 \text{ m}^2$ . The length and breadth of the rectangle is 50% more and 40% more than the side of the cube.

**Quantity-I:** Find the volume of the sphere that can be fitted inside the given cube such that it touches all the six faces of the cube. (Use:  $\pi = 3$ )

**Quantity-II:** Find the volume of cuboidal hole of dimension equal to the rectangle and depth 4.5 m.

- (1) Quantity-I > Quantity-II (2) Quantity-I < Quantity-II  
(3) Quantity-I  $\leq$  Quantity-II  
(4) Quantity-I = Quantity-II or No relation  
(5) Quantity-I  $\geq$  Quantity-II

42. Which of the following pair of symbols will define the relation between Quantity-I and Quantity-II and between Quantity-II and Quantity-III respectively?

x, y, and z are positive numbers such that  $xyz = 180$ , and 'p' is the average of x and y.

**Quantity-I:** If  $z = 5$ , then find the minimum value of p.

**Quantity-II:** If  $z = 4$ , then find the minimum value of p.

**Quantity-III:** If  $z = 3$ , then find the minimum value of p.

A. = B. > C. <  
D.  $\geq$  E.  $\leq$

F. # (relation cannot be established)

- (1) B, C (2) A, A  
(3) B, B (4) C, C  
(5) D, D

43. Which of the following pair of symbols will define the relation between Quantity-I and Quantity-II and between Quantity-II and Quantity-III respectively?

The age of two friends Sudeep and Vikram is (x + 2) years and (y - 2) years respectively, the sum of ages of Sudeep and Vikram is 56 years, and the ratio of age of Sudeep 4 years before and age of Vikram 2 years before was 2: 3.

**Quantity-I:** Find the age of Sudeep.

**Quantity-II:** Find the age of Vikram.

**Quantity-III:** Find the average age of Sudeep and Vikram.

A. = B. > C. <  
D.  $\geq$  E.  $\leq$

F. # (relation cannot be established)

- (1) D, C (2) C, B  
(3) B, A (4) A, B  
(5) B, A

**Direction (44-45):** In the following question, two equations I and II are given. Solve both the equations carefully & answer the questions given below.

- (a) If  $x > y$  (b) If  $x < y$   
(c) If  $x \geq y$  (d) If  $x \leq y$   
(e) If  $x = y$  or relation cannot be established

44. I.  $(x^{1/4}/20)^2 = 196/x^{3/2}$  II.  $y^{1/3} \times y^{2/3} \times 14^3 = 7 \times y^4$   
(1) a (2) b  
(3) c (4) d  
(5) e

45. I.  $4/x^{1/2} + 7/x^{1/2} = x^{1/2}$  II.  $y^2 - (11^{5/2}/y^{1/2}) = 0$   
(1) a (2) b  
(3) c (4) d  
(5) e

46. There are 8 different coloured balls in a basket. In how many ways can the selection be done



such that the balls are picked up in a group of multiples of 2?

- (1) 536 (2) 127  
(3) 134 (4) 245  
(5) 422

47. Madhan appeared in four exams, all having the same maximum marks and obtained the marks are the ratio 5:4:5:4. If the average marks obtained by him are 75%, then what is the maximum percentage of marks which he scored in the all four exams?

- (1) 33.33% (2) 66.66%  
(3) 76% (4) 47%  
(5) 83.33%

48. Jaya reaches office on time when she travels at an average speed of 45kmph. If she travels at an average speed of 40kmph, she reaches 15 minutes late. How far does she travel?

- (1) 4 hours (2) 6 hours  
(3) 7 hours (4) 2 hours  
(5) 5 hours

49. 85% of the population of Ballia is registered in the voters list. 25% of the registered voters did not cast their votes. 10% of the cast votes are invalid. Out of the two candidates, the winning candidate got 55% of the valid votes and won by 2,754 votes. Find the population of Ballia.

- (1) 48,000 (2) 52,000  
(3) 49,000 (4) 51,000  
(5) None of these

50. Reena's present age is three times her son's present age and two fifth of her father's present age. The average of present age of all of them is 46 yrs. What is the difference between the Reena's son's present age and Reena's father's present age?

- (1) 68 yrs (2) 88 yrs  
(3) 58 yrs (4) 78 years  
(5) None of the above

51. Four years ago, Bala's age is 22. If the ratio of Sathya's age after 6 years to Bala's age after 8 years is 2:1 and the ratio of Sathya's age before 10 years to Mala's age before 16 years is 4:3, then Mala's age after 8 years?

- (1) 63 years (2) 45 years  
(3) 75 years (4) 57 years

- (5) 65 years

52. The diagonal of the rectangle is  $\sqrt{62}$ cm and its area is 41 square meter. What is the perimeter of the rectangle?

- (1) 43 cm (2) 34 cm  
(3) 24 cm (4) 38 cm  
(5) 15 cm

53. Distance between two persons Raju and Narendhar is 120 km and they can run at a speed of x km/hr and y km/hr respectively. If they move in the same direction then Raju overtakes Narendhar in 30 hours and if they move towards each other they take 20% of the time taken by Raju to overtake Narendhar when they move in same direction. Find x and y.

- (1) 10 km/hr, 5 km/hr (2) 11 km/hr, 9 km/hr  
(3) 12 km/hr, 8 km/hr (4) 13 km/hr, 7 km/hr  
(5) 14 km/hr, 4 km/hr

54. The age of Arjun and his son Abhimanyu is (x + 4) years and (y + 3) years, respectively, such that the ratio of their ages is 2:1, respectively. Find the sum of the ages of Arjun and Abhimanyu, if (x - y) = 15.

- (1) 54 years (2) 48 years  
(3) 40 years (4) 32 years  
(5) None of these

55. Find the area of a rectangle whose perimeter is 24 cm less than the perimeter of square of area 784 cm<sup>2</sup>, and the ratio of length to breadth of rectangle is 6:5, respectively.

- (1) 320 cm<sup>2</sup> (2) 360 cm<sup>2</sup>  
(3) 420 cm<sup>2</sup> (4) 480 cm<sup>2</sup>  
(5) 540 cm<sup>2</sup>

**Directions (56-60):** Study the following table and answer the given questions

There are two colleges A and B which conduct the exam. The following table shows the percentage of the passed student.

"There are two types of people who will tell you that you cannot make a difference in this world: those who are afraid to try and those who are afraid you will succeed."

Year	College A		College B	
	Number of appeared students	Percentage of passed students	Number of appeared students	Percentage of passed students
2011	1600	70%	-	40%
2012	2100	55%	-	30%
2013	-	40%	1450	50%
2014	1840	65%	1760	60%
2015	2080	-	1500	-

56. If the total number of students who failed in the exam in the year 2012 from college B was 1260 then what is the ratio of the passed students in the year 2012 from college B to that of the passed students in the year 2014 from same college?

(1) 71:65 (2) 43:42  
(3) 45:88 (4) 53:17  
(5) 49:53

57. If 40% of students from college A were declared failed in the year 2015, then what is the sum of the total number of students who passed from college A in the year 2011, 2014 and 2015 together?

(1) 6546 (2) 3564  
(3) 7679 (4) 2577  
(5) 5435

58. What is the difference between the total number of students who passed in the year 2014 from college B and the total number of students who failed in the year 2012 from college A?

(1) 242 (2) 656  
(3) 767 (4) 111  
(5) 86

59. If in the year 2016 the number of students who appeared in the exam from college A is increased by 15% from that of the students who appeared in 2011 and 70% of the students passed, then what is the number of passed students from college A in the year 2016?

(1) 2456 (2) 1456  
(3) 1986 (4) 2646  
(5) 1288

60. If in the year 2013 and 2015 the total number of students who passed from college A were 1130 and 1254 respectively, then what is the average

number of passed students over the years from college A?

(1) 1171 (2) 2546  
(3) 1356 (4) 1387  
(5) 2263

**Directions (61-65):** In each of these questions, a number series is given. In each series, only one number is missing. Find out the missing number.

61. 10, 5.5, 6.5, 11.25, 24.5, 63.75, ?

(1) 156.67 (2) 167.82  
(3) 157.92 (4) 194.25  
(5) 182.63

62. 2, 3, 10, 15, 26, 35, ?, 63

(1) 45 (2) 40  
(3) 51 (4) 55  
(5) None of these

63. 42, 44, 136, 686, 4810, ?

(1) 42500 (2) 43300  
(3) 21550 (4) 55895  
(5) None of these

64. 211, 337, 505, 721, 991, ?

(1) 1451 (2) 1321  
(3) 1541 (4) 1554  
(5) None of these

65. 15, 36, 116, 474, 2382, 14306, ?

(1) 187459 (2) 100158  
(3) 157301 (4) 121891  
(5) 168364

### Reasoning Aptitude

**Directions (66-70):** Study the following information carefully and answer the given question.

Eight scientists P, Q, R, S, T, U, V, and W are sitting in a square table facing towards the centre, such that four of them are sitting at the corner of the square table and rest four persons are sitting in the middle of the square table. All the persons were sitting along the perimeter of the square table at an equal distance between them. The perimeter of the square is 320m and the perimeter of the square is  $4a$  ( $320=4a$ ), where 'a' is the side of the square. Distances are considered only on the perimeter of the square table. T sits 80m away from P who does not sit at any corner of the

table. Three persons sits between P and V. W sits at corner of the table and S sits 40m to the right of W. R and U sits opposite to each other. S is not an immediate neighbour of U. P doesn't sit immediate left of Q.

66. Who sits at the immediate right of Q?

- (1) T (2) V  
(3) S (4) P  
(5) None of these

67. How many persons are/is sitting between W and R when counting right of W?

- (1) 2 (2) 3  
(3) 1 (4) more than three  
(5) None of these

68. Who sits second to the right of the one who sit opposite to S?

- (1) U (2) Q  
(3) P (4) T  
(5) None of these

69. Which of the following statement(s) is/are not true?

- (i) T and R are immediate neighbours  
(ii) V sits Third to the left of W  
(iii) Q sits second to the right of U  
(1) Only (i) (2) Only (i) and (ii)  
(3) Only (ii) and (iii) (4) Only (iii)  
(5) All (i), (ii) and (iii)

70. Who sits at a distance of 120m left of T?

- (1) S  
(2) The one who is immediate left V  
(3) The one who is second to the right of W  
(4) Both (2) and (3)  
(5) None of these

**Directions (71-75):** Answer the questions based on the information given below.

7 boxes P, Q, R, S, T, U and V are kept one above the other but not necessarily in the same order. These boxes contain different number of coins among- 04, 08, 09, 10, 12, 13 and 18, and belong to different states among Orissa, TN, Gujarat, Goa, Kerala, Haryana and Bihar but not necessarily in the same order.

Box P is 4 boxes above the box, which contains 18 coins. The box from TN is immediately below box P. There are at least 2 boxes between the box from TN and box U, which has minimum number of coins. Box Q from Haryana is 2 boxes above

U. Number of boxes above box Q is equal to the number of boxes below box T. The box immediately below T has 9 coins and is from Bihar. Neither box from Goa nor from Kerala is above the box from Bihar. Box immediately below the box from Orissa contains 13 coins. Box P contains neither 13 nor 08 coins. Box R is not below box S. The topmost box doesn't contain either 12 or 10 coins. Box S is immediately above the box, which contains 10 coins.

71. \_\_\_\_\_ has the highest number of coins.

- (1) Box from Haryana (2) Box V  
(3) Box S (4) Box R  
(5) None of these

72. Box from \_\_\_\_\_ has 3 coins more than Box S.

- (1) Gujarat (2) TN  
(3) Haryana (4) Orissa  
(5) None of these

73. If the sum of coins of box R and the box from Goa is less than 15, what is the sum of the coins of box from Kerala and box T?

- (1) 17 (2) 30  
(3) 21 (4) 31  
(5) None of these

74. If box U doesn't belong to Kerala, then what is the sum of the number of coins of box Q, the box from Goa and box R?

- (1) 28 (2) 30  
(3) 22 (4) 26  
(5) None of these

75. Which among the following boxes are between the box from Haryana and box P?

- I. Box T II. Box, which contains 09 coins  
III. Box, which contains 08 coins  
(1) Both II and III (2) Both I and III  
(3) All I, II and III (4) Both I and II  
(5) None of these

**Direction (76-80):** Read the following information carefully and answer the questions given below.

Letters in the word are to be coded as follows.



Letters	P	A	S	C	E	Q	G	I	U	X	W	Y	M	R	K	L	D
Codes	1	Σ	3	B	6	£	9	∞	@	8	%	7	\$	2	&	5	©

**Conditions:** i. If the first letter is a vowel and last letter is a consonant then the code of first letter and third letter should be interchanged And also the code for last letter and fourth letter of the word should be interchanged.

ii. If a word has two same letter, then the codes of the first and the last letter should be interchanged

iii. If the first letter is a consonant and the third letter is a vowel. Then the First letter should be interchanged with the fourth letter and the third letter should be interchanged with the last letter of the word

76. What is the code for the word "AQUPW"?

- (1) @£Σ%1 (2) Σ£@1%  
(3) £Σ%1@ (4) 1@%£Σ  
(5) None of these

77. What is the code for the word "MPSQE"?

- (1) \$316£ (2) £\$136  
(3) \$13£6 (4) 1£36\$  
(5) \$16£3

78. What is the code for the word "GIGRD"?

- (1) ©929∞ (2) ©∞929  
(3) 9©9∞2 (4) ©9∞29  
(5) None of these

79. What is the code for the word "KLURP"?

- (1) 1@52& (2) 21&5@  
(3) @251& (4) 251&@  
(5) None of these

80. What is the code for the word "MRICP"?

- (1) ∞12B\$ (2) B2∞1\$  
(3) B21\$∞ (4) B∞12\$  
(5) None of these

**Directions (81-82):** In each question below there are some statements followed by three/four conclusions numbered I, II, III and IV. Read the statement carefully and then decide which of the following conclusion does not logically follow disregarding commonly known facts.

81. **Statement:** Some Rose are Jasmine.  
Some Jasmine are Lily. No Lily is Rose.

All Lily are Aster.

**Conclusion:** i. All Aster are Rose is possibility

ii. All Jasmine are Aster is Possibility

iii. Some Aster are Jasmine

- (1) Only i and ii (2) Only ii  
(3) Only i (4) Only i and iii  
(5) None of these

82. **Statement:** No Apple is Orange.

Some Grapes are Orange.No Mango is Grapes.

**Conclusion:** i. Some Apple are not Mango

ii. Some Orange are not Mango

iii. All Grapes are Apple is Possibility

- (1) only i (2) All i, ii and iii  
(3) only i and iii (4) only ii and iii  
(5) All are follows

**Direction (83-87):** In these questions relationship between different elements is shown in the statements. These statements are followed by conclusions. You have to find out which of the conclusions follow or not from the given statements.

(a) If Only Conclusion I follows

(b) If Only Conclusion II follows

(c) If Either Conclusion I or II follows

(d) If Both Conclusions I and II follows

(e) If Neither Conclusions I nor II follows

83. **Statement:**  $M < B \leq Y = C > O = S$ ;  $E < P \leq W > C = R \geq T$ .

**Conclusion:** i.  $W > M$

ii.  $T \geq B$

(1) a

(2) b

(3) c

(4) d

(5) e

84. **Statement:**  $L < K = J > F \geq N > S$ ;  $O < I \leq F \geq E = X$ .

**Conclusion:** i.  $K > X$

ii.  $O < K$

(1) a

(2) b

(3) c

(4) d

(5) e

85. **Statement:**  $P < L = N \leq F > E = T$ ;  $A < Z \geq X = N < W = Q$ .

**Conclusion:** i.  $P < A$

ii.  $Q < T$

(1) a

(2) b

(3) c

(4) d

(5) e

86. **Statement:**  $M < K \leq O = J > B = S$ ;  $P < O = V \geq Q$ .

**Conclusion:** i.  $J = Q$       ii.  $Q < J$

- (1) a                      (2) b  
(3) c                      (4) d  
(5) e

87. **Statement:**  $O < B = J \geq D = E < A$ ;  $M < W \leq J = C > Z$ .

**Conclusion:** i.  $O < C$       ii.  $A > W$

- (1) a                      (2) b  
(3) c                      (4) d  
(5) e

**Direction (88-89):** Read the following information carefully and answer the questions given below.

A, B, C, D, E and F are the six persons in the group. They all are in different are in different Weights. A was heavier than only two persons. D was lighter than only F, who was heavier than A. A was lighter than C. B was lighter than C and not lightest among the group. C was 64Kg.

88. Name the person who was third heaviest among the group?

- (1) A                      (2) C  
(3) D                      (4) E  
(5) None of these

89. What is the possible weight of A?

- (1) 60                      (2) 65  
(3) 67                      (4) 69  
(5) 66

**Direction (90-92):** Read the following information carefully and answer the questions given below.

There are seven persons in the family, with three generation and three couples are in the family. R was the sister of Q, whose mother-in-law was J. M was father of P and grandfather of N. S was uncle of N, whose mother has no siblings. R's Nephew was N.

90. How was S related to M?

- (1) Son                      (2) Daughter-in-law  
(3) Son-in-law              (4) Cannot be determined  
(5) None of these

91. How was Q related to N?

- (1) Father                      (2) Mother  
(3) Son                      (4) Daughter  
(5) None of these

92. How was J related to N?

- (1) Paternal Grand Mother      (2) Paternal Grand Father  
(3) Maternal Grand Mother      (4) Maternal Grand Father  
(5) None of these

**Directions (93):** Study the following information carefully and answer the below questions. In the following questions, the symbols %, \$, @, &, # and  $\times$  are used with the following meanings as illustrated below:

A @ B – A is father of B  
A % B – A is Mother of B  
A \$ B – A is Son of B  
A # B – A is Sister of B  
A & B – A is Wife of B  
A  $\times$  B – A is daughter of B

93. If  $P \% R \& N @ U$ ,  $N \$ S$ ,  $O \times M \times S$ ,  $W \& T \$ P \& Q$  then how R is related to O?

- (1) Cannot be determined      (2) Sister  
(3) Daughter-in-law              (4) Aunt  
(5) Son

**Direction (94-98):** Read the following information carefully and answer the questions given below.

I, J, K, X, Z, T, N, P, Q and S are the ten persons sitting in the two parallel rows facing each other. The persons are sitting in the first row facing north and the persons are sitting in the second row facing south but not necessary in the same order.

Only two persons sits between Q and Z. N sits second to the right of I. J is an immediate neighbour of I. X faces the person who sits third to the left of P. Z sits to the right of Q, who sits at extreme end of the line P sits diagonally opposite to N. Neither S nor K faces X. K does not sit at extreme end of the line. T does not faces north.

