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	4:30 PM - 6:00 PM
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 **An amount of ₹15116.544 is due at the end of 3 years. If the annual compound interest rate is 8%, compounded annually, what is its present value?**

Ans
- ✗ 1. ₹11,000
- ✗ 2. ₹12,500
- ✓ 3. ₹12,000
- ✗ 4. ₹13,000

Q.2 **Which of the following events occurs after pollen grains reach the stigma in flowering plants?**

Ans
- ✗ 1. Nectar is produced by the flower.
- ✓ 2. Fertilization takes place inside the ovule.
- ✗ 3. The pollen develops directly into a seed.
- ✗ 4. The ovary develops into a flower.

Q.3 **A bird starts from rest and flies by flapping its wings until it reaches a speed of 6 m/s. Which statement best explains how the bird gains kinetic energy?**

Ans
- ✓ 1. The bird's muscles convert stored chemical energy into kinetic energy.
- ✗ 2. The branch transfers energy continuously during flight.
- ✗ 3. Air resistance increases the bird's kinetic energy.
- ✗ 4. Kinetic energy is produced without any energy transformation.

Q.4 **Geetanjali covers three equal distances with the speeds 50 km/h, 60 km/h and 80 km/h respectively. Calculate the average speed of the journey. Write your answer round off to two decimal places.**

Ans
- ✓ 1. 61.02 km/h
- ✗ 2. 64.23 km/h
- ✗ 3. 62.01 km/h
- ✗ 4. 65.02 km/h

Q.5 **In the geomorphology of the Northern Plains of India, the saline and alkaline efflorescence patches that commonly occur in the relatively drier parts of the Bhangar are locally known by which term?**

Ans
- ✗ 1. Terai wetlands
- ✗ 2. Bhabar belt
- ✗ 3. Khadar deposits
- ✓ 4. Reh or Kallar

Q.6 The current population of a town is 16,000. It increases by 40% in the first year and by 50% in the second year, but decreases by 35% in the third year. What is the population of the town at the end of the third year?

Ans
- ✔ 1. 21,840
- ✘ 2. 20,580
- ✘ 3. 23,100
- ✘ 4. 19,320

Q.7 Each vowel in the word EXTERNALITY is changed to the second letter following it in the English alphabetical order AND each consonant is changed to the letter immediately preceding it in the English alphabetical order. How many letters will appear exactly twice in the group of letters thus formed?

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

Q.8 Which statement about the products of a neutralisation reaction is correct?

Ans
- ✔ 1. They are always a salt and water
- ✘ 2. They are always oxygen and water
- ✘ 3. They are always hydrogen gas and water
- ✘ 4. They are always carbon dioxide and water

Q.9 In a row of 48 students facing North, Madhu is 22nd from the left end. If Suresh is 25th to the right of Madhu, what is Suresh's position from the right end of the line?

Ans
- ✘ 1. 1st
- ✘ 2. 4th
- ✔ 3. 2nd
- ✘ 4. 3rd

Q.10 A biomedical engineer is designing an MRI machine that uses a solenoid to generate a uniform magnetic field inside the imaging chamber. To increase the field strength without changing the current, she considers changing the solenoid's design. Which modification would most effectively enhance the field inside the chamber while keeping the chamber's size constant?

Ans
- ✘ 1. Spacing the turns of the solenoid farther apart within the same chamber
- ✘ 2. Using a thicker wire for the coil windings inside the solenoid
- ✘ 3. Placing a non-magnetic (e.g., plastic) core inside the solenoid
- ✔ 4. Increasing the number of tightly wound turns per unit length of the solenoid

Q.11 Which of the following is a primary function of the vertebral column in vertebrates?

Ans
- ✘ 1. To pump oxygenated blood throughout the body
- ✘ 2. To filter toxic nitrogenous wastes from blood
- ✘ 3. To secrete digestive fluids for breaking down food
- ✔ 4. To protect the spinal cord of the nervous system

Q.12 The crescent-shaped sand dunes that cover the larger areas of the Thar Desert are known as _____.

