Test Center Name	iON Digital Zone iDZ Asansol
Test Date	17/12/2024
Test Time	12:45 PM - 2:15 PM
Subject	RRB JE DMS CMA CS MS

* 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, CS, MS CBT-1**

Q.1 Which of the following is a primary reason why all multi-cellular organisms do not reproduce by fragmentation?

Ans ✗ 1. Their cells are loosely organised.

✗ 2. They are unicellular.

✗ 3. They have a random arrangement of cells.

✓ 4. They have specialised cells organised into tissues and organs.

Q.2 Which of the following is true about asexual reproduction?

Ans ✓ 1. It results in offspring genetically identical to the parent.

✗ 2. It requires fertilisation.

✗ 3. It involves two parent organisms.

✗ 4. It requires complex reproductive organs.

Q.3 GJBF is related to ILDH in a certain way based on the English alphabetical order. In the same way, JMEI is related to LOGK. To which of the following is MPHL related, following the same logic?

Ans ✗ 1. ORNJ

✗ 2. ROJN

✗ 3. RONJ

✓ 4. ORJN

Q.4 For a concave mirror, where is the centre of curvature located relative to the mirror?

Ans ✗ 1. At the mirror's surface

✗ 2. Behind the mirror

✓ 3. In front of the mirror

✗ 4. At the mirror's focal point

Q.5 A number when increased by 50 %', gives 2790. The number is:

Ans ✗ 1. 5580

✗ 2. 3720

✓ 3. 1860

✗ 4. 930

Q.6	In which language was the classic Indian novel 'Chandrakanta' originally written?
Ans	✗ 1. Bengali
	✓ 2. Hindi
	✗ 3. Tamil
	✗ 4. Urdu

Q.7	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	✓ 1. ENPU
	✗ 2. KSVA
	✗ 3. CKNS
	✗ 4. HPSX

Q.8	What should come in place of the question mark (?) in the given series? 160 151 141 130 118 ?
Ans	✓ 1. 105
	✗ 2. 101
	✗ 3. 95
	✗ 4. 91

Q.9	Which of the following is NOT a homologous series?
Ans	✗ 1. C_3H_7OH , C_4H_9OH , $C_5H_{11}OH$, $C_6H_{11}OH$
	✗ 2. CH_4 , C_2H_6 , C_3H_8 , C_4H_{10}
	✗ 3. C_2H_2 , C_2H_4 , C_3H_6 , C_4H_8
	✓ 4. C_2H_4 , C_2H_6 , C_3H_6 , C_4H_8

Q.10	This question is based on the five, four-digit numbers given below. (Left) 5479 3126 6785 9254 1630 (Right) (Example: 697 – First digit = 6, second digit = 9 and third digit = 7) NOTE: All the operations to be performed from left to right. What will be the resultant if the fourth digit of the second-greatest number is added to the third digit of the smallest number?
Ans	✗ 1. 14
	✗ 2. 12
	✓ 3. 8
	✗ 4. 10

Q.11	A double displacement reaction typically involves the exchange of:
Ans	✓ 1. ions
	✗ 2. electrons
	✗ 3. protons
	✗ 4. neutrons

Q.12	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	✔ 1. VW – XZ
	✘ 2. JL – OQ
	✘ 3. DF – IK
	✘ 4. MO – RT

Q.13	If x is inversely proportional to y, and y = 6 when x = 7, find the value of x, when y = 64.
Ans	✔ 1. $\dfrac{21}{32}$
	✘ 2. $\dfrac{23}{35}$
	✘ 3. $\dfrac{21}{33}$
	✘ 4. $\dfrac{22}{33}$

Q.14	The ratio of the lengths of two corresponding sides of two similar triangles is 17 : 13. The ratio of the areas of these two triangles, in the order mentioned, is:
Ans	✔ 1. 289 : 169
	✘ 2. $17\sqrt{17} : 13$
	✘ 3. 17 : 13
	✘ 4. 290 : 170

Q.15	In a certain code language, 'hat tie watch' is coded as 'zm ph mt', 'belt bow tie' is coded as 'la oe zm', 'bow watch clip' is coded as 'oe mt dy'. What is the code for 'hat' in that language? (Note: All the codes are two-letter coded only.)
Ans	✔ 1. ph
	✘ 2. oe
	✘ 3. zm
	✘ 4. mt

