रेलवे भर्ती बोर्ड / RAILWAY RECRUITMENT BOARDS

सीईएन - 05/25 - जेई, डीएमएस, सीएमए - CEN - 05/25 - JE, DMS, CMA

Test Date	25/02/2026
Test Time	4:30 PM - 6:00 PM
Subject	RRB JE DMS CMA

*** Note**
Correct Answer will carry 1 mark per Question.
Incorrect Answer will carry 1/3 Negative mark per Question.

1. Options shown in green color with a tick icon are correct.
2. Chosen option on the right of the question indicates the option selected by the candidate.

Q.1 **Simar starts from Point A and drives 10 km towards south. He then takes a right turn, drives 7 km, turns right and drives 12 km. He then takes a right turn and drives 9 km. He takes a final right turn, drives 2 km and stops at Point P. How far (shortest distance) and towards which direction should he drive in order to reach Point A again?**

(All turns are 90 degree turns only unless specified.)

Ans A). 2 km to the west B). 3 km to the west C). 2 km to the east D). 3 km to the east

Correct Answer: A

Q.2 **A tap can fill a cistern in 32 hours, while another tap can empty the full cistern in 64 hours. If the cistern is initially empty and both taps are opened together, find the time (in hours) required to fill one-fourth of the cistern.**

Ans A). 64 B). 48 C). 32 D). 16

Correct Answer: D

Q.3 **The list price of a refrigerator is ₹15,000. It is sold to a retailer after two successive discounts of 32% and 40%. The retailer wants to earn a profit of 45% on his cost after allowing a 49% discount (on its new list price) to the customer. At what price should he list the refrigerator?**

Ans A). ₹17,400 B). ₹17,412 C). ₹17,325 D). ₹17,504

Correct Answer: A

Q.4 **D, R, A, W and S have different marks. Only one person has scored between A and R. Only one person has scored between R and W. S has scored more than R and W. How many people have scored less than D?**

Ans A). One B). Two C). Four D). Three

Correct Answer: A

Q.5 Express $5.97\overline{3}$ as a vulgar fraction.

Ans A). $5\frac{219}{225}$ B). $5\frac{319}{225}$ C). $5\frac{229}{255}$ D). $5\frac{319}{215}$

Correct Answer: A

Q.6 **Select the pair which follows the same pattern as that followed by the two set of pairs given below. Both pairs follow the same pattern.**

JKK : KFH
HVO : IQL

Ans A). CPR : DKN B). OOP : PJM C). FJL : GDI D). CUK : DPG

Correct Answer: B

Q.7 **Why are sulphide ores usually converted into oxides before the extraction of metals?**

Ans A). Metal sulphides react faster with carbon B). Sulphide ores are unstable at room temperature
C). Sulphide ores contain more gangue materials D). Metal oxides are easier to reduce than sulphides

Correct Answer: D

Q.8 **Under the Stand-Up India Scheme, bank loans from Scheduled Commercial Banks (SCBs) are provided in what range for eligible beneficiaries?**

Ans A). ₹5 lakh to ₹50 lakh B). ₹25 lakh to ₹2 crore C). ₹1 crore to ₹5 crore D). ₹10 lakh to ₹1 crore

Correct Answer: D

Q.9 If $\frac{4(x^2 + 1) - 8x}{3x} = 6,\ x > 0$, then find the positive value of $\sqrt{x} + \frac{1}{\sqrt{x}}$.

