WBCS Preliminary Exam. - PRACTICE SET

Answers with Explanation

1. (c)	2. (c)	3. (b)	4. (b)	5. (c)	6. (d) 7. (b)
8. (b)	9. (c)	10. (c)	11. (a)	12. (d)	13. (a) 14. (c)
15. (b)	16. (b)	17. (c)	18. (b)	19. (c)	20. (c) 21. (b)
22	aa (1)	0 (1)	25 ()		

- 22. (c) 23. (b) 24. (b) 25. (c)
- 26. (c) Doctrine of lapse was the pro-imperialist approach to expand the realm of British Kingdom in India. It was introduced by Dalhousie. The Doctrine equipped with an idea to annex those states which have no heir, get lapsed the right of ruling and it will not be reverted by adoption.
- 27. (a) Dadabhai Naoroji is the author of books such as 'Poverty and Un-British Rule In India'. ACHIEVER
- 28. (a) Romesh Chandra Dutta (13 August 1848 30 November 1909) was an Indian civil servant, economic historian, writer and translator of Ramayana and Mahabharata.
- 29. (b) Foreign trade means the exchange of goods and services between two or more countries/borders or territories. From the time of independence, India has been one of the important trading countries, exporting primary items like cotton, raw silk, sugar, wool, jute, and indigo, etc. Moreover, importer of finished consumer goods like woollen clothes, cotton, silk, and capital goods like light machinery manufactured in Britain.

During this period, Britain held the monopoly of over India's imports and exports. Therefore, most of the foreign trade was restricted only to Britain and other was while the rest half was allowed to trade with other countries like Ceylon (Sri Lanka), China, and Persia (Iran). ACHIEVERS In Focus India was a large exporter in the colonial period.

However, it did not affect the country's economy. Commodities like food grains, clothes, kerosene hit the country hard with its scarcity.

- 30. (c) The most unique features of Dholavira, an Indus valley site in Gujarat, is its division. While other Indus Valley sites were divided into two parts viz. Citadel and Lower Town, Dholavira was divided into three divisions.
- 31. (c) The option C is not correct. Indians did not face famines because of abundant rains and assured at least one of two seasons of crops; and abundance of fruits and edible roots.
- 32. (c) Brihadaranyaka will be correct answer of this question.
- 33. (a) Mauryan Emperor Bindusara had friendly relations with the Greek King Antiochos-I of Syria. Deimachos was a Syrian Ambassador who came in the court of Bindusara. Mauryan Emperor Ashoka the Great: In his rock edict 13th mentions the names of 5 Hellenic kings- Antiochus II of Syria, Ptolemy II of Egypt, Antigonus of Messedonia, Magas of Syrina, Alexander

of Epirus. He sent missionaries to all of them. This shows that Mauryan dynasty maintained the diplomatic relations with distant countries like Syria in the West. ACHIEVERS IN FOCUS

- 34. (b) Medhatithi is one of the oldest and most famous commentators on the Manusmriti. He considered Sati system identical to suicide, which was forbidden by the Vedas. One shall not die before the span of one's life is run out.
- 35. (a) Banabhatta was the court poet of Harshavardhan, who wrote 'Harshacharita' and 'Kadambari'. Harshacharita is an important historical work that narrates the incidents of the earlier part of Harsha's reign.
- 36. (d) He was defeated by Bhima II, the Solanki ruler of Gujarat in 1178. The Chaulukya dynasty was a dynasty that ruled parts of what are now Gujarat and Rajasthan in north-western India, between 940 CE and 1244 CE. Their capital was located at Anahilavada (modern Patan). At times, their rule extended to the Malwa region in present day Madhya Pradesh. The family is also known as the Solanki dynasty in the vernacular literature.
- 37. (a) Nataraja is a depiction of lord Shiva. As the Lord of Dance, Nataraja, Shiva performs the Ananda Tandava (dance of bliss), the dance .The "Nataraja bronzes" is the Chola Nataraja artworks are mostly in copper, and a few are in brass. A great area innovation within the arts of the Chola period was in the field of metalwork, particularly in bronze sculpture.
- 38. (b) Muhammad bin Qasim, who was the first Muslim to have successfully invaded Sindh in 712 AD was commander of Umayyad Caliphate general, who, during the reign of Caliph al-Walid I led the Muslim conquest of Sindh and Multan. He was able to defeat the third and the last Maharaja of the Brahmin dynasty, Raja Dahir. Raja Dahir was killed in the Battle of Aror.
- 39. (c) His original name was "Mirza Asadullah Baig Khan. Most of us know that "Ghalib" was his pen name. But before Ghalib, he wrote with a pen name "Asad", which means a Lion. He was honoured with title of Dabeer-ul-Mulk by Bahadur Shah Zafar II. When another title Mirza Nosha was given to him, he came to be known as Mirza Ghalib.
- 40. (a) Babur has written his biography i.e. 'Baburnama' which is also known as 'Tuzk-e Babri'. Babur and Jahangir are the only two Emperors of Mughal Empire who wrote their own biographies. 'Baburnama' is also known to be the first true autobiography in the Islamic literature. 'Baburnama' was written in Chagtai Turkic, which was Babur's mother tongue.

ACHIEVERS In Focus

It was translated into Persian by Abdul Rahim Khan-I-Khana. He was son of Bairam Khan.