Q.16	Which of the following ratio is smallest?
Ans	✔ 1. 19 : 60
	✘ 2. 29 : 55
	✘ 3. 15 : 47
	✘ 4. 18 : 42

Q.17	When a metal and sulphuric acid react with each other, metal displaces hydrogen, which is higher in the reactivity series. Identify the metal for which the bubbling of hydrogen gas will be the fastest.
Ans	✔ 1. Magnesium
	✘ 2. Iron
	✘ 3. Aluminium
	✘ 4. Zinc

Q.18	35 men can do a piece of work in 48 days. The number of men required to complete the same work in 21 days is:
Ans	✘ 1. 77
	✘ 2. 72
	✔ 3. 80
	✘ 4. 79

Q.19	If the resistance in a circuit is increased while the voltage remains constant, the current will _____.
Ans	✘ 1. double
	✘ 2. increase
	✔ 3. decrease
	✘ 4. remain constant

Q.20	Two sets of numbers are given below. In each set of numbers, certain mathematical operation(s) on the first number result(s) in the second number. Similarly, certain mathematical operation(s) on the second number result(s) in the third number and so on. Which of the given options follows the same set of operations as in the given 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.) 12-60-120-130; 14-70-140-150
Ans	✘ 1. 15-75-150-140
	✘ 2. 13-65-130-120
	✘ 3. 11-55-110-130
	✔ 4. 16-80-160-170

Q.21	Find the simple interest (in closest integral ₹) on ₹4000 at 5.25% per annum rate of interest for the period from 5 February 2024 to 6 April 2024
Ans	✘ 1. 36
	✔ 2. 35
	✘ 3. 34
	✘ 4. 33

Q.22	Two taps can fill a cistern in 2 hours and 53 hours respectively. A third tap can empty it in 53 hours. How long (in hours) will it take to fill the empty cistern, if all of them are opened together?
Ans	✘ 1. 4
	✘ 2. 3
	✔ 3. 2
	✘ 4. 5

Q.23	The average price of three items of furniture is Rs 16440. If their prices are in the ratio 3:5:7, the price of the cheapest item (in Rs) is
Ans	✔ 1. 9864
	✘ 2. 3288
	✘ 3. 5480
	✘ 4. 7672

Q.24	If the distance between A and B is 1253 Km. From A, Chaman goes to B with speed 93 km/h and return to A with the speed 95 km/h. Find the average speed of Chaman. (rounded off to two decimal place)
Ans	✔ 1. 93.99 km/h
	✘ 2. 90.46 km/h
	✘ 3. 103.98 km/h
	✘ 4. 94.47 km/h

Q.25	If '×' means 'addition', '+' means 'subtraction', '−' means 'division' and '÷' means 'multiplication', then what will come in place of the question mark (?) in the following equation? 14 + 1 ÷ 7 × 32 − 8 = ?
Ans	✘ 1. 12
	✔ 2. 11
	✘ 3. 14
	✘ 4. 13

Q.26	What is the molecular formula of washing soda?
Ans	✘ 1. $NaHCO_3$
	✔ 2. $Na_2CO_3 \cdot 10H_2O$
	✘ 3. Na_2CO_3
	✘ 4. $NaCl$

Q.27	Correctly match the following Biosphere Reserves to their respective states. Biosphere Reserves States 1. Nokrek a. Meghalaya 2. Panna b. Madhya Pradesh 3. Manas c. Assam
Ans	✔ 1. 1-a, 2-b, 3-c
	✘ 2. 1-a, 2-c, 3-b
	✘ 3. 1-c, 2-b, 3-a
	✘ 4. 1-b, 2-a, 3-c

Q.28	The solution of the system of linear equations is: x + y + z = 6, 2x − y + 3z = 14, −x + 2y −z = −2
Ans	✘ 1. $x = \dfrac{-5}{3}, y = \dfrac{5}{3}, z = -6$
	✘ 2. $x = \dfrac{5}{3}, y = \dfrac{-5}{3}, z = 6$
	✘ 3. $x = \dfrac{4}{3}, y = \dfrac{-4}{3}, z = 5$
	✔ 4. $x = \dfrac{-4}{3}, y = \dfrac{4}{3}, z = 6$

