



रेल भर्ती बोर्ड / RAILWAY RECRUITMENT BOARDS



सी ई एन आर पी एफ - ०१/२०२४ - CEN RPF - 01/2024

Community	OBC NCL
Test Center Name	Jagannath Institute Of Engineering And Technology
Test Date	03/12/2024
Test Time	9:00 AM - 10:30 AM
Subject	Recruitment of Sub Inspector Executive in Railway Protection Force and Railway Protection Special Force

* 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 : Arithmetic

Q.1 The average of eight numbers is 20. The average of five of these numbers is 14. The average of the remaining three numbers is

- Ans
- ☒ 1. 31
 - ☒ 2. 32
 - ☒ 3. 30
 - ☒ 4. 29

Q.2 A cone is 12.6 cm high and the radius of the base is 3.2 cm. It is melted and recast into a sphere. Determine the radius of the sphere.(Correct up to one decimal place)

- Ans
- ☒ 1. 3.2 cm
 - ☒ 2. 2.9 cm
 - ☒ 3. 2.1 cm
 - ☒ 4. 1.2 cm

Q.3 The smallest natural number which is divisible by 16, 88, 12 and 22 is:

- Ans
- ☒ 1. 476
 - ☒ 2. 501
 - ☒ 3. 567
 - ☒ 4. 528

Q.4 If the number 934a6281 is completely divisible by 3 and a be the smallest positive integer, then find the value of $(a-2)(a-1)a(a+1)(a+2)(a+3)(a+4)$.

- Ans
- ☒ 1. 5004
 - ☒ 2. 5040
 - ☒ 3. 5400
 - ☒ 4. 4050

Q.5 If the interest earned during the 2nd year on a certain sum is ₹6787, and the rate of interest is 10% per annum compounded annually, then the sum is:

- Ans
- ☒ 1. ₹60805
 - ☒ 2. ₹61700
 - ☒ 3. ₹62005
 - ☒ 4. ₹62530

Q.6 The value of

$$\frac{1}{7} + \frac{5}{7} + \frac{2}{14} + \frac{4}{7} - 2 =$$

Ans

☐ 1. $-\frac{3}{14}$

☒ 2. $-\frac{6}{14}$

☐ 3. $-\frac{5}{14}$

☐ 4. $-\frac{8}{14}$

Q.7 During sale, Raghav bought a notebook marked for ₹60 at 25% discount and a pen marked for ₹80 at 25% discount. How much (in ₹) did he save due to sale?

Ans

☐ 1. 33

☐ 2. 36

☒ 3. 35

☐ 4. 38

Q.8

Find the value of $\left[(23 \times 7) \times \left\{ 6 \div 6 \times \frac{(17 - 13)}{4} \right\} \right]$

Ans

☐ 1. 143

☐ 2. 175

☒ 3. 161

☐ 4. 158

Q.9 The smallest 1-digit number to be added to the 6-digit number 318833 so that it is completely divisible by 11 is:

Ans

☐ 1. 7

☐ 2. 5

☐ 3. 3

☒ 4. 2

Q.10 The expenditure of Sudha is 200% more than her savings. If her expenditure decreases by 4% and savings increase by 28%, then by what percent does her income increase?

Ans

☐ 1. 0.09

☐ 2. 0.07

☒ 3. 0.04

☐ 4. 0.08

Q.11 A number when increased by 50 %, gives 3630. The number is:

Ans

☐ 1. 7260

☐ 2. 4840

☐ 3. 1210

☒ 4. 2420

Q.12 If a 1952 m long train crosses a pole in 122 seconds, then find the time (in seconds) taken by the train to cross a 160 m long platform.

Ans

☐ 1. 128

☒ 2. 132

☐ 3. 137

☐ 4. 135

Q.13 The ratio of numbers of girls and boys participating in sports of a school is 1 : 5. If the number of girls is 249, determine the number of boys participating in the sports.

Ans

☒ 1. 1245

☐ 2. 1275

☐ 3. 1265

☐ 4. 1220

Q.14 If $24 \times 9 \times 720 \div \sqrt{2304} = y + 925$, then find the value of y.

- Ans
- ☐ 1. 2316
 - ☐ 2. 2307
 - ☒ 3. 2315
 - ☐ 4. 2310

Q.15 The average of 41 numbers is 16. The average of the first 17 numbers is 27 and the average of the last 25 numbers is 26. If the 17th number from the beginning is excluded, then what is the average of the remaining numbers?

- Ans
- ☒ 1. 5.075
 - ☐ 2. 9.085
 - ☐ 3. 3.43
 - ☐ 4. 5.5

Q.16 A shopkeeper lists the price of a fan at 20% above its cost price and offers a 15% discount on its list price. If he earns a profit of ₹190, then what is the list price (in ₹) of the fan?

- Ans
- ☐ 1. 11243
 - ☐ 2. 11549
 - ☐ 3. 11528
 - ☒ 4. 11400

Q.17 Express the following as a vulgar fraction.

$$0.23 + 0.54 + 0.3$$

- Ans
- ☐ 1. $\frac{11}{99}$
 - ☐ 2. $\frac{10}{99}$
 - ☒ 3. $\frac{10}{9}$
 - ☐ 4. $\frac{11}{9}$

Q.18 What time (in seconds) is required for a 549 m long train to cross a 421 m long tunnel, if the train travels at a speed of 36 km/h?

