



रेलवे भर्ती बोर्ड / RAILWAY RECRUITMENT BOARD
सीईएन ०२/२०२६ - तकनीशियन ग्रेड I सिगनल और तकनीशियन ग्रेड III
CEN 02/2026 - Technician Grade I Signal and Technician Grade III



Test Date	07/10/2026
Test Time	4:30 PM - 6:00 PM
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 An express train covers a certain distance at a uniform speed. If its speed was increased by 16 km/h, it would take 8 hours less than the scheduled time. If its speed was decreased by 16 km/h, it would take 12 hours more than the scheduled time. Find the length of the journey.

- Ans**
- ☒ A. 3640 km
 - ☒ B. 3840 km
 - ☐ C. 4140 km
 - ☐ D. 4040 km

Q.2 A dump truck runs 54 km on 12 liters of fuel. How many kilometres will it run on 60 liters of fuel?

- Ans**
- ☒ A. 270
 - ☐ B. 272
 - ☐ C. 274
 - ☐ D. 268

Q.3 A cylindrical pillar is 80 cm in diameter and 35 m in height. Find the cost of painting the curved surface of the pillar at the rate of ₹45 per m². $\left(\text{Use } \pi = \frac{22}{7} \right)$

- Ans**
- ☒ A. ₹3,960
 - ☐ B. ₹3,988
 - ☐ C. ₹3,921
 - ☐ D. ₹3,983

Q.4 A and B can complete a piece of work in 12 days and 18 days respectively. They work together for 4 days, after which A leaves the work. B continues alone for 6 days, and then C joins B. If C alone can complete the whole work in 9 days, find the total time (in days) taken to complete the work.

- Ans**
- ☐ A. $10\frac{5}{3}$
 - ☐ B. $11\frac{2}{3}$
 - ☐ C. $9\frac{2}{3}$
 - ☒ D. $10\frac{2}{3}$

Q.5	On a circular path of 1778 m, Rashika and Shifa start walking from the same point but in the opposite directions at the speed of 5.3 m/s and X m/sec, respectively, they will meet for the first time after 127 seconds. Find the value of X.
Ans	☒ A. 4.6 ☒ B. 6.6 ☒ C. 3.8 ☒ D. 8.7
Q.6	A shopkeeper marks an article 60% above its cost price. He offers a discount of 20% on the marked price and still earns a profit of ₹840. What is the marked price of the article?
Ans	☒ A. ₹4800 ☒ B. ₹4000 ☒ C. ₹6400 ☒ D. ₹8400
Q.7	An initial sum of ₹6,600 will increase to ₹6,798 at an annual interest rate of 6% per annum, compounded semi-annually, over X years. The value of X is:
Ans	☒ A. 1 ☒ B. 1.25 ☒ C. 0.5 ☒ D. 0.75
Q.8	A man has invested ₹57500 at a rate of 12% per annum simple interest for 4 years. Find the amount (in ₹) that he will receive after 4 years.
Ans	☒ A. 28600 ☒ B. 27600 ☒ C. 86100 ☒ D. 85100
Q.9	If a $\sin^3\theta + b \cos^3\theta = \sin\theta \cos\theta$ and $a \sin\theta = b \cos\theta$, then value of $a^2 + b^2$ is
Ans	☒ A. 1 ☒ B. 4 ☒ C. $\frac{1}{4}$ ☒ D. 9
Q.10	A sum of money is distributed among Amit, Bharat and Chetan in the ratio of 5 : 7 : 9. If the share of Bharat is ₹490 less than the combined share of Amit and Chetan, then what is the total sum of money distributed among them?
Ans	☒ A. ₹1484 ☒ B. ₹1470 ☒ C. ₹1449 ☒ D. ₹1430
Q.11	A shopkeeper purchases 240 pens at the rate of 5 pens for ₹40 and sells them at the rate of 4 pens for ₹44. What is the profit percentage earned by the shopkeeper?
Ans	☒ A. 30% ☒ B. 37.5% ☒ C. 32.5% ☒ D. 35%
Q.12	The arithmetic mean of 21 numbers is 48. The mean of the first 10 numbers is 49 and the mean of the last 10 numbers is 45. Find the 11th number.
Ans	☒ A. 68 ☒ B. 72 ☒ C. 88 ☒ D. 64

Q.13 Twice Manvi's age plus Tanvi's age is 37 years. Tanvi's father is twice as old as Tanvi, and Manvi's brother is 5 years older than Manvi. The sum of the ages of Tanvi's father and Manvi's brother is 43 years. Find the sum of the ages (in years) of Manvi and Tanvi.