- 41. (d) Aurangzeb followed an intolerant treatment towards the Hindus, who formed the bulk of India's population. As a result, the Jats of the Mathura region, the Bundelas of Bundelkhand, the Satnamis and the Sikhs rose in revolt against the Mughal Emperor.
 50. ACHIEVERS In Focus
- 42. (d) Rafi-us-Daula who ruled in 1719 CE was given the title of Shah Jahan II. He had the shortest reign and died very quickly as he too suffered from consumption (Tuberculosis) like Rafi-us-Darajat.
- 43. (b) Shah Alam II was the sixteenth Mughal Emperor and the son and successor of Alamgir II. Shah Alam II became the Emperor of a crumbling Mughal Empire. His power was so depleted during his reign.
- 44. (c) In Court, Tilak declared Swaraj ha maza janmasidha adhikar aahe ani to mi milavinach" in court when he was under trial for a sedition case against him. Later Tilak was sent to Mandalay jail for six years.
- 45. (a) Ahsan Manzil was the official resident and seat of the Nawab of Dhaka. It is located along the banks of the Buriganga River in Dhaka. The conference of 1906 was held in this place where the foundation of the Muslim League was laid.
- 46. (b) The National Development Council was set up on 6th August 1952.
- 47. (c) Barindra Kumar Ghosh was born at Norwood near London on 5th January in 1880. He was a younger brother of Aurobindo Ghosh. In 1906, to spread the revolutionary ideas and to provide fervor to Swadeshi movement, he started a Bengali weekly "The Jugantar". In 1907, he started the Maniktala group with Bagha Jatin and a few young revolutionary activists for the collection of arms and ammunitions and manufacturing explosives. He was sentenced to death by the trial known as Alipore Bomb Case. Later the sentence was commuted to life imprisonment and was sent to the Cellular Jail in Andaman in 1909. In 1920, Barindra Kumar Ghose was released. In 1933 Barindra Kumar Ghose launched English weekly-'The Dawn of India'. He was also associated with 'The Statesman' newspaper and earned the title as a columnist. In 1950, he became the Editor of the Bengali daily 'Dainik Basumati'. **ACHIEVERS** In Focus
- 48. (c) Nawab Abdul Latif Khan: (1828-1893)a prominent personality of mid 19th century Bengal, the pioneer of Muslim modernization and the architect of the Muslim Renaissance, was one of those great men who appeared as saviours of their frustrated, humiliated, demoralized and disorganized fellow countrymen under colonial rule. His chief contribution was in the field of education. He was among the first to understand that young Bengali Muslims should receive modern education. He understood that the Muslims of Bengal had fallen behind in everything because of their prejudices against modern education.

He devoted his whole life to removing this selfdestructive prejudice from their minds.

- 49. (d) The Charter Act of 1833 made the Governor General of Bengal the Governor General of British India and all financial and administrative powers were centralized in the hands of Governor General-in-Council.
- 50. (d) Badruddin Taiyabji became the Ist Indian Barrister in Bombay; became the 2nd Indian Chief Justice; was the founding member of Bombay Presidency Association and INC and also presided over the 3rd Congress session in Madras in 1887.
- 51. (a) The British East India Company established its first factory in Bengal at Hooghly. ACHIEVERS In Focus
- 52. (b) Durgeshnandini is the first Bengali novel written by Bankim Chandra as well as the first major Bengali novel in the history of Bengali literature. The story of the novel was borrowed from some local legends of Arambag region, Hooghly district, Paschimbanga, collected by Bankim Chandra's great-uncle. Although the conservative critics mocked the lucidity of Bankim Chandra's language, 'Durgeshnandini' was highly praised by most of the contemporary scholars and newspapers.
- 53. (b) The Terai and Dooars region politically constitute the plains of Darjeeling District, whole of Jalpaiguri and Alipurduar district and upper region of Cooch Behar District in West Bengal. The slope of the land is gentle, from north to south. The general height of the land is 80 to 100 m.
- 54. (c) West Bengal's Nadia district became the first open defecation free district in the country.
- 55. (a) Suchitra Sen Legendary actress Suchitra Sen, who was popularly known as Bengal's Greata Garbo, died at the age of 82. Sen began her career with the Bengali film "Shesh Kothay" in 1952. She is well known for her role in Devdas and Aandhi. She was also the first Indian actress to be awarded at an international film festival-best actress award for "Saptapadi" at the Moscow film festival in 1963.
- 56. (a) The factors that enhanced the Status of Hindi: The contribution of Bhudeva Mukherjee ,well-known educationist and writer, played a key role in establishing the Nagari script in Bihar schools and law courts before 1892. Nagari Pracharni Sabha was founded in 1893 to promote the cause of Hindi and Nagari script. The Language policy of Indian National Congress in the end of 1920's paved the way of Hindi as the Mother tongue of Hindustan.
- 57. (c) Brahmaputra river when it flows out of India into Bangladesh is known as Jamuna river.
- 58. (d) The correct pairs are Delhi- Jhuggi Jhopri, Mumbai-Jhopadpatti, Chennai- Chei, Kolkata- Bastees.
- 59. (a) The Almatti Dam is a dam project on the Krishna River in North Karnataka, India which was completed in 2005.
- 60. (b) Jaigaon is a census town in Alipurduar subdivision





of Alipurduar district in the state of West 71. (a) Bengal, India. It is located on the country's border with Bhutan. The main overland entrance to Bhutan is through Jaigaon and Bhutan Gate separates the two countries. ACHIEVERS In Focus

