



रेलवे भर्ती बोर्ड / RAILWAY RECRUITMENT BOARDS
सीईएन - 05/25 - जेई, डीएमएस, सीएमए - CEN - 05/25 - JE, DMS, CMA



Test Date	20/02/2026
Test Time	9:00 AM - 10:30 AM
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.

Section : RRB JE DMS CMA

Q.1 A sound wave travels from air into water. How does its frequency, speed, and wavelength change as it crosses the boundary?

- Ans**
- 1. Its frequency increases, speed remains the same, and wavelength decreases
 - 2. Its frequency decreases, speed decreases, and wavelength increases
 - 3. Its frequency remains constant, speed decreases, and wavelength decreases
 - ✓ 4. Its frequency remains constant, speed increases, and wavelength increases

Q.2 Seven people, A, L, M, I, R, H and S, are sitting in a row, facing north. Only three people sit to the left of A. Only H sits to the right of R. Only three people sit between R and L. M sits at some place to the left of I but at some place to the right of S. How many people sit between S and I?

- Ans**
- 1. Two
 - 2. Four
 - 3. One
 - ✓ 4. Three

Q.3 The Deccan Plateau is separated from the Chota Nagpur Plateau by which of the following?

- Ans**
- ✓ 1. Vindhya Range
 - 2. Aravalli Hills
 - 3. Mahanadi Basin
 - 4. Western Ghats

Q.4 Refer to the following number and symbol series and answer the question that follows. Counting to be done from left to right only. (Note: All numbers are single digit numbers only.)

(Left) 8 9 & 8 \$ 5 # @ & # 4 @ 3 ! + ? 4 5 & 8 (Right)

If all the symbols are dropped from the series, which of the following will be seventh from the right?

- Ans**
- ✓ 1. 8
 - 2. 5
 - 3. 4
 - 4. 3

Q.5	A young child is diagnosed with both myopia and hypermetropia in different eyes. What is the most appropriate corrective approach?
Ans	1. Using bifocal lenses in both eyes ✔ 2. Providing glasses with different lenses for each eye (concave for one, convex for the other) 3. Providing identical convex lenses for both eyes 4. Using cylindrical lenses in both eyes
Q.6	217 is related to 115 following a certain logic. Following the same logic, 183 is related to 81. To which of the given options is 234 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 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	✔ 1. 132 2. 139 3. 121 4. 145
Q.7	Who has been elected as the President of Centre of Films for Children and Young People (CIFEJ) for the 2025–2027 term?
Ans	1. SS Rajamouli 2. Lokesh Kanagaraj ✔ 3. Jitendra Mishra 4. Om Raut
Q.8	Which statement correctly describes a heterogeneous mixture?
Ans	1. Its particles are uniformly distributed at particle level 2. Its composition remains fixed and constant always ✔ 3. Its composition is not uniform throughout the mixture 4. Its components cannot be separated by physical methods
Q.9	Which of the following does NOT describe a property of ethanol (C ₂ H ₅ OH)?
Ans	1. It is a clear, colourless liquid with a pleasant smell. 2. It reacts with sodium to release hydrogen gas. 3. It is soluble in water in all proportions. ✔ 4. It turns blue litmus paper red.
Q.10	Govind starts from Point A and drives 5 km towards south. He then takes a left turn, drives 5 km, turns left and drives 12 km. He then takes a left turn and drives 11 km. He takes a final left turn, drives 7 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° turns only unless specified.)
Ans	✔ 1. 6 km to the east 2. 5 km to the west 3. 6 km to the west 4. 5 km to the east
Q.11	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 J related to P?
Ans	1. Daughter's husband 2. Brother's daughter's husband 3. Daughter's son ✔ 4. Brother's daughter's son

