



रेल भर्ती बोर्ड / RAILWAY RECRUITMENT BOARDS



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

Community	OBC NCL
Test Center Name	iON Digital Zone iDZ Kollam
Test Date	09/12/2024
Test Time	4:00 PM - 5:30 PM
Subject	Recruitment of Sub Inspector Executive in Railway Protection Force and Railway Protection Special Force

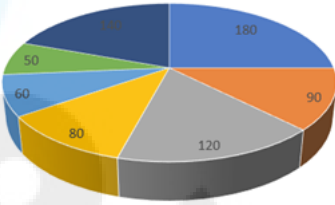
\* Note  
Correct Answer will carry 1 mark per Question.  
Incorrect Answer will carry 1/3 Negative mark per Question.

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 7 numbers is 51. If each number is increased by 6, what will the new average be?
Ans	<div><div><input checked="" type="checkbox"/></div>1. 63</div> <div><div><input checked="" type="checkbox"/></div>2. 57</div> <div><div><input checked="" type="checkbox"/></div>3. 51</div> <div><div><input checked="" type="checkbox"/></div>4. 7</div>
Q.2	If x varies inversely as $y^3 - 1$ and is equal to 3 when $y = 4$ , find x when $y = 6$ .
Ans	<div><div><input checked="" type="checkbox"/></div>1. <math>\frac{190}{216}</math></div> <div><div><input checked="" type="checkbox"/></div>2. <math>\frac{189}{215}</math></div> <div><div><input checked="" type="checkbox"/></div>3. <math>\frac{189}{216}</math></div> <div><div><input checked="" type="checkbox"/></div>4. <math>\frac{191}{215}</math></div>
Q.3	Three partners invested in a business in the ratio 6:7:3. They invested their capitals for 8 months, 3 months and 10 months, respectively. What was the ratio of their profits?
Ans	<div><div><input checked="" type="checkbox"/></div>1. 17:7:10</div> <div><div><input checked="" type="checkbox"/></div>2. 14:7:10</div> <div><div><input checked="" type="checkbox"/></div>3. 13:7:10</div> <div><div><input checked="" type="checkbox"/></div>4. 16:7:10</div>
Q.4	Find the value of $\left[ (54 \div 6) \times \left\{ \frac{70}{7} + \frac{38}{6} \times (8 - 2) \right\} \right]$
Ans	<div><div><input checked="" type="checkbox"/></div>1. 442</div> <div><div><input checked="" type="checkbox"/></div>2. 429</div> <div><div><input checked="" type="checkbox"/></div>3. 422</div> <div><div><input checked="" type="checkbox"/></div>4. 432</div>
Q.5	The selling price of 50 books is equal to the cost price of 25 books. Find the loss or gain percentage.
Ans	<div><div><input checked="" type="checkbox"/></div>1. 50 % loss</div> <div><div><input checked="" type="checkbox"/></div>2. <math>\frac{100}{25}</math> % gain</div> <div><div><input checked="" type="checkbox"/></div>3. 50 % gain</div> <div><div><input checked="" type="checkbox"/></div>4. <math>\frac{100}{25}</math> % loss</div>
Q.6	The population of a village was 130000. It increased by 10% in the first year and increased by 20% in the second year. Its population after two years is _____.
Ans	<div><div><input checked="" type="checkbox"/></div>1. 156000</div> <div><div><input checked="" type="checkbox"/></div>2. 169000</div> <div><div><input checked="" type="checkbox"/></div>3. 143000</div> <div><div><input checked="" type="checkbox"/></div>4. 171600</div>