Q.29	In a row of 25 students facing north, Manoj is 15th from the right end. If Harish is 10th to the left of Manoj, what is Harish's position from the left end of the row?
Ans	✔ 1. 1st
	✘ 2. 2nd
	✘ 3. 3rd
	✘ 4. 4th

Q.30	What is the pH of a solution containing significant concentrations of H^+ ions?
Ans	✘ 1. 7
	✔ 2. Less than 7
	✘ 3. Greater than 7
	✘ 4. Cannot be determined

Q.31	With respect to Quad Leaders' Summit, which of the following statements is/are correct?
	1) The Quad Leaders' Summit was held in Wilmington (US) in 2024.
	2) The year 2024 marks 22 years since the formation of the grouping.
	3) India will host the 2025 Quad Leaders Summit.
Ans	✘ 1. 1 and 2 only
	✔ 2. 1 and 3 only
	✘ 3. 1 only
	✘ 4. 2 and 3 only

Q.32	How many members of the Rajya Sabha are nominated by the President of India?
Ans	✘ 1. 15
	✘ 2. 8
	✘ 3. 10
	✔ 4. 12

Q.33	What should come in place of the question mark (?) in the given series?
	78 79 83 92 108 ?
Ans	✘ 1. 132
	✘ 2. 134
	✔ 3. 133
	✘ 4. 135

Q.34	A shopkeeper lists the price of a fan at 25% above its cost price and offers a 10% discount on its list price. If he earns a profit of ₹117, then what is the list price (in ₹) of the fan?
Ans	✘ 1. 1346
	✔ 2. 1170
	✘ 3. 1308
	✘ 4. 896

Q.35	Which of the following is true for a balanced chemical equation?
Ans	✔ 1. The total number of atoms for each element is the same on both sides of the equation.
	✘ 2. The products have more atoms than the reactants.
	✘ 3. The mass of reactants is always greater than the mass of products.
	✘ 4. The number of molecules on each side is always equal.

Q.36	Which of the following statements is correct regarding magnets?
Ans	✔ 1. A magnet is a dipole with north and south poles.
	✘ 2. A magnet produces magnetic as well as electric fields.
	✘ 3. A magnet can attract an electron.
	✘ 4. A magnet can have either north or south pole.

Q.37	The difference in the age of two people is 24 years. If 6 years ago, the older of the two was four times as old as the younger one, then find their present ages.
Ans	✘ 1. 15 and 39 years
	✘ 2. 12 and 36 years
	✘ 3. 16 and 40 years
	✔ 4. 14 and 38 years

Q.38	What is the sum of the numbers between 250 and 450, such that when it is divided by 8, 12 and 18, it leaves no remainder?
Ans	✘ 1. 1008
	✔ 2. 1080
	✘ 3. 936
	✘ 4. 1152

Q.39	In surgical procedures for contraception in males, sperm transfer gets prevented if which of the following is blocked?
Ans	✘ 1. Ovary
	✘ 2. Fallopian tubes
	✘ 3. Testes
	✔ 4. Vas deferens

Q.40	What develops into fruit after fertilisation?
Ans	✘ 1. Style
	✘ 2. Stigma
	✘ 3. Anther
	✔ 4. Ovary

Q.41	What should come in place of the question mark (?) in the given series based on the English alphabetical order? TUR FGD RSP DEB ?
Ans	✘ 1. NPQ
	✔ 2. PQN
	✘ 3. NQP
	✘ 4. PNQ

Q.42	What is the average of all the natural numbers from 1 to 95?
Ans	✘ 1. 48.5
	✘ 2. 49
	✔ 3. 48
	✘ 4. 47.5

Q.43 Which status was conferred upon Shipping Corporation of India (SCI) by the Government of India in August 2008?

