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	09/10/2026
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 following figures give the temperature (in °C) of city X for a week in the month of March. Find the arithmetic mean (in °C) of the temperatures by the direct method.**
Temperature recorded: 32.3, 34.5, 33.1, 32.7, 35.3, 33.2, 34.1

Ans A). 33.8 B). 32.8 C). 33.4 D). 33.6 **Correct Answer: D**

Q.2 If $x^2 + \frac{1}{x^2} = 23$, then the value of $\frac{4x}{5x^2 - 3x + 5}$ is:

Ans A). $\frac{1}{5}$ B). $\frac{21}{10}$ C). $\frac{11}{3}$ D). $\frac{2}{11}$ **Correct Answer: D**

Q.3 **A rectangular sheet of paper, 132 cm × 12 cm, is rolled along its length to form a cylinder. Find the volume of the cylinder so formed.**

Ans A). 16623 cm^3 B). 16632 cm^3 C). 16326 cm^3 D). 16362 cm^3 **Correct Answer: B**

Q.4 **The average sale of cars by a dealer per day in the month of March, other than on Saturdays and Sundays, is 116. The average sale of cars per day on Sundays is 126.**
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 121?

Ans A). 139 B). 143 C). 135 D). 138 **Correct Answer: A**

Q.5 **The 6-digit number 2A683B is divisible by 3. Find the least possible value of (A+B).**

Ans A). 11 B). 2 C). 5 D). 8 **Correct Answer: B**

Q.6 **Pipe C can fill a tank in 10 hours and Pipe D can fill it in 15 hours. If both pipes are opened together, how much time (in hours) will it take to fill the tank?**

Ans A). 8 B). 6 C). 5 D). 10 **Correct Answer: B**

Q.7 **Find the smallest number divisible by 5, 10 and 15.**

Ans A). 45 B). 20 C). 60 D). 30 **Correct Answer: D**

Q.8 An individual invests ₹10,000 at an annual compound interest rate of 5%. Find the total amount after 3 years.

Ans A). ₹11,000 B). ₹11,576.25 C). ₹11,200.50 D). ₹12,000

Correct Answer: B

Q.9 AB is parallel to CD. A transversal PQ intersects AB and CD at E and F, respectively, and ∠PEB = 38°. G is a point between AB and CD such that ∠BEG = 24° and ∠GFE = 29°. What is the measure of ∠EGF?

Ans A). 33° B). 47° C). 21° D). 27°

Correct Answer: A

Q.10 A trapezium has parallel sides 18 cm and 12 cm. The height of the trapezium is equal to the average of the lengths of the two parallel sides. What is the area of the trapezium?

Ans A). 225 cm^2 B). 220 cm^2 C). 200 cm^2 D). 212 cm^2

Correct Answer: A

Q.11 Select the smallest ratio among following.

A- 5 : 7
B- 4 : 5
C- 9 : 10
D- 3 : 4

Ans A). C B). B C). D D). A

Correct Answer: D

Q.12 A sum is invested for 2 years at compound interest, compounded annually. At an annual interest rate of x%, the amount becomes ₹24,200. If the annual interest rate is (x + 10)%, the amount becomes ₹28,800. What is the value of x?

Ans A). 5 B). 10 C). 20 D). 15

Correct Answer: B

Q.13 Three taps X, Y, and Z can fill a tank in 15 minutes, 12 minutes and 20 minutes, respectively. If Y if kept open all the time whereas X and Z are open for one hour alternately starting with X, then the tank will be filling in:

Ans A). 7 hours B). 8 hours C). 6 hours D). 5 hours

Correct Answer: A

Q.14 A, B, C and D are four points in order on a circle such that C is exactly opposite to A and D is exactly opposite to B. Which of the followings is NOT true?

Ans A). AC = CD B). AC = BD C). AD = BC D). AB = CD

Correct Answer: A

Q.15 A man has invested ₹57500 at a rate of 8% per annum simple interest for 4 years. Find the amount (in ₹) that he will receive after 4 years.

Ans A). 19400 B). 75900 C). 76900 D). 18400

Correct Answer: B

Q.16 Find the value of $\frac{\tan A}{1-\sqrt{\operatorname{cosec}^2 A - 1}} + \frac{\cot A}{1-\sqrt{\sec^2 A - 1}}$.