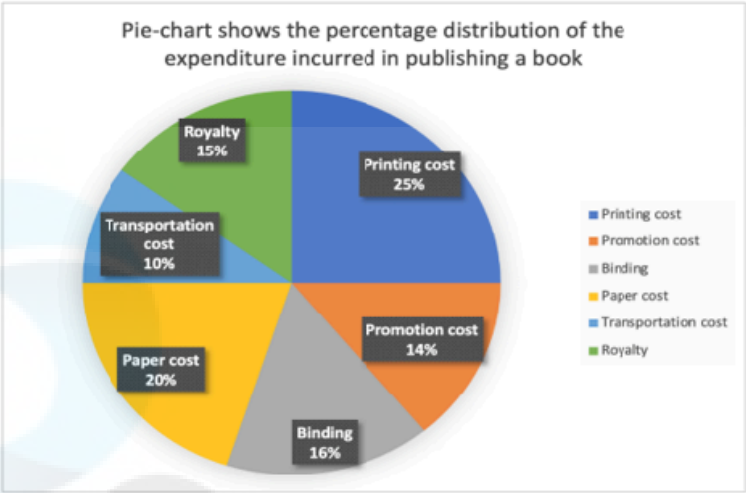
- Ans
- ☐ 1. 90
 - ☐ 2. 89
 - ☐ 3. 101
 - ☒ 4. 97

Q.19 A bank offers 8.1% compound interest per annum calculated on a half-yearly basis. A customer deposits ₹8445 each on 1 January and 1 July of a year. At the end of the year, the amount he would have gained by way of interest is _____. [Give your answer correct to 2 decimal places.]

- Ans
- ☒ 1. ₹1039.91
 - ☐ 2. ₹1057.26
 - ☐ 3. ₹1069.91
 - ☐ 4. ₹1048.4

Q.20

The following pie chart shows the percentage distribution of the expenditure incurred in publishing a book.



If, for a certain quantity of books, the publisher pays ₹20,400 as paper cost, then what is the difference between printing cost and royalty (in ₹) for these books?

- Ans
- ✗ 1. 11600
 - ✓ 2. 10200
 - ✗ 3. 13600
 - ✗ 4. 12400

Q.21 400 oranges were bought at ₹1410 per hundred and were sold at a profit of ₹960. Find the selling price (in ₹) per dozen of oranges.

- Ans
- ✗ 1. 213
 - ✗ 2. 208
 - ✗ 3. 188
 - ✓ 4. 198

Q.22 Which of the following fractions is the largest?

$$\frac{4}{7}, \frac{4}{45}, \frac{65}{87}, \frac{12}{38}$$

- Ans
- ✓ 1. $\frac{65}{87}$
 - ✗ 2. $\frac{4}{7}$
 - ✗ 3. $\frac{4}{45}$
 - ✗ 4. $\frac{12}{38}$

Q.23 Anmol completes his journey in 16 hours. He covers half the distance at 30 km/h and the rest at 50 km/h. What is the length of the journey (in Km)?

- Ans
- ✗ 1. 607
 - ✗ 2. 604
 - ✓ 3. 600
 - ✗ 4. 599

Q.24 If 'a' is the smallest positive integer and the number 8764a529 is completely divisible by 9, then find the value of 17 (3a+5).

- Ans
- ✗ 1. 116
 - ✓ 2. 289
 - ✗ 3. 126
 - ✗ 4. 236

Q.25 Two right circular cones have heights in the ratio 1 : 9 and their base perimeters are in the ratio 9 : 5. Determine their volumes. (Use $\pi = \frac{22}{7}$)

Ans ☐ 1. 25 : 7

☐ 2. 25 : 9

☒ 3. 9 : 25

☐ 4. 7 : 25

Q.26 The average weight of P, Q and R is 45 kg and that of Q and R is 20 kg. Find the weight of P.

Ans ☐ 1. 92 kg

☐ 2. 94 kg

☒ 3. 95 kg

☐ 4. 90 kg

Q.27 Nandini and Nandita invest in a business in the ratio 23 : 3. If total profit is Rs. 2522, then what is difference between the profit (in Rs.) of Nandini and Nandita?

Ans ☐ 1. 1790

☐ 2. 1890

☐ 3. 1840

☒ 4. 1940

Q.28 If x varies inversely as $y^3 - 1$ and is equal to 6 when $y = 3$, find x when $y = 7$.

Ans

☐ 1. $\frac{26}{58}$

☒ 2. $\frac{26}{57}$

☐ 3. $\frac{27}{58}$

☐ 4. $\frac{28}{57}$

Q.29 A shopkeeper marks an article at ₹x and offers a discount of 15% on it. He sells it for ₹408 after charging VAT of 25% on the discounted price. What is the value of ₹x?

Ans ☐ 1. ₹300

☐ 2. ₹200

☐ 3. ₹600

☒ 4. ₹384

Q.30 Two trains of equal length are running on parallel lines in the same direction at speeds of 112 km/h and 20 km/h. The faster train passes the slower train in 45 seconds. The length of each train is:

Ans ☐ 1. 563 meters

☐ 2. 572 meters

☐ 3. 576 meters

☒ 4. 575 meters

Q.31 If $26 \times 5 \times 882 \div \sqrt{2401} = y + 695$, then find the value of y.