Q.7	$\frac{(a^1 \times b^4 \times c^5)}{(a^3 \times b^6 \times c^9)}$ in simplified form is:
Ans	<div><div><input checked="" type="checkbox"/></div>1. <math>(a^{-2}) \times (b^{-2}) \times (c^{-4})</math></div> <div><div><input type="checkbox"/></div>2. <math>(a^7) \times (b^{-7}) \times (c^{-6})</math></div> <div><div><input type="checkbox"/></div>3. <math>(a^8) \times (b^5) \times (c^{-1})</math></div> <div><div><input type="checkbox"/></div>4. <math>(a^{-5}) \times (b^{-8}) \times (c^2)</math></div>
Q.8	The LCM of 24, 38, 336 and 152 is:
Ans	<div><div><input checked="" type="checkbox"/></div>1. 6384</div> <div><div><input type="checkbox"/></div>2. 6353</div> <div><div><input type="checkbox"/></div>3. 6410</div> <div><div><input type="checkbox"/></div>4. 6362</div>
Q.9	Manav's average earning per month in the first three months of a year was ₹7520. In April, his earning was 75% more than the average earning in the first three months. If his average earning per month for the whole year is ₹62334, then what will be Manav's average earning (in ₹) per month from May to December?
Ans	<div><div><input type="checkbox"/></div>1. 89034</div> <div><div><input checked="" type="checkbox"/></div>2. 89036</div> <div><div><input type="checkbox"/></div>3. 89039</div> <div><div><input type="checkbox"/></div>4. 89031</div>
Q.10	A man walks to a viewpoint and returns to the starting point by his car maintaining constant speed and thus takes a total time of 8 hours 30 minutes. He would have gained 5 hours by driving both ways. How long would it have taken for him to walk both ways with same walking speed?
Ans	<div><div><input checked="" type="checkbox"/></div>1. 13 hours 15 minutes</div> <div><div><input type="checkbox"/></div>2. 13 hours 45 minutes</div> <div><div><input type="checkbox"/></div>3. 14 hours 30 minutes</div> <div><div><input type="checkbox"/></div>4. 12 hours 15 minutes</div>
QA cylinder of height 13 cm is made from a rectangular sheet of dimension 44 cm × 13 cm, without any cut. What is the total surface area of the cylinder closed from both ends? (Use $\pi = \frac{22}{7}$ )	
Ans	<div><div><input type="checkbox"/></div>1. 440 cm<sup>2</sup></div> <div><div><input checked="" type="checkbox"/></div>2. 880 cm<sup>2</sup></div> <div><div><input type="checkbox"/></div>3. 220 cm<sup>2</sup></div> <div><div><input type="checkbox"/></div>4. 1280 cm<sup>2</sup></div>
Q.12	A train runs at a speed of 147 kmph to cover a distance of 294 km and then at a speed of 133 kmph to cover a distance of 266 km. Find the average speed of the train for the entire distance.
Ans	<div><div><input type="checkbox"/></div>1. 187 kmph</div> <div><div><input type="checkbox"/></div>2. 152 kmph</div> <div><div><input type="checkbox"/></div>3. 132 kmph</div> <div><div><input checked="" type="checkbox"/></div>4. 140 kmph</div>
Q.13	Pranjal's average earning per month in the first three months of a year was ₹28744. In April, his earning was 50% more than the average earning in the first three months. If his average earning per month for the whole year is ₹94411, then what will be Pranjal's average earning (in ₹) per month from May to December?
Ans	<div><div><input type="checkbox"/></div>1. 125453</div> <div><div><input checked="" type="checkbox"/></div>2. 125448</div> <div><div><input type="checkbox"/></div>3. 125447</div> <div><div><input type="checkbox"/></div>4. 125446</div>
Q.14	The average of 7 numbers is 53. If each number is increased by 7, what will the new average be?
Ans	<div><div><input type="checkbox"/></div>1. 7</div> <div><div><input type="checkbox"/></div>2. 53</div> <div><div><input type="checkbox"/></div>3. 67</div> <div><div><input checked="" type="checkbox"/></div>4. 60</div>
Q.15	A bank offers 5.6% compound interest per annum calculated on a half-yearly basis. A customer deposits ₹7346 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	<div><div><input type="checkbox"/></div>1. ₹16.68</div> <div><div><input type="checkbox"/></div>2. ₹626.14</div> <div><div><input type="checkbox"/></div>3. ₹612.82</div> <div><div><input checked="" type="checkbox"/></div>4. ₹622.82</div>