Q.12	Which of the following statements about Parliamentary Committees is TRUE?
Ans	1. Ad Hoc Committees are permanent in nature. ✔ 2. Standing Committees are reconstituted from time to time and are permanent. 3. There are no temporary Parliamentary Committees. 4. All Parliamentary Committees are permanent.
Q.13	Suppose a student wants to design an amusement park ride that moves people in a circle at uniform speed. Which concept should the student apply to ensure riders stay safely in their seats during the circular motion?
Ans	1. Increasing speed randomly will keep them safe 2. Gravity alone is sufficient to keep the riders in place 3. A constant outward force is needed to keep riders pressed against their seats ✔ 4. A constant inward (centripetal) force is needed on the riders to keep them in uniform circular motion
Q.14	A technician needs to connect a new appliance in a domestic circuit to ensure it receives full voltage and can be operated independently. What should the technician do?
Ans	1. Connect the appliance only to the neutral wire ✔ 2. Connect the appliance in parallel with existing appliances 3. Connect the appliance only to the earth wire 4. Connect the appliance in series with existing appliances
Q.15	A plant sheds its leaves and bark to remove stored waste products. How does this strategy differ from the way animals excrete wastes?
Ans	1. Plants use blood circulation for excretion, unlike animals. 2. Plants use digestive systems to remove waste, unlike animals. 3. Plants have a single organ system for waste removal, unlike animals. ✔ 4. Plants use parts that will be shed, while animals have specialized organs for excretion.
Q.16	A dishonest vendor claims that he is selling goods at their cost price. But he is weighing 902 grams for 1000 grams. What is his profit percentage (rounded off to 2 decimal places)?
Ans	1. 12.08% 2. 6.51% 3. 11.82% ✔ 4. 10.86%
Q.17	If a point is located below the principal axis of a spherical mirror, what sign is assigned to its perpendicular distance according to the sign convention for spherical mirrors?
Ans	1. Positive 2. Zero 3. Depends on mirror type ✔ 4. Negative
Q.18	Methane reacts with chlorine in the presence of sunlight to form chloromethane and hydrogen chloride. Which of the following statements is CORRECT? Statement I: Only one chlorine atom can substitute at a time. Statement II: The reaction is an example of a substitution reaction. Statement III: Multiple substitution can occur if the reaction continues.
Ans	1. Only I and III are true 2. Only II and III are true ✔ 3. I, II and III are true 4. Only I and II are true

Q.19 Two men A and B walk round a circle 1300 metres in circumference. A walks at the rate of 150 metres per minute and B at the rate 80 metres per minute. If they both start at the same time from the same point and walk in the same direction, after how much time will they meet each other?

- Ans
- ✓ 1. $18\frac{4}{7}$ min
 - 2. $17\frac{8}{7}$ min
 - 3. $16\frac{5}{7}$ min
 - 4. $15\frac{4}{7}$ min

Q.20 Where is perinuclear space present?

- Ans
- 1. Outside the nucleus
 - 2. Within the nucleolus
 - 3. Inside of the nucleus
 - ✓ 4. Between two layers of the nuclear envelope

Q.21 When was Namami Gange Programme launched to clean the Ganga river?

- Ans
- 1. 2017
 - 2. 2020
 - ✓ 3. 2014
 - 4. 2015

Q.22 Which change will promote micelle formation in a detergent solution?

- Ans
- ✓ 1. Increasing detergent concentration above Critical Micelle Concentration(CMC)
 - 2. Lowering the temperature below Kraft point
 - 3. Adding more water to dilute the solution
 - 4. Decreasing detergent concentration below Critical Micelle Concentration(CMC)

Q.23 Magnesium ribbon burns with:

- Ans
- 1. A blue non-luminous flame
 - ✓ 2. A bright white flame
 - 3. A yellow luminous flame
 - 4. No visible flame

Q.24 Which property explains why the path of light is not visible when a beam passes through a true solution?

