



सत्यमेव जयते

रेलवे भर्ती बोर्ड / RAILWAY RECRUITMENT BOARD
सीईएन ०२ / २०२५ - तकनीशियन ग्रेड I सिगनल और तकनीशियन ग्रेड III
CEN 02/2025 – Technician Grade I Signal and Technician Grade III



Test Date	09/03/2026
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.

- Options shown in green color with a tick icon are correct.
- Chosen option on the right of the question indicates the option selected by the candidate.

Section : Mathematics

Q.1 What is the mode of the following data?

40, 53, 47, 55, 42, 46, 50, 42, 54, 49, 40, 54, 43, 40, 44, 55, 49, 53

- Ans
- A. 53
 - B. 55
 - C. 40
 - D. 49

Q.2 Simplify: $\left(\frac{15}{24} \div \frac{15}{2}\right) \div \left(\frac{1}{8} \times \frac{16}{3} + \frac{1}{8}\right) + \frac{2}{11} \div \frac{19}{23}$ of $\frac{23}{11}$

- Ans
- A. $-\frac{4}{24}$
 - B. $\frac{4}{19}$
 - C. $\frac{7}{18}$
 - D. $-\frac{5}{23}$

Q.3 Which of the following numbers is divisible by 11?

- Ans
- A. 502579
 - B. 513589
 - C. 502589
 - D. 512579

Q.4 Three inlet pipes A, B, and C can fill a tank in 8 hours, 12 hours, and 24 hours, respectively. First, pipe A is opened alone for 1 hour. Then pipe B is opened, and both A and B run together for the next 2 hours. After that, pipe C is also opened, and all three pipes run together until the tank is full. How much total time, from the start, will it take to fill the tank?

- Ans
- A. 4 hour 30 minutes
 - B. 4 hour 40 minutes
 - C. 4 hour 20 minutes
 - D. 4 hour 50 minutes

Q.5 One pipe can fill the tank in 18 min, while another pipe can empty the completely filled tank in 72 min. If both the pipes are operated together on empty tank, how long (in min) will it take to fill two-third of the tank?

- Ans**
- A. 48
 - B. 16
 - C. 64
 - D. 32

Q.6 How many positive integers less than 30 are co-prime to 30?

- Ans**
- A. 7
 - B. 5
 - C. 6
 - D. 8

Q.7 If the length of the side of an equilateral triangle is 8 cm, find its area. (Use $\sqrt{3} = 1.732$).

- Ans**
- A. 26.812 sq.cm.
 - B. 28.612 sq.cm.
 - C. 27.712 sq.cm.
 - D. 24.812 sq.cm.

Q.8 The value of $11^3 - 8^3$ is:

- Ans**
- A. 866
 - B. 759
 - C. 819
 - D. 806

Q.9 Karan and Arjun start a business. Karan invests ₹15,000 more than Arjun. Karan invests for 3 months, and Arjun invests for 4 months. At the end of the business, the total profit is ₹6,060, and Karan's share is ₹2,020 more than Arjun's share. Find the capital contributed by Karan.

- Ans**
- A. ₹24,087
 - B. ₹24,000
 - C. ₹23,885
 - D. ₹24,093

Q.10 The difference between the ages of Sakshi and Priya is 37 years. Five years ago from now, the sum of their ages was 95 years. If Sakshi is older than Priya, find Priya's present age (in years).

- Ans**
- A. 43
 - B. 24
 - C. 34
 - D. 28

Q.11 If $\frac{\sin\theta + \cos\theta}{\sin\theta - \cos\theta} = 11$, then the value of $\frac{25 \tan^2\theta - 3}{36 \cot^2\theta + 2} - 1$ is:

- Ans**
- A. 1
 - B. $\frac{2}{9}$
 - C. $\frac{11}{9}$
 - D. $\frac{7}{9}$

Q.12 If $a = 0.1125$, then find the value of $100[\sqrt{1 + 2(3a) + 9a^2} - 4a]$.