- 61. (d) Bankura has got Head Quarter in the name of District.
- 62. (c) Diara is associated with the district of Maldah in West Bengal.
- 63. (d) The maximum length of NH-44 lies in the state of Tamil Nadu. The total length of NH-44 in Tamil Nadu is 627 kilometers.
- 64. (d) The cotton textile industry is located in western India mainly because of the easy availability of Skilled labour, Power sources and Cotton belt.
- 65. (b) During the time of September, with the retreating of the sun towards the south, the northern landmass of the Indian subcontinent begins to cool off rapidly. When the air pressure begins to build over northern India, the Indian Ocean and its atmosphere still holds its heat. This causes cold wind to flow from the Himalayas and Indo-Gangetic Plain towards the Indian Ocean south of the Deccan peninsula. This is known as the North-east Monsoon or the Retreating Monsoon. ACHIEVERS In Focus
- 66. (a) The North-east trade wind is responsible for rainfall in Tamil Nadu in the winter season. The normal annual rainfall of the state is about 945 mm of which 48% is through the North-East monsoon, and 32% through the south-west monsoon.
- 67. (b) India has ten bio-geographic regions i.e, Trans Himalayas, Himalayas, Desert, Semi-arid, Western Ghat, Deccan plateau, Gangetic plain, North-East Zone, Coastal zone, Islands present near the shore.
- 68. (a) Deodar is found between the altitudes of 1800 to 2600 meters of the Himalayan region.
- 69. (a) The Gulf of Cambay is known for its extreme tides.Gulf of Cambay is an inlet of the Arabian Sea along the west coast of India, in Gujarat. The Narmada, Tapti, Mahi and Sabarmati rivers drain into it. The Gulf of Kutch is an inlet of the Arabian Sea along the west coast of India, in Gujarat, and renowned for extreme daily tides. ACHIEVERS In Focus
- 70. (c) Soils which are formed in areas where mountains end and plains starts are called "Duars". Duars are strips of gravelly Bhabhar and Tarai lands in between West Bengal and Assam. Duars are known for tea cultivation. Large numbers of seasonal hill torrents which leave the Siwalik Range and enter the level plain are swollen with water soon after heavy showers in the neighbouring hills and carry with them a heavy load of coarse sand and silt. They are called 'Chos' in the plain where their beds are broad, braided, shallow and sandy. They are quite numerous and in some places every kilometre has a 'Chos'. It is mainly found in Punjab. Karewas valley is an intermountain valley fill, comprising of unconsolidated gravel and mud found in Jammu & Kashmir.

- (a) Maharashtra became the first state in the country to adopt the Fly Ash Utilization Policy. The policy seeks 100% use of fly ash generated from thermal power plants and biogas plants for construction activities. It facilitates use of fly ash to make bricks, blocks, tiles, wall panels, cement and other construction materials. The policy extends use of fly ash to 300 Kms radius of power plant from earlier 100 kms radius of power plant. It will help in environment protection and save soil excavation. It also will make available raw material for construction at low cost to help 'Housing for All' projects. It will also help create new employment opportunities in the power plant sector and pave way for prosperity by generating Wealth from Waste.
- 72. (a) Damodar is the most important river of the 'Rarr' region of West Bengal. ACHIEVERS In Focus
- 73. (b) National Waterway-61 has been either proposed nor notified till now.
- 74. (b) The latitude that pass through Sikkim also pass through Rajasthan. 27 degree centigrade latitude passes through Gangtok of Sikkim and Alwar in Rajasthan.
- 75. (b) The northern most point of India is known as India Col. It is located in an altitude of 5,764 meters.
- 76. (a) Only those financial bills which contain provisions exclusively on matters listed in article 110 of the Constitution are called Money Bills.
- 77. (a) India's President is head of the Indian state, first citizen of India and supreme commander of the Indian Armed Forces.
- 78. (c) The Riksdag is the national legislature and the supreme decision-making body of the government of Sweden.
- 79. (a) Dr. Sachchidananda Sinha was the first President (temporary Chairman) of the Constituent Assembly when it met on December 9, 1946. Dr. Rajendra Prasad then became the President of the Constituent Assembly, and would later become the first President of India. The Vice President of the Constituent Assembly was Professor Harendra Coomar Mookerjee, a former Vice-Chancellor of Calcutta University and a prominent Christian from Bengal, who also served as the Chairman of the Constituent Assembly's Minorities Committee; he was appointed Governor of West Bengal after India became a Republic.
- 80. (c) If the person is of Indian origin, then he / she has to be ordinary resident of India for seven years before making application towards getting citizenship by registration.
 ACHIEVERS In Focus
- 81. (c) Economic and Social planning is listed on 20 in the Concurrent list in 7th schedule of India.
- 82. (b) Matters which are not included in any of the three lists (Union, State, Concurrent) are known as residuary subjects.
- 83. (c) The Governor of a state, though has to consult the Council of Ministers led by the Chief Minister, acts finally on his discretion for the establishment of

separate development boards for Vidarbha and Marathwada in the state of Maharashtra.