Ans ☐ 1. 1655

☐ 2. 1651

☒ 3. 1645

☐ 4. 1652

Q.32 The average of 41 numbers is 33. The average of the first 17 numbers is 41 and the average of the last 25 numbers is 27. If the 17th number from the beginning is excluded, then what is the average of the remaining numbers?

Ans ☐ 1. 34.53

☐ 2. 30.1

☐ 3. 32.215

☒ 4. 33.35

Q.33 The average price of three items of furniture is Rs 15855. If their prices are in the ratio 3:5:7, the price of the costliest item (in Rs) is

Ans ☒ 1. 22197
☐ 2. 7399
☐ 3. 3171
☐ 4. 5285

Q.34 A sum, when invested at 20% simple interest per annum, amounts to ₹2880 after 3 years. What is the simple interest (in ₹) on the same sum at the same rate in 2 year?

Ans ☒ 1. 720
☐ 2. 1440
☐ 3. 2880
☐ 4. 360

Q.35 The total surface area of a solid hemisphere is 152 cm^2 . Its radius (in cm) is: $Take\ \pi = \frac{22}{7}$

Ans ☐ 1. $\sqrt{\frac{541}{66}}$
☐ 2. $\sqrt{\frac{541}{33}}$
☐ 3. $\sqrt{\frac{535}{33}}$
☒ 4. $\sqrt{\frac{532}{33}}$

Section : General Intelligence and Reasoning

Q.36 Each letter in the word COARSE is changed to the letter immediately succeeding 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 third from the right in the new group of letters thus formed?

Ans ☒ 1. P
☐ 2. D
☐ 3. F
☐ 4. S

Q.37 DEF starts from Point A and drives 7 km towards south. He then takes a right turn, drives 19 km, turns right and drives 23 km. He then takes a right turn and drives 27 km. He takes a final right turn, drives 16 km and stops at Point P. How far (the 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 ☐ 1. 5 km towards east
☐ 2. 3 km towards south
☐ 3. 9 km towards north
☒ 4. 8 km towards west

Q.38 16 is related to 62 following a certain logic. Following the same logic, 12 is related to 46. To which of the given options is 21 related to, 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. 86
☒ 2. 82
☐ 3. 80
☐ 4. 84

Q.39 Which numbers should come in place of the question marks (?) in the same sequence to make the series logically complete?
125 127 131 137 145 ? 167 ?

Ans ☒ 1. 155, 181
☐ 2. 152, 182
☐ 3. 159, 189
☐ 4. 156, 185

Q.40 Select the term from among the given options that can replace the question mark (?) in the following series.

TUM 21 RVP 15 ? NXV 3 LYY -3

- Ans
- ✓ 1. PWS 9
 - ✗ 2. QSP 8
 - ✗ 3. ORP 9
 - ✗ 4. PSR 8

Q.41 In the following triads, each group of letters is related to the subsequent one following a certain logic. Select from the given options, the one that follows the same logic.

DIET - IDET - TEID
WASH - AWSH - HSAW

- Ans
- ✗ 1. HUTS - HTUS - STUH
 - ✓ 2. FUME - UFME - EMUF
 - ✗ 3. SANG - ASNG - GANS
 - ✗ 4. TONG - OTNG - ONGT

Q.42 Which of the following letter-number clusters will replace the question mark (?) in the given series to make it logically complete?

ENS 103 HKV 95 KHY 87 NEB 79 QBE 71 ?

- Ans
- ✗ 1. UZG 61
 - ✗ 2. UYK 63
 - ✓ 3. TYH 63
 - ✗ 4. SXF 61

Q.43 Refer to the following letter, symbol series and answer the question that follows. (Counting to be done from left to right only.)

(Left) 7 % 4 £ 5 \$ & 3 Ω + 2 6 @ 8 9 # 1 * ^ (Right)

How many symbols in the series are immediately preceded by another symbol and also immediately followed by a number?

- Ans
- ✓ 1. 2
 - ✗ 2. 1
 - ✗ 3. 0
 - ✗ 4. 3

Q.44 Two sets of numbers are given below. In each set of numbers, certain mathematical operation(s) on the first number results in the second number. Similarly, certain mathematical operation(s) on the second number results 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.)

36 - 18 - 20.4 - 22.8
48 - 24 - 26.4 - 28.8

- Ans
- ✓ 1. 54 - 27 - 29.4 - 31.8
 - ✗ 2. 48 - 24 - 28.4 - 30.8
 - ✗ 3. 72 - 36 - 36.4 - 38.8
 - ✗ 4. 42 - 14 - 16.4 - 18.8

Q.45 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 ::?

: KMR :: BDI : %

- Ans
- ✓ 1. # = DFK; % = IKP
 - ✗ 2. # = DFK; % = IKO
 - ✗ 3. # = EFK; % = IKP
 - ✗ 4. # = DFK; % = IMP

Q.46 Each of P, Q, R, S, T, U and V go to play on a different day of a week starting from Monday and ending on Sunday of the same week.
S goes to play on Tuesday. Exactly two people go to play between S and P. Exactly two people go to play between V and U. Q goes to play on the day immediately after V. Only one person goes to play between R and V. Q goes to play on one of the days after P.
Who goes to play on Monday?