- Ans
- A. 85.57
 - B. 88.75
 - C. 87.75
 - D. 87.57

Q.13 A person gave 40% of his income to his wife to look after household expenditure. He gave 20% of the remaining amount to each of his two sons and one daughter. One - third of the amount now left was spent on miscellaneous items and the remaining amount ₹14,400 was deposited in the bank. Find his income.

- Ans
- A. ₹90,000
 - B. ₹96,000
 - C. ₹1,10,000
 - D. ₹1,00,000

Q.14 A shopkeeper sold a book at a loss of 7%. If the selling price had been increased by ₹120, there would have been a gain of 17%. What was the cost price (in ₹) of the book?

- Ans
- A. 500
 - B. 495
 - C. 505
 - D. 510

Q.15 The difference between the ages of Anuja and Mahima is 42 years. Five years ago from now, the sum of their ages was 98 years. If Anuja is older than Mahima, find Mahima's present age (in years).

- Ans
- A. 28
 - B. 27
 - C. 29
 - D. 33

Q.16 The mean of a data is 41 and its median is 98. The mode (using empirical relation) of the data is:

- Ans
- A. 209
 - B. 240
 - C. 128
 - D. 212

Q.17 Which of the following numbers is not divisible by both 94 and 68?

- Ans
- A. 3196
 - B. 9588
 - C. 7990
 - D. 6392

Q.18 What sum of money (in ₹) will yield ₹740 as simple interest in 2 years at 5% per annum?

- Ans
- A. 6900
 - B. 7600
 - C. 7800
 - D. 7400

Q.19 The curved surface area of a right circular cylinder is 1056 cm^2 and its height is 16 cm . Find the total surface area of the cylinder.

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

- Ans
- A. 1974 cm^2
 - B. 1749 cm^2
 - C. 1794 cm^2
 - D. 1479 cm^2

Q.20 A sum of money amounts to ₹52,020 in 6 months at the rate of 8% per annum when the interest is compounded quarterly. Find the sum.

- Ans
- A. ₹49,000
 - B. ₹50,000
 - C. ₹51,000
 - D. ₹48,000

Q.21 The sum of the length, breadth and height of a cuboid is $p \text{ cm}$ and its diagonal is $q \text{ cm}$. Find its total surface area (in cm^2).

- Ans
- A. $(p - q)^2$
 - B. $p^2 - q^2$
 - C. $\frac{p^2 - q^2}{2}$
 - D. $p^2 + q^2$

Q.22 A car travels 120 km at an unknown speed $x \text{ km/h}$ and then returns at $(x + 20) \text{ km/h}$. The average speed for the whole journey is 60 km/h . Find the value of x . (Round to one decimal place.)

- Ans
- A. 54.5
 - B. 51.6
 - C. 50.2
 - D. 52.4

Q.23 Two numbers are in the ratio of $4 : 9$. If their sum is 26 , then find the mean proportional between them.

- Ans
- A. 11
 - B. 12
 - C. 10
 - D. 14

Q.24 A dealer buys two articles X and Y for ₹1,200 each. He marks each of them at the same price. He sells X by giving two successive discounts of 80% and 44% and still earns ₹172 as profit. If he sells Y at a single discount of 88%, then what is the profit percentage on Y?

- Ans
- A. 22.5%
 - B. 21.5%
 - C. 22%
 - D. 21%

Q.25 In a test, B got 50 marks while A got 80 marks out of 110 maximum marks. What percentage of A's marks were B's marks?

- Ans
- A. 110%
 - B. 160%
 - C. 72.73%
 - D. 62.5%

Section : General Intelligence and Reasoning

Q.26 In a certain code language, 'SNOW' is coded as '1732' and 'KNOW' is coded as '5317'. What is the code for 'K' in that language?

- Ans A. 7
 B. 5
 C. 2
 D. 1

Q.27 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. QK - RL
 B. HB - IC
 C. JD - LE
 D. MG - NH

Q.28 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.
 POK-GFB
 FEA-WVR

- Ans A. WVR-NMI
 B. WUP-NMI
 C. WUP-MLH
 D. WVR-MMH

Q.29 What should come in place of ? in the given series based on the English alphabetical order?