94. Name the person who sits second to the left of K?

- (1) P                      (2) Q  
(3) X                      (4) T  
(5) None of these

95. Four among the five are alike in such a way based on their arrangement, find the one who does not belongs to the group?

- (1) S                      (2) J

- (3) I (4) N  
(5) Q

96. Name the person who sits second to the left of one who faces T?  
(1) S (2) N  
(3) J (4) I  
(5) None of these
97. The person who sits second to the left of P faces which among the following person?  
(1) S (2) J  
(3) N (4) I  
(5) None of these
98. How many persons sits between the one who faces N and an immediate neighbour of P?  
(1) One (2) Two  
(3) Three (4) Four  
(5) None

**Direction (99-100):** Read the following information carefully and answer the questions given below.

A stands 2 meter west of B, who stands 1 meter north of C. D stands 2 meter south of C and 5 meter north of E. F stands 2 meter east of E and 4 meter south of G.

99. If P stands 2 meter west of G then on which direction does P stands with respect to D?  
(1) North (2) South  
(3) East (4) West  
(5) None of these
100. What is the shortest distance between A and G?  
(1)  $2\sqrt{3}$  meter (2)  $5\sqrt{4}$  meter  
(3)  $4\sqrt{2}$  meter (4)  $4\sqrt{5}$  meter  
(5) None of these

## Solution

### English Language

- Ans.1(4) Ans.2(2) Ans.3(5) Ans.4(3)  
Ans.5(1) Ans.6(2) Ans.7(3) Ans.8(1)  
Ans.9(1) Ans.10(3) Ans.11(1)  
Ans.12(1) The author is highly critical of the policies adopted and argues that they had reverse effects.  
Ans.13(2) The passage talks of the fact that government employed violent policies with intention of countering the insurgencies but it reversed the situation accidentally.  
Ans.14(1) Option 1 has been cited as a reason by the author.  
Ans.15(2) The author says that New Delhi has been unable to clearly articulate the blueprint of the Kashmir peace process.  
Ans.16(4) Ignited – lit  
Ans.17(2) Windfall – blessing  
Ans.18(2) Trilling – crying  
Ans.19(1) Incestuous – depraved  
Ans.20(3) Fraught – filled  
Ans.21(1) Peculiar – strange  
Ans.22(2) Reviled – cursed  
Ans.23(4) Impasse – dead end  
Ans.24(3) Slouching – awkward  
Ans.25(1) Subterfuge – trick  
Ans.26(5) GET IN SOMEONE'S HAIR means to annoy someone. A gives a situation

where a person's constant questioning was annoying the speaker, so 1 applies.

GET INTO DEEP WATER means to get into trouble. 2 applies as B gives a situation where a few boys got into trouble as they broke someone's window.

GET OFF THE TRACK means to start talking about a different topic instead of the main topic. 3 applies as C gives a situation where a man starts talking about something else in between his speech.

- Ans.27(4) GET THE PICTURE means to understand something. 1 does not apply as the situation talks about how a task was delegated. GET OUT OF A JAM means to get out of a difficult situation. 2 applies as the situation talks about how the speaker was able to explain his situation that got him out of trouble. GAIN GROUND means to make progress or become popular. 3 applies as the situation talks about how the speaker's product gained popularity.

- Ans.28(2) TO HAVE A FACE LIKE THUNDER means to look angry or upset. 1 applies as the situation talks about someone's angry response on being told the truth.



TO HAVE A LOT ON ONE'S PLATE means to be dealing with a lot of problems. 2 applies as the situation talks about how someone was dealing with a lot of problems after his father passed away.

TO HAVE AN AXE TO GRIND means to harbour ill-feeling towards someone. It does not apply as the situation talks about the good opinion of someone regarding the speaker.

**Ans.29(5)** TO HAVE BIG EARS means to be nosy and listen to other people's talk. 1 applies as the situation talks about a nosy person who listens to other people's conversations.

TO HAVE FRIENDS IN HIGH PLACES means to know important and powerful people. 2 applies as the situation talks about how the speaker knows politicians who can help him to get something done. HIT A HOME RUN means to be successful. 3 applies as the situation talks about a performance which was successful and appreciated by the audience.

**Ans.30(3)** HIT THE ROAD means to leave or depart on a journey. 1 applies as the situation talks about the time when the speaker would leave on his journey.

HIT THE NAIL ON THE HEAD means to describe something very accurately. 2 does not apply as the situation talks about how the boy was scolded for lying by his teacher.

HIT THE ROOF means to become angry and start shouting. 3 applies as the situation talks about someone lost his temper and started shouting when asked if it was he who broke the vase.

### Quantitative Aptitude

**Ans.31(1)**  $26+64-17+37 = X$   
 $X=110$

**Ans.32(4)**  $7/16 \times 8245.66 + 2/110 \times 24624.6 - 16\%$   
 $4235.3$   
 $7/8 \times 4123 + 1/11 \times 4925 - 4/5 \times 847 = X$   
 $3608+448-678 = 0$   
 $X = 3378$

**Ans.33(5)**  $(456500)1/3 + 958.08 \times 779.98 / 24.01 = ?$   
 $77 + 958 \times (780/24) = ?$   
 $77+958 \times 32.5 = ?$

**Ans.34(3)**

$31212 = X$

Let, number of Rs. 50 notes, Rs. 100 notes, and Rs. 500 notes received by Virat from his father be  $2x$ ,  $3x$ , and  $4x$ , respectively.

So,  $2x \times 50 + 3x \times 100 + 4x \times 500 = 4800$   
 $100x + 300x + 2000x = 4800$   
 $2400x = 4800$

$x = 2$

So, amount received by Virat in the form of

Rs. 500 notes  $= 500 \times 4x = 500 \times 8 = \text{Rs. } 4000$

**Ans.35(4)**

Amount of money saved by Shikhar  $= 4000 - 2800 = \text{Rs. } 1200$

Amount of money saved by Kuldeep  $= 2800 - 2400 = \text{Rs. } 400$

Required ratio  $= 1200: 400 = 3: 1$

**Ans.36(1)**

Amount spent for entertainment  $= 1/3 \times 3000 = \text{Rs. } 1000$

Amount spent on foods  $= 1/4 \times (3000 - 1000) = \text{Rs. } 500$

Amount spent on shopping  $= 2500 - (1000 + 500) = \text{Rs. } 1000$

**Ans.37(1)**

Let, number of Rs. 100 notes and Rs. 500 notes received by Rohit be 'x' and number of Rs. 50 notes received by Rohit be 'y'.

Number of Rs. 50 notes left with Rohit  $= (3500 - 2800)/50 = 14$

So,  $50 \times y + 100 \times x + 500 \times x = 3500$   
 $50y + 600x = 3500$

$y + 12x = 70$

If  $x = 1$ , then  $y = 58$

If  $x = 2$ , then  $y = 46$

If  $x = 3$ , then  $y = 34$

If  $x = 4$ , then  $y = 22$

If  $x = 5$ , then  $y = 10$  (Rejected)

So, minimum number of Rs. 50 notes received by Rohit will be 22.

**Ans.38(2)**

Amount of money saved by Virat  $= 4800 - 4200 = \text{Rs. } 600$

Amount of money saved by Rishabh  $= 3000 - 2500 = \text{Rs. } 500$

Required percentage  $= 600/500 \times 100 = 120\%$

**Ans.39(1)**

$?^3 = 11(8+3)^5$

$?^3 = 11 \times 11^5$

$? = 11^2$

$? = 121$

**Ans.40(2)**

$? = (648-10) \div (216+4)$

$$= 638/220$$

$$= 2.9.$$

**Ans.41(1)** Let, l and b be the length and breadth of rectangle and 'a' be the side of cube.

So, length of rectangle = '1.5a' m

And, breadth of rectangle = '1.4a' m

According to question:

$$l \times b + 6a^2 = 3240$$

$$1.5a \times 1.4a + 6a^2 = 3240$$

$$2.1a^2 + 6a^2 = 3240$$

$$8.1a^2 = 3240$$

$$a^2 = 3240/8.1$$

$$a = \sqrt{400}$$

$$a = 20 \text{ m}$$

Therefore, side of cube = 20 m

Length of rectangle =  $1.5 \times 20 = 30 \text{ m}$

And, breadth of rectangle =  $1.4 \times 20 = 28 \text{ m}$

**Quantity-I:** Diameter of Sphere = side of cube

So, radius of sphere =  $20/2 = 10 \text{ m}$

Therefore, volume of sphere

$$= (4/3) \times \pi \times r^3 = (4/3) \times 3 \times 10^3 = 4000 \text{ m}^3$$

**Quantity-II:** Volume of cuboidal hole

$$= 30 \times 28 \times 4.5 = 3780 \text{ m}^3$$

**Ans.42(4)** **Quantity-I:**  $z = 5$ ,

So,  $(xy) = 180/5 = 36$

Therefore, possible values of (x, y) are (1, 36), (2, 18), (3, 12), (4, 9), and (6, 6).

So, possible values of  $p = (1 + 36)/2 = 18.5$ ,  $(2 + 18)/2 = 10$ ,  $(3 + 12)/2 = 7.5$ ,  $(4 + 9)/2 = 6.5$ ,  $(6 + 6)/2 = 6$ .

Therefore,  $p = 6$

**Quantity-II:**  $z = 4$ ,

So,  $(xy) = 180/4 = 45$

Therefore, possible values of (x, y) are (1, 45), (3, 15), and (5, 9).

So, possible values of  $p = (1 + 45)/2$

$$= 23, (3 + 15)/2 = 9, (5 + 9)/2 = 7$$

Therefore,  $p = 7$

**Quantity-III:**  $z = 3$ ,

So,  $(xy) = 180/3 = 60$

Therefore, possible values of (x, y) are (1, 60), (2, 30), (3, 20), (4, 15), (5, 12), and (6, 10).

So, possible values of  $p = (1 + 60)/2$

$$= 30.5, (2 + 30)/2 = 16, (3 + 20)/2$$

$$= 11.5, (4 + 15)/2 = 9.5, (5 + 12)/2$$

$$= 8.5, (6 + 10)/2 = 8.$$

Therefore,  $p = 8$

**Ans.43(2)** According to question,

$$(x + 2) + (y - 2) = 56$$

$$(x + y) = 56 \dots (i)$$

$$\text{Also, } \{(x + 2) - 4\} : \{(y - 2) - 2\} = 2 : 3$$

$$(x - 2) : (y - 4) = 2 : 3$$

$$3x - 6 = 2y - 8$$

$$3x - 2y = -2$$

Using equation (i), we get,

$$3x - 2(56 - x) = -2$$

$$5x = 112 - 2$$

$$x = 110/5$$

$$x = 22$$

$$\text{So, } y = 56 - 22 = 34$$

So, age of Sudeep and Vikram is 24 years and 32 years respectively.

**Quantity-I** = 24 years

**Quantity-II** = 32 years

**Quantity-III** =  $(24 + 32)/2 = 28$  years

$$(x^{1/4}/20)^2 = 196/X^{3/2}$$

$$X^{1/2}/20^2 = 196/X^{3/2}$$

$$X^2 = 78400$$

$$X = 280, -280$$

$$Y^{1/3} \times Y^{2/3} \times 14^3 = 7 \times Y^4$$

$$Y \times 14^3 = 7 \times Y^4$$

$$14 \times 14 \times 14/7 = Y^3$$

$$Y^3 = 196 \times 2$$

$$Y^3 = 392$$

$$Y = 7.31 = 7$$

The relation cannot be established

$$4/x^{1/2} + 7/x^{1/2} = x^{1/2}$$

$$11 = X$$

$$Y^2 - (11^{5/2}/Y^{1/2}) = 0$$

$$Y^{5/2} = 11^{5/2}$$

$$Y = 11$$

$x = y$  or relation cannot be established

**Ans.46(2)**

Since the balls are picked up in a group of multiples of 2, either 2 or 4 or 6 or 8 balls can be selected

Thus total number of ways =  ${}^8C_2 + {}^8C_4 + {}^8C_6 + {}^8C_8$

$$=$$

$$(8 \times 7/1 \times 2) + (8 \times 7 \times 6 \times 5/1 \times 2 \times 3 \times 4) + (8 \times 7/1 \times 2)$$

$$+ 1$$

$$= 28 + 70 + 28 + 1$$

$$= 127$$

**Ans.47(5)**

Let the marks obtained by Madhan in 4 exams be 5x, 4x, 5x and 4x respectively.

Then average marks scored by him in all the 4 exams =  $18x/4 = 4.5x$

Let the minimum marks in the exam be y.

Then, according to the question,

$$y \times 75/100 = 4.5x$$

$$y = (4.5x \times 100)/75$$

$$= 6x$$

Thus maximum percentage =  $5x/6x \times 100$

$$= 83.33\%$$

**Ans.48(4)** Let the time taken by Jaya to reach an office on time is  $t$ .  
Then according to the given question,  
 $45t = 40(t+15)$   
 $45t = 40t + 600$   
 $5t = 600$   
 $t = 120$  minutes  
 $= 2$  hours.

**Ans.49(5)** Let the population of Ballia be ' $x$ '  
Number of registered voters =  $0.85x$   
Number of votes cast =  $0.75 \times 0.85 = 0.6375x$   
Number of valid votes  
 $= 0.90 \times 0.6375x = 0.57375x$   
So according to question:  
 $0.10 \times 0.57375x = 2754$   
 $0.057375x = 2754, x = 48000$   
So, the population of Ballia = 48000

**Ans.50(4)** Present age of Reena's son =  $x$   
Reena's current age =  $3x$   
Reena's present age  
 $= 2/5$  of father's present age  
Present age of father =  $(15/2)x$   
Total present age =  $x + 3x + (15/2)x$   
 $= 138 \Rightarrow x = 12$   
Difference between present age of Reena's father and present age of Reena's son  
 $= 90 - 12 = 78$  years

**Ans.51(1)** Let Bala's present age be  $x$  years, Sathya's present age be  $y$  years, and Mala's present age be  $z$  years.  
Present age of Bala =  $22 + 4 = 26$  years.  
Then according to the question,  
 $[(y+6)/(x+8)] = 2/1$   
After solving this we have,  $y = 62$  years  
Similarly,  
 $[(y-10)/(z-16)] = 4/3$   
After solving this, we have  
 $z = 55$  years

Thus Mala's age after 8 years =  $55 + 8 = 63$  years  
**Ans.52(3)** Let the length and breadth of the rectangle be  $l$  and  $b$  respectively.  
Then,  $l^2 + b^2 = 62$   
Also given that, area of the rectangle =  $lb = 41$

We know that,  $(l+b)^2 = l^2 + 2lb + b^2$   
 $= (l^2 + b^2) + 2lb$   
 $= 62 + 2(41)$   
 $= 144$

Thus  $l+b = 12$

Thus perimeter =  $2 \times 12 = 24$  cm.

**Ans.53(3)** When Raju and Narendhar move in the same direction,  
 $(120/(x-y)) = 30$   
 $x-y = 4$  ..... (1)  
When they move towards each other,  
 $(120/(x+y)) = 30/5$   
 $(120/(x+y)) = 6$

$x+y = 20$  ..... (2)

After solving (1) and (2), we have  
 $x = 12$  km/hr and  $y = 8$  km/hr.

**Ans.54(2)** According to question,

$(x+4)/(y+3) = 2/1$

$(x+4) = 2y+6$

$x-2y = 2$  ..... (i)

Also,  $x-y = 15$  ..... (ii)

Solving equation (i), and (ii), we get

$y + 15 - 2y = 2$

$y = 15 - 2 = 13$

And,  $x = 2 + 26 = 28$  years

So, age of Arjun =  $28 + 4 = 32$  years

So, age of Abhimanyu =  $13 + 3 = 16$  years

Therefore, sum of ages of Arjun and Abhimanyu =  $32 + 16 = 48$  years

**Ans.55(4)** Area of square =  $784 \text{ cm}^2$

So, length of side of square =  $\sqrt{784} = 28$  cm

Therefore, perimeter of rectangle

$= 4 \times 28 - 24 = 88$  cm

So,  $2(\text{length} + \text{breadth}) = 88$

Let, length and breadth of rectangle be  $6x$  cm and  $5x$  cm, respectively.

So,  $2(6x + 5x) = 88$

$22x = 88, x = 4$

So, length of rectangle =  $4 \times 6 = 24$  cm

Breadth of rectangle =  $4 \times 5 = 20$  cm

Therefore, area of rectangle

$= 24 \times 20 = 480 \text{ cm}^2$

**Ans.56(3)** Let total number of students in the college B in 2012 be  $x$ .

Then according to the question,

$70\% \text{ of } x = 1260$

$x = 1800$

Thus number of passed students

$= 30\% \text{ of } 1800 = 540$



Number of passed students in the year 2014 from college B = 60% of 1760 = 1056

Thus required ratio = 540: 1056  
= 45:88

**Ans.57(2)** Number of students passed in the year 2011

= 70% of 1600 = 1120

Similarly, Number of students passed in the year 2014 = 65% of 1840 = 1196

And Number of students passed in the year 2015 = 60% of 2080 = 1248

Required number of students  
= 1120+1196+1248 = 3564

**Ans.58(4)** Total number of students who passed in the year 2014 from college B = 60% of 1760 = 1056

Total number of students who failed in the year 2012 from college A = 45% of 2100 = 945

Required difference = 1056 - 945  
= 111

**Ans.59(5)** Number of students appeared in 2016 in college A

= 115% of 1600

= 1840

Thus total number of passed students from college A = 70% of 1840

= 1288

**Ans.60(1)** Number of passed students in the year 2011

= 70% of 1600 = 1120

Number of passed students in the year 2012

= 55% of 2100 = 1155

Number of students passed in the year 2014

= 65% of 1840 = 1196

Required average

=  $(1120+1155+1130+1196+1254)/5 = 1171$

**Ans.61(4)**  $10 \times 0.5 + 0.5 = 5.5$

$5.5 \times 1 + 1 = 6.5$

$6.5 \times 1.5 + 1.5 = 11.25$

$11.25 \times 2 + 2 = 24.5$

$24.5 \times 2.5 + 2.5 = 63.75$

$63.75 \times 3 + 3 = 194.25$

**Ans.62(5)** The pattern of the series is  $1^2+1$ ,  $2^2-1$ ,  $3^2+1$ ,  $4^2-1$ .....

**Ans.63(2)**  $42 \times 1 + 2 = 44$

$44 \times 3 + 4 = 136$

**Ans.64(2)**

$136 \times 5 + 6 = 686$

$686 \times 7 + 8 = 4810$

$4810 \times 9 + 10 = 43300$

$(6^3 - 5) = 211$

$(7^3 - 6) = 337$

$(8^3 - 7) = 505$

$(9^3 - 8) = 721$

$(10^3 - 9) = 991$

$(11^3 - 10) = 1321$

**Ans.65(2)**

$15 \times 2 + 6 = 36$

$36 \times 3 + 8 = 116$

$116 \times 4 + 10 = 474$

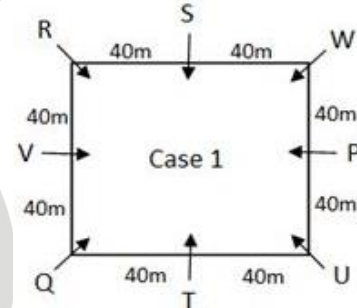
$474 \times 5 + 12 = 2382$

$2382 \times 6 + 14 = 14306$

$14306 \times 7 + 16 = 100158$

### Reasoning Aptitude

**Ans.(66-70):**



**Ans.66(1)**

**Ans.67(3)**

**Ans.68(3)**

**Ans.69(5)**

**Ans.70(4)**

**Ans.(71-75)**

Box			
7	R	08	Gujarat
6	P	12	Orissa
5	T	13	TN
4	S	9	Bihar
3	Q	10	Haryana
2	V	18	Goa/Kerala
1	U	04	Kerala/Goa

**Ans.71(2)**

Box V has the highest number of coins.