- Ans
- ✓ 1. Particles are smaller than one nanometre
 - 2. Particles can be removed by filtration
 - 3. Particles are heavier than solvent molecules
 - 4. Particles settle down on standing still

Q.25 A camp has provisions for 51 persons for 12 days. If the number of persons is increased to 102, for how many days will the same provisions last?

- Ans
- 1. 9
 - 2. 5
 - 3. 4
 - ✓ 4. 6

Q.26 In this question, a group of numbers/symbols is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol are to be followed directly as given in the table.

Number/symbol	2	@	5	8	\$	9	&	%	#	6	+	7	3	1
Code	P	T	F	J	W	A	E	R	D	Q	S	B	U	L

Conditions:
If the first element is a number and the last a symbol, the codes for these two (the first and the last elements) are to be interchanged.
If the first element is an even number and the last an odd number, the first and last elements are to be coded as \$.
If both the second and third elements are perfect cubes, the third element is to be coded as the code for the second element.
What is the code for the following group of numbers/symbols?
28%5

- Ans
1. PRJF

2. \$RJ\$

3. PJRF

 4. \$JR\$

Q.27 What is a key difference between chemical fertilisers and manures in terms of nutrient release to plants?

- Ans
1. Manures have higher and less variable nutrient concentrations.

2. Chemical fertilisers enhance biological activity.

 3. Manures release nutrients gradually.

4. Conventional chemical fertilisers release nutrients gradually.

Q.28 In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol to be followed directly as given in the table.

NUMBER/SYMBOL	7	\$	8	6	&	#	3	+	5	4	2	9	@	*
CODE	A	E	R	T	H	U	K	L	P	Z	C	V	N	Q

Conditions –
(i) If the first element is a symbol and the last a number, the codes for these two (the first and the last elements) are to be interchanged.
(ii) If the first element is an odd number and the last an even number, the first and last elements are to be coded as ©
(iii) If both second and third elements are perfect squares, the third element is to be coded as the code for the second element.
What will be the code for the following group?
7 4 9 @ \$

- Ans
1. A Z Z R E

2. E Z Z N E

3. A V Z N E

 4. A Z Z N E

Q.29 Which metal listed below shows the strongest reaction when added to dilute hydrochloric acid?

- Ans
-  1. Magnesium

2. Iron

3. Zinc

4. Copper

Q.30	The selling price of 20 books is equal to the cost price of 31 books. Find the loss or gain percentage.
Ans	 1. 55 % gain 2. $\frac{100}{11}\%$ gain 3. 55 % loss 4. $\frac{100}{11}\%$ loss
Q.31	Why is it important to keep the level of vitamins A and K high in poultry feeds for broilers?
Ans	1. To increase their tolerance to cold weather  2. To ensure proper nutrition for healthy growth and development 3. To make broilers resistant to external parasites 4. To reduce the size of eggs
Q.32	Each of A, B, C, M, N and O has scored different marks. Only two people have scored between O and B. Only one person has scored more than M. Only three people have scored between M and O. N has scored more than C but less than A. How many people have scored less than C?
Ans	1. Two  2. One 3. Three 4. Four
Q.33	The 7-digit number 93A562B is divisible by 9, What is the minimum value of (A + B)?
Ans	 1. 2 2. 4 3. 7 4. 5
Q.34	Standard deviation of 10, 12, 9, 8, 21 is (correct to two decimals):
Ans	1. 4.59 2. 4.79 3. 4.89  4. 4.69
Q.35	Which of the following statements is TRUE for all saturated hydrocarbons?
Ans	1. They are generally very reactive due to triple bonds. 2. They readily undergo addition reactions. 3. They contain at least one double bond.  4. They show substitution reactions rather than addition reactions.
Q.36	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. No one has exam before Z. Only three people have exam between Z and F. Only one person has exam between F and X. Y has exam on Wednesday. D has exam on one of the days after E but on one of the days before C. On which day of the week does D have exam?
Ans	1. Friday 2. Tuesday  3. Thursday 4. Wednesday

Q.37 Which of the following is an effect of non-biodegradable substances in water bodies?

