

RRB GROUP D TEST - 6 SOLUTION

MATHS

Q 1. Answer: (a)

Explanation:

Pipe X fills in 10 h $\Rightarrow$ rate = $\frac{1}{10}$ tank / hour. Pipe Y fills in 12 h

$\Rightarrow$ rate = $\frac{1}{12}$ tank / hour.

combined rate = $\frac{1}{10} + \frac{1}{12} = \frac{11}{60}$

Both open for 3 hours :

Amount filled in 3 hours = $3 \times \frac{11}{60} = \frac{11}{20}$

Remaining = $1 - \frac{11}{20} = \frac{9}{20}$

Pipe Y alone fills at $\frac{1}{12}$ tank / hour, so time required

$\frac{9}{20}$
time = $\frac{1}{12} = 5.4$ hours

Q 2. Answer: (b)

Explanation:

$12 \times 6 \div (12 \div 3) + (6 \times 15 \div 3) \times 2 \times a = 27 \times 4 \div 9$

$= 72 \div 4 + (30) \times 2 \times a = 12$

$= 18 + 60a = 12$

$= 60a = -6$

$a = -\frac{1}{10}$

Q 3. Answer: (c)

Explanation:

$6a^2 = 10584 \text{ cm}^2$

$a^2 = 1764$

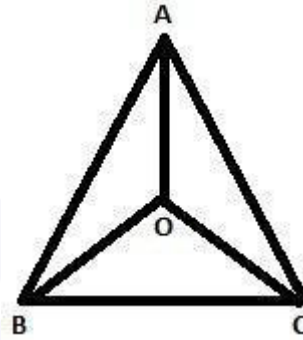
$a = 42$

Diagonal = $a\sqrt{3}$

Diagonal = $42\sqrt{3} \text{ cm}$.

Q 4. Answer: (d)

Explanation:



If, $\angle BAC = 68^\circ$

Then In - centre, $\angle BOC = 90^\circ + \frac{1}{2} \angle BAC$

$= 90^\circ + 34^\circ = 124^\circ$

Q 5. Answer: (a)

Explanation:

Assume total distance = $(3, 4) \text{ LCM} = 12$

$\frac{1}{3}$ of journey = $\frac{12}{3} = 4 \text{ km}$ at 45 km/h .

$\frac{1}{4}$ of journey = $\frac{12}{4} = 3 \text{ km}$ at 40 km/h .

Remaining = $12 - (4 + 3) = 5 \text{ km}$ at 60 km/h .

For 4 km at $45 \frac{\text{km}}{\text{h}} : \frac{4}{45} \text{ hr}$

For 3 km at $40 \frac{\text{km}}{\text{h}} : \frac{3}{40} \text{ hr}$

For 5 km at $60 \frac{\text{km}}{\text{h}} : \frac{1}{12} \text{ hr}$

Total time = $\frac{4}{45} + \frac{3}{40} + \frac{1}{12} = \frac{32 + 27 + 30}{360} = \frac{89}{360} \text{ hr}$

Average speed = $\frac{\text{Total distance}}{\text{Total time}} = 12 / \frac{89}{360} = \frac{4320}{89} \text{ km/hr}$

Q 6. Answer: (d)

Explanation:

If a number leaves the same remainder when dividing any numbers, then it must divide the differences of the numbers.

$8256 - 6720 = 1536$

$9792 - 8256 = 1536$



$$9792 - 6720 = 3072$$

We need the GCD of 1536 and 3072: $\text{GCD}(1536, 3072) = 1536$

Q 7. Answer: (b)

Explanation:

Assume Ekta's wealth = 1 unit.

$$\text{Deepa's wealth} = \frac{5}{8} \times 1 = \frac{5}{8}, \text{Farah's wealth} = \frac{9}{4} \times 1 = \frac{9}{4}$$

$$\text{Ratio} = \frac{9}{4} : \frac{5}{8} = 18 : 5$$

Q 8. Answer: (a)

Explanation:

$$x \times \frac{1}{2} = 1296$$

$$x = 2592$$

$$2592 \times \frac{1}{10} = 259.2$$

Q 9. Answer: (b)

Explanation:

Work $\propto$ (number of workers $\times$ days).