**Ans.72(4)**

Box from Orissa has 3 coins more than box S.

**Ans.73(4)**

If the sum of coins of box R and the box from Goa is less than 15, the sum of the coins of box from Kerala and box T is  $(13 + 18) = 31$

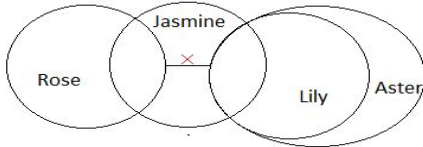
**Ans.74(3)**

If box U doesn't belong to Kerala, it belongs to Goa. The sum of the number of coins of Box Q, the box from Goa and box R is  $(10+04+08) = 22$

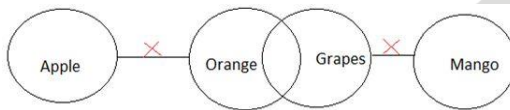
**Ans.75(4)**

Box T and box, which contains 09 coins are between the boxes from Haryana and box P

- Ans.76(1) As per Condition (i) we get @£Σ%1.  
 Ans.77(3) Since it does not satisfy any conditions, so we can code it as \$13£6.  
 Ans.78(2) As per Condition (ii) we get ©∞929.  
 Ans.79(4) As per Condition (iii) we get 251&@.  
 Ans.80(3) As per Condition (iii) we get B21\$∞.  
 Ans.81(3)



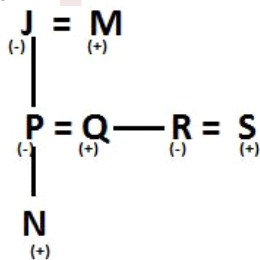
Ans.82(3)



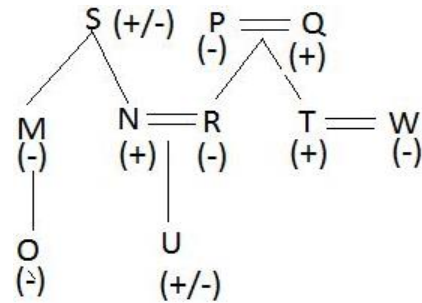
- Ans.83(1) i.  $M < B \leq Y = C < W$  (True)  
 ii.  $B \leq Y = C = R \geq T$  (False)  
 Ans.84(4) i.  $K = J > F \geq E = X$  (True)  
 ii.  $O < I \leq F < J = K$  (True)  
 Ans.85(5) i.  $P < L = N = X \leq Z > A$  (False)  
 ii.  $T = E < F \geq N < W = Q$  (False)  
 Ans.86(3)  $Q \leq V = O = J$   
 Ans.87(1) i.  $O < B = J = C$  (True)  
 ii.  $W \leq J \geq D = E < A$  (False)  
 Ans.(88-89):  
 $F > D > C > A > B > E$

64

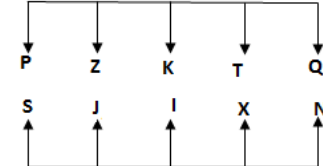
- Ans.88(2) Ans.89(1)  
 Ans.(90-92):



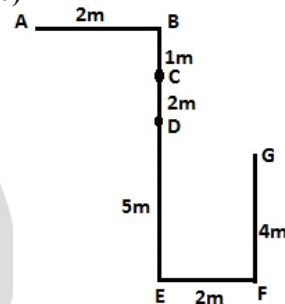
- Ans.90(4) Ans.91(1) Ans.92(3)  
 Ans.93(4)



Ans.(94-98)



- Ans.94(2) Ans.95(5) Ans.96(3)  
 Ans.97(4) Ans.98(2)  
 Ans.(99-100)



- Ans.99(2) Ans.100(3)

"The ones who are crazy enough to think they can change the world, are the ones that do."

The real test is not whether you avoid this failure, because you won't. It's whether you let it harden or shame you into inaction, or whether you learn from it; whether you choose to persevere.

## SSC CGL Prelims Solved Paper

### Reasoning Aptitude

1. Arrange the following words in a logical and meaningful order.

1. Medicine                      2. Diagnosis  
3. Recovery                    4. Illness  
5. Doctor  
(A) 4, 5, 1, 2, 3              (B) 4, 5, 2, 3, 1  
(C) 4, 5, 2, 1, 3              (D) 4, 5, 3, 2, 1

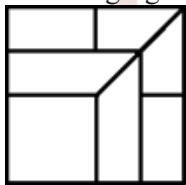
2. A man starts from a point and walks 2 m towards the North, then he turns towards his right and walks 2 m finally he turns right again and walks. What is direction now he is facing?

(A) North                      (B) South  
(C) East                      (D) West

3. In the following question, select the related letters from the given alternatives.  
JPD : GMA :: NTW : ?

(A) TQK                      (B) NYR  
(C) KQT                      (D) UIP

4. How many quadrilaterals are there in the following figure?



(A) 6                      (B) 8  
(C) 9                      (D) More than 10

5. If '+' means '÷', 'x' means '+', '÷' means '-', and '-' means 'x', then

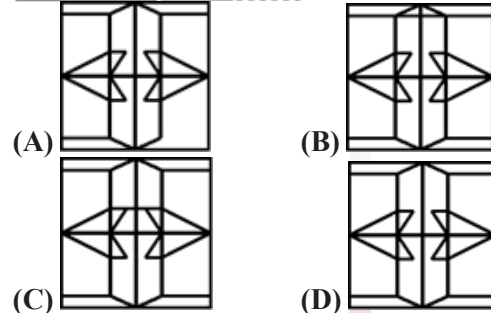
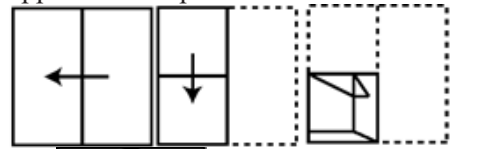
$$108 + 36 \times 54 - 2 \div 36 = ?$$

(A) 75                      (B) 65  
(C) 85                      (D) 55

6. If water is called Red, Red is called Mango, Mango is called Blue, Blue is called Rain, Rain is called Violet, Violet is called Snake, Snake is called Green and Green is called White in a certain language, then what is the color of Sky called in that language?

(A) Blue                      (B) Rain  
(C) Mango                      (D) Red

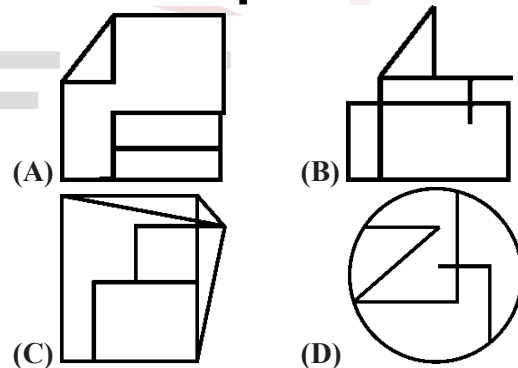
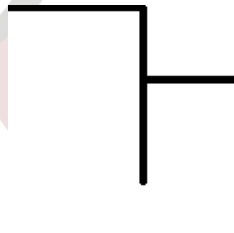
7. A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened.



8. Find out the odd word from the given alternatives.

(A) Beirut                      (B) Hanoi  
(C) Shanghai                      (D) Islamabad

9. Select the option in which the given figure is embedded.



10. Pointing to the photograph of a girl, Ram said "She has no sister or daughter but her mother is the only daughter of my mother". How is the



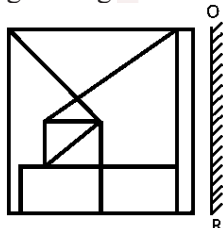
girl in the photograph related with Ram's mother?

- (A) Sister-in-law (B) Daughter-in-law  
(C) Niece (D) Grand daughter

11. Mansi remembers that her father's birthday was certainly after the eighth but before thirteenth of December. Her sister Rashi remembers that their father's birthday was definitely after ninth but before fourteenth of December. On which date of December was their father's birthday?

- (A) 10<sup>th</sup> (B) Data inadequate  
(C) 12<sup>th</sup> (D) 11<sup>th</sup>

12. If a mirror is placed on the line OR, then which of the answer figures is the right image of the given figure?



- (A) (B)   
(C) (D)

13. Two statements are given followed by three conclusions numbered I, II, and III. Assuming the statements to be true, even if they seem to be at variance with commonly known facts. Decide which of conclusion logically follow(s) from the statement.

**Statements:** Some wires are cables  
All cables are jacks

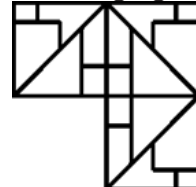
**Conclusions:** I. All jacks are wire  
II. Some wires are not cables  
III. All cables are wires is a possibility

- (A) Only conclusion I follows  
(B) Only conclusion II follows  
(C) Only conclusion III follows  
(D) Both the conclusion II and III follow

Five friends A, B, C, D and E were standing in straight horizontal line and all are facing towards north. D was standing at one of the ends and third to the right of C. B was right of E but left of D. E was not at the end. Who was at the left end of the line?

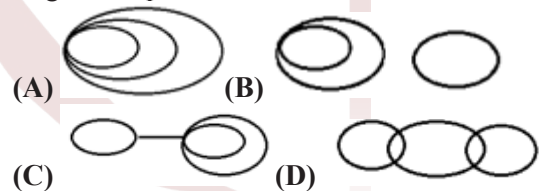
- (A) A (B) C  
(C) D (D) E

Select the option in which will complete the following figure.



- (A) (B)   
(C) (D)

16. Which of the following Venn diagrams show the relationship among English, Alphabets, Numbers



17. The sum of the ages of Amit and his son is 52 years. The average of the ages of Amit, his son and his wife is 25. What is the age of his wife?

- (A) 23 years (B) 21 years  
(C) 27 years (D) 28 years

18. Introducing Kartik, a woman says, 'He is the only son of my mother's only brother's only sister' so, what is the relation of Kartik with woman's mother?

- (A) Brother-in-law (B) Son  
(C) Brother (D) Uncle

19. A series is given with one word missing. Choose the correct alternative from the given ones that will complete the series:

Neither, Underground, Manchester, Mainstream, Train?

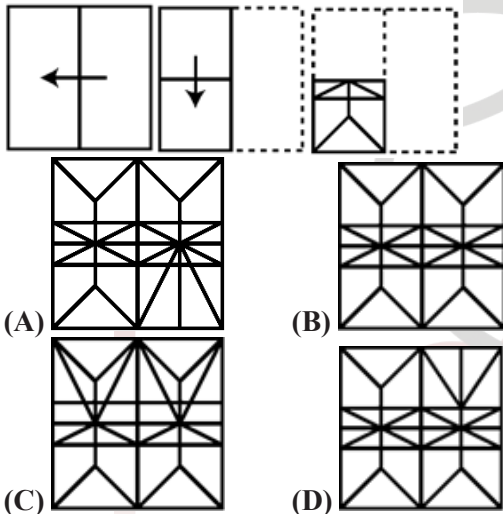
- (A) Bottleneck (B) Struck  
(C) Straight (D) Terminal

20. From the given words, select the word which cannot be formed using the letters of the given word.

**SUBSTITUTES**

- (A) BITES (B) SITES  
(C) RUSTS (D) TESTS

21. A piece of paper is folded and punched as shown below in the question figures. From the given answer figures, indicate how it will appear when opened.



22. Select the odd one out from the given alternatives.

- (A) Car (B) Truck  
(C) Jeep (D) Cycle

23. Select the missing number from the given alternatives.

?	15	31
72	75	93
3	5	3

- (A) 21 (B) 31  
(C) 24 (D) 27

24. B is twice as heavy as A but twice as lighter than F. C is half the weight of A but heavier

than D. If the weight of A is 40kg then what may be the possible weight of D?

- (A) 30 kg (B) 20 kg  
(C) 25 kg (D) 10 kg

25. Find out the missing term in the series given. ACD CEF EGH GIJ ?

- (A) THL (B) IKH  
(C) IKG (D) IKL

### General Studies

26. "Onge" tribe lives in which state/Union Territory of India?

- (A) Pondicherry (B) Meghalaya  
(C) Andaman & Nicobar (D) Daman & Diu

27. An earthquake with a magnitude of 7.8 hit the coast of which nation on July 22, 2020?

- (A) Australia (B) New Zealand  
(C) Alaska (D) Mexico

28. "Santhal Revolt" took place in which year in India?

- (A) 1798-99 (B) 1819  
(C) 1855-56 (D) 1920-21

29. In which of the following hill range is "Dodabeta" peak situated?

- (A) Nallamala Hills (B) Anaimalai Hills  
(C) Cardamom Hills (D) Nilgiri Hills

30. Which is the only country in the world having non-quadrilateral flag?

- (A) Australia (B) Nepal  
(C) Netherland (D) Norway

31. "BIOS" stands for \_\_\_\_\_.

- (A) Basic Input Output System  
(B) Basic Inner Outer Services  
(C) Better Input Output Services  
(D) Better Inner and Outer System

32. "Annual Financial Statement" is mentioned in which Article of Indian Constitution?

- (A) Article 108 (B) Article 112  
(C) Article 79 (D) Article 215

33. What is the name of world's first armed amphibious drone developed by China?

- (A) Marine Salamander (B) Marine Turtle

- (C) Marine Lizard (D) Marine Frog
34. Which of the following boundary line separates North Korea and South Korea?  
(A) 49<sup>th</sup> parallel South (B) 38<sup>th</sup> parallel North  
(C) 26<sup>th</sup> parallel North (D) 17<sup>th</sup> parallel South
35. Which state's first Plasma Bank-MISSION COPE was launched on July 21?  
(A) Karnataka (B) Madhya Pradesh  
(C) Maharashtra (D) Telangana
36. In wind power, which form of energy is converted into electrical energy?  
(A) Potential Energy (B) Solar Energy  
(C) Kinetic Energy (D) Radiant Energy
37. Which country has launched joint naval exercise "Sea Breeze drills" with United States in the Black Sea?  
(A) Russia (B) Belarus  
(C) Turkey (D) Ukraine
38. Famous "Kalinga War" took place in which year?  
(A) 258 BC (B) 262 BC  
(C) 232 BC (D) 261 BC
39. Which properties make metal a good conductor of electricity?  
(A) They contain free electrons  
(B) The molecules in them are very close to each other  
(C) The molecules in them collide Very freely  
(D) They contain reflecting surface
40. Which of the following river flows through a rift valley?  
(A) Yamuna (B) Son  
(C) Narmada (D) Mahanadi
41. "Red colour" during rising and setting of Sun occurs due to which phenomenon?  
(A) Diffusion of Light (B) Scattering of Light  
(C) Reflection of Light (D) Refraction of Light
42. Who has won the Gulbenkian Prize for Humanity?  
(A) Severn Cullis  
(B) Alexandria Villasenor  
(C) Kehkashan Basu  
(D) Greta Thunberg
43. July 23rd is the birth anniversary of which two renowned Indian freedom fighters?  
(A) Chandra Shekhar Azad, Bal Gangadhar Tilak  
(B) Bhagat Singh, B. R. Ambedkar  
(C) Ram Prasad Bismil, Ashfaqulla Khan  
(D) Sukhdev Thapar, Shivaram Rajguru
44. First "Asian Games" in 1951 was organized at which place?  
(A) Beijing (B) Tokyo  
(C) Manila (D) New Delhi
45. Which of the following is highest peak in south India?  
(A) Nilgiri (B) Dodabetta  
(C) Kalsubai (D) Anamudi
46. Which bank has partnered with ArcelorMittal Nippon Steel India to make India's 1st digitised bill discounting transaction?  
(A) Kotak Mahindra Bank  
(B) HDFC Bank  
(C) Canara Bank  
(D) ICICI Bank
47. The details of Ashoka's war with Kalinga kingdom is mentioned in \_\_\_\_\_.  
(A) Kalinga Edict (B) XIII Rock Edict  
(C) Sarnath Pillar (D) None of these
48. What is the name of China's ambitious Mars Rover Mission?  
(A) Tiang-1 (B) Tianwen-1  
(C) Zing-VI (D) Xiangong-II
49. Coronation of Shivaji took place in which year?  
(A) 1680 A.D. (B) 1627 A.D.  
(C) 1674 A.D. (D) 1664 A.D.
50. "Pyridoxine" is chemical name of which vitamin?  
(A) Vitamin C (B) Vitamin B2  
(C) Vitamin B6 (D) Vitamin B12

### Quantitative Aptitude

**Directions (51-53)** Five companies manufactured three different types of LED bulbs. The table given below shows the total number of bulbs manufactured, percentage of type A, LEDs manufactured and ratio number of type B,



LEDs manufactured to number of type C, LEDs manufactured.