- Ans
- 1. Helps plants grow
 - 2. Water becomes fertile
 - 3. Provides nutrients for fish
 - ✓ 4. Clogs drains and harms aquatic life

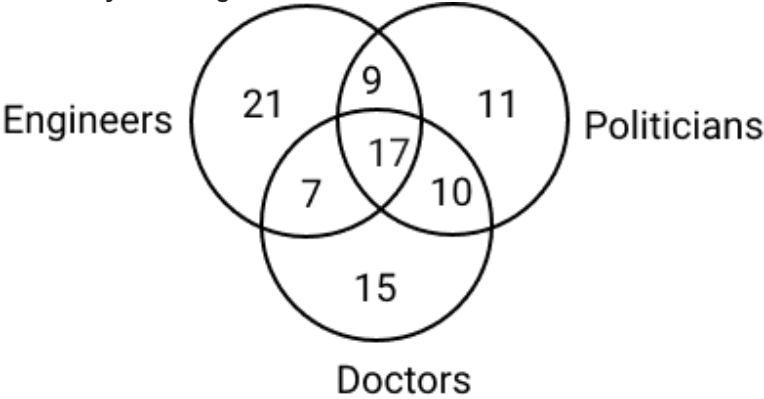
Q.38 Why does a torch bulb glow only when the switch is turned on?

- Ans
- 1. Because the bulb is functional
 - 2. Because the bulb is in series with the cell
 - 3. Because the battery is charged
 - ✓ 4. Because the switch completes the circuit, allowing current to flow

Q.39 In this question, a question is followed by two statements numbered (I) and (II). You have to decide whether the data provided in the statements is sufficient to answer the question. Read both the statements and decide the appropriate answer.
Af, Bg, Cq, Dy and En are sitting around a circular table, facing the centre. Who sits second to the right of Bg?
(I) Af sits to the immediate right of En. Cq is the immediate neighbour of Dy and En.
(II) Dy sits to the immediate right of Bg. En sits second to the left of Bg.

- Ans
- 1. Data in Statement II alone is sufficient to answer the question while data in Statement I is not.
 - 2. Both Statements I and II together (and not Statement I alone or Statement II alone) are sufficient to answer the question.
 - ✓ 3. Data in Statement I alone is sufficient to answer the question while data in Statement II is not.
 - 4. Data in Statements I and II together are NOT sufficient to answer the question.

Q.40 Study the given Venn diagram carefully and answer the question. 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 such Engineers are there who are also Politicians but not Doctors?



- Ans
- ✓ 1. 9
 - 2. 17
 - 3. 10
 - 4. 7

Q.41 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.)

(2,9,17)
(11,16,60)

- Ans
- 1. (11,8,12)
 - 2. (3,2,34)
 - 3. (9,12,8)
 - ✓ 4. (6,17,41)

Q.42	When an object is placed at the center of curvature (C) of a concave mirror, what is the nature of the image formed?
Ans	1. Enlarged and inverted 2. Highly diminished, point-sized ✔ 3. Real and inverted 4. Virtual and erect
Q.43	Six friends, O, P, Q, G, H and I, live on six different floors of the same building. The lowermost floor in the building is numbered 1, the floor above it is numbered 2 and so on, till the topmost floor, which is numbered 6. Only one person lives above Q. P lives on an even-numbered floor but not on floor number 4. Only two people live between P and H. Only two people live between Q and I. O lives immediately below Q. How many people live between G and O?
Ans	1. None 2. Three 3. One ✔ 4. Two
Q.44	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	✔ 1. LD - XF 2. ZS - NV 3. WP - KS 4. TM - HP
Q.45	Girish scored 664 marks in an examination and was 8 marks short of 84% of the maximum marks. In the same examination, his friend scored 472 marks. What is the percentage of marks scored by his friend?
Ans	✔ 1. 59% 2. 61% 3. 56% 4. 58%
Q.46	If $7 : 21 :: 2.2 : x$ and $7 : 49 :: 9 : y$, what is the ratio of x to y?
Ans	✔ 1. 11 : 105 2. 12 : 103 3. 15 : 115 4. 9 : 106
Q.47	Why is potassium hydroxide used in the bell-jar experiment involving photosynthesis?
Ans	✔ 1. To absorb carbon dioxide 2. To provide sunlight 3. To supply oxygen 4. To remove water
Q.48	Which economic model advocates that developing countries should prioritize import substitution over free trade to promote economic development?
Ans	1. Comparative Advantage Theory 2. Neoliberalism 3. Export-led Growth Model ✔ 4. Import Substitution Industrialization