Ans
- ✘ 1. Seif dunes
- ✔ 2. Barchans
- ✘ 3. Star dunes
- ✘ 4. Parabolic dunes

Q.13 The length of the diagonal of a square is $6\sqrt{2}$ cm. Find the perimeter (in cm) of the square.

Ans
- ✔ 1. 24
- ✘ 2. 48
- ✘ 3. 20
- ✘ 4. 32

Q.14 **The British policy of "Divide and Rule" in India was primarily based on which of the following assumptions?**

Ans

✗ 1. Fostering cooperation between different communities was essential for maintaining peace.

✓ 2. Recognizing and solidifying pre-existing, rigid religious and caste identities was key to effective administration.

✗ 3. A uniform civil code would be the most effective way to govern a diverse population.

✗ 4. Promoting linguistic diversity would help in the economic development of the country.

Q.15 **What will come in the place of '?' in the following equation, if '+' and '-' are interchanged and 'x' and '÷' are interchanged?**
315 - 280 x 5 ÷ 3 +19 =?

Ans

✗ 1. 460

✓ 2. 464

✗ 3. 475

✗ 4. 482

Q.16 **A retailer purchases goods with a list price of ₹2,00,000. The seller offers a 20% trade discount and a 5% cash discount if payment is made within 10 days. If the retailer pays within the discount period, what is the final amount paid?**

Ans

✗ 1. ₹1,51,000

✗ 2. ₹1,60,000

✗ 3. ₹1,50,000

✓ 4. ₹1,52,000

Q.17 **At the Asian Relay Championships 2026, India's women's team won gold with a season-best timing of 43.85 seconds. This performance came in which relay event?**

Ans

✗ 1. Women's 4×400 m relay

✗ 2. Women's 4×200 m relay

✗ 3. Mixed 4×400 m relay

✓ 4. Women's 4×100 m relay

Q.18 **Below are given two sets of numbers. In each set of numbers, a certain mathematical operation on the first number results in the second number. Similarly, certain mathematical operations on the second number result in the third number and so on. Which of the given options follows the same set of operations as in the question?**
(NOTE: A two/three digit number cannot be broken into individual digits for operations. E.g. if 37 is followed by 10, the operation cannot be 3+7 as a two-digit number cannot be broken into individual digits.)
9 – 36 – 72 – 90;
11 – 44 – 88 – 106

Ans

✗ 1. 4 – 64 – 128 – 146

✓ 2. 8 – 32 – 64 – 82

✗ 3. 7 – 28 – 56 – 72

✗ 4. 6 – 24 – 48 – 64

Q.19 **Bohr's postulates explain the stability of hydrogen but fail for multi-electron atoms mainly because:**

Ans

✓ 1. Electron-electron interactions are not considered in Bohr's model

✗ 2. Electrons are assumed to have no mass in multi-electron atoms

✗ 3. Neutrons in the nucleus affect electron paths in Bohr's model

✗ 4. Protons move rapidly in larger atoms, disturbing orbits

Q.20 **The areas of three adjacent faces of a rectangular box (cuboid) are 120 square cm, 72 square cm, and 60 square cm. What is the volume of the box?**

Ans

✗ 1. 680 cubic cm

✗ 2. 840 cubic cm

✓ 3. 720 cubic cm

✗ 4. 960 cubic cm

Q.21 **Keshav starts from point A and drives 7 km towards west. He then takes a left turn and drives 13 km. He takes a final left turn and drives 7 km and stops at point B. Pranay starts from point P, which is 10 km east of Point A, and drives 4 km towards east. He then takes a right turn and drives 13 km. He takes a final right turn and drives 2 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. 10 km
- ✓ 2. 12 km
- ✗ 3. 13 km
- ✗ 4. 11 km

Q.22 **A can complete a piece of work in 4 days, while B can complete the same work in 52 days. B works alone for 13 days and then leaves. In how many days can A alone complete the remaining work?**

