रेलवे भर्ती बोर्ड / RAILWAY RECRUITMENT BOARDS
सीईएन - 04/2026 - जेई, डीएमएस, सीएमए - CEN - 04/2026 - JE, DMS, CMA

Test Date	27/10/2026
Test Time	9:00 AM - 10:30 AM
Subject / Exam Group	RRB JE DMS CMA CBT I

*** 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 CBT I**

Q.1 **Refer to the following letter, symbol series and answer the question. Counting to be done from left to right only.**
(Left) U G W \ C = M O H $ @ D P & P ^ * A H E E (Right)
How many such letters are there each of which is immediately preceded by a symbol and also immediately followed by a symbol?

Ans
✗ 1. Three
✗ 2. One
✓ 3. Two
✗ 4. Four

Q.2 **In 1639, the English East India Company established its first territorial possession in India by leasing land from a representative of which empire, where Fort St. George was built?**

Ans
✗ 1. Maratha Empire
✓ 2. Vijayanagara Empire
✗ 3. Bijapur Sultanate
✗ 4. Mughal Empire

Q.3 **F is the father of R. R is the brother of U. B is the father of H. H is the son of U. How is H related to F?**

Ans
✗ 1. Daughter's husband
✗ 2. Father
✓ 3. Daughter's son
✗ 4. Brother

Q.4 **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. MD-HK
✗ 2. PG-KN
✗ 3. SJ-NQ
✓ 4. JA-EG

Q.5 **What should come in place of the question mark (?) in the given series?**

3 3 10 17 24 45 52 ?

Ans

✗ 1. 104

✓ 2. 101

✗ 3. 110

✗ 4. 111

Q.6 **Which combination of end products results from yeast fermentation?**

Ans

✗ 1. Lactic acid and water

✗ 2. Water and carbon dioxide

✓ 3. Ethanol and carbon dioxide

✗ 4. Ethanol and lactic acid

Q.7 **If a TV is bought for ₹32,000 and paid through 8 equal monthly installments at a compound interest rate of 12% per annum (compounded monthly), which of the following best represents the correct monthly installment (to the nearest rupee)?**

Ans

✗ 1. ₹3,900

✗ 2. ₹4,100

✗ 3. ₹4,028

✓ 4. ₹4,182

Q.8 **The product of two numbers is 468 and their L.C.M. is 78. Find their H.C.F.**

Ans

✗ 1. 12

✗ 2. 1

✗ 3. 9

✓ 4. 6

Q.9 **Which of these is equivalent to :** $\frac{2\sin x(1-\cos^2 x)}{\sec^3 x}$ **?**

Ans

✓ 1. $2\sin^3 x \cos^3 x$

✗ 2. $2\sin^3 x \cot x$

✗ 3. $2\sin^3 x \sec^3 x$

✗ 4. $2\operatorname{cosec}^3 x \cot^3 x$

Q.10 **Over ninety-seven percent of India's coal reserves occur in the valleys of Damodar, Sone, Mahanadi and which other river?**

Ans

✗ 1. Narmada

✗ 2. Kaveri

✗ 3. Krishna

✓ 4. Godavari

Q.11 **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 and decide the appropriate answer.**

Question: Five people – Abeer, Charita, Dhruv, Eshika and Faris – are seated in a row facing north. Who is seated at the extreme right end?

Statements:
(I) There are exactly two people between Abeer and Eshika.
(II) Charita sits immediately to the left of Faris, and Dhruv sits to the left of Charita.

Ans
✗ 1. Data in both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.
✓ 2. Data in both statements I and II together are NOT 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 statement II alone is sufficient to answer the question while data in statement I is not.