Q.16	A person covers certain distance in 6 hours at a speed of 5 km/h and some more distance in 7 hours at a speed of 9 km/h. Find his average speed for the entire distance covered.
Ans	<div>✗ 1. <math>8\frac{2}{13}</math></div> <div>✗ 2. <math>6\frac{2}{13}</math></div> <div>✓ 3. <math>7\frac{2}{13}</math></div> <div>✗ 4. <math>9\frac{2}{13}</math></div>
Q.17	Simplify the following: $\frac{2}{7} + \frac{19}{5} - 2.4 + \left(\frac{4.8}{2.4}\right)^2$
Ans	<div>✓ 1. <math>\frac{199}{35}</math></div> <div>✗ 2. <math>\frac{119}{35}</math></div> <div>✗ 3. <math>\frac{131}{35}</math></div> <div>✗ 4. <math>\frac{101}{35}</math></div>
Q.18	Given that $17^{0.63} = x$ , $17^{0.04} = y$ and $x^z = y^4$ , then the value of z is close to:
Ans	<div>✓ 1. 0.25</div> <div>✗ 2. -0.45</div> <div>✗ 3. -0.79</div> <div>✗ 4. 2.08</div>
Q.19	The smallest 1-digit number to be added to the 6-digit number 950473 so that it is completely divisible by 11 is:
Ans	<div>✗ 1. 6</div> <div>✗ 2. 2</div> <div>✗ 3. 1</div> <div>✓ 4. 4</div>
Q.20	If the volume of cube is $1728\text{ m}^3$ , then find the total surface area of cube in $\text{m}^2$ .
Ans	<div>✗ 1. 901</div> <div>✗ 2. 910</div> <div>✓ 3. 864</div> <div>✗ 4. 861</div>
Q.21	A man sold an article for ₹420 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 ₹560, then what is the value of d?
Ans	<div>✗ 1. 16.9</div> <div>✓ 2. 12.5</div> <div>✗ 3. 18.4</div> <div>✗ 4. 14.5</div>
Q.22	The average weight of 6 men is increased by 2 kg when one of them whose weight is 48 kg is replaced by a new man. What is the weight of the new man?
Ans	<div>✗ 1. 54 kg</div> <div>✗ 2. 58 kg</div> <div>✓ 3. 60 kg</div> <div>✗ 4. 56 kg</div>
Q.23	Find the gain percentage, given that Bushra sold her scooter for ₹59112 gaining $\frac{1}{6}$ th of the selling price.
Ans	<div>✗ 1. 10%</div> <div>✓ 2. 20%</div> <div>✗ 3. 5%</div> <div>✗ 4. 35%</div>
Q.24	Parvati and Pari invest in a business in the ratio 5 : 26. If total profit is Rs. 3038, then what is difference between the profit (in Rs.) of Parvati and Pari?
Ans	<div>✗ 1. 2208</div> <div>✗ 2. 1958</div> <div>✗ 3. 2008</div> <div>✓ 4. 2058</div>

Q.25	<p>A wholesaler purchases goods worth ₹45,000. The manufacturer offers a trade discount of 15% and an additional scheme discount of 10%. Calculate the net price after both discounts.</p> <p>Ans</p> <p>✗ 1. ₹34,225</p> <p>✗ 2. ₹34,255</p> <p>✗ 3. ₹34,455</p> <p>✓ 4. ₹34,425</p>
Q.26	<p>What will be the remainder when <math>(99^{99} + 99)</math> is divisible by 100?</p> <p>Ans</p> <p>✗ 1. 99</p> <p>✓ 2. 98</p> <p>✗ 3. 97</p> <p>✗ 4. 96</p>
Q.27	<p>The pie-chart shows the sales of an item on different days of a week. Study the given pie-chart and answer the question that follows.</p> <div data-bbox="363 569 892 899"> <p style="text-align: center;">Sales</p>  <p style="text-align: center;"> <span style="color: blue;">■</span> Sunday             <span style="color: orange;">■</span> Monday             <span style="color: grey;">■</span> Tuesday             <span style="color: yellow;">■</span> Wednesday             <span style="color: lightblue;">■</span> Thursday             <span style="color: green;">■</span> Friday             <span style="color: darkblue;">■</span> Saturday         </p> </div> <p>The difference in angles made at the centre by the sales on Tuesday and Saturday is (in degrees):</p> <p>Ans</p> <p>✓ 1. 10</p> <p>✗ 2. 0</p> <p>✗ 3. 20</p> <p>✗ 4. 5</p>
Q.28	<p>Sakshi invested a sum of ₹2500 at 20% per annum compound interest, compounded annually. If she received an amount of ₹4320 after n years, the value of n is:</p> <p>Ans</p> <p>✗ 1. 4</p> <p>✓ 2. 3</p> <p>✗ 3. 3.5</p> <p>✗ 4. 2</p>
Q.29	<p>The surface area of a solid metallic sphere is <math>5544 \text{ cm}^2</math>. It is melted and recast into a cone of height 84 cm. Find the diameter of the base of the cone.</p> <p>Ans</p> <p>✓ 1. 42 cm</p> <p>✗ 2. 46 cm</p> <p>✗ 3. 44 cm</p> <p>✗ 4. 40 cm</p>
Q.30	<p>Given that <math>42^{0.66} = x</math>, <math>42^{0.65} = y</math> and <math>x^z = y^4</math>, then the value of z is close to:</p> <p>Ans</p> <p>✗ 1. 4.81</p> <p>✗ 2. 2.04</p> <p>✓ 3. 3.94</p> <p>✗ 4. 4.92</p>
Q.31	<p>The difference between the smallest and the largest fractions among <math>\frac{8}{8}</math>, <math>\frac{6}{6}</math>, <math>\frac{26}{39}</math>, <math>\frac{29}{31}</math> is:</p> <p>Ans</p> <p>✗ 1. <math>\frac{1}{8}</math></p> <p>✗ 2. <math>\frac{1}{6}</math></p> <p>✓ 3. <math>\frac{1}{3}</math></p> <p>✗ 4. <math>\frac{1}{2}</math></p>