Ans
- ✗ 1. 4
- ✗ 2. 5
- ✓ 3. 3
- ✗ 4. 2

Q.23 **252 is related to 28 following a certain logic. Following the same logic, 306 is related to 34. To which of the following is 270 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. 37
- ✗ 2. 32
- ✓ 3. 30
- ✗ 4. 35

Q.24 **As per the Bohr's Atomic model, the electronic configuration of Calcium atom (Atomic number 20) is:**

Ans
- ✗ 1. 2 , 8 , 10
- ✓ 2. 2 , 8 , 8 , 2
- ✗ 3. 2 , 8 , 2 , 8
- ✗ 4. 2 , 2 , 8 , 8

Q.25 **An engineer tests a custom-built cart by loading it with 12 identical packages and releasing it on a smooth warehouse floor. If the cart, with the packages, accelerates at 0.5 meters per second squared when pushed with a total force of 36 newtons, What will be the new acceleration if the applied force is doubled while the mass remains unchanged?**

Ans
- ✗ 1. The acceleration would stay the same as the initial value.
- ✗ 2. The acceleration would decrease by a fixed amount.
- ✗ 3. The acceleration would be halved compared to the initial value.
- ✓ 4. The acceleration would double compared to the initial value.

Q.26 **A group of numbers/symbols is coded using letter codes as per the codes given below and the conditions that 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	7	4	5	#	@	&	?	$	+	%
Code	J	P	L	C	M	Z	T	G	F	D

Conditions:
(i) If the first element is an odd number, interchange the codes of the first and last elements.
(ii) If the second and third elements are symbols, code the third element as the code of the second element.
(iii) If the fourth element is an even number, code both fourth and fifth elements as ©.

What is the code for the following group of number-symbols?
745#@

Ans
✔ 1. MPLCJ
✘ 2. ZPLCM
✘ 3. JPTCM
✘ 4. JPLCM

Q.27 **The average marks obtained in mathematics by the students of a class was 77. The average marks obtained by the boys is 60% more than the average marks obtained by the girls. If the ratio of the number of boys to that of girls is 7 : 2, then the average marks obtained by the girls is:**

Ans
✘ 1. 54
✘ 2. 47.6
✘ 3. 52
✔ 4. 52.5

Q.28 **The scrotum helps to maintain a testicular temperature that is _____ normal body temperature, which is essential for sperm formation.**

Ans
✘ 1. Equal to
✘ 2. Higher than
✔ 3. Lower than
✘ 4. Fluctuating with

Q.29 **What is the standard deviation of five numbers 8, 12, 16, 20, 24? (Rounded off to two decimal places.)**

Ans
✘ 1. 7.15
✘ 2. 4.52
✔ 3. 5.66
✘ 4. 6.25

Q.30 **A person claps near a cliff and hears the sound again after a short interval. Which observation confirms that the repeated sound is an echo?**

Ans
✔ 1. The reflected sound is heard after a noticeable delay.
✘ 2. The reflected sound is heard immediately after the clap without any delay.
✘ 3. The reflected sound is louder than the original sound.
✘ 4. The reflected sound is heard at the same instant as the clap.

Q.31 **What is the value of $\{(5 + 3)^2 - (4 \times 2)\} \div 4 \times 2 + 3$?**

Ans
✘ 1. 33
✘ 2. 34
✔ 3. 31
✘ 4. 30

Q.32 For a moderately asymmetrical grouped data distribution, the median is 35. The difference between the mode and the mean is 12. If the mean is greater than the mode, find the value of the mean. (Use the empirical relation among the mean, median, and mode)

Ans
- ✔ 1. 39
- ✘ 2. 38
- ✘ 3. 40
- ✘ 4. 41

Q.33 Find the value of $\frac{\sqrt{\tan^2 A + (\operatorname{cosec}^2 A - 1) + 2}}{(\tan A + \cot A)}$.

Ans
- ✔ 1. 1
- ✘ 2. tanA
- ✘ 3. cotA
- ✘ 4. 2

Q.34 A, B, U, V, Y, and Z each scored different marks. Only two people have scored between U and B. Only one person has scored more than A. Only three people have scored between A and U. Z has scored more than Y but less than V.
How many people have scored less than A?