Q.12 **14 is related to 115 following a certain logic. Following the same logic, 21 is related to 171. To which of the following is 26 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 to/subtracting from/multiplying with 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. 218
✓ 2. 211
✗ 3. 201
✗ 4. 206

Q.13 **Find the total surface area of a cone, in square metres correct to two decimal places, if its slant height (in cm) is the greatest prime number less than 239 and its height (in cm) is the smallest multiple of 13 greater than 200. (Take $\pi = \frac{22}{7}$)**

Ans
✗ 1. 12.92
✗ 2. 11.84
✓ 3. 11.15
✗ 4. 12.36

Q.14 **A student scored 84 in a subject with a weightage of 3, scored 72 in another subject with a weightage of 2 and 96 in another subject with a weightage of 4. Calculate the weighted arithmetic mean. (Round off your answer to two places of decimal).**

Ans
✗ 1. 88.54
✓ 2. 86.67
✗ 3. 87.28
✗ 4. 85.18

Q.15 **A restoration plan for an old quarry includes plants with true roots, stems, and leaves but no seeds. Which group is most appropriate to use?**

Ans
✓ 1. Pteridophyta
✗ 2. Gymnosperms
✗ 3. Bryophyta
✗ 4. Thallophyta

Q.16 **Which part of the human brain is mainly responsible for thinking, reasoning, and decision-making?**

Ans
✓ 1. Fore-brain
✗ 2. Spinal cord
✗ 3. Hind-brain
✗ 4. Mid-brain

Black Book

Q.17 **In a moderately skewed frequency distribution, the sum of the mean, median, and mode is 180. If the mean exceeds the median by 15, find the value of the mode. (Use the empirical relationship among the mean, median, and mode.)**

Ans

✗ 1. 30

✓ 2. 35

✗ 3. 40

✗ 4. 25

Q.18 **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 the codes for the respective number/symbol to be followed directly as given in the table.**

Number/Symbol 3 @ 7 # 2 % 8 & 1 $ 6 + 9 4

Code NK ARDMVP HTFWLQ

Conditions –
(i) If the second element is a symbol, code the fifth element as ©.
(ii) If the first element is a symbol, interchange the first and last codes.
(iii) If the third element is a symbol, replace the second code with the third code.

What will be the code for the following?
7 & 4 9 2

Ans

✗ 1. APDLD

✗ 2. APRLD

✗ 3. QPDLA

✓ 4. APQL©

Q.19 **OPTQ is related to PQUR in a certain way based on the English alphabetical order. In the same way, LMQN is related to MNRO. To which of the following is ABFC related, following the same logic?**

Ans

✗ 1. BDFH

✗ 2. BBFD

✗ 3. BCFD

✓ 4. BCGD

Q.20 **What is the relationship between the apparent position and the actual position of a star when observed?**

Ans

✗ 1. The apparent position of a star is the same as its actual position.

✓ 2. The apparent position of a star is slightly different from its actual position.

✗ 3. The apparent position of a star is at a 45° angle to its actual position.

✗ 4. The apparent position of a star is far from its actual position.

Q.21 **Two friends, X and Y, started a business with capital contributions of ₹132 and ₹230, respectively. After 4 months, X invested an additional ₹88, while Y withdrew ₹46. At the end of the year, the business earned a profit of ₹48,825. What is X's share of the profit?**

Ans

✗ 1. ₹23,970

✓ 2. ₹23,870

✗ 3. ₹23,780

✗ 4. ₹23,650

Q.22 **A bike covers a certain distance in 14 hours. It covers half of the distance at a speed of 80 km/h and the remaining half at a speed of 60 km/h. Find the total distance (in km) covered by the bike.**

Ans

✗ 1. 865

✓ 2. 960

✗ 3. 750

✗ 4. 950

black

Q.23 **A teacher asks students to analyze the image formation in a convex lens using the sign convention. Which combination of signs for object distance and image distance confirms the image is real and inverted?**

Ans

✗ 1. Object distance positive, image distance negative

✗ 2. Object distance negative, image distance negative

✗ 3. Object distance positive, image distance positive

✓ 4. Object distance negative, image distance positive

Q.24 **Which classical dance form is characterized by the 'Tribhanga' posture, involving three bends at the neck, torso, and knees?**

Ans

✗ 1. Bharatanatyam

✗ 2. Kathakali

✓ 3. Odissi

✗ 4. Kuchipudi

Q.25 **If an insect population is exposed to a new pesticide, what is the most likely long-term outcome?**