Companies	Total	Type A	Type B : Type C
P	2000	34%	6:5
Q	2500	20%	9:7
R	1500	30%	4:3
S	1800	25%	2:3
T	3000	35%	6:7

51. What is the ratio of number of type B, LEDs manufactured by company Q to the same by company T?  
(A) 4:5 (B) 3:2  
(C) 6:5 (D) 5:4
52. What is the total number of type C, LEDs manufactured by company R and S together?  
(A) 1220 (B) 1240  
(C) 1260 (D) 1280
53. What is the average number of type A, LEDs sold by companies P, Q, R and S?  
(A) 480 (B) 520  
(C) 560 (D) 540
54. Number of Type C, LEDs manufactured by company P is how much percent more/less than number of type B, LEDs manufactured by company S?  
(A) 11.11% (B) 22.22%  
(C) 9.09% (D) 15%
55. From two points on the ground and lying on a straight line through the foot of a pillar, the two angles of elevation of the top of the pillar are complementary to each other. If the distances of the two points from the foot of the pillar are 12 metres and 27 metres and the two points lie on the same side of the pillar, then the height of the pillar is:  
(A) 16 metres (B) 24 metres  
(C) 18 metres (D) 12 metres
56. Amar, Akbar and Anthony can complete a work in 25 days, 30 days and 40 days respectively. All of them together completed the work. If the total wage received by them is Rs. 2950, then find the share of Amar.  
(A) Rs. 1200 (B) Rs. 720
- (C) Rs. 1570 (D) Rs. 1440
57. If the total surface area of a sphere is  $616 \text{ cm}^2$ , then find the circumference of a circle whose radius is equal to that of the sphere.  
(A) 22 cm (B) 154 cm  
(C) 88 cm (D) 44 cm
58. A number is deducted by 30% of itself, and then 20% of the resultant number is deducted from the resultant number to get 3024. Find the original number.  
(A) 4800 (B) 5400  
(C) 6000 (D) 5100
59. The speed of a car is 20% more than that of a bike. Both of them starts at same time from city 'P' and reaches city 'Q' which is 675 km apart from city 'P', at the same time. In between city 'P' and 'Q' the car made 15 stops of 6 minutes each. Find the speed of the car.  
(A) 60 km/hr (B) 90 km/hr  
(C) 125 km/hr (D) 120 km/hr
60. If a number 'x' is subtracted from another number 'y' then the resultant is 75% of the 'x'. The sum of 'x' and 'y' is 143. Find the difference between 'x' and 'y'.  
(A) 26 (B) 28  
(C) 39 (D) 42
61. An article is sold at a profit of 15% after marking it up by 25%. If the discount offered on the article is Rs. 164, then find the selling price of the article.  
(A) Rs. 1758 (B) Rs. 2024  
(C) Rs. 1972 (D) Rs. 1886
62. Rs. 12500 when it is first invested at 20% p.a. simple interest for 3 years and then the same amount is invested at 30% p.a. compound interest, compounded annually for 2 years. Find the total interest earned from both SI and CI.  
(A) Rs. 14805 (B) Rs. 18420  
(C) Rs. 15275 (D) Rs. 16125
63. The slope of a line AB is -5. Another line CD which is perpendicular to AB has the coordinates (3, y) and (-2, 4) respectively. Find the possible value of y.  
(A) 5 (B) 3

- (C) -6 (D) -4
64. The ratio of efficiencies of A, B and C is 9:8:7 respectively. If all of them can complete the whole work in 75 days then find the time taken by A and C together to complete 64% of the total work.  
(A) 75 days (B) 72 days  
(C) 80 days (D) 76 days
65. The numbers of the sequence 52, 51, 48, 43, 34, 27, 16 forms a pattern and one number is odd one out. What will come in the place of odd one out number?  
(A) 54 (B) 46  
(C) 30 (D) 36
66. If x is subtracted from each of 26, 46, 35 and 65, the numbers so obtained are in proportion. What is the mean proportion between  $(6x + 1)$  and  $(x - 4)$ .  
(A) 12 (B) 14  
(C) 16 (D) 10
67. The ratio of the number of males and females in college 'A' is 9:8. The number of males in college 'B' is 2000 more than that in 'A'. If the number of females in college 'A' is 4000 less than the number of males in 'B' then find the total number of students in college 'A'.  
(A) 28000 (B) 34000  
(C) 36000 (D) 42000
68. The cost price of an article is Rs. 330 less than its selling price. The article is marked up by 30% and the discount offered on the article is Rs. 165. Find the cost price of the article.  
(A) Rs. 1650 (B) Rs. 1920  
(C) Rs. 1420 (D) Rs. 1780
69. The perimeter of an isosceles triangle is 132 cm. The equal sides of the triangle is  $(7/8)$ th of its base. Find the base of the isosceles triangle.  
(A) 46 cm (B) 48 cm  
(C) 56 cm (D) 36 cm
70. ABCD is a rhombus in which angle BAD =  $72^\circ$ . Equilateral triangles AMB and BNC are drawn outside the rhombus on sides AB and BC. Calculate the measure of the angle BMN.  
(A)  $24^\circ$  (B)  $36^\circ$
- (C)  $48^\circ$  (D)  $30^\circ$
71. If the ratio of number of sides of two regular polygons is 2:3 respectively and the ratio of their interior angles is 6:7 respectively then find the number of sides of the two polygons.  
(A) 8 and 12 (B) 6 and 9  
(C) 2 and 3 (D) 10 and 15
72. The radius of the base of a conical tent is 12 metres. The tent is 9 metres high. Find the cost of canvas required to make the tent, if one square metre of canvas costs Rs. 120. [Take  $\pi = 3.14$ ]  
(A) Rs. 76824 (B) Rs. 67884  
(C) Rs. 67842 (D) Rs. 67824
73. Find the value of  $(2/3)(\sin^2 60^\circ + \cos 30^\circ - \tan 60^\circ) + \operatorname{cosec}^2 45^\circ$   
(A)  $(5 - 2\sqrt{3})/2$  (B)  $(3 - 4\sqrt{3})/4$   
(C)  $(6 - 5\sqrt{3})/3$  (D)  $(3 - 4\sqrt{3})/2$
74. If  $x = (\sqrt{5} + 3)$  then find the value of  $\{2x/(1 + \sqrt{5})\} + (1 - \sqrt{5})$   
(A) 2 (B) 4  
(C) 6 (D) 0
75. Find the value of  $\{45^2 - (1207.5 + 2202.5)\} \div 25$   
(A) -54.5 (B) -62.2  
(C) -55.4 (D) None of these

### English Language

**Directions (76-77)** In the following question, a sentence is given in which an idiom is highlighted. From the options below, choose the one that gives the correct meaning of the idiom.

76. I had to **kick my heels** for hours at the Istanbul airport as my flight was delayed.  
(A) To be arrested  
(B) To rest  
(C) To wait or pass time aimlessly  
(D) To wait impatiently
77. We **keep an open house** on Christmas to help the poor.  
(A) To provide hospitality to visitors  
(B) To give alms  
(C) A generous person  
(D) A miser

**Direction (78-79)** In the following question, a sentence has been given in Active/ Passive Voice. Out of the four alternatives suggested, select the one which best expresses the same sentence in Passive/ Active Voice.

78. The puzzle was solved by the students.  
 (A) The students solved the puzzle.  
 (B) The students had solved the puzzle.  
 (C) The students have solved the puzzle.  
 (D) The students will solve the puzzle.

79. They had made an announcement about the games.  
 (A) An announcement about the games was made by them.  
 (B) An announcement about the games had been made by them.  
 (C) An announcement about the games is made by them.  
 (D) An announcement about the games had been made by them.

80. In the following question, a sentence has been given in Direct/ Indirect speech. Out of the four alternatives suggested, select the one which best expresses the same sentence in Direct/ Indirect speech.  
 The coach said, "He can win this game."  
 (A) The coach said that he can win this game.  
 (B) The coach said that he could win that game.  
 (C) The coach said that he could win this game.  
 (D) The coach said that he could win a game.

**Direction (81-82)** In the question below, an idiom is given, followed by four options. Select the option that gives the correct meaning of the idiom.

81. Meet one's Waterloo  
 (A) To care for something deeply  
 (B) To be defeated  
 (C) To conquer  
 (D) To utilise time efficiently
82. Sit on the fence  
 (A) To follow the orders  
 (B) To delay making a decision  
 (C) To overpower someone  
 (D) To take revenge

**Directions (83-84)** In the following question, choose the word opposite in meaning to the given word.

83. Tardy  
 (A) Pleasant (B) Malleable  
 (C) Dirty (D) Punctual
84. Redundant  
 (A) Jostle (B) Heinous  
 (C) Essential (D) Humorous

**Direction (85-86)** In the following question, out of the four alternatives, choose the one which can be substituted for the given words/sentence.

85. The study of sound  
 (A) Altruistic (B) Acoustics  
 (C) Botany (D) Epigraphy
86. Something that is kept as a memory of a special event  
 (A) Regalia (B) Granary  
 (C) Hive (D) Souvenir

87. In the following question, a sentence is given with a phrase or idiom in brackets. Select the option given below that can replace the bracketed phrase.  
 The government (will come out with) a white paper in four months to cut taxes on steel companies.  
 (A) Would reprimand (B) Will introduce  
 (C) Would launched (D) No improvement

**Direction (88-89)** In the following question, four different words are given, out of which only one is correctly spelled. Find the correctly spelled word.

88. (A) Tweaking (B) Termenating  
 (C) Tweesting (D) Traking
89. (A) Recieve (B) Achieve  
 (C) Percieve (D) Greive

90. In the following question, four different words are given, out of which only one is incorrectly spelled. Find the word that is incorrectly spelled.  
 (A) Squinting (B) Accesability



(C) Distinguishable (D) Extinct

**Direction (91-92)** In the question given below, rearrange the fragments in the correct order, and choose the correct option.

91. P: India has been reeling under a major water crisis.

Q: The impact of drought has been identified in more than 50 per cent of districts.

R: The extent and magnitude of water scarcity vary across regions.

S: It has tied the nation together to explore possible ways to handle this grappling situation of the water crisis.

(A) PQRS

(B) QPRS

(C) SQPR

(D) RPQS

92. P: The demographic dividend can only be availed if there are sufficient opportunities to grow.

Q: India is a fast-growing economy with a very young population.

R: The government has been making efforts to create a conducive environment for self-employment and growth.

S: This is necessary if India has to rise to be a global power in the near future.

(A) PQRS

(B) QPRS

(C) PQSR

(D) QPSR

**Directions (93-95)** In the following question, a sentence has been given in Active/ Passive Voice. Out of the four alternatives suggested, select the one which best expresses the same sentence in Passive/Active Voice.

93. A war was declared by Britain.

(A) Britain declared a war.

(B) Britain declares war.

(C) Britain has declared war.

(D) Britain will declare war.

94. I made pasta last night.

(A) Pasta is made by me last night.

(B) Pasta has been made by me last night.

(C) Pasta was made by me last night.

(D) Pasta had been made by me last night.

95. The police has arrested the politician for obstruction of justice.

(A) The politician was arrested by the police for obstruction of justice.

(B) The politician had been arrested by the police for obstruction of justice.

(C) The politician has been arrested by the police for obstruction of justice.

(D) The politician is arrested by the police for obstruction of justice.

**Directions (96-100)** In the following passage, some of the words have been left out and replaced by a blank. First read the passage and try to understand what it is about. Then fill in the blanks as per the questions given.

It is important to \_\_\_\_\_ that the mismatch between the qualifications of graduates and market needs is not the only explanation for their unemployment and underemployment. Graduates have \_\_\_\_\_ for the simple reason that the quality of their education is not on par with market needs. It is common knowledge that with the \_\_\_\_\_ of institutions of higher education in the country the overall quality of higher education has \_\_\_\_\_, often miserably. Cognitive skills and the ability to think independently and creatively is not \_\_\_\_\_ developed.

96. \_\_\_\_\_ important to \_\_\_\_\_ that

(A) Recognise

(B) Devise

(C) Compromise

(D) Organise

97. Graduates have \_\_\_\_\_ for

(A) Ceded

(B) Rejected

(C) Deranged

(D) Exorbitant

98. \_\_\_\_\_ with the \_\_\_\_\_ of institutions

(A) Revolving

(B) Mushrooming

(C) Deferring

(D) Referring

99. higher education has \_\_\_\_\_, often miserably.

(A) Concord

(B) Docked

(C) Dropped

(D) Stocked

100. creatively is not \_\_\_\_\_ developed

(A) Popularly

(B) Easily

(C) Invariably

(D) Adequately

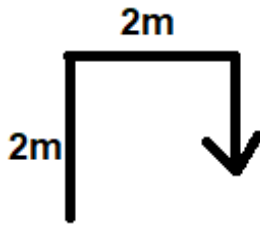
## Solution

### Reasoning Aptitude

**Ans.1(C)** The words can be arranged logically in the following manner:

- |              |             |
|--------------|-------------|
| 1. Illness   | 2. Doctor   |
| 3. Diagnosis |             |
| 4. Medicine  | 5. Recovery |

**Ans.2(B)**



So, now he is facing south direction.

**Ans.3(C)**

Given

JPC: GMZ :: NTW

So, the pattern is J-3=G, P-3=I, C-3=A.

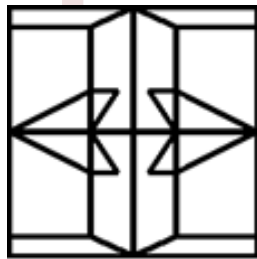
N-3=K, T-3=Q, W-3=T.

**Ans.4(D)** There are more than 10 quadrilaterals present in the figure.

**Ans.5(A)** According to the given  
 $108 \div 36 + 54 \times 2 - 36 = 75$ .

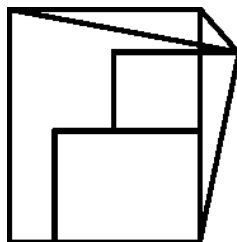
**Ans.6(B)** The color of Sky is Blue and Blue is called Rain.

**Ans.7(D)**



**Ans.8(C)** All are capitals cities of countries except Shanghai.  
 Lebanon-Beirut  
 Vietnam-Hanoi  
 Pakistan-Islamabad

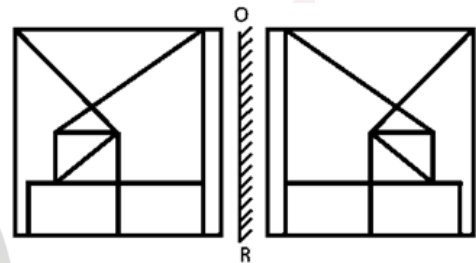
**Ans.9(C)**



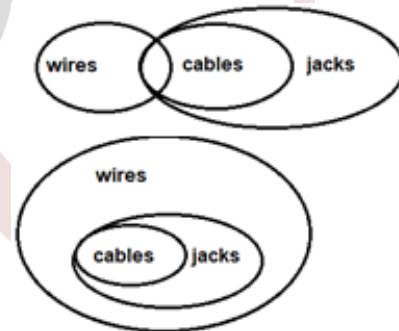
**Ans.10(D)** Ram's mother's only daughter's daughter which means Ram and the girl's mother are siblings. Thus, the girl in the photograph is the granddaughter of Ram's mother.

**Ans.11(B)** According to Mansi, her father's birthday falls on one of the days among 9th, 10th, 11th, 12th of December. According to Rashi, her father's birthday falls on one of the days among 10th, 11th, 12th, 13th.

**Ans.12(D)**



**Ans.13(C)** Following figures can be formed from the statements.

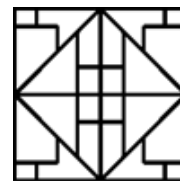


So, from the above figures it is clear that all cables can be wires.

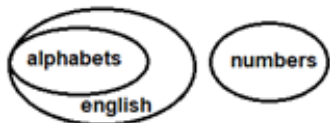
**Ans.14(A)** D was standing at one of the ends and third to the right of C. B was right of E and left of D. E was not at the end which means A was at the left end of the line.



**Ans.15(D)**



**Ans.16(B)** Following Venn diagram can show the relation among English, alphabets and numbers



**Ans.17(A)** Let the age of Amit, his son and his wife is x, y and z respectively.

According to the question,

$$x+y=52$$

$$x+y+z=75 \text{ (average is 25)}$$

$$\text{So, } 52+z=75$$

$$z=23 \text{ years}$$

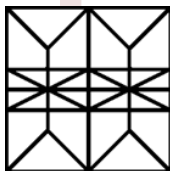
**Ans.18(B)** Only son of woman's mother means her brother so clearly, he is the son of her mother.

**Ans.19(D)** Neither, Underground, Manchester, Mainstream, Train, Terminal.

Position of letter 'N' in each of the words, shifts one letter to the right as we go from left to right in the given sequence.

**Ans.20(C)** RUSTS can't be formed the word SUBSTITUTES because there is no "R" in the given word.

**Ans.21(B)**



**Ans.22(D)** Except cycle, all are fuel driven vehicles.

**Ans.23(C)**  $15 \times 5 = 75$

$$31 \times 3 = 93$$

$$24 \times 3 = 72$$

**Ans.24(D)** The possible weight of D is 10kg because D is lighter than C, whose weight is 20kg.

**Ans.25(D)** +2 in every letter to get the next set of word.

$$\text{So, } G+2=I, I+2=K, J+2=L$$

### General Studies

**Ans.26(C)** The 'Onge' are one of the Andamanese indigenous peoples of the Andaman Islands.

**Ans.27(C)** A, 7.8 magnitude earthquake hit the coast of Alaska on July 22, 2020. This was confirmed by National Oceanic and Atmospheric Administration. A Tsunami warning had been issued initially but it was later cancelled.

**Ans.28(C)** By the 1850s, the Santhals felt that the time had come to rebel against zamindars, moneylenders and the colonial state, in order to create an ideal world for themselves where they would rule. It was after the Santhal Revolt (1855-56) that the Santhal Pargana was created, carving out 5,500 square miles from the districts of Bhagalpur and Birbhum.

**Ans.29(D)** Doddabetta is the highest mountain in the Nilgiri Hills, at height of 2637 metres.

**Ans.30(B)** The national flag of **Nepal** is the world's only non-quadrilateral flag that acts as both the state flag and civil flag of a sovereign nation. The flag is a simplified combination of two single pennons (or pennants), known as a double-pennon.

**Ans.31(A)** BIOS (basic input/output system) is the program a personal computer's microprocessor uses to get the computer system started after you turn it on.

**Ans.32(B)** Annual Financial Statement. Annual Financial Statement is a documents presented to the Parliament in every financial year as a part of the Budget Process under Article 112 of the constitution of India.

**Ans.33(C)** World's first armed amphibious drone boat named "**Marine Lizard**" is developed by China. It can be used in land and sea assault operations.

**Ans.34(B)** The 38th parallel north is a circle of latitude that is 38 degrees north of the Earth's equator. The 38th parallel north formed the border between North and South Korea prior to the Korean War.

**Ans.35(A)** Karnataka Deputy CM C.N. Ashwathnarayan on July 21 inaugurated state's maiden plasma bank at HCG Hospital, Bengaluru as a part of Mission COPE (COVID Plasma Endeavour).

**Ans.36(C)** The term wind energy describes the process by which the wind is used to generate mechanical power or electricity. Wind turbines convert the kinetic energy in the wind into mechanical power.

**Ans.37(D)**  
**Ans.38(D)** The Kalinga War was a war fought between the Mauryan empire and the state of Kalinga. Kalinga (Now in Odisha) was an important kingdom because it



controlled the trade routes with Southeast Asia. Because of this, Ashoka, the Mauryan king, wanted to capture it. Therefore, he led his huge army to Kalinga in 261 BC.