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

Q.35 Which of the following is a disaster-related function of the Panchayat Samiti?

Ans
- ✔ 1. Providing relief during natural calamities
- ✘ 2. Coordinating judicial inquiry on disaster mismanagement
- ✘ 3. Enforcing rehabilitation funds from central schemes
- ✘ 4. Issuing insurance claims to affected families

Q.36 Refer to the following letter, symbol series and answer the question.
(Left) # $ V Y W Ω F K Q λ * D A B H T σ I K % Y (Right)
If all the letters are dropped from the series, which of the following will be fourth from the left?

Ans
- ✘ 1. #
- ✔ 2. λ
- ✘ 3. $
- ✘ 4. σ

Q.37 Which of the following movements is associated with the slogan “Do or Die”?

Ans
- ✔ 1. Quit India Movement
- ✘ 2. Civil Disobedience Movement
- ✘ 3. Non-Cooperation Movement
- ✘ 4. Khilafat Movement

Q.38 A student observes that light bends towards the normal when entering water from air. What does this suggest about the refractive index of water compared to air?

Ans
- ✔ 1. Water has a higher refractive index than air
- ✘ 2. Water and air have equal refractive indices
- ✘ 3. Water has a lower refractive index than air
- ✘ 4. Refractive index of water depends on light's wavelength only

Q.39 **India's oldest iron and steel plant, the Tata Iron and Steel Company (TISCO), was established in 1907 at the confluence of the Subarnarekha and Kharkai rivers in which city?**

Ans

✗ 1. Bhilai

✗ 2. Rourkela

✓ 3. Jamshedpur

✗ 4. Durgapur

Q.40 **If the Earth's atmosphere were absent, which of the following phenomena would NOT be observed?**

Ans

✗ 1. Occurrence of a solar eclipse

✓ 2. Advance sunrise and delayed sunset

✗ 3. The Sun’s daily motion

✗ 4. Phases of the Moon

Q.41 **Divide ₹4984 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. 3148

✗ 2. 2548

✓ 3. 2848

✗ 4. 2748

Q.42 **The Chipko Movement, a grassroots initiative against deforestation involving villagers embracing trees to prevent felling, originated in which present-day state?**

Ans

✗ 1. Jharkhand

✗ 2. Himachal Pradesh

✓ 3. Uttarakhand

✗ 4. Sikkim

Q.43 **What is the main role of tracheids and vessels in xylem tissue?**

Ans

✗ 1. They help in horizontal movement of food

✗ 2. They provide only mechanical support to stems

✗ 3. They store carbohydrates for future use

✓ 4. They transport water and minerals upward

Q.44 **Which of the following best explains why the Tyndall effect is NOT observed in a true solution?**

Ans

✓ 1. Particles in a true solution are too small to scatter light

✗ 2. Particles have a different refractive index

✗ 3. Particles in a true solution are colored

✗ 4. Air bubbles are absent in a true solution

Q.45 The area of an equilateral triangle is $4\sqrt{3}$ cm^2. What will be the diameter of circumcircle (in cm) of the triangle?

Ans

✓ 1. $\frac{8\sqrt{3}}{3}$

✗ 2. $\frac{2\sqrt{3}}{3}$

✗ 3. $\frac{\sqrt{3}}{3}$

✗ 4. $\frac{4\sqrt{3}}{3}$

Q.46 **Why does temperature increase with height in the stratosphere?**

Ans

✗ 1. Vertical mixing of air increases heat

✗ 2. The Earth's surface heats the layer directly

✗ 3. Water vapour condensation releases heat

✓ 4. Ozone absorbs UV rays and heats the layer

Q.47 **M, N, O, X, Y and Z live on six different floors of the same building. The lowermost floor in the building is numbered 1, the floor above it, number 2 and so on till the topmost floor is numbered 6.**
Only two people live between M and Z. Only two people live between O and Y. Only one person lives between N and Y. N lives on floor numbered 1. M lives above Y.
How many people live above X?