- Ans** ☒ A. 25
 ☒ B. 30
 ☒ C. 28
 ☒ D. 22

Q.14 If 20% of k is 15 less than 1200% of 10, then k is:

- Ans** ☒ A. 565
 ☒ B. 505
 ☒ C. 525
 ☒ D. 485

Q.15 There are two concentric circles with centre P. The larger circle has radius PQ = 10 cm, and the smaller circle has radius PR = 8 cm. TQ is a tangent to the larger circle from an external point T (touching it at Q), and TR is a tangent to the smaller circle from the same point T (touching it at R). If TQ = 24 cm, find the value of (TR – PR)/PQ.

- Ans** ☒ A. $\frac{2\sqrt{17}-3}{5}$
 ☒ B. $\frac{3\sqrt{17}+18}{10}$
 ☒ C. $\frac{3\sqrt{17}-4}{5}$
 ☒ D. $\frac{\sqrt{17}-4}{5}$

Q.16 A vendor marks up the cost price of a product by 25% and then offers a 10% discount on the marked price. What is the net profit percentage earned by the vendor?

- Ans** ☒ A. 10%
 ☒ B. 12.5%
 ☒ C. 18.5%
 ☒ D. 20%

Q.17 Given that the median of the numbers 15,8,11,21,32,5,25,7 is m. If 15 is replaced by 7, then the new median is n. Find the difference between m and n.

- Ans** ☒ A. 4.5
 ☒ B. 2.5
 ☒ C. 1.5
 ☒ D. 3.5

Q.18 In a trapezium PQRS, PQ || RS. Calculate $\angle R$ if $\angle P = 72^\circ$ and $\angle Q = 54^\circ$.

- Ans** ☒ A. 72°
 ☒ B. 126°
 ☒ C. 54°
 ☒ D. 108°

Q.19 The average sale of cars by a dealer per day in the month of March, other than on Saturdays and Sundays, is 163. The average sale of cars per day on Sundays is 125. 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 171?

- Ans** ☒ A. 242
 ☒ B. 243
 ☒ C. 247
 ☒ D. 246

Q.20	A sum of money invested at compound interest triples itself in 15 years. At the same annual rate of interest, in how many years will it become 27 times its original value?
Ans	☐ A. 60 years ☐ B. 30 years ☐ C. 75 years ☒ D. 45 years

Section : General Intelligence and Reasoning

Q.26	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 P lives below U. Only four people live between U and R. T lives on an odd numbered floor immediately above S. Q does not live on even numbered floor. Who lives on floor number 6?
Ans	☐ A. U ☐ B. R ☒ C. V ☐ D. S

Q.27	Refer to the following letter series and answer the question. Counting to be done from left to right only. (Left) R F D Q A L M F W S O U T A L E T G D V B T K U (Right) How many such consonants are there each of which is immediately preceded by a vowel and also immediately followed by a vowel?
Ans	☒ A. Three ☒ B. One ☒ C. None ☒ D. Two