SJT HYI WNX LCM ?

- Ans A. ABR
 B. ARB
 C. ASD
 D. ABS

Q.30 Each vowel in the word AMBLERS 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. How many letters will appear exactly twice in the new group of letters thus formed?

- Ans A. Two
 B. Zero
 C. Three
 D. One

Q.31 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. MP - RT
 B. PS - TW
 C. JM - NQ
 D. QT - UX

Q.32 Seven people H, I, J, K, L, M, and N are sitting in a row facing the north. Only two people are seated to the left of L. Only three people are seated between L and H. I is seated second to the right of J. I is not an immediate neighbour of H. K is seated to the immediate right of M. Who is seated at the extreme left end of the row?

- Ans**
- A. N
 - B. J
 - C. K
 - D. H

Q.33 Seven boxes A, B, C, D, E, F and G are kept one over the other but not necessarily in the same order. E is kept fifth from the bottom. C is kept fifth from the top. Only one box is kept between D and C. F is kept immediately below B. A is not kept below G. How many boxes are kept between G and A?

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

Q.34 Each vowel in the word THALERS 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. How many letters will appear exactly twice in the group of letters thus formed?

- Ans**
- A. 3
 - B. 0
 - C. 2
 - D. 1

Q.35 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. RKL
 - B. PSQ
 - C. UXV
 - D. SVT

Q.36 What will come in the place of '?' in the following equation, if '+' and '-' are interchanged and 'x' and '÷' are interchanged?

$$4 \div 2 + 12 \times 4 - 3 = ?$$

- Ans**
- A. 4
 - B. 6
 - C. 8
 - D. 9

Q.37 Refer to the following letter series and answer the question that follows. Counting to be done from left to right.

(Left) E Z J K A R T S W H M F U C N P D K I E N O A K (Right)

How many such vowels are there, each of which is immediately preceded by a consonant and also immediately followed by a consonant?

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

Q.38 Seven boxes, B, F, G, H, R, T and Y, kept one over the other, but not necessarily in the same order.
R is kept immediately above H. G is kept immediately above T. Only one box is kept between H and T. T is kept above R. Only one box is kept below Y. G or B are not kept at the top.
How many boxes are kept above T?

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

Q.39 Refer to the following series and answer the question. (All numbers are single-digit numbers only. Counting to be done from left to right.)
(Left) 7 2 9 1 3 2 9 4 1 6 8 5 4 3 7 6 4 2 8 1 3 5 (Right)
How many such odd digits are there, each of the which is immediately preceded by an even digit and immediately followed by an even digit?

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

Q.40 Seven people, C, D, E, F, J, K and L, are sitting in a row, facing north. Only three people sit between D and J. L sits to the immediate left of J. No one sits to the right of K. Only two people sit between K and L. C sits to the immediate right of E.
How many people sit between F and C?

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

Q.41 In a certain code language,
A # B means 'A is the sister of B',
A + B means 'A is the son of B',
A ÷ B means 'A is the wife of B',
and A @ B means 'A is the father of B'.

How is A related to T if 'A + B # H @ K ÷ T'?

- Ans
- A. Wife's father
 - B. Wife's brother
 - C. Wife's father's sister's husband
 - D. Wife's father's sister's son

Q.42 In a certain code language, 'PICK' is coded as '2384' and 'SKIP' is coded as '4638'. What is the code for 'S' in that language?

- Ans
- A. 8
 - B. 3
 - C. 6
 - D. 2

Q.43 If 'A' stands for '+', 'B' stands for 'x', 'C' stands for '+' and 'D' stands for '-', what will come in place of the question mark '?' in the following equation?

$$57 D 34 C 90 A 18 B 6 = ?$$

- Ans
- A. 54
 - B. 55
 - C. 57
 - D. 53

Q.44 Select the set in which the numbers are related in the same way as are the numbers of the following sets.

(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.)