Ans A). $\sqrt{\frac{2}{5}}$ B). $\sqrt{\frac{2}{3}}$ C). $\sqrt{\frac{5}{3}}$ D). $\sqrt{\frac{17}{2}}$

Correct Answer: D

Q.10 **What is the primary composition of the stable composite developed by IIT Mandi that prevents 2D semiconductors from degrading?**

Ans A). Carbon nanotubes embedded in polymer matrix B). Boron nitride mixed with epoxy resin
C). Tungsten disulfide (WS) encapsulated in polydimethylsiloxane (PDMS) D). Graphene combined with silicone

Correct Answer: C

Q.11 **If 14.8 : x :: x : 3.7 and x > 0, then find the value of x.**

Ans A). 7.4 B). 4.1 C). 12.9 D). 11.4

Correct Answer: A

Q.12 **'Utkal Diwas', which was celebrated on 1st April 2025, marks the anniversary of the statehood of _____.**

Ans A). Chhattisgarh B). Uttarakhand C). Telangana D). Odisha

Correct Answer: D

Q.13 **Seven boxes, D, E, F, G, H, W and X, are kept one over the other, but not necessarily in the same order.**
Only H is kept above E. Only D is kept between E and G. Only F is kept below X.
How many boxes are kept between W and E?

Ans A). One B). Three C). Two D). Four

Correct Answer: C

Q.14 **19 is related to 287 following a certain logic. Following the same logic, 23 is related to 347. To which of the following is 28 related, following the same logic?**
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding /subtracting /multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

Ans A). 422 B). 426 C). 424 D). 420

Correct Answer: A

Q.15 **Why are brackets used in the formula $Ca(OH)_2$?**

Ans A). To show ionic nature B). To balance oxygen atoms C). To indicate two hydroxide groups D). To represent molecular bonding

Correct Answer: C

Q.16 **In a certain code language,**
A + B means 'A is the daughter of B'
A – B means 'A is the brother of B'
A x B means 'A is the wife of B'
A ÷ B means 'A is the father of B'

Based on the above, how is E related to K if 'E – F + G x H ÷ K'?

Ans A). Husband B). Brother C). Son D). Father

Correct Answer: B

Q.17 **If + means - , - means x , x means ÷ , ÷ means +, then what will come in place of the question mark (?) in the following equation?**

4-18×3÷50+33=?

Ans A). 31 B). 40 C). 41 D). 30

Correct Answer: C

Q.18 **The average of the first 18 positive multiples of 11 is:**

Ans A). 104.5 B). 18 C). 11 D). 99

Correct Answer: A

Q.19 How many metres of cloth 2 metres wide will be required to make a conical tent with the diameter of the base being 14 metres and its slant height being 9.5 metres?

(Use $\pi = \frac{22}{7}$)

Ans A). 114.5 B). 104.5 C). 124.5 D). 109.5

Correct Answer: B

Q.20 A dentist uses a mirror to obtain a large image of a patient's tooth. Which mirror should the dentist use and why?

Ans A). Plane mirror, because it gives a real image B). Concave mirror, because it gives a magnified image

C). Spherical mirror, because it gives a virtual image D). Convex mirror, because it gives a magnified image

Correct Answer: B

Q.21 What is the primary material used to develop vermicompost?

Ans A). Bacteria and viruses B). Earthworms C). Yeast D). Chemical fertilisers

Correct Answer: B

Q.22 Girish scored 695 marks in an examination and was 17 marks short of 89% of the maximum marks. In the same examination, his friend scored 688 marks. What is the percentage of marks scored by his friend?

Ans A). 84% B). 83% C). 86% D). 87%

Correct Answer: C

Q.23 How do check-dams help in improving agricultural water availability and soil quality?

Ans A). They increase groundwater levels and reduce soil erosion. B). They directly irrigate fields with river water and increase soil erosion.

C). They store water only for city use, and reduce soil erosion. D). They divert water away from farms and increase soil erosion.

Correct Answer: A

Q.24 Which observation supports the law of constant proportions for water?

Ans A). Water boils at fixed temperature B). Water exists in three states C). Hydrogen and oxygen ratio is fixed

D). Water conducts electricity weakly

Correct Answer: C

Q.25 P is the brother of W. W is the father of R. T is the father of J. J is the son of R. How is T related to P?

Ans A). Daughter's son B). Brother's daughter's son C). Daughter's husband D). Brother's daughter's husband

Correct Answer: D

Q.26 A shopkeeper sells his goods at cost price. If by using false weights he gains $3\frac{19}{27}\%$, then what weight does he use for 1 kg (in g, rounded off to 2 decimal places)?