- Ans
- ✗ 1. R
 - ✗ 2. U
 - ✗ 3. V
 - ✓ 4. T

Q.47 In a certain code language, 'CONE' is coded as '1649' and 'NECK' is coded as '2169'. What is the code for 'K' in that language?

- Ans**
- ☐ 1. 1
 - ☐ 2. 9
 - ☐ 3. 6
 - ☒ 4. 2

Q.48 Each vowel in the word LASTING is changed to the letter immediately following it in the English alphabetical order and each consonant is changed to the letter immediately preceding it in the English alphabetical order. How many vowels are there in the group of letters thus formed?

- Ans**
- ☒ 1. 0
 - ☐ 2. 1
 - ☐ 3. 2
 - ☐ 4. 3

Q.49 If 2 is added to each even digit and 1 is subtracted from each odd digit in the number 6159247, what will be the sum of the first two digits from the left in the new number thus formed?

- Ans**
- ☒ 1. 8
 - ☐ 2. 12
 - ☐ 3. 14
 - ☐ 4. 16

Q.50 In a certain code language, 'CHAT' is coded as '1583' and 'ACTS' is coded as '5718'. What is the code for 'S' in that language?

- Ans**
- ☐ 1. 1
 - ☐ 2. 5
 - ☒ 3. 7
 - ☐ 4. 8

Q.51 Vidit starts from Point A and drives 7 km towards South. He then takes a left turn, drives 5 km, turns left and drives 9 km. He then takes a left turn and drives 8 km. He takes a final left 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**
- ☒ 1. 3 km to the east
 - ☐ 2. 4 km to the east
 - ☐ 3. 4 km to the west
 - ☐ 4. 3 km to the west

Q.52 Refer to the following number, symbol series and answer the question that follows. Counting to be done from left to right only.

(Left) 2 & % 4 6 Ω 7 \$ £ 8 & @ 3 # 1 5 * 9 (Right)

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

- Ans**
- ☒ 1. More than two
 - ☐ 2. None
 - ☐ 3. One
 - ☐ 4. Two

Q.53 Identify the figure given in the options which when put in place of the question mark (?) will logically complete the series.

<div>▽</div> <div>∞</div> <div>Ƴ</div>	<div>∞</div> <div>Ƴ</div>	<div>△</div>	<div>Ƴ</div> <div>∞</div> <div>▽</div>	<div>Ƴ</div> <div>∞</div> <div>△</div>	<div>?</div>
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Ans

✓ 1.

<div>Ƴ</div> <div>∞</div> <div>▽</div>

✗ 2.

<div>Ƴ</div> <div>∞</div> <div>△</div>

✗ 3.

<div>⋈</div> <div>∞</div> <div>△</div>

✗ 4.

<div>Ƴ</div> <div>∞</div> <div>▽</div>

Q.54 In a certain code language,
A + B means 'A is the son of B',
A – B means 'A is the brother of B',
A × B means 'A is the wife of B',
and A % B means 'A is the father of B'.

How is S related to H if 'S % D – F × G + H'?

Ans

✓ 1. Son's wife's father

✗ 2. Son's wife's brother

✗ 3. Wife's father

✗ 4. Wife's brother

Q.55 A, B, C, D, E, F and G sit in a straight line facing North. Only two people sit to the right of G. Only two people sit between G and E. Only two people sit between D and B. B sits to the immediate left of G. A sits to the immediate right of F. How many people sit between D and F?

Ans

✗ 1. 2

✗ 2. 1

✗ 3. 3

✓ 4. 4

Q.56 Among five people named A, B, C, D and E, each have a certain age. C is thrice the age of D. The age of A is 3. D is half the age of E. B is twice the age of A. If E is four times the age of B, what is the age of C?

Ans

✗ 1. 34

✓ 2. 36

✗ 3. 38

✗ 4. 40

Q.57 G is the father of H. H is the mother of J. J is the brother of K. K is the son of L. How is G related to L?

Ans

✓ 1. Wife's father

✗ 2. Husband's mother

✗ 3. Wife's brother

✗ 4. Husband's father

Q.58 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 wafers are biscuits.
All biscuits are cookies.
All cookies are pastries.

Conclusions:
(I) All biscuits are wafers.
(II) All pastries are cookies.

- Ans** ☒ 1. Only conclusion (I) follows.
☒ 2. Both conclusions (I) and (II) follow.
☒ 3. Neither conclusion (I) nor (II) follows.
☒ 4. Only conclusion (II) follows.

Q.59 In a certain code language, 'FAIR' is coded as '8547' and 'RAFT' is coded as '5486'. What is the code for 'T' in the given code language?

- Ans** ☒ 1. 5
☒ 2. 4
☒ 3. 6
☒ 4. 8

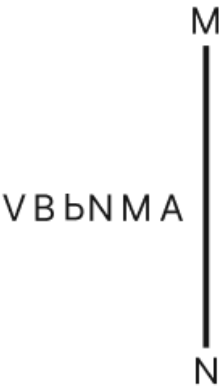
Q.60 A, B, C, D, E and F live on six different floors of the same building. The lowermost floor in the building is numbered 1, the floor above it, number 2 and so on till the topmost floor is numbered 6. B lives on a floor that is a prime number. The product of the floors on which B and E live is 3. Only 2 people live above D. F lives immediately below C. How many people live between A and F?