Ans

✗ 1. Genetic makeup of the population remains unchanged

✗ 2. All individual insects adapt instantly to the chemical

✓ 3. Resistant individuals survive and pass on their traits

✗ 4. The entire population dies out without any resistance

Q.26 **At simple interest, a certain sum of money amounts to ₹1,750 in 2 years and ₹2,250 in 3 years. Find the rate of interest per annum, rounded off to two decimal places.**

Ans

✗ 1. 50.25%

✓ 2. 66.67%

✗ 3. 25.25%

✗ 4. 33.33%

Q.27 **If an object is placed at twice the focal length (2F) from a convex lens, what is the magnitude of the magnification of the image formed?**

Ans

✗ 1. The magnification is zero

✗ 2. The magnification is greater than one

✗ 3. The magnification is less than one

✓ 4. The magnification is exactly one

Q.28 **Which habit should a mother avoid after childbirth to protect her health and her baby's health?**

Ans

✗ 1. Gentle walking

✗ 2. Eating fruits

✗ 3. Drinking more water

✓ 4. Consuming alcohol

Q.29 **DZWV is related to ZVSR in a certain way based on the English alphabetical order. In the same way, IEBA is related to EAXW. To which of the given options is OKHG related, following the same logic?**

Ans

✗ 1. KGCC

✓ 2. KGDC

✗ 3. KFCC

✗ 4. KHCE

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Q.30 If 'A' stands for '÷' , 'B' stands for 'x', 'C' stands for '+' and 'D' stands for '-' , what will come in place of the question mark '?' in the following equation?
392 A 14 C 15 B 12 D 78 =?

Ans
- ✗ 1. 115
- ✓ 2. 130
- ✗ 3. 113
- ✗ 4. 124

Q.31 What is the primary function of the cartilage discs found between the vertebrae in the human spine?

Ans
- ✓ 1. Act as cushions and allow flexibility
- ✗ 2. Support the body's weight directly
- ✗ 3. Form joints with the ribs
- ✗ 4. Produce blood cells for the body

Q.32 One of the quadrilateral's diagonals is 54 cm long, and the perpendiculars drawn from the other two vertices this diagonal are 38 and 18 cm, respectively. Determine the quadrilateral's area.

Ans
- ✗ 1. $1511\ cm^2$
- ✓ 2. $1512\ cm^2$
- ✗ 3. $1514\ cm^2$
- ✗ 4. $1510\ cm^2$

Q.33 According to Intergovernmental Panel on Climate Change (IPCC) assessment reports, which of the following gases is the largest single contributor to anthropogenic greenhouse gas emissions?

Ans
- ✓ 1. Carbon dioxide
- ✗ 2. Tropospheric ozone
- ✗ 3. Nitrous oxide
- ✗ 4. Methane

Q.34 Which part of the binomial name 'Homo sapiens' represents the genus?

Ans
- ✗ 1. Genus sapiens
- ✗ 2. Species Homo
- ✗ 3. sapiens
- ✓ 4. Homo

Q.35 Which is the only large river flowing through the Great Indian Desert region?

Ans
- ✗ 1. Mahi
- ✗ 2. Sabarmati
- ✗ 3. Chambal
- ✓ 4. Luni

Q.36 Raman's monthly income is ₹18,500. He saves 28% of his income. His income then increases by 13%, while his expenditure increases by 45%, then his savings will:

Ans
- ✗ 1. Increase by ₹3,586
- ✗ 2. Increase by ₹3,585
- ✗ 3. Decrease by ₹3,587
- ✓ 4. Decrease by ₹3,589

blackbook

Q.37 **Which of the following pairs are isotopes of each other?**

Ans

✗ 1. Atoms with different atomic numbers and different mass numbers

✗ 2. Atoms with different numbers of protons and the same number of neutrons

✓ 3. Atoms with the same atomic number but different mass numbers

✗ 4. Atoms with the same mass number but different atomic numbers

Q.38 **A product is sold at a profit of 127% on its cost price. If the cost price and selling price are interchanged, what percentage loss would be incurred on the transaction? Give your answer rounded off to two decimal places.**