Ans A). $1 - \tan A - \cot A$ B). $1 + \tan A + \cot A$ C). $1 - \tan A + \cot A$ D). $1 + \tan A - \cot A$

Correct Answer: B

Q.17 If 20% of k is 10 less than 1800% of 20, then k is:

Ans A). 1750 B). 1710 C). 1730 D). 1790

Correct Answer: A

Q.18 A shopkeeper bought 6 identical mobile phones for a total of ₹12,000. He then sold 2 of these mobile phones for a total of ₹10,000. What is his gain percentage on the phones sold?

Ans A). 150% B). 152% C). 153% D). 148%

Correct Answer: A

Q.19 The sum of the present ages of Tommy and Arthur is 50 years. Four years ago, Arthur's age was half of Tommy's age at that time. What is Tommy's present age (in years)?

Ans A). 39 B). 32 C). 28 D). 37

Correct Answer: B

Q.20 **A class is divided into three sections A, B, and C.**
Section A has 25 students with an average score of 70.
Section B has 35 students with an average score of 60.
Section C has 40 students.
If the combined average score of all 100 students is 63, what is the average score of Section C?

Ans A). 58.25 B). 61.25 C). 67.25 D). 64.25

Correct Answer: B

Q.21 The mean proportion of X and $(20-4\sqrt{24})^{-\frac{1}{2}}$ is $\frac{1}{2}\sqrt{10+4\sqrt{6}}$, then the value of X is:

Ans A). $\sqrt{5-2\sqrt{3}}$ B). $\sqrt{5+2\sqrt{6}}$ C). $\sqrt{5-\sqrt{6}}$ D). $\sqrt{5+2\sqrt{3}}$

Correct Answer: B

Q.22 **The cost price of an article is ₹800. It is sold at a profit of 15%. What is the selling price of the article?**

Ans A). ₹900 B). ₹880 C). ₹920 D). ₹850

Correct Answer: C

Q.23 **A retailer gives two successive discounts of 3y% and 15% on an item, resulting in a single equivalent discount of 28%. What is the value of y? (Rounded off to the nearest integer)**

Ans A). 4 B). 6 C). 7 D). 5

Correct Answer: D

Q.24 **Rahul travels three equal distances on his cycle with the speeds of 8 km/hr, 10 km/hr and 15 km/hr and takes a total time of 2 hours 27 minutes. The total distance (in km) covered by him is:**

Ans A). 28.5 km B). 27.5 km C). 25.2 km D). 27.2 km

Correct Answer: C

Q.25 **In a 2520 m circular race, Siddharth finishes one round in 90 seconds and Yash finishes one round in 45 seconds. How many different meeting points are there on the circumference if they are running in the opposite directions?**

Ans A). 12 B). 9 C). 13 D). 3

Correct Answer: D

Section : **General Intelligence and Reasoning**

Q.26 **IHEF is related to BAXY in a certain way based on the English alphabetical order. In the same way, XWTU is related to QPMN. To which of the following is SROP related, following the same logic?**

Ans A). LKGI B). LJGI C). LKHI D). LLGP

Correct Answer: C

Q.27 **What should come in place of the question mark (?) in the given series?**

24 12 12 18 36 ?

Ans A). 85 B). 75 C). 90 D). 80

Correct Answer: C

Q.28 **What will come in the place of '?' in the following equation, if '+' and ' ÷ ' are interchanged and ' - ' and ' x ' are interchanged?**

195 + 3 x 22 - 6 ÷ 117 = ?

Ans A). 50 B). 57 C). 51 D). 43

Correct Answer: A

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 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). LM - PR B). XY - BD C). JH - KM D). AB - EG

Correct Answer: C

Q.30 **Refer to the following letter series and answer the question. Counting to be done from left to right only.**
(Left) M B Y Q U Z S H C E R A K T D O F X I G W (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). Two B). One C). None D). Three

Correct Answer: B

Q.31 **In the word MARKET if you rearrange all the letters in alphabetic order, how many letters are in the same positions as in the original word ?**

Ans A). Three B). None C). Two D). One

Correct Answer: D

Q.32 **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:
Among 5 poles, W, O, K, G and Y each having a different height, which pole is the shortest?