- Ans** ☒ 1. 3
☒ 2. 1
☒ 3. 2
☒ 4. 4

Q.61 Seven boxes Q, R, S, T, U, V and F are kept one over the other but not necessarily in the same order. Only five boxes are kept between S and U. Only S is kept above V. Only two boxes are kept between Q and T. R is kept immediately above F. T is not kept immediately above R. How many boxes are kept between R and T?

- Ans** ☒ 1. Four
☒ 2. Three
☒ 3. One
☒ 4. Two

Q.62 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



- Ans** ☒ 1. M A N P M V
☒ 2. A M N P V
☒ 3. A M N P V
☒ 4. A M N P V

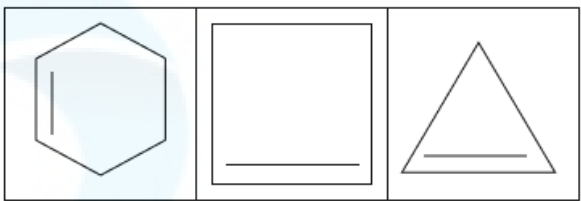
Q.63 Seven people, M, N, O, P, Q, R and T, are sitting around a circular table facing the centre of the table. Only two people sit between T and N when counted from the right of T. Only two people sit between R and P when counted from the right of R. M sits to the immediate right of P. M sits second to the left of T. Q is not an immediate neighbour of R. Who sits immediately to the left of O?

- Ans** ☒ 1. N
☒ 2. P
☒ 3. R
☒ 4. Q

Q.64 CGJB is related to EILD in a certain way based on the English alphabetical order. In the same way, FJME is related to HLOG. To which of the following is IMPH related, following the same logic?

- Ans**
- ☒ 1. KOJR
 - ☒ 2. KORJ
 - ☒ 3. OKRJ
 - ☒ 4. OKJR

Q.65 The 3 figures given below are alike in a certain way as they share certain feature(s). Select the option that shares the same features as the given figures.



Ans

- ☒ 1.
- ☒ 2.
- ☒ 3.
- ☒ 4.

Q.66 Based on the English 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?

- Ans**
- ☒ 1. PKV
 - ☒ 2. LGQ
 - ☒ 3. CXH
 - ☒ 4. XSC

Q.67 What will come in the place of the question mark '?' in the following equation, if '+' and '-' are interchanged and 'x' and '÷' are interchanged?
 $52 + 2 \times 3 \div 6 - 42 + 11 \times 3 \div 3 = ?$

- Ans**
- ☒ 1. 98
 - ☒ 2. 118
 - ☒ 3. 102
 - ☒ 4. 79

Q.68 If 2 is added to each odd digit and 1 is subtracted from each even digit in the number 2836574, what will be the sum of the digits which are third from the left and third from the right in the new number thus formed?

- Ans**
- ☒ 1. 10
 - ☒ 2. 9
 - ☒ 3. 12
 - ☒ 4. 7

Q.69 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 man out is not based on the number of consonants/vowels or their position in the letter-cluster.)

- Ans** ☒ 1. EKN
 ☐ 2. ADI
 ☐ 3. CFK
 ☐ 4. GJO

Q.70 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. TRS
 ☒ 2. EDD
 ☐ 3. XVW
 ☐ 4. WUV

Section : General Awareness

Q.71 Which of the following rivers is known for NOT draining into the sea but rather into salt lakes or sand?

- Ans** ☐ 1. Chambal
 ☐ 2. Krishna
 ☐ 3. Mahanadi
 ☒ 4. Luni

Q.72 Who among the following was elected unopposed as the Deputy Speaker of the 8th Arunachal Pradesh Legislative Assembly?

- Ans** ☐ 1. Sotai Kri
 ☐ 2. Omak Nitik
 ☐ 3. Tapir Gao
 ☒ 4. Kardo Nyigyor

Q.73 The elastic potential energy of a strained body is:

- Ans** ☐ 1. stress × strain
 ☒ 2. $\frac{1}{2} \times \text{stress} \times \text{strain} \times \text{volume}$
 ☐ 3. stress/strain
 ☐ 4. stress × strain / volume

Q.74 Who is the head of Union Executive in India?

- Ans** ☒ 1. The President
 ☐ 2. The Prime Minister
 ☐ 3. The Governor
 ☐ 4. Chief Justice of Supreme Court

Q.75 In which of the following years was the first round table conference held?

- Ans** ☐ 1. 1928
 ☐ 2. 1932
 ☐ 3. 1933
 ☒ 4. 1930

Q.76 ‘Globbatyrnaensis’, a species of ginger, was discovered for the first time in September 2024 by scientists from the Indian Institute of Science Education and Research, Bhopal, from which of the following states?

- Ans** ☐ 1. Madhya Pradesh
 ☐ 2. Kerala
 ☒ 3. Meghalaya
 ☐ 4. Uttarakhand

Q.77 Rohit Sharma finished at which position in the table of leading run-scorers in the Men's T20 World Cup 2024 tournament?