Q.34	In a certain code language, 'JACK' is coded as '2396' and 'CAKE' is coded as '7963'. What is the code for 'E' in the given code language?
Ans	✗ A. 3 ✗ B. 6 ✓ C. 7 ✗ D. 9
Q.35	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 T, U, V, W, and X, who is the youngest? (I) U is younger than T and W but older than X. (II) V is younger than U. X is not the youngest.
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 are NOT sufficient to answer the question. ✓ C. Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question. ✗ D. Data in Statement II alone is sufficient to answer the question while data in statement I is not
Q.36	Refer to the following letter, symbol series and answer the question. Counting to be done from left to right only. (Left) F & I Y @ J Y C * A # & K S P \$ B M (Right) How many such symbols are there each of which are immediately preceded by a vowel and also immediately followed by a symbol?
Ans	✓ A. One ✗ B. Two ✗ C. None ✗ D. Three
Q.37	24 is related to 168 following a certain logic. Following the same logic, 27 is related to 189. To which of the following is 33 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	✗ A. 271 ✗ B. 293 ✗ C. 311 ✓ D. 231
Q.38	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 one out is not based on the number of consonants/vowels or their position in the letter-cluster.)
Ans	✓ A. IJ - MN ✗ B. LJ - KM ✗ C. DB - CE ✗ D. MK - LN
Q.39	Mr. Riek starts from Point A and walks 22 km towards North. He then takes a left turn, walks 30 km, turns left and walks 28 km. He then takes a left turn and walks 39 km. He takes a final left turn, walks 6 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. 9 km to the west ✗ B. 11 km to the south ✗ C. 7 km to the east ✗ D. 10 km to the north

Q.40 What should come in place of ‘?’ in the given series?

99 89 81 75 71 ?

- Ans
- ☐ A. 46
 - ☐ B. 64
 - ☐ C. 50
 - ☒ D. 69

Q.41 Select the pair that follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.

IFG–KHI
LIJ–NKL

- Ans
- ☐ A. KHI–LJJ
 - ☐ B. KGG–LIJ
 - ☒ C. KHI–MJK
 - ☐ D. KGG–MJK

Q.42 UQTU is related to TPST in a certain way based on the English alphabetical order. In the same way, KGJK is related to JFIJ. To which of the following is TPST related, following the same logic?

- Ans
- ☐ A. SPQR
 - ☒ B. SORS
 - ☐ C. SNQS
 - ☐ D. SOQS

Q.43 If 1 is added to each odd digit and 2 is subtracted from each even digit in the number 8624357, what will be difference between the highest and lowest digits in the number thus formed?

- Ans
- ☐ A. 9
 - ☐ B. 7
 - ☒ C. 8
 - ☐ D. 6

Q.44 What should come in place of the question mark (?) in the given series based on the English alphabetical order?

VAN QVI LQD GLY ?

- Ans
- ☐ A. BTY
 - ☐ B. BGY
 - ☒ C. BGT
 - ☐ D. BTG

Q.45 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. KIE
 - ☐ B. XVR
 - ☒ C. SPL
 - ☐ D. FDZ

Q.46 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 9 ^ 3 + 1 \$ 8 % 5 =

Code MPSVYADF I L

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.
8 1 9 + ^

- Ans ☒ A. P M Y V D
☒ B. D Y Y V P
☒ C. P Y M V D
☒ D. D M M V P

Q.47 If '+' means '–', '–' means 'x', 'x' means '÷', '÷' means '+', then what will come in place of the question mark (?) in the following equation?

12 – 8 ÷ 4 + 24 × 4 = ?

- Ans ☒ A. 94
☒ B. 90
☒ C. 92
☒ D. 96

Q.48 In a certain code language, 'don't be jealous' is written as 'ac dp mo' and 'be on time' is coded as 'mo lk zb'. How is 'be' coded in the given language?

- Ans ☒ A. dp
☒ B. mo
☒ C. ac
☒ D. zb

Q.49 Seven people, Q, B, M, L, R, K and G are sitting in a row, facing north. K sits fifth from the left end of the row. Only four people sit to the right of R. Q is the immediate neighbour of B and K. G sits to the immediate right of M. How many people sit between L and G?

- Ans ☒ A. Three
☒ B. Two
☒ C. One
☒ D. Four

Q.50 After arranging the letters of the word SILENT in the English alphabetical order, how many letters remain in the same place as in the original word?

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

Section : General Science

Q.51 A shipping company needs to ensure their iron cargo ships are protected from corrosion during long voyages through salty ocean water. Which strategy would be most effective for preventing corrosion for this purpose?