Given :

24 workers $\times$ 18 days = total work for 1 wall.

$$= 24 \times 18 = 432 \text{ works.}$$

$$\text{Work required} = 432 \times 1.5 = 648 \text{ works.}$$

$$\text{Days} = \frac{648}{36} = 18 \text{ days.}$$

Q 10. Answer: (d)

Explanation:

$$\cos 3A = \sin(A - 45^\circ)$$

$$\sin \theta = \cos(90^\circ - \theta)$$

$$\sin(A - 45^\circ) = \cos[90^\circ - (A - 45^\circ)] = \cos(135^\circ - A)$$

$$\cos 3A = \cos(135^\circ - A)$$

$$\Rightarrow 3A = 135^\circ - A$$

$$\Rightarrow 3A + A = 135^\circ$$

$$\Rightarrow 4A = 135^\circ$$

$$\Rightarrow A = 33.75^\circ$$

Q 11. Answer: (a)

Explanation:

Fresh mangoes weight = 2 quintals = 200 kg.

$$\text{Solids} = 200 \times \frac{20}{100} = 40 \text{ kg}$$

Dried mangoes contain 80% solids, so :

$$0.8 \times x = 40$$

$$\Rightarrow x = \frac{40}{0.8} = 50 \text{ kg}$$

Q 12. Answer: (b)

Explanation:

$$= (4)^3 - (3)^3 - (2)^3 - 3(12)(2)$$

$$= 64 - 27 - 8 - 72 = -43$$

Q 13. Answer: (c)

Explanation:

Male	Female
25000	15000
20000	
5000	5000
Ratio/अनुपात = 1 : 1	

Q 14. Answer: (a)

Explanation:

Vessel P : milk : water = 3 : 7

$$\text{Fraction of milk} = \frac{3}{10}$$

Vessel Q : milk : water = 7 : 3

$$\Rightarrow \text{fraction of milk} = \frac{7}{10}$$

Desired mixture : milk : water = 4 : 5

$$\Rightarrow \text{fraction of milk} = \frac{4}{9}$$

Using alligation method :

Fraction from Q – desired fraction :

Desired fraction – fraction from P = y : x

$$\frac{7}{10} - \frac{4}{9} : \frac{4}{9} - \frac{3}{10} = y : x$$

$$\frac{23}{90} : \frac{13}{90} = 23 : 13$$

Q 15. Answer: (a)

Explanation:

Let **present** daughter's age = x and **present** mother's age = y

Sum of their ages :

$$x + y = 60 \text{ -- (Equation 1)}$$

Ten years ago, mother's age was 5 times daughter's age :

$$y - 10 = 5(x - 10) \text{ -- (Equation 2)}$$

$$y - 10 = 5x - 50$$

$$y = 5x - 40 \text{ -- (Equation 3)}$$

Now,

$$x + (5x - 40) = 60$$

$$6x - 40 = 60$$

$$6x = 100$$

$$x = \frac{100}{6}$$

16 years 8 months

Q 16. Answer: (a)

Explanation:

room dimensions: Length = 5 m, Width = 3 m, Height = 2.8 m

Walls only (no ceiling/floor):

Two walls of size length $\times$ height = $5 \times 2.8 = 14 \text{ m}^2$, each $\rightarrow 2 \times 14 = 28 \text{ m}^2$

Two walls of size width $\times$ height = $3 \times 2.8 = 8.4 \text{ m}^2$, each $\rightarrow 2 \times 8.4 = 16.8 \text{ m}^2$

Total wall area per room = $28 + 16.8 = 44.8 \text{ m}^2$

Total wall area for 4 rooms

$$4 \times 44.8 = 179.2 \text{ m}^2$$

1 liter covers 20 m^2

$$\text{Liters required} = \frac{179.2}{20} = 8.96 \text{ Liters}$$

Q 17. Answer: (b)

Explanation:

$$\text{Correct calculation : } x \div \frac{2}{7} = x \times \frac{7}{2} = \frac{7x}{2}$$

$$\text{Wrong calculation : } x \div \frac{7}{2} = x \times \frac{2}{7} = \frac{2x}{7}$$

$$\text{Error} = \text{Correct value} - \text{Wrong value} = \frac{7x}{2} - \frac{2x}{7} = \frac{45x}{14}$$

$$\text{Percentage error} = \frac{\text{error}}{\text{correct value}} \times 100$$

$$= \left(\frac{45x}{14} \div \frac{7x}{2} \right) \times 100 = 91.84\%$$

Q 18. Answer: (a)