Q.32

Express the following into vulgar fraction.  
0.093 + 0.23

Ans

✓ 1.

323

990

✗ 2.

323

999

✗ 3.

343

990

✗ 4.

343

999

Q.33

A sum, when invested at 20% simple interest per annum, amounts to ₹2880 after 4 years. What is the simple interest (in ₹) on the same sum at the same rate in 2 year?

Ans

✗ 1. 1280

✗ 2. 320

✓ 3. 640

✗ 4. 2560

Q.34

The price of fuel decreases by 20%, 45% and 55% in three successive months, but increases by 50% in the fourth month. What is the percentage increase/decrease in the price of fuel in the fourth month as compared to its original price?

Ans

✓ 1. Decreases by 70.3%

✗ 2. Increases by 67.55%

✗ 3. Increases by 72.35%

✗ 4. Decreases by 68.29%

Q.35

Two trains of equal length are running on parallel lines in the same direction at speeds of 66 km/h and 39 km/h. The faster train passes the slower train in 24 seconds. The length of each train is:

Ans

✓ 1. 90 meters

✗ 2. 72 meters

✗ 3. 110 meters

✗ 4. 89 meters

Section : General Intelligence and Reasoning

Q.36

There are three problem figures, which are alike in a certain way as they share some common feature/s. Select the figure from the answer options, which shares the same features as shared by the three problem figures.

Ans

✗ 1.

✓ 2.

✗ 3.

✗ 4.

Q.37

A, B, C, D, E, F and G sit around a circular table facing centre. Only E sits between G and C. C sits third to the left of B. A sits to the immediate left of B. D is not an immediate neighbour of C. How many people sit between D and E when counted from the right of E?

Ans

✓ 1. 4

✗ 2. 2

✗ 3. 3

✗ 4. 1

Q.38

Which numbers should come in place of the question mark (?) in the same sequence to make the series logically complete?