(6, 18, 14)
(8, 20, 16)

- Ans A. (14, 26, 30)
 B. (12, 28, 24)
 C. (13, 25, 21)
 D. (9, 21, 25)

Q.45 In a certain code language,

'A + B' means 'A is the son of B',
'A @ B' means 'A is the sister of B',
'A # B' means 'A is the wife of B' and
'A ÷ B' means 'A is the father of B'.

How is Q related to H if 'Q # W + R ÷ G @ H'?

- Ans A. Brother's daughter
 B. Brother's wife
 C. Daughter
 D. Wife

Q.46 In the following triad, each group of letters is related to the subsequent one following a certain logic. Select from the given options, the one that follows the same logic.

MATH – AMTH – AHTM
MELT – EMLT – ETLM

- Ans A. TEAM – AEMT – TEAM
 B. COLD – OCLD – ODLG
 C. LEAD – ALDE – ADLE
 D. HART – RTAH – AHRT

Q.47 S is the daughter of E. E is the wife of L. N is the mother of K. N is the sister of L. How is S related to K?

- Ans A. Mother's brother's wife
 B. Brother's wife
 C. Mother's brother's daughter
 D. Brother's daughter

Q.48 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.

HDF – DZB
GCE – CYA

- Ans A. UQS – PMN
 B. UPQ – QMO
 C. UQS – QMO
 D. UPQ – PLN

Q.49 In the following number-pairs, the second number is obtained by applying certain mathematical operations to the first number. Select the set in which the numbers are related in the same way as are the numbers of the following sets.
(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.)
32, 192
41, 246

- Ans**
- A. 43, 254
 - B. 44, 364
 - C. 35, 210
 - D. 38, 226

Q.50 In a certain code language,
A + B means 'A is the sister of B'
A – B means 'A is the brother of B'
A x B means 'A is the wife of B'
A ÷ B means 'A is the father of B'
Based on the above, how is M related to R if 'M – K + L ÷ P x R'?

- Ans**
- A. Wife's father's brother
 - B. Wife's father
 - C. Wife's brother
 - D. Wife's father's father

Section : General Science

Q.51 The main reason for twinkling of stars is _____.

- Ans**
- A. Presence of clouds
 - B. Nuclear reactions inside stars
 - C. Atmospheric refraction varying with time
 - D. Scattering of star light

Q.52 Which of the following statements correctly differentiates a compound from a mixture?

- Ans**
- A. Compounds show variable composition, mixtures do not.
 - B. Mixtures are formed through chemical reactions.
 - C. Mixtures can be separated by physical means, but compounds cannot.
 - D. Compounds retain the properties of their constituents.

Q.53 Which of the following best distinguishes a food web from a food chain?

- Ans**
- A. A food web allows backward energy flow; a food chain is unidirectional
 - B. A food web shows multiple trophic levels; a food chain shows one level
 - C. A food chain always has decomposers; a food web does not
 - D. A food web transfers all energy; a food chain loses energy

Q.54 In a prism, the emergent ray comes out at an angle different from the incident ray. What is this angle called?

- Ans**
- A. Angle of deviation
 - B. Angle of incidence
 - C. Angle of reflection
 - D. Angle of the prism

Q.55 Which of the following is a ring compound with the molecular formula C_6H_{12} ?

- Ans
- A. Butane
 - B. Benzene
 - C. Cyclohexane
 - D. Hexane

Q.56 Crossbreeding in cattle is done to achieve _____.

- Ans
- A. Longer lactation and disease resistance
 - B. Excessive draught power
 - C. Reduced milk production
 - D. Only higher milk fat content

Q.57 A wire carrying current is placed between the poles of a magnet. It experiences maximum force when it _____.

- Ans
- A. is perpendicular to the magnetic field
 - B. is outside the magnetic field
 - C. is parallel to the magnetic field
 - D. is at 45° to the magnetic field

Q.58 An object moving at 25 m/s is brought to rest in 5 seconds. The final velocity is _____.

- Ans
- A. 20 m/s
 - B. 0 m/s
 - C. 25 m/s
 - D. 5 m/s

Q.59 Which of the following is the product formed when ethene (C_2H_4) reacts with hydrogen (H_2) in the presence of a catalyst nickel?