Explanation:

$$\text{Exterior angle} = \frac{360^\circ}{n} = \frac{360^\circ}{12} = 30^\circ$$

$$\text{Interior angle} = 180^\circ - \text{Exterior angle}$$

$$\text{Interior angle} = 180^\circ - 30^\circ = 150^\circ$$

Q 19. Answer: (d)

Explanation:

$$\text{Rate per year} = 50/5 = 10\%$$

$$\text{So, } R = 10\% \text{ p.a.}$$

$$\text{Principal} = ₹12,000$$

$$\text{Rate} = 10\% = 0.10$$

$$\text{Time} = 2 \text{ years}$$

$$A = P(1 + r/100)^T$$

$$A = 12000 \times (1.1)^2$$

$$A = 12000 \times 1.21 = 14520$$

$$\text{CI} = A - P = 14520 - 12000 = ₹2520$$

Q 20. Answer: (c)

Explanation:

$$(\sin^2 33^\circ + \sin^2 57^\circ)$$

$$= \sin^2 33^\circ + \cos^2 (90^\circ - 57^\circ) = 1$$

$$= \sin^2 33^\circ + \cos^2 33^\circ$$

$$= 1$$

$$(\cos^2 42^\circ + \cos^2 48^\circ)$$

$$= \cos^2 42^\circ + \sin^2 (90^\circ - 48^\circ) = 1$$

$$= \cos^2 42^\circ + \sin^2 42^\circ$$

$$= 1$$

$$\text{So, } (\sin^2 33^\circ + \sin^2 57^\circ) : (\cos^2 42^\circ + \cos^2 48^\circ) = 1 : 1$$

Q 21. Answer: (c)

Explanation:

Let the second part = x

Then, the first part = $3x + 8$

$$\Rightarrow x + (3x + 8) = 360$$

$$\Rightarrow 4x + 8 = 360$$

$$\Rightarrow 4x = 352$$

$$\Rightarrow x = 88$$

Q 22. Answer: (c)

Explanation:

Let the cost price of one article = C .

Let the marked price of one article = M .

Customer pays for 4 articles and gets 1 free $\rightarrow$ gets 5 articles total.



Q 30. Answer: (a)

Explanation:

Let B's age = x
 A's age = $x + 4$
 Six years ago: $A = (x + 4 - 6) = x - 2$, $B = x - 6$
 A/Q , $x - 2 = 2(x - 6)$
 $\Rightarrow x - 2 = 2x - 12 \Rightarrow 10 = x$
 So, B = 10 years

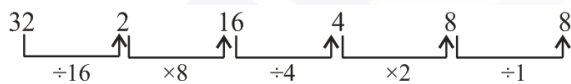
Q 31. Answer: (c)

Explanation:

7^3 , $(7 - 1)^3$
 5^3 , $(5 - 1)^3$
 2^3 , $(2 - 1)^3 = 1$
 6^3 , $(6 - 1)^3$

Q 32. Answer: (d)

Explanation:



Q 33. Answer: (b)

Explanation:

$P < T$ (False)
 $R > Q$ (True)
 Only conclusion II Follows

Q 34. Answer: (b)

Explanation:

First letters advance by +2 ($M \rightarrow O \rightarrow Q \rightarrow S \rightarrow U$). Numbers increase by +2, +3, +4, next +5 $\rightarrow 11 + 5 = 16$. Third letters increase +3 each ($A \rightarrow D \rightarrow G \rightarrow J \rightarrow M$).

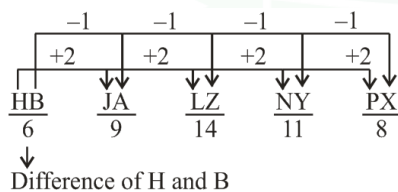
Q 35. Answer: (d)

Explanation:

The statement emphasizes the importance of time both conclusions are valid.