Ans A). 987.35 B). 964.29 C). 938.99 D). 954.79

Correct Answer: B

Q.27 What should come in place of '?' in the given series?

7 10 16 25 ?

Ans A). 34 B). 43 C). 40 D). 37

Correct Answer: D

Q.28 In a micelle, which part faces outward toward water?

Ans A). Hydrocarbon tail B). Ionic head C). Non-polar end D). Grease molecule

Correct Answer: B

Q.29 A student claims that two cars of equal mass, one moving at 40 km/h and another at 80 km/h, have the same kinetic energy if their engines provide the same power. What is the error in this reasoning?

Ans A). The cars have equal energy if the engines are identical.

B). Kinetic energy depends on the square of speed, not just on power supplied. C). Power supplied determines energy, regardless of speed.

D). Both cars have equal kinetic energy since both cover the same distance.

Correct Answer: B

Q.30 A farmer wants to grow wheat with better baking quality and resistance to drought. Which two characteristics should be targeted in variety improvement?

Ans A). Higher yield and wider adaptability B). Improved quality and abiotic resistance C). Improved quality and biotic resistance

D). Wider adaptability and biotic resistance

Correct Answer: B

Q.31 **As per the India Meteorological Department (IMD), what is the approximate total annual normal rainfall received in the Thar Desert, which has a coefficient of variation (CV) of about 38%?**

Ans A). 250 mm per year B). 200 mm per year C). 150 mm per year D). 50 mm per year

Correct Answer: A

Q.32 **Which rivers have contributed to the formation of the Northwestern Plains of India?**

Ans A). Krishna, Godavari, and Kaveri B). Satluj, Beas, and Ravi C). Ganga, Yamuna, and Brahmaputra D). Narmada, Tapti, and Mahanadi

Correct Answer: B

Q.33 **A question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements are sufficient to answer the question. Read both the statements carefully and decide the appropriate answer.**

Question: 5 people, P, Q, X, Y and Z, have an exam on different days of the same week between Monday and Friday. Who has an exam on Thursday?

Statements:
I. P has an exam on Wednesday. Only one person has an exam between P and Q. Z has an exam immediately before X.
II. No one has an exam between P and Y. Only two people have an exam between Y and X. Z does not have an exam on Monday.

Ans A). Data in statement II alone is sufficient to answer the question while data in statement I is not

B). Data in statement I alone is sufficient to answer the question while data in statement II is not

C). Data in statements I and II together is not sufficient to answer the question

D). Data in statements I and II together (and not statement I alone or statement II alone) is sufficient to answer the question

Correct Answer: D

Q.34 **Why does our palm feel cold when acetone or petrol is poured on it?**

Ans A). The liquid blocks heat flow from surroundings B). The liquid increases moisture on skin surface

C). The liquid absorbs heat from the skin to evaporate D). The liquid reacts chemically with our skin surface

Correct Answer: C

Q.35 **When x is added to each of 13, 19, 16 and 23, then the numbers so obtained, in this order, are in proportion. Then, if 5x : y :: y : (8x-4), and y > 0, what is the value of y?**

Ans A). 42 B). 37 C). 41 D). 30

Correct Answer: D

Q.36 **Refer to the following letter, number and symbol series and answer the question that follows.**

(Left) H @ $ V 1 B 2 C N E T U 8 6 % # L C N Q A (Right)

If all the letters are dropped from the series, which of the following will be fifth from the left?

Ans A). 6 B). 8 C). % D). 2

Correct Answer: B

Q.37 **Which region is the Sarhul festival, orgainsed on 1st April 2025, particularly significant in?**

Ans A). The southern states of India B). The Himalayan region C). The Chhotanagpur region and Jharkhand D). The coastal regions of India

Correct Answer: C

Q.38 **How do rays parallel to the principal axis behave after reflection from a convex mirror?**

Ans A). They actually converge at the focus. B). They appear to diverge from a point on the principal axis.