- 84. (b) At the lowest level of the judicial machinery, the Munsiff at the civil side possesses limited jurisdiction and decides civil cases of small pecuniary stake while the Judicial Magistrate tries criminal cases which are punishable with imprisonment for a term up to three years. ACHIEVERS In Focus
- 85. (a) The pecuniary jurisdiction of the Permanent Lok Adalat in a district shall be up to rupees ten lakhs. However, the Central Government is empowered to increase the said pecuniary jurisdiction from time to time.
- 86. (b) The Reserve Bank of India was established on April 1, 1935 in accordance with the provisions of the Reserve Bank of India Act, 1934. The Central Office of the Reserve Bank of India was initially established in Kolkata but was permanently shifted to Mumbai in 1937.
- 87. (c) The indelible ink which is applied to fingers of voters during elections to prevent double voting contains Silver nitrate (AgNO₃). It makes a stain on the skin which is very difficult to wash off.
- 88. (c) The Chief Election Commissioner and two other election commissioner should office for a term of six years or until they attain the age of 65 years, whichever is earlier. However, they can resign at any time or can also be removed before the expiry of their term.
- 89. (a) The main basis for allocation of seats to various States in the Lok Sabha is population of the state. When the Constitution of India came into being, it had fixed the number of Seats to Lok Sabha as not more than 500.
- 90. (b) The tenth schedule of the Constitution of India contains provisions regarding defection. It was introduced by the 52nd Amendment to the Constitution of India in the year 1985 during tenure of Rajiv Gandhi.
- 91. (c) MPC has all six members.
- 92. (c) The Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM) was launched in 2013 by the Ministry of Housing & Urban Affairs in India. This mission aims to provide sustainable livelihood opportunities to the urban poor by focusing on skill development and entrepreneurship. It specifically targets six groups, including construction workers, gig workers, waste management workers, care workers, domestic workers, and transportation workers. ACHIEVERS In Focus
- 93. (b) Frugal Engineering is the process of reducing the complexity and cost of a good and its production. It includes removal of non-essential features from durable goods such as a car or phone, in order to sell it in developing countries to low income consumers.
- 94. (a) IFSC is short for Indian Financial System Code and represents the 11 digit character that one can usually see on his/her bank's cheque leaves. The IFSC is an 11-character code with the first four alphabetic

characters representing the bank name, and the last six characters (usually numeric, but can be alphabetic) representing the branch. The fifth character is 0 (zero) and reserved for future use. ACHIEVERS In Focus

- 95. (d) National Housing Bank was set up on July 9, 1988 under the National Housing Bank Act, 1987 as a wholly-owned subsidiary of the Reserve Bank to act as an apex level institution for housing.
- 96. (d) Stagflation refers to persistent high inflation coupled with high unemployment and stagnant demand /growth in economy.

High Inflation + Low Economic Growth {or conditions of recession} + Low Employment Generation = Stagflation

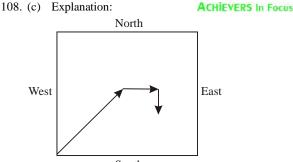
Stagflation generally occurs because recession reduces demand for goods. In the post 2008 crisis years, slowdown in growth and investment was accompanied by elevated levels of consumer price inflation in India. This condition was called stagflation.

- 97. (a) Jharkhand has the largest estimated coal reserves in India. It constitutes of about 38% of the total reserves in India. The main coal mining centres of the state are Ramgarh, Auranga, Bokaro, Karanpur, etc.
- 98. (b) All export and import-related activities including custom duty are governed by the Foreign Trade Policy (FTP), which is aimed at enhancing the country's exports and use trade expansion as an effective instrument of economic growth and employment generation.
- 99. (a) A monopoly exists when a specific person or enterprise is the only supplier of a particular commodity. This contrasts with a monopsony which relates to a single entity's control of a market to purchase a good or service, and with oligopoly which consists of a few sellers dominating a market.
- 100. (a) Indian Economy is a mixed economy where both state and market play a key role in the management of economy. In India both the Public sector as well as the private sector co-exist.
- 101. (b) A regressive tax is the one in which tax rate decreases as the amount subject to taxation increases; and the tax rate progresses from high to low. The lowest amount is subject to higher taxation and this leads to individuals with low income bear the highest burden of regressive taxes.
- 102. (a) All other figures can be rotated into each other. (In each figurer except (a), the middle element is obtained by rotating the outer element through 90° Clock wise and the inner element is obtained by rotating the middle element through 90° clock wise).
- 103. (d) 1. Farhan > Altaf > Shahid
 2. Farhan > Rafiq > Mohammad
 It can not be determined who is shortest.
- 104. (b) The first, third-fifth and seventh Letters of the first group are each moved one step backward to obtain the corresponding letters of the second group. The movement of other Letters is not required to find the answer.





- 105. (c) All the letters of the first group are replaced by the corresponding letters from the other end of the alphabet in the second group.
- 106. (d) In the above question, the digits are removed one by one from the beginning and the end in order alternately so as to obtain the subsequent terms of the series.
- 107. (b) Using Correct Symbols, We have: Given expression = $30 / 2 + 3 \times 6 - 5$ = 15 + 18 - 5 = 28



South

109. (d) D is the brother-in-law of A, who is brother of C. C is wife of D. D is the son-in-law of B. B Can either father or mother of A.

110. (a)

ACHIEVERS In Focus

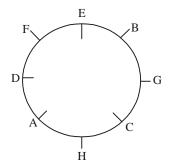
ACHIEVERS In Focus

- 111. (a) The position of each alphabet in the word is written but in the reverse order. Like the position of alphabets in the word BOWLER is 2, 15, 23, 12, 5, 18. So, the code is 1851223152.
- 112. (d) There are 15 letters between U and W in the given series. So, the middle letter is the eighth letter to the right of U, which is Y. Clearly, the tenth letter to the right of Y is C.
- 113. (b) In all other alternatives except (b), the second letter is two steps behind the first letter, while the third letter is four steps ahead of the second letter, in the given arrangement.
- 114. (b) Cleverness in ascending order: Rohan < Amit < Sudeep < Harshit < Garima.