Q.49	What happens to the work done if the displacement becomes zero despite a force being applied?
Ans	1. The work done decreases. 2. The work done increases. ✓ 3. The work done is zero. 4. The work done remains constant.
Q.50	In a wallet containing gold, silver and bronze tokens, the ratio of gold to silver tokens was 5:17 while the ratio of bronze to gold tokens was 18:19. What was the ratio of bronze to silver tokens?
Ans	1. 98:328 2. 93:327 ✓ 3. 90:323 4. 95:330
Q.51	Which of the following compounds has a formula unit mass of 100 u?
Ans	1. MgO 2. CaCl₂ 3. Na₂CO₃ ✓ 4. CaCO₃
Q.52	9 identical cartons together weigh 72 kg. How many cartons of the same type would be needed to make up a total 168 kg?
Ans	1. 18 2. 20 3. 24 ✓ 4. 21
Q.53	How much fund is allotted to the Khelo India (national programme for development of sports) for FY26?
Ans	1. ₹1,400 crore ✓ 2. ₹1,000 crore 3. ₹1,200 crore 4. ₹1,600 crore
Q.54	Which of the following statements correctly differentiates the power of the Rajya Sabha from the Lok Sabha?
Ans	1. Rajya Sabha can initiate a motion of no-confidence against the Council of Ministers 2. Rajya Sabha can amend Money Bills 3. Rajya Sabha has equal power with Lok Sabha in all financial matters ✓ 4. Rajya Sabha can authorise Parliament to make laws on State subjects
Q.55	During a round-trip journey where a person walks to a location at 5 km/h and returns at 3 km/h, which statement about average speed is correct?
Ans	1. Average speed is 3 km/h. 2. Average speed is 5 km/h. ✓ 3. Average speed will be less than the arithmetic mean of 5 km/h and 3 km/h. 4. Average speed equals the arithmetic mean of 5 km/h and 3 km/h.

Q.56	The average of the first 18 positive multiples of 15 is:
Ans	1. 18 2. 135 3. 15 ✔ 4. 142.5
Q.57	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 conclusion(s) logically follow(s) from the statements. Statements: Some bins are cats. No cat is a deer. No cat is a tree. Conclusions: (I): No bin is a deer. (II): Some trees are deers.
Ans	1. Both conclusions (I) and (II) follow. ✔ 2. Neither conclusion (I) nor (II) follows. 3. Only conclusion (II) follows. 4. Only conclusion (I) follows.
Q.58	Find the least number which when divided by 5, 6, 3 and 4 leaves a remainder 2, but when divided by 7 leaves no remainder.
Ans	1. 168 2. 147 3. 198 ✔ 4. 182
Q.59	The population of country is 10 crores at present and is expected to grow to 17.28 crores in the next three years. Neglecting the death rate, the uniform annual percentage rate of growth is:
Ans	1. 11 ✔ 2. 20 3. 10 4. 12
Q.60	Why are solids described as rigid in nature?
Ans	1. Their particles slide easily under applied external force 2. Their particles possess very low mass and volume ✔ 3. Their particles are closely packed with strong attraction 4. Their particles move freely with weak mutual attraction
Q.61	Kiran has borrowed an amount of ₹4,40,000 from a bank to start a business. How much simple interest (in ₹) will he pay at a rate of 7% per annum after 2 years?
Ans	1. 60600 2. 63600 ✔ 3. 61600 4. 62600

Q.62 Simplify the following.