Statements:
I. Y is shorter than O. G is shorter than W.
II. G is taller than Y.

Ans A). Data in Statement II alone is sufficient to answer the question while data in statement I is not

B). Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question.

C). Data in Statement I alone is sufficient to answer the question while data in statement II is not

D). Both statements I and II together are NOT sufficient to answer the question

Correct Answer: D

Q.33 **Each letter in the word LANGUID is arranged in alphabetical order. How many letters are there in the English alphabetical order between the letter which is third from the left and the one which is first from the right in the new letter cluster thus formed?**

Ans A). 13 B). 16 C). 14 D). 12

Correct Answer: A

Q.34 **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 ^ $

Code X Z C E H K N Q T W

Conditions –
(i) If the first element is a number and the last a symbol, the codes for these two (the first and the last elements) are to be interchanged.
(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 the second and third elements are odd numbers, the third element is to be coded as the code for the second element.

What is the code for the following group of number-symbols?
1 8 + 6 $

Ans A). E K H X W B). W K K X E C). E H H X W D). W K H X E

Correct Answer: D

Q.35 **In a certain code language, 'FACE' is coded as '6348' and 'CAKE' is coded as '6734'. What is the code for 'K' in the given code language?**

Ans A). 6 B). 3 C). 4 D). 7

Correct Answer: D

Q.36 **Select the pair that follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.**

RVR−NRN
SWS−OSO

Ans A). LOJ−HLH B). LOJ−GKG C). LPL−HLH D). LPL−GLG

Correct Answer: C

Q.37 **What should come in place of ? in the given series based on the English alphabetical order?**

AZ, BY, CX, DW, ?

Ans A). EV B). FV C). FU D). EU

Correct Answer: A

Q.38 24 is related to 192 following a certain logic. Following the same logic, 19 is related to 152. To which of the following is 32 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). 226 B). 236 C). 216 D). 256

Correct Answer: D

Q.39 If 'A' stands for '÷', 'B' stands for '×', 'C' stands for '+', and 'D' stands for '−', what will come in place of the question mark (?) in the following equation?

10 B 5 D 24 A 4 C 8 = ? D 8

Ans A). 70 B). 40 C). 50 D). 60

Correct Answer: D

Q.40 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. R lives on an even numbered floor. Only three people live between R and U. T lives immediately above V but immediately below Q. Sum of floor numbers of R and S is more than 10. Following a certain logic, S is related to floor number 5 in the given arrangement in the same way as Q is related to floor number 3. To which of the following floor numbers is T related, following the same logic?

Ans A). 1 B). 4 C). 6 D). 2

Correct Answer: D

Q.41 What should come in place of '?' in the given series?

8 10 13 18 25 ?

Ans A). 33 B). 37 C). 31 D). 36

Correct Answer: D

Q.42 A, B, C, D, E and F 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.
E lives on a floor which is a prime number. The product of floors on which E and A live is 8. B lives immediately above F. The sum of floors on which A and C lives is 7.
What is the sum of floors on which A and B live?

Ans A). 10 B). 11 C). 9 D). 8

Correct Answer: A

Q.43 In a certain code language, 'cup drama tale' is coded as ' fi gh qf' and 'ear tale mask' is coded as 'pq dy fi'. How is 'tale' coded in the given language?

Ans A). pq B). fi C). gh D). qf

Correct Answer: B

Q.44 Rohit starts from Point A and drives 10 km towards north. He then takes a left turn, drives 12 km, turns left and drives 11 km. He then takes a left turn and drives 15 km. He takes a final left turn, drives 1 km and stops at Point P. How far (shortest distance) and towards which direction should he drive in order to reach Point A again? (All turns are 90-degree turns only unless specified.)

