



रेलवे भर्ती बोर्ड / RAILWAY RECRUITMENT BOARD

सीईएन ०२/२०२६ - तकनीशियन ग्रेड। सिगनल और तकनीशियन ग्रेड III

CEN 02/2026 - Technician Grade I Signal and Technician Grade III



Test Date	08/10/2026
Test Time	9:00 AM - 10:30 AM
Subject	RRB Technician Grade III

* 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 : Mathematics

Q.1	The sum of the present ages of Stan and Benedict is 41 years. Four years ago, Benedict's age was half of Stan's age at that time. What is Stan's present age (in years)?
Ans	☒ A. 36 ☒ B. 33 ☒ C. 26 ☒ D. 30
Q.2	A city's population decreases by 15% in the first year and by another 10% in the second year. In the third and fourth years, new development causes the population to grow by a constant rate of y% per year. If the population of the city, at the end of four years is 92.565% of the original size, what is the value of y?
Ans	☒ A. 10 ☒ B. 20 ☒ C. 5 ☒ D. 15
Q.3	A man has invested ₹57500 at a rate of 10% per annum simple interest for 3 years. Find the amount (in ₹) that he will receive after 3 years.
Ans	☒ A. 75750 ☒ B. 74750 ☒ C. 17250 ☒ D. 18250
Q.4	A can complete a piece of work in 12 days and B can complete the same work in 18 days. They start working together. After 4 days, A leaves the work. In how many more days will B finish the remaining work?
Ans	☒ A. 6 ☒ B. 4 ☒ C. 8 ☒ D. 9
Q.5	The mode of a dataset is 25. Which of the following datasets has 25 as the unique mode?
Ans	☒ A. 18, 20, 22, 24, 26, 28, 30, 32, 34 ☒ B. 15, 25, 25, 25, 28, 28, 30, 32, 35 ☒ C. 20, 22, 25, 25, 27, 27, 30, 30, 32 ☒ D. 18, 20, 22, 25, 25, 28, 30, 30, 32

Q.6 If two parallel lines are cut by a transversal, then which of the following is true?

- Ans**
- ☐ A. Difference in alternate interior angles is 60° .
 - ☒ B. Alternate interior angles are congruent.
 - ☐ C. Alternate interior angles are always complimentary.
 - ☐ D. Alternate interior angles are always supplementary.

Q.7 Which of the following numbers is divisible by 11?

- Ans**
- ☐ A. 2143
 - ☐ B. 2356
 - ☐ C. 2880
 - ☒ D. 2728

Q.8 If 20% of k is 10 less than 3600% of 25, then k is:

- Ans**
- ☒ A. 4450
 - ☐ B. 4430
 - ☐ C. 4490
 - ☐ D. 4410

Q.9 Two pipes X and Y can fill a tank with water in $5\frac{1}{3}$ hours and 24 hours respectively and a third pipe Z can empty it in 8 hours. If the pipes X and Y be opened at 11:30 a.m. and 12:30 p.m. respectively while pipe Z is opened at 1:30 p.m., the tank will be filled at:

- Ans**
- ☐ A. 6:56 p.m.
 - ☒ B. 7:06 p.m.
 - ☐ C. 6:36 p.m.
 - ☐ D. 6:46 p.m.

Q.10 Rohit bought a laptop for ₹30,000. He sold it to Aman at a profit of 20%. Aman sold it to Suresh at a loss of 10%. At what price did Suresh buy the laptop?

- Ans**
- ☐ A. ₹33,500
 - ☐ B. ₹30,000
 - ☒ C. ₹32,400
 - ☐ D. ₹31,600

Q.11 The curved surface area of a right circular cone is 3960 cm^2 . If the height of the cone is $9\sqrt{39} \text{ cm}$ and its slant height is 60 cm, then what is the volume of the cone?

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

- Ans**
- ☒ A. $4158\sqrt{39} \text{ cm}^3$
 - ☐ B. $4134\sqrt{39} \text{ cm}^3$
 - ☐ C. $4194\sqrt{39} \text{ cm}^3$
 - ☐ D. $4112\sqrt{39} \text{ cm}^3$

Q.12 The average sale of cars by a dealer per day in the month of March, other than on Saturdays and Sundays, is 125. The average sale of cars per day on Sundays is 116. 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 174?