Ans
- ✘ 1. Miniratna
- ✘ 2. Dashratna
- ✘ 3. Maharatna
- ✔ 4. Navratna

Q.44 When the pH of rainwater falls below 5.6, it is commonly referred to as:

Ans
- ✘ 1. alkaline rain
- ✔ 2. acid rain
- ✘ 3. mineral rain
- ✘ 4. hard water

Q.45 Manur starts from Point A and drives 12 km towards the East. He then takes a right turn, drives 11 km, turns right and drives 13 km. He then takes a right turn and drives 17 km. He takes a final right turn, drives 1 km and stops at Point P. How far (shortest distance) and towards which direction should he drive in order to reach Point A again? (All turns are 90 degrees turns only unless specified)

Ans
- ✘ 1. 2 km to the South
- ✔ 2. 6 km to the South
- ✘ 3. 3 km to the South
- ✘ 4. 5 km to the South

Q.46 Refer to the following number, symbol series and answer the question. Counting to be done from left to right only.

(Left) 3 8 9 5 £ 6 3 @ 3 % @ 7 * 1 # 2 6 9 2 7 & £ (Right)

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

Ans
- ✔ 1. 4
- ✘ 2. 6
- ✘ 3. 3
- ✘ 4. 5

Q.47 What is the primary reason for a central bank to increase the reserve requirement ratio of commercial banks?

Ans
- ✔ 1. To decrease the money supply in the economy
- ✘ 2. To increase the money supply in the economy
- ✘ 3. To decrease the profitability of commercial banks
- ✘ 4. To encourage banks to lend more

Q.48 Simplify the given expression.

$(sin A + cosec A)^2 + (cos A − sec A)^2 + 3$

Ans
- ✘ 1. $tan^2A + cot^2A$
- ✘ 2. $3 + tan^2A + cot^2A$
- ✔ 3. $6 + tan^2A + cot^2A$
- ✘ 4. $1 + tan^2A + cot^2A$

Q.49	Which of the following statements best describes what happens in a double displacement reaction?
Ans	✗ 1. Two elements combine to form a compound.
	✗ 2. A compound breaks down into simpler substances.
	✗ 3. Electrons are transferred between atoms.
	✓ 4. Ions in two compounds switch places to form two new compounds.

Q.50	A man sold an article for ₹533 by first giving a d% discount on its marked price, and then another discount having the same nominal value (in ₹). If the marked price of the article is ₹1025, then what is the value of d?
Ans	✗ 1. 22
	✓ 2. 24
	✗ 3. 29
	✗ 4. 21

Q.51	B, C, E, F and H have different heights. B is taller than C. Only E is shorter than F. H is taller than B. How many people are taller than C?
Ans	✓ 1. Two
	✗ 2. One
	✗ 3. Four
	✗ 4. Three

Q.52	P is the daughter of Q's sister R. S is the wife of Q and T is the son of S. How is P related to T?
Ans	✗ 1. Sister's daughter
	✗ 2. Father's daughter
	✗ 3. Father's mother
	✓ 4. Father's sister's daughter

Q.53	What is one of the main attractions of 'Mamallapuram' apart from the dance festival?
Ans	✗ 1. Modern art galleries
	✗ 2. Local handicrafts
	✗ 3. Wildlife sanctuaries
	✓ 4. Architectural beauty of temples

Q.54	Shalini travels a distance of 270 km with speed of 54 km/h and 300 km with 30 km/h by her car. Find the average speed (in km/h) of Shalini.
Ans	✗ 1. 47
	✓ 2. 38
	✗ 3. 44
	✗ 4. 43

Q.55	If the refractive index of water is 1.33, then the speed of light in water is approximately _____.
Ans	✗ 1. 3×10^8 m/s
	✗ 2. 1.5×10^8 m/s
	✓ 3. 2.26×10^8 m/s
	✗ 4. 4×10^8 m/s

Q.56 In a certain code,
'red blue green' is coded as 'dy ph mt',
'blue violet black' is coded as 'lp ph st' and
'black red white' is coded as 'st bq dy'.
All the codes are two-letter codes only.
What is white coded as?

Ans
❌ 1. st

❌ 2. ph

❌ 3. dy

✅ 4. bq

Q.57 What is the result when sodium chloride and silver nitrate are mixed in a double displacement reaction?

Ans
❌ 1. Formation of water

✅ 2. Formation of a precipitate

❌ 3. Formation of a gas

❌ 4. Formation of a salt

Q.58 If the interest earned during the 2nd year on a certain sum is ₹3726, and the rate of interest is 15% per annum compounded annually, then the sum is:

Ans
✅ 1. ₹21600

❌ 2. ₹20885

❌ 3. ₹20835

❌ 4. ₹21185

Q.59 If the object is placed beyond the center of curvature (C) in front of a concave mirror, the image formed will be _____.