C). They get reflected back along the same path. D). They pass through the centre of curvature.

Correct Answer: B

Q.39 **Which of the following articles is INCORRECTY matched with the Constitutional Provisions related to Parliament ?**

Ans A). Article 93 ----Speaker and Deputy Speaker of the House of People B). Article 99 ---Composition of the Council of States/Rajya Sabha

C). Article 89---- Chairman and Deputy Chairman of Council of States D). Article 105--- Powers and Privileges of the Houses of Parliament

Correct Answer: B

Q.40 **The monthly income of Chetan is ₹60,000 and his expenditure is ₹35,000. If his income increases by 25%, and his expenditure increases by 15%, then what will be the percentage increase in his savings?**

Ans A). 35% B). 36% C). 39% D). 38%

Correct Answer: C

Q.41 **Which of the following situations is NOT an example of action and reaction forces?**

Ans A). A swimmer pushing water backwards B). A bat hitting a cricket ball

C). A ball thrown upward comes back down due to the pull of gravity. D). A rocket launching upwards

Correct Answer: C

Q.42 **In a certain code,**
'parents teach good values' is coded as 'sc fs ye un',
'strong values shape character' is coded as 'lx zv fs lb' and
'good habits discipline strong' is coded as 'ye hk gb zv'.

(All the codes are two-letter codes only.)
What is the possible code for 'character'?

Ans A). Either 'ye' or 'lb' B). Either 'fs' or 'zv' C). Either 'lb' or 'fs' D). Either 'lb' or 'lx'

Correct Answer: D

Q.43 **Which of the following statements best explains why humans are severely affected by biological magnification?**

Ans A). Humans can break down toxins B). Humans are best decomposers in food chain

C). Humans consume less food than other consumers in food chain D). Humans occupy the top trophic level in many food chains

Correct Answer: D

Q.44 **Which of the following folk dances is performed to celebrate a good harvest and is popular in the states of Odisha and Chhattisgarh?**

Ans A). Bhangra B). Karma C). Garba D). Rouf

Correct Answer: B

Q.45 **The fluid content inside the plasma membrane is named:**

Ans A). Chromatin B). Genes C). Cytoplasm D). Chromosomes

Correct Answer: C

Q.46 **Select the set in which the numbers are related in the same way as are the numbers of the following sets.**

(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into its constituent digits. E.g. 13 – Operations on 13 such as adding/subtracting/multiplying etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed)

(13, 91, 27)
(19, 133, 39)

Ans A). (25, 175, 50) B). (26, 130, 53) C). (20, 140, 41) D). (29, 210, 57)

Correct Answer: C

Q.47 The roots of the equation $ax^3 - 24x^2 + 188x - 480 = 0$ are three consecutive even natural numbers. The value of a is _____.

Ans A). 2 B). 1 C). 3 D). 4

Correct Answer: B

Q.48 **Which waste based difference between the renal artery and renal vein is directly related to excretory function?**

Ans A). The renal vein has higher pressure B). The renal artery has more valves C). The renal artery contains more urea

D). The renal vein contains more oxygen

Correct Answer: C

Q.49 **A car suddenly changes direction while moving at constant speed. Which aspect of inertia is being demonstrated, and how does the car's mass influence this effect?**

Ans A). The inertia of rest is demonstrated, and the car's mass does not affect direction changes.

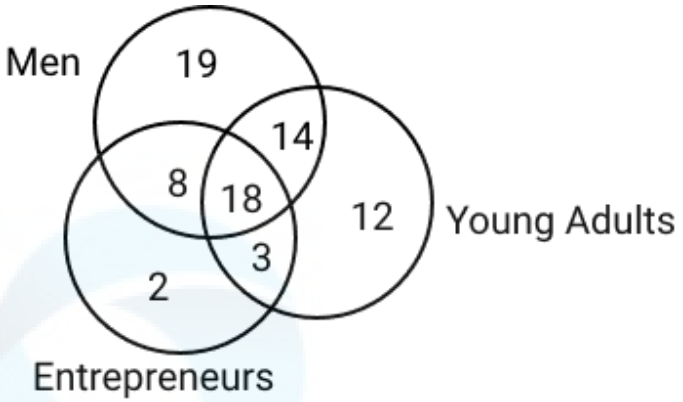
B). The inertia of speed is demonstrated, and a lighter car resists direction change more.