- Ans** ☐ 1. Third
 ☒ 2. Second
 ☐ 3. Fifth
 ☐ 4. First

Q.78	Which Amendment has made the Right to Education a Fundamental Right?
Ans	<div><div><input checked="" type="checkbox"/> 1. 86th Amendment</div><div><input type="checkbox"/> 2. 90th Amendment</div><div><input type="checkbox"/> 3. 92nd Amendment</div><div><input type="checkbox"/> 4. 75th Amendment</div></div>
Q.79	How many indicators were used to calculate the recently published India's National MPI report?
Ans	<div><div><input type="checkbox"/> 1. 10</div><div><input type="checkbox"/> 2. 14</div><div><input type="checkbox"/> 3. 16</div><div><input checked="" type="checkbox"/> 4. 12</div></div>
Q.80	What is the main focus of the 'Kuposhan Mukh Jharkhand' event chaired by Annpurna Devi?
Ans	<div><div><input type="checkbox"/> 1. Improving child education for their welfare</div><div><input type="checkbox"/> 2. Increasing child participation in politics</div><div><input type="checkbox"/> 3. Improving women standards</div><div><input checked="" type="checkbox"/> 4. Improving nutritional standards and child welfare</div></div>
Q.81	Which of the following mountain passes DOES NOT lie in Uttarakhand?
Ans	<div><div><input type="checkbox"/> 1. Lipu Lekh</div><div><input type="checkbox"/> 2. Lwa Dhura</div><div><input checked="" type="checkbox"/> 3. Nathu La</div><div><input type="checkbox"/> 4. Lampiya Dhura</div></div>
Q.82	Which of the following statements is FALSE?
Ans	<div><div><input type="checkbox"/> 1. According to Article 77, all executive actions of the Government of India shall be executed in the name of the President.</div><div><input type="checkbox"/> 2. According to Article 74, the President will act only on the advice of the Council of Ministers.</div><div><input type="checkbox"/> 3. All members of the Council of Ministers hold office during the pleasure of the President.</div><div><input checked="" type="checkbox"/> 4. Article 76 provides for a Council of Ministers headed by the Prime Minister.</div></div>
Q.83	Which of the following roles does the Small Industries Development Bank of India (SIDBI) perform in Indian economy?
Ans	<div><div><input checked="" type="checkbox"/> 1. Financing and promoting Micro, Small, and Medium Enterprises (MSMEs)</div><div><input type="checkbox"/> 2. Supervising credit rating agencies</div><div><input type="checkbox"/> 3. Managing government pension funds</div><div><input type="checkbox"/> 4. Regulating foreign exchange transactions</div></div>
Q.84	'Kathasaritasagara' is a collection of stories composed in _____.
Ans	<div><div><input type="checkbox"/> 1. Telugu</div><div><input checked="" type="checkbox"/> 2. Sanskrit</div><div><input type="checkbox"/> 3. Prakrit</div><div><input type="checkbox"/> 4. Tamil</div></div>
Q.85	In which of the following years was the Overseas Citizenship of India Scheme introduced by amending Citizenship Act 1955?
Ans	<div><div><input type="checkbox"/> 1. 2004</div><div><input checked="" type="checkbox"/> 2. 2005</div><div><input type="checkbox"/> 3. 2001</div><div><input type="checkbox"/> 4. 2009</div></div>
Q.86	The _____ direct(s) and guide(s) the nation/state for equitable society and provide(s) module to the government in formulating policies and enactment of laws.
Ans	<div><div><input type="checkbox"/> 1. Enforcement Directorate</div><div><input type="checkbox"/> 2. Bureaucracy</div><div><input type="checkbox"/> 3. Judiciary</div><div><input checked="" type="checkbox"/> 4. Directive Principles</div></div>
Q.87	Vigyan Yuva 2024 awardee in Biological Sciences category, Prof. Aravind Penmatsa, is Assistant Professor at which of the following institutions?
Ans	<div><div><input type="checkbox"/> 1. IISER Bhopal</div><div><input type="checkbox"/> 2. IIT Bombay</div><div><input checked="" type="checkbox"/> 3. IISc Bengaluru</div><div><input type="checkbox"/> 4. IIM Dhanbad</div></div>

Q.88 A lens has a power of -0.25D . What is the nature and focal length of this lens?

- Ans**
- ☐ 1. Concave lens of focal length -2 metres
 - ☐ 2. Convex lens of focal length 4 metres
 - ☒ 3. Concave lens of focal length -4 metres
 - ☐ 4. Convex lens of focal length -8 metres

Q.89 QUEQIAO-2 signal relay satellite was launched by which country in 2024 to serve as the communication bridge for its future lunar probe missions?

- Ans**
- ☐ 1. Japan
 - ☒ 2. China
 - ☐ 3. North Korea
 - ☐ 4. South Korea

Q.90 Which of the following north-eastern states reported the highest literacy rate according to the Census of India 2011?

- Ans**
- ☐ 1. Meghalaya
 - ☐ 2. Manipur
 - ☒ 3. Mizoram
 - ☐ 4. Assam

Q.91 The Indian Airforce and Army jointly conducted the Vayu-Prahar Exercise in which of the following theatre commands?

- Ans**
- ☐ 1. Southern Theatre
 - ☐ 2. Western Theatre
 - ☐ 3. Northern Theatre
 - ☒ 4. Eastern Theatre

Q.92 Which of the following is the 'Utility of a commodity'?

- Ans**
- ☐ 1. It is the desire of dissatisfying the capacity of a commodity.
 - ☒ 2. It is the want of satisfying the capacity of a commodity.
 - ☐ 3. It is the desire to satisfy the capacity of a commodity.
 - ☐ 4. It is the want of dissatisfying the capacity of a commodity.