Ans
❌ 1. virtual, upright and diminished

❌ 2. real, inverted and enlarged

❌ 3. virtual, upright and enlarged

✅ 4. real, inverted and diminished

Q.60 The special reproductive structures in fungi like Rhizopus, which germinate to form new individuals, are called:

Ans
❌ 1. Anthers

✅ 2. Spores

❌ 3. Gemmules

❌ 4. Pollens

Q.61 KL91 is related to CD66 in a certain way. In the same way, MN81 is related to EF56. To which of the following is OP71 related, following the same logic?

Ans
❌ 1. HG46

✅ 2. GH46

❌ 3. HG56

❌ 4. GH56

Q.62 Find the HCF of 84, 126 and 210.

Ans
❌ 1. 70

✅ 2. 42

❌ 3. 14

❌ 4. 21

Q.63 What are the number of chromosomes in a human male germ cell?

Ans ✗ 1. 46 pairs of Chromosomes

✓ 2. 23 Chromosomes

✗ 3. 23 pairs of Chromosomes

✗ 4. 46 Chromosomes

Q.64 P, Q, R, S, T and U are sitting around a circular table facing the centre. U sits third to the left of T. R sits second to the right of Q. Q is not the immediate neighbour of T. P is not the immediate neighbour of R. Who sits third to the left of Q?

Ans ✗ 1. P

✗ 2. T

✓ 3. S

✗ 4. U

Q.65 The numbers of children in 10 families of a locality are 2, 1, 3, 4, 2, 3, 5, 1, 1, 3. The number of children per family is:

Ans ✗ 1. 3

✗ 2. 2.8

✓ 3. 2.5

✗ 4. 2.4

Q.66 The magnetic field lines of a bar magnet may NOT be drawn using:

Ans ✗ 1. iron filings

✗ 2. a magnetic compass

✓ 3. wood particles

✗ 4. another bar magnet

Q.67 A wire of given material having length L and area of cross-section A has a resistance of 4 Ω. The resistance of another wire of the same material having length L/2 will be:

Ans ✗ 1. 4 Ω

✗ 2. 1 Ω

✗ 3. 8 Ω

✓ 4. 2 Ω

Q.68 Which electrical appliance helps preserve food by maintaining low temperatures?

Ans ✗ 1. Toaster

✗ 2. Electric kettle

✗ 3. Microwave

✓ 4. Refrigerator

Q.69 What is the difference between baking powder and baking soda?

Ans ✗ 1. Baking powder is a mixture of baking soda and hydrochloric acid.

✗ 2. Baking soda is a mixture of baking powder and tartaric acid.

✗ 3. Baking soda is a mixture of baking powder and hydrochloric acid.

✓ 4. Baking powder is a mixture of baking soda and tartaric acid.

Q.70	Find the value of $8.25 \times 6 - 3.14 \times 7 + 2.758$ of $2.5 - 4.365 \times 5$.
Ans	✔ 1. 12.59
	✘ 2. 11.82
	✘ 3. 12.97
	✘ 4. 11.05

Q.71	The average of four consecutive odd numbers is 36. What is the greatest of these numbers?
Ans	✘ 1. 41
	✘ 2. 43
	✔ 3. 39
	✘ 4. 37

Q.72	Which of the following diseases can be prevented by using a mechanical barrier contraceptive method?
Ans	✔ 1. AIDS
	✘ 2. Typhoid
	✘ 3. TB
	✘ 4. Malaria

Q.73	If the mean of the following data is 40, then the value of X is:

xi	10	25	70	85
fi	21	X	22	35

Ans	✘ 1. 134
	✘ 2. 112
	✔ 3. 107
	✘ 4. 120

Q.74	Which of the following statements about AIDS is FALSE?
Ans	✘ 1. AIDS affects the immune system of the body.
	✘ 2. AIDS is caused by the HIV virus.
	✔ 3. AIDS can be transmitted through mosquito bites.
	✘ 4. AIDS can be prevented by practising safe sex.