Ans

✓ 1. Two

✗ 2. Four

✗ 3. Three

✗ 4. One

Q.48 **According to the 2026 edition of the Henley Passport Index, which of the following countries had the world's most powerful passport with visa-free access to 192 destinations?**

Ans

✓ 1. Singapore

✗ 2. South Korea

✗ 3. United Arab Emirates

✗ 4. Japan

Q.49 **Aman is the son of Pooja. Pooja is the wife of Rajesh. Rajesh is the brother of Deepak. Deepak is the father of Kavya. How is Aman related to Kavya?**

Ans

✗ 1. Mother's brother's son

✗ 2. Mother's sister's son

✓ 3. Father's brother's son

✗ 4. Father's sister's son

Q.50 **Which Classical Language is associated with the works of Kalidasa, Bhasa, and Bhavabhuti?**

Ans

✗ 1. Tamil

✗ 2. Hindi

✓ 3. Sanskrit

✗ 4. Prakrit

Q.51 If $15\sin A + \cos A = \sqrt{8}\sin A$, find the value of $\tan A$.

Ans

✓ 1. $\frac{-15-\sqrt{8}}{217}$

✗ 2. $\frac{-15-\sqrt{8}}{212}$

✗ 3. $\frac{-15-\sqrt{8}}{227}$

✗ 4. $\frac{-16-\sqrt{8}}{217}$

Q.52 **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 letter-cluster pair DOES NOT belong to that group?**
(Note: The odd one out is not based on the number of consonants/vowels or their position in the letter-cluster.)

Ans

✗ 1. AW−VR

✗ 2. XT−SO

✓ 3. NJ−HG

✗ 4. SO−NJ

Q.53 **If a mother or foetus faces risk during delivery, what action might a doctor take?**

Ans

✗ 1. Avoid all medical and surgical procedures regardless of risk

✗ 2. Delay the delivery until all risks disappear

✗ 3. Wait passively without taking any action

✓ 4. Perform surgical procedures to ensure a safe delivery

Q.54 **PQ and RS are two parallel chords on the same side of the centre of the circle having radius of 17 cm and centre O. What is the distance (in cm) between PQ and RS if PQ is 16 cm and RS is 30 cm?**

Ans

✗ 1. 6

✗ 2. 5

✓ 3. 7

✗ 4. 8

Q.55 **Which statement about lymph is correct?**

Ans

✗ 1. Lymph is mainly made of platelets

✗ 2. Lymph contains more red blood cells than plasma

✗ 3. Lymph contains more protein than blood plasma

✓ 4. Lymph has less protein than plasma and is colourless

Q.56 **Which metal will be least reactive in reaction with HCl?**

Ans

✗ 1. Magnesium

✗ 2. Zinc

✓ 3. Iron

✗ 4. Aluminium

Q.57 **Consider a circle C of radius 8 cm with centre at O. What is the difference in the area of the circle C and the area of the sector of C subtending an angle of 120° at O?**

Ans

✗ 1. $\frac{120\pi}{3}$ cm^2

✓ 2. $\frac{128\pi}{3}$ cm^2

✗ 3. $\frac{125\pi}{3}$ cm^2

✗ 4. $\frac{124\pi}{3}$ cm^2

Q.58 **If 3 is added to each even digit and 2 is added to each odd digit in the number 2531647, what will be the sum of the first and last digits in the number thus formed?**

Ans

✓ 1. 14

✗ 2. 12

✗ 3. 18

✗ 4. 16

Q.59 **Which of the following programmes was launched in October 1980 in place of the Food for Work Programme?**

Ans

✗ 1. Development of Women and Children in Rural Areas

✗ 2. Integrated Rural Development Programme

✓ 3. National Rural Employment Programme

✗ 4. Training of Rural Youth for Self-Employment

Q.60 This question is based on the following words
DIM PIN URN OWL
How many letters are there between the first letter of the second word from the right and the second letter of the first word from the left as per English alphabetical order?

Ans
- ✗ 1. 12
- ✗ 2. 10
- ✓ 3. 11
- ✗ 4. 14

Q.61 Which body is responsible for auditing government expenditure in India?