73 82 100 127 ? 208

Ans

✗ 1. 138

✗ 2. 152

✓ 3. 163

✗ 4. 143

Q.39	What should come in place of the question mark (?) in the given series based on the English alphabetical order?  DCA EDB FEC GFD ?  Ans <input checked="" type="checkbox"/> 1. MOL <input checked="" type="checkbox"/> 2. KLJ <input checked="" type="checkbox"/> 3. HGE <input checked="" type="checkbox"/> 4. MNL
Q.40	EHSM is related to AMOR in a certain way based on the English alphabetical order. In the same way, WRKW is related to SWGB. To which of the given options is OBCG related to, following the same logic?  Ans <input checked="" type="checkbox"/> 1. LGZN <input checked="" type="checkbox"/> 2. JFXK <input checked="" type="checkbox"/> 3. KGYL <input checked="" type="checkbox"/> 4. LHYM
Q.41	Three of the following four letter-cluster pairs are alike in a certain way and thus form a group. Which is the letter-cluster pair that does NOT belong to that group? (Note: The odd one out is not based on the number of consonants/vowels or their positions in the letter-cluster.)  Ans <input checked="" type="checkbox"/> 1. VR - PS <input checked="" type="checkbox"/> 2. NJ - HK <input checked="" type="checkbox"/> 3. FB - ZE <input checked="" type="checkbox"/> 4. PL - JM
Q.42	Each of the digits in the number 8213459 is arranged in ascending order from left to right. The position(s) of how many digits will remain unchanged as compared to that in the original number?  Ans <input checked="" type="checkbox"/> 1. Two <input checked="" type="checkbox"/> 2. Four <input checked="" type="checkbox"/> 3. One <input checked="" type="checkbox"/> 4. Three
Q.43	Each of P, Q, R, S, T, U and V has an exam on a different day of a week starting from Monday and ending on Sunday of the same week. Only two people have exam between R and V. U has an exam on Tuesday. P has an exam on the day immediately before V and immediately after U. S has an exam on Monday. T has an exam on the day before R and the day after Q. Q has an exam on Friday. Who amongst the following has exam on Wednesday?  Ans <input checked="" type="checkbox"/> 1. V <input checked="" type="checkbox"/> 2. T <input checked="" type="checkbox"/> 3. P <input checked="" type="checkbox"/> 4. R
Q.44	Select the set in which the numbers are related in the same way as are the numbers of the following sets. (NOTE: Operations should be performed on the whole numbers, without breaking down the numbers into their constituent digits. E.g. 13 – Operations on 13 such as adding/subtracting/multiplying to 13 can be performed. Breaking down 13 into 1 and 3 and then performing mathematical operations on 1 and 3 is not allowed.) (31, 951, 10) (29, 837, 4)  Ans <input checked="" type="checkbox"/> 1. (4, 8, 7) <input checked="" type="checkbox"/> 2. (40, 1593, 6) <input checked="" type="checkbox"/> 3. (33, 1069, 20) <input checked="" type="checkbox"/> 4. (27, 717, 11)
Q.45	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 conclusions logically follow(s) from the statements. Statements: All fans are lights. All lights are clocks. Some clocks are bulbs. Conclusions: (I): Some fans are bulbs. (II): Some lights are bulbs.  Ans <input checked="" type="checkbox"/> 1. Both conclusions (I) and (II) follow. <input checked="" type="checkbox"/> 2. Only conclusion (II) follows. <input checked="" type="checkbox"/> 3. Neither conclusion (I) nor (II) follows. <input checked="" type="checkbox"/> 4. Only conclusion (I) follows.
Q.46	Seven boxes, G, H, I, J, K, L and V, are kept one over the other but not necessarily in the same order. H is kept immediately above G. L is kept immediately above J. Only K is kept above V. Only two boxes are kept between G and K. L is not kept at third position from the bottom. How many boxes are kept between I and K?  Ans <input checked="" type="checkbox"/> 1. Two <input checked="" type="checkbox"/> 2. Three <input checked="" type="checkbox"/> 3. Four <input checked="" type="checkbox"/> 4. One
Q.47	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 ::?  #: XBE :: HLO : %  Ans <input checked="" type="checkbox"/> 1. # = TXA; % = LBS <input checked="" type="checkbox"/> 2. # = TXA; % = LPS <input checked="" type="checkbox"/> 3. # = UXA; % = LPS <input checked="" type="checkbox"/> 4. # = TXA; % = LPO

Q.48 In a certain code language,  
A < B means 'A is the son of B',  
A + B means 'A is the father of B',  
A ; B means 'A is the sister of B',  
and A = B means 'A is the daughter of B'.

How is P related to E if 'P + O < S ; T = E'?

- Ans
- ☐ 1. Sister's son
  - ☐ 2. Mother's sister
  - ☐ 3. Father's sister
  - ☒ 4. Daughter's husband

Q.49 In a certain code language, 'AWED' is coded as '2764' and 'DATE' is coded as '7625'. What is the code for 'T' in that language?

- Ans
- ☐ 1. 2
  - ☐ 2. 6
  - ☐ 3. 7
  - ☒ 4. 5

Q.50 Select the correct mirror image of the given figure when the mirror is placed at MN as shown below.



