



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	10/03/2026
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 If 15 notebooks cost ₹240, then how many notebooks can be bought with ₹992?

- Ans A. 62
 B. 64
 C. 60
 D. 66

Q.2 The value of $27^3 - 22^3$ is:

- Ans A. 9035
 B. 8823
 C. 8923
 D. 8888

Q.3 If an exterior angle of a regular polygon is 40° , then find the number of diagonals of the polygon.

- Ans A. 27
 B. 40
 C. 35
 D. 45

Q.4 The difference between the present ages of Ayushi and Nidhi is 26 years. Five years ago from now, the sum of their ages was 30 years. If Ayushi is older than Nidhi, find Nidhi's present age (in years).

- Ans A. 6
 B. 10
 C. 12
 D. 7

Q.5 The mean of a data is 20 and its median is 30. The mode (using empirical relation) of the data is:

- Ans A. 131
 B. 50
 C. 110
 D. 44

Q.6 The simplified value of $\sqrt{225} + \sqrt{0.04} - \sqrt{4.84}$ is

- Ans
- A. 3.82
 - B. 13.53
 - C. 13
 - D. 4.03

Q.7 If the cost of 8 pens is ₹136, then find the cost of 12 such pens.

- Ans
- A. ₹208
 - B. ₹206
 - C. ₹202
 - D. ₹204

Q.8 If $x = 5 + 2\sqrt{6}$, then find the value of $\frac{x-1}{\sqrt{x}}$.

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

Q.9 Simplify:

$$\left(\frac{5}{6} + \frac{1}{3}\right) \div \left(\frac{2}{5} + 0.3\right) \times 0.5 + \frac{1}{2} - \frac{1}{6}$$

- Ans
- A. $\frac{3}{6}$
 - B. $\frac{5}{6}$
 - C. $\frac{7}{6}$
 - D. $\frac{1}{6}$

Q.10 A tap fills a tank in 11 hours. Another tap empties the full tank in 22 hours. How long (in hours) will it take to fill the tank completely, if the tank is empty and both the taps are open together?

- Ans
- A. 23
 - B. 22
 - C. 25
 - D. 24

Q.11 A dealer buys two articles X and Y for ₹700 each. He marks each of them at the same price. He sells X by giving two successive discounts of 60% and 20% and still earns ₹630 as profit. If he sells Y at a single discount of 76%, then what is the profit percentage on Y?

- Ans
- A. 42.5%
 - B. 41%
 - C. 42%
 - D. 41.5%

Q.12 What sum of money (in ₹) will yield ₹720 as simple interest in 3 years at 6% per annum?

- Ans A. 4000
 B. 4200
 C. 4400
 D. 3500

Q.13 A quantity is first decreased by 12% and then again decreased by 8%. What is the overall percentage decrease?

- Ans A. 21.04%
 B. 18.96%
 C. 19.04%
 D. 20.96%

Q.14 What is the amount on ₹20,000 for six months at 12% annual interest, compounded quarterly?

- Ans A. ₹21823
 B. ₹21218
 C. ₹21335
 D. ₹21934

Q.15 If $\cot\theta = \frac{1}{\sqrt{3}}$, ($0^\circ < \theta < 90^\circ$), then the value of $\frac{2 - \sin^2\theta}{1 + \cos^2\theta} + (\operatorname{cosec}^2\theta + \sec^2\theta)$ is:

- Ans A. $\frac{11}{3}$
 B. $\frac{17}{3}$
 C. $\frac{19}{3}$
 D. $\frac{29}{3}$

Q.16 In a college, class A has 25 students and class B has 30 students. If the number of students in class A increases by 20% in the first year and by 10% in the second year, and the number of students in class B increases by a total of 20% in two years, what is the overall percentage increase in the total number of students in the college over the two years? (Give your answer rounded off to 2 decimal places.)

- Ans A. 20.85%
 B. 20.45%
 C. 25.45%
 D. 25.85%

Q.17 The difference between the present ages of Juhi and Surbhi is 24 years. Five years ago from now, the sum of their ages was 66 years. If Juhi is older than Surbhi, find Surbhi's present age (in years).

- Ans A. 20
 B. 26
 C. 33
 D. 18

Q.18 Find the perimeter of the semi-circle of radius 21 cm

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

- Ans
- A. 108 cm
 - B. 174 cm
 - C. 87 cm
 - D. 66 cm

Q.19 A traveller moves from City A to City B at 48 km/h and returns at 60 km/h. If the total time taken for the whole journey is 9 hours, find the distance between A and B.