- Ans
- A. Propene (C_3H_6)
 - B. Ethyne (C_2H_2)
 - C. Propane (C_3H_8)
 - D. Ethane (C_2H_6)

Q.60 Metals in the middle of the activity series, such as iron and zinc, are generally extracted by:

- Ans
- A. Heating alone without any reducing agent
 - B. Reduction of their oxides with carbon or carbon monoxide
 - C. Electrolysis of molten salts
 - D. Displacement from aqueous solution

Q.61 A bus moves from one end A to the other end B of a straight 1000 m road in 100 s and then turns around and moves 500 m back to point C in another 100 s. What will be the average velocity (in m/s) and the type of motion of the bus in going from point A to point C?

- Ans
- A. 0.4 m/s and Non-Uniform Motion
 - B. 0.4 m/s and Uniform Motion
 - C. 2.5 m/s and Non-Uniform Motion
 - D. 2.5 m/s and Uniform Motion

Q.62 Choose a term to complete the analogy.

Columnar Epithelium : Absorption :: Cuboidal Epithelium : _____

- Ans
- A. Mechanical support
 - B. Pushing mucus
 - C. Forming a delicate lining
 - D. Preventing wear and tear

Q.63 Lysosomes are also known as:

- Ans
- A. Control centers
 - B. Energy powerhouses
 - C. Suicidal bags of the cell
 - D. Protein factories

Q.64 An object travels 16 m in 4 s and then another 16 m in 2 s. What is the average speed of the object?

- Ans
- A. 5.33 m/s
 - B. 2.67 m/s
 - C. 8 m/s
 - D. 4 m/s

Q.65 How long does an unfertilised egg survive after being released from the ovary?

- Ans
- A. About one day
 - B. One week
 - C. Two hours
 - D. One month

Q.66 The SI unit of force (F) is _____ .

- Ans
- A. N m
 - B. Joule
 - C. kg m/s²
 - D. kg m/s

Q.67 The molecular mass of a compound is '60'. If it contains 40% carbon, 6.7% hydrogen, and 53.3% oxygen, what is the molecular formula?

- Ans
- A. C₂H₄O₂
 - B. C₃H₆O₃
 - C. CH₂O
 - D. C₄H₈O₄

Q.68 Implantation of developing embryo occurs in which part of the female reproductive system in human beings?

- Ans
- A. Lining of the uterus
 - B. Cervix
 - C. Fallopian tubes
 - D. Ovary

Q.69 A body undergoes a displacement of 50 m under the action of a constant force of 5 N in the same direction as that of the force. What will be the work done under the action of this force?

- Ans**
- A. + 25 J
 - B. - 250 J
 - C. - 25 J
 - D. + 250 J

Q.70 What is the importance of sexual reproduction in creating variation in plant populations?

- Ans**
- A. It speeds up DNA copying errors.
 - B. It prevents any variations from occurring.
 - C. It copies DNA without any changes.
 - D. It mixes DNA from two parents to create new variations.

Q.71 What will be the pH of a 0.01 M HCl solution?

- Ans**
- A. 8
 - B. 18
 - C. 2
 - D. 12

Q.72 Which of the following describes a key function of lysosomal enzymes?

- Ans**
- A. Breaking down proteins, lipids, and carbohydrates
 - B. Creating new proteins for the cell
 - C. Transporting molecules across the membrane
 - D. Storing genetic material

Q.73 What are the two main categories of factors responsible for storage losses in agricultural produce?

- Ans**
- A. Biotic and Abiotic
 - B. Mechanical and Thermal
 - C. Harvesting and Processing
 - D. Chemical and Electrical

Q.74 If a sample of air is compressed to half its volume, which of the following statements is correct?

- Ans**
- A. The composition of air remains same because it is a mixture.
 - B. Air becomes a compound on compression.
 - C. The composition of air changes.
 - D. The proportion of gases changes.

Q.75 In the process of electrolytic refining of copper, which of the following is correctly matched?