**Ans.39(A)** Metals are good conductors of electricity, because they have free electrons. These free electrons act as charge carriers in the metallic structure, allowing electric current to flow through the metal.

**Ans.40(C)** Narmada is one of the rivers in India that flows in a rift valley, flowing between the Vindhya range and Satpura mountain range.

**Ans.41(B)** During sunrise and sunset, the rays have to travel a larger part of the atmosphere because they are very close to the horizon. Therefore, light other than red is mostly scattered away. Most of the red light, which is the least scattered, enters our eyes. Hence, the sun and the sky appear red.

**Ans.42(D)** Greta Thunberg, a 17-year-old environment activist from Sweden, was named the winner of the first Gulbenkian Prize for Humanity. She is a founder of a school strike for climate and is known as one of the most influential environmental activists.

**Ans.43(A)** July 23rd marks the birth anniversaries of two great freedom fighters of India —Bal Gangadhar Tilak and Chandra Shekhar Azad. Lokmanya Bal Gangadhar Tilak had said the famous line "Swaraj is my birthright and I shall have it."

**Ans.44(D)** The 1951 Asian Games, officially known as the First Asian Games, was a multi-sport event celebrated in New Delhi, India from 4 to 11 March 1951. The Games received names like First Asiad and 1951 Asiad.

**Ans.45(D)** Anamudi is the highest mountain peak in the Western Ghats and also the highest point in South India, located in the southern region of Eravikulam National Park. The peak is the highest point of the Periyar river basin and highest peak in Kerala.

**Ans.46(D)**

**Ans.47(B)** Rock Edict XIII mentions victory of Ashoka over Kalinga kingdom (Present Odisha).

**Ans.48(B)** China launched its first ambitious Mars Rover Mission- 'Tianwen-1' on July 23, 2020 aboard Long March 5 rocket from Hainan Island's Wenchang Satellite Launch Center. Tianwen-1 includes a Mars orbiter, a lander and a rover.

**Ans.49(C)** The coronation of Shivaji took place on 6th June, 1674 at Raigad Fort, Maharashtra.

**Ans.50(C)** Pyridoxine, also known as vitamin B6, is a form of vitamin B6 found commonly in food and used as dietary supplement.

### Quantitative Aptitude

**Ans.51(D)** Number of Type B, LEDs manufactured by company Q =  $9/16 \times 0.80 \times 2500 = 1125$

Number of Type B, LEDs manufactured by company T =  $6/13 \times 0.65 \times 3000 = 900$   
Desired ratio =  $1125:900 = 5:4$

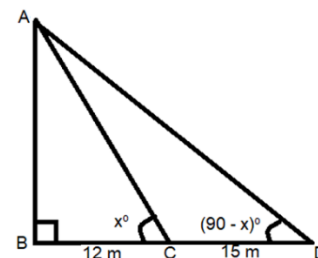
**Ans.52(C)** Number of type C, LEDs manufactured by company R =  $3/7 \times 0.70 \times 1500 = 450$

Number of type C, LEDs manufactured by company S =  $3/5 \times 0.75 \times 1800 = 810$   
Desired number =  $450 + 810 = 1260$

**Ans.53(B)** Desired Average =  $(0.34 \times 2000 + 0.20 \times 2500 + 0.30 \times 1500 + 0.25 \times 1800)/4 = 520$

**Ans.54(A)** Number of Type C LEDs manufactured by company P =  $5/11 \times 0.66 \times 200 = 600$   
Number of Type B LEDs manufactured by company S =  $2/5 \times 0.75 \times 1800 = 540$   
Desired Percentage =  $[(600 - 540)/540] \times 100 = 11.11\%$

**Ans.55(C)**



Let height of the pillar is 'h' metres.

In triangle ABC

$$\tan x = AB/BC = h/12$$

$$\text{So, } h = 12 \tan x$$

In triangle ABD  
 $\cot(90 - x) = BD/AB = 27/h$   
 $h = 27/\tan x$   
 So,  $h^2 = 27 \times 12 = 324$   
 $h = 18$  metres

**Ans.56(A)** Let the total work  
 = 600 units (L.C.M of 25, 30 and 40)  
 Efficiency of Amar =  $600/25 = 24$   
 units/day  
 Efficiency of Akbar =  $600/30 = 20$   
 units/day  
 Efficiency of Anthony =  $600/40 = 15$   
 units/day  
 Ratio of the efficiencies of Amar, Akbar  
 and Anthony = 24:20:15  
 Therefore, share of Amar  
 =  $(2950 \times 24)/(24 + 20 + 15) = \text{Rs. } 1200$

**Ans.57(D)** Let the radius of the sphere and the circle  
 be 'r' cm.  
 According to the question,  
 $4\pi r^2 = 616$   
 Or,  $r^2 = (616 \times 7)/88 = 49$   
 Or,  $r = 7$  cm  
 Therefore, circumference of the circle  
 =  $2\pi r = 2 \times (22/7) \times 7 = 44$  cm

**Ans.58(B)** Let the original number be 'x'  
 According to the question,  
 $(x - 0.30x - 0.20 \times 0.70x) = 3024$   
 Or,  $0.56x = 3024$   
 Or,  $x = 3024/0.56 = 5400$

**Ans.59(B)** Let the speed of the bike be 'x' km/hr  
 Therefore, speed of the car =  $1.2x$  km/hr  
 Total time for which the car made the  
 stops =  $15 \times 6 = 90$  minutes =  $90/60 = 1.5$   
 hours  
 According to the question,  
 $675/x - 675/1.2x = 1.5$   
 Or,  $450/x - 375/x = 1$   
 Or,  $x = 75$  km/hr  
 Therefore, speed of the car =  $1.2x = 90$   
 km/hr

**Ans.60(C)** According to the question,  
 $(y - x) = 0.75x$   
 Or,  $y - 1.75x = 0$ ..... (1)  
 Also,  $y + x = 143$ ..... (2)  
 On solving equation (1) and (2), we get  
 $x = 52$  and  $y = 91$   
 Therefore, required difference =  $91 - 52 = 39$

**Ans.61(D)** Let the cost price of the article be Rs. x  
 Therefore, marked price of the article

= Rs.  $1.25x$   
 Selling price of the article = Rs.  $1.15x$   
 According to the question,  
 $1.25x - 1.15x = 164$   
 Or,  $0.10x = 164$   
 Or,  $x = \text{Rs. } 1640$   
 Selling price of the article =  $1.15x = \text{Rs. } 1886$

**Ans.62(D)** Interest received at simple interest  
 =  $(12500 \times 20 \times 3)/100 = \text{Rs. } 7500$   
 Interest received at compound interest,  
 compounded annually  
 =  $12500(1 + 30/100)^2 = \text{Rs. } 8625$   
 Required sum =  $7500 + 8625 = \text{Rs. } 16125$   
**Ans.63(A)** Slope of CD =  $(-1/-5) = 1/5$   
 Therefore,  
 $(4 - y)/(-2 - 3) = 1/5$   
 $4 - y = -1$   
 Or,  $y = 5$

**Ans.64(B)** Let efficiency of A, B and C be  $9x$ ,  $8x$  and  
 $7x$  units per day respectively.  
 Total work =  $24x \times 75$  units  
 Desired time =  $(0.64 \times 24x \times 75)/16x = 72$   
 days

**Ans.65(D)** The series follow the pattern as:  
 $52 - 1 = 51$   
 $51 - 3 = 48$   
 $48 - 5 = 43$   
 $43 - 7 = 36$   
 $36 - 9 = 27$   
 $27 - 11 = 16$

So, 36 should come in place of 34.  
**Ans.66(B)** Let the number is subtracted be 'x'  
 According to question;  
 $(26 - x)/(46 - x) = (35 - x)/(65 - x)$   
 $1690 + x^2 - 91x = 1610 + x^2 - 81x$   
 $10x = 80$   
 $x = 8$   
 So, mean proportional =  $\sqrt{(49 \times 4)} = 7 \times 2 = 14$

**Ans.67(B)** Let the number of males and females in  
 college 'A' be  $9x$  and  $8x$  respectively.  
 Therefore, number of males in college 'B'  
 =  $(9x + 2000)$   
 Therefore, number of females in college  
 'A'  
 =  $9x + 2000 - 4000 = (9x - 2000)$   
 Therefore,  $9x - 2000 = 8x$   
 Or,  $x = 2000$   
 Therefore, total number of students in  
 college 'A' =  $9x + 8x = 34000$

**Ans.68(A)** Let the cost price of the article be Rs.  $x$

Therefore, marked price of the article = Rs.  $1.3x$

Selling price of the article = Rs.  $(1.3x - 165)$

According to the question,

$$1.3x - 165 - 330 = x$$

$$\text{Or, } 0.3x = 495$$

$$\text{Or, } x = \text{Rs. } 1650$$

**Ans.69(B)** Let the base of the triangle be  $8a$  cm.

Therefore, other two sides of the triangle

$$= (7/8) \times 8a = 7a \text{ cm}$$

According to the question,

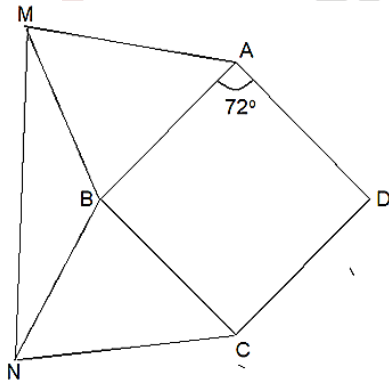
$$7a + 7a + 8a = 132$$

$$\text{Or, } 22a = 132$$

$$\text{Or, } a = 132/22 = 6 \text{ cm}$$

Therefore, base of the triangle =  $8a = 48$  cm

**Ans.70(A)**



$$\text{Angle } ABC = 180^\circ - 72^\circ = 108^\circ$$

$$\text{Angle } MBN = 360^\circ - 60^\circ - 60^\circ - 108^\circ = 132^\circ$$

$$\text{So, Angle } BMN = (180^\circ - 132^\circ)/2 = 24^\circ$$

**Ans.71(B)** Let the number of sides of both polygon be  $2x$  and  $3x$ , respectively.

Interior angle =  $(2n - 4)/n \times 90^\circ$ , where  $n$  is number of sides

According to question;

$$\{(2 \times 2x - 4)/2x\} \times 90^\circ / \{(2 \times 3x - 4)/3x\} \times 90^\circ$$

$$= 6/7$$

$$3(4x - 4) \times 7 = 2 \times 6 \times (6x - 4)$$

$$28x - 28 = 24x - 16$$

$$4x = 12$$

$$x = 3$$

**Ans.72(D)** Slant height of the cone =  $\sqrt{(12^2 + 9^2)}$

$$= \sqrt{225} = 15 \text{ metres}$$

$$\text{Cost of canvas} = 120 \times 3.14 \times 12 \times 15$$

$$= \text{Rs. } 67824$$

**Ans.73(A)**  $(2/3)\{(\sqrt{3}/2)^2 + (\sqrt{3}/2 - \sqrt{3})\} + (\sqrt{2})^2$

$$= (2/3)(3/4 + \sqrt{3}/2 - \sqrt{3}) + 2$$

$$= (5 - 2\sqrt{3})/2$$

**Ans.74(A)**  $\{(2(\sqrt{5} + 3)/(1 + \sqrt{5}))\} + (\sqrt{5} + 3)^2$

$$= \{(2\sqrt{5} + 6)(1 - \sqrt{5})/(1 + \sqrt{5})(1 - \sqrt{5})\} + (1 - \sqrt{5})$$

$$= (-4 - 4\sqrt{5})/-4 + (1 - \sqrt{5})$$

$$= 1 + \sqrt{5} + 1 - \sqrt{5} = 2$$

**Ans.75(C)**  $\{45^2 - (1207.5 + 2202.5)\} \div 25$

$$= \{2025 - 3410\} \div 25$$

$$= -55.4$$

### English Language

**Ans.76(C)** ‘Kick one’s heels’ means “to wait or be kept waiting”.

**Ans.77(A)** The idiom ‘keep an open house’ means “to be always ready to provide hospitality”.

**Ans.78(A)** The sentence is in the indicative mood and passive voice. Follow the rules below to convert a sentence in the indicative mood to active voice:

1. The subject clause will become the object clause. Here, the subject THE PUZZLE will change to the object, and the object THE STUDENTS will change into the subject and begin the sentence.

2. Replace WAS SOLVED with SOLVED.

3. Remove the conjunction BY before THE STUDENTS.

**Ans.79(D)** The sentence is in the indicative mood and active voice. Follow the rules below to convert a sentence in the indicative mood to passive voice:

1. The subject clause will become the object clause. Here, the subject pronoun THEY will change to the object form THEM, and the object AN ANNOUNCEMENT ABOUT THE GAMES will change into the subject and begin the sentence.

2. Replace HAD MADE with HAD BEEN MADE.

3. Insert the conjunction BY before THEM.

**Ans.80(B)** The sentence is in direct speech and in the indicative mood. To convert this sentence to the indirect speech, follow these rules:



1. Remove the comma and the inverted commas.

2. Begin the indirect speech sentence with the reporting speech clause THE COACH SAID.

3. Put THAT between the reporting and reported speeches.

4. Change the modal verb CAN to COULD.

5. Change the demonstrative pronoun THIS to THAT.

**Ans.81(B)** MEET ONE'S WATERLOO means 'to face a defeat or suffer a loss'. (B) conveys the requisite meaning of the idiom.

**Ans.82(B)** 'SIT ON THE FENCE' means 'not to make a decision instantly'. (B) conveys the requisite meaning of the idiom.

**Ans.83(D)** TARDY means delaying or delayed beyond the right or expected time; late. PUNCTUAL is the antonym.

PLEASANT- giving a sense of happy satisfaction or enjoyment.

MALLEABLE- (of a metal or other material) able to be hammered or pressed into shape without breaking or cracking.

DIRTY- covered or marked with an unclean substance.

**Ans.84(C)** REDUNDANT means something which is no longer needed or useful. ESSENTIAL is the antonym.

JOSTLE- to push, elbow, or bump against (someone) roughly, typically in a crowd.

HEINOUS- (of a person or wrongful act, especially a crime) utterly odious or wicked.

HUMOROUS- causing laughter and amusement; comic.

**Ans.85(B)** ACOUSTIC is a branch of physics concerned with the study of sound.

Altruistic- A person who is selfless, Botany- Study of plants, Epigraphy- Study and interpretations of ancient inscriptions.

**Ans.86(D)** SOUVENIR is 'something you buy or keep to help you remember a holiday or special event'. (D) conveys the requisite meaning of the sentence.

Regalia- official and traditional special clothes and decorations, Hive- a structure where bees live, Granary- Storing place for grains.

**Ans.87(B)** The sentence talks of a white paper that would be launched by the government. (B) conveys the requisite meaning.

(A) is incorrect as reprimanded means 'to criticize' thus does not convey the meaning of the phrase.

(C) is grammatically incorrect as the modal verb 'WOULD' always takes the base form verb after it; LAUNCHED is a second form verb.

**Ans.88(A)** TWEAKING is the correct word which means 'pulling something sharply'.

Terminating- Closing, Twisting- Changing, Tracking- Following.

**Ans.89(B)** The correct word is 'ACHIEVE' which means 'attain'.

Receive- Sustain, Perceive-Discern, Grieve- Mourn.

**Ans.90(B)** The correct spelling is ACCESSIBILITY which means 'Intelligibility'.

Squinting- narrow one's eyes.

Distinguishable- Detectable.

Extinct- Vanished.

**Ans.91(A)** The correct sequence is -PQRS. P begins the sentence by introducing the subject - WATER CRISIS IN INDIA. Q follows P by identifying the regions of water scarcity. R follows Q by stating the extent of the problem which is variable across different regions. S concludes it telling us how the water crisis has united the nation to explore ways to tackle the water crisis.

**Ans.92(B)** The correct sequence is QPRS. Q begins the sentence by introducing the subject- INDIAN ECONOMY. P follows Q as it talks about how the country can reap the benefits of demographic dividend. R follows P by stating the government's steps to stimulate growth. S concludes it by stating the capability of India to become a global power

**Ans.93(A)** The sentence is in indicative mood and passive voice. Follow the rules below to convert a sentence in indicative mood to active voice:

1. The subject clause will become the object clause. Here, the subject (A WAR) will change to the object of the verb, and the object (BRITAIN) will change into the subject and begin the sentence.

2. Replace WAS DECLARED with DECLARED.

4. Remove the conjunction BY before BRITAIN.

**Ans.94(C)** The sentence is in active voice and in simple past tense (MADE). Follow the rules below to convert a sentence in indicative mood to passive voice:

1. The subject clause will become the object clause. Here, the subject pronoun I will change to the object of the verb and assume the object form ME, and the object PASTA will change into the subject and begin the sentence.

2. Replace MADE with WAS MADE. The passive voice construction for simple past tense is "was/ were + past participle".

3. Add the conjunction BY before ME to link the verb with its object.

**Ans.95(C)** The sentence is in active voice and in present perfect tense (HAS ARRESTED). Follow the rules below to convert a sentence in indicative mood to passive voice:

1. The subject clause will become the object clause. Here, the subject THE POLICE will change to the object of the verb, and the object THE POLITICIAN will change into the subject and begin the sentence.

2. Replace HAS ARRESTED with HAS BEEN ARRESTED. The passive voice construction for present perfect tense is "HAS + BEEN + past participle".

3. Add the conjunction BY before THE POLICE to link the verb with its object.

**Ans.96(A)** We need a base form of the verb to fit in the infinitive construction TO + VERB. RECOGNISE is a verb which means 'acknowledge'. It will fit here as the sentence talks about the recognising the issue-mismatch between the qualifications of graduates and market needs.

Devise(verb)- Conceive,  
Compromise(noun)- Settlement,  
Organise(verb)- Arrange.

**Ans.97(B)** We need a past participle form of the verb to fit in the present perfect tense construction- HAVE+VERB. REJECTED is a verb which means 'dismissed'. It will fit here as the sentence talks about the

reason why most of the graduates rejected for the job as they lack the skill.

Ceded- surrendered, Deranged- Insane, Exorbitant(adjective)- Excessively costly.

**Ans.98(B)** We need a noun/ gerund which is to be modified by the definite article 'THE'.

MUSHROOMING is a gerund which means 'expanding or growing rapidly'. It will fit here as the sentence talks about how the institutes have expanded but quality education of declined.

Revolving(verb)- Considering, Deferring (verb)- Delaying, Referring(verb)- Concerning.

**Ans.99(C)** We need a past participle form of the verb to fit in the present perfect tense construction- HAS+VERB. DROPPED is a verb which means 'declined'. It will fit here as the sentence contradicts the first part which shows how institutes have increase over the years while education quality dropped.