- Ans
- A. 240 km
 - B. 270 km
 - C. 250 km
 - D. 260 km

Q.20 Aarju starts a business with ₹55,000 and after 3 months, Bimla joins Aarju as her partner. After a year, the profit is divided in the ratio 8 : 9. What is Bimla's contribution in the capital?

- Ans
- A. ₹82,355
 - B. ₹82,500
 - C. ₹84,240
 - D. ₹84,080

Q.21 A man sells two articles for ₹42000 each. He gets a profit of 45% on one article and loses 45% on the other article. What is his overall profit or loss (to the nearest integer) in this transaction?

- Ans
- A. ₹21329 profit
 - B. ₹21429 profit
 - C. ₹21329 loss
 - D. ₹21429 loss

Q.22 Pipe A can fill a tank in 12 hours, pipe B in 15 hours, and an outlet C can empty it in 20 hours. A and B are opened together for 5 hours, and then C is also opened. Find the total time to fill the tank.

- Ans
- A. 7.5 hours
 - B. 6 hours
 - C. 5.5 hours
 - D. 6.5 hours

Q.23 A hollow cylindrical pipe has an external radius of 7 cm, internal radius of 6 cm, and height of 20 cm. Find the total surface area of the pipe (both ends included).

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

- Ans
- A. 1600 cm²
 - B. 1716 cm²
 - C. 1485 cm²
 - D. 1670 cm²

Q.24 What is the mode of the following data?

47, 43, 50, 46, 46, 40, 54, 54, 40, 54, 42, 48, 44, 55, 52, 45, 41, 41

- Ans
- A. 40
 - B. 46
 - C. 41
 - D. 54

Q.25 Which number, when added to each of the numbers 2, 3, 11 and 13, will make the resulting numbers in proportion?

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

Section : General Intelligence and Reasoning

Q.26 E, R, U, T, Y, W and Q are sitting around a circular table, facing the centre of the table. Only two people sit between T and Q when counted from the right of Q. Only three people sit between W and U when counted from the right of U. E sits to the immediate right of W. Y is an immediate neighbour of U as well as Q. How many people sit between R and U when counted from the left of R?

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

Q.27 What should come in place of '?' in the given series?

6, 7, 11, 20, 36, 61, ?

- Ans
- A. 97
 - B. 105
 - C. 95
 - D. 110

Q.28 In a certain code language,
 $A + B$ means 'A is the sister of B'
 $A - B$ means 'A is the brother of B'
 $A \times B$ means 'A is the wife of B'
 $A \div B$ means 'A is the father of B'

Based on the above, how is S related to N if ' $S \div E + W \times T - N$ '?

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

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. UX-XD
 - B. FI-JM
 - C. DG-HK
 - D. SV-WZ

Q.30 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. DI - AF
 - B. XB - UY
 - C. QR - MP
 - D. KO - HL

Q.31 VRHM is related to XTJO in a certain way based on the English alphabetical order. In the same way, DZPU is related to FBRW. To which of the given options is JVFA related, following the same logic?

- Ans**
- A. LXCD
 - B. LXHC
 - C. LKIO
 - D. LCFD

Q.32 What should come in place of '?' in the given series?

47 54 63 70 79 ?

- Ans**
- A. 88
 - B. 83
 - C. 86
 - D. 84

Q.33 What will come in the place of the question mark (?) in the following equation, if '+' and '-' are interchanged and 'x' and '÷' are interchanged?

$48 - 96 \times 12 \div 4 + 32 = ?$

- Ans**
- A. 43
 - B. 42
 - C. 46
 - D. 48

Q.34 A, B, C, D, E, F and G are sitting around a circular table facing the centre. Only two people are seated between E and F when counted from the right of E. Only two people are seated between F and D when counted from the left of D. Only three people are seated between E and B when counted from the left of B. C is seated to the immediate left of G. How many people are seated between A and F when counted from the right of F?

