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	12:45 PM - 2:15 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 Simplify: $\frac{\sqrt{16x^4 - 72x^2y^2 + 81y^4}}{\sqrt{4x^2 - 12xy + 9y^2}} - (2x - 3y)$, given that $2x > 3y$.

Ans
✗ A. $4x^2$
✓ B. $6y$
✗ C. $4x$
✗ D. $6y^2$

Q.2 **Kirti starts a business with ₹27,000 and after 7 months, Vaishnavi joins Kirti as her partner. After a year, the profit is divided in the ratio 8 : 9. What is Vaishnavi's contribution in the capital?**

Ans
✗ A. ₹72,750
✗ B. ₹72,875
✓ C. ₹72,900
✗ D. ₹73,360

Q.3 **Calculate the simple interest if the principal amount is ₹75,000, the rate is 5%, and the time is 5 years.**

Ans
✗ A. ₹3750
✗ B. ₹16,870
✗ C. ₹7,850
✓ D. ₹18,750

Q.4 **What sum of money (in ₹) will yield ₹720 as simple interest in 2 years at 6% per annum?**

Ans
✗ A. 6400
✗ B. 6200
✓ C. 6000
✗ D. 5500

Q.5 **The sum of the present ages of Lokesh and Taresh is 24 years. After 2 years, Lokesh's age will be three times that of Taresh. Lokesh's present age (in years) is:**

Ans
✗ A. 12
✗ B. 17
✓ C. 19
✗ D. 22

Q.6 A and B can complete a work in 12 days and 8 days, respectively. They started doing the work together but after 2 days, B had to leave, and A completed the remaining work alone. The whole work was completed in _____ days.

Ans
✗ A. 10
✓ B. 9
✗ C. 7
✗ D. 8

Q.7 Find the sum of 8 exterior angles of a 24-sided regular polygon.

Ans
✗ A. 115°
✗ B. 135°
✗ C. 140°
✓ D. 120°

Q.8 Simplify:

$$\frac{2}{5} \text{ of } \left(\left(\frac{3}{4} \div 0.25\right) + \frac{1}{2}\right) - \frac{1}{3}$$

Ans
✗ A. $\frac{14}{15}$
✗ B. $\frac{13}{15}$
✗ C. $\frac{17}{15}$
✓ D. $\frac{16}{15}$

Q.9 If 6 machines produce 120 items in 8 hours, how many items can 9 machines produce in 4 hours at the same rate?

Ans
✗ A. 120
✗ B. 80
✓ C. 90
✗ D. 60

Q.10 In Δ PQR, $\angle Q = 90°$. If $\tan R = \frac{1}{3}$,

then the value of $1 + \frac{\sec P(3\cos R - \sin P)}{\operatorname{cosec} R\,(4\sin R - \cos P)}$ is:

Ans
✗ A. 6
✗ B. 5
✗ C. 7
✓ D. 3

Q.11 If the median and the mode are given as 65 and 60, respectively, find the mean.

Ans
✗ A. 62.5
✗ B. 68
✗ C. 70
✓ D. 67.5

Q.12 When one-third of a number is increased by 55, the result is 83. Find the sum of the digits of the original number.

Ans
- ✗ A. 13
- ✗ B. 14
- ✓ C. 12
- ✗ D. 9

Q.13 Simplify: $\frac{[5 \text{ of } (2+4)] - \{6^2 \div 3\} + 2}{3 \text{ of } (5-2) \div 9}$

Ans
- ✗ A. 16
- ✓ B. 20
- ✗ C. 22
- ✗ D. 18

Q.14 The sum of 6 numbers is 240. Find their average.

Ans
- ✗ A. 41
- ✓ B. 40
- ✗ C. 39
- ✗ D. 38

Q.15 Six cubes each of side 4 cm, are placed adjacent to each other. Find the volume of the cuboid so formed.

Ans
- ✗ A. 256 cm3
- ✓ B. 384 cm3
- ✗ C. 512 cm3
- ✗ D. 64 cm3

Q.16 A and B together can complete a task in 10 days, B and C in 12 days and A and C in 15 days. How long will A, B and C take to complete the task working together?