Ans A). 3 km to the east B). 4 km to the west C). 4 km to the east D). 3 km to the west

Correct Answer: D

Q.45 Refer to the following letter series and answer the question. Counting to be done from left to right only.
(Left) P O U S I K J Y H B V F T E B G T E X E H Y (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). None B). Three C). Two D). One

Correct Answer: C

Q.46 Seven people, A, B, C, D, X, Y and Z are sitting in a row, facing north. Only X sits to the right of C. Only three people sit between C and D. A sits third to the left of Y. B is not an immediate neighbour of C. Who sits third to the right of D?

Ans A). B B). A C). X D). Z

Correct Answer: D

Q.47 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 pair.)

Ans A). NJ−JI B). QM−NJ C). IE−FB D). EA−BX

Correct Answer: A

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.**

Among 5 poles, A, B, D, I and Y each having a different height, which pole is the tallest?

(I) D is taller than only one pole. I is shorter than B but taller than A.
(II) I is taller than Y.

Ans A). Both statements I and II together (and not statement I alone or statement II alone) are sufficient to answer the question

B). Data in Statement I alone is sufficient to answer the question while data in statement II is not

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

Correct Answer: A

Q.49 **If + means -, - means ×, × means ÷, and ÷ means +, what is the value of: 5 - 16 ÷ 4 + 12 × 3 = ?**

Ans A). 80 B). 90 C). 95 D). 85

Correct Answer: A

Q.50 **S is the brother of G. G is the father of U. H is the father of M. M is the son of U. How is H related to S?**

Ans A). Sister's husband B). Brother's wife's brother C). Husband D). Brother's daughter's husband

Correct Answer: D

Section : **General Science**

Q.51 **Which local wind typically occurs at night because of the cooling of land faster than water?**

Ans A). Sea breeze B). Land breeze C). Westerlies D). Monsoon

Correct Answer: B

Q.52 **In a grassland food web, which of the following would most likely happen if the population of primary consumers such as rabbits dramatically decreased?**

Ans A). The grass population would decrease due to increased grazing.

B). The top predator population would increase due to more available prey.

C). The population of decomposers would increase due to more dead matter.

D). The secondary consumer population would decrease due to reduced food availability.

Correct Answer: D

Q.53 **A student pushes a 4 kg cart so that its velocity changes from 2 m/s to 6 m/s in 2 seconds. What is the magnitude of the force applied on the cart?**

Ans A). 2 N B). 8 N C). 4 N D). 16 N

Correct Answer: B

Q.54 **A science project requires students to adjust a first-class lever to lift a heavy object with the least amount of effort force. Which adjustment will give them the greatest mechanical advantage?**

Ans A). Minimizing the Length of the effort arm while keeping the load arm short

B). Positioning the load as far away from the fulcrum as possible C). Placing the fulcrum exactly at the center regardless of the load's weight

D). Maximizing the Length of the effort arm while keeping the load arm long

Correct Answer: D

Q.55 **Which tissue can be found in a fern stem cross-section, but is missing in Bryophyta and Thallophyta?**

Ans A). Chlorophyll B). Leaf pores C). Vascular bundles D). Root hairs

Correct Answer: C

Q.56 **Which of the following best explains why ethanol is considered a cleaner fuel compared to petrol in automobiles?**

Ans A). Ethanol contains more energy per gram than petrol B). Ethanol causes more corrosion in engine parts

C). Ethanol produces less harmful emissions during combustion D). Ethanol is more difficult to store and transport than petrol

Correct Answer: C

Q.57 **How does the atmosphere help maintain suitable temperatures for life on Earth?**

Ans A). It partly absorbs the incoming solar radiations B). It allows all heat to escape into space quickly

C). It blocks all heat from reaching the surface D). It cools the planet by reflecting all sunlight

Correct Answer: A

Q.58 The base of the skull, extends a flexible column called _____.

Ans A). Atlas column B). Sternum column C). Vertebral Column D). Axis column

Correct Answer: C

Q.59 Which of the following best describes why noble gases have a valency of zero?

Ans A). They cannot form ions under any condition B). They are the smallest atoms in the periodic table

C). They have no electrons in the outer shell to react D). Their outermost shell is already complete and stable

Correct Answer: D

Q.60 A botanist is attempting to genetically modify a crop plant to increase its height and repair capability after damage. Which plant tissue should she focus on enhancing to make the plant more effective?