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

Q.35 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. KU - MT
 - B. OV - QX
 - C. HO - JQ
 - D. DK - FM

Q.36 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 9 2 6 1 2 6 4 8 2 7 5 9 8 6 5 4 2 2 1 3 (Right)
How many such even digits are there, each of the which is immediately preceded by a perfect square and immediately followed by an even digit? (NOTE: 1 is also a perfect square)

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

Q.37 In a certain code language, 'DUKE' is coded as '8123' and 'DESK' is coded as '2314'. What is the code for 'S' in that language?

- Ans
- A. 8
 - B. 4
 - C. 1
 - D. 2

Q.38 Each letter in the word DEARTHS is changed to the letter immediately following it in the English alphabetical order and then all the letters thus formed are arranged in alphabetical order. Which of the following letters will be fourth from the right in the new group of letters thus formed?

- Ans
- A. E
 - B. F
 - C. I
 - D. S

Q.39 Anu starts from Point A and drives 3 km towards the north. He then takes a right turn, drives 2 km, turns right and drives 5 km. He then takes a right turn and drives 4 km. He takes a final right turn, drives 2 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. 6 km to the east
 - B. 4 km to the west
 - C. 2 km to the east
 - D. 8 km to the North

Q.40 Seven boxes A, B, C, D, E, F and G are kept one over the other but not necessarily in the same order. Only two boxes are kept below D. Only three boxes are kept between E and D. C is kept above A but below G. B is kept above F but below A. Which box is kept immediately above A?

- Ans
- A. C
 - B. G
 - C. E
 - D. D

Q.41 In a certain code language, 'TYRE' is coded as '8526' and 'BYTE' is coded as '5986'. What is the code for 'B' in that language?

- Ans
- A. 9
 - B. 2
 - C. 6
 - D. 8

Q.42 Seven boxes A, B, C, D, E, F and G are kept one over the other but not necessarily in the same order. B is kept third from the top. Only three boxes are kept between D and B. C is kept immediately below G but above F. A is kept below E but above B. How many boxes are kept between C and A?

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

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?

$$147 A 3 C 51 D 16 B 3 = ?$$

- Ans**
- A. 52
 - B. 59
 - C. 50
 - D. 54

Q.44 G is the mother of Y. Y is the sister of V. S is the father of L. L is the husband of V. How is G related to L?

- Ans**
- A. Mother
 - B. Wife's sister
 - C. Wife's mother
 - D. Sister

Q.45 In a certain code language,
 P + Q means 'P is the father of Q'
 P - Q means 'P is the wife of Q'
 P x Q means 'P is the brother of Q'
 P ÷ Q means 'P is the son of Q'

Based on the above, how is G related to K if 'F - G x H ÷ I - J ÷ K'?

- Ans**
- A. Son's Son
 - B. Mother's brother
 - C. Father's brother
 - D. Mother's father

Q.46 Refer to the following letter series and answer the question that follows. Counting to be done from left to right.

(Left) D J L O E A H O A F A G E B G A N R S H X (Right)

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

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

Q.47 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. NPM
 - B. KHG
 - C. GIF
 - D. MOL

Q.48 Select the pair that follows the same pattern as the one followed by the two pairs given below. Both pairs follow the same pattern.

KNG : MLF
GRN : IPM

- Ans
- A. JSN : LQM
 - B. IGH : KDG
 - C. BGM : DEK
 - D. KHR : MFP

Q.49 EHLF is related to NQUO in a certain way based on the English alphabetical order. In the same way, HKOI is related to QTXR. To which of the following is JMQK related, following the same logic?

- Ans
- A. VSTZ
 - B. VSZT
 - C. SVTZ
 - D. SVZT

Q.50 Each vowel in the word PANDEMIC 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 appear exactly twice in the new group of letters thus formed?

- Ans
- A. M
 - B. B
 - C. C
 - D. O

Section : General Science

Q.51 Which of the following methods is commonly used to extract metals low in the activity series, such as mercury and copper, from their ores?

- Ans
- A. Displacement by carbon monoxide gas
 - B. Reduction with aluminium powder
 - C. Roasting
 - D. Electrolysis of molten ore

Q.52 Which characteristic best describes parenchyma?

- Ans
- A. Cells arranged in a single layer with guarding function.
 - B. Living cells with thin walls, capable of division in young tissues.
 - C. Rigid cells that withstand bending.
 - D. Dead at maturity with thick secondary walls.

Q.53 Which of the following is NOT a factor responsible for grain storage losses?