- Ans ☒ A. Storing ships in dry air when not in use
☒ B. Painting the hull with ordinary paint
☒ C. Using pure iron sheets for construction
☒ D. Attaching zinc blocks to the ship's hull as sacrificial anodes

Q.52 In a chemical reaction, 50 grams of calcium carbonate is heated to produce 28 grams of calcium oxide and an unknown mass of carbon dioxide. According to the law of conservation of mass, what is the mass of carbon dioxide produced?

- Ans**
- ☐ A. 24 grams
 - ☐ B. 20 grams
 - ☐ C. 18 grams
 - ☒ D. 22 grams

Q.53 Which scenario demonstrates a higher power output, assuming the same work is done in each?

- Ans**
- ☐ A. Applying more force for the same amount of work
 - ☐ B. Using less energy for the same amount of work
 - ☐ C. Performing the work over a longer time interval
 - ☒ D. Completing the work in a shorter time interval

Q.54 Which characteristic supports the classification of yeast under the kingdom Fungi?

- Ans**
- ☐ A. It is a prokaryotic organism lacking a true nucleus.
 - ☒ B. It is a unicellular organism, but its cell wall is made of chitin.
 - ☐ C. It is a photosynthetic organism that produces its own food.
 - ☐ D. It is a multicellular organism that forms a mycelium.

Q.55 Which of the following explains the importance of meiosis for maintaining chromosome number across generations?

- Ans**
- ☐ A. It doubles chromosome number to increase complexity
 - ☐ B. It produces identical cells to preserve genetic continuity
 - ☐ C. It ensures all chromosomes are inherited from the mother only
 - ☒ D. It halves the chromosome number in gametes before fertilization

Q.56 Which of the following organisms does NOT reproduce by budding?

- Ans**
- ☐ A. Yeast
 - ☐ B. Hydra
 - ☐ C. Sponge
 - ☒ D. Bacteria

Q.57 During the oxidation of copper, its surface acquires a black coloured coating due to the formation of which of the following compounds?

- Ans**
- ☐ A. Copper sulphate
 - ☐ B. Copper sulphide
 - ☐ C. Copper carbonate
 - ☒ D. Copper oxide

Q.58 If an image formed by a spherical mirror is real and inverted, which of the following correctly describes the sign of the image distance according to the sign convention?

- Ans**
- ☐ A. Image distance is positive
 - ☐ B. Image distance is zero
 - ☐ C. Image distance is variable
 - ☒ D. Image distance is negative

Q.59 How can the strength of the magnetic field produced by a current-carrying circular loop be increased?

- Ans**
- ☐ A. By decreasing the number of turns in the loop.
 - ☐ B. By increasing the radius of the loop.
 - ☐ C. By decreasing the current flowing through the loop.
 - ☒ D. By increasing the number of turns in the loop and increasing the current.

Q.60 Which gas is released when hydrochloric acid reacts with sodium hydrogencarbonate?

- Ans
- ☒ A. Carbon dioxide is released
 - ☐ B. Hydrogen gas is released
 - ☐ C. Ammonia gas is released
 - ☐ D. Oxygen gas is released

Q.61 Simple machines are best described as devices that _____.

- Ans
- ☒ A. allow a smaller force to move a larger load
 - ☐ B. replace all human effort in work
 - ☐ C. change the material being moved
 - ☐ D. increase friction during movement

Q.62 Which of the following best describes an ionic bond?

- Ans
- ☐ A. A chemical bond formed by sharing electrons between atoms
 - ☐ B. A chemical bond formed by overlapping atomic orbitals
 - ☒ C. A chemical bond formed by the transfer of electrons from one atom to another
 - ☐ D. A chemical bond involving delocalized electrons in a metal

Q.63 Why is reverberation time significantly longer in a large empty classroom than in a fully furnished library of the same size?

- Ans
- ☐ A. The classroom uses a different type of sound source
 - ☐ B. The classroom has a higher air temperature than the library
 - ☒ C. The classroom has fewer sound-absorbing surfaces compared to the library
 - ☐ D. The classroom has dark coloured walls

Q.64 A stationary box remains unmoved on the floor even when equal forces are applied from opposite sides. Which feature of the forces best explains this outcome?