C). Mass only affects speed, not direction, when a car turns.

D). The inertia of direction is demonstrated, and a car with greater mass will resist the change in direction more.

Correct Answer: D

Q.50 Study the given diagram carefully and answer the question that follows. The numbers in different sections indicate the number of persons. (NOTE: You have to take the given data to be true even if they seem to be at variance from commonly known facts.)



How many young adults are entrepreneurs?

Ans A). 21 B). 3 C). 22 D). 18

Correct Answer: A

Q.51 In the Assumed Mean Method, if the assumed mean (A) = 55 and an observed value x = 40, what is the deviation d?

Ans A). 1.5 B). -1.5 C). 15 D). -15

Correct Answer: D

Q.52 If a body at rest is dropped from a certain height and takes 4 seconds to reach the ground, what is the approximate height from which it was dropped? (Take g = 10 m/s²)

Ans A). 80 meters B). 160 meters C). 40 meters D). 100 meters

Correct Answer: A

Q.53 Which of the following is usually 'stored under high pressure'?

Ans A). N2 B). H2 C). Solid CO2 D). NaCl

Correct Answer: D

Q.54 The value of $4^3 - 7^2 + \left(\frac{16}{4}\right)^2 - 4 + 9 \times 1 =$ _____

Ans A). 33 B). 44 C). 42 D). 36

Correct Answer: D

Q.55 Which of the following objectives is stated in Article 38 of the Indian Constitution?

Ans A). To establish military rule for national security B). To establish a social order based on justice—social, economic, and political
C). To guarantee employment to all citizens D). To provide equal education opportunities for all

Correct Answer: B

Q.56 The Five Ps of Sustainable Development are:

Ans A). Poverty, Peace, Protection, Plant, Product B). Population, Peace, Production, Power, Partnership
C). People, Peace, Power, Planet, Partnership D). People, Peace, Prosperity, Planet, Partnership

Correct Answer: D

Q.57 A farmer wants to plant 95 mango trees, 171 banyan trees, and 152 banana trees in equal rows (in terms of the number of trees). Also, he wants to create distinct rows of trees, with only one type of tree in each row. Find the minimum number of rows required.

Ans A). 23 B). 18 C). 19 D). 22

Correct Answer: D

Q.58 Find the roots of the quadratic equation $15x^2-x-2=0$

Ans A). $x = \frac{-1}{3}$ or $x = \frac{-2}{5}$ B). $x = \frac{1}{3}$ or $x = \frac{2}{5}$ C). $x = \frac{-1}{3}$ or $x = \frac{2}{5}$ D). $x = \frac{1}{3}$ or $x = \frac{-2}{5}$

Correct Answer: C

Q.59 If $14\sin Y + \cos Y = \sqrt{14}\sin Y$, then find the value of $\tan Y$.

Ans A). $\frac{-14-\sqrt{14}}{182}$ B). $\frac{-14-\sqrt{14}}{187}$ C). $\frac{-14-\sqrt{14}}{192}$ D). $\frac{-15-\sqrt{14}}{182}$

Correct Answer: A

Q.60 **This question is based on the following words/letter clusters.**

(left) ADS DUG AGS BEG (right)

How many letters are there between the second letter of the second word/letter cluster from the right and the second letter of the second word/letter cluster from the left, counted in the English alphabetical order?