$294 \div [10 \div 5 \times \{11 + 12 - (8 + 5 - (10 + 1))\}]$

- Ans
- ✓ 1. 7
 - 2. 4
 - 3. 2
 - 4. 15

Q.63 Social indicators of development improved after economic growth accelerated. Which of the following indicators saw the most consistent improvement after 1991?

- Ans
- ✓ 1. Maternal Mortality Rate
 - 2. Gini coefficient
 - 3. Consumer Price Index
 - 4. Fiscal deficit

Q.64 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.

IIO : JDK
NGR : OBN

- Ans
- 1. BHW : BCR
 - 2. IQL : IKH
 - ✓ 3. ORL : PMH
 - 4. ITX : IOS

Q.65 Find the value of x, y and z from the following equations:

$3x + 2y - z = 24, \quad x - 5y + 3z = 16, \quad x + y - 3z = 21$

- Ans
- 1. $x = \frac{-229}{42}, y = \frac{-289}{42}, z = \frac{97}{21}$
 - ✓ 2. $x = \frac{389}{42}, y = \frac{-97}{21}, z = \frac{-229}{42}$
 - 3. $x = \frac{289}{42}, y = \frac{97}{21}, z = \frac{229}{42}$
 - 4. $x = \frac{-97}{21}, y = \frac{-289}{42}, z = \frac{229}{42}$

Q.66 The length of a rectangular ground is 21 m more than its breadth. Its area is 31,042 m². Its breadth (in m) is:

- Ans
- 1. 182
 - 2. 151
 - 3. 161
 - ✓ 4. 166

Q.67 The average sale of cars by a dealer per day in the month of March, other than on Saturdays and Sundays, is 151. The average sale of cars per day on Sundays is 129. What is the average sale of cars per day on Saturdays, if the first Saturday is on the 3rd of March and average sale of cars per day for the whole month is 148?

- Ans
- 1. 155
 - ✓ 2. 150
 - 3. 145
 - 4. 153

Q.68	According to Dadabhai Naoroji's Drain of Wealth theory, what major economic issue needed to be addressed to end India's exploitation under British rule?
Ans	1. Limited administrative participation for Indians  2. Unequal economic exchange between India and Britain 3. Excessive land revenue imposed on peasants 4. Religious discrimination by colonial authorities
Q.69	Chetan's salary was first reduced by 40% and subsequently raised by 24%. How much percentage was his final salary lower compared to his initial salary?
Ans	1. 24% 2. 40%  3. 25.6% 4. 9.6%
Q.70	In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. 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.) 94, 375 115, 396
Ans	1. 76, 358 2. 107, 389 3. 81, 364  4. 72, 353
Q.71	Anirudh and Brahmaji are assigned the work of constructing a wall. Anirudh can do the job in 60 hours alone where as Brahmaji can do the job three times faster. Anirudh starts the work during the first hour and Brahmaji does the work during the second hour. During the third hour both do the job simultaneously. If they continue in this fashion, how long it will take for them to complete the job?
Ans	1. 21.5 hours 2. 22.5 hours  3. 23 hours 4. 7.5 hours
Q.72	If + means - , - means x , x means ÷ , ÷ means +, then what will come in place of the question mark (?) in the following equation? 8-21×3÷75+13=?
Ans	1. 119 2. 120 3. 128  4. 118
Q.73	Which of the following is present only in plant cell?
Ans	 1. Cell wall 2. Vacuoles 3. Nucleus 4. Endoplasmic reticulum

Q.74 Simplify : $\frac{\sqrt[3]{5832}}{\sqrt[4]{1296}} \times \frac{3}{54} \times 168$