- Ans
- ☐ A. Forces are acting at different points
 - ☐ B. Both forces are unbalanced in direction
 - ☐ C. Both forces are unequal in magnitude
 - ☒ D. Both forces are equal in magnitude and opposite in direction.

Q.65 Which statement explains how muscle and bone tissues work together in the human musculoskeletal system?

- Ans
- ☒ A. Muscle tissues contract to pull on bones, causing movement at joints.
 - ☐ B. Bone tissues contract to move muscles, enabling walking.
 - ☐ C. Muscle tissues create cartilage to cushion bones during motion.
 - ☐ D. Muscle tissues produce minerals to strengthen bones for support.

Q.66 Which of the following experimental setups would help to determine effectivity of wind and insect pollination separately for a certain plant species?

- Ans
- ☐ A. Remove the reproductive stigmas from all of the flowers before pollination can take place.
 - ☒ B. Divide the flowers into two groups: one open to wind only, and one open to insects only.
 - ☐ C. Cover all of the flowers completely to prevent any form of pollination from occurring.
 - ☐ D. Expose all of the flowers to both wind currents and insect pollinators at the same time.

Q.67 Which feature best describes the orientation and size of the image produced by a convex mirror for any object position?

- Ans
- ☐ A. The image is always inverted and smaller than the object
 - ☐ B. The image is always inverted and the same size as the object
 - ☐ C. The image is sometimes erect and larger than the object
 - ☒ D. The image is always erect and smaller than the object

Q.68 Which of the following metals will not show any observable change when placed in cold water, based on their position in the reactivity series?

Ans ☒ A. Copper
☒ B. Magnesium
☒ C. Sodium
☒ D. Zinc

Q.69 A patient has a heart condition in which the left ventricle pumps blood inefficiently. What is the most immediate effect on the body's transport system?

Ans ☒ A. Reduced oxygen delivery to body tissues
☒ B. Immediate buildup of carbon dioxide in tissues
☒ C. Blood pressure in major veins instantly increases
☒ D. Elevated resting heart rate throughout the body

Q.70 Which type of joint allows movement to straighten in one direction only and is found in the elbow bends of the human body?

Ans ☒ A. Ball and socket joint
☒ B. Hinge joint
☒ C. Pivot joint
☒ D. Fixed joint

Q.71 If two houses—one made of concrete and one made of wood—are exposed to the same sunlight, which is most likely to remain warmer at night?

Ans ☒ A. The wooden house, because of excessive re-radiation
☒ B. The wooden house, because it absorbs more sunlight
☒ C. The concrete house, because it releases stored heat slowly
☒ D. The concrete house, because it reflects all sunlight

Q.72 Which of the following best describes a homogeneous mixture?

Ans ☒ A. A mixture with visible separate layers
☒ B. A mixture where substances can be separated by a filter
☒ C. A mixture with uniform composition throughout
☒ D. A mixture where particles settle at the bottom

Q.73 Which of the following is the main role of hydrochloric acid (HCl) in the stomach?

Ans ☒ A. Creates acidic conditions
☒ B. Produces bile for digestion
☒ C. Absorbs digested nutrients
☒ D. Breaks down fats directly

Q.74 A body of mass 2 kg kept at the top of a building of height 10 m possess a potential energy of 200 J. What will be the kinetic energy of this body when it hits the ground? (Neglect air resistance)

Ans ☒ A. 200 J
☒ B. 50 J
☒ C. 400 J
☒ D. 100 J

Q.75 In which of the following situations will a current-carrying conductor experience maximum force in a magnetic field?

Ans ☒ A. When there is no current in the conductor
☒ B. When the conductor is placed perpendicular to the magnetic field lines
☒ C. When the conductor is placed at an angle less than 90 degrees to the field lines
☒ D. When the conductor is placed parallel to the magnetic field lines

Q.76 How does latitude affect the amount of solar energy a location receives on Earth?

- Ans**
- ☒ A. Latitude has negligible effect on the solar energy received
 - ☒ B. Higher latitudes receive less direct sunlight than equatorial latitudes
 - ☒ C. Equatorial latitudes receive less direct sunlight than higher latitudes
 - ☒ D. All locations receive the same amount of sunlight year-round

Q.77 In an ecosystem, organisms that can prepare their own food using sunlight are known as _____.