115. (b) Difference =
$$\frac{PR^2}{100 \times 100}$$

1 = $\frac{P \times 4 \times 4}{100 \times 100}$ = 625

$$1 = \frac{1}{100 \times 100} = 62$$
(116-120) :



116. (d) 117. (c) 118. (d) 119. (b) 120. (d)

- 121. (d) Study of religion is not archaeology where as the rest represent the correct branch of study.
- 122. (a) Required number : = H.C.F. of (91 - 43), (183 - 91) and (183 - 43)= H.C.F. of 48, 92 and 140 = 4.
- 123. (c) If A and B are two numbers, $A \times B = HCF$ of A and $B \times LCM$ of A and B $\therefore 16 \times ? = 8 \times 144$ $\therefore ? = 72$ ACHIEVERS IN FOCUS
- 124. (b) Let the common factor be K \therefore The numbers are K and 6K If A and B are two numbers, $A \times B = HCF$ of A and $B \times LCM$ of A and B \therefore K \times 6K = 23 \times 138 \therefore K² = 23 \times 23 \therefore K = 23
 - \therefore Larger number = 6K = 6 × 23 = 138
- 125. (d) L.C.M. of 2, 4, 6, 8, 10, 12 is 120. So, the bells will toll together after every 120 seconds(2 minutes).

In 30 minutes, they will toll together $\frac{30}{2} + 1 = 16$

times.

- 126. (b) Rhizobium Found in roots of legumes, like Peas, grams, Pulses etc, where it fixes atmospheric nitrogen as Ammonia, which is then converted into useful Amino Acid.
- 127. (a) Pink eye or Conjunctivitis is an irritation or inflammation of the conjunctiva, which covers the white part of the eyeball. It can be caused by allergies or a bacterial or viral infection.
- 128. (a) The pylorus is the furthest part of the stomach that connects to the duodenum. It is divided into two parts, the antrum and the pyloric canal. The antrum connects to the body of the stomach, and the pyloric canal connects to the duodenum.
- 129. (d) Please note that Bast Fibers are obtained from Phloem.
- 130. (b) Influenza (1-2 days) , rest are 6-15 days.
- 131. (d) Calcium Carbide is the most commonly used chemical for ripening of mangoes in India. It reacts with the moisture emanated by the respiration of the fruit. It liberates a gas called acetylene which helps in ripening the fruit.
- 132. (b) Fluorine is most active because it has the highest electronegativity
- 133. (b) The given principle is one of the postulates of the Dalton's atomic theory given in 1803 by John Dalton. The postulates of Dalton's atomic theory are as follows:
 - 1. Elements consist of indivisible small particles (atoms).
 - 2. All atoms of the same element are identical; different elements have different types of atom.
 - 3. Atoms can neither be created nor destroyed.

- 4. 'Compound elements' (i.e. Compounds) are formed when atoms of different elements join in simple ratios to form 'compound atoms' (i.e. Molecules).
- 134. (d) Nitrobenzene, $C_6H_5NO_2$, very poisonous, flammable, pale yellow, liquid aromatic compound with an odor like that of bitter almonds. It is sometimes called oil of mirbane or nitrobenzol. **ACHIEVERS In Focus**
- 135. (b) Polyvinyl chloride (PVC) is made from the monomer vinyl chloride (CH₂=CHCl). It is used for making rain coats, handbags, toys including dolls, electrical goods and as a covering of electrical wires.
- 136. (d) The chalcogens are the group 16 elements of the periodic table. This group is also known as the oxygen family. It consists of the elements oxygen (O), sulphur (S), selenium (Se), tellurium (Te), and the radioactive element polonium (Po).
- 137. (a) The correct order would be Na> Mg >Be > P. Metallic character increases down a group and decreases along a period as we move from left to right.
- 138. (c) The general relationship between bond energy and bond length is that the bond energy decreases with the increase of bond length between two atoms.
- 139. (a) How the brain interprets the frequency of an emitted sound is called its pitch. The faster the vibration of the source, the higher is the frequency and the higher is the pitch.
- 140. (c) The 'Cruise Bharat Mission' was launched from Mumbai on 1 October, 2024, by Union Minister Shri Sarbananda Sonowal. This initiative aims to transform India into a global cruise tourism hub, with a target of doubling cruise passenger traffic by 2029. The mission emphasizes three key segments: ocean and harbour, river, inland, and island cruises. It will be implemented in three phases, focusing initially on studies, master planning, and modernization of existing cruise facilities.
- 141. (b) Sujata Chaturvedi has taken over as the Director General of the Sports Authority of India (SAI), succeeding Sandip Pradhan who completed his fiveyear tenure on 30 September, 2024. Chaturvedi was previously serving as the Sports Secretary of the Sports Ministry. She assumed her new role on 1 October, 2024.
- 142. (d) The speed of sound in a medium depends on temperature of the medium. The speed of sound decreases when we go from solid to gaseous state. In any medium as we increase the temperature the speed of sound increases.. The speed of sound will be highest in humid air at 30°C.
- 143. (a) Nuclear Fission is the source of energy in nuclear reactors which produce electricity.
- 144. (c) The atomic number or proton number of a chemical element is the number of protons found in the nucleus of an atom. In an uncharged atom, the atomic number is also equal to the number of electrons.