Concord(noun)- Agreement, Docked (verb)- Beach, Stocked(verb)- supplied.

**Ans.100(D)** We need an adverb to modify the verb (developed). ADEQUATELY is an adverb which means 'to a satisfactory level'. It will fit here as the sentence talks about the cognitive skills and thinking ability of graduates who lacks these traits due to lack of quality education.

Popularly- Generally, Easily-Simply, Invariable- Always.

**"Many of life's failures are people who did not realize how close they were to success when they gave up."**

## RRB NTPC Mains Solved Paper

### General Awareness

1. As per Article 24 of Indian Constitution, no child is allowed to work in any factor who is below  
(A) Twelve years of age  
(B) Eighteen years of age  
(C) Fourteen years of age  
(D) Sixteen years of age
2. The frequency of the wave whose time period is 0.05 sec is  
(A) 5 Hz  
(B) 10 Hz  
(C) 20 Hz  
(D) 40 Hz
3. From these hormones, which is not secreted by Pituitary Gland?  
(A) LTH  
(B) STH  
(C) ADH  
(D) Cretinism
4. What is the name of India's first female legislator in whose honor Google made a doodle?  
(A) Savitri Swamy  
(B) Ankita Deshpande  
(C) Muthulakshmi Reddy  
(D) Aarti Narayan
5. The aqueous solution of which of the following acids is called vinegar?  
(A) Oxalic acid  
(B) Citric acid  
(C) Acetic acid  
(D) Hydrochloric acid
6. Which of the following award is presented in the fields of classical music, classical dance, theatre and visual art?  
(A) Kalidas Award  
(B) Maithilisharan Gupt Award  
(C) Iqbal Award  
(D) Sharad Joshi Award
7. Which Bank has signed an MoU with Bharat Sanchar Nigam Limited to provide seamless telecom services to the Indian Bank at competitive market rates?  
(A) Allahabad Bank  
(B) Canara Bank  
(C) ICICI Bank  
(D) Indian Bank
8. Arrange the following Indian States in descending order of their geographical areas:  
I. Rajasthan  
II. Tamil Nadu  
III. Maharashtra  
IV. Karnataka
9. Which of the following statements is incorrect about Fundamental Rights?  
(A) New technologies may endanger these rights  
(B) Equality is one of the moral and political ideals in India, they are superior to ordinary laws  
(C) In India, these are economic and political rights integral part of the Constitution  
(D) In India, it is highly described as Magna Carta of India
10. Who of the following has launched two loan products for MSMEs SHWAS & AROG?  
(A) SIDBI  
(B) RBI  
(C) SEBI  
(D) SBI
11. The National Company law tribunal was set up in India under which of the following act?  
(A) Companies act 2013  
(B) Companies act 1956  
(C) Companies act 2017  
(D) None of these
12. The headquarters of The National Council of Science Museums is in.....  
(A) New-Delhi  
(B) Karnataka  
(C) Andhra-Pradesh  
(D) Kolkata
13. Who has been appointed as the Goodwill ambassador of UNDP (United Nations Development Programme)?  
(A) Antonio Banderas  
(B) Didier Drogba  
(C) Padma Lakshmi  
(D) Connie Britton
14. Which is a tool designed for large organizations, where employees need to connect to a server from different locations to access key files and information?  
(A) Virtual private network  
(B) Enterprise software  
(C) Content access software  
(D) Simulation software
15. Who was the last person to walk on Moon during the Apollo 17 Mission?  
(A) I, II, III, IV  
(B) III, I, IV, II  
(C) I, III, IV, II  
(D) III, IV, I, II



- (A) Alan Shepard (B) John Watts Youn  
(C) Eugene Cernan (D) James Irwin
16. The second largest earthquake ever recorded with a magnitude of 8.2 shook which country?  
(A) Bolivia (B) Russia  
(C) Japan (D) Seychelles
17. Which of the following bacterium is responsible for causing Leptospirosis?  
(A) Leptospira interrogans  
(B) Staphylococcus aureus  
(C) Streptococcus pyogenes  
(D) Vibrio cholera
18. Flatworm belongs to which of the following Phylum of the Animal Kingdom?  
(A) Phylum Annelida  
(B) Phylum Arthropoda  
(C) Phylum Platyhelminthes  
(D) Phylum Mollusca
19. Which of the following enzyme is not present in Pancreatic juice?  
(A) Trypsin (B) Erepsin  
(C) Maltase (D) Both B and C
20. The blood circulation inside the human body takes approximately how many seconds?  
(A) 50 sec (B) 23 sec  
(C) 19 sec (D) 35 sec
21. Which planet of the solar system is also known as the 'Winter Planet'?  
(A) Venus (B) Mercury  
(C) Mars (D) Jupiter
22. Burzi-La and Zoji-La are the two important passes in the state of .....?  
(A) Himachal Pradesh  
(B) Jammu and Kashmir  
(C) Andhra Pradesh  
(D) Uttar Pradesh
23. Who among the following controls the entire financial system of the Union as well as the States?  
(A) Comptroller and Auditor general of India  
(B) Attorney General of India  
(C) The finance minister  
(D) The vice-president
24. The first finance commission of India was constituted in which year?  
(A) 1956 (B) 1951  
(C) 1972 (D) 1964
25. The spherical shape of the soap bubble is caused due to which phenomenon?  
(A) Viscosity (B) Elasticity  
(C) Surface tension (D) Reflection
26. What is the SI unit of angular velocity?  
(A) Hertz  
(B) Kilogram square meter  
(C) Radian per second  
(D) Kilogram metre per second
27. What is the effect on entropy in a closed system when the energy changes from one form to another form as per the second law of thermodynamics?  
(A) Increases (B) Decreases  
(C) Becomes zero (D) Either A or B
28. Which compound is used to coat the furniture to prevent them from termites?  
(A) Zinc chloride (B) Calcium hydroxide  
(C) Aluminium sulphate (D) Potassium chloride
29. How many carbon atoms are required in the formation of the lattice structure of the diamond?  
(A) 6 carbon atoms (B) 4 carbon atoms  
(C) 8 carbon atoms (D) 5 carbon atoms
30. Which of the following is another name for Vitamin B1?  
(A) Retinol (B) Riboflavin  
(C) Ascorbic acid (D) Thiamine
31. Indian railways that plays an important role in our life was nationalised in .....?  
(A) 1981 (B) 1990  
(C) 1951 (D) 1945
32. Which scheme was introduced by Indian railways catering and tourism corporation (IRCTC) to provide berths to wait-listed passengers of all the train types and classes in alternate trains?  
(A) Janani vikas scheme (B) Vikalp scheme  
(C) Mission Raftaar (D) None of these

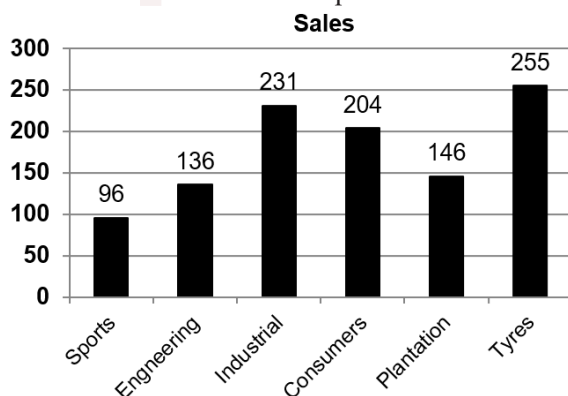
33. The Smart cities mission which is a flagship scheme of Union government will cover how many cities in five years?  
(A) 120 cities (B) 99 cities  
(C) 150 cities (D) 100 cities
34. Sangeet natak akademi award is the most coveted national honour given in the field of.....?  
(A) Music (B) Literature  
(C) Theatre (D) Both A and C
35. Recently, TRIFED has signed an MoU with The LINK Fund, for a collaborative project titled "Sustainable Livelihoods For Tribal Households in India". Where is the headquarter of LINK Fund?  
(A) Paris (B) Geneva  
(C) Zürich (D) Sydney
36. The study of fertilization of egg, formation of zygote and development of embryo is known as?  
(A) Ethnology (B) Embryology  
(C) Etiology (D) Kalology
37. Who was elected as the vice-president of India for the second term in 1957?  
(A) Dr. Zakir Hussain (B) Shri V.V Giri  
(C) Dr. S. Radha Krishnan (D) Dr. Rajendra Prasad
38. Ellora temples were built by which of the following rulers?  
(A) Sunga (B) Rashtrakuta  
(C) Pallava (D) Chalukya
39. Ashtadhyayi, book that set the linguistic standards for classical Sanskrit was written by.....?  
(A) Panini (B) Kapila  
(C) Kautilya (D) None of these
40. According to the Brand Finance Insurance 100 report for 2021 which insurance company is tenth most valuable insurance brand globally?  
(A) Aegon (B) Aviva  
(C) Bajaj (D) LIC
41. What is the effect of inflation on Purchasing power per unit of money?  
(A) Decreases (B) Increases  
(C) Remains stable (D) Neither A nor B
42. SDR's are supplementary foreign exchange reserve assets defined and maintained by.....?  
(A) World Bank  
(B) Reserve bank of India (RBI)  
(C) Government of India  
(D) International monetary fund (IMF)
43. Which hardware device is attached to our personal computer through SCSI port?  
(A) Mouse (B) Keyboard  
(C) Scanner (D) Printer
44. A programming language used almost exclusively to manipulate the content on a web page is .....?  
(A) C language (B) JAVA  
(C) HTML (D) JavaScript
45. 'Kutch Mahotsava' is a famous festival celebrated in which Indian state?  
(A) Madhya Pradesh (B) Bihar  
(C) Uttar Pradesh (D) Gujarat
46. Central industrial security force (CISF) raising day is recognised on ..... ?  
(A) 25 February (B) 15 January  
(C) 10 march (D) 19 December
47. Which instrument is used to measure the rate of the flow of liquids?  
(A) Telemeter (B) Venturimeter  
(C) Odometer (D) Viscometer
48. 'Jal Amrutha Scheme' launched by which state government of India?  
(A) Karnataka (B) Madhya Pradesh  
(C) Andhra Pradesh (D) Bihar
49. Which player has won gold at Makran cup in Boxing?  
(A) Manish Kaushik (B) Jaafar naseri  
(C) Deepak Singh (D) Satish Kumar
50. Which city of Telangana has been added as a destination in the IRCTC's Ramayana Circuit train?  
(A) Khammam (B) Bhadrachalam  
(C) Bhadradi (D) Kothagudem

**Mathematics**

51. Rohit buys an old bat for Rs 1230 and spends Rs 180 on its repairs. If he sells it for Rs 1128, then what is his loss percentage?  
 (A) 12.5% (B) 15%  
 (C) 20% (D) 25%
52. 'Zero' is  
 (A) an even integer (B) an odd integer  
 (C) neither even nor odd (D) even and odd both
53. What is the value of  $\frac{(0.4)^3 + (0.6)^3}{[(0.4)^2 + (0.6)^2 - (0.4) \times (0.6)]}$ ?  
 (A) 1.2 (B) 1.1  
 (C) 1.0 (D) 0.9
54. If the price of an article is decreased by 33.33%, then to restore its former value the new price must be increased by what percent?  
 (A) 33.33% (B) 50%  
 (C) 20% (D) 25%
55. The difference between yearly simple interest and compound interest reckoned half yearly on ` 1,200 for one year at 10% per annum is  
 (A) ` 2.50 (B) ` 3.00  
 (C) ` 4.00 (D) ` 6.00

**Direction (56-58):** Read the following questions carefully and answer the questions as follows

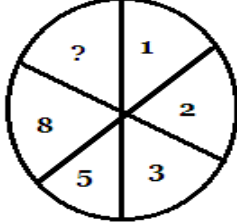
These are the sales data of company is given below. These are the units of that particular department sold in that particular year. Based on this data answer the below questions.



56. What is the average sale of this company?  
 (A) 178 (B) 258  
 (C) 385 (D) 390
57. The sales of engineering and industrial department are how much units more than that of consumers and plantation?  
 (A) 27 unit (B) 17 unit  
 (C) 117 unit (D) 37 unit
58. The units sold by sports department are how much percentage less than that of the sales done by engineering department approximately?  
 (A) 40% (B) 30%  
 (C) 32% (D) 34%
59. When 0.242424.... converted into fraction, then the fraction would be  
 (A) 1/11 (B) 7/11  
 (C) 8/33 (D) 1/4
60. Which of the following numbers is divisible by 19?  
 (A) 21793 (B) 27193  
 (C) 23179 (D) 29173
61. Find the unit digit of  $2^{11} + 3^{12} + 4^{13} + 5^{14} =$   
 (A) 1 (B) 2  
 (C) 8 (D) 4
62. 
$$\frac{5\frac{7}{4} - 4\frac{3}{5}}{\frac{7}{4} - \frac{3}{5}} = ?$$
  
 (A) 58/23 (B) 43/23  
 (C) 53/23 (D) 49/23
63. If the HCM and LCF of two numbers are 143 and 53482, and one of the numbers is 26741, then find the other number?  
 (A) 286 (B) 121  
 (C) 489 (D) 447
64. Find the greatest 3 digit number which when divided 15, 45 and 80 leaves a remainder of 13, 43, 78?  
 (A) 718 (B) 960  
 (C) 698 (D) 788
65. What is the average of all the even numbers between 21 and 41?  
 (A) 31 (B) 32  
 (C) 30 (D) 28



66. A person travels a distance of 40 km with a speed of 16 km/hr and next 60 km with a speed of 12 km/hr and last 70 km with a speed of 28 km/hr. then calculate his average speed during the whole journey?  
 (A) 20km/hr (B) 15km/hr  
 (C) 17km/hr (D) 21km/hr
67. A student has to secure 40% to pass the examination. If he gets 63.50 and fails by 36.50 marks what is the total marks?  
 (A) 300 (B) 250  
 (C) 150 (D) 200
68. A machine has an error percentage of +2.5%. If one measures in it and the measurement comes as 41. What is the correct measurement?  
 (A) 40 (B) 38.75  
 (C) 40.25 (D) 41.05
69. A container contains 50L of milk. From this container, 5L was taken out and taken replaced by water. This process was further repeated one more time. How much milk is there in the container?  
 (A) 40.5 L (B) 41 L  
 (C) 80 m (D) 40 L
70. If radius of a cylinder is decreased by 5%, while its height is increased by 2%, then what will be effect on volume?  
 (A) 7.945% (B) 7.495%  
 (C) 6.945% (D) 7.995%
71. Find the fourth proportional 4, 7 and 16.  
 (A) 28 (B) 14  
 (C) 56 (D) 52
72. A man has bought a certain number of articles at a certain cost. Had he bought 5 more articles then he would have paid Rs 2 less per article, had he bought 2 article more , then he would have to pay a price of Rs 1 less per article. Find the total cost?  
 (A) 50 (B) 40  
 (C) 60 (D) 90
73. Find the net discount percentage if there is an successive discounts of two 4%  
 (A) 8% (B) 8.16%  
 (C) 7.84% (D) 12%
74. A work can be done by 40 workers in 30 days. They start the work together but 5 workers dropout every 10 days. In how many days would the work be completed now?  
 (A) 36 days (B) 32 days  
 (C) 35 days (D) 40 days
75. If the efficiency of A and B is 3 : 2. If A can complete the work in 55 days, then in how much time will both complete the work?  
 (A) 22 days (B) 33 days  
 (C) 110 days (D) 27.5 days
76. A gun was fired twice from the same place at an interval of 2 hours. A man who was walking towards the place from where the gun was fired heard the gun shots at an interval of 1 hr 45 min. If the speed of sound is 350 m/s, then find the speed of the man?  
 (A) 50 m/s (B) 60 m/s  
 (C) 100 m/s (D) 40 m/s
77. A person generally reaches his office his office 15 minutes late. He increased his speed by 25% one day, and arrived 10 minutes late. In how much time does he need to complete his journey if he wants to reach office on time?  
 (A) 10 min (B) 20 min  
 (C) 30 min (D) 25 min
78. If the simple interest on Rs. c at a rate of b% for n years is same as that on Rs. d at a rate of b2% for n2 years, then c : d is equal to  
 (A) n : b (B) bn : 1  
 (C) 1/n: 1/b (D) 1/bn: 1
79. A man divides his property so that his son's share to his wife and his wife's share to his daughter's share are both in the ratio 4: 1. If the daughter gets 9000 less than his son, the value (in rupees) of the whole property is  
 (A) ` 12600 (B) ` 13600  
 (C) ` 16200 (D) ` 6100
80. The ratio of radii of two cones is 3 : 4 and the ratio of their height is 16 : 9. Then the ratio of their volume will be  
 (A) 3 : 4 (B) 9 : 16  
 (C) 48 : 36 (D) 1 : 1

81. A pavement of equal width has to be made all around a rectangular park of length 42 m and breadth 24 m. What is the total area of pavement if width of 5 m has to be maintained?  
 (A) 560 m (B) 760 m  
 (C) 710 m (D) 355 m
82. If  $\tan x + \cot x = 2$ , then the value of  $x + \cot^n x$  ( $0^\circ \leq x < 90^\circ$ ) is  
 (A) 2 (B)  $2^n$   
 (C)  $2^n$  (D)  $2^{(n+1)}$
83.  $\sqrt{1332 + \sqrt{1332 + \sqrt{1332 + \dots \infty}}} = ?$   
 (A) 37 (B) 36  
 (C) 39 (D) 38
84. All the sides of a quadrilateral ABCD touch a circle. If  $AB = 6.5$ ,  $BC = 7.5$  and  $CD = 9$ , then  $DA = ?$   
 (A) 8 (B) 5  
 (C) 6 (D) 4
85. If  $a$  is a positive base variable then the following readings were taken,  $a + 10$ ,  $a + 3$ ,  $a - 4$ ,  $a - 2$ ,  $a + 7$ ,  $a + 11$  then find the median of the following readings.  
 (A)  $a+3$  (B)  $a+7$   
 (C)  $a+5$  (D) Cannot be determined
- General Intelligence and Reasoning**
86. In the following question, select the odd number pair from the given alternatives.  
 (A) 13 – 16 (B) 19 – 22  
 (C) 21 – 24 (D) 33 – 38
87. In the following question, select the odd word from the given alternatives.  
 (A) Forest (B) Tiger  
 (C) Lion (D) Elephant
88. What do all the four names given below represent?  
 (Turquoise, Beige, Blonde, Burgundy)  
 (A) Fruits (B) Reptiles  
 (C) Colours (D) Flowers
89. A series is given with one term missing. Select the correct alternative from the given ones that will complete the series.  
 PV, UA, ZF, ?, JP  
 (A) EK (B) DL  
 (C) EJ (D) DK
90. If white is called blue, blue is called red, red is called yellow, yellow is called green, green is called black, black is called violet and violet is called orange, what would be the colour of human blood?  
 (A) Red (B) Green  
 (C) Yellow (D) Violet
91. Choose the number which is related in the same way as the Alphabet and Number related in the first pair.  
 $C : 81 :: B : ?$   
 (A) 16 (B) 8  
 (C) 64 (D) 32
92. Deepa is taller than Chaitrali and Elena. Chaitrali is taller than Anamika. Deepa is not as tall as Bala. Elena is taller than Anamika. Who among the next to the tallest one?  
 (A) Elena (B) Deepa  
 (C) Chaitali (D) Bala
93. Find the missing term.
- 
- (A) 10 (B) 12  
 (C) 13 (D) 15
94. Some statements are given below. Find which of the following conclusion logically follows the given statement.  
**Statement:** 1. Some Cities are Towns  
 2. Some Towns are Villages. 3. All villages are Small.  
**Conclusion:** I. Some Cities can be small.  
 II. Some Town being small is a possibility.  
 (A) If only I follows. (B) If only II follows.  
 (C) Neither I nor II follows. (D) Both I and II follow.
95. Farhan is a brother of Aryan. Chavi is a daughter of Aryan. Karishma is a sister of Farhan. Gaurav

is a brother of Chavi. Who is the uncle of Gaurav?