Ans

✗ 1. 54.22%

✗ 2. 55.49%

✗ 3. 58.49%

✓ 4. 55.95%

Q.39 **Which combination of vision defects is commonly corrected using bifocal lenses?**

Ans

✓ 1. Presbyopia and myopia

✗ 2. Myopia and astigmatism

✗ 3. Hypermetropia and astigmatism

✗ 4. Myopia and hypermetropia

Q.40 **The volume of metal to make a hollow sphere is equal to the volume of the hollow part. Find the ratio of the outer radius to the inner radius of the sphere.**

Ans

✓ 1. $\sqrt[3]{2}:1$

✗ 2. $2\sqrt[3]{4}:3$

✗ 3. $2\sqrt[3]{2}:1$

✗ 4. $2\sqrt[3]{2}:3$

Q.41 **In a certain code language,**
'A + B' means 'A is the son of B',
'A – B' means 'A is the sister of B',
'A x B' means 'A is the wife of B' and
'A ÷ B' means ' A is the father of B'.
Based on the above, how is F related to Z if 'F x V + J ÷ L – Z'?

Ans

✓ 1. Brother's wife

✗ 2. Wife

✗ 3. Daughter

✗ 4. Brother's daughter

Q.42 **Which of the following options is equivalent to $729x^3 + 343y^3 + 1701x^2y + 1323xy^2$?**

Ans

✓ 1. $(9x + 7y)^3$

✗ 2. $(9x + 10y)^3$

✗ 3. $(11x + 7y)^3$

✗ 4. $(7x + 9y)^3$

Q.43 **What is the average of the numbers 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, and 22?**

Ans

✗ 1. 10

✓ 2. 12

✗ 3. 14

✗ 4. 11

Q.44 **The current population of a town is 15,500. It increases by 31% in the first year and by 25% in the second year, but decreases by 52% in the third year. What is the population of the town at the end of the third year?**

Ans

✗ 1. 12,181

✗ 2. 12,187

✓ 3. 12,183

✗ 4. 12,185

Q.45 **This question is based on the following words**
(left) LOB HIP MAT FLY (right)
How many letters are there between the third letter of the third word from the right and the first letter of the first word from the left as per English alphabetical order?

Ans

✗ 1. 4

✗ 2. 2

✗ 3. 6

✓ 4. 3

Q.46 **In a lever, the fulcrum is placed closer to the load than to the effort. What is the advantage of this arrangement?**

Ans

✗ 1. The effort required remains equal to the load.

✗ 2. Less effort is required, and the effort moves through a shorter distance.

✓ 3. Less effort is required, but the effort moves through a greater distance.

✗ 4. More effort is required, but the effort moves through a shorter distance.

Q.47 **When a beam of light passes through a mixture of water and fine chalk powder, the path of light becomes visible. Which concept explains this phenomenon?**

Ans

✓ 1. Tyndall Effect

✗ 2. Sedimentation

✗ 3. Filtration

✗ 4. Brownian Motion

Q.48 **Which of the following statements is INCORRECT regarding organic compounds?**

Ans

✓ 1. Friedrich Wöhler disproved the 'vital force theory' in 1838.

✗ 2. Friedrich Wöhler disproved the 'Vital force theory' by preparing urea from ammonium cyanate.

✗ 3. Two characteristic features, tetravalency and catenation, are seen in carbon.

✗ 4. In vital force theory, compounds were initially extracted from natural substances.

Q.49 **Navjot invested ₹65000 at 8% per annum for 1 year at compound interest, compounded half-yearly. The amount received by him is:**

Ans

✗ 1. ₹70321

✓ 2. ₹70304

✗ 3. ₹70421

✗ 4. ₹71290

Q.50 **Why should Plaster of Paris be stored in airtight containers?**

Ans

✗ 1. It evaporates over time.

✓ 2. It absorbs moisture and hardens.

✗ 3. It becomes acidic.