Ans
- ✗ 1. Finance Commission
- ✗ 2. Central Vigilance Commission
- ✓ 3. Comptroller and Auditor General
- ✗ 4. Union Public Service Commission

Q.62 Electrolytic refining is used for the purification of which of the following?

Ans
- ✗ 1. Sugar
- ✓ 2. Metals
- ✗ 3. Non-metals
- ✗ 4. Alloys

Q.63 GH 9 is related to JG 28 in a certain way. In the same way, HH 13 is related to KG 32. To which of the given options is OP 23 related, following the same logic?

Ans
- ✗ 1. SP 44
- ✓ 2. RO 42
- ✗ 3. RP 42
- ✗ 4. SO 38

Q.64 Which of the following options when placed in place of the question mark (?) will logically complete the given series?

15 22 40 79 129 200 282 ?

Ans
- ✓ 1. 385
- ✗ 2. 389
- ✗ 3. 380
- ✗ 4. 387

Q.65 In a division problem, the divisor is 18 times the quotient and 9 times the remainder. If the remainder is 40, what is the dividend?

Ans
- ✓ 1. 7240
- ✗ 2. 7244
- ✗ 3. 7238
- ✗ 4. 7237

Q.66 What should come in place of the question mark (?) in the given series?

243 226 210 195 181 168 ?

Ans
- ✓ 1. 156
- ✗ 2. 152
- ✗ 3. 161
- ✗ 4. 158

Q.67 Which enzyme, present in the stomach, helps digest proteins?

Ans
- ✓ 1. Pepsin
- ✗ 2. Amylase
- ✗ 3. Lipase
- ✗ 4. Trypsin

Q.68 **Which of the following best describes the 'Repo Rate', a monetary policy tool of the Reserve Bank of India (RBI)?**

Ans

✔ 1. Rate at which RBI lends to commercial banks for short-term

✘ 2. Rate for long-term government loans

✘ 3. Rate at which banks lend to RBI

✘ 4. Percentage of deposits to be kept as reserves

Q.69 **Raman's monthly income is ₹21,000. He saves 19% of his income. If his income increases by 14% and his expenditure increases by 20%, then his savings will:**

Ans

✘ 1. Increase by ₹458

✘ 2. Decrease by ₹457

✘ 3. Increase by ₹459

✔ 4. Decrease by ₹462

Q.70 **The 7-digit number 92A445B is divisible by 4. What is the minimum value of (A+B)?**

Ans

✔ 1. 2

✘ 2. 3

✘ 3. 6

✘ 4. 4

Q.71 **A certain sum of money, when invested at simple interest, amounts to ₹1,750 in 2 years and ₹2,000 in 3 years. Find the rate of interest per annum, in %.**

Ans

✔ 1. 20

✘ 2. 50

✘ 3. 10

✘ 4. 25

Q.72 **The India Semiconductor Mission 2.0, announced in the Union Budget 2026–27, focuses on which area of computer-technology development?**

Ans

✘ 1. Rural broadband mapping and tariff regulation

✘ 2. Digital payment authentication and settlement

✘ 3. Online gaming certification and user safety

✔ 4. Chip equipment, materials and advanced manufacturing

Q.73 **Two containers have different concentrations of red dye: one is 30% and the other is 50%. If 4 litres of the first and 6 litres of the second are mixed, what is the percentage of red dye in the mixture?**

Ans

✔ 1. 42%

✘ 2. 50%

✘ 3. 40%

✘ 4. 44%

Q.74 **What should come in place of '?' in the given series based on the English alphabetical order?**
IKN HJM GIL FHK ?