- Ans**
- ☒ A. Decomposers
 - ☒ B. Herbivores
 - ☒ C. Producers
 - ☒ D. Carnivores

Q.78 Which of the following statements is/are NOT true about an object moving in uniform circular motion?

- A. The speed of the object remains constant.
B. The velocity of the object remains constant.
C. The direction of the object's velocity changes continuously.

- Ans**
- ☒ A. Only A
 - ☒ B. Both A and B
 - ☒ C. Both A and C
 - ☒ D. Only B

Q.79 A train's velocity-time graph shows a steady velocity of 24 m/s for 5 seconds, then a uniform decrease to 0 m/s over the next 4 seconds. What is the linear velocity at $t = 7$ s?

- Ans**
- ☒ A. 24 m/s
 - ☒ B. 6 m/s
 - ☒ C. 12 m/s
 - ☒ D. 18 m/s

Q.80 Soil fertility would decline if fungi were removed from an ecosystem as:

- Ans**
- ☒ A. Predators would experience reduced food availability in the ecosystem
 - ☒ B. The breakdown of dead matter would slow, reducing mineral availability
 - ☒ C. Fungi directly supply nutrients to living plants through absorption processes
 - ☒ D. Plants would be unable to perform photosynthesis due to absence of fungi

Q.81 Which of the following reactions best represents a combination reaction?

- Ans**
- ☒ A. Zinc displaces copper from copper sulfate solution
 - ☒ B. Magnesium reacts with oxygen to form magnesium oxide
 - ☒ C. Hydrochloric acid reacts with sodium hydroxide to form sodium chloride and water
 - ☒ D. Calcium carbonate breaks down into calcium oxide and carbon dioxide

Q.82 Which method is commonly used to separate particles from a heterogeneous mixture after coagulation has taken place?

- Ans**
- ☒ A. Decantation
 - ☒ B. Filtration
 - ☒ C. Distillation
 - ☒ D. Evaporation

Q.83 Which element contains only one proton and one neutron among the following?

- Ans**
- ☒ A. Deuterium
 - ☒ B. Helium
 - ☒ C. Tritium
 - ☒ D. Protium

Q.84 An engineer is designing a device that requires a precise and constant temperature to incubate bacterial cultures. Which principle should primarily guide the choice of the heating element for this device, considering the applications of the heating effect of current?

Ans ☒ A. Increasing the current continuously to produce maximum heat
☒ B. Using a material with low resistance to minimize heat production
☒ C. Using a material that prevents heat production during operation
☒ D. Using a material with suitable resistance to produce sufficient heat

Q.85 Which of the following best describes Thomson's model of an atom?

Ans ☒ A. An atom is a sphere of positive charge with electrons scattered within it
☒ B. Electrons are arranged in shells around a nucleus in an atom
☒ C. An atom has a central nucleus with electrons orbiting around it
☒ D. An atom is a dense nucleus with electrons moving outside it

Q.86 Which of the following methods is commonly used to prevent rancidity in oils and fats?

Ans ☒ A. Storing the oil in a transparent container
☒ B. Adding antioxidants like vitamin E or BHA
☒ C. Exposing the oil to sunlight
☒ D. Heating the oil to boiling point

Q.87 Which of the following element symbols is incorrect?

Ans ☒ A. Al – Aluminium
☒ B. K – Potassium
☒ C. Pb – Lead
☒ D. Ag – Gold

Q.88 Plants have large vacuoles that store water, while animal cells have much smaller vacuoles. If scientists want to develop crops that can survive longer during drought, which method would be most useful?

Ans ☒ A. Make plant cells have many small vacuoles like animal cells.
☒ B. Reduce the amount of water stored in plant vacuoles.
☒ C. Increase the size of plant vacuoles so they can store more water.
☒ D. Remove vacuoles from plant cells to make them lighter.

Q.89 The resistance of an electrical appliance is 10 Ω. What will be the power of the appliance, when a potential difference of 110 V is applied across it?