Q 36. Answer: (b)

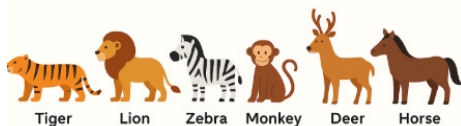
Explanation:



Difference of H and B

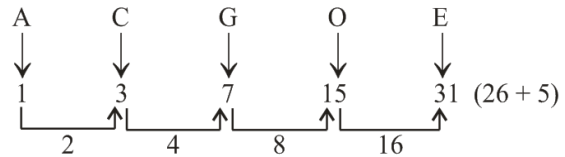
Q 37. Answer: (c)

Explanation:



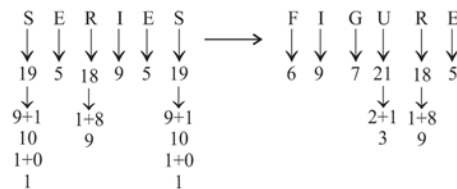
Q 38. Answer: (a)

Explanation:



Q 39. Answer: (b)

Explanation:



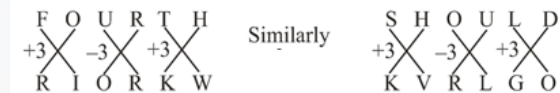
Q 40. Answer: (c)

Explanation:

Amit + Reena + Sohan = 72
 $I \rightarrow$ Reena = Amit + 6
 $II \rightarrow$ Sohan = 30
 From both: Amit + Reena = 42
 $\Rightarrow$ Reena = Amit + 6
 $\Rightarrow$ Amit + (Amit + 6) = 42 $\Rightarrow 2\text{Amit} + 6 = 42 \Rightarrow 2\text{Amit} = 36 \Rightarrow \text{Amit} = 18$
 $\Rightarrow$ Reena = 24

Q 41. Answer: (b)

Explanation:



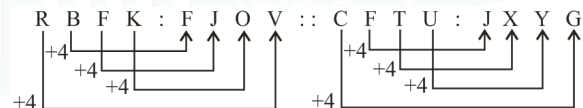
Q 42. Answer: (a)

Explanation:

(Logic: Archaeology $\rightarrow$ Antiquities, Numismatics $\rightarrow$ Study of Coins)

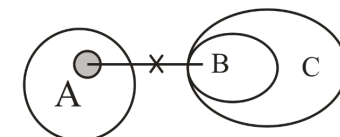
Q 43. Answer: (b)

Explanation:



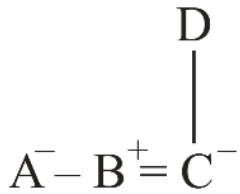
Q 44. Answer: (c)

Explanation:



Q 45. Answer: (b)

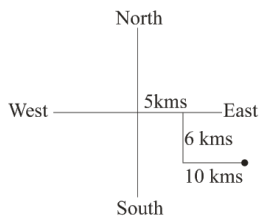
Explanation:



Topics -- Direction & Distance

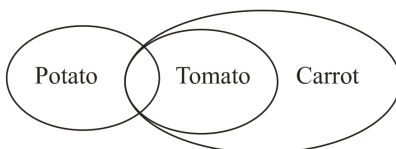
Q 46. Answer: (a)

Explanation:



Q 47. Answer: (a)

Explanation:

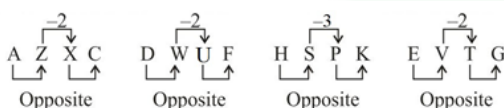


Q 48. Answer: (d)

Explanation:

H	@
O	#
N	!
E	%
Y	\$
S	&
T	^

Q 49. Answer: (d)



Q 50. Answer: (c)

Explanation:

$$3 \times 4 - 8 = 42 = 16$$

$$2 \times 4 - 3 = 52 = 25$$

Q 51. Answer: (c)

Explanation:

$$52 + 4 = 29$$

$$32 + 7 = 16$$

Q 52. Answer: (c)

Explanation:

'A' represents '-', 'B' represents '+', 'C' represents 'x' and 'D' represents '+'

$$115 \div 23 \times 50 + 250 - 200$$

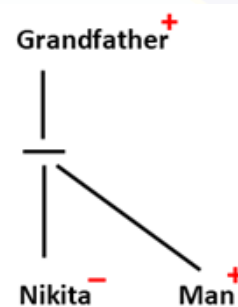
$$= 5 \times 50 + 250 - 200$$

$$= 500 - 200$$

$$= 300$$

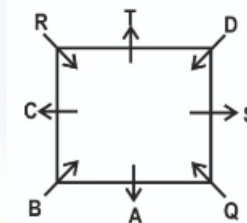
Q 53. Answer: (a)

Explanation:



Q 54. Answer: (a)

Explanation:



Thus, the correct answer is option 1.