Ans A). 11 B). 12 C). 13 D). 14

Correct Answer: C

Q.61 **By the late 1960s, what major achievement did India attain in agriculture?**

Ans A). Shifted entirely to organic farming B). Started exporting food grains C). Became self-sufficient in food grains D). Stopped using fertilizers

Correct Answer: C

Q.62 Simplify: $110 - 42 \times (5 + 6) - 6$

Ans A). −348 B). −363 C). −350 D). −358

Correct Answer: D

Q.63 **Who among the following has overtaken Yuzvendra Chahal to become India's highest wicket-taker in T20 Internationals at Eden Gardens in Kolkata on 22 January 2025?**

Ans A). Jasprit Bumrah B). Kuldeep Yadav C). Mohammed Siraj D). Arshdeep Singh

Correct Answer: D

Q.64 **A regular hexagon is inscribed in a circle. If the length of the shortest diagonal of the hexagon is 12 cm, find one-sixth of the area (in cm²) of the region lying between the circle and the hexagon.**

Ans A). $6(3\pi - 2\sqrt{3})$ B). $4(2\pi - 3\sqrt{3})$ C). $4(3\pi - 2\sqrt{3})$ D). $6(2\pi - 3\sqrt{3})$

Correct Answer: B

Q.65 **What should come in place of the question mark (?) in the given series?**

2 16 44 100 212 ?

Ans A). 436 B). 433 C). 430 D). 435

Correct Answer: A

Q.66 **Select the set in which the numbers are related in the same way as are the numbers of the following sets.**
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding / subtracting /multiplying, etc. to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.)

(133,5,23)
(107,1,18)

Ans A). (76,20,16) B). (10,22,2) C). (75,9,4) D). (18,24,1)

Correct Answer: A

Q.67 **Which of the following is/are correct about Tej Bahadur Sapru?**
I. He helped Annie Besant to build up the Central Hindu College at Banaras.
II. He entered politics during the Home Rule movement.
III. He participated in the Round Table Conferences held between 1930 and 1932 in London.

Ans A). Only I B). Only II C). All I, II and III D). Only II and III

Correct Answer: C

Q.68 **Which of the following tissues ensures that food made in the leaves is delivered to all plant parts?**

Ans A). Phloem B). Mesophyll C). Xylem D). Epidermis

Correct Answer: A

Q.69 **Amit had invested same amount of sums at simple as well as compound interest, compounded annually. The time period of both the sums was 2 years and rate of interest too was same 10% per annum. At the end, he found a difference of ₹97 in both the interests received. What were the sums (in ₹) invested?**

Ans A). 8,950 B). 8,800 C). 9,700 D). 10,050

Correct Answer: C

Q.70 **Plant diseases are caused by pathogens transmitted through:**

Ans A). Sunlight exposure B). Soil, water and air C). Crop residues alone D). Fertilisers and manure only

Correct Answer: B

Q.71 **What conclusion can be drawn from the experiment in which potassium permanganate solution remains coloured even after repeated dilution?**

Ans A). Particles of matter are extremely small in size B). Particles of matter are fixed and stationary
C). Particles of matter are visible to naked eye D). Particles of matter occupy no space at all

Correct Answer: A

Q.72 **Ozone shields the surface of the Earth from which type of radiation coming from the Sun?**

Ans A). X rays B). White light C). Infra-red D). Ultra violet

Correct Answer: D

Q.73 **Mr. W travelled 425 km, 946 km and 340 km at a speed of 5 km/hr, 43 km/hr and 34 km/hr, respectively. Find his average speed in km/hr.**

Ans A). $14\frac{71}{117}$ B). $14\frac{75}{117}$ C). $14\frac{73}{117}$ D). $14\frac{70}{117}$

Correct Answer: C

Q.74 **Which of the following everyday mixtures is best classified as a suspension?**

Ans A). Salt solution prepared in water B). Sugar completely dissolved in water C). Copper sulphate dissolved in water
D). Chalk powder mixed with water

Correct Answer: D

Q.75 **In what ratio should sugar costing ₹34/kg be mixed with sugar costing ₹58/kg so that by selling the mixture at ₹52.80/kg, there is a profit of 32%?**