145. (b)

ACHIEVERS In Focus

- 146. (a) It was in late 1970s, Kerry Packer had established the rival World Series Cricket. It introduced many of the now commonly used features of One Day International Cricket, involving uniforms, matches being played at night under floodlights and a white ball and dark sight screens. ACHIEVERS In Focus
- 147. (a) Parth Mane achieved a remarkable feat at the ISSF Junior Championship in Peru, winning double gold in the 10m air rifle event. He secured the individual title with a score of 250.7, narrowly defeating China's Huang Liwanlin by 0.7 points. Additionally, Mane won gold in the men's team event alongside Ajay Malik and Abhinav Shaw.
- 148. (d) Assam has been granted Geographical Indication (GI) tags for eight traditional products, including distinctive rice beer variants deeply rooted in Bodo culture. The GI tags recognize the cultural heritage and traditional knowledge of the Bodo community. Products like Bodo Jou Gwran, with its high alcohol content and traditional brewing methods, have gained national and international recognition.
- 149. (a) One of the founders of bacteriology, German physician Robert Koch, discovered the anthrax disease cycle and the bacteria responsible for Tuberculosis and Cholera. He received the Nobel Prize for Physiology in 1905 for his research on Tuberculosis. To commemorate the day of his discovery, World Tuberculosis Day is being celebrated on March 24. Government of India has committed to eliminate prevalence of TB by 2025, by formulating National Strategic Plan (NSP) for Tuberculosis Elimination (2017-2025) and campaigns like "TB Harega Desh Jeetega".
- 150. (c) The Union Cabinet on 3 October 2024, approved classical language status for five languages: Marathi, Bengali, Pali, Prakrit and Assamese. This addition increases the total number of classical languages in India to 11. Classical languages hold significant cultural and historical importance, and the recognition brings them special status for preservation and promotion.
- 151. (c) During the 40th session of General Conference of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2019, it was proclaimed to celebrate April 15 as World Art Day every year. The day is celebrated to create awareness about

the diversity of artistic freedom and highlight the contribution of artists to sustainable development of the world. April 15 is also the birth anniversary of the legendary artist Leonardo da Vinci.

- 152. (a) Crookes glass comprises Cerium oxide (CiO₂) which sharply absorbs the ultraviolet rays from the sunlight. It is used in making lenses of eye glasses.
- 153. (b) LPG is composed hydrocarbons containing three or four carbon atoms. The normal components of LPG thus, are Propane (C_3H_8) , Butane (C_4H_{10}) and Methan (CH_4) . Small concentrations of other hydrocarbons may also be present.





- 154. (c) Temporary hardness is a type of water hardness caused by the presence of dissolved bicarbonate minerals (Calcium bicarbonate and Magnesium bicarbonate).
 ACHIEVERS In Focus
- 155. (c) Gases show high compressible because the molecules of gases are very very loosely packed and there is too much space between them so by compressing it is comes close and close and close and as its intermolecular space is more than solid and liquid it can be more compressed compared to the both.
- 156. (b) Alfred Bernhard Nobel was a Swedish businessman, chemist, engineer, inventor, and philanthropist. Nobel held 355 different patents, dynamite being the most famous. The synthetic element nobelium was named after him.
- 157. (b) The Kasu Brahmananda Reddy National Park (KBRNP) is located in Jubilee Hills in Hyderabad, Telangana and covers an area of 390-acre. The park is also known as Chiran Fort Palace. The park has over 600 species of plant life, 140 species of birds and 30 different varieties of butterflies and reptiles. It is home to pangolin, small Indian civet, peacock, jungle cat, porcupines, etc.
- 158. (c) PM10 is particulate matter with 10 mm or less in diameter and PM2.5 is particulate matter with 2.5 micrometers or less in diameter. These particles are formed by burning fuel and chemical reactions that take place in the atmosphere which results environment pollution. A new study showed that PM2.5 is more harmful than PM10. ACHIEVERS In Focus
- 159. (b) Narayan Sarovar Sanctuary is situated in the most sighted animal here is the Chinkara (population estimated in the range of 1200–1500), which is currently the flagship species of the sanctuary. The most significant animal of the sanctuary is the Chinkara which is also the flagship species of the sanctuary.
- 160. (a) Sound waves are longitudinal waves. In these waves the individual particles of the medium move in a direction parallel to the direction of propagation of the disturbance.
- 161. (d) Some of the green house gases: carbon dioxide, methane, nitrous oxide, chlorofluorocarbon, tropospheric ozone.
- 162. (c) It is a Sovereign, Socialist, Secular, Democratic, Republic with a Parliamentary system of government. The Republic is governed in terms of the Constitution of India which was adopted by the Constituent Assembly on 26th November, 1949 and came into force on 26th January, 1950.
- 163. (c) Sakshi Malik from Haryana, made history as the first Indian woman to win an Olympic medal in wrestling at the 2016 Rio Olympics. Competing in the 58 kg freestyle category, she secured a bronze medal, marking a monumental achievement for Indian sports. resilience.
- 164. (a) The Assam Government introduced the 'Nijut Moina' scheme, which offers monthly stipends to female

students in order to promote women's education and reduce dropout rates. The scheme provides Rs.1,000 for higher secondary students, Rs.1,250 for degree students, and Rs.2,500 for post-graduation students. This initiative reflects Assam's efforts to support and enhance educational opportunities for women from class 11 through post-graduation.