Ans A). Focus on enhancing the vascular tissue as it transports nutrients and water.

B). Focus on enhancing the meristematic tissue as it drives growth and regeneration.

C). Focus on enhancing the ground tissue as it stores food. D). Focus on enhancing the epidermal tissue as it protects against pathogens.

Correct Answer: B

Q.61 An electric motor is rated at 250 W. In a physics experiment, it is used to lift a load performing 7500 J of work. What does the rating indicate in this context?

Ans A). The motor can only do a maximum of 7500 J of work ever B). The motor stores 250 J of energy to do work

C). The motor applies 250 N of force for 30 seconds D). The motor can perform 7500 J of work in 30 seconds at full power

Correct Answer: D

Q.62 Consider the following statements regarding the behaviour of acids and bases in aqueous solutions and choose the correct statement.

(I) Acids produce H^+ ions in aqueous solutions.
(II) Bases produce OH^- ions in aqueous solutions.
(III) The acidic nature of a solution is due to the presence of OH^- ions.
(IV) The basic nature of a solution is due to the presence of OH^- ions.

Ans A). Only III and IV B). Only II and III C). Only I, II and IV D). Only I and II

Correct Answer: C

Q.63 An element has two isotopes with mass numbers 35 and 37. Which property remains the same in both isotopes?

Ans A). Number of neutrons B). Atomic mass C). Number of protons D). Mass number

Correct Answer: C

Q.64 In the context of spherical mirrors, what is the relationship between the principal axis and the normal at the pole?

Ans A). The principal axis is parallel to the mirror's surface at the pole B). The principal axis is tangent to the mirror's surface at the pole

C). The principal axis forms a 45-degree angle with the mirror's surface at the pole

D). The principal axis is perpendicular to the mirror's surface at the pole

Correct Answer: D

Q.65 Which charged particle determines the atomic number of an element?

Ans A). Electron in outermost shell B). Mass of the whole atom C). Neutron present in nucleus D). Proton present in nucleus

Correct Answer: D

Q.66 Which property of convex mirrors makes them suitable for use in shopping malls for security purposes?

Ans A). They magnify the image. B). They reflect light in parallel beams. C). They give a wide field of view. D). They reverse the image.

Correct Answer: C

Q.67 Persistent high blood pressure may increase the risk of _____.

Ans A). Heart disease and stroke B). Improved blood circulation C). Faster digestion of food D). Increased oxygen production

Correct Answer: A

Q.68 If a cyclist covers a distance of 'D' kilometers in 'T' hours, which formula correctly represents the average speed?

Ans A). Average speed = D x T B). Average speed = D/T C). Average speed = D - T D). Average speed = T/D

Correct Answer: B

Q.69 A mining company discovers a new ore containing a metal from the top of the reactivity series. They want to extract this metal efficiently and economically. Which extraction method should they use?

Ans A). Electrolysis of molten ore B). Carbon reduction with coke C). Leaching with cyanide D). Roasting in air

Correct Answer: A

Q.70 **A chemist is preparing a compound that contains sodium (Na), chlorine (Cl), and oxygen (O) in the formula $NaClO_3$. If the atomic masses are: Na = 23 u, Cl = 35.5 u, and O = 16 u, then calculate the formula unit mass of $NaClO_3$?**

Ans A). 106.5 u B). 119.5 u C). 87.5 u D). 74.5 u

Correct Answer: A

Q.71 **When two bodies of different masses are accelerated at the same rate, what can be inferred about the forces acting on them according to Newton's second law?**

Ans A). The heavier body experiences a greater force due to its larger mass.

B). Force is not dependent on mass when acceleration is constant. C). The lighter body experiences more force because it moves faster.

D). Both bodies experience equal force because acceleration is the same.