Q 55. Answer: (d)

Explanation:

Floors	Persons
8	L
7	H
6	F
5	M
4	O
3	G
2	N
1	I

Thus, the correct answer is option 4.

Q 56. Answer: (c)

Explanation:

- Boyle's Law states that at constant temperature, the pressure of a fixed mass of gas is inversely proportional to its volume ($P \propto 1/V$). As the volume decreases, the pressure increases proportionally. This principle is applied in syringes, human breathing mechanisms, and scuba diving.

Q 57. Answer: (b)

Explanation:

- In NaCl, sodium transfers one electron to chlorine, forming Na^+ and Cl^- ions. The electrostatic attraction between these oppositely charged ions is called an ionic bond. This gives NaCl high melting and boiling points and makes it soluble in water.

Q 58. Answer: (b)

Explanation:

- Phloem transports food (sugars prepared in leaves) to all parts of the plant. This process, called translocation, is carried out by sieve tubes and companion cells. Unlike xylem, phloem conducts in both upward and downward directions.

Q 59. Answer: (d)

Explanation:

Deficiency of Vitamin B12 causes pernicious anemia, leading to reduced red blood cell production and fatigue. Vitamin B12 is mainly found in animal foods like meat, milk, and eggs. Vegetarians are more prone to its deficiency.

Q 60. Answer: (d)

Explanation:

- Venus has the strongest greenhouse effect. Its thick CO_2 -rich atmosphere traps heat, raising surface temperatures to about 465°C , hotter than Mercury, despite being farther from the Sun.

Q 61. Answer: (c)

Explanation:

- Ultrafiltration in Bowman's capsule filters blood under pressure. Water, salts, glucose, and urea all pass into the nephron without selection. Later, the tubules reabsorb only essential substances.

Q 62. Answer: (b)

Explanation:

- A current-carrying conductor in a magnetic field experiences a magnetic force, also known as Lorentz force. The direction of this force is given by Fleming's left-hand rule. This principle is used in electric motors, where the interaction between current and magnetic field produces motion. The magnitude depends on

current, length of conductor, and magnetic field strength.

Q 63. Answer: (b)

Explanation:

- 1 Zinc oxide (ZnO) is amphoteric, meaning it can react with both acids and bases. It reacts with HCl to form ZnCl_2 and with NaOH to form sodium zincate. Amphoteric oxides are typical of elements near the metalloid region of the periodic table, showing properties of both metals and non-metals.

Q 64. Answer: (b)

Explanation:

- The pulmonary vein carries oxygen-rich blood from the lungs to the left atrium of the heart. Unlike most veins that carry deoxygenated blood, pulmonary veins are an exception. This oxygenated blood is then pumped into the left ventricle and subsequently distributed to the whole body through the aorta.

Q 65. Answer: (b)

Explanation:

- The time period (T) of a simple pendulum is given by $T = 2\pi\sqrt{L/g}$, where L is length and g is acceleration due to gravity. The formula does not include the mass of the bob, so the period is independent of mass. This is why a heavy or light bob swings with the same frequency if lengths are equal.

Q 66. Answer: (c)

Explanation:

- Chlorofluorocarbons (CFCs) are responsible for ozone layer depletion. In the stratosphere, UV radiation breaks CFCs releasing chlorine atoms, which catalytically destroy ozone molecules. This increases UV radiation reaching the Earth, causing skin cancer, cataract, and ecological damage.

Q 67. Answer: (b)

Explanation:

- Antidiuretic hormone (ADH), secreted by the posterior pituitary, regulates water balance in kidneys. It increases water reabsorption in the collecting ducts of nephrons, reducing urine volume. ADH ensures proper hydration and maintains blood pressure. Deficiency of ADH leads to excessive urine production, as seen in diabetes insipidus.

Q 68. Answer: (b)

Explanation:

- When light passes from air (less dense) to glass (more dense), its speed decreases due to the higher optical density of glass. This causes bending of light toward the normal, a phenomenon called refraction. The refractive index of glass determines the exact reduction in speed.

Q 69. Answer: (b)

Explanation:

- Glucose is a reducing sugar because it contains a free aldehyde group in its open-chain form. It can reduce Fehling's or Benedict's solution, forming a red precipitate of Cu_2O . Sucrose is non-reducing, while starch and cellulose do not have free aldehyde or ketone groups to act as reducing agents.