Q.93 The Kharif season in India is associated with the cultivation of which of the following crops?

- Ans**
- ☐ 1. Wheat
 - ☐ 2. Gram
 - ☐ 3. Barley
 - ☒ 4. Rice

Q.94 Who wrote the book 'Women Freedom Fighters of India'?

- Ans**
- ☐ 1. EB Havell
 - ☐ 2. Shashi Tharoor
 - ☐ 3. Aravind Adiga
 - ☒ 4. Sanjay Yadav

Q.95 Indian cricketer Virat Kohli equalled Sachin Tendulkar's record of the most ODI centuries with his 49th hundred against which country in November 2023?

- Ans**
- ☒ 1. South Africa
 - ☐ 2. Pakistan
 - ☐ 3. Australia
 - ☐ 4. England

Q.96 In 1991, in order to make international adjustment the rupee was:

- Ans**
- ☐ 1. stabilised
 - ☒ 2. devalued
 - ☐ 3. printed
 - ☐ 4. appreciated

Q.97	In which year was Gibberellic acid discovered by Eiichi Kurosawa, which is known to stimulate seed germination and cell proliferation?
Ans	<div><div><input type="checkbox"/></div>1. 1910</div> <div><div><input type="checkbox"/></div>2. 1975</div> <div><div><input checked="" type="checkbox"/></div>3. 1926</div> <div><div><input type="checkbox"/></div>4. 1950</div>
Q.98	According to the basic road statistics (2017-18) provided by the Ministry of Road Transport and Highways, which state has the largest total surface road length in India?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Maharashtra</div> <div><div><input type="checkbox"/></div>2. Uttar Pradesh</div> <div><div><input type="checkbox"/></div>3. Madhya Pradesh</div> <div><div><input type="checkbox"/></div>4. Rajasthan</div>
Q.99	The World bank comprises of _____.
Ans	<div><div><input type="checkbox"/></div>1. WTO</div> <div><div><input type="checkbox"/></div>2. GATT</div> <div><div><input type="checkbox"/></div>3. IMF</div> <div><div><input checked="" type="checkbox"/></div>4. IBRD</div>
Q.100	How has the advancement of technology impacted employment trends in India?
Ans	<div><div><input type="checkbox"/></div>1. Technological advancement has had no significant impact on employment trends</div> <div><div><input type="checkbox"/></div>2. Only manual and low-skill jobs have been affected by technological advancements</div> <div><div><input checked="" type="checkbox"/></div>3. It has created new job opportunities, especially in the IT and service sectors, while also displacing traditional jobs</div> <div><div><input type="checkbox"/></div>4. Technology has uniformly reduced employment opportunities across all sectors</div>
Q.101	Which of the following is responsible for the protection and enforcement of Fundamental Rights in India?
Ans	<div><div><input type="checkbox"/></div>1. Union Public Service Commission (UPSC)</div> <div><div><input type="checkbox"/></div>2. National Human Rights Commission (NHRC)</div> <div><div><input checked="" type="checkbox"/></div>3. Supreme Court of India</div> <div><div><input type="checkbox"/></div>4. Election Commission of India</div>
Q.102	Which of the following statements is/are true for the Carnatic Music in India? 1.Gitam is the simplest type of composition. 2.Khayal is a part of Carnatic Classical music. 3.Padas are scholarly compositions in Telugu and Tamil languages.
Ans	<div><div><input type="checkbox"/></div>1. Both 1 and 2</div> <div><div><input checked="" type="checkbox"/></div>2. Both 1 and 3</div> <div><div><input type="checkbox"/></div>3. Only 2</div> <div><div><input type="checkbox"/></div>4. Both 2 and 3</div>
Q.103	Manohar Lal Khattar, who resigned in March 2024, was the Chief Minister of which of the following states of India?
Ans	<div><div><input type="checkbox"/></div>1. Jharkhand</div> <div><div><input checked="" type="checkbox"/></div>2. Haryana</div> <div><div><input type="checkbox"/></div>3. Chhattisgarh</div> <div><div><input type="checkbox"/></div>4. Goa</div>
Q.104	The world's only multilateral decision-making forum on climate change with almost complete membership of every country in the world, the United Nations Climate Change Conference, COP28, took place at which place from 30 November to 12 December 2023?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Dubai</div> <div><div><input type="checkbox"/></div>2. New Delhi</div> <div><div><input type="checkbox"/></div>3. Baku</div> <div><div><input type="checkbox"/></div>4. Glasgow</div>
Q.105	Who among the following was the first Secretary of Bethune School established at Calcutta (now Kolkata)?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Ishwar Chandra Vidyasagar</div> <div><div><input type="checkbox"/></div>2. Bal Gangadhar Tilak</div> <div><div><input type="checkbox"/></div>3. Debendranath Tagore</div> <div><div><input type="checkbox"/></div>4. Raja Ram Mohan Roy</div>