- 165. (d) Group Captain Shubhanshu Shukla of the Indian Air Force has been selected to pilot the Axiom-4 mission to the International Space Station (ISS) in 2025, marking a historic achievement as the first Indian astronaut to embark on this journey. The Ax-4 mission, a collaborative effort between India and the United States, will also see renowned astronaut Peggy Whitson commanding the mission. ACHIEVERS In Focus
- 166. (d) The inaugural Kho Kho World Cup will be held in India in 2025, announced by the Kho Kho Federation of India and the International Kho Kho Federation. The event will feature 24 countries from 6 continents, with 16 teams for both men and women. To promote the sport, the KKFI plans to introduce Kho Kho in 200 schools across 10 cities and aims to register at least 50 lakh players. The tournament will include a week of matches with 54 countries participating, aiming to elevate Kho Kho to an international level.
- 167. (b) The Maharashtra Government has approved the renaming of Pune Airport to 'Jagadguru Sant Tukaram Maharaj Airport' to honour the revered saint's contributions to Bhagwat Dharma. Sant Tukaram was born in Lohgaon, near the airport. The renaming reflects a tribute to Sant Tukaram's legacy and cultural significance, enhancing the airport's connection to the region's spiritual heritage. ACHIEVERS In Focus
- 168. (d) The 55th International Film Festival of India (IFFI) took place in Goa from 20-28 November, 2024. IFFI was founded in 1952 and is held annually. This year's festival showcased a diverse range of films, including feature films, non-feature films, and documentaries from around the world. Goa's picturesque landscape and vibrant culture provided a unique backdrop for this celebration of cinema.
- 169. (b) Claudia Sheinbaum made history as Mexico's first female President, succeeding outgoing President Andres Manuel Lopez Obrador. Previously serving as the first female Mayor of Mexico City, Sheinbaum's presidency continues the progressive agenda of the Morena party, emphasizing social justice and political reform. ACHIEVERS In Focus
- 170. (b) 'Charna' refers to the Guru-pupil lineage or school for teaching and learning of Vedas in ancient India.
- 171. (d) Homeland of Aryans : one of the inscription proves that the Aryans are from Central Asia is Boghazkoi (Asia Minor, Turkey) Inscription.
- 172. (d) According to Rigveda, the famous battle of ten kings (or Dasrajan Yudha) was between Sudas, a Bharata king of the Tritsu family and the confederacy of ten well-known tribes- Puru, Yadu, Turvasa, Anu, Druhyu,

Alina, Paktha, Bhalanas, Shiva and Vishanin. In the bloody and decisive battle on the banks of River Parushni the Bharatas emerged victorious. ACHIEVERS In Focus

- 173. (b) Victor Ambros and Gary Ruvkun, two American scientists, have been awarded the 2024 Nobel Prize in Medicine for their groundbreaking discovery of microRNA. Their research has significantly advanced our understanding of how organisms develop and function. The Nobel Prize Committee recognized their pioneering work, which has opened up new avenues for research in molecular biology and disease treatment.
- 174. (c) The 12th edition of the 'Naseem-Al-Bahr' bilateral exercise between the navies of India and Oman is to be held in Goa. The exercise is held once in every two years between Indian Navy and the Royal Navy of Oman since 1993.The previous edition of the exercise was held in December 2017 in Muscat, Oman.

Recently, two naval ships of the Oman Navy arrived in Goa, while the Indian Navy ships Beas and Subhadra will participate in the exercise.

- 175. (a) Kerala inaugurated India's first supercapacitor manufacturing facility at Keltron Component Complex, developed in collaboration with the Indian Space Research Organisation (ISRO). The plant aims to produce 2,000 supercapacitors daily, generating Rs. 22 crore annually, and is part of the state's plan to invest Rs.1,000 crore in the electronics sector. The facility will manufacture high-quality, indigenously made supercapacitors for applications ranging from electric vehicles to space missions.
- 176. (a) The Satapatha Brahamana states that the wife is half her husband and completes him.
- 177. (b) Hornbill Festival is a weeklong annual event of Nagaland. The popularity and importance of Hornbill festival is not just a national phenomenon but has gained popularity around the world. Organized by the State Tourism. Art and Culture Department, Hornbill Festival dubbed as the Festival of Festivals in Nagaland, encourages inter-tribal interaction, showcasing the entire array of Naga life and culture. Unlike other years, with more activities added to the event, the Department is expecting the biggest participation of both domestic and international tourists.
- 178. (d) Article 30 of the Indian Constitution confers the right on minorities to establish and administer educational institutions of their choice. This right is provided to all language and religious minorities. ACHIEVERS

The Article was recently in news because the Supreme Court of India held that the appointment of teachers in minority educational institutions can be regulated by the Government and it will not violate Article 30. As per the judgement, the institutions cannot have an absolute right on the appointment.

179. (d) The Bharat Gaurav luxury tourist train was launched to promote cultural and spiritual tourism between India and Nepal. The train, part of the Bharat Nepal Maitri Yatra, covers important religious and cultural sites in both countries, including Ayodhya and Varanasi in India and Janakpur and Kathmandu in Nepal.

- 180. (d) Ajit Vinayak Gupte, a seasoned diplomat from the 1991 batch, has taken on the role of India's Ambassador to Germany. He served as Ambassador to Denmark from 2017-2021 and is currently the Ambassador to Egypt. ACHIEVERS In Focus
- 181. (c) The State cabinet of Telengana has recently decided to organize a town development programme called 'Pattana Pragathi' for 10 days from February 24. The programme is scheduled to be held in all towns and cities of the state.

This programme is aimed at maintain the urban areas clean and green with better sanitation facilities. Several measures to improve the living standards of people in urban regions are to be undertaken.