- Ans ☒ 1. 28
- ☐ 2. 18
- ☐ 3. 25
- ☐ 4. 36

Q.75 A cylindrical vessel contains 154 litres of water. If the radius of the base is 14 cm, the height (in cm) of the water column in the vessel is:
(Take $\pi = \frac{22}{7}$)

- Ans ☒ 1. 250 cm
- ☐ 2. 275 cm
- ☐ 3. 260 cm
- ☐ 4. 240 cm

Q.76 Refer to the following letter, number and symbol series and answer the question that follows.

(Left) L 8 * Q 3 \$ M ^ Y 7 & T 2 % R \$ F 6 # P @ N 9 ! K 4 @ Z ^ W (Right)

If all the symbols are dropped, which of the following will be seventh from the right?

- Ans ☐ 1. F
- ☒ 2. P
- ☐ 3. N
- ☐ 4. 6

Q.77 Choose the correct statements about triangles from the ones given below:

- A. A triangle can be formed with sides 9 cm, 13 cm, 3 cm.
- B. In $\triangle PQR$, if $\angle P = 50^\circ$, $\angle Q = 30^\circ$, then QR is the longest side of the triangle.
- C. Area of an equilateral triangle of side 6 cm is $18\sqrt{3}$ cm².
- D. In $\triangle DEF$ and $\triangle PQR$, $\angle D = \angle P$, $\angle E = \angle Q$ and $DF = PR$. Then $\triangle DEF$ is congruent to $\triangle PQR$.

- Ans ☐ 1. Only A
- ☐ 2. Only A, B, C
- ☐ 3. Only B, C, D
- ☒ 4. Only D

Q.78 A person standing 20 meters away from the base of a tower observes that the angle of elevation to the top of the tower is 60°. Find the height of the tower. (Rounded off to two decimal places)

- Ans ☒ 1. 34.64 m
- ☐ 2. 32.60 m
- ☐ 3. 38.38 m
- ☐ 4. 36.67 m

Q.79 This question is based on the following words.

MUG TOP ACE GAS

How many letters are there between the second letter of the first word from the right and the second letter of the first word from the left as per the English alphabetical order?

- Ans ☐ 1. 18
- ☒ 2. 19
- ☐ 3. 20
- ☐ 4. 22

Q.80	In a 100-meter race, X runs at 5 m/s and Y at 4 m/s. How much head start should X give Y (in meters) so that the race ends in a tie?
Ans	1. 25 2. 15 ✓ 3. 20 4. 10
Q.81	In February 2025, the Union Minister of External Affairs and Heads of Missions from 61 countries visited Kaziranga National Park, located in which state of India?
Ans	1. Manipur ✓ 2. Assam 3. Nagaland 4. Arunachal Pradesh
Q.82	A store offers a trade discount of 16% on all items. In addition, they offer a “Buy four get one free” scheme on specific items. If a customer purchases five items each marked at ₹700 and the “Buy four get one free” scheme applies, what is the total discounted price for five items, the customer has to pay?
Ans	1. ₹2305 ✓ 2. ₹2352 3. ₹2378 4. ₹2336
Q.83	Why are non-biodegradable substances harmful for the environment?
Ans	1. Can be broken down by bacteria ✓ 2. Needs heat and temperature for breakdown, releases harmful chemicals 3. Causes no pollution in water 4. Easily mixes with soil
Q.84	Which missile system is being developed under Project Kusha to enhance India's air defence capabilities?
Ans	1. BrahMos 2. MICA ✓ 3. Extended Range Air Defence System 4. S-400
Q.85	What should come in place of ‘?’ in the given series? 116, 121, 131, 146, 166, ?
Ans	1. 189 2. 195 ✓ 3. 191 4. 193
Q.86	Why is it important to provide dairy cattle with a sloping floor in their sheds and balanced rations in their diet?
Ans	1. To protect from parasites, and increase fibre content. ✓ 2. To keep the shed dry and facilitate cleaning, and to support health and milk production. 3. To keep the shed dry and facilitate cleaning, and reduce roughage intake. 4. To prevent diseases and to support health and milk production.