- Ans**
- ☐ A. 431
 - ☐ B. 433
 - ☐ C. 441
 - ☒ D. 436

Q.13 2 times the present age of Renu is 14 years more than 4 times the present age of Manav, and 5 times the present age of Manav is 9 years less than 2 times the present age of Renu. The sum of the present ages (in years) of Renu and Manav is:

- Ans**
- ☒ A. 22
 - ☐ B. 27
 - ☐ C. 18
 - ☐ D. 20

Q.14 If $\sin^4 x - \cos^4 x = \frac{1}{5}$, then the value of $2\sin^2 x - 1$ is:

- Ans**
- ☐ A. $\frac{1}{3}$
 - ☐ B. $\frac{1}{4}$
 - ☒ C. $\frac{1}{5}$
 - ☐ D. $\frac{1}{2}$

Q.15 A is a prime number. It is given that $\text{LCM}(A, 30) = 210$. What is the value of A?

- Ans**
- ☐ A. 9
 - ☐ B. 10
 - ☒ C. 7
 - ☐ D. 8

Q.16 How many cubes of side 2 cm can be cut from a cuboid of dimensions 8 cm $\times$ 6 cm $\times$ 4 cm?

- Ans**
- ☐ A. 30
 - ☒ B. 24
 - ☐ C. 26
 - ☐ D. 22

Q.17 AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and $\angle PEB = 75^\circ$. G is a point between AB and CD such that $\angle BEG = 45^\circ$ and $\angle GFE = 19^\circ$. What is the measure of $\angle EGF$?

- Ans**
- ☐ A. 110°
 - ☐ B. 104°
 - ☐ C. 102°
 - ☒ D. 101°

Q.18 Rohit travels 30 km at 60 km/hr, the next 40 km at 80 km/hr and the last 30 km at 30 km/hr. What is the average speed for the entire journey?

- Ans**
- ☒ A. 50 km/hr
 - ☐ B. 52 km/hr
 - ☐ C. 55 km/hr
 - ☐ D. 48 km/hr

Q.19 A mixture contains two types of solution P and Q in the ratio of 4 : 5. If 10 litres of solution P and 11 litres of solution Q is added to the mixture, the ratio becomes 5 : 6. Select the correct statement from the following options.

- Ans**
- ☐ A. Total initial quantity of mixture is 54 litres
 - ☒ B. Initial quantity of solution Q is 25 litres
 - ☐ C. Quantity of solution P after addition is 35 litres
 - ☐ D. Total quantity of mixture after addition is 77 litres

Q.20	Rahul sold a wristwatch for ₹2,100 at a loss of 25%. At what price should it be sold for Rahul to make a profit of 30%?
Ans	✗ A. ₹3,240 ✗ B. ₹3,040 ✓ C. ₹3,640 ✗ D. ₹3,540
Q.21	Neha took a loan of ₹10,000 at an interest rate of 10% per annum, compounded half yearly. If the total amount she has to repay is ₹11,025, for how long did she take the loan?
Ans	✗ A. 2 years ✗ B. 6 months ✓ C. 1 year ✗ D. 1.5 years
Q.22	A retailer offers three successive discounts of 10%, 15%, and 20% on an article marked at ₹25,000. What is the final selling price?
Ans	✗ A. ₹18,500 ✗ B. ₹12,500 ✓ C. ₹15,300 ✗ D. ₹16,400
Q.23	The ratio of three numbers is 2 : 3 : 5 and their sum is 200. What is the value of the largest number?
Ans	✗ A. 80 ✗ B. 90 ✓ C. 100 ✗ D. 120
Q.24	In a 2340 m circular race, Siddharth finishes one round in 30 seconds and Yash finishes one round in 60 seconds. How many different meeting points are there on circumference if they are running in a same direction?
Ans	✗ A. 4 ✗ B. 3 ✓ C. 1 ✗ D. 2
Q.25	The mean of a distribution is 72, and the mean exceeds the mode by 12. In this distribution, the value (Mean - Median) is one-third of (Mean - Mode). Find the median.
Ans	✗ A. 72 ✗ B. 66 ✗ C. 70 ✓ D. 68