Ans

✘ 1. EHJ

✔ 2. EGJ

✘ 3. EGI

✘ 4. EHI

Q.75 **A boat takes 8 hours to travel 100 km upstream and 5 hours to travel 80 km downstream in a river. If the boat travels 60 km upstream and then 60 km downstream, how much total time (in hours) will it take? Also find the speed (in km/h) of the stream. (Options are written respectively)**

Ans

✔ 1. 8.55, 1.75

✘ 2. 8.45, 1.5

✘ 3. 8.45, 1.75

✘ 4. 8, 1.5

Q.76 **1 Ampere of current is passed through a bulb for 10 seconds. If the amount of current is doubled, keeping the time the same, how much charge would have passed through the filament of the bulb compared to the initial case?**

Ans

✗ 1. Exactly half as in the initial case

✓ 2. Double the charge than the initial case

✗ 3. Four times the initial case

✗ 4. Same amount as in the initial case

Q.77 **Two elements, calcium (atomic number 20, mass number 40) and argon (atomic number 18, mass number 40) are compared. Which of the following statements is true for the given elements?**

Ans

✓ 1. They are isobars because they have the same mass number but different atomic numbers.

✗ 2. They are isotopes because they have the same atomic number but different mass numbers.

✗ 3. They are isobars because they have the same atomic number.

✗ 4. They are identical because both have the same mass number and atomic number.

Q.78 **Why should a lifeguard aiming to rescue an object under water not dive exactly toward its apparent position?**

Ans

✗ 1. Water reflects the object.

✗ 2. The object appears farther away.

✗ 3. The object continuously moves because of refraction.

✓ 4. The object appears shallower due to refraction.

Q.79 **In a certain code language,**
A # B means 'A is the daughter of B',
A $ B means 'A is the mother of B',
A & 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#T$O%Q&Z'?

Ans

✗ 1. Wife

✗ 2. Mother

✗ 3. Wife's father's mother

✓ 4. Wife's father's sister

Q.80 **A sound wave travels through seawater with a speed of 1500 m/s. If its wavelength is 2.5 m, what is its frequency?**

Ans

✓ 1. 600 Hz

✗ 2. 150 Hz

✗ 3. 1200 Hz

✗ 4. 750 Hz

Q.81 **Each vowel in the word BEFRIENDS is changed to the second letter following it in the English alphabetical order, and each consonant is changed to the letter immediately 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. R

✓ 2. G

✗ 3. C

✗ 4. M

Q.82 Solve the following linear equations.

$$2x-y+3z=8,\ x-y-z=7,\ x+y+z=10$$

Ans

✓ 1. $x=\frac{17}{2}, y=\frac{27}{8}, z=\frac{-15}{8}$

✗ 2. $x=\frac{17}{2}, y=\frac{-27}{8}, z=\frac{-15}{8}$

✗ 3. $x=\frac{-17}{2}, y=\frac{-27}{8}, z=\frac{15}{8}$

✗ 4. $x=\frac{17}{2}, y=\frac{27}{8}, z=\frac{15}{8}$

Q.83 **Refer to the following number, symbol series and answer the question. Counting to be done from left to right only. All numbers are single-digit numbers.**
(Left) 5 @ 3 $ 8 & 6 Ω 2 % 9 * 4 £ 7 # 1 & 3 (Right)
How many such symbols are there, each of which is immediately preceded by a number and also immediately followed by a number?

Ans
✗ 1. Two
✓ 2. More than three
✗ 3. Three
✗ 4. One

Q.84 **Which of the following describes the arrangement and function of lateral meristem in plant stems?**

Ans
✗ 1. Located at tip, increases length
✓ 2. Arranged in rings, increases diameter
✗ 3. Scattered in stem, stores nutrients
✗ 4. Found at nodes, forms branches

Q.85 **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 friends – Aadhya, Bhavin, Charit, Devika and Eshan – are of different ages. Who is the youngest?

Statements:
(I) Devika is younger than Charit but older than Bhavin.
(II) Aadhya is older than Devika, and Eshan is older than Charit.

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

Q.86 **The area of a square plot is 5041 m^2. The length of each side of the plot (in m) is:**

Ans
✗ 1. 61
✗ 2. 79
✗ 3. 89
✓ 4. 71

Q.87 **Seven people, D, E, F, G, U, V and W, are sitting in a row facing the North. D sits second from the right end of the line. G sits to the immediate left of U. Only four people sit between E and D. Only three people sit to the right of W. V is not an immediate neighbour of W.**
How many people sit between E and W?