Q 70. Answer: (b)

Explanation:

- In uniform circular motion, the velocity magnitude remains constant, but the direction changes continuously. This requires a centripetal (radial inward) acceleration toward the center of the circle. Its magnitude is v^2/r , where v is speed and r is radius. No tangential acceleration exists if speed is constant.

Q 71. Answer: (b)

Explanation:

- Mitochondria are called the powerhouse of the cell because they generate ATP through cellular respiration. Glucose and other nutrients are oxidized, releasing energy stored in ATP molecules, which powers cellular activities. Cells with higher energy demands, like muscle cells, contain more mitochondria.

Q 72. Answer: (b)

Explanation:

- Graphite is commonly used as a moderator in nuclear reactors to slow down fast neutrons. Slower neutrons have a higher probability of causing fission in fissile nuclei like Uranium-235. The moderator absorbs little energy but efficiently reduces neutron speed, ensuring a sustained chain reaction.

Q 73. Answer: (a)

Explanation:

- In a parallel circuit, each resistor is directly connected across the supply voltage. Therefore, the potential difference across each resistor is the same as the source voltage. The current through each resistor depends on its resistance but voltage remains equal across all parallel branches.

Q 74. Answer: (b)

Explanation:

- Dendrites are branched extensions of the neuron that receive signals from other neurons or sensory receptors. These signals are transmitted to the soma and then to the axon for further propagation. Dendrites increase the surface area for synaptic connections, enabling complex communication within the nervous system.

Q 75. Answer: (b)

Explanation:

- This is a displacement reaction. Zinc displaces hydrogen from sulfuric acid because it is more reactive. The reaction results in zinc sulfate formation and hydrogen gas liberation. Displacement reactions involve one element replacing another in a compound, often governed by the reactivity series of metals.

Q 76. Answer: (a)

Explanation:

The time period T of a wave is the reciprocal of frequency f .

$$T = 1/f = 1/50 = 0.02 \text{ seconds.}$$

The time period represents the time taken by one complete oscillation of the wave.

Q 77. Answer: (b)

Explanation:

- When metals react with acids, hydrogen gas is liberated. For example, $\text{Zn} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$. The metal displaces hydrogen from the acid, forming a salt and releasing H_2 . This reaction depends on the metal's reactivity.

Q 78. Answer: (c)

Explanation:

- Vitamin K is essential for synthesizing prothrombin and other clotting factors in the liver. Without it, the blood cannot clot properly, leading to excessive bleeding. It is fat-soluble and found in green leafy vegetables and synthesized by intestinal bacteria.

Q 79. Answer: (a)

Explanation:

- In a series circuit, the current remains the same through all resistors because there is only one path for electron flow. However, the voltage across each resistor depends on its resistance according to Ohm's law $V = IR$.

Q 80. Answer: (c)

Explanation:

- Oxalic acid is a primary standard because it is pure, stable, non-hygroscopic, and can be accurately weighed. It is used to standardize solutions of bases. HCl and HNO_3 cannot be used as primary standards due to volatility and concentration variations.

GENERAL KNOWLEDGE

Q 81. Answer: (d)

Explanation:

- Both Chandrayaan-1 (launched 22 October 2008) and Mars Orbiter Mission (Mangalyaan, launched 5 November 2013) were successfully launched by ISRO's



PSLV, known for placing payloads into polar and transfer orbits.

Q 82. Answer: (b)

Explanation:

- In 2024 Bharat Ratna recipients included Lal Krishna Advani, P. V. Narasimha Rao and Chaudhary Charan Singh (among others). M. Venkaiah Naidu was not a 2024 Bharat Ratna awardee.

Q 83. Answer: (c)

Explanation:

- Chronological centuries: Al-Biruni (11th c.), Marco Polo (13th c.), Ibn Battuta (14th c.), Francois Bernier (17th c.). So order: B → A → D → C.

Q 84. Answer: (c)

Explanation:

- The Andhra Pradesh Reorganisation Act was passed in 2014. Telangana formally came into existence on 2 June 2014.

Q 85. Answer: (b)

Explanation:

- Natyashastra, the foundational Sanskrit text on theatre, dance and music, is traditionally attributed to Bharata Muni.

Q 86. Answer: (a)

Explanation:

- The Kushana dynasty (1st–3rd century CE) issued gold coins (dinars) in significant quantities, influenced by Indo-Greek coinage traditions.