Section : General Intelligence and Reasoning

Q.26	What should come in place of the question mark (?) in the given series? 7 14 21 28 35 ?
Ans	✗ A. 40 ✗ B. 41 ✗ C. 43 ✓ D. 42
Q.27	The position(s) of how many letters will remain unchanged if each letter in the word PROBLEM is arranged in the English alphabetical order?
Ans	✗ A. One ✗ B. Two ✗ C. Three ✓ D. None

Q.28 Refer to the following letter series and answer the question.
(Left) H B G V I Z O R F D W O U T D S W Q A L M F T (Right)
How many letters are there in the English alphabetical series between the letter which is sixth from the right end and fourth from the left end of the series?

Ans ☒ A. Six
☒ B. Three
☒ C. Four
☒ D. Five

Q.29 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 ☒ A. OS - EV
☒ B. MO - CT
☒ C. YC - OF
☒ D. DH - TK

Q.30 D is the father of H. H is the brother of C. Y is the father of T. T is the son of C. How is D related to Y?

Ans ☒ A. Brother
☒ B. Wife's brother
☒ C. Father
☒ D. Wife's father

Q.31 Each vowel in the word COLLEGE is changed to the letter immediately 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 be second from the right in the new group of letters thus formed?

Ans ☒ A. G
☒ B. F
☒ C. E
☒ D. H

Q.32 What should come in place of ? in the given series based on the English alphabetical order?
ACE, BDF, CEG, DFH, ?

Ans ☒ A. EFI
☒ B. EHG
☒ C. EGI
☒ D. FHI

Q.33 A, B, C, D, E, F and G are sitting in a row, facing north. B sits third to the right of F. E sits second to the right of B. Only two people sit between E and A. D sits third to the left of G. C sits at some place to the left of G. How many people sit between C and G?

Ans ☒ A. One
☒ B. Two
☒ C. Three
☒ D. More than three

Q.34 In a certain code language, 'SALT' is coded as '1739' and 'TALK' is coded as '7159'. What is the code for 'K' in that language?

Ans ☒ A. 3
☒ B. 9
☒ C. 7
☒ D. 5

Q.35 Mr. Riek starts from Point A and walks 18 km towards North. He then takes a right turn, walks 9 km, turns right and walks 23 km. He then takes a right turn and walks 14 km. He takes a final right turn, walks 5 km and stops at Point P. How far (shortest distance) and towards which direction should he walk in order to reach Point A again? (All turns are 90 degrees turns only unless specified)

Ans ☒ A. 7 km to the west
☒ B. 8 km to the north
☒ C. 4 km to the south
☒ D. 5 km to the east

Q.36 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 numbers/symbols to be followed directly as given in the table.

Number/Symbol 3 + % 8 \$ 1 ^ 6 = 5

Code QTWBDGJMPS

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 third element.

1 % 5 + 6

Ans ☒ A. G W S T M
☒ B. G S S T ©
☒ C. © W S T ©
☒ D. © W W T M

Q.37 113 is related to 138 following a certain logic. Following the same logic, 146 is related to 171. To which of the following is 153 related, 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 ☒ A. 164
☒ B. 178
☒ C. 194
☒ D. 186

Q.38 If ‘A’ stands for ‘+’, ‘B’ stands for ‘–’, ‘C’ stands for ‘x’, and ‘D’ stands for ‘÷’, what will come in place of the question mark (?) in the following equation?
91 D 7 A 6 C 5 B 17 = ?

Ans ☒ A. 26
☒ B. 28
☒ C. 24
☒ D. 22

Q.39 RTNG is related to WQSD in a certain way based on the English alphabetical order. In the same way, BNXA is related to GKCX. To which of the given options is LHHU related to, following the same logic?

Ans ☒ A. PDMS
☒ B. QEMR
☒ C. RFNQ
☒ D. PFLR

Q.40 In a certain code language, 'base wet ivy' is coded as 'cg au zm' and 'child base data' is coded as 'au jl gs'. How is 'base' coded in the given language?

- Ans
- ☒ A. au
 - ☐ B. cg
 - ☐ C. zm
 - ☐ D. jl

Q.41 Based on the English alphabetical order, three of the following four letter-clusters are alike in a certain way and thus form a group. Which letter-cluster 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
- ☐ A. XVR
 - ☒ B. YXS
 - ☐ C. WUQ
 - ☐ D. DBX

Q.42 What will come in the place of '?' in the following equation, if '+' and '-' are interchanged and 'x' and '÷' are interchanged?
 $38 \times 19 \div 4 - 48 + 31 = ?$

- Ans
- ☐ A. 23
 - ☐ B. 26
 - ☒ C. 25
 - ☐ D. 27

Q.43 Refer to the following letter, symbol series and answer the question. Counting to be done from left to right only.
(Left) F & I T @ J Y C * A # U K L P \$ B M (Right)
How many such symbols are there each of which is immediately preceded by a vowel but not immediately followed by a consonant?

- Ans
- ☒ A. One
 - ☐ B. Three
 - ☐ C. Two
 - ☐ D. None

Q.44 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.

Among 5 trees, H, K, T, W and X, each of different heights, which tree is the tallest?
(I) T is shorter than only two trees. X is taller than T.
(II) W is taller than X.

- Ans
- ☐ A. Data in Statement I alone is sufficient to answer the question while data in Statement II is not
 - ☒ B. Both Statements I and II together (and not Statement 1 alone or Statement II alone) are sufficient to answer the question
 - ☐ C. Data in Statement II alone is sufficient to answer the question while data in Statement I is not
 - ☐ D. Both Statements I and II together are NOT sufficient to answer the question

Q.45 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.
WYC-DFJ
GIM-NPT

- Ans
- ☐ A. VWZ-BDH
 - ☒ B. VXB-CEI
 - ☐ C. VXB-BEH
 - ☐ D. VWZ-CEI

Q.46 What will come in the place of '?' in the following equation, if '+' and '÷' are interchanged and '-' and 'x' are interchanged?

$168 + 42 \times 14 - 9 \div 207 = ?$

- Ans**
- ☒ A. 77
 - ☒ B. 81
 - ☒ C. 72
 - ☒ D. 85

Q.47 What should come in place of '?' in the given series?

$3\ 3\ 6\ 18\ 72\ ?$

- Ans**
- ☒ A. 360
 - ☒ B. 256
 - ☒ C. 272
 - ☒ D. 368

Q.48 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 are sufficient to answer the question. Read both the statements and decide the appropriate answer.

Q. Among L, M, N, O, and P, who is the second tallest?
(I) M is taller than L and N but shorter than O.
(II) P is taller than O.

- Ans**
- ☒ A. Data in Statement I alone is sufficient to answer the question while data in statement II is not
 - ☒ B. Data in Statement II alone is sufficient to answer the question while data in statement I is not
 - ☒ C. Both statements I and II together (and not statement 1 alone or statement 2 alone) are sufficient to answer the question.
 - ☒ D. Both statements I and II together are NOT sufficient to answer the question

Q.49 P, Q, R, S, T, U and V live on seven 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 7. Only four people live between T and V. T lives on an odd numbered floor. Only two people live between V and R. S lives on an odd numbered floor immediately below Q. P lives on an even numbered floor. On which floor number does U live?

- Ans**
- ☒ A. 1
 - ☒ B. 3
 - ☒ C. 5
 - ☒ D. 4

Q.50 Seven boxes, A, B, C, D, E, F and G, are kept one over the other but not necessarily in the same order. Only four boxes are kept between B and A. Only F is kept above B. Only two boxes are kept between G and C. D is kept immediately above E. C is not kept immediately above D. How many boxes are kept below E?

- Ans**
- ☒ A. 4
 - ☒ B. 1
 - ☒ C. 3
 - ☒ D. 2

Section : **General Science**

Q.51 Which plant tissue is mainly responsible for transporting the products of photosynthesis from leaves to other parts of the plant?

- Ans**
- ☒ A. Epidermis
 - ☒ B. Cortex
 - ☒ C. Xylem
 - ☒ D. Phloem

Q.52 A student prepares solutions of the following salts: NaCl, NH₄Cl, Na₂CO₃, CH₃COONa. He observes that two of them have pH > 7. Which two salts are they?

- Ans
- ☒ A. Na₂CO₃ and CH₃COONa
 - ☐ B. NH₄Cl and CH₃COONa
 - ☐ C. NaCl and Na₂CO₃
 - ☐ D. NaCl and NH₄Cl

Q.53 Where does the developing embryo in most mammals receive its nourishment?

- Ans
- ☐ A. Egg shell
 - ☐ B. Egg yolk
 - ☒ C. Mother's body
 - ☐ D. Surrounding water

Q.54 Which of the following is NOT a function of the male reproductive system?

- Ans
- ☐ A. Production of testosterone hormone
 - ☒ B. Secretion of milk for offspring
 - ☐ C. Transport of sperm cells
 - ☐ D. Production of sperm cells

Q.55 According to Rutherford's model of the atom, where are most of the atom's mass and positive charge concentrated?

- Ans
- ☒ A. In a small, dense nucleus at the center
 - ☐ B. Evenly distributed in empty space
 - ☐ C. In the electron cloud surrounding the nucleus
 - ☐ D. Spread throughout the entire atom

Q.56 The area under a velocity–time graph for uniform acceleration is in the shape of a _____.

- Ans
- ☐ A. Triangle only
 - ☐ B. Circle
 - ☒ C. Trapezium or triangle.
 - ☐ D. Rectangle only

Q.57 A body moves with a uniform speed and its distance-time graph is a straight line from (0 s, 0 m) to (15 s, 45 m). If the body continues at the same rate, what distance will it cover at 20 s?

- Ans
- ☐ A. 65 m
 - ☐ B. 75 m
 - ☐ C. 50 m
 - ☒ D. 60 m

Q.58 Which of the following statements describes why sugar dissolves in water to form a solution?

- Ans
- ☐ A. Water chemically changes sugar into a new substance during mixing.
 - ☐ B. Sugar forms a suspension in water, remaining undissolved but visible.
 - ☐ C. Sugar sinks and remains at the bottom when enough water is present.
 - ☒ D. Sugar molecules interact with water molecules, allowing them to separate and spread evenly.

Q.59 Which type of animal tissue primarily functions to support, bind, or separate other tissues or organs?

- Ans
- ☐ A. Epithelial tissue
 - ☐ B. Muscle tissue
 - ☐ C. Nervous tissue
 - ☒ D. Connective tissue

Q.60 For acids, which of the following ions is responsible for their acidic behavior in solution?

- Ans
- ☐ A. carbonate ion
 - ☒ B. hydrogen ion
 - ☐ C. sulphate ion
 - ☐ D. hydroxyl ion

Q.61 Two parallel, straight wires carry equal currents in opposite directions. If the magnetic fields produced by the two wires are equal in magnitude and opposite in direction at a point, what is the resultant magnetic field at that point?

- Ans
- ☒ A. Zero
 - ☐ B. Doubled
 - ☐ C. Half the original field
 - ☐ D. Unchanged

Q.62 A cart of mass 6 kg is acted upon by a forward force of 8 N and a backward force of 5 N simultaneously. What is the magnitude of its net acceleration?

- Ans
- ☒ A. 0.5 m/s^2
 - ☐ B. 2.2 m/s^2
 - ☐ C. 1.3 m/s^2
 - ☐ D. 0.8 m/s^2

Q.63 A boy fell down while playing and severely injured his knee, making it hard to walk. Which two connective tissues are mostly likely to be involved in this injury?

- Ans
- ☐ A. Areolar tissue and Cartilage
 - ☐ B. Tendon and Blood
 - ☐ C. Adipose tissue and Bone
 - ☒ D. Ligament and Cartilage

Q.64 If the magnification produced by a convex lens is +1, then the image formed is:

- Ans
- ☐ A. Virtual, magnified, on the same side of lens
 - ☒ B. Virtual, same size, on the same side of lens
 - ☐ C. Real, magnified, on the opposite side of lens
 - ☐ D. Real, same size, on the opposite side of lens

Q.65 What happens to the atomic radius when an atom loses an electron to become a cation?

- Ans
- ☒ A. The atomic radius decreases
 - ☐ B. The atomic radius increases
 - ☐ C. The atomic radius becomes zero
 - ☐ D. The atomic radius remains the same

Q.66 A student wants to design an experiment to demonstrate a combination reaction using common laboratory chemicals. Which of the following setups best fulfills this purpose while ensuring safety and clear observation?

- Ans
- ☒ A. Mixing iron filings with sulfur powder and heating them in a test tube until a black solid forms
 - ☐ B. Mixing lead(II) nitrate solution with potassium iodide solution and observing a yellow solid
 - ☐ C. Mixing sodium chloride solution with silver nitrate solution and observing a white precipitate
 - ☐ D. Adding hydrochloric acid to calcium carbonate and collecting the gas produced

Q.67 A student places an object 30 cm in front of a convex lens of focal length 10 cm. Using the lens formula, which value correctly represents the image distance produced by the lens?

- Ans
- ☐ A. -10 cm on the opposite side of the object
 - ☐ B. 20 cm on the same side as the object
 - ☐ C. 10 cm on the same side as the object
 - ☒ D. 15 cm on the opposite side of the object

Q.68 Which one of the following is a property of a suspension?

- Ans
- ☒ A. The particles scatter light and are visible to the naked eye.
 - ☐ B. The mixture is homogeneous and uniform throughout.
 - ☐ C. The particles do not settle down even after some time.
 - ☐ D. The particles pass easily through filter paper.

Q.69 When you're standing in a bus and it suddenly starts moving forward, you tend to fall backward. What is the reason for this?

- Ans
- ☐ A. Because your upper body does not resist the motion
 - ☒ B. Because your upper body resists the motion due to inertia
 - ☐ C. Due to friction between your shoes and the bus floor
 - ☐ D. Because your body tries to move faster than the bus

Q.70 Which of the following practices helps in preventing rancidity in food items?

- Ans
- ☐ A. Exposing food to sunlight
 - ☒ B. Keeping food in airtight containers
 - ☐ C. Adding water to the food
 - ☐ D. Storing food in humid places

Q.71 A city is planned to replace a pond, grassland, and trees with a park featuring playground equipment, shrubs, and paved paths. Which of the following consequences best reflects the impact on the local ecosystem?

- Ans
- ☐ A. Complete removal of all animal species from the area
 - ☐ B. Increased plant diversity compensating for habitat loss
 - ☐ C. Improvement of ecological balance due to human activity
 - ☒ D. Loss of aquatic habitat leading to reduced biodiversity in the area

Q.72 The mass of an electron is approximately:

- Ans
- ☐ A. double the proton
 - ☒ B. negligible compared to proton
 - ☐ C. equal to proton
 - ☐ D. same as neutron

Q.73 Which of the following is a characteristic of a saturated carbon compound?

- Ans
- ☐ A. It contains both single and triple bonds between carbon atoms.
 - ☐ B. It contains only double bonds between carbon atoms.
 - ☐ C. It contains alternating single and double bonds between carbon atoms.
 - ☒ D. It contains only single bonds between carbon atoms.

Q.74 A 60-watt bulb is left on for 2 seconds. What does the 'watt' indicate in this context?

- Ans
- ☐ A. The total energy used by the bulb
 - ☐ B. The voltage required by the bulb
 - ☒ C. The rate at which the bulb uses energy
 - ☐ D. The brightness of the bulb

Q.75 Which statement best describes a neutron in the structure of an atom?

- Ans
- ☐ A. A neutron is a negatively charged particle orbiting the nucleus.
 - ☒ B. A neutron is a neutral particle found in the nucleus of an atom.
 - ☐ C. A neutron is a positively charged particle in the nucleus.
 - ☐ D. A neutron is a neutral particle orbiting the nucleus.

Q.76 A school auditorium has walls covered with thick curtains. When a student shouts, very little echo is heard compared to a similar auditorium with bare concrete walls. Which property of the curtains primarily explains this observation?

- Ans
- ☐ A. Curtains increase the speed of sound in the auditorium
 - ☐ B. Curtains increase the reflection of sound back to the source
 - ☒ C. Curtains absorb most of the sound energy, reducing reflection
 - ☐ D. Curtains change the pitch of the reflected sound

Q.77 Which of the following best describes the sign of the radius of curvature for a concave mirror, as per the sign convention?

Ans ☒ A. Not assigned
☒ B. Negative
☒ C. Zero
☒ D. Positive

Q.78 If a scientist writes the name of a species as *Panthera leo* in a printed article without using italics, which rule of scientific naming is violated?

Ans ☒ A. The genus is in lowercase letters
☒ B. The species name is capitalized
☒ C. The genus comes after the species
☒ D. The name is not italicized

Q.79 Which of the following situations best illustrates the use of infrasonic waves in real life?

Ans ☒ A. Ultrasound imaging in hospitals
☒ B. People talking to each other
☒ C. Monitoring earthquakes using seismic waves
☒ D. Bats using sound to navigate

Q.80 A doctor is assessing two patients: one with high systolic blood pressure and another with high diastolic blood pressure. If these conditions remain untreated, what is the most likely outcome?

Ans ☒ A. Only the high-systolic patient will develop kidney problems
☒ B. Blood pressure will return to normal on its own
☒ C. Both are at risk of vessel and heart damage
☒ D. Only the high-diastolic patient will develop headaches

Q.81 How does the direction of the applied force relative to the object's motion affect the amount of work done?

Ans ☒ A. Work depends only on the amount of force applied, regardless of its direction.
☒ B. Work is maximum when the force is applied in the same direction as the motion.
☒ C. Work is maximum when the force is applied perpendicular to the direction of motion.
☒ D. Work is always zero if the object moves in the same direction as the force.

Q.82 Which of the following is the typical duration of menstrual cycle in human females?

Ans ☒ A. Around 7 days
☒ B. Around 28 days
☒ C. Around 60 days
☒ D. Around 14 days

Q.83 Two circuits have the same voltage source. The first has resistance R with current I_1 , while the second has twice the resistance of the first with current I_2 . Find the ratio of the current (I_1/I_2) in the two circuits.

Ans ☒ A. $1/2$
☒ B. 2
☒ C. 1
☒ D. $1/4$

Q.84 Which process directly contributes to the release of oxygen into the atmosphere?

Ans ☒ A. Respiration by animals and plants
☒ B. Photosynthesis by plants and algae
☒ C. Decomposition of organic matter
☒ D. Combustion of fossil fuels

Q.85 Aerobic respiration mainly takes place in the _____.

- Ans
- ☒

A. Mitochondria
- ☐

B. Vacuole
- ☐

C. Nucleus
- ☐

D. Ribosome

Q.86 Which surface would reflect the most solar radiation based on its albedo?

- Ans
- ☐

A. A sandy beach
- ☐

B. Dark asphalt road
- ☒

C. Snow-covered field
- ☐

D. A grassy meadow

Q.87 A laboratory technician needs to separate a mixture containing ammonium chloride, sand, and salt. Which sequence of methods should be used to obtain pure ammonium chloride from this heterogeneous mixture?

- Ans
- ☐

A. Add water, filter to remove sand, then use chromatography
- ☒

B. Heat to sublime ammonium chloride, then condense the vapour
- ☐

C. Dissolve the mixture in water, filter, then evaporate water
- ☐

D. Use filtration followed by magnetic separation

Q.88 The binomial system helps scientists when collaborating internationally on biodiversity research as:

- Ans
- ☐

A. It uses the most common local name.
- ☒

B. It provides one universal scientific name.
- ☐

C. It translates names into local languages.
- ☐

D. It promotes learning regional languages.

Q.89 What does the slope of a velocity-time graph for a body moving with uniform acceleration represent?

- Ans
- ☐

A. The initial position of the object
- ☐

B. The final position of the object
- ☒

C. The acceleration of the object
- ☐

D. The total distance covered by the object

Q.90 Which of the following statements describes why metals like gold are found in a free state in nature, while metals like sodium are not?

- Ans
- ☐

A. Gold is softer and is therefore found in pure form
- ☒

B. Gold is less reactive and does not combine easily with other elements
- ☐

C. Gold has a higher density than most metals
- ☐

D. Gold melts at a lower temperature than other metals

Section : **General Awareness**

Q.91 The high-tempo joint maritime exercise Kalari Leap, conducted by the Indian Air Force in February 2026, was organised in which of the following regions?

- Ans
- ☐

A. Sundarbans delta region
- ☒

B. Lakshadweep and Minicoy Archipelago
- ☐

C. Andaman and Nicobar Islands
- ☐

D. Gulf of Kutch coastline

Q.92 Who was reappointed as the Solicitor General of India with effect from 1 July 2026?

- Ans
- ☐

A. R. Venkataramani
- ☐

B. Vikramjit Banerjee
- ☐

C. K. M. Nataraj
- ☒

D. Tushar Mehta

Q.93 Which state has launched the Declaration on Online Safety of Children, along with two major cyber initiatives aimed at strengthening child protection and digital security capacities in October 2025?

- Ans**
- ☒ A. Kerala
 - ☐ B. West Bengal
 - ☐ C. Tamil Nadu
 - ☐ D. Rajasthan

Q.94 Exercise Vayushakti 2026, conducted by the Indian Air Force, showcased its operational capabilities at which field firing range?

- Ans**
- ☐ A. Chandan Field Firing Range
 - ☐ B. Babina Field Firing Range
 - ☒ C. Pokhran Field Firing Range
 - ☐ D. Mahajan Field Firing Range

Q.95 Which Indian state became the first to be officially declared “extreme poverty-free” on November 1, 2025?

- Ans**
- ☐ A. Himachal Pradesh
 - ☐ B. Karnataka
 - ☐ C. Tamil Nadu
 - ☒ D. Kerala

Q.96 Which of the following digital platforms of the Department of Consumer Affairs received the Silver Award under Category I – Government Process Re-engineering by Use of Technology for Digital Transformation at the National Awards for e-Governance (NAeG) 2026?

- Ans**
- ☒ A. e-Jagriti
 - ☐ B. e-Daakhil
 - ☐ C. e-Samadhan
 - ☐ D. e-Nivaran

Q.97 In April 2026, the Department for Promotion of Industry and Internal Trade (DPIIT) launched the BHAHYA Scheme to achieve which objective?

- Ans**
- ☒ A. Establish world-class plug-and-play industrial parks across India
 - ☐ B. Promote exports from coastal economic zones
 - ☐ C. Strengthen industrial credit for micro enterprises
 - ☐ D. Modernise public sector manufacturing units

Q.98 According to the Ministry of Statistics and Programme Implementation (MoSPI)'s “Press Note on New Series of GDP Estimates with Base Year 2022–23,” released in February 2026, India's real GDP growth for FY 2025–26 was estimated at:

- Ans**
- ☐ A. 8.6%
 - ☒ B. 7.6%
 - ☐ C. 7.4%
 - ☐ D. 7.1%

Q.99 In June 2026, DRDO's successful demonstration of a multi-layered Ballistic Missile Defence (BMD) system placed India among the elite group of nations capable of intercepting _____.

- Ans**
- ☒ A. Intercontinental Ballistic Missiles (ICBMs)
 - ☐ B. Submarine-Launched Ballistic Missiles (SLBMs)
 - ☐ C. Medium-Range Ballistic Missiles (MRBMs)
 - ☐ D. Short-Range Ballistic Missiles (SRBMs)

Q.100 In May 2026, General N.S. Raja Subramani assumed charge as India's third Chief of Defence Staff (CDS), replacing whom?

- Ans**
- ☒ A. General Anil Chauhan
 - ☐ B. General Bipin Rawat
 - ☐ C. General Upendra Dwivedi
 - ☐ D. General Manoj Pande