✗ 4. It reacts with oxygen.

oklaoo

Q.51 **Which combination of metal and solution would NOT result in a displacement reaction based on the reactivity series?**

Ans

✗ 1. Zinc placed in lead nitrate solution

✗ 2. Magnesium placed in copper sulfate solution

✓ 3. Copper placed in zinc sulfate solution

✗ 4. Iron placed in copper sulfate solution

Q.52 **Six friends, D, E, F, W, X and Z, 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.**
F lives immediately above Z. Only two people live between W and Z and W lives one of the floors below Z. W lives on an odd-numbered floor. X lives immediately below D.
Who lives on the topmost floor?

Ans

✗ 1. Z

✓ 2. E

✗ 3. F

✗ 4. D

Q.53 If $7a^2 + \frac{7}{a^2} = 28$, then what is the value of $3a^4 + \frac{3}{a^4} + 9$?

Ans

✗ 1. 35

✓ 2. 51

✗ 3. 42

✗ 4. 81

Q.54 **One pipe can fill the tank in 27 minutes while another pipe can empty the tank in 36 minutes. If both the pipes are operated together on an empty tank, how long (in minutes) will it take to fill one-third of the tank?**

Ans

✗ 1. 108

✗ 2. 72

✗ 3. 18

✓ 4. 36

Q.55 **Divide ₹5439 into three parts in such a way that half of the first part, one-fourth of the second part and one-eighth of the third part are equal. Find the third part (in ₹).**

Ans

✓ 1. 3108

✗ 2. 3008

✗ 3. 3408

✗ 4. 2808

Q.56 **If an object's velocity-time graph is a horizontal line above the time axis, what does this indicate about the object's motion?**

Ans

✗ 1. The object is moving with increasing velocity

✗ 2. The object is at rest throughout the motion

✓ 3. The object is moving at a constant positive velocity

✗ 4. The object is moving with decreasing velocity

Q.57 **In December 2025, which institution conducted India's first clinical trial of the "Supernova Stent" for the treatment of stroke?**

Ans

✓ 1. All India Institute of Medical Sciences, New Delhi

✗ 2. National Institute of Mental Health and Neurosciences (NIMHANS), Bengaluru

✗ 3. Christian Medical College (CMC), Vellore

✗ 4. Postgraduate Institute of Medical Education and Research (PGIMER), Chandigarh

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Q.58 How many metres of a 10 m – wide cloth will be required to make a con

Ans
- ✗ 1. 245
- ✓ 2. 231
- ✗ 3. 220
- ✗ 4. 188

Q.59 **A chemist is analyzing a sample of sodium carbonate (Na_2CO_3) to determine its formula unit mass. If the sample contains 2 moles of sodium, 1 mole of carbon, and 3 moles of oxygen in each formula unit, what is the calculated formula unit mass of sodium carbonate (Na_2CO_3)? (Atomic masses: Na = 23 u, C = 12 u, O = 16 u)**

Ans
- ✗ 1. 122 u
- ✗ 2. 84 u
- ✗ 3. 94 u
- ✓ 4. 106 u

Q.60 **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 the codes for the respective number/symbol are to be followed directly as given in the table.**

Number/Symbol	6	@	1	#	8	%	3	&	5	$	2	+	9	4
Code	Q	M	H	T	A	P	K	F	U	R	D	W	L	B

Conditions –
(i) If the first element is a symbol and the third element is a number, interchange their codes.
(ii) If the middle element is a symbol, code the second element as ©.
(iii) If the last element is a symbol, replace the first code with the last code.

What will be the code for the following group?
3 8 % 2 9

Ans
- ✗ 1. KAPDL
- ✓ 2. K©PDL
- ✗ 3. KAPDB
- ✗ 4. A©PDL

Q.61 **Each vowel in the word CARPENTRY is changed to the letter immediately following it in the English alphabetical order, and each consonant is changed to the second letter preceding it in the English alphabetical order. Which of the following letters will appear exactly twice in the group of letters thus formed?**

Ans
- ✓ 1. P
- ✗ 2. N
- ✗ 3. R
- ✗ 4. F

Q.62 **During electrolytic refining of copper, what happens to the impurities present in the impure copper anode?**