- (A) Krishna (B) Farhan  
(C) Aryan (D) Chavi

96. If first and third letter in the word "EXTREMIST" were interchanged, also the fourth and the sixth letters and the seventh and ninth letters. Which of the following would be sixth letter from the right?

- (A) T (B) E  
(C) R (D) M

97. Find the missing term in the series.

EA, HB, LD, QG, WJ, ?

- (A) DP (B) CO  
(C) OL (D) EQ

98. If A means '÷', B means 'x', C means '+', D means '-' then  $48 A 8 C 3 B 2 D 7 = ?$

- (A) 7 (B) 5  
(C) 12 (D) -6

99. If  $C = 3$ ,  $L = 12$ ,  $MAN = 0$  and  $SIN = 14$  then what is the code for  $ARM = ?$

- (A) 8 (B) 13  
(C) 6 (D) 4

100. Statements followed by some conclusions are given below. Find which of the conclusion logically follows from the given statement

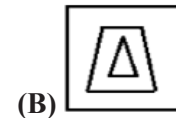
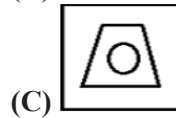
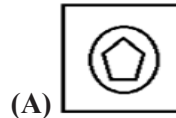
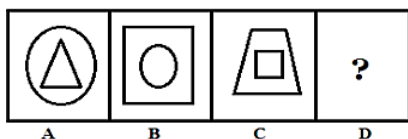
**Statement:** The economic condition of the country has gone from bad to worse.

**Conclusion: I.** Government has failed to tackle economic problem.

**II.** People are not cooperating with the government.

- (A) If only I follows (B) If only II follows  
(C) Both I and II follow (D) None follows

101. In the following question Problem set of Figures A, B, C and D is given. There is a definite relationship between A and B establishes the same relationship between C and D. Choose from the alternative.



102. Which of the following is same as Reluctant, Coy, and Loath?

- (A) Eager (B) Grudging  
(C) Release (D) Guard

103. Choose the right alternative which statement is required for giving the correct answer of the following question.

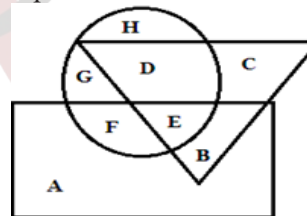
The last Sunday of May, 2004 fell on which date?

I. The First Sunday of that month fell on 4th.

II. The last day of that month was Saturday.

- (A) If only I is sufficient.  
(B) If Only II is sufficient.  
(C) Either I or II is sufficient.  
(D) If both I and II together are sufficient.

104. In the following diagram circle represent Poet, Triangle represents Doctor and rectangle represents Dancer. Which alphabet space represents doctors who are also poet and dancer?



- (A) E (B) F  
(C) D (D) G

105. Study the following arrangements carefully to answer the given questions. Which of the following is 13th to the right of the 6th from the left of the given arrangement?

@ B 8 C = 2 N G 6 \$ 8 & W L 4 Q \* R 1 # % A R 6 U 3 A ! 7 ©

- (A) & (B) R  
(C) 1 (D) W

106. Arrange the given words in dictionary order.

1. Replenish 2. Reasoning 3. Resonance  
4. Reduce 5. Reptile

- (A) 2, 4, 1, 3, 5 (B) 2, 3, 4, 1, 5



(C) 2, 4, 3, 1, 5 (D) 2, 4, 1, 5, 3

107. In the question given below a statement follow two course of action. Choose from alternative which follows the statement.

**Statement:** World Bank has approved a \$500 million loan to finance a project to construct rural infrastructure in Madhya Pradesh.

**Course of action: I.** India should approach other international organization to develop such projects in other states too.

**II.** India should not seek such types of loan because it increases debt.

- (A) If only I follows (B) If only II follows  
(C) Both I and II follow (D) None follows

**Direction (108-110):** Read the following information carefully and answer the question:

(i) Akansha, Aarthi, Aruna, Anu, Abha, Ashwini and Anaya are sitting around a circular table facing centre.

(ii) Ashwini is not an immediate neighbor of Abha.

(iii) Akansha is to the immediate right of Anu.

(iv) Aarthi is second to the left of Ashwini

(v) Akansha is third to the left of Anaya.

108. Who is second to the left of Anu?

(A) Ashwini (B) Abha  
(C) Aruna (D) Anaya

109. Which of the following groups has the first person sitting between other two?

(A) Aruna, Ashwini, Anaya (B) Aarthi, Abha, Akansha  
(C) Anaya, Aarthi, Ashwini (D) Akansha, Aruna, Anu

110. Which of the following pairs of person has the first person sitting to the immediate right of the second person?

(A) Ashwini, Aruna  
(B) Anu, Aruna  
(C) Abha, Arthi  
(D) Aruna, Anu

111. Find the missing term in the series?

1, 2, 5, 15, ?

(A) 55 (B) 30  
(C) 45.5 (D) 52.5

112. Meenakshi introduced Shailesh as her son's Maternal Grandfather's Only Brother. How is Shailesh related to Meenakshi?

(A) Uncle (B) Brother  
(C) Nephew (D) Father

113. In the following questions four words have been given out of which three are alike in some manner. Choose out the odd one.

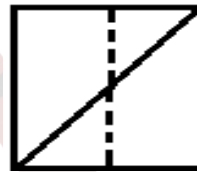
(A) Grapes (B) Berries  
(C) Apple (D) Watermelon

114. Choose the most suitable alternative which can be represented as the given venn diagram

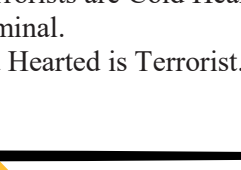
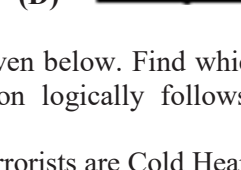
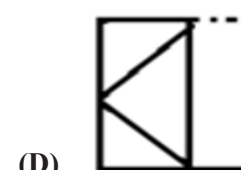
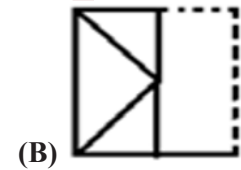
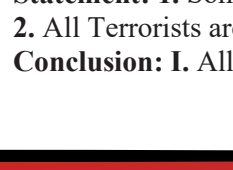
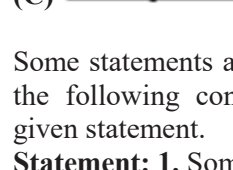
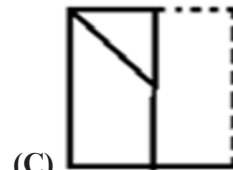
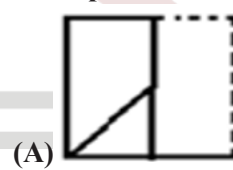


(A) Metal, Iron, Chlorine  
(B) Male, Father, Doctor  
(C) Bricks, House, Bridge  
(D) Bedroom, House, Bathroom

115. In the following question choose the figure which resemble the pattern when a transparent sheet carrying a design, is folded along the dotted line.



Transparent sheet:



116. Some statements are given below. Find which of the following conclusion logically follows the given statement.

**Statement: 1.** Some Terrorists are Cold Hearted.

**2.** All Terrorists are Criminal.

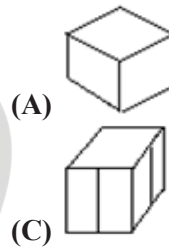
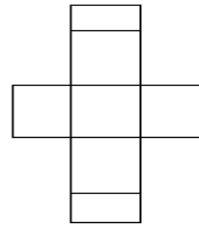
**Conclusion: I.** All Cold Hearted is Terrorist.

**II. No Cold Hearted is Terrorist**

- (A) If only I follows. (B) If only II follows.  
 (C) Neither I nor II follows. (D) Either I or II follows.

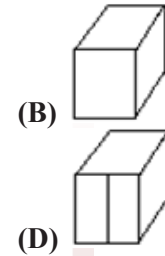
117. Mahesh leaves his office and goes straight 10 meters to point A, then turns left and goes 20 meters to reach point B. He then turns right and goes 30 meters to reach point C. What is the shortest distance between A and C?  
 (A) 12 m (B)  $13\sqrt{5}$  m  
 (C)  $10\sqrt{13}$  m (D) 13 m
118. Sty is related to Pig in the same way as Burrow is related to ----?  
 (A) Hare (B) Donkey  
 (C) Deer (D) Bees
119. If 'ANSWER' is coded as 'NBWTRF' then what is the code for 'MYSORE'?  
 (A) YNOTSE (B) YMOSER  
 (C) YNOTES (D) YMOTES

120. If a paper shown is folded to form a box. Choose the box that is similar to the box that will be formed.



(A)

(C)



(B)

(D)

**Solution****General Awareness**

- Ans.1(C)** According to Article 24 of Indian Constitution, a child given below age of fourteen is not allowed to work in any of the factors.
- Ans.2(C)** Frequency =  $1/T$   
 $= 1/0.05 = 20\text{Hz}$
- Ans.3(D)** Cervical hormone does not dissolve by pituitary gland
- Ans.4(C)** Muthulakshmi Reddy was the first female legislator of India, along with the country's first woman surgeon. On July 30, on the occasion of the 133rd birth anniversary of Dr. Muthulakshmi Reddy, Google has remembered them by creating a doodle. This doodle was made on the name of Dr. Muthulakshmi Reddy, a educationist, legislator, surgeon and social reformer of India.
- Ans.5(C)** Aqueous solution of acetic acid is called vinegar
- Ans.6(A)** Kalidas Award is given in the field of classical music, classical dance, theater and visual arts
- Ans.7(D)** Indian Bank has signed an MoU with Bharat Sanchar Nigam Limited to provide

seamless telecom services to the Indian Bank at competitive market rates. This means the telco might be availing its services to the bank for a lower market rate than usual. The bank is already using the services of BSNL and Mahanagar Telephone Nigam Limited for its Wide Area Network across the country Dr VK Sanjeevi, chief general manager of Chennai Telephones said that BSNL and its subsidiary MTNL is connecting 5,000 branches and ATMs of Indian Bank.

Bharat Sanchar Nigam Limited Chairman & MD: Pravin Kumar Purwar  
 Bharat Sanchar Nigam Limited Headquarters: New Delhi

**Ans.8(C)****Ans.9(C)****Ans.10(A)**

**I. Rajasthan III. Maharashtra**  
**IV. Karnataka II. Tamil Nadu**  
 In India it has economic and political rights which is an integral part of the Constitution. (false)

The Small Industries Development Bank of India has launched two loan products for MSMEs to help them with the required financial support in the fight against the COVID-19 pandemic. These two new quick credit delivery schemes will

facilitate funding for production and services related to the supply of oxygen cylinders, oxygen concentrators, oximeters and essential drugs by MSMEs.

The two new loan products are:

SHWAS – SIDBI assistance to Healthcare sector in War Against Second wave of COVID19.

AROG – SIDBI Assistance to MSMEs for Recovery & Organic Growth during COVID19 pandemic.

**Ans.11(A)** The national company law tribunal is a quasi-judicial body constituted by the central government. It was established under The Companies act 2013 and constituted on 1 June 2016 by the government of India.

**Ans.12(D)** National council of science museums is an autonomous organisation under the Ministry of Culture. It is the chain of largest science centres and museums set up 4 April 1978 with its headquarters in Kolkata.

**Ans.13(C)** The United Nations development programme is the United Nations global development network headquartered in New York City. Indian- American television personality and food expert Padma Lakshmi has been appointed as the goodwill ambassador of UNDP recently.

**Ans.14(A)** A virtual private network enables the user to send and receive data across shared and public networks. VPN technology was developed to allow remote users and branch offices to access the corporate applications and resources.

**Ans.15(C)** Eugene Cernan was the last person to walk on moon. He visited the moon's neighbourhood twice aboard Apollo 10 and Apollo 17 and also did a challenging spacewalk aboard Gemini 9. He died on January 16, 2017.

**Ans.16(A)** The Bolivia earthquake that occurred on 9 June, 1994 was the second largest earthquake with a magnitude of 8.2 with a focal depth greater than 300km.

**Ans.17(A)** Leptospirosis is a disease caused by bacteria *Leptospira interrogans* which is a gram-negative spiral shaped bacteria. It is known to cause symptoms such as headache, muscle pain, bleeding from

the lungs etc. The contagious period for leptospirosis depends upon how long the viable organisms are shed in the urine which may be few weeks or as long as 11 months.

**Ans.18(C)** Platyhelminthes are commonly known as tapeworms or flatworms. These are soft-bodied invertebrate animals. There are about 20,000 species of these animals that live as parasites on humans and other animals.

**Ans.19(D)** Pancreatic juice is a liquid secreted by pancreas which contains a variety of enzymes like Trypsin, amylase and lipase. Pancreatic juice is alkaline in nature due to high concentration of bicarbonate ions which helps in neutralizing the acidic gastric acid and allowing effective enzymatic changes.

**Ans.20(B)**

**Ans.21(D)** Jupiter is the fifth planet from the sun and the largest planet in the solar system. It is primarily composed of hydrogen with quarter of its mass being helium. It is also known as winter planet because its average temperature is very low i.e. -148-degree C

**Ans.22(B)** The Burzi-la pass is an ancient pass in Northern India between Srinagar and Gilgit. It lies close to the line of control between India and Pakistan while zoji-la pass is located in Jammu and Kashmir located on National Highway 1 between Srinagar and leh in the western section of the Himalayan mountain range.

**Ans.23(A)** The comptroller and auditor general of India is an authority established by article 148 of the constitution of India which audits all the receipts and the expenditures of the government of India. He is also the head of Indian audit and accounts department.

**Ans.24(B)** The first finance commission was established by the President of India in 1951 under article 280 of the Indian constitution. The chairman of the first finance commission was K.C Neogy.

**Ans.25(C)** The spherical shape of the soap bubble is caused by the minimization of the surface area. For a, given volume, sphere is a form which has the least surface area.

- Ans.26(C)** The angular velocity of the particle is the rate at which it rotates around a chosen centre point. It is measured in angle per unit time. Its SI unit is radian per second and is represented by the symbol  $\omega$ .
- Ans.27(A)** Entropy is a measure of spread of matter and energy to everywhere they have access. The second law of thermodynamics says that when the energy changes from one form to another form or matter moves freely then the entropy in a closed system increases.
- Ans.28(A)**
- Ans.29(D)** Diamonds are made up of 5 carbon atoms that are linked together in a lattice structure. Each carbon atom shares electrons with four other carbon atoms forming a tetrahedral unit. This tetrahedral bonding forms an incredibly strong molecule i.e. Diamond.
- Ans.30(D)** Vitamin B1 is also known as thiamine. It enables the body to use carbohydrates as energy which is essential for metabolism, nerve, muscles and heart functions. Vitamin B1 is present in high concentration in yeast, beef, pork, nuts, whole grains and pulses.
- Ans.31(C)** The railways were first introduced in India in 1853 from Mumbai to Thane. It was nationalised in the year 1951 after which it became one of the largest networks in the world.
- Ans.32(B)** Indian railways VIKALP scheme is implemented for passengers in the waiting list of all the train types and classes. Fully waiting passengers opted for VIKALP can check PNR status after charting.
- Ans.33(D)** The smart city mission is an urban renewal and retrofitting program by the government of India with the mission to develop 100 cities across the country in order to make them citizen friendly and sustainable. It was launched in the year 2015.
- Ans.34(D)** The Sangeet Natak Akademi award is the most coveted national honour started in 2003. It is given in the field of music, dance, theatre and arts. The award consists of 1 lakh rupees, a citation, a shawl and brass plaque.
- Ans.35(B)** Tribal Co-operative Marketing Federation of India (TRIFED), has entered into a Memorandum of Understanding (MoU) with The LINK Fund, for a collaborative project titled "Sustainable Livelihoods For Tribal Households in India". Under the project, both the organisations will work together towards:
- Tribal Development and Employment Generation, by providing support to tribals for increasing value addition in their produce and products.
- Sustainable livelihoods and value addition, for the increase in income and employment generation through technological intervention for efficiency in value addition for MFPIs, produce and crafts diversification, skill training and enhancement of value additions in minor forest produce.
- The LINK Fund is a Geneva, Switzerland based philanthropic operational foundation and practitioner-led fund, working towards eradicating extreme poverty and mitigating the effects of climate change.
- Ans.36(B)**
- Ans.37(C)** The 1957 Indian vice presidential election was held in 1957 to elect the vice-president of India. Sarvepalli Radha Krishnan was chosen as the vice-president for second term in 1957.
- Ans.38(B)** The Kailash temple is one of the 34 cave temples and monasteries known collectively as the Ellora caves. It was constructed in 8<sup>th</sup> century by Rashtrakuta king Krishna I. It features the use of multiple distinct architectural and sculptural styles.
- Ans.39(A)** Ashtadhyayi is a book written by Panini in 6<sup>th</sup> to 5<sup>th</sup> century BCE. It consists of 4000 sutras of the science of phonetics and grammar that had evolved in the Vedic religion. Panini divided his work into 8 chapters which is further divided into quarter chapters.
- Ans.40(D)** The state-owned insurance behemoth "Life Insurance Corporation (LIC)" has emerged as the third strongest and the tenth most valuable insurance brand globally, in



Brand Finance Insurance 100 report for 2021. The annual report is released by London-based brand valuation consultancy firm Brand Finance, to identify the most valuable and strongest insurance brands globally. The brand value of LIC increased by almost 7 per cent to \$8.65 billion in 2021.