Q.106	Name the scientist who developed the process of deciphering the genetic code in the living cells in the 1960s.
Ans	<div><div><input type="checkbox"/></div>1. Archibald Garrod</div> <div><div><input type="checkbox"/></div>2. Wilhelm Johannsen</div> <div><div><input type="checkbox"/></div>3. Erich von Tschermak</div> <div><div><input checked="" type="checkbox"/></div>4. Marshall Nirenberg</div>
Q.107	Where was the inaugural edition of the India-Saudi Arabia Joint Military Exercise 'SADA TANSEEQ' conducted in 2024?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Mahajan, Rajasthan</div> <div><div><input type="checkbox"/></div>2. Suratgarh, Rajasthan</div> <div><div><input type="checkbox"/></div>3. Jaisalmer, Rajasthan</div> <div><div><input type="checkbox"/></div>4. Jaipur, Rajasthan</div>
Q.108	Which of the following is a form of folk music?
Ans	<div><div><input type="checkbox"/></div>1. Dhrupad</div> <div><div><input type="checkbox"/></div>2. Bhand pather</div> <div><div><input type="checkbox"/></div>3. Sufiana kalam</div> <div><div><input checked="" type="checkbox"/></div>4. Naworia-geet</div>
Q.109	Which of the following states recorded a population of more than 10 crore in the Census of India 2011?
Ans	<div><div><input type="checkbox"/></div>1. Rajasthan</div> <div><div><input type="checkbox"/></div>2. Tamil Nadu</div> <div><div><input type="checkbox"/></div>3. Madhya Pradesh</div> <div><div><input checked="" type="checkbox"/></div>4. Bihar</div>
Q.110	Cold sores are painful blisters caused by infection from which virus?
Ans	<div><div><input type="checkbox"/></div>1. H7N9</div> <div><div><input type="checkbox"/></div>2. WNV</div> <div><div><input checked="" type="checkbox"/></div>3. HSV-1</div> <div><div><input type="checkbox"/></div>4. HPV</div>
Q.111	Kulottunga I was a king of which of the following dynasties?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Chola</div> <div><div><input type="checkbox"/></div>2. Rashtrakuta</div> <div><div><input type="checkbox"/></div>3. Gurjara-Partihara</div> <div><div><input type="checkbox"/></div>4. Pandya</div>
Q.112	The Barak River, a headstream of Meghna, rises in which of the following states?
Ans	<div><div><input type="checkbox"/></div>1. Arunachal Pradesh</div> <div><div><input type="checkbox"/></div>2. Assam</div> <div><div><input checked="" type="checkbox"/></div>3. Manipur</div> <div><div><input type="checkbox"/></div>4. West Bengal</div>
Q.113	Which of the following is the standard unit of energy in the International System of Units (SI)?
Ans	<div><div><input type="checkbox"/></div>1. Pascal (Pa)</div> <div><div><input type="checkbox"/></div>2. Watt (W)</div> <div><div><input type="checkbox"/></div>3. Newton (N)</div> <div><div><input checked="" type="checkbox"/></div>4. Joule (J)</div>
Q.114	_____ is a quantitative process of change of scale and size, which can be measured and aided by ethics and norms.
Ans	<div><div><input type="checkbox"/></div>1. Evolution</div> <div><div><input type="checkbox"/></div>2. Growth</div> <div><div><input checked="" type="checkbox"/></div>3. Development</div> <div><div><input type="checkbox"/></div>4. Progress</div>
Q.115	Which writ is issued against executive and inferior judicial bodies to perform their duties which they have failed to perform?
Ans	<div><div><input type="checkbox"/></div>1. Quo Warranto</div> <div><div><input type="checkbox"/></div>2. Prohibition</div> <div><div><input checked="" type="checkbox"/></div>3. Mandamus</div> <div><div><input type="checkbox"/></div>4. Certiorari</div>

Q.116	Which of the following sites is better known as a Chalcolithic Site?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Kayatha</div> <div><div><input type="checkbox"/></div>2. Utnur</div> <div><div><input type="checkbox"/></div>3. Mehrgarh</div> <div><div><input type="checkbox"/></div>4. Burzahom</div>
Q.117	During Delhi Sultanate period who brought capital back from Lahore to Delhi?
Ans	<div><div><input type="checkbox"/></div>1. Chenghiz Khan</div> <div><div><input checked="" type="checkbox"/></div>2. Iltutmish</div> <div><div><input type="checkbox"/></div>3. Nasiruddin Qubacha</div> <div><div><input type="checkbox"/></div>4. Qutbuddin Aibak</div>
Q.118	Who among the following founded the 'Satya Shodhak Samaj', in 1873?
Ans	<div><div><input type="checkbox"/></div>1. Radhakant Deb</div> <div><div><input type="checkbox"/></div>2. Ishwar Chandra Vidyasagar</div> <div><div><input type="checkbox"/></div>3. Raja Rammohan Roy</div> <div><div><input checked="" type="checkbox"/></div>4. Jyotirao Govindrao Phule</div>
Q.119	When was 'Victoria Memorial' built in India?
Ans	<div><div><input type="checkbox"/></div>1. 1806</div> <div><div><input type="checkbox"/></div>2. 1857</div> <div><div><input type="checkbox"/></div>3. 1900</div> <div><div><input checked="" type="checkbox"/></div>4. 1906</div>
Q.120	What was the name of India's first rocket with a single piece 3D printed engine launched from Sriharikota in May 2024?
Ans	<div><div><input type="checkbox"/></div>1. Dhara</div> <div><div><input checked="" type="checkbox"/></div>2. Agnibaan</div> <div><div><input type="checkbox"/></div>3. Pushpak</div> <div><div><input type="checkbox"/></div>4. Dhanush</div>