Ans
- ✗ 1. They deposit on the cathode
- ✓ 2. They settle below the anode as anode mud
- ✗ 3. They dissolve in the electrolyte
- ✗ 4. They escape as gases

Q.63 **Where was the 20th Session of the UNESCO Intergovernmental Committee for the Safeguarding of the Intangible Cultural Heritage (ICH) held in December 2025?**

Ans
- ✗ 1. Rashtrapati Bhavan Cultural Centre, New Delhi
- ✗ 2. Vigyan Bhavan, New Delhi
- ✓ 3. Red Fort Complex, New Delhi
- ✗ 4. India International Convention & Expo Centre, Dwarka

Black book

Q.64 **How is sodium hydroxide (NaOH) prepared on an industrial scale?**

Ans

✗ 1. By reacting sodium with water directly

✗ 2. By heating sodium chloride with oxygen

✓ 3. By the electrolysis of sodium chloride solution

✗ 4. By heating sodium carbonate with water

Q.65 **Which of the following muscular tissues is composed of long, cylindrical, unbranched, multinucleate cells and enables voluntary body movement?**

Ans

✓ 1. Striated muscle tissue

✗ 2. Areolar tissue

✗ 3. Smooth muscle tissue

✗ 4. Cardiac muscle tissue

Q.66 **Geologically, the Andaman and Nicobar Islands are considered a southward extension of which mountain range?**

Ans

✓ 1. Arakan Yoma range

✗ 2. Aravalli Range

✗ 3. Vindhya Range

✗ 4. Western Ghats

Q.67 **Which of the following taxonomic groups consists of organisms that can interbreed and produce fertile offspring?**

Ans

✗ 1. Family

✓ 2. Species

✗ 3. Class

✗ 4. Kingdom

Q.68 **Which of the following capital cities hosted the high-level ministerial Quad meeting in July 2026, addressing free navigation networks and maritime security during ASEAN framework discussions?**

Ans

✓ 1. Manila

✗ 2. Kuala Lumpur

✗ 3. Bangkok

✗ 4. Jakarta

Q.69 **The position(s) of how many letters will remain unchanged if each of the letter in the word JURYMAN is arranged in the English alphabetical order?**

Ans

✗ 1. Three

✓ 2. Zero

✗ 3. One

✗ 4. Two

Q.70 **Which Article of the Indian Constitution guarantees the Right to Education?**

Ans

✗ 1. Article 25

✗ 2. Article 19

✓ 3. Article 21A

✗ 4. Article 16

Q.71 **19 is related to 153 following a certain logic. Following the same logic, 44 is related to 353. To which of the following is 31 related to, following the same logic?**
(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)

Ans

✗ 1. 246

✗ 2. 243

✓ 3. 249

✗ 4. 251

Q.72 **A manufacturer fixes his selling price at 50% over the cost of production. If the cost of production goes up by 50%, and the manufacturer raises his selling price by 22%, find the profit percentage.**

Ans

✗ 1. 25%

✓ 2. 22%

✗ 3. 21%

✗ 4. 23%

Q.73 If $12\sin A + \cos A = \sqrt{4}\sin A$, find the value of $\tan A$.

Ans

✗ 1. $-\frac{1}{20}$

✗ 2. $-\frac{1}{7}$

✓ 3. $-\frac{1}{10}$

✗ 4. $-\frac{1}{16}$

Q.74 **Which statement accurately describes the role of protons when comparing the atoms of different elements?**

Ans

✓ 1. The number of protons in the nucleus determines the identity of the element.

✗ 2. The way protons participate in bonding determines the element.

✗ 3. The number of neutrons in the nucleus determines the identity of the element.

✗ 4. The mass of protons determines the element.

Q.75 **Which of the following letter-clusters will replace the question mark (?) in the given series to make it logically complete?**

PET 15 QHP 30 RKL 60 SNH 120 ?