Q.75	The population of a town in 1927 was 232300. If its population increased in two successive decades by 30% in each decade, the population of the town in 1947 was:
Ans	✘ 1. 392592
	✘ 2. 392583
	✔ 3. 392587
	✘ 4. 392585

Q.76	A question is given, followed by two statements labelled I and II. Identify which of the statements is/are sufficient to answer the question. Q. A, B, C, D and E are sitting in a straight line facing north. Who sits on the extreme left end? (I) A sits fourth to the right of E. (II) Exactly 1 person sits between B and C.
Ans	✗ 1. Both Statements I and II put together (and not independently) are sufficient to answer the question.
	✗ 2. Data in Statement II alone is sufficient to answer the question, while data in Statement I is not.
	✗ 3. Both Statements I and II put together are not sufficient to answer the question.
	✔ 4. Data in Statement I alone is sufficient to answer the question, while data in Statement II is not.

Q.77	Besides being a barrier method of contraception, condoms also serve which of the following purposes?
Ans	✗ 1. Help in transmission of STDs such as gonorrhoea
	✔ 2. Prevent transmission of STDs such as gonorrhoea
	✗ 3. Prevent diseases that spread through skin-to-skin contact
	✗ 4. Decrease sexual desire

Q.78	Hindustan Socialist Republican Association (HSRA) was founded in 1928 in which of the following cities?
Ans	✗ 1. Pune
	✗ 2. Calcutta
	✗ 3. Lahore
	✔ 4. Delhi

Q.79	Which of the following statements is true regarding the refractive index?
Ans	✔ 1. Refractive index of water is always greater than 1.
	✗ 2. Refractive index depends only on the speed of light in vacuum.
	✗ 3. Refractive index of glass is less than 1.
	✗ 4. Refractive index of a given medium is independent of the wavelength of the light.

Q.80	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 ::? # : DGJ :: EHK : %
Ans	✗ 1. # = WXC, % = LOR
	✔ 2. # = WZC, % = LOR
	✗ 3. # = WZC, % = LOP
	✗ 4. # = MZC, % = LOR

Q.81	Each of D, E, F, K, L, M and N has an exam on a different day of a week, starting from Monday and ending on Sunday of the same week. N has exam on Thursday. L has an exam two days before N. Only four people have exams between F and L. M has an exam on one of the days after L. D has an exam on the day immediately before E. How many people have exams between E and M?
Ans	✗ 1. Four
	✔ 2. Two
	✗ 3. Three
	✗ 4. One

Q.82	Let O be the incentre of a triangle PQR and S be a point on the side QR such that OS⊥ QR. If ∠QOS = 15°, then ∠PQR =?
Ans	✗ 1. 75°
	✗ 2. 65°
	✗ 3. 130°
	✓ 4. 150°

Q.83	In Delhi Sultanate, the holder of an 'iqta', who also worked as the administrative head of his 'iqta', was designated as _____.
Ans	✓ 1. muqti
	✗ 2. qazi
	✗ 3. ariz
	✗ 4. wazir

| Q.84 | Read the given statements and conclusions carefully. Assuming that the information given in the statements is true, even if it appears to be at variance with commonly known facts, decide which of the given conclusion(s) logically follow(s) from the statements.

Statements:
All waters are liquids.
All liquids are juices.
All juices are fruits.

Conclusions:
(I) All waters are fruits.
(II) Some fruits are liquids. |
|------|---|
| Ans | ✗ 1. Only conclusion (II) follows. |
| | ✗ 2. Only conclusion (I) follows. |
| | ✗ 3. Neither conclusion (I) nor (II) follows. |
| | ✓ 4. Both conclusions (I) and (II) follow. |

Q.85	The radius of the base of a right circular cone is 21 m and its curved surface area is 1914 m^2. Find the volume (in m^3) of the cone.
Ans	✗ 1. 9549
	✓ 2. 9240
	✗ 3. 10250
	✗ 4. 8549

Q.86	Which of the following Ministries launched the electric mobility promotion scheme in March 2024 to provide short term support to Electric Vehicles?
Ans	✗ 1. Ministry of Environment, Forest and Climate Change
	✗ 2. Ministry of Corporate Affairs
	✓ 3. Ministry of Heavy Industries
	✗ 4. Ministry of Road Transport and Highways

| Q.87 | If 'A' stands for '÷', 'B' stands for 'x', 'C' stands for '+' and 'D' stands for '-', then what will be come in place of the question mark (?) in the following equation?