Ans
- ✗ A. 7 days
- ✗ B. 10 days
- ✓ C. 8 days
- ✗ D. 9 days

Q.17 A shopkeeper lists the price of a fan at 36% above its cost price and offers a 25% discount on its list price. If he earns a profit of ₹134, then what is the list price (in ₹) of the fan?

Ans
- ✓ A. 9,112
- ✗ B. 8,851
- ✗ C. 8,987
- ✗ D. 9,135

Q.18 A family's monthly income increased by 15%. They increased their monthly expenditure on food by 10% and on rent by 20%. If their initial monthly expenditure on food was ₹12,000 and on rent was ₹8,000, and their initial monthly savings were ₹15,000, what are their new monthly savings? (Assume that there is no other expenditure.)

Ans
- ✗ A. ₹18,650
- ✓ B. ₹17,450
- ✗ C. ₹25,000
- ✗ D. ₹15,000

Q.19 The sum of the prime factors of 84 is:

Ans
- ✗ A. 14
- ✗ B. 18
- ✗ C. 15
- ✓ D. 12

Q.20 During a sale, 60% of the goods are sold at a profit of 21%. Of the remaining goods, 40% are sold at a profit of 46%, and the rest are sold at a loss of 29%. If the overall profit is x%, then what is the value of x?

Ans
- ✗ A. 9.5
- ✓ B. 13
- ✗ C. 3
- ✗ D. 3.5

Q.21 Simplify:

$$[(120-24\div(4+2))\times 2-(50\div 5+6)]+[(18+12\times 2-8)-(9\div 3+5)]$$

Ans
- ✗ A. 252
- ✓ B. 242
- ✗ C. 262
- ✗ D. 232

Q.22 Find the fourth proportional to 3.5, 7.5, and 6.3.

Ans
- ✓ A. 13.5
- ✗ B. 11.5
- ✗ C. 14.5
- ✗ D. 12.5

Q.23 If the lateral surface area of a cylinder is 775.8 cm^2 and its height is 24 cm, then find its volume. (Use π = 3.14 and round off to two decimal places.)

Ans
- ✗ A. 1962.74 cm3
- ✗ B. 1984.78 cm3
- ✗ C. 2016.67 cm3
- ✓ D. 1996.63 cm3

Q.24 Naveena's monthly income is ₹84,000. She spends 25% of his income on house rent, 20% on groceries, 15% on other household expenses, and saves the remaining amount. How much money (in ₹) does she save every month?

Ans
- ✗ A. 32,000
- ✗ B. 32,600
- ✓ C. 33,600
- ✗ D. 33,000

Q.25 A 200 m long train passes a man standing on a platform in 10 seconds. How long will it take to cross another 350 m long train running at 60 km/h in the opposite direction?

Ans
- ✓ A. 15 seconds
- ✗ B. 12 seconds
- ✗ C. 14 seconds
- ✗ D. 16 seconds

Section : **General Intelligence and Reasoning**

Q.26 Rajat is the brother of Garima. Garima is the sister of Harish. Harish is the father of Jyoti. Jyoti is the wife of Karan. How is Rajat related to Karan?

Ans

✗ A. Wife's father's father

✓ B. Wife's father's brother

✗ C. Wife's mother's father

✗ D. Wife`s mother`s brother

Q.27 Seven people, A, V, C, L, E, K and N, are sitting in a row, facing north. Only four people sit to the left of E. Only four people sit to the right of L. Only one person sits between K and L. V sits to the immediate left of A. C does not sit to the left of N. Who sits third to the right of C?

Ans

✓ A. A

✗ B. L

✗ C. E

✗ D. K

Q.28 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?

3 B 2 D 12 A 4 C 3 = ?

Ans

✓ A. 6

✗ B. 8

✗ C. 12

✗ D. 4

Q.29 Each letter in the word LANDMARK is arranged in alphabetical order. How many letters are there in the English alphabetical order between the letter which is fourth from the left and the one which is second from the right in the new letter cluster thus formed?

Ans

✓ A. 2

✗ B. 3

✗ C. 4

✗ D. 5

Q.30 What should come in place of ? in the given series based on the English alphabetical order?

DGYL XKTQ ROOV LSJA ?

Ans

✗ A. EVDE

✗ B. EWEE

✗ C. FVDF

✓ D. FWEF

Q.31 What will come in the place of '?' in the following equation, if '+' and '-' are interchanged and 'x' and '÷' are interchanged?

3 ÷ 5 + 16 x 8 - 8 = ?

Ans

✓ A. 21

✗ B. 18

✗ C. 17

✗ D. 20

Q.32 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.)

(5, 18, 24)
(9, 22, 28)

Ans

✗ A. (6, 19, 13)

✗ B. (4, 17, 11)

✗ C. (11, 36, 42)

✓ D. (8, 21, 27)

Q.33 In a certain code language,
P + Q means 'P is the mother of Q'
P – Q means 'P is the sister of Q'
P x Q means 'P is the father of Q'
P ÷ Q means 'P is the daughter of Q'

Based on the above, how is H related to G if 'H + S – T x G ÷ P'?

Ans

✗ A. Father's sister

✓ B. Father's mother

✗ C. Mother's mother

✗ D. Sister

Q.34 Rajdeep ranked 64th from the top and 23rd from the bottom in his class. How many students are there in his class?

Ans

✗ A. 87

✗ B. 84

✓ C. 86

✗ D. 85

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 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. ME – HA

✗ B. WO – QI

✗ C. TL – NF

✗ D. YQ – SK

Q.36 In a certain code language, 'KEPT' is coded as '7523' and 'OKAY' is coded as '4136'. What is the code for 'K' in that language?

Ans

✗ A. 1

✗ B. 5

✓ C. 3

✗ D. 7

Q.37 Ay, Bk, Cv, Du, Es, Fo and Gw are sitting around a circular table facing the centre. Cv sits to the immediate right of Ay. Du sits third to the left of Ay. Bk is the immediate neighbour of Fo and Cv. Gw is not an immediate neighbour of Du. What is the position of Es with respect to Fo?

Ans

✗ A. Third to the left

✗ B. Immediate left

✗ C. Immediate right

✓ D. Second to the right

Q.38 Natesh starts from point Y and drives 58 km towards East. He then takes a left turn, drives 28 km, turns left and drives 40 km. He then takes a left turn and drives 71 km. He takes a right turn, drives 18 km to stop at point Z. How far (shortest distance) and towards which direction should he drive in order to reach point Y again? (All turns are 90-degree turns only unless specified.)

Ans
- ✔ A. 43 km towards north
- ✘ B. 45 km towards west
- ✘ C. 39 km towards south
- ✘ D. 41 km towards north

Q.39 Select the pair which follows the same pattern as that followed by the two pairs given below. Both pairs follow the same pattern.

CVT : DXW
OBL : PDO

Ans
- ✘ A. SKP : TLQ
- ✘ B. DXG : EZK
- ✔ C. NAU : OCX
- ✘ D. HZE : IAG

Q.40 Dhiraj starts from Point A and drives 11 km towards west. He then takes a right turn, drives 8 km, turns right and drives 14 km. He then takes a right turn and drives 11 km. He takes a final right turn, drives 3 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° turns only unless specified.)

Ans
- ✘ A. 5 km to the west
- ✔ B. 3 km to the north
- ✘ C. 3 km to the south
- ✘ D. 3 km to the east

Q.41 BIRD is related to CLSG in a certain way based on the English alphabetical order. In the same way, RAIN is related to SDJQ. To which of the given options is STAR related, following the same logic?

Ans
- ✘ A. TWCV
- ✔ B. TWBU
- ✘ C. UWCV
- ✘ D. UVCU

Q.42 The position(s) of how many letters will remain unchanged if each letter in the word "VISCOMETRY" is arranged in alphabetical order?

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

Q.43 What should come in place of '?' in the given series?

24 35 40 51 56 ?

Ans
- ✔ A. 67
- ✘ B. 69
- ✘ C. 70
- ✘ D. 68

Q.44 All 59 people are standing in a row facing North. Mahesh is 20th from the right end, while Kailash is 14th from the left end. How many people are there between Mahesh and Kailash?

Ans
- ✗ A. 24
- ✗ B. 23
- ✓ C. 25
- ✗ D. 26

Q.45 Based on the alphabetical order, three of the following four 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 man out is not based on the number of consonants/vowels or their position in the letter cluster.)

Ans
- ✗ A. DEK
- ✗ B. GHN
- ✗ C. NOU
- ✓ D. NOD

Q.46 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. AB–EF
- ✓ B. XY–AE
- ✗ C. NO–RS
- ✗ D. JK–NO

Q.47 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.

CMO : DKP
WKL : XIM

Ans
- ✓ A. OIY : PGZ
- ✗ B. HFC : HDC
- ✗ C. GFR : GDR
- ✗ D. DQG : DNH

Q.48 In a certain code language, 'GODS' is coded as '7642' and 'DIVE' is coded as '1357'. What is the code for 'D' in that language?

Ans
- ✗ A. 3
- ✓ B. 7
- ✗ C. 4
- ✗ D. 1

Q.49 Refer to the following letter series and answer the question. Counting to be done from left to right.
(Left) M M C R V I K Z J N L U W X W F O Y X F G(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. One
- ✗ B. Three
- ✓ C. None
- ✗ D. Two

Q.50 Refer to the following series and answer the question (All numbers are single-digit numbers only. Counting is to be done from left to right.)

(Left) 2 8 1 3 5 2 6 7 3 4 9 6 7 8 4 1 3 4 6 (Right)

How many such even digits are there each of which is immediately preceded by an odd digit and immediately followed by an even digit?

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

Section : **General Science**

Q.51 A student heats 10 g of calcium carbonate in a closed container. It decomposes into 5.6 g of calcium oxide and carbon dioxide gas. What will be the mass of carbon dioxide produced?

Ans
- ✗ A. 5.0 g
- ✗ B. 15.6 g
- ✓ C. 4.4 g
- ✗ D. 10.0 g

Q.52 The versatile nature of carbon is responsible for the formation of which of the following types of compounds?

Ans
- ✓ A. Organic compounds
- ✗ B. Inorganic compounds
- ✗ C. Metallic compounds
- ✗ D. Ionic compounds

Q.53 Which of the following statements about natural acid-base indicators is correct?

Ans
- ✗ A. Red litmus turns blue in acids.
- ✓ B. Turmeric turns red in basic solution.
- ✗ C. Methyl orange is a natural indicator extracted from turmeric.
- ✗ D. China rose (Hibiscus) extract turns green in bases.

Q.54 An echo is heard in 6 s. If the distance of the reflecting surface from the source is 990 m, then how much is the speed of sound?

Ans
- ✗ A. 660 m/s
- ✗ B. 165 m/s
- ✓ C. 330 m/s
- ✗ D. 1320 m/s

Q.55 If the gravitational force experienced by a body of mass 'm' on the surface of Earth is 'X' N. If the mass of the body is tripled, what will be the value of the gravitational force experienced by the body?

Ans
- ✗ A. X/9 N
- ✗ B. X/3 N
- ✗ C. X N
- ✓ D. 3X N

Q.56 An object is placed at 100 cm on the left of a convex lens of focal length 40 cm. Where should a screen be placed to right of the lens so that the image formed is real, inverted and smaller in size as compared to the object size?

Ans

✗ A. The screen should be placed at 40 cm from the lens.

✗ B. The screen should be placed anywhere between 20 cm and 40 cm from the lens.

✓ C. The screen should be placed anywhere between 40 cm and 80 cm from the lens.

✗ D. The screen should be beyond 100 cm from the lens.

Q.57 Which of the following is a molecule formed by two atoms of the same element?

Ans

✓ A. H_2

✗ B. H_2O

✗ C. CO

✗ D. O_3

Q.58 Meristematic tissue in plants is mainly characterized by:

Ans

✗ A. Permanent storage cells.

✗ B. Mature cells with thick walls.

✓ C. Small, actively dividing cells with thin walls.

✗ D. Large, highly vacuolated cells.

Q.59 Which of the following statements are correct?

1. Colloids appear homogeneous because their particles are very small.
2. Colloids are truly homogeneous at the molecular level.
3. Colloidal particles scatter light.
4. Milk is a colloidal solution.

Ans

✗ A. 2 and 4 only

✗ B. 1, 2, 3 and 4

✗ C. 1 and 2 only

✓ D. 1, 3 and 4 only

Q.60 If a velocity–time graph shows a horizontal straight line, the object is moving with _____.

Ans

✗ A. No velocity

✓ B. Constant velocity

✗ C. Non-uniform acceleration

✗ D. Zero displacement

Q.61 A porter lifts a 10 kg luggage from the ground and places it on his head at a height of 2.5 m. What is the work done by the porter on the luggage? (Using g =10 m/s^2)

Ans

✗ A. 25 J

✗ B. 500 J

✗ C. 100 J

✓ D. 250 J

Q.62 Burning of a saturated hydrocarbon will result in which type of flame?

Ans

✓ A. Clean flame

✗ B. Sooty flame

✗ C. Yellow flame

✗ D. Green flame

Q.63 The burning of carbon to form carbon dioxide is an example of a/an:

Ans

✗ A. Endothermic reaction

✗ B. Photochemical reaction

✓ C. Exothermic reaction

✗ D. Reversible reaction

Q.64 Which structure is present in plant cells but absent in animal cells?

Ans

✓ A. Cell wall

✗ B. Mitochondria

✗ C. Endoplasmic reticulum

✗ D. Cytoplasm

Q.65 If producers increase in number and herbivores decrease in number, what is the likely sudden consequence in the food chain?

Ans

✓ A. Carnivore population will decrease due to less food.

✗ B. Producers will decrease due to overgrazing.

✗ C. Carnivore population will increase.

✗ D. Decomposers population will decline suddenly.

Q.66 A concave lens forms a virtual image when the object is placed _____.

Ans

✗ A. At infinity only

✗ B. At 2F only

✓ C. At any position in front of the lens.

✗ D. Beyond 2F only

Q.67 A train starts from rest and reaches a speed of 216 km/h in 10 minutes. If its acceleration is uniform, what is the value of the acceleration?

Ans

✗ A. 1.0 m/s2

✗ B. 0.6 m/s2

✓ C. 0.1 m/s2

✗ D. 0.4 m/s2

Q.68 In a velocity–time graph, the graph is a straight horizontal line at 10 m/s for 5 seconds. Then the distance travelled is _____.

Ans

✗ A. 2 m

✓ B. 50 m

✗ C. 10 m

✗ D. 5 m

Q.69 An ultrasonic wave has a frequency of 33 kHz. What will be the speed of this wave if its wavelength is 0.01 m?

Ans

✗ A. 3.3 m/s

✗ B. 33 m/s

✓ C. 330 m/s

✗ D. 0.33 m/s

Q.70 Which of the following is the correct formula for the compound calcium phosphate?

Ans

✗ A. $Ca_4(PO_4)_3$

✓ B. $Ca_3(PO_4)_2$

✗ C. $CaPO_4$

✗ D. $Ca_2(PO_4)_3$

Q.71 When standing still with a heavy load on your head, you expend energy and get tired. Why is zero work done on the load?

Ans
- ✗ A. The force applied is vertical.
- ✗ B. The time elapsed is irrelevant.
- ✓ C. There is no displacement of the load.
- ✗ D. Force is not being applied.

Q.72 In the respiratory tract, columnar epithelium possesses cilia. What is the primary function of these cilia?

Ans
- ✓ A. To move and push mucus forward to clear it
- ✗ B. To provide only mechanical support to the tract
- ✗ C. To secrete substances onto the epithelial surface
- ✗ D. To increase the surface area for absorption only

Q.73 What is the main purpose of balanced nutrient management in crops?

Ans
- ✗ A. To eliminate water requirements
- ✓ B. To optimize soil fertility and crop yield
- ✗ C. To promote weed growth
- ✗ D. To maximize pesticide use

Q.74 Which of the following is a function of the Golgi apparatus?

Ans
- ✗ A. Photosynthesis
- ✗ B. Protein synthesis
- ✗ C. ATP production
- ✓ D. Packaging and secretion of materials

Q.75 Which component of phloem is responsible for the transport of food in plants?

Ans
- ✗ A. Phloem parenchyma
- ✗ B. Companion cells
- ✓ C. Sieve tubes
- ✗ D. Phloem fibers

Q.76 The speed of sound depends primarily on the nature and _____ of the medium.

Ans
- ✗ A. Volume
- ✗ B. Pressure
- ✓ C. Temperature
- ✗ D. Amplitude

Q.77 What are the tiny blobs present on stick-like structures in *Rhizopus* called?

Ans
- ✗ A. Spores
- ✗ B. Hyphae
- ✗ C. Roots
- ✓ D. Sporangia

Q.78 The formation of micelles in soap solution occurs due to:

Ans
- ✓ A. hydrophobic and hydrophilic interactions in water
- ✗ B. electrostatic attraction between ions
- ✗ C. hydrogen bonding with water molecules
- ✗ D. dispersion forces only

Q.79 Which of the following is the correct relation between the object distance (u), image distance (v) and focal length (f) of a convex lens?

Ans

- ✔ A. (1/v) - (1/u) = 1/f
- ✘ B. v + u = f
- ✘ C. v - u = f
- ✘ D. (1/v) x (1/ u) = 1/f

Q.80 Which of these is an example of a solid sol?

Ans

- ✔ A. Coloured gem
- ✘ B. Jelly
- ✘ C. Cheese
- ✘ D. Smoke

Q.81 If decomposers were removed from an ecosystem, what would be the most immediate consequence?

Ans

- ✘ A. Rapid increase in herbivore population
- ✘ B. Decrease in sunlight reaching producers
- ✘ C. Increased plant growth due to more dead organic matter
- ✔ D. Accumulation of waste and dead matter, disrupting nutrient cycling

Q.82 A wooden block of mass 50 kg is placed on a smooth horizontal surface. A constant horizontal force of 'X' N is applied on it while it is at rest. The block acquires a velocity of 10 m/s in 2 s. What is the value of X?

Ans

- ✘ A. 100 N
- ✘ B. 10 N
- ✘ C. 25 N
- ✔ D. 250 N

Q.83 Blood pressure is recorded as two values: _____ pressure, measured when the heart contracts, and _____ pressure, measured when the heart relaxes.

Ans

- ✔ A. Systolic; Diastolic
- ✘ B. Diastolic; Venous
- ✘ C. Maximum; Systolic
- ✘ D. Diastolic; Systolic

Q.84 Read the given Assertion (A) and Reason (R) and select the most appropriate option.

(A): A woman has normal ovulation and fertilisation, but the zygote is expelled without attaching to the uterine wall because implantation has failed.
(R): Implantation is the process by which the blastocyst embeds in the endometrium to establish pregnancy.

Ans

- ✘ A. A is true, but R is false
- ✘ B. Both A and R are true, but R is not the correct explanation of A
- ✘ C. A is false, but R is true
- ✔ D. Both A and R are true, and R is the correct explanation of A

Q.85 Which of the following practices directly contributes to crop yield improvement?

Ans

- ✘ A. Delayed harvest
- ✘ B. Planting the same crop year after year
- ✔ C. Timely irrigation and fertilization
- ✘ D. Ignoring pest signs

Q.86 **Which property of connective tissue enables it to bind and support different body parts?**

Ans

✗ A. Presence of cilia

✗ B. Presence of contractile proteins

✓ C. Presence of extracellular matrix

✗ D. Presence of nerve endings

Q.87 **A concave lens has a focal length of 15 cm. If it forms an image 10 cm from the lens, how far away is the object placed from the lens?**

Ans

✗ A. -25 cm

✓ B. -30 cm

✗ C. +30 cm

✗ D. +6 cm

Q.88 **During the extraction of metals from their ores, the removal of gangue is an important preliminary step. Which of the following statements most accurately explains why different concentration methods (such as hydraulic washing, froth flotation and magnetic separation) are used for different ores?**

Ans

✗ A. Because gangue particles are chemically reactive and must be removed by oxidation before extraction

✗ B. Because all ores have identical physical properties but different chemical compositions

✓ C. Because each method exploits specific differences in physical and chemical properties between the ore and the gangue

✗ D. Because the choice of concentration method depends on the melting point of the ore and gangue

Q.89 **The ratio of the unit mass of a molecule of nitrogen (N_2) to that of an oxygen molecule (O_2) is approximately:**

Ans

✗ A. 8 : 7

✓ B. 7 : 8

✗ C. 14 : 32

✗ D. 28 : 16

Q.90 **What is the main advantage of using olfactory indicators?**

Ans

✗ A. They give exact pH values.

✗ B. They change colour sharply.

✗ C. They can be used for all solutions.

✓ D. They are useful for visually impaired individuals.

Section : **General Awareness**

Q.91 **Which bank joins the India Bullion Exchange as a special category client?**

Ans

✗ A. Bank of India

✗ B. Indian Bank

✗ C. Punjab National Bank

✓ D. State Bank of India

Q.92 **Division of legislative subjects into union, state and concurrent List is contained in which of the following schedules of the Constitution of India?**

Ans

✓ A. Seventh Schedule

✗ B. Eleventh Schedule

✗ C. Ninth Schedule

✗ D. Fifth Schedule

Q.93 The Constitution of India provided for how many types of emergencies in Part XVIII, from Articles 352 to 360?

Ans
- ✔ A. Three
- ✘ B. Four
- ✘ C. Six
- ✘ D. Five

Q.94 Under the new scheme for first-time Women, SC and ST entrepreneurs, announced in the Union Budget 2025-26, what is the **maximum loan amount** that can be availed?

Ans
- ✘ A. ₹1 crore
- ✔ B. ₹2 crore
- ✘ C. ₹5 crore
- ✘ D. ₹50 lakh

Q.95 Under the 2018 amendments in Foreign Direct Investment (FDI) policy approved by the Cabinet, the maximum Foreign Direct Investment (FDI) permitted under the automatic route in Single Brand Retail Trading (SBRT) is _____

Ans
- ✔ A. 100%
- ✘ B. 40%
- ✘ C. 60%
- ✘ D. 85%

Q.96 Which country launched the first indigenous, Low-Cost Gene Therapy for Sickle Cell Disease, named "BIRSA 101"?

Ans
- ✔ A. India
- ✘ B. Japan
- ✘ C. China
- ✘ D. Spain

Q.97 At which session of the Indian National Congress did the party formally split into the Moderates and the Extremists?

Ans
- ✘ A. Delhi session 1912
- ✘ B. Calcutta session 1906
- ✘ C. Bombay session 1910
- ✔ D. Surat session 1907

Q.98 The NAVYA (Nurturing Aspirations through Vocational Training for Young Adolescent Girls) initiative, launched on 24 June 2025, is for which age group?

Ans
- ✘ A. 12 - 14 years
- ✘ B. 14 - 16 years
- ✔ C. 16 - 18 years
- ✘ D. 18 - 20 years

Q.99 Which dance form is performed by men wearing long colorful robes and tall conical caps in Jammu & Kashmir?

Ans
- ✘ A. Chholiya
- ✘ B. Hikat
- ✔ C. Dumhal
- ✘ D. HurkaBaul

Q.100 **With reference to fluvial geomorphic processes in the Indian subcontinent, the Indo-Gangetic Plains have been formed predominantly due to the long-term accumulation of which specific type of deposits?**

Ans

✗ A. Aeolian sand deposits formed under arid climatic conditions

✗ B. Glacial till deposited directly by valley glaciers

✗ C. Marine sediments laid down by repeated sea transgressions

✓ D. Alluvial sediments deposited by Himalayan river systems

"