- Ans
- ☐ 1. 9&54@2
  - ☒ 2. 9&54@2
  - ☐ 3. 9&54@2
  - ☐ 4. 5&94@2

Q.51 What should come in place of the question mark (?) in the given series based on the English alphabetical order?

HEC JGE LIG NKI ?

- Ans
- ☐ 1. PNK
  - ☐ 2. PNL
  - ☐ 3. PML
  - ☒ 4. PMK

Q.52 What will come in the place of the question mark '?' in the following equation, if '+' and '-' are interchanged and 'x' and '÷' are interchanged?

$38 - 8 \div 2 + 9 - 12 \div 3 - 16 \times 2 = ?$

- Ans
- ☒ 1. 89
  - ☐ 2. 73
  - ☐ 3. 99
  - ☐ 4. 107

Q.53 Refer to the following letter, symbol series and answer the question that follows. Counting to be done from left to right only.

(Left) L T # K % & D R @ \$ F \$ P Q \* ! A Ω E Y % U £ K (Right)

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

- Ans
- ☒ 1. Three
  - ☐ 2. None
  - ☐ 3. One
  - ☐ 4. Two

Q.54 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 :: ?

# : GEJ :: RPU : %

- Ans
- ☐ 1. # = POO, % = MLK
  - ☒ 2. # = LJO, % = MKP
  - ☐ 3. # = JHF, % = MKJ
  - ☐ 4. # = PIO, % = MIU





Q.55 Manish starts from Point A and drives 13 km towards South. He then takes a left turn, drives 11 km, turns left and drives 15 km. He then takes a left turn and drives 12 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. 2 km to the west
  - ☐ 2. 2 km to the east
  - ☒ 3. 1 km to the east
  - ☐ 4. 1 km to the west


Q.56	In a certain code language, 'he is late' is coded as 'ab bc cd' and 'is she alive' is coded as 'kj cd mo'. How is 'is' coded in the given language?
Ans	<div> <div>✗ 1. de</div> <div>✓ 2. cd</div> <div>✗ 3. mo</div> <div>✗ 4. ab</div> </div>
Q.57	<p>Refer to the following letter, symbol series and answer the question that follows. Counting to be done from left to right only.</p> <p>(Left) = S Y # G F &amp; A % K E * D C &amp; £ U @ N &gt; B + L M (Right)</p> <p>How many such symbols are there each of which are immediately preceded by a letter and also immediately followed by another symbol?</p>
Ans	<div> <div>✗ 1. Three</div> <div>✗ 2. Four</div> <div>✓ 3. One</div> <div>✗ 4. Two</div> </div>
Q.58	<p>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?</p> <p>(Note: The odd one out is not based on the number of consonants/vowels or their position in the letter-cluster.)</p>
Ans	<div> <div>✗ 1. BCE</div> <div>✓ 2. MOR</div> <div>✗ 3. STV</div> <div>✗ 4. PQS</div> </div>
Q.59	<p>If 2 is added to each even digit and 1 is subtracted from each odd digit in the number 9361457, what will be the sum of the second digit from the left and the third digit from the right in the new number thus formed?</p>
Ans	<div> <div>✗ 1. 12</div> <div>✗ 2. 6</div> <div>✓ 3. 8</div> <div>✗ 4. 10</div> </div>
Q.60	<p>Seven people, E, F, G, H, I, J and U, are sitting around a circular table facing the centre of the table. Only one person sits between H and E when counted from the right of H. Only one person sits between E and U. Only one person sits between H and I. I sits third to the right of I. Only one person sits between F and I. Who sits second to the right of G?</p>
Ans	<div> <div>✗ 1. I</div> <div>✗ 2. E</div> <div>✗ 3. U</div> <div>✓ 4. J</div> </div>
Q.61	<p>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?</p>
Ans	<div> <div>✗ 1. JE : HC</div> <div>✗ 2. HC : FA</div> <div>✗ 3. NI : LG</div> <div>✓ 4. OJ : NH</div> </div>
Q.62	<p>Select the set in which the numbers are related in the same way as are the numbers of the following sets.</p> <p>(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.)</p> <p>(1, -2, 2) (24, 24, 12)</p>
Ans	<div> <div>✓ 1. (18, 26, 5)</div> <div>✗ 2. (24, 6, 22)</div> <div>✗ 3. (34, 22, 24)</div> <div>✗ 4. (15, 10, 11)</div> </div>
Q.63	<p>A is the sister of B's daughter C. K is the father of C, and L is the father of K. How is A related to L?</p>
Ans	<div> <div>✗ 1. Son's son</div> <div>✗ 2. Son's wife</div> <div>✗ 3. Daughter's daughter</div> <div>✓ 4. Son's daughter</div> </div>
Q.64	<p>This question is based on the five, three-digit numbers given below.</p> <p>(Left) 431 649 324 163 719 (Right)</p> <p>(Example- 697 – First digit = 6, second digit = 9 and third digit = 7)</p> <p>NOTE: All operations to be done from left to right.</p> <p>What will be the resultant if the third digit of the lowest number is added to the second digit of the highest number?</p>
Ans	<div> <div>✗ 1. 7</div> <div>✓ 2. 4</div> <div>✗ 3. 6</div> <div>✗ 4. 5</div> </div>