Q.87 The internal surface area (in m²) of an open cuboidal tank whose internal length, internal breadth and internal height are given as 3 m, 11 m, and 9 m, respectively, is:

Ans 1. 295

 2. 285

 3. 303

 4. 314

Q.88 Find the mode of the given data (correct to two places of decimal).

Class interval	0-6	6-12	12-18	18-24	24-30
Frequency	8	7	5	9	4

Ans  1. 20.67

 2. 22.45

 3. 19.24

 4. 21.36

Q.89 Which rule helps to determine the direction of force acting on a current-carrying conductor in a magnetic field?

Ans 1. Ampere's rule

 2. Faraday's law

 3. Fleming's left-hand rule

 4. Right-hand rule

Q.90 What is the purpose of the Draft National Sports Governance Bill, 2024, introduced by the Indian Government?

Ans 1. To eliminate traditional sports from national competitions

 2. To establish a framework for ethical governance and athlete welfare in sports federations

 3. To increase commercialization of sports in Urban and Semiurban areas

 4. To centralize all sports decisions under one authority

Q.91 Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?

HUL 19 , MZQ 36, REV 53, WJA 70 , ?

Ans 1. BNE 88

 2. BOF 87

 3. CMD 80

 4. BMF 90

Q.92 The product of two consecutive natural numbers is 506. The greater of the two numbers is:

Ans 1. 17

 2. 23

 3. 18

 4. 21

Q.93 What lies between the sand dunes and the coast in the East Coastal Plains?

Ans 1. Deltas

 2. Lagoons

 3. Mountains

 4. Beaches

Q.94 Which of the following letter-clusters should replace # and % so that the pattern and relationship followed between the letter-cluster pair on the left side of :: is the same as that on the right side of :: ?
: ORM :: MPK : %

- Ans**
- 1. # = TTO, % = KMK
 - 2. # = MKO, % = KNI
 - 3. # = QTO, % = KPY
 - ✔ 4. # = QTO, % = KNI

Q.95 Which two elements are primarily added to soil by green manure?

- Ans**
- 1. Phosphorus and calcium
 - 2. Nitrogen and potassium
 - 3. Potassium and magnesium
 - ✔ 4. Nitrogen and phosphorus

Q.96 Which individuals actively supported Mahatma Gandhi during the Kheda Satyagraha movement?

- Ans**
- 1. Ambalal Sarabhai and Anasuya Ben
 - 2. Raj Kumar Shukla and Rajendra Prasad
 - ✔ 3. Vallabhbhai Patel and Indulal Yajnik
 - 4. Vallabhbhai Patel and Rajendra Prasad

Q.97 What should come in place of ‘?’ in the given series?

17 30 43 56 69 ?

- Ans**
- 1. 81
 - 2. 80
 - 3. 83
 - ✔ 4. 82

Q.98 Which of the following is one of Asia's largest cattle fairs, organized at the confluence of two mighty rivers, the Ganga and Gandak?

- Ans**
- 1. Suraj Kund Craft Mela
 - 2. Flamingo Festival
 - ✔ 3. Sonapur Fair
 - 4. Thrissur Pooram

Q.99 If $(5x + 1)^3 + (x + 3)^3 + 8(3x - 4)^3 = 6(5x + 1)(x + 3)(3x - 4)$, then the value of x is:

- Ans**
- 1. $\frac{1}{4}$
 - 2. $\frac{2}{3}$
 - ✔ 3. $\frac{1}{3}$
 - 4. $\frac{1}{2}$

Q.100 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–HxK'?

- Ans
1. Sister

 2. Wife's sister

3. Mother

4. Wife's mother