- 182. (c) Bhagat Singh was convicted and executed at the young age of 23 for his involvement in the assassination of John Saunders (Lahore Conspiracy Case). Saunders was a British police officer. Bhagat Singh and his comrades sought revenge for the death of Lala Lajpat Rai which was caused by brutal police. They were convicted after a trial by s Special Tribunal which sentenced them to death by hanging. On 23 March, 1931, Bhagat Singh, Rajguru and Sukhdev were executed.
- 183. (b) The Hindu Widows' Remarriage Act, 1856, also Act XV, 1856, enacted on 25 July 1856, legalized the remarriage of Hindu widows in all jurisdictions of India under East India Company rule was drafted by Lord Dalhousie.
- 184. (a) In 1766 the British, the Marathas and the Nizam of Hyderabad entered into a triple alliance against Haider. However, Haider soon bought off the Marathas. The Nizam abandoned the war in 1768, leaving the British to face Haider Ali alone. The latter attacked Arcot and reached the outskirts of Madras. He dictated peace on the basis of the status quo. The English also agreed to help Haider Ali against any third party invasion in future.
- 185. (a) Delhi Lieutenant Governor V K Saxena has launched a 'Dust-free Delhi' drive to reduce air pollution before winter. This 10-day campaign involves multiple agencies like the MCD and PWD, focusing on cleaning roads and drains to prevent dust accumulation. The initiative aligns with the Delhi government's Winter Action Plan to tackle pollution levels during winter months.
- 186. (d) Himachal Pradesh has launched the 'Sankalp' initiative under the leadership of CM Sukhvinder Singh Sukhu, which is aimed at addressing drug trafficking and addiction in the state. The initiative includes establishing a model de-addiction and rehabilitation centre in Kotla Barog, Sirmaur district. This centre will provide comprehensive services for recovery and support for affected families. Additionally, the state





is pursuing environmental sustainability goals, aiming to become a Green Energy State by 31 March, 2026, which includes a green hydrogen plant in Nalagarh.

- 187. (d) The birth anniversary of the social reformer and the first female teacher of India, Savitribai Phule was observed across the country on January 3. The Prime Minister of India and various other leaders paid tributes to her on her birth anniversary. Savitribai Phule along with her husband Jyotirao Phule founded the country's first girls' school in Pune in 1848. Born in Maharashtra, Phule worked hard to abolish discrimination against women and suppressed classes of people. ACHIEVERS IF
- 188. (c) Pratyasa Ray from Odisha has been selected for the prestigious 32nd Ekalabya Puraskar for 2024 in recognition of her outstanding achievements in the sport. Her remarkable track record includes winning multiple gold medals at the Odisha State Swimming Championships and earning accolades at national and international competitions.
- 189. (c) The Indian Air Force held a spectacular air show on Marina Beach in Chennai to celebrate the 92nd IAF Day. This event showcased various new aircraft, including the Rafale, Tejas, and Sukhoi fighter jets, mesmerizing the gathered spectators. Families and dignitaries were present to witness the daring aerial manoeuvres and formation flying executed by the IAF, highlighting their aerial prowess.
- 190. (c) The foundation of the National Disaster Response Force (NDRF) Academy was recently laid in Nagpur, Maharashtra by the Union Home Minister Amit Shah. He also inaugurated a campus of the Nagpur based National Fire Service College. The NDRF Academy, once completed will contain state-of-the-art infrastructure to simulate disasters and provide training to the personnel in various rescue operations. The National Disaster Response Force, a dedicated force for disaster response related operations was constituted in the year 2006. ACHIEVERS In Focus
- 191. (c) The 31st edition of the International Kite Festival was inaugurated in Ahmedabad by the Chief Minister of Gujarat and the Governor of the state. Ahmedabad has been the official host of the festival since 1989.

Several kite makers and enthusiasts all over the world will participate in the festival to display and fly their kite creations. The festival is organized as a part of the 'Uttarayan' celebrations of the state of Gujarat. The festival is expected to boost the tourism sector of the state.

- 192. (a) Kuttanad region in Kerala covering Alappuzha and Kottayam Districts represents India's lowest altitudes.
- 193. (b) Luni is a river in Rajasthan which originates in the Pushkar Valley of Aravalli range near Ajmer and ends in marshy lands of Rann of Kutch in Gujarat.

194. (b)

- 195. (a) Madhya Pradesh has achieved a significant milestone by conducting India's first entirely paperless election for the post of sarpanch in Ratua Ratanpur. This groundbreaking initiative, spearheaded by the state election commission, aims to eliminate paper usage in the electoral process, enhancing both efficiency and transparency.
- 196. (d) Rhea Singha, a 19-year-old model from Gujarat, won the title of Miss Universe India 2024 in Jaipur, triumphing over 51 other candidates. This victory positions her as India's representative at the upcoming global Miss Universe competition in Mexico.
- 197. (c) The National Disaster Management Authority (NDMA) and Southern Command of the Indian Army organized a two-day national symposium, 'Exercise AIKYA', on disaster management in Chennai. 'AIKYA' means 'Oneness' in Tamil, symbolizing the goal to unite India's Disaster Management community. It brought together stakeholders from six southern states/ UTs: Tamil Nadu, Kerala, Karnataka, Andhra Pradesh, Telangana, and Puducherry. It focused on issues like tsunamis, landslides, floods, cyclones, industrial incidents, and forest fires, emphasizing recent events in Tamil Nadu, Wayanad and Andhra Pradesh.
- 198. (c) Sharad Kumar, a retired IPS officer, has been appointed as the new chief of BCCI's Anti-Corruption Unit. Previously he was serving as Director General of the National Investigation Agency from 2013-2017 and Vigilance Commissioner from June 2018-April 2020. ACHIEVERS In Focus
- 199. (b) The International Day of Peace is celebrated annually on 21 September to promote peace and highlight the importance of global unity for a peaceful and sustainable world. This year's theme is "Cultivating a Culture of Peace".
- 200. (b) Mizoram launched the Bana Kaih initiative to support small entrepreneurs and farmers. The scheme offers financial assistance to farmers growing ginger, turmeric, Mizo chilli, and broomsticks. Farmer societies in villages will purchase these crops, with minimum prices set by the Government. Farmers will receive support prices if they sell below these rates; no Government intervention if prices are higher.

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