Correct Answer: A

Q.72 **Which strategy is most effective in reducing tobacco use among teenagers?**

Ans A). Teaching health risks through workshops B). Providing sports equipment for students C). Distributing general information pamphlets

D). Showing graphic images without explanation

Correct Answer: A

Q.73 **If a reaction occurs in an open flask and the observed mass decreases, which explanation best fits with the Law of Conservation of Mass?**

Ans A). Reactants become lighter after the reaction B). The Law of Conservation of Mass is invalid C). Some mass is converted to energy

D). A gas has escaped from the flask

Correct Answer: D

Q.74 **The process of settling down of colloidal particles by adding an electrolyte is called:**

Ans A). dialysis B). coagulation C). emulsification D). peptisation

Correct Answer: B

Q.75 **Which of the following structures is directly involved in the process of menstruation?**

Ans A). Uterus B). Ovary C). Fallopian tube D). Liver

Correct Answer: A

Q.76 **In a distance-time graph, two vehicles are represented by two lines: one is a straight line inclined to the time axis, and the other is a curved line with increasing steepness. What does this suggest about the motion of the two vehicles?**

Ans A). Both vehicles move at the same speed throughout B). Both vehicles move at changing speeds throughout

C). One vehicle moves at constant speed, the other accelerates D). One vehicle is stationary while the other moves

Correct Answer: C

Q.77 **Which of the following statements best describes a property of a colloid in relation to mixtures and solutions?**

Ans A). A colloid neither scatters light nor settles on standing. B). A colloid separates into layers when filtered.

C). A colloid settles on standing but does not scatter light. D). A colloid scatters light but does not settle on standing.

Correct Answer: D

Q.78 **Which of the following explains how the development of the microscope contributed to changes in biological classification systems?**

Ans A). It reduced the need to classify organisms into separate kingdoms.

B). It allowed scientists to observe and identify microorganisms previously unknown

C). It confirmed that all organisms belonged to either plants or animals

D). It enabled scientists to classify organisms using only visible characteristics

Correct Answer: B

Q.79 **What is the chemical formula of washing soda?**

Ans A). $CaCO_3$ B). $NaHCO_3$ C). NaCl D). $Na_2CO_3 \cdot 10H_2O$

Correct Answer: D

Q.80 **Which of the following statements is/are true?**

a. The rusting of iron can be prevented by making alloys.
b. Stainless steel is primarily an alloy of iron, chromium, and nickel.
c. An alloy is a heterogenous mixture of two or more metals.

Ans A). a and c B). Only a C). b and c D). a and b

Correct Answer: D

Q.81 **A student modifies the experiment by replacing the copper wire with a plastic thread between points X and Y, keeping all other conditions unchanged. What will be the expected observation regarding the compass needle and why?**

Ans A). The compass needle will deflect more sharply due to increased resistance in plastic.

B). The compass needle will deflect less because plastic creates a weaker magnetic field than copper.

C). The compass needle will not deflect because plastic does not conduct electricity and thus no magnetic field is produced.

D). The compass needle will deflect slightly due to friction between the thread and support.

Correct Answer: C

Q.82 **What are the necessary conditions for corrosion or rusting of iron?**

Ans A). Only moisture B). Only air/oxygen C). Both moisture and air/oxygen D). Only high temperature

Correct Answer: C

Q.83 **A ball is dropped from a height and falls freely under gravity for 4 seconds. What is the velocity of the ball after 4 seconds? (Take g = 10 m/s²)**

Ans A). 10 m/s B). 40 m/s C). 20 m/s D). 80 m/s

Correct Answer: B

Q.84 **Which feature helps pteridophytes survive better than bryophytes in places with limited moisture?**

Ans A). Absorption of water directly through the entire plant body only B). Absence of true roots, stems, and leaves

C). Presence of vascular tissues for transport of water and nutrients D). Dependence on water for the movement of male gametes

Correct Answer: C

Q.85 **When a ball falls freely from a height, what happens to its potential and kinetic energy according to the law of conservation of energy?**

Ans A). Potential energy increases and kinetic energy decreases B). Both energies decrease at the same time

C). Potential energy decreases and kinetic energy increases D). Both energies are lost as heat immediately

Correct Answer: C

Q.86 **In a seesaw, where should the load be placed relative to the fulcrum for easier lifting?**

Ans A). Closer to the fulcrum B). Exactly at the same point as the fulcrum C). Farther from the fulcrum

D). At the same distance as effort is from the fulcrum

Correct Answer: A

Q.87 **A rainbow is observed after a rain shower when sunlight passes through water droplets in the air. Which process primarily causes the separation of colors seen in a rainbow?**