- Ans
- A. High-quality packaging
 - B. Inadequate moisture and temperature
 - C. Fungi and bacteria
 - D. Rodents

Q.54 A farmer walks along the boundary of a square field with side 11 m, completing one round in 20 seconds. After walking for 3 minutes and 20 seconds, what is the magnitude of the displacement from his starting point?

- Ans
- A. 11 m
 - B. 15.56 m
 - C. 22 m
 - D. 0 m

Q.55 Why is regular and controlled irrigation important for crop production?

- Ans
- A. It makes plants dependent on artificial watering.
 - B. It reduces fertilizer use by supplying nutrients through water.
 - C. It ensures optimal water supply at critical growth stages.
 - D. It increases soil salinity and prevents root growth.

Q.56 An object with a mass of 15 kg is placed 8 m above the ground. How much potential energy does the object have? (Using $g = 9.8 \text{ m/s}^2$)

- Ans
- A. 1500 J
 - B. 784 J
 - C. 1176 J
 - D. 980 J

Q.57 A scientist observed that an iron railing near the sea corroded faster than the same type of railing in a dry city. What could the main reason be?

- Ans
- A. Sea air contains salt and moisture, which accelerates rusting.
 - B. The sea air is more humid, diluting the rusting process.
 - C. The iron near the sea is exposed to more sunlight.
 - D. The city air has less oxygen, preventing rust.

Q.58 After fertilisation in humans, where does the growth and development of the embryo mainly occur?

- Ans
- A. Fallopian tube
 - B. Vagina
 - C. Uterus
 - D. Ovary

Q.59 A wire has a resistance of 10Ω . If it is stretched to three times its original length (volume remaining constant), its new resistance will be _____.

- Ans
- A. 90Ω
 - B. 3.33Ω
 - C. 10Ω
 - D. 30Ω

Q.60 Which of the following tissues is responsible for limb and body movement?

- Ans
- A. Epithelial tissue
 - B. Cardiac muscle
 - C. Smooth muscle
 - D. Skeletal muscle

Q.61 Which of the following statements best explains the functional advantage of the pollen tube formation in the process of fertilisation in flowering plants?

- Ans
- A. It allows the pollen grain to attach firmly to the stigma for self-pollination to occur efficiently
 - B. It helps the pollen grain to release its stored nutrients for the ovule to develop into a seed
 - C. It ensures direct transfer of the male germ-cell to the ovary, preventing wastage of pollen grains
 - D. It enables the ovary to release egg cells toward the pollen grain for fusion to take place

Q.62 The far point of a myopic person is 80 cm in front of the eye. Assuming the far point for normal vision is infinity, what is the required power (P) of the corrective lens?

- Ans
- A. +0.80 D
 - B. +1.25 D
 - C. -0.80 D
 - D. -1.25 D

Q.63 Which of the following statements is/are true regarding the speed of sound?
 (i) The speed of sound decreases with an increase in the temperature of the medium.
 (ii) The speed of sound in solid state is greater than the speed of sound in gaseous state under the same external conditions.
 (iii) The speed of sound is independent of the properties of the medium through which it travels.

- Ans
- A. Both (i) and (ii)
 - B. Both (i) and (iii)
 - C. Only (iii)
 - D. Only (ii)

Q.64 Why is electrolysis used for the extraction of metals high up in the reactivity series, such as sodium and aluminum?

- Ans
- A. Because these metals exist in native state
 - B. Because these metals have low melting points
 - C. Because these metals cannot be reduced by carbon or hydrogen
 - D. Because these metals form volatile oxides

Q.65 Two resistors of $5\ \Omega$ and $15\ \Omega$ are connected in series to a battery of 10 V. How much will flow through the circuit?

- Ans
- A. 0.5 A
 - B. 200 A
 - C. 2 A
 - D. 0.4 A

Q.66 Which of the following correctly differentiates ligament from tendon in human connective tissue?

- Ans
- A. Ligament connects bone to bone; tendon connects muscle to bone
 - B. Tendon is elastic, while ligament is completely non-elastic
 - C. Ligament connects muscle to bone, while tendon connects bone to bone
 - D. Both ligament and tendon connect bones to bones but differ in color

Q.67 Why is vegetative propagation useful for agriculture purposes?

- Ans
- A. It increases genetic variation
 - B. It requires seeds for every generation
 - C. It produces identical plants rapidly
 - D. It prevents diseases naturally

Q.68 Which of the following is the best example of uniform circular motion?