- Ans**
- A. Cathode – Impure copper
 - B. Electrolyte – Acidified Copper sulphate solution
 - C. Cathode Mud – Pure copper crystals
 - D. Anode – Pure copper

Q.76 Refer to the two statements given below and choose the CORRECT option.

Statement A: Nervous tissue is responsible for rapid transmission of electrical impulses in the body.

Statement B: Nervous tissue mainly provides structural and mechanical support to organs.

- Ans**
- A. Statement A is correct but B is incorrect.
 - B. Both statements A and B are correct.
 - C. Both statements A and B are incorrect.
 - D. Statement A is incorrect but B is correct.

Q.77 An object's mass remains constant everywhere (on the Earth or the Moon), whereas its weight changes because _____.

- Ans**
- A. The SI unit of weight is Newtons, while mass is kilograms
 - B. Weight depends on the local value of g, which varies with location
 - C. Mass is dependent on inertia, but weight is not
 - D. Weight is a scalar quantity, while mass is vector

Q.78 Which of the following epithelial tissues is specialised for absorption and lines the inner surface of the intestine?

- Ans**
- A. Columnar epithelium
 - B. Cuboidal epithelium
 - C. Stratified epithelium
 - D. Ciliated epithelium

Q.79 Read the given assertion and reason and select the correct option based on the analysis of these statements.

Assertion: Stethoscope uses the concept of multiple reflection of sound waves for its working.

Reason: Sound waves require a material medium for their propagation.

- Ans**
- A. Both assertion and reason are true and the reason is the correct explanation of the assertion.
 - B. Assertion is false and reason is true.
 - C. Both assertion and reason are true and the reason is not the correct explanation of the assertion.
 - D. Assertion is true but reason is false.

Q.80 When several rays parallel to the principal axis fall on a concave mirror, how do the reflected rays behave?

- Ans**
- A. They spread out and appear to come from behind the mirror.
 - B. They are reflected back along the same path.
 - C. They travel parallel to the principal axis after reflection.
 - D. They all meet at a single point on the principal axis.

Q.81 When sound propagates through air, the region of high pressure created by the vibrating object pushing air forward is called a _____.

- Ans**
- A. Medium boundary
 - B. Transverse wave
 - C. Rarefaction (R)
 - D. Compression (C)

Q.82 Which of the following best describes the primary function of nervous tissue?

- Ans**
- A. Absorption of nutrients
 - B. Transmission of electrical impulses
 - C. Providing support and binding
 - D. Contraction for movement

Q.83 Which of the following statements is/are correct regarding Rutherford's model of the atom?

Statement 1: The atom has a positively charged dense nucleus at its centre.

Statement 2: Electrons revolve in circular orbits around the nucleus without losing energy.

Statement 3: Most of the space inside the atom is empty.

- Ans**
- A. Only 1, 2 and 3
 - B. Only 1 and 3
 - C. Only 2 and 3
 - D. Only 1 and 2

Q.84 Isotopes are atoms of the same element that have:

- Ans**
- A. the same atomic number but different mass numbers
 - B. different number of protons
 - C. different chemical properties
 - D. the same mass number but different atomic numbers

Q.85 Six resistors of $3\ \Omega$ each are connected in parallel in a circuit. What will be their effective resistance?

- Ans**
- A. $18\ \Omega$
 - B. $3\ \Omega$
 - C. $2\ \Omega$
 - D. $0.5\ \Omega$

Q.86 Which of the following is the best method to prevent corrosion of iron in coastal areas?

- Ans**
- A. Immersing in cold water
 - B. Painting with oil-based paints
 - C. Galvanisation
 - D. Heating the iron periodically

Q.87 Which group of organisms is responsible for breaking down dead bodies and waste into simpler substances that return to the soil?

- Ans**
- A. Decomposers
 - B. Consumers
 - C. Producers
 - D. Parasite only

Q.88 The compound with molecular formula C_2H_4O can belong to which of the following functional group, and what is its IUPAC name?