30 C 48 D 36 B 50 A 20 = ? |
|------|---|
| Ans | ✓ 1. −12 |
| | ✗ 2. −11 |
| | ✗ 3. −14 |
| | ✗ 4. −10 |

Q.88	The number of 176-Ω resistors (in parallel) required to carry 5 A on a 220-V line is:
Ans	✗ 1. 2
	✗ 2. 8
	✓ 3. 4
	✗ 4. 16

Q.89	Students and professors of which IIT have developed an innovative fire rescue drone in June 2024?
Ans	✗ 1. IIT Delhi
	✗ 2. IIT Madras
	✓ 3. IIT Dharwad
	✗ 4. IIT Mandi

Q.90	A six-digit number is divisible by 91. If 143 is added to this number, the resulting number is divisible by which of the following number?
Ans	✗ 1. 91
	✗ 2. 7
	✓ 3. 13
	✗ 4. 11

Q.91	15 is related to 35 following a certain logic. Following the same logic, 21 is related to 49. To which of the given options is 27 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 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. 63
	✗ 2. 69
	✗ 3. 65
	✗ 4. 51

Q.92	If A:B = 1 : 3, B:C = 4 : 3 and C : D = 6 : 7, then A:B:C:D is
Ans	✗ 1. 6:24:18:21
	✗ 2. 8:24:16:21
	✗ 3. 8:22:18:21
	✓ 4. 8:24:18:21

Q.93	Which of the following rights is NOT part of the Right to Life under Article 21 of the Indian Constitution?
Ans	✗ 1. Right to Privacy
	✗ 2. Right to Free Legal Aid
	✓ 3. Right to Property
	✗ 4. Right to Livelihood

Q.94	Which of the following Articles of the Indian Constitution states that there shall be a Legislative Assembly for the National Capital Territory and the seats in such Assembly shall be filled by members chosen by direct election from territorial constituencies in the National Capital Territory?
Ans	✗ 1. Article 239 B
	✓ 2. Article 239 AA
	✗ 3. Article 239 AB
	✗ 4. Article 239A

Q.95	**What should come in place of the question mark (?) in the given series based on the English alphabetical order?** **FMK HOM JQO LSQ ?**
Ans	✗ 1. NUR
	✗ 2. NVR
	✗ 3. NVS
	✓ 4. NUS

Q.96	**Which of the following statements is INCORRECT about the Annual Financial Statement 2024-25?** **1) The Budget 2024-25 will focus on four castes.** **2) 1 crore farmers across the country will be initiated into natural farming, supported by certification and branding in the next 2 years.** **3) 20,000 need-based bio-input resource centres to be established.** **4) 1,000 Industrial Training Institutes will be upgraded in hub and spoke arrangements with outcome orientation.**
Ans	✗ 1. 1 only
	✓ 2. 3 only
	✗ 3. 4 only
	✗ 4. 2 only

Q.97	**Kapil Parmar created history by securing India's first-ever medal in which game at the Paralympic Games 2024?**
Ans	✓ 1. Judo
	✗ 2. Shooting
	✗ 3. Fencing
	✗ 4. Table Tennis

Q.98	**Mendel studied traits such as flower colour and seed shape in pea plants. These traits are called as:**
Ans	✗ 1. genetic codes
	✗ 2. dominant characteristics
	✗ 3. progeny units
	✓ 4. visible characters

Q.99	**The sum of the ages of Ram and Ramesh is 48 years. Four years ago the age of Ram was three times the age of Ramesh. What will be the age of Ramesh five years from now?**
Ans	✗ 1. 18 years
	✗ 2. 21 years
	✓ 3. 19 years
	✗ 4. 14 years

Q.100	**Amit purchased 10 kg of rice at the rate of ₹35 per kg and 39 kg of rice at ₹44 per kg. He sold the mixture at the rate of ₹42 per kg. Find his loss (in ₹).**
Ans	✗ 1. 3
	✗ 2. 13
	✓ 3. 8
	✗ 4. 16