रेलवे भर्ती बोर्ड / RAILWAY RECRUITMENT BOARDS
सीईएन - 05/25 - जेई, डीएमएस, सीएमए - CEN - 05/25 - JE, DMS, CMA

| Test Date | 19/02/2026 |
| Test Time | 12:45 PM - 2:15 PM |
| Subject | RRB JE DMS CMA |

**\* 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 : **RRB JE DMS CMA**

**Q.1**

The value of $\sqrt{\left(42 + \sqrt{\left((46 + \sqrt{\left(3 + \sqrt{\left(34 + \sqrt{(4)}\right)}\right)}\right)}\right)}$ is:

**Ans**
✔ 1. 7
✘ 2. 8
✘ 3. 11
✘ 4. 9

**Q.2** 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 carefully and decide the appropriate answer.

Among 5 people, A, B, C, D and E, each of a different height, who is the second-tallest?
I: E is shorter than A. B is taller than D but shorter than E.
II: Only C is taller than A. D is shorter than E.

**Ans**
✔ 1. The data in statement II alone is sufficient to answer the question while data in statement I is not

✘ 2. The data in statement I alone is sufficient to answer the question while data in statement II is not

✘ 3. The data in statement I and II together (and not statement I alone or statement II alone) is sufficient to answer the question

✘ 4. The data in statement I and II put together is NOT sufficient to answer the question

**Q.3** Bleaching powder is commonly used:
**Ans**
✘ 1. As a sweetener

✘ 2. To make soap

✔ 3. To disinfect water

✘ 4. As a fuel

**Q.4** Find the median of the following data.

7, 19, 88, 20, 19, 26, 90, 81, 44, 34.

**Ans**
✔ 1. 30
✘ 2. 32
✘ 3. 28
✘ 4. 34

**Q.5** Atharv starts from Point A and drives 12 km towards west. He then takes a right turn, drives 3 km, turns right and drives 16 km. He then takes a right turn and drives 9 km. He takes a final right turn, drives 4 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**
- ✗ 1. 5 km to the north
- ✓ 2. 6 km to the north
- ✗ 3. 5 km to the south
- ✗ 4. 6 km to the south

**Q.6** The Indian classical dance forms Kuchipudi and Bharatanatyam originated in which Indian states, respectively?

**Ans**
- ✓ 1. Andhra Pradesh and Tamil Nadu
- ✗ 2. Tamil Nadu and Andhra Pradesh
- ✗ 3. Kerala and Tamil Nadu
- ✗ 4. Karnataka and Andhra Pradesh

**Q.7** A scientist is designing an artificial multi-cellular organism. What must they include to ensure all cells receive nutrients and remove wastes effectively?

**Ans**
- ✓ 1. A transportation system for food, oxygen, and waste
- ✗ 2. Only specialised tissues for nutrition
- ✗ 3. Direct contact of every cell with the environment
- ✗ 4. Simple diffusion through the entire surface

**Q.8** Two water supply lines A and B can fill a reservoir individually in 10 hours and 12 hours, respectively. A discharge outlet D can empty the reservoir completely in 6 hours. If all three are opened together at 7:00 A.M., at what time will one-fourth of the reservoir be filled?

**Ans**
- ✗ 1. 11 A.M.
- ✓ 2. 10 P.M.
- ✗ 3. 10 A.M.
- ✗ 4. 11 P.M.

**Q.9** If $\csc^2\theta + 4\sin^2\theta = 4$, where $0° \leq \theta \leq 90°$, then find the value of $\theta$.

**Ans**
- ✗ 1. 90°
- ✗ 2. 30°
- ✓ 3. 45°
- ✗ 4. 60°

**Q.10** Anwar's salary is ₹19,000 per month. He spends ₹4,500 on house rent, ₹1,500 on bills and the rest of the amount is his monthly savings. Find his savings (in ₹) in a year, if in the month of his birthday, he spent his complete monthly savings for his birthday celebration.