- Ans**
- A. Aldehyde, ethanol
 - B. Aldehyde, ethanal
 - C. Ether, ethane
 - D. Alcohol, ethanol

Q.89 A body travelling in a straight line with a constant velocity of 50 m/s . What is the displacement of the car in 10 sec and the type of motion followed by the car, respectively?

- Ans**
- A. 5 m and Uniform Motion
 - B. 5 m and Non-Uniform Motion
 - C. 500 m and Uniform Motion
 - D. 500 m and Non-Uniform Motion

Q.90 What is the main difference between isobars and isotopes?

- Ans**
- A. Isobars have the same mass number but different atomic numbers
 - B. Isobars have the same number of electrons; isotopes do not
 - C. Isobars have the same atomic number; isotopes have different atomic numbers
 - D. Isobars are atoms of the same element; isotopes are of different elements

Section : **General Awareness**

Q.91 Who among the following were the pivotal leaders of the Santhal Rebellion of 1855–1856?

- Ans**
- A. Tilka Manjhi and Sido Kanhu
 - B. Birsa Munda and Raghunath Murmu
 - C. Lalu Prasad and Sidhu Kanhu
 - D. Sidhu Murmu and Kanhu Murmu

Q.92 In which country is the military exercise ZAPAD 2025 conducted from 10 to 16 September 2025?

- Ans**
- A. Germany
 - B. France
 - C. Japan
 - D. Russia

Q.93 In September 2025, the Supreme Court of India reaffirmed which important legal position under the Scheduled Castes and the Scheduled Tribes (Prevention of Atrocities) Act, 1989?

- Ans**
- A. The grant of anticipatory bail is absolutely barred if the FIR prima facie discloses an offence under the Act
 - B. The accused can apply for anticipatory bail under all circumstances
 - C. The anticipatory bail provision has been removed from the Indian Penal Code
 - D. The anticipatory bail may be granted only by the High Court

Q.94 In which Indian state do the Western Ghats reach their maximum elevation, marked by the presence of Anaimudi, the highest peak of the range?

- Ans**
- A. Maharashtra
 - B. Tamil Nadu
 - C. Kerala
 - D. Karnataka

Q.95 In which year did India sign the World Trade Organization (WTO) Agreement and become a founding member of WTO?

- Ans**
- A. 1997
 - B. 1995
 - C. 1991
 - D. 1993

Q.96 During October 2025, what first-ever scientific observation was made by ISRO's Chandrayaan-2 orbiter?

- Ans**
- A. The effects of Coronal Mass Ejections from the Sun on the Moon
 - B. The presence of subsurface water deposits under the lunar surface
 - C. The discovery of a newly identified mineral present on the Moon
 - D. The detection of volcanic activity occurring beneath the lunar crust

Q.97 The National Sports Governance Bill, 2025, was introduced to achieve which of the following objective?

- Ans**
- A. To establish rules for recognizing and regulating sports bodies
 - B. To improve physical and sports education in schools
 - C. To launch a national-level talent hunt program
 - D. To increase budget allocation for Olympic sports

Q.98 "To provide opportunities for education to his child or ward between the ages of six and fourteen years" was added to the Indian Constitution as the 11th Fundamental Duty through which of the following amendments?

- Ans**
- A. 42nd Constitutional Amendment Act, 1976
 - B. 61st Constitutional Amendment Act, 1988
 - C. 44th Constitutional Amendment Act, 1978
 - D. 86th Constitutional Amendment Act, 2002

Q.99 Who among the following made a significant contribution to Bharatanatyam as a performer, teacher, composer and scholar and was awarded Padma Bhushan in 2011?

- Ans**
- A. Vempati Chinna Satyam
 - B. Guru Bipin Singh
 - C. C. V. Chandrashekhara
 - D. Kalamandalam Gopi

Q.100 The term 'Armed Rebellion' was introduced under Article 352 of the Indian Constitution for the proclamation of a National Emergency by which Constitutional Amendment?

- Ans**
- A. 42nd Constitutional Amendment Act, 1976
 - B. 86th Constitutional Amendment Act, 2002
 - C. 61st Constitutional Amendment Act, 1988
 - D. 44th Constitutional Amendment Act, 1978