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

Q.88 **Two friends, X and Y, started a business with initial capital contributions of ₹160 and ₹230, respectively. At the end of one year, the business earned a total profit of ₹54,951. What is X's share (in ₹) of the profit?**

Ans
✗ 1. ₹22,551
✗ 2. ₹22,549
✓ 3. ₹22,544
✗ 4. ₹22,560

Q.89 A product is sold at a profit of 122% 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. 54.95%
- ✘ 2. 56.03%
- ✘ 3. 57.53%
- ✘ 4. 54.49%

Q.90 Akshat invested ₹85100 at 20% per annum for 1 year at compound interest, compounded half-yearly. The amount received by him is:

Ans
- ✘ 1. ₹102904
- ✘ 2. ₹102649
- ✘ 3. ₹103140
- ✔ 4. ₹102971

Q.91 How many electrons are in the outermost shell of Chlorine (Z = 17) and Neon (Z = 10), respectively?

Ans
- ✘ 1. 8, 7
- ✔ 2. 7, 8
- ✘ 3. 7, 2
- ✘ 4. 7, 7

Q.92 Which of the following best explains why a sodium atom forms a positive ion when it reacts with chlorine?

Ans
- ✘ 1. A sodium atom retains all its electrons to remain electrically neutral.
- ✘ 2. A sodium atom gains one electron to complete its outer shell.
- ✘ 3. A sodium atom shares electrons equally with chlorine to form a bond.
- ✔ 4. A sodium atom loses one electron to achieve a stable electronic configuration.

Q.93 In the Tamil Nadu Assembly election results of 2026, which party emerged as the single largest party?

Ans
- ✘ 1. All India Anna Dravida Munnetra Kazhagam
- ✘ 2. Indian National Congress
- ✘ 3. Dravida Munnetra Kazhagam
- ✔ 4. Tamilaga Vettri Kazhagam

Q.94 Which of the following allotropes of carbon does not conduct electricity?

Ans
- ✘ 1. Graphite
- ✘ 2. Fullerene
- ✔ 3. Diamond
- ✘ 4. Charcoal

Q.95 Select the pair which follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.

BKP : EMM
JLQ : MNN

Ans
- ✘ 1. KXL : NYI
- ✘ 2. INX : LPV
- ✘ 3. BPN : ESK
- ✔ 4. QDJ : TFG

Q.96 If $6a - b + 3c = -9$, $a + b - c = 4$ and $3a - b + 4c = -5$, then what is the value of $a + b + c$?

Ans
- ✘ 1. 0
- ✘ 2. 1
- ✔ 3. 6
- ✘ 4. −1

Q.97 **In a certain code,**
'happy child plays' is coded as 'sy wc qz',
'happy smiles mother' is coded as 'ta gk sy' and
'beautifully child smiles' is coded as 'wc bt gk'.
(All the codes are two-letter codes only.)

What does the code 'bt' stand for?

Ans
✗ 1. happy
✗ 2. child
✗ 3. plays
✓ 4. beautifully

Q.98 **Why do non-biodegradable pesticides undergo biological magnification in food chains?**

Ans
✗ 1. They are destroyed during digestion.
✓ 2. They accumulate in organisms and are not broken easily.
✗ 3. They evaporate rapidly into the atmosphere.
✗ 4. They dissolve completely in water.

Q.99 **A manufacturer fixes his selling price at 28% over the cost of production. If the cost of production goes up by 25%, and the manufacturer raises his selling price by 25%, find the profit percentage.**

Ans
✗ 1. 27%
✓ 2. 28%
✗ 3. 25%
✗ 4. 31%

Q.100 **Which statement about the physical properties of metals is true?**

Ans
✗ 1. All metals are equally good conductors of electricity.
✓ 2. The sonority of a metal is due to its ability to vibrate when struck.
✗ 3. Mercury is the only metal that is solid at room temperature.
✗ 4. All metals are hard and cannot be cut with a knife.

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