**Q.65** In a certain code language, 'CUTE' is coded as '8479' and 'TRIP' is coded as '4351'. What is the code for 'T' in that language?


Ans  1.5  
 2.4  
 3.3  
 4.7

Q.66 P, Q, R, S and T are all different ages. Q is older than R. R is younger than T but older than P. S is the oldest. Who among them is the youngest?

Ans  1. P

 2. R

 3. T

 4. S

**Q.67** This question is based on the five, three-digit numbers given below.

(Left) 342 781 619 457 243 (Right)

(Example- 697 – First digit = 6, second digit = 9 and third digit = 7)  
(NOTE: All operations to be done from left to right.)

If 2 is added to first digit of every number, in how many numbers will the first digit be exactly divisible by the second digit?




Ans ☒ 1. 3  
☒ 2. 4  
☒ 3. 2  
☒ 4. 1

Q.68 Mr. NOP starts from point A and drives 11 km towards West. He then takes a left turn, drives 12 km, turns left and drives 31 km. He then takes a left turn and drives 27 km. He takes a final left turn, drives 20 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.)

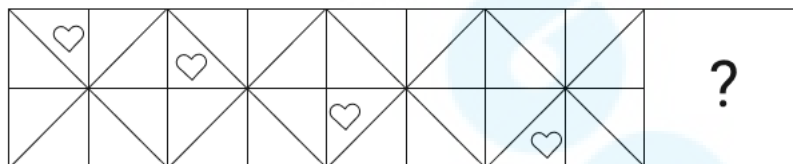
**Ans**

- ☐ 1. 13 km to the West
- ☐ 2. 11 km to the East
- ☐ 3. 9 km to the North
- ☒ 4. 15 km to the South

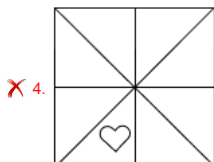
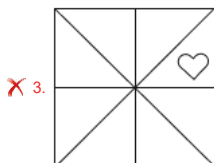
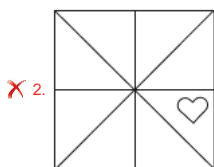
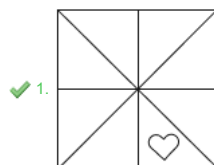
**Q.69** TUV ranked 16<sup>th</sup> from the top and 19<sup>th</sup> from the bottom in his class. How many students are there in his class?

Ans  1. 32  
 2. 34  
 3. 23  
 4. 43

**Q.70** Identify the figure given in the options which when put in place of the question mark (?) will logically complete the series.



**Ans**



Q.71	Which of the following is NOT one of Kepler's laws of planetary motion?  A. The orbit of each planet around the Sun is an ellipse with the Sun at one of the two foci. B. The orbits of all planets around the Sun are coplanar. C. A line segment joining a planet and the Sun sweeps out equal areas during equal intervals of time. D. The square of the orbital period of a planet is directly proportional to the cube of the semi-major axis of its orbit.
Ans	<div><div><input checked="" type="checkbox"/></div>1. C</div> <div><div><input checked="" type="checkbox"/></div>2. B</div> <div><div><input checked="" type="checkbox"/></div>3. A</div> <div><div><input checked="" type="checkbox"/></div>4. D</div>
Q.72	Which scheme is focussed on promoting entrepreneurship among SC/STs and women by providing loans at concessional rates?