Ans A). 5 : 3 B). 7 : 3 C). 3 : 1 D). 5 : 2

Correct Answer: C

Q.76 **When dilute hydrochloric acid reacts with calcium carbonate, the gas evolved is passed through limewater. On passing the gas in excess, the milkiness disappears due to the formation of:**

Ans A). Calcium oxide B). Calcium hydrogen carbonate C). Calcium carbonate D). Calcium hydroxide

Correct Answer: B

Q.77 **Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusions logically follow(s) from the statements.**

Statements:
All apples are mangos.
All mangos are balls.
No ball is a cat.

Conclusions:
(I): No apple is a cat.
(II): Some balls are apples.

Ans A). Both conclusions (I) and (II) follow B). Neither conclusion (I) nor (II) follows C). Only conclusion (II) follows
D). Only conclusion (I) follows

Correct Answer: A

Q.78 **If the current in a wire is 2 amperes, how much charge flows through a cross-section in 5 seconds?**

Ans A). 7 coulombs B). 10 coulombs C). 0.4 coulombs D). 2.5 coulombs

Correct Answer: B

Q.79 **Find the ratio between the fourth proportional of 8, 12 and 4, and the third proportional of 6 and 9.**

Ans A). 4:9 B). 5:11 C). 7:11 D). 9:13

Correct Answer: A

Q.80 **The ratio of the cost prices of articles X and Y is 1:2. A man earns a profit of 12% by selling X and incurs a loss of 36% by selling Y. What is his overall gain or loss percentage in the entire transaction?**

Ans A). Loss, 20% B). Gain, 20% C). Gain, 26.5% D). Loss, 24.5%

Correct Answer: A

Q.81 Each of C, D, E, F, X, Y and Z has an exam on a different day of a week starting from Monday and ending on Sunday of the same week.
X has exam on Friday. Only two people have exams between Y and X. Only four people have exams between C and Y. D has exam immediately after F. Z doesn't have exam on Monday.
How many people have exam(s) between Z and E?

Ans A). Four B). Two C). Three D). One

Correct Answer: A

Q.82 A can do a work in 9 days and B in 12 days. They work on alternate days, beginning with B.
In how many days will the work be completed?

Ans A). $8\frac{1}{3}$ B). $9\frac{1}{3}$ C). $10\frac{1}{3}$ D). $12\frac{1}{3}$

Correct Answer: C

Q.83 Select the triad which follows the same pattern as that followed by the two triads given below. Both triads follow the same pattern.

JM-HK-FI
MP-KN-IL

Ans A). QS-NP-KO B). PS-NQ-LO C). PS-NQ-KO D). QS-MP-KO

Correct Answer: B

Q.84 In a certain code,
'green apple sweet' is coded as 'ta lo mi'
'red apple fresh' is coded as 'ku lo pe'
'green mango fresh' is coded as 'ta si pe'
(all the codes are two letter coded only)
What is the code for "green apple"?

Ans A). ku lo B). mi si C). ta lo D). ta pe

Correct Answer: C

Q.85 Why are metals such as sodium and calcium extracted by electrolytic reduction instead of heating with carbon?

Ans A). They decompose when heated with carbon B). They have greater affinity for oxygen than carbon
C). They exist only as molten chlorides in nature D). They form unstable oxides at high temperature

Correct Answer: B

Q.86 A boat travels 36 km downstream in 3 hours and returns upstream covering the same distance in 5 hours. What is the speed of boat in still water?

Ans A). 10.2 km/hour B). 9.6 km/hour C). 11.7 km/hour D). 8.5 km/hour

Correct Answer: B

Q.87 What should come in place of ? in the given series based on the English alphabetical order?
JMQ ILP HKO GJN ?

Ans A). FJM B). FIN C). FIM D). FJN

Correct Answer: C

Q.88 Based on the English alphabetical order, three of the following four letter cluster pairs are alike in a certain way and thus form a group. Which is the one that does not belong to that group?
(Note: The odd man out is not based on the number of consonants/vowels or their position in the letter cluster.)