- Ans
- A. A roller coaster on a loop
 - B. A racing car on a curved track slowing down
 - C. Moon revolving around the Earth in a circular orbit
 - D. A yo-yo being swung in a vertical circle at changing speed

Q.69 An object has a mass of 12 kg and moves with a constant speed of 8 m/s. How much kinetic energy does it have?

- Ans
- A. 256 J
 - B. 768 J
 - C. 512 J
 - D. 384 J

Q.70 Which of the following correctly represents the unit mass of a molecule of water (H₂O)?

- Ans
- A. 18 u
 - B. 10 u
 - C. 16 u
 - D. 20 u

Q.71 Which of the following is correct for substitution reaction?

- Ans
- A. A reaction where hydrogen is added to a compound.
 - B. A reaction where a compound breaks down into simpler substances.
 - C. A reaction where atoms or groups in a molecule are replaced by another atom or group.
 - D. A reaction where two compounds combine to form one.

Q.72 If the speed of light in a medium is 2.25×10^8 m/s, its refractive index is _____.

- Ans
- A. 0.75
 - B. 1.33
 - C. 1.75
 - D. 1.50

Q.73 The motion of an athlete running along a circular path with constant speed is an example of accelerated motion because _____.

- Ans
- A. The mass of the athlete is constant
 - B. The athlete's speed is increasing
 - C. A constant external force is applied
 - D. The direction of motion changes continuously

Q.74 How much energy will be available to the tertiary consumer if a food chain begins with 5000 J of energy at the producer level?

- Ans
- A. 0.5 J
 - B. 500 J
 - C. 5 J
 - D. 50 J

Q.75 Which of the following pairs are isotopes?

- Ans
- A. ¹H and ²H
 - B. ¹⁶O and ¹⁶F
 - C. ¹²C and ¹⁴N
 - D. ⁴⁰Ca and ⁴⁰Ar

Q.76 A constant force of 21 N moves a body through 3 m in its own direction. Work done is _____.

- Ans
- A. 24 J
 - B. 63 J
 - C. 18 J
 - D. 7 J

Q.77 How much work is required to move a charge of 3 C between two points that have a potential difference of 15 V?

- Ans
- A. 21 J
 - B. 45 J
 - C. 14 J
 - D. 5 J

Q.78 Which of the following correctly represents a diatomic element?

- Ans
- A. H₂
 - B. He
 - C. H
 - D. CO

Q.79 Which condition is required for methane to undergo a substitution reaction with chlorine?

- Ans
- A. Acidic medium
 - B. Heat
 - C. Electric current
 - D. Sunlight

Q.80 The principal focus of a concave mirror is:

- Ans
- A. The point where rays parallel to the principal axis converge after reflection
 - B. The pole of the mirror
 - C. The center of curvature of the mirror
 - D. A point on the mirror where all rays meet

Q.81 Which of the following statements is true with respect to the reaction of a metal 'A' with metal 'B' of its solution, in which metal 'A' displaces metal 'B'?

- Ans
- A. 'A' is more reactive than 'B'.
 - B. 'B' is more reactive than 'A'.
 - C. Both 'A' and 'B' have the same reactivity.
 - D. The reaction cannot take place at all.

Q.82 Which of the following isotopes is used in the treatment of cancer?

- Ans
- A. Isotope of uranium
 - B. Isotope of iodine
 - C. Isotope of cobalt
 - D. Isotope of carbon

Q.83 Match the elements in Column I with their correct electron distribution in Column II according to the Bohr-Bury rules.

Element	Electron Distribution
A. Sodium (Na)	1. 2, 8, 2
B. Magnesium (Mg)	2. 2, 8, 1
C. Aluminium (Al)	3. 2, 8, 3
D. Calcium (Ca)	4. 2, 8, 8, 2

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

Q.84 Choose a term to complete the analogy.

Chlorenchyma : Photosynthesis :: Aerenchyma : _____

- Ans
- A. Food storage
 - B. Water absorption
 - C. Buoyancy
 - D. Mechanical strength

Q.85 Which of the following is NOT explained by the Universal Law of Gravitation?

- Ans
- A. Formation of tides
 - B. Weight of objects on Earth
 - C. Resistance offered by air to a moving object
 - D. Falling of apples from a tree

Q.86 What causes only the animal cell to burst when both plant and animal cells are placed in pure water?