Ans

✗ 1. SPD 260

✗ 2. TPD 260

✓ 3. TQD 240

✗ 4. SQD 240

Q.76 **Ratan starts from point A and drives 35 km towards East. He then takes a right turn and drives 56 km. He takes a final left turn and drives 19 km and stops at point B. Dinesh starts from point P, which is 99 km East of Point A, and drives 15 km towards West. He then takes a left turn and drives 56 km. He takes a final right turn and drives 25 km and stops at Point Q. What is the shortest distance between Point Q and Point B? (All turns are 90-degree turns only.)**

Ans

✗ 1. 4 km

✗ 2. 2 km

✗ 3. 7 km

✓ 4. 5 km

blackbook

Q.77 **By the year 1925, how many provinces in British India had enacted Panchayat Acts to formalise local self-governance?**

Ans
- ✔ 1. Eight
- ✘ 2. Six
- ✘ 3. Four
- ✘ 4. Twenty

Q.78 **A, B, C, D, G, H and I are sitting around a circular table facing the centre of the table. I sits third to the left of A. B sits second to the left of D. A is an immediate neighbour of both H and B. G is not an immediate neighbor of I. How many people sit between C and B when counted from the right of C?**

Ans
- ✘ 1. Three
- ✘ 2. One
- ✔ 3. Two
- ✘ 4. Four

Q.79 **From a point A, which is at a distance of 30 cm from centre O of a circle of radius 18 cm, in the same plane, a pair of tangents AB and AC are drawn to the circle. The area of quadrilateral ABOC is:**

Ans
- ✘ 1. 216 cm^2
- ✘ 2. 456 cm^2
- ✔ 3. 432 cm^2
- ✘ 4. 240 cm^2

Q.80 **A botanist uses a custom spring launcher to propel lightweight plant seeds horizontally onto a test field. If the launcher imparts a uniform acceleration of 7 m/s^2 to each 0.06 kg seed for 0.8 seconds, which of the following values best represents the average force exerted on a single seed during launch?**

Ans
- ✘ 1. 0.13 N
- ✘ 2. 0.34 N
- ✘ 3. 0.052 N
- ✔ 4. 0.42 N

Q.81 **A technician in a spacecraft repairs a loose panel by pushing it toward the wall without touching any other object. The panel moves in one direction, and the technician drifts in the opposite direction. Which explanation best describes this observation?**

Ans
- ✘ 1. The technician moves more than the panel because the technician has greater mass
- ✔ 2. The technician and panel experience equal forces in opposite directions, causing both to move apart
- ✘ 3. The panel moves because the technician applies a force, but the technician remains still
- ✘ 4. The technician moves due to air resistance inside the spacecraft, not because of the push

Q.82 **If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 1857632, what will be the sum of the digits which are second from the left and third from the right of the new number thus formed?**

Ans
- ✔ 1. 10
- ✘ 2. 9
- ✘ 3. 11
- ✘ 4. 8

Q.83 **An object moves with constant velocity, and a retarding force is applied in the opposite direction. The object stops after moving a distance s. How is the work done by this retarding force represented?**

Ans
- ✘ 1. No work done
- ✘ 2. F×s (positive work)
- ✔ 3. F×(-s) or -F×s (negative work)
- ✘ 4. F×0 (zero work)

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Q.84 **Which of the following was a key outcome of India's 1991 foreign exchange reforms?**

Ans

✔ 1. Reducing government intervention and letting markets set rupee value

✘ 2. Tying the rupee's value exclusively to gold reserves

✘ 3. Standardising import tariffs uniformly across all goods

✘ 4. Banning government control over all foreign exchange dealings

Q.85 **If the ratio of two numbers is 2 : 1, and their HCF is 48, then their LCM is:**

Ans

✘ 1. 72

✘ 2. 120

✔ 3. 96

✘ 4. 144

Q.86 ABCDEF is a regular hexagon with DE = 24 cm. If the area of the hexagon is $k\sqrt{3}$ cm^2, then the sum of digits of k is ____.