Q 87. Answer: (a)

Explanation:

- Shashi Tharoor wrote 'The Great Indian Novel' (published 1989), a satirical retelling of modern Indian history through the framework of the Mahabharata.

Q 88. Answer: (a)

Explanation:

- Organic farming does NOT promote monoculture; it favors crop rotation and polyculture, natural pest control (including encouraging birds), weed suppression and natural fertilizers like compost and manure.

Q 89. Answer: (b)

Explanation:

- Union Minister for Finance and Corporate Affairs Smt. Nirmala Sitharaman presented the Union Budget 2025–26 in Parliament on 1 February 2025. The Budget outlined macro-fiscal targets and sectoral priorities while continuing reforms to boost manufacturing, infrastructure and social welfare.

Q 90. Answer: (b)

Explanation:

- During his state visit to Mauritius in March 2025, Prime Minister Narendra Modi announced the Vision “MAHASAGAR” — Mutual and Holistic Advancement for Security and Growth Across Regions — as India’s elevated approach toward Global South and Indian Ocean cooperation.

Q 91. Answer: (b)

Explanation:

- The inaugural Africa–India Key Maritime Engagement (AIKEYME) exercise took place in Dar es Salaam, Tanzania, from 13 April 2025. The exercise aimed to strengthen maritime cooperation, interoperability and shared response capabilities between India and Indian Ocean littoral states. AIKEYME reflects India’s focus on practical maritime partnerships, information sharing and capacity building with African partners to safeguard shared maritime commons and foster security collaboration.

Q 92. Answer: (b)

Explanation:

- Dr P. K. Mishra, Principal Secretary to the Prime Minister, represented India at the Global Platform for Disaster Risk Reduction (GPDRR) 2025 in Geneva in early June. His engagements included dialogues with G20, WHO and African Union delegations, reaffirming India’s commitment to disaster resilience, public health integration and multilateral cooperation.

Q 93. Answer: (b)

Explanation:

- India’s central role in advancing the Global Biofuels Alliance (GBA), an India-led multilateral initiative that gained traction during G20 engagements in 2024–25. The Alliance aligns with India’s decarbonisation and energy security goals by fostering cooperation among producers, consumers and institutions to promote biofuel standards, investment and deployment at national and regional levels.

Q 94. Answer: (c)

Explanation:

- The liver performs many vital functions: it detoxifies harmful substances (like drugs, alcohol), stores glycogen (as a glucose reserve), and secretes bile which helps emulsify fats. However, insulin is produced by the pancreas, not the liver. Thus, production of insulin is not a function of the liver.

Q 95. Answer: (c)

Explanation:

- The Speaker of the Lok Sabha presides over a joint sitting of Parliament, as per Article 118 of the Constitution.



If the Speaker is absent, the Deputy Speaker presides. The joint sitting is called by the President to resolve deadlocks between Lok Sabha and Rajya Sabha on certain bills.

Q 96. Answer: (a)

Explanation:

- The 'Sagar Mein Samman' (SMS) initiative was unveiled on 18 May 2025 to promote gender equity in the maritime sector. It aims to boost women's participation in maritime operations—from seafaring roles to leadership, docks, training, and governance. It addresses safety, training, retention, and leadership challenges, aligning with India's vision to build a gender-equitable maritime workforce.

Q 97. Answer: (b)

Explanation:

- The "Sahkar Taxi" cooperative ride-hailing service was announced by the Ministry of Cooperation in March 2025. Under the "Sahakar se Samriddhi" philosophy, it aims to form cooperative taxi societies where drivers manage operations and profits are shared equitably. The service will include registrations of two-wheelers, taxis, rickshaws, and four-wheelers.

Q 98. Answer: (c)

Explanation:

- In May 2025, the Union Cabinet approved ₹60,000 crore for upgrading Industrial Training Institutes (ITIs) over 5 years to improve infrastructure, curriculum, and digital capabilities.

Q 99. Answer: (b)

Explanation:

- The Mumbai International Cruise Terminal inaugurated in April 2025 is reported to handle 5 cruise ships simultaneously.

Q 100. Answer: (b)

Explanation:

- India's first uncrewed Gaganyaan mission is scheduled for launch in December 2025. This mission will carry the humanoid robot Vyommitra to simulate astronaut conditions and provide critical data on life-support and environmental systems. The launch will be conducted using the Human Rated Launch Vehicle (HLVM3) from the Satish Dhawan Space Centre, aiming for a low Earth orbit.