- Ans
- A. Plant cells can actively pump out water.
 - B. Osmosis occurs only in animal cells.
 - C. Animal cells have a thicker membrane.
 - D. Plant cells have a rigid cell wall.

Q.87 What is the concentration of H^+ ions in pure water at $25^{\circ}C$?

- Ans
- A. $1 \times 10^{-5} M$
 - B. $1 \times 10^{-1} M$
 - C. $1 \times 10^{-4} M$
 - D. $1 \times 10^{-7} M$

Q.88 Which of the following combinations best explains why waste generation has become a major environmental issue in modern societies?

- Ans
- A. Government regulations that limit the collection of biodegradable waste and its recycling
 - B. Increased use of biodegradable materials and better disposal habits
 - C. Reduced use of packaging materials and enhanced recycling
 - D. Improved lifestyles leading to more disposable and non-biodegradable materials

Q.89 The deeply folded inner membrane of mitochondria helps to increase the _____ for ATP generation.

- Ans
- A. Surface area
 - B. Cell wall thickness
 - C. Colour
 - D. Volume

Q.90 Which of the following pairs of compounds contain the same total number of atoms per molecule?

- Ans
- A. NH_3 and CH_4
 - B. H_2SO_4 and N_2O_5
 - C. CO_2 and H_2O_2
 - D. C_2H_6O and PCl_3

Q.91 Keshab Chandra Sen was a prominent leader of which of the following reform movements in India?

- Ans**
- A. Prarthana Samaj
 - B. Brahmo Samaj
 - C. Arya Samaj
 - D. Ramakrishna Mission

Q.92 The Second Five-Year Plan (1956–61) was strategically designed to accelerate India's long-term growth by prioritizing which of the following sectors?

- Ans**
- A. Renewable energy expansion
 - B. Public health infrastructure
 - C. Heavy industries
 - D. Village-level artisan development

Q.93 Which major operation did the Indian government launch in May 2025 following the terrorist attack in Pahalgam?

- Ans**
- A. Operation Sindoor
 - B. Operation Trident
 - C. Operation Shakti
 - D. Operation Vijay

Q.94 Which private Indian company has recently achieved a significant milestone by becoming the first to receive approval for offering satellite-based internet services in India?

- Ans**
- A. Tata Communications
 - B. Ananth Technologies
 - C. SpaceX
 - D. Reliance Jio

Q.95 Match the following.

Person Musical Instrument

- a. Amir Ali Khan i. Sitar
- b. Anoushaka Shankar ii. Ghatam
- c. T.H. Vinayakram iii. Sarod
- d. Bismillah Khan iv. Shehnai

- Ans**
- A. a-ii; b-iii; c-i; d-iv
 - B. a-iii; b-i; c-ii; d-iv
 - C. a-ii; b-iv; c-i; d-iii
 - D. a-iv; b-ii; c-iii; d-i

Q.96 Which distinguishing feature primarily differentiates a biosphere reserve from a national park in India, as per conservation and management objectives?

- Ans**
- A. Biosphere Reserves (BRs) allow research, tourism, and local livelihoods in designated buffer and transition zones.
 - B. Biosphere Reserves (BRs) covers a smaller geographical area than national parks.
 - C. Biosphere Reserves (BRs) focuses exclusively on protection of wild animals.
 - D. Biosphere Reserves (BRs) does not aim at conservation of biological diversity.

Q.97 Which of the following articles of the Constitution of India provides for the mechanism and power of Parliament to amend the Constitution?

- Ans**
- A. Article 372
 - B. Article 362
 - C. Article 356
 - D. Article 368

Q.98 The Supreme Court dismissed which state's plea to halt Karnataka's Mokedatu project in November 2025?

- Ans**
- A. Tamil Nadu
 - B. Goa
 - C. Maharashtra
 - D. Andhra Pradesh

Q.99 The provision of 'Single citizenship' for all in the Indian Constitution is adopted from the constitution of which of the following countries?

- Ans**
- A. US Constitution
 - B. British Constitution
 - C. Australian Constitution
 - D. Canadian Constitution

Q.100 What is the main purpose of the vehicle-mounted Laser DEW MK-II(A) tested by DRDO in April 2025?

- Ans**
- A. Satellite launching
 - B. Anti-ballistic missile defense
 - C. Space communication
 - D. Drone neutralization