**Ans.41(A)** Inflation is a sustained increase in the price level of the goods and services in an economy over a period of time. Inflation reflects a reduction in purchasing power- a loss of real value in the medium of exchange and unit of account within the economy.

**Ans.42(D)** Special Drawing rights were created by IMF in 1969 and were intended to be an asset held in the foreign exchange reserves under the Bretton Woods System of fixed exchange rate. SDR's are allocated to the countries by IMF and its value is also reviewed by IMF every five years.

**Ans.43(C)** A scanner is a device that captures images from photographic prints, posters, magazine and other sources for computer editing and display. Scanners are usually attached to our personal computer through small computer system interface (SCSI) port.

**Ans.44(D)** JavaScript is a lightweight, interpreted programming language. It is designed for creating network-centric applications. It is the programming language of the HTML and the web.

**Ans.45(D)** The Kutch Mahotsava is celebrated in the state of Gujarat annually in the month of February and march. The celebration of this festival was initiated by the Department of culture, Gujarat so as to increase the tourist revenue. It showcases the old-age traditions and the vivid culture of Gujarat.

**Ans.46(C)** CISF is a unique organisation in paramilitary forces of India. It was set up in 1969 under an act of the Parliament of India. It is headquartered in New-Delhi. CISF day is celebrated every year on 10 march. this year marks the 49<sup>th</sup> raising day of the CISF force.

**Ans.47(B)** A venturimeter is a device used to measure the fluid flow through pipes. This flow measurement device is based on the principle of Bernoulli's equation.

**Ans.48(A)** Jal Amrutha scheme is launched by Karnataka with a corpus of 500 cr rupees. This scheme will focus on water-conservation schemes and the protection of the water-bodies. Karnataka government also declared 2019 as the 'Year of Water'.

**Ans.49(C)** Makran cup was held in Chabahar, Iran. Deepak Singh who is a national boxing champion in 49kg category won gold after defeating Jaffar Naseri in the finals.

**Ans.50(B)** Bhadrachalam in Telangana has been added as a destination in the IRCTC's Ramayana Circuit train.

Union Minister for Culture and Tourism G Kishan Reddy has expressed his gratitude to Prime Minister Narendra Modi for the inclusion of Bhadrachalam as one of the destinations in the Ramayana Circuit of the Pilgrim Special Train.

Bhadrachalam is home to Sree Sita Ramachandra Swamy temple.

The aim of the Ramayana Yatra Train is to connect all the important locations of Lord Rama's journey during his lifetime, the inclusion of Bhadrachalam Road Station will complete the Ramayana Circuit.

### Mathematics

**Ans.51(C)**

$$CP = 1230 + 180 = 1410$$

$$SP = 112$$

$$\text{Loss\%} = \frac{(1410 - 1128) \times 100}{1410} = \frac{282 \times 10}{141} = 20\%$$

**Ans.52(A)**

'Zero' is a whole number

**Ans.53(C)**

Using Formula

$$a^3 + b^3 = (a+b)^3 (a^2 + b^2 - ab)$$

**Ans.54(B)**

Let Price=150

33% decrease

New Price=100

Difference=50%

**Ans.55(B)**

$$SI = 1200 \times \frac{10}{100} \times 1 = 120$$

$$CI = 1200 \left(1 + \frac{10}{200}\right)^2 - 1200 = 123$$

$$\text{Diff} = 123 - 120 = 3$$

**Ans.56(A)** Average = total/number of components  
 $= (96 + 136 + 231 + 204 + 146 + 255)/6$   
 $1068/6 = 178$

**Ans.57(B)** Engineering + industrial = 367  
 Consumers + plantation = 350  
 $= 367 - 250 = 17$  units

**Ans.58(B)**  $(136 - 96)/136 \times 100 = 29.41 \approx 30\%$

**Ans.59(C)** Let  $x = 0.242424 \dots (1)$   
 $100x = 24.242424 \dots (2)$   
 Now subtracting 1 from 2 we will get  
 $99x = 24$   
 Hence  $x = 24/99 = 8/33$

**Ans.60(A)** You can manually check it or follow osculator method of finding the divisibility  
 The osculator of 19 is 2  
 Hence if we take 27193  
 We will do it like  
 Step 1: Take the 1<sup>st</sup> digit from the right and multiply it with 2 and if the osculator is positive add it other wise subtract it from the rest of the number  
 $2719 + 2 \times 3 = 2725$   
 $272 + 2 \times 5 = 283$   
 $28 + 2 \times 3 = 34$   
 $3 + 2 \times 4 = 11$  (the final should come in multiple of 19 or if we can find in between steps 19 or multiple of 19 then also we can tell it is divisible by 19.  
 Hence it is not divisible by 19  
 Now 21793  
 $2179 + 2 \times 3 = 2185$   
 $218 + 2 \times 5 = 228$   
 $22 + 2 \times 8 = 38$  divisible by 19 hence option (a)

**Ans.61(C)** The cyclicity concept of 2 and 3 is 4 and 4 is 2 and 5 its unit digit will always be 5.  
 $2^{11}$  the unit digit will be  $11/4 =$  remainder will be 3 then the unit digit will be the third term in the cycle of powers of 2  
 $2^1 =$  Unit digit of 2 is 2  
 $2^2 =$  Unit digit of 4 is 4  
 $2^3 =$  Unit digit of 8 is 8  
 $2^4 =$  Unit digit of 16 is 6  
 Then it will repeat again.  
 Similarly for  $3^{12}$  it is also cycle of 4, the remainder  $12/4 = 0$ , hence it will be the last term i.e  $3^4 = 81$  unit digit is 1.  
 For  $4^{13}$ , since 13 is odd, hence unit digit will be 4

And for  $5^{14}$  units digit will be 5 only

**Ans.62(B)**  

$$\frac{27/4 - 23/5}{23/20}$$

$$= \frac{135 - 92}{23} = 43/23$$

**Ans.63(A)** HCF = 143 =  $11 \times 13$   
 LCM = 53482 =  $11^2 \times 13 \times 17 \times 2$   
 Number 1 = 26741 =  $11^2 \times 13 \times 17$   
 Then number 2 will be  $11^2 \times 13 \times 2 = 286$   
**Ans.64(A)** Let that number be N, then we can mark that if 2 is added to N then N will become an multiple of 15, 45, and 80  
 $N = 15a + 13$   
 $N + 2 = 15(a + 1)$   
 Similarly,

Now finding LCM of 15, 45 and 80 which comes out to be 720  
 Now the format of the number is  $N + 2 = 720x$   
 Hence  $N = 720x - 2$   
 For n to be greatest 3 digit number we can put  $x = 1$  only  
 $N = 720 \times 1 - 2 = 718$

**Ans.65(A)** Average of the even numbers between 21 and 41

First even number = 22  
 And last even number = 40  
 Hence average of even numbers  
 $= (\text{first number} + \text{last number})/2$   
 $= (40 + 22)/2 = 31$

**Ans.66(C)** Average speed = (Total distance)/(total time)

$$\frac{40 + 60 + 70}{\frac{40}{16} + \frac{60}{12} + \frac{70}{28}} = \frac{170}{10} = 17$$

17 km/h

**Ans.67(B)** He has to secure =  $63.50 + 36.50 = 100$  marks to pass the exam which corresponds to 40%, then total marks will be

$$100/40 \times 100 = 250 \text{ marks}$$

**Ans.68(A)**  $41 \times 100 / 102.5 = 40$

**Ans.69(A)** After n operations the quantity of milk  
 $= [a(1 - b/a)^n]$   
 $= 50(1 - 5/50)(1 - 5/50) = 50 \times 9/10 \times 9/10 = 40.5$

**Ans.70(A)** Effect on volume can be calculated  
 $= x + y + z + (xy + yz + zx)/100 + xyz/100^2$   
 Here  $x = -5$ ,  $y = -5$  and  $z = 2$

- Ans.71(A)**  $= 7.945\%$   
 $4/7 = 16/x$   
 $x = (16 \times 7)/4$   
 $x = 28$
- Ans.72(C)** Cost (C) = Number of articles (N)  $\times$  Price per piece (P).....1  
 $C = (N+5) \times (P-2)$  ..... (2)  
 $C = (N+2) \times (P-1)$  ..... (3)  
 Now comparing equation 1 and 2  
 $NP = (N+5) \times (P-2)$   
 $NP = NP - 2N + 5P - 10$   
 $5P - 2N = 10$ ..... (4)  
 Similarly, comparing equations 1 and 3 we will get  
 $2P - N = 2$ ..... (3)  
 Now, solving the equations 3 and 4 we will get  
 $N = 10$ , and  $P = 6$   
 Hence, cost is 60.
- Ans.73(C)** Successive discount =  $-x - x + x^2/100$   
 $= -4 - 4 + 16/100$   
 $= 7.84\%$
- Ans.74(A)** Total work =  $40 \times 30 = 1200$  units  
 First 10 days =  $10 \times 40 = 400$   
 Second 10 days =  $10 \times 35 = 350$   
 Third 10 days =  $10 \times 30 = 300$   
 Total work in 30 days = 1050  
 Left out work = 150 units.  
 Now for the next 10 days, there are 25 workers, they will complete the work in  $150/25 = 6$  days.  
 Total days required =  $30 + 6 = 36$  days.
- Ans.75(B)** Total units of work =  $55 \times 3$  (Efficiency  $\times$  Time = Work)  
 If they work together =  $(55 \times 3)/5 = 33$  days.
- Ans.76(A)** The time taken by the men to travel a distance  $x$  km is 1hr 45 min, but this distance of  $x$  will be travelled by sound in 15 minutes. This is because had he been at his initial position then he would have heard the gun shots only after 2 hours. But he heard it 15 min earlier because he has travelled a distance of  $x$  km. hence  
 (Time of men) / (Time of sound) =  $105/15$   
 Since speed and time are inversely proportional is distance is same, then  
 (Speed of men) / (Speed of sound) =  $15/105 = 1/7$   
 Speed of men =  $350/7 = 50$  mps

- Ans.77(A)** As the distance is same, then the speed and time are inversely proportional,  
 (New speed) / (Earlier speed) =  $5/4$   
 (New time taken) / (Earlier time taken) =  $4/5$   
 But the difference in time taken = 5 minutes  
 Hence earlier time taken = 25 minutes, but earlier he was late by 15 minutes. So to reach office on time he has to take  $25 - 15 = 10$  minutes

**Ans.78(B)**  $(c \times b \times n)/100 = (d \times b^2 \times n^2)/100$   
 $c/d = bn/1$

- Ans.79(A)**  $S : W = 4 : 1$  and  $W : D = 4 : 1$   
 Combining both the ratio  $S : W : D = 16 : 4 : 1$

- Now total asset =  $9000/15 \times 21 = 12600$
- Ans.80(D)** Let the radius be  $3x$  and  $4x$  and height be  $16y$  and  $9y$   
 $v_1/v_2 = (1/3 \times 9x^2 \times 16y) / (1/3 \times 16x^2 \times 9y) = 1/1$   
**Ans.81(B)** Area of the pavement =  $2x(l + b + 2x)$ , where  $x$  is the width of the pavement,  $l$  and  $b$  are the length and breadth of the park.  
 $2 \times 5(42 + 24 + 10) = 760$

- Ans.82(A)**  $\tan x + \cot x = 2$   
 This is possible when  $\tan x = 1$  and  $\cot x = 1$   
 Then  $\tan^n x + \cot^n x = 1^n + 1^n = 2$

**Ans.83(A)**  $\sqrt{1332 + \sqrt{1332 + \sqrt{1332 + \dots \infty}}} = x$

$$\sqrt{1332 + x} = x$$

$$1332 + x = x^2$$

$$x^2 - x - 1332 = 0$$

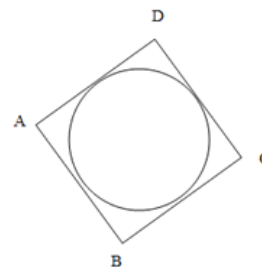
$$x^2 - 37x + 36x - 1332 = 0$$

$$x(x - 37) + 36(x - 37) = 0$$

$$x = -36, 37$$

We can see that  $x = 37$  can only satisfy the equation.

- Ans.84(A)**



If a quadrilateral circumscribes a circle then the sum of lengths of each pair of opposite sides are equal.

Hence  $AB + CD = BC + DA$

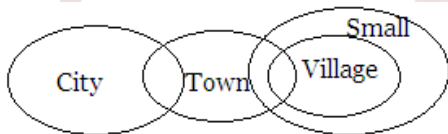
$6.5 + 9 = 7.5 + DA$

$DA = 8$

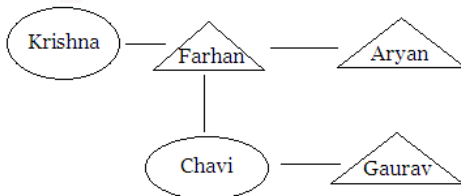
- Ans.85(C)** Arranging in ascending order,  
 $a - 4, a - 2, a + 3, a + 7, a + 10, a + 11$   
 Now the number of readings is 6, it is even  
 hence the median will be average 3<sup>rd</sup> and 4<sup>th</sup> reading  
 $= (a + 3 + a + 7)/2$   
 $= a + 5$

### General Intelligence and Reasoning

- Ans.86(D)**  $13+3=16$   
 $19+3=22$   
 $21+3=24$   
 $33+5=38$
- Ans.87(A)**
- Ans.88(C)**
- Ans.89(A)**  $P+6=V$   $V-1=U$   
 $U+6=A$  ,  $A-1=Z$
- Ans.90(C)** Red = Yellow  
 The colour of blood is red = yellow
- Ans.91(A)** C → Place value of c is 3,  $(3)^4 = 81$   
 B → Place Value of B is 2,  $(2)^4 = 16$
- Ans.92(B)** Bala > Deepa > Chaitrali > Elena > Anamika
- Ans.93(C)**  $1+2 = 3$ ,  $2+3 = 5$ ,  $3+5 = 8$ ,  $5+8 = 13$
- Ans.94(B)**



**Ans.95(B)**

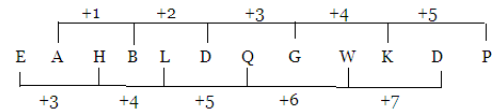


**Ans.96(D)**

E X T R E M I S T  
 T X E M E R T S I

Sixth from the right = M

**Ans.97(A)**



**Ans.98(B)**  $48 \ 8 \ 8 \ 3 \ 3 \ 2 \ 2 \ 7 \rightarrow 48 \div 8 + 3 \times 2 - 7$   
 $= 6 + 6 - 7 = 5$

**Ans.99(C)**

M A N

$13 + 1 - 14 = 0$

S I N

$19 + 9 - 14 = 14$

A R M

$1 + 18 - 13 = 6$

**Ans.100(A)** The statement implies that the existing economy problem have worsened so first conclusion follows. In statement nothing about the people's attitude is mentioned so II does not follow.

**Ans.101(D)** Outer element becomes the inner element and for outer element an extra side is added.



**Ans.102(B)** Reluctant, Coy and Loath have same meaning  
 Reluctant means Unwilling so Grudging has same meaning.

**Ans.103(C)** From I, we conclude that 4th, 11th, 18th and 25th of May, 2004 were Sundays.

So after 25th there will be no Sunday.

Last Sunday is on 25th

From II

31st is Saturday

30<sup>th</sup> - Friday

29<sup>th</sup> - Thursday

28<sup>th</sup> - Wednesday

27<sup>th</sup> - Tuesday

26<sup>th</sup> - Monday

25th - Sunday

So last Sunday is on 25th

**Ans.104(A)** Doctors who are poet as well as dancer represented by region which is common to Triangle, Rectangle and circle.

**Ans.105(C)** 6th to the left → 2

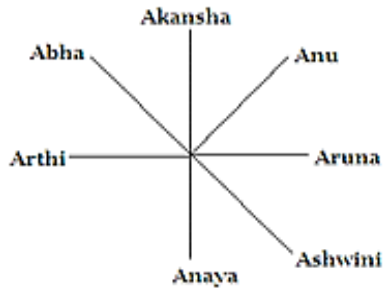


13th to the right from 2 → 1

**Ans.106(D)** Reasoning, Reduce, Replenish, Reptile, Resonance

**Ans.107(A)** Only I should follow because this type of infrastructure helps in rural India development.

**Ans.(108-110)**

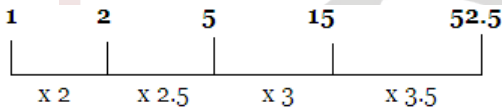


**Ans.108(A)**

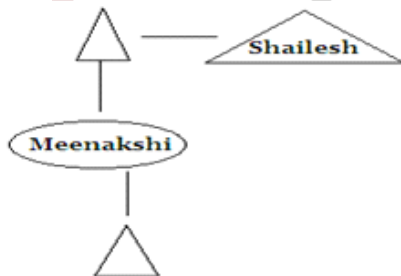
**Ans.109(C)**

**Ans.110(B)** Anu is immediate right of Aruna

**Ans.111(D)**

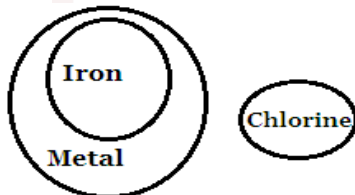


**Ans.112(A)**

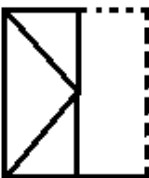


**Ans.113(C)** Except Apple all other fruits grow on Creepers.

**Ans.114(A)**



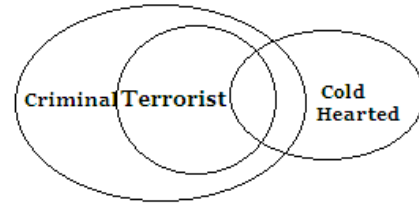
**Ans.115(B)**



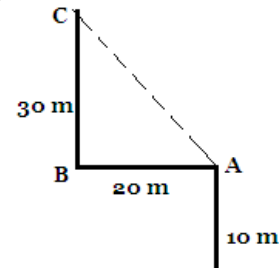
As we can get that right part is folded because in option there is dotted line

shown in right part. When the sheet get folded then right part is over left part.

**Ans.116(C)**



**Ans.117(C)**



$$\begin{aligned} AC &= \sqrt{(30)^2 + (20)^2} \\ &= \sqrt{900 + 400} \\ &= \sqrt{1300} = 10\sqrt{13} \text{ m} \end{aligned}$$

**Ans.118(A)** Sty is dwelling place of Pig. So Hare is related to Burrow.

**Ans.119(C)**

AN	SW	ER	MY	SO	RE
NA	WS	RE	YM	OS	ER
NB	WT	RF	YN	OT	ES

**Ans.120(D)**



"Success seems to be connected with action. Successful people keep moving. They make mistakes, but they don't quit."



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