Ans

✘ 1. 15

✔ 2. 18

✘ 3. 22

✘ 4. 25

Q.87 **What is the main role of apical meristem in the growth of a plant?**

Ans

✘ 1. Increase in girth of stem

✔ 2. Increase in length of stem and roots

✘ 3. Production of flowers and fruits

✘ 4. Formation of bark on tree

Q.88 **A wall clock is marked at ₹2000. If a shopkeeper offers a 20% discount, followed by a further 10% discount on the reduced price, what is the final price paid for the wall clock?**

Ans

✘ 1. ₹1620

✘ 2. ₹1800

✔ 3. ₹1440

✘ 4. ₹1600

Q.89 **Which Mughal emperor granted Sir Thomas Roe a firmān (imperial decree) allowing the English East India Company to establish factories and trade rights in Mughal territories?**

Ans

✔ 1. Jahangir

✘ 2. Akbar

✘ 3. Shah Jahan

✘ 4. Aurangzeb

Q.90 **Irank ranked 13th from the bottom and 63rd from the top in his class. How many students are there in his class?**

Ans

✘ 1. 70

✘ 2. 80

✔ 3. 75

✘ 4. 60

adda247

Q.91 **The first Khelo India Tribal Games 2026 were scheduled across which three cities of Chhattisgarh?**

Ans
- ✗ 1. Raipur, Bilaspur and Durg
- ✗ 2. Jagdalpur, Korba and Raigarh
- ✗ 3. Bilaspur, Sarguja and Ambikapur
- ✓ 4. Raipur, Jagdalpur and Sarguja

Q.92 **When was the National Rural Health Mission (NRHM) officially launched in India for the improvement of healthcare delivery in rural areas?**

Ans
- ✗ 1. 2014
- ✗ 2. 2008
- ✓ 3. 2005
- ✗ 4. 2011

Q.93 **The average score of 100 students in a test is 63. Out of the total students, 50% are girls. The average score of boys is 10% more than that of the girls. Find the average score of girls.**

Ans
- ✓ 1. 60
- ✗ 2. 62
- ✗ 3. 58
- ✗ 4. 66

Q.94 **Refer to the following letter, symbol series and answer the question. Counting to be done from left to right only.**
(Left) L P M Q % Y G Q & W + @ % D K & Ω λ H K E (Right)
How many such symbols are there each of which are immediately preceded by a symbol and also immediately followed by a letter?

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

Q.95 **Two convex lenses are made of the same material. One lens is more strongly curved than the other. Which statement is correct about their focal lengths?**

Ans
- ✗ 1. Both lenses have the same focal length because they are made of the same material.
- ✓ 2. The more strongly curved lens has a shorter focal length.
- ✗ 3. The focal length depends only on the thickness of the lens.
- ✗ 4. The more strongly curved lens has a longer focal length.

Q.96 If $5^{3x + 4} = (5^4)^{105}$, then what is the integral part of x?

Ans
- ✗ 1. 136
- ✗ 2. 139
- ✓ 3. 138
- ✗ 4. 137

Q.97 **What should come in place of the question mark (?) in the given series?**

4 8 11 22 25 ?

Ans
- ✗ 1. 26
- ✗ 2. 28
- ✗ 3. 53
- ✓ 4. 50

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Q.98 **Which statement accurately describes how the mass number of an atom is determined?**

Ans

✗ 1. It is the total number of electrons and protons in the atom.

✗ 2. It is the difference between the number of protons and neutrons.

✗ 3. It is the number of protons only in the nucleus.

✓ 4. It is the total number of protons and neutrons in the nucleus.

Q.99 **A, B, U, V, Y and Z each scored different marks. Only two people have scored more than Z. Only U has scored less than V. B has scored more than A but less than Y. How many people have scored more than A?**

Ans

✗ 1. Four

✓ 2. Three

✗ 3. Two

✗ 4. One

Q.100 **Pari has to travel 909 km in 14 hours. She travels at 45 km/h for the first 3 hours, and then at 42 km/h for the next 126 km. At what speed must she travel for the rest of the journey to reach her destination in exactly 14 hours?**

Ans

✗ 1. 84 km/h

✗ 2. 78 km/h

✗ 3. 75 km/h

✓ 4. 81 km/h

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