Ans A). Absorption of sunlight by water droplets B). Refraction of sunlight followed by dispersion in water droplets

C). Scattering of sunlight by air molecules D). Reflection of sunlight from the surface of raindrops

Correct Answer: B

Q.88 **A body of mass 2 kg is held at a height of 5 m. Its potential energy is _____. (Take g=10 m/s^2)**

Ans A). 50 J B). 10 J C). 5 J D). 100 J

Correct Answer: D

Q.89 **Which of the following factors is NOT directly influenced by local wind patterns in agricultural areas?**

Ans A). Regulation of soil temperature B). Support for crop health through ventilation C). Control of field moisture levels

D). External characteristic feature of crops

Correct Answer: D

Q.90 **Which process occurs when blood passes through the lungs during circulation?**

Ans A). Oxygen is absorbed and carbon dioxide is released B). Nutrients are absorbed into the blood

C). Carbon dioxide is absorbed and oxygen is released D). Blood is filtered for waste removal

Correct Answer: A

Section : **General Awareness**

Q.91 **What was the theme of the 63rd National Maritime Day Celebrations, observed in April 2026?**

Ans A). Sustainable Seas, Prosperous Nation B). Strengthening India's Maritime Future C). Blue Economy for Viksit Bharat

D). Maritime India, Empowering Progress

Correct Answer: D

Q.92 **Which dedicated task force was constituted by SEBI in May 2026 to address AI-driven cybersecurity risks?**

Ans A). Secure Markets Mission B). Cyber Rakshak C). cyber-suraksha.ai D). AI Shield India

Correct Answer: C

Q.93 **In January 2026, DRDO successfully conducted a long-duration ground test of an Actively Cooled Scramjet Engine for the development of _____.**

Ans A). Reusable launch vehicles B). Hypersonic cruise missiles C). Unmanned combat aerial vehicles D). Ballistic missile defence systems

Correct Answer: B

Q.94 **The Khelo India Winter Games 2026 was held in February 2026 in which of the following states/union territories?**

Ans A). Jammu & Kashmir B). Himachal Pradesh C). Uttarakhand D). Arunachal Pradesh

Correct Answer: A

Q.95 **In April 2026, who among the following released the book 'Tides of Time: Bharat's History through Murals in Parliament'?**

Ans A). Droupadi Murmu B). C. P. Radhakrishnan C). Harivansh Narayan Singh D). Jagdeep Dhankhar

Correct Answer: B

Q.96 **According to the publication titled "Children in India 2025" report, released by the Ministry of Statistics and Programme Implementation (MoSPI), the infant mortality rate (IMR) decreased from 44 per 1,000 live births in 2011 to what figure in 2023?**

Ans A). 25 per 1,000 live births B). 30 per 1,000 live births C). 15 per 1,000 live births D). 35 per 1,000 live births

Correct Answer: A

Q.97 **In May 2026, the exhibition 'Geographies of Distance: Remembering Home', presented at the 61st International Art Exhibition – La Biennale di Venezia, was curated by:**

Ans A). Alwar Balasubramaniam B). Ranjani Shettar C). Bose Krishnamachari D). Dr. Amin Jaffer

Correct Answer: D

Q.98 **Which Indian state has launched the Pandit Deendayal Upadhyay Poverty-Free Village Scheme (Pandit Deendayal Upadhyay Gramin Panchayat Vikas Yojana) in 2025?**

Ans A). Uttar Pradesh B). Rajasthan C). Uttrakhand D). Bihar

Correct Answer: B

Q.99 **In June 2026, Ethan Vaz achieved the title of India's 96th Chess Grandmaster after securing his final Grandmaster norm at which tournament?**

Ans A). Tata Steel Chess Tournament B). Reykjavik Open C). Prague Masters D). Sarajevo GM Mix Tournament

Correct Answer: D

Q.100 **Which of the following organisations launched the report titled "Strategic Roadmap for Making Ayurveda Global" in July 2026?**

Ans A). NITI Aayog B). Ministry of AYUSH C). The National Medical Commission (NMC) D). Indian Council of Medical Research (ICMR)

Correct Answer: A

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