Ans A). KI−EF B). SQ−NL C). AY−VT D). LJ−GE

Correct Answer: A

Q.89 India commemorated the _____birth anniversary of Rabindranath Tagore on May 7, 2025.

Ans A). 164th B). 166th C). 160th D). 162nd

Correct Answer: A

Q.90 Calculate the population standard deviation of the data 13, 17, 23, 26, 31, 28, 15, 34, 17, and 26.
(Round off your answer to two decimal places.)

Ans A). 7.18 B). 7.26 C). 6.81 D). 6.19

Correct Answer: C

Q.91 **Refer to the following letter, number, symbol series and answer the question that follows. (NOTE: All numbers are single digit numbers only) Counting to be done from left to right only.**

(Left) H 9 & 3 L ! 6 M $ 7 R @ 4 C % 2 F # 5 K * 8 P (Right)

How many such symbols are there, each of which is immediately preceded by a number and also immediately followed by another symbol?

Ans A). Two B). None C). One D). Three

Correct Answer: B

Q.92 **Five years ago, the ratio of the ages of Amit and Bhanu was 2 : 3. Fifteen years from now, their ages will be in the ratio of 5 : 6. Find the sum of their present ages. (Give your answer in years and months, if relevant.)**

Ans A). 43 years, 4 months B). 80 years C). 43 years D). 43 years, 3 months

Correct Answer: A

Q.93 **Akshay has borrowed an amount of ₹440000 from a bank to start a business. How much simple interest (in ₹) will he pay at a rate of 5% per annum after 4 years?**

Ans A). 87000 B). 89000 C). 78000 D). 88000

Correct Answer: D

Q.94 **What should be done in order to minimise waste production?**

Ans A). Increase plastic usage B). Maximise plastic packaging of products C). Use non-biodegradable products D). Change and adapt sustainable lifestyle

Correct Answer: D

Q.95 **When using the sign convention for spherical mirrors, which direction along the principal axis is considered positive?**

Ans A). To the right of the origin (along + x-axis) B). To the left of the origin (along - x-axis) C). Upwards from the principal axis D). Downwards from the principal axis

Correct Answer: A

Q.96 **Seven people, F, J, M, L, R, V and X, are sitting in a row, facing north.**
Only three people sit to the left of X. Only M sits to the right of R. Only three people sit between R and V. J sits at some place to the left of L but at some place to the right of F.
How many people sit to the left of V?

Ans A). 4 B). 2 C). 3 D). 1

Correct Answer: D

Q.97 **The radius and slant height of a cone are 59.5 cm and 85 cm, respectively. Find its total surface area.**

$\left(\text{Take } \pi = \frac{22}{7}\right)$

Ans A). 30,021.5 cm2 B). 28,021.5 cm2 C). 27,021.5 cm2 D). 27,000.5 cm2

Correct Answer: C

Q.98 **What is the sign of the focal length for a convex lens as per the sign convention for spherical lenses?**

Ans A). Zero B). Variable C). Negative D). Positive

Correct Answer: D

Q.99 **A student uses a convex lens to project an image of a tree onto a wall. If the image is found to be smaller than the tree, what can be inferred about the tree's position relative to the lens?**

Ans A). The tree is at twice the focal length from the lens. B). The tree is placed beyond twice the focal length (beyond 2F) of the lens. C). The tree is between the lens and its focal point. D). The tree is at the focal point of the lens.

Correct Answer: B

Q.100 **Which demand advanced by the Moderate leadership of the Indian National Congress (1885–1905) most clearly reflected their objective of expanding Indian involvement within colonial decision-making structures?**

Ans A). Curtailment of regressive indirect taxation B). Expansion of legislative councils for Indian representation C). Immediate transfer of political authority to Indian hands D). Preferential allocation of bureaucratic appointments to Indians

Correct Answer: B

"