Ans ☒ A. 121 W
☒ B. 110 W
☒ C. 11 W
☒ D. 1,210 W

Q.90 Which of the following statements about image formation by spherical mirrors is NOT correct?

Ans ☒ A. A real image is always erect.
☒ B. A concave mirror can also form a virtual image.
☒ C. Concave mirrors can produce highly magnified real images.
☒ D. Convex mirrors always produce diminished images.

Section : **General Awareness**

Q.91 Which Act, enacted in 2025, replaced MGNREGA with a new statutory framework aligned with the Viksit Bharat 2047 vision, enhanced employment guarantee to 125 days per rural household, and linked wage employment with durable rural infrastructure?

Ans ☒ A. Pradhan Mantri Gram Sadak Yojana (revised rural infrastructure mandate)
☒ B. Viksit Bharat–GRAM G Act, 2025
☒ C. National Rural Infrastructure Development Act, 2025
☒ D. Deendayal Antyodaya Yojana – National Rural Livelihoods Mission

Q.92	Which of the following personalities was announced as a Padma Bhushan awardee in 2026 for contributions to the field of art?
Ans	☐ A. V S Achuthanandan ☐ B. K. T. Thomas ☐ C. Dharmendra Singh Deol ☒ D. Alka Yagnik
Q.93	Which of the following organisations released the report titled “State of India’s Environment 2026”, in collaboration with Down To Earth, highlighting increasing climate risks and extreme weather events in the country?
Ans	☐ A. Ministry of Environment, Forest and Climate Change ☐ B. World Bank ☐ C. NITI Aayog ☒ D. Centre for Science and Environment
Q.94	Which of the following is NOT a purpose of the Electronic Gold Receipts (EGRs) launched by the National Stock Exchange of India in May 2026?
Ans	☒ A. To encourage and reward investors to replace digital assets with physical gold ☐ B. To enable investors to own physical gold without the need to store it at home or in a bank locker ☐ C. To improve market participation, and enhance the trust across stakeholders ☐ D. To strengthen transparency and formalisation in the gold market
Q.95	Which of the following was the theme of the 12th International Day of Yoga (IDY) observed on June 21, 2026?
Ans	☒ A. Yoga for Healthy Ageing ☐ B. Yoga for Sustainable Living and Wellness ☐ C. Yoga for Humanity and Global Harmony ☐ D. Yoga for One Earth, One Health
Q.96	Which scheme was launched by the Employees' Provident Fund Organisation (EPFO) in July 2026 to facilitate the amicable settlement of damages and penalty-related disputes?
Ans	☒ A. VISHWAS, 2026 ☐ B. SAMADHAN, 2026 ☐ C. SURAKSHA, 2026 ☐ D. NISHTHA, 2026
Q.97	As per 2026 reports on Mission Buniyaad in Haryana, which district secured the third rank at the state level with approximately 1,600 students qualifying for the next stage?
Ans	☒ A. Gurgaon ☐ B. Rohtak ☐ C. Hisar ☐ D. Sirsa
Q.98	In February 2026, which organisation successfully demonstrated the Solid Fuel Ducted Ramjet (SFDR) technology from the Integrated Test Range (ITR), Chandipur?
Ans	☐ A. Hindustan Aeronautics Limited (HAL) ☒ B. Defence Research and Development Organisation (DRDO) ☐ C. Indian Space Research Organisation (ISRO) ☐ D. Bharat Dynamics Limited (BDL)
Q.99	What is the main purpose of the Security and Defence Partnership signed between India and the EU in January 2026?
Ans	☐ A. To promote only maritime trade between India and the EU ☒ B. To establish a framework for cooperation on peace, security, and defence ☐ C. To focus exclusively on space technology research ☐ D. To organize annual defence exhibitions

Q.100 At the National Inter State Senior Athletics Championships 2026, held in June 2026, who won the men's javelin throw title with a personal best of 87.05 metres?

- Ans
- ☒ A. Neeraj Chopra
 - ☐ B. Rohit Yadav
 - ☒ C. Murali Sreeshankar
 - ☒ D. Ramesh Tharanga