**Ans**
- ✗ 1. 1,17,000
- ✗ 2. 1,56,000
- ✗ 3. 1,30,000
- ✓ 4. 1,43,000

**Q.11** Which of the following statements about Plaster of Paris (POP) is CORRECT?

**Ans**
- ✗ 1. POP is $CaSO_4 \cdot 2H_2O$ and sets quickly on mixing with water
- ✓ 2. POP is $CaSO_4 \cdot \frac{1}{2}H_2O$ and hardens by reacting with water
- ✗ 3. POP is $CaSO_4 \cdot 2H_2O$ and is mainly used as a fertilizer
- ✗ 4. POP is $CaSO_4 \cdot \frac{1}{2}H_2O$ and sets slowly without water

**Q.12** If a constant force acts on two objects of different masses, which statement best describes their acceleration according to the second law of motion?

Ans ✗ 1. Both objects will have the same acceleration.

✗ 2. Acceleration does not depend on mass.

✗ 3. The object with greater mass will have greater acceleration.

✓ 4. The object with smaller mass will have greater acceleration.

**Q.13** A solar cooker uses a mirror to concentrate sunlight onto a vessel. Which type of mirror is used and what property makes it suitable?

Ans ✗ 1. A convex mirror because it provides a wide field of view

✓ 2. A concave mirror because it focuses parallel sunlight to a single point

✗ 3. A plane mirror because it reflects light uniformly

✗ 4. A convex mirror because it spreads light over a large area

**Q.14** 88 is related to 225 following a certain logic. Following the same logic, 124 is related to 261. To which of the following is 178 related, following the same logic?
(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding /subtracting /multiplying 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 ✗ 1. 311

✓ 2. 315

✗ 3. 313

✗ 4. 317

**Q.15** A trader gives 10% discount on the marked price of an article and gives 40 articles free for buying 112 articles and gains 26% in the entire transaction. Assuming a customer pays for 112 articles, the marked price of an article is what percentage more than its cost price?

Ans ✓ 1. 90%

✗ 2. 82%

✗ 3. 98%

✗ 4. 95%

**Q.16** B is the mother of U. U is the sister of N. C is the father of Y. Y is the husband of N. How is Y related to B?

Ans ✗ 1. Daughter`s son

✗ 2. Husband

✓ 3. Daughter`s husband

✗ 4. Father

**Q.17** The average of the first 18 positive multiples of 9 is:

Ans ✗ 1. 81

✗ 2. 9

✓ 3. 85.5

✗ 4. 18

**Q.18** In what ratio should sugar costing ₹38 per kg be mixed with sugar costing ₹55 per kg so that by selling the mixture at ₹57.20 per kg, there is a profit of 10%?

Ans ✓ 1. 3 : 14

✗ 2. 12 : 1

✗ 3. 12 : 5

✗ 4. 15 : 1

**Q.19** **Bee-keeping is suitable as an additional income because it:**

Ans ✓ 1. Requires low investment

✗ 2. Depends on irrigation

✗ 3. Uses chemical fertilisers

✗ 4. Needs large land area

**Q.20** **The number 343264 is divisible by:**

Ans ✗ 1. 43

✓ 2. 32

✗ 3. 29

✗ 4. 27

**Q.21** **Which of the following arrangements produces a nearly uniform magnetic field in the central region of a circular current-carrying system under steady conditions?**

Ans ✗ 1. Using loops of varying radii

✓ 2. Using multiple closely wound turns of identical radius with constant current

✗ 3. Arranging loops in random orientations

✗ 4. Allowing current to vary with time in a single loop

**Q.22** **I, J, K, U, V and W 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. Only two people live between V and J. Only K lives above W. U lives on an even numbered floor. V lives on the lowermost floor. How many people live between I and K?**

Ans ✗ 1. One

✗ 2. Three

✗ 3. Four

✓ 4. Two

**Q.23** **In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol to be followed directly as given in the table.**

| NUMBER/SYMBOL | 7 | $ | 8 | 6 | & | # | 3 | + | 5 | 4 | 2 | 9 | @ | * |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| CODE | | B | C | R | T | H | U | L | P | A | Q | V | N | J | M |

**Conditions –**
**(i) If the first element is a symbol and the last a number, the codes for these two (the first and**
**the last elements) are to be interchanged.**
**(ii) If the first element is an odd number and the last an even number, the first and last elements are to be coded as ©**
**(iii) If both second and third elements are perfect squares, the third element is to be coded as**
**the code for the second element.**
**7 & * 8 4**

Ans ✗ 1. M H M R ©

✗ 2. © H M Q ©

✓ 3. © H M R ©

✗ 4. B H M R Q

**Q.24** **Rupesh has borrowed an amount of ₹4,40,000 from a bank to start a business. How much simple interest (in ₹) will he pay at a rate of 7% per annum after 3 years?**

Ans ✗ 1. 93400

✓ 2. 92400

✗ 3. 91400

✗ 4. 94400

**Q.25** A student drags a suitcase on a flat airport floor. If the force applied and the distance moved both double, how does the work done change?

**Ans**
✗ 1. Work done halves.

✓ 2. Work done becomes four times greater.

✗ 3. Work done doubles.

✗ 4. Work done remains unchanged.

**Q.26** Which method helps prevent rancidity?

**Ans**
✗ 1. Exposing food to sunlight

✗ 2. Heating food continuously

✗ 3. Adding excess water

✓ 4. Storing food in airtight containers

**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 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**
✗ 1. OT - XS

✗ 2. HM - QL

✓ 3. NT - XT

✗ 4. AF - JE

**Q.28** Which of the following options correctly explains why the eastern coastal plains of India are wider and more deltaic than the western coastal plains?

**Ans**
✗ 1. Eastern rivers flow over steep gradients

✓ 2. Eastern rivers form large deltas due to gentle slopes

✗ 3. Eastern plains have more tectonic uplift

✗ 4. Eastern plains receive less tidal influence

**Q.29** The ratio of fare of a person between Auto and Bus is 2 : 3.5 and the ratio of number of passengers travelled, on a particular day, by Auto and Bus is 4 : 7. By what fraction the total fare collected by Auto on that particular day is less than the total fare collected by Bus?

**Ans**
✓ 1. $\dfrac{33}{49}$

✗ 2. $\dfrac{3}{5}$

✗ 3. $\dfrac{2}{5}$

✗ 4. $\dfrac{1}{3}$

**Q.30** What global events in late 2019 and early 2020 have contributed to a rethinking of globalisation strategies among policymakers?

**Ans**
✗ 1. Decrease in oil prices and global warming

✗ 2. Urbanization and migration

✗ 3. Technological stagnation and inflation

✓ 4. COVID-19 pandemic

**Q.31** Refer to the following letter and symbol series and answer the question that follows. Counting to be done from left to right only.

**(Left) M L Z Q @ L X + E S E / J L Q Y Q W + X R (Right)**

How many such letters are there each of which is immediately preceded by a symbol and also immediately followed by a symbol?

**Ans** ✓ 1. None

✗ 2. One

✗ 3. Three

✗ 4. Two

**Q.32** Which of the following letter-clusters should replace # and % so that the pattern and relationship followed between the letter-cluster pair on the left side of :: is the same as that on the right side of :: ?

**# : GJE :: SVQ : %**

**Ans** ✗ 1. # = IPG, % = QTM

✓ 2. # = ILG, % = QTO

✗ 3. # = MKG, % = QKI

✗ 4. # = PLG, % = QJN

**Q.33** If $\dfrac{x}{x^2 - 4x + 1} = \dfrac{1}{9}$, then the value of $x^3 + \dfrac{1}{x^3}$ is:

**Ans** ✗ 1. 729

✗ 2. 1256

✗ 3. 1839

✓ 4. 2158

**Q.34** In a certain code language,
A + B means 'A is the daughter 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 E related to K if 'E x F – G + H ÷ K'?

**Ans** ✗ 1. Daughter

✗ 2. Wife

✓ 3. Brother's wife

✗ 4. Brother's daughter

**Q.35** This question is based on the five, three-digit numbers given below.
(Left) 694 874 742 459 648 (Right)
(Example- 697 – First digit = 6, second digit = 9 and third digit = 7)

What will be the resultant if second digit of the highest number is added to the third digit of lowest number?

**Ans** ✓ 1. 16

✗ 2. 14

✗ 3. 12

✗ 4. 13

**Q.36** In the context of uniform circular motion, which of the following examples from everyday life best illustrates this concept?

**Ans** ✓ 1. A satellite revolving around the Earth at a fixed speed in a circular orbit

✗ 2. A pendulum bob swinging to and fro

✗ 3. A car moving with changing speed along a circular track

✗ 4. A person walking randomly in a park

**Q.37** Who is the author of the book titled 'I Am?', which was launched by Vice-president of India, Jagdeep Dhankhar in February 2025?

Ans   ✗ 1. Grandhi Mallikarjuna Rao

  ✗ 2. Roshni Nadar

  ✓ 3. Gopichand P. Hinduja

  ✗ 4. Satya Nadella

**Q.38** Which observation best supports the statement that humans have double circulation of blood?

Ans   ✓ 1. Blood passes through the heart twice in one complete circulation

  ✗ 2. Blood flows only once through the heart in one complete cycle

  ✗ 3. Right side of the heart pumps oxygenated blood

  ✗ 4. Oxygenated and deoxygenated blood mix in the heart

**Q.39** What should come in place of '?' in the given series?

**3 8 6 11 9 14 ?**

Ans   ✓ 1. 12

  ✗ 2. 16

  ✗ 3. 17

  ✗ 4. 15

**Q.40** In 2025, which Indian state government announced a legacy policy aimed at ensuring the long-term utilization of sports infrastructure developed for the National Games?

Ans   ✓ 1. Uttarakhand

  ✗ 2. Bihar

  ✗ 3. Gujarat

  ✗ 4. Maharashtra

**Q.41** What is the mean of the following distribution?

| Marks | 10 | 28 | 48 | 69 | 87 |
|---|---|---|---|---|---|
| No. of Students | 15 | 34 | 37 | 44 | 12 |

Ans   ✗ 1. 71

  ✓ 2. 49

  ✗ 3. 78

  ✗ 4. 34

**Q.42** L, I, S, T, E and N, each has a different age. Only N is younger than L. S is older than T, but younger than E. Only I is older than E. Who is the third youngest?

Ans   ✓ 1. T

  ✗ 2. I

  ✗ 3. E

  ✗ 4. N

**Q.43** Animal tissues differ from plant tissues because animal tissues:

Ans   ✗ 1. Lack specialized functions

  ✗ 2. Show unlimited growth

  ✓ 3. Are mostly living and flexible

  ✗ 4. Possess rigid cell walls

**Q.44** Refer to the two statements given below and choose the CORRECT option.

Statement A: Mixed cropping helps reduce the risk of total crop failure under adverse environmental conditions.

Statement B: In mixed cropping, different crops are grown in a definite row arrangement to minimise competition.

Ans ✗ 1. Both statements A and B are incorrect.

✗ 2. Statement A is incorrect but B is correct.

✗ 3. Both statements A and B are correct.

✔ 4. Statement A is correct but B is incorrect.

**Q.45** When an object is placed at infinity in front of a convex mirror, what is the nature of the image formed?

Ans ✗ 1. Real and inverted

✗ 2. Real and erect

✔ 3. Virtual and erect

✗ 4. Virtual and inverted

**Q.46** Seven people, F, J, M, L, R, V and X, are sitting in a row, facing north.
Only V sits to the left of F. Only four people sit between V and J. Only X sits between R and L, and R is not an immediate neighbor of J.
How many people sit to the left of L?

Ans ✗ 1. 2

✗ 2. 1

✔ 3. 4

✗ 4. 3

**Q.47** A student claims that the force exerted by the Earth on the Moon is much stronger than the force exerted by the Moon on the Earth. Based on Newton's third law and the Universal Law of Gravitation, is this claim correct?

Ans ✔ 1. No, both forces are equal in magnitude but opposite in direction

✗ 2. No, Earth exerts a much smaller force on the Moon

✗ 3. Yes, because Earth is more massive, it exerts more force

✗ 4. No, the Moon exerts a stronger force because it is closer to Earth

**Q.48** Why is it important to dry agricultural produce first in sunlight and then in shade before storage?

Ans ✔ 1. To reduce moisture content and prevent growth of pests and fungi.

✗ 2. To improve the color and taste of the produce.

✗ 3. To increase the size and brightness of the grains.

✗ 4. To make the grains easier to pack and prevent growth of weeds.

**Q.49** If two cars start at the same point and move along a straight road, Car X at a constant speed of 40 km/h and Car Y at a constant speed of 60 km/h, which statement correctly compares their motions after 2 hours?

Ans ✗ 1. Car Y will be 20 km ahead of Car X after 2 hours.

✔ 2. Car Y will be 40 km ahead of Car X after 2 hours.

✗ 3. Car X will be 40 km ahead of Car Y after 2 hours.

✗ 4. Both cars will have traveled the same distance after 2 hours.

**Q.50** One root of the quadratic equation $2x^2+(k+3)x+2k=0$ is reciprocal of the other. Find the roots.

**Ans**

✗ 1. $\dfrac{1}{2}$ and $2$

✗ 2. 1 and 1

✓ 3. -1 and -1

✗ 4. -1 and 1

**Q.51** Which substance has a molecular mass of 44 u?

**Ans**

✗ 1. Carbon monoxide

✓ 2. Carbon dioxide

✗ 3. Methane

✗ 4. Ammonia

**Q.52** In graphite, a carbon atom is attached with:

**Ans**

✗ 1. One other carbon atom

✗ 2. Four other carbon atoms

✗ 3. Two other carbon atoms

✓ 4. Three other carbon atoms

**Q.53** A road roller of diameter 2.24 m and length 1 m has to press a ground of area 880 $m^2$. How many revolutions does it make to complete the work?

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

**Ans**

✗ 1. 109

✓ 2. 125

✗ 3. 100

✗ 4. 114

**Q.54** Which measure has been made mandatory for brick kilns in India to reduce emissions, as per the 2024 government report on pollution control?

**Ans**

✗ 1. Use of electrostatic filters in stacks

✗ 2. Conversion to solar thermal drying systems

✓ 3. Transition to zig-zag kiln technology

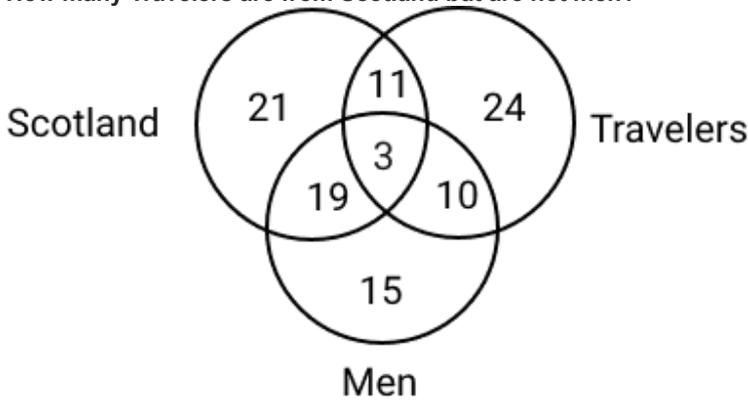✗ 4. Retrofitting of biomass combustion units

**Q.55** If an atom loses two electrons, which of the following changes will occur?

**Ans**

✓ 1. The atom will become a cation with +2 charge.

✗ 2. The atomic number will decrease by 2.

✗ 3. The neutron number will decrease by 2.

✗ 4. The atomic number will increase by 2.

**Q.56** A 200 m long train crosses a man walking at a speed of 6.6 km/h in the opposite direction in 15 seconds. What is the speed (in km/h) of the train?

**Ans**

✗ 1. 46.3

✓ 2. 41.4

✗ 3. 42.2

✗ 4. 37.2

**Q.57** Study the given Venn diagram carefully and answer the question. The numbers in different sections indicate the number of persons. (NOTE: You have to take the given data to be true even if they seem to be at variance from commonly known facts.)
How many Travelers are from Scotland but are not men?



**Ans**
 ✗ 1. 10
 ✗ 2. 15
 ✗ 3. 19
 ✔ 4. 11

**Q.58** Which calculation correctly gives the molecular mass of nitric acid ($HNO_3$)?
**Ans**
 ✔ 1. 1 + 14 + 48
 ✗ 2. 1 + 14 + 3
 ✗ 3. 2 + 14 + 48
 ✗ 4. 1 + 14 + 16

**Q.59** In covering a distance of 130 km, Amit takes 4 hours more than Vinay. If Amit doubles his speed, then he would take 9 hour less than Vinay. Amit's original speed is:
**Ans**
 ✗ 1. 9 km/h
 ✗ 2. 14 km/h
 ✔ 3. 5 km/h
 ✗ 4. 6 km/h

**Q.60** Let C be a circle with centre O, and R be an external point to C. Let RP and RQ be two tangents to circle C with P and Q being the points of tangency, respectively. If $\angle PRQ = 60°$, then find $\angle POQ$.
**Ans**
 ✔ 1. 120°
 ✗ 2. 80°
 ✗ 3. 100°
 ✗ 4. 60°

**Q.61** Select the correct option regarding the following two statements labelled Assertion (A) and Reason (R).

**Assertion (A):** Burning plastic waste is a safe method of disposal.
**Reason (R):** Burning plastic releases toxic gases harmful to humans and the environment.
**Ans**
 ✗ 1. Assertion is true, reason is false
 ✔ 2. Assertion is false, reason is true
 ✗ 3. Both assertion and reason are true, but reason does not correctly explain the assertion
 ✗ 4. Both assertion and reason are true, and reason correctly explains the assertion

**Q.62** If at the same rate of interest, in 2 years, the simple interest is ₹48 and compound interest, compounded annually, is ₹54, then what is the principal (in ₹)?

**Ans**
✗ 1. 89

✗ 2. 91

✓ 3. 96

✗ 4. 100

**Q.63** What is the mass by mass percentage of salt in a solution prepared by dissolving 10 g of salt in 90 g of water?

**Ans**
✗ 1. 90%

✗ 2. 1%

✗ 3. 100%

✓ 4. 10%

**Q.64** In this question, a group of number/symbol is coded using letter codes as per the codes given below and the conditions which follow. The correct combination of codes following the conditions is your answer. If none of the conditions follow, then codes for the respective Number/Symbol to be followed directly as given in the table.

| Number/symbol | 2 | @ | 9 | 5 | $ | 3 | & | % | # | 7 | + | 4 | 8 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Code | P | T | L | J | A | W | E | Q | D | R | S | B | U | F |

Conditions –
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.
If the first element is an odd number and the last an even number, the first and last elements are to be coded as *
If both second and third elements are perfect squares, the third element is to be coded as the code for the second element.
What will be the code for the following group of number-symbol?
537+

**Ans**
✓ 1. SWRJ

✗ 2. JWRS

✗ 3. JRWS

✗ 4. SRWJ

**Q.65** What should come in place of the question mark (?) in the given series?

10 13 19 28 40 ?

**Ans**
✓ 1. 55

✗ 2. 52

✗ 3. 54

✗ 4. 53

**Q.66** Which of the following features distinguishes the Purvanchal hills from the rest of the Himalayan mountain system?

**Ans**
✓ 1. They stretch in a convex arc along the eastern frontier

✗ 2. They include the Aravalli and Satpura hill groups

✗ 3. They are snow-covered throughout the year

✗ 4. They form the highest peaks of the Zanskar range

**Q.67** A farming community wants to maximize crop yield despite limited increase in cultivable land. Which set of practices should they prioritize to achieve this goal?

**Ans**
✗ 1. Farming without introducing modern technology or high-yielding varieties.

✓ 2. Crop variety improvement, crop production improvement, and crop protection management.

✗ 3. Solely expanding the use of traditional farming methods.

✗ 4. Crop variety improvement and crop production improvement only.

**Q.68** Which of the following was NOT a major recommendation of the Kelkar Task Force (2002) on direct taxes?

**Ans**
✗ 1. Extension of PAN to cover all economic agents/citizens

✔ 2. Reduction in corporate tax rate to 40 percent for domestic companies

✗ 3. Elimination of the standard deduction for salaried taxpayers

✗ 4. Elimination of the minimum alternate tax on corporate entities

**Q.69** Which statement correctly describes an ion?

**Ans**
✗ 1. A molecule containing similar atoms only

✔ 2. A charged atom or group of atoms

✗ 3. A compound formed by covalent bonds

✗ 4. A neutral atom formed by chemical bonding

**Q.70** A man bought two types of sharpeners, one at ₹18 for 9 sharpeners and the other at ₹8 per sharpener. He purchased an equal number of each type and sold all the sharpeners at ₹8 per piece. Find his percentage profit.

**Ans**
✗ 1. 75%

✗ 2. 80%

✔ 3. 60%

✗ 4. 85%

**Q.71** A cubical gift box has each side measuring 12.4 cm. It is to be wrapped all over with a gift paper. Find the area to be wrapped.

**Ans**
✔ 1. 922.56 cm2

✗ 2. 822.75 cm2

✗ 3. 1022.45 cm2

✗ 4. 1082.50 cm2

**Q.72** Mr. Madan got 9 out of 10 marks in English, 15 out of 16 in life sciences and the ratio of the percentage of his marks in English and Mathematics is 15: 16. If the total marks of Mathematics are 20, then find the difference of the percentage of his marks in Mathematics and life sciences.

**Ans**
✗ 1. 3.5%

✗ 2. 4.35%

✔ 3. 2.25%

✗ 4. 5.25%

**Q.73** If x is inversely proportional to y, and y = 7 when x = 16, find the value of x, when y = 2.

**Ans**
✗ 1. 55

✗ 2. 47

✔ 3. 56

✗ 4. 53

**Q.74** The product of two consecutive natural numbers is 12. The greater of the two numbers is:

**Ans**
✗ 1. 2

✔ 2. 4

✗ 3. 6

✗ 4. 3

**Q.75** Which process is responsible for the removal of waste byproducts from the body in living organisms?

Ans ✗ 1. Transportation

✓ 2. Excretion

✗ 3. Respiration

✗ 4. Nutrition

**Q.76** Read the given statements and conclusions carefully. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. You have to decide which conclusion(s) logically follow(s) from the given statements.

Statements: All stamp are logo. All stamp are cheque. All stamp are document.

Conclusions (I): All logo are document.
Conclusions (II): Some document are cheque.

Ans ✗ 1. Both conclusions (I) and (II) follow

✗ 2. Neither conclusion (I) nor (II) follows

✗ 3. Only conclusion (I) follows

✓ 4. Only conclusion (II) follows

**Q.77** A tap can fill a cistern in 27 hours, while another tap can empty the full cistern in 36 hours. If the cistern is initially empty and both taps are opened together, find the time (in hours) required to fill one-fourth of the cistern.

Ans ✓ 1. 27

✗ 2. 81

✗ 3. 108

✗ 4. 54

**Q.78** Article 23 of the Indian Constitution prohibits which of the following?

Ans ✓ 1. Prohibition of traffic in human beings and forced labour

✗ 2. Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth

✗ 3. Prohibition of solemnisation of child marriages

✗ 4. Prohibition of employment of children in factories, etc.

**Q.79** What was the immediate cause that sparked the 1857 uprising among Indian sepoys?

Ans ✓ 1. Use of greased cartridges in Enfield rifles

✗ 2. Heavy taxation

✗ 3. Disbandment of local rulers

✗ 4. Attack on Lucknow by the British army

**Q.80** A person with both myopia and hypermetropia is most likely to use which type of lens?

Ans ✗ 1. Concave lens

✗ 2. Cylindrical lens

✗ 3. Convex lens

✓ 4. Bi-focal lens

**Q.81** An object of mass 3 kg initially at rest is subjected to a constant force of 9 N for 2 seconds. What will be its final velocity?

Ans ✗ 1. 3 m/s

✗ 2. 18 m/s

✗ 3. 9 m/s

✓ 4. 6 m/s

**Q.82** A shopkeeper bought six identical mobile phones for ₹72,000. He sold two of these mobile phones for ₹42,000. Find his gain percentage.

Ans
- ✗ 1. 78%
- ✗ 2. 76%
- ✔ 3. 75%
- ✗ 4. 77%

**Q.83** Which of the following bodies is described as the "real executive" in the Indian political system?

Ans
- ✗ 1. Council of Ministers
- ✗ 2. Supreme Court of India
- ✗ 3. President of India
- ✔ 4. Prime Minister of India

**Q.84** If + means - , - means x , x means ÷ , ÷ means +, then what will come in place of the question mark (?) in the following equation?

**53+28÷72×8-3=?**

Ans
- ✗ 1. 51
- ✗ 2. 28
- ✔ 3. 52
- ✗ 4. 27

**Q.85** Which state hosted the 38$^{th}$ National Games of India in 2025?

Ans
- ✗ 1. Karnataka
- ✗ 2. Maharashtra
- ✔ 3. Uttarakhand
- ✗ 4. Gujarat

**Q.86** Solve the following linear equations.

$$x + y - 2z = 10, \quad 3x + y - z = 12, \quad x + 2y - z = 5$$

Ans
- ✗ 1. x = −4, y = 1, z = 3
- ✔ 2. x = 3, y = −1, z = −4
- ✗ 3. x = 4, y = −1, z = −3
- ✗ 4. x = −3, y = 1, z = 4

**Q.87** Who is the Chairperson of the Hyderabad City Security Council (HCSC) supporting the STREE Summit 2025?

Ans
- ✗ 1. Geeta Goti
- ✔ 2. CV Anand
- ✗ 3. C Shekar Reddy
- ✗ 4. Joshna Chinappa

**Q.88** Three bells ring at intervals of 4, 6, and 9 minutes, respectively. If they all ring together at 9:00 a.m., at what time will they ring together again?

Ans
- ✗ 1. 9:42 a.m.
- ✗ 2. 9:48 a.m.
- ✗ 3. 9:54 a.m.
- ✔ 4. 9:36 a.m.

**Q.89** Equal pieces of zinc and copper are added separately to dilute sulphuric acid. Which observation is CORRECT?

Ans ✗ 1. Both metals evolve hydrogen gas

✗ 2. Neither metal evolves hydrogen gas

✓ 3. Only zinc evolves hydrogen gas

✗ 4. Only copper evolves hydrogen gas

**Q.90** KJ 3 is related to MF -10 in a certain way. In the same way, EH 6 is related to GD -7. To which of the given options is QJ 4 related, following the same logic?

Ans ✗ 1. RE -7

✓ 2. SF -9

✗ 3. RF -9

✗ 4. SE -7

**Q.91** Which reformer attempted to synthesize Indian and Western religious thought in the 19th century?

Ans ✗ 1. Keshab Chandra Sen

✗ 2. Swami Vivekananda

✗ 3. Sir Syed Ahmed Khan

✓ 4. Raja Ram Mohan Roy

**Q.92** Find the mean proportional of 144 and 9.

Ans ✗ 1. 37

✗ 2. 35

✗ 3. 39

✓ 4. 36

**Q.93** Six friends, O, P, Q, G, H and I, live on six different floors of the same building. The lowermost floor in the building is numbered 1, the floor above it is numbered 2 and so on, till the topmost floor, which is numbered 6.
Q lives on an odd-numbered floor. Only two people live between Q and O. H lives immediately above O. G lives immediately below P.
How many people live between I and P?

Ans ✗ 1. None

✗ 2. Three

✗ 3. One

✓ 4. Two

**Q.94** In which of the following organisms are chromoplasts present?

Ans ✓ 1. Rose

✗ 2. Amoeba

✗ 3. Hydra

✗ 4. Star fish

**Q.95** **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)**

**(33, 1089, 17)**
**(21, 441, 11)**

Ans  ✗ 1. (18, 324, 11)

 ✓ 2. (27, 729, 14)

 ✗ 3. (30, 900, 16)

 ✗ 4. (24, 576, 13)

**Q.96** **19 is related to 210 following a certain logic. Following the same logic, 27 is related to 298. To which of the following is 43 related, following the same logic?**
**(NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding /subtracting /multiplying 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  ✓ 1. 474

 ✗ 2. 478

 ✗ 3. 476

 ✗ 4. 475

**Q.97** **Refer to the following letter, symbol series and answer the question.**
**(Left) Z U % & J L C @ M * N # % Q X Y & $ T E % X (Right)**
**If all the letters are dropped from the series, which of the following will be sixth from the left?**

Ans  ✗ 1. *

 ✗ 2. #

 ✓ 3. %

 ✗ 4. &

**Q.98** **In May 2025, DRDO's DMSRDE laboratory in _____ created an advanced polymeric membrane designed for high-pressure desalination of seawater.**

Ans  ✗ 1. Pune

 ✗ 2. Hyderabad

 ✓ 3. Kanpur

 ✗ 4. Jaipur

**Q.99** **What should come in place of ? in the given series based on the English alphabetical order?**
**TLP SKO RJN QIM ?**

Ans  ✗ 1. PGL

 ✗ 2. PGK

 ✓ 3. PHL

 ✗ 4. PHK

**Q.100** **Simplify: 23 - [3 - {9 - (4 + 5)}]**

Ans  ✓ 1. 20

 ✗ 2. 24

 ✗ 3. 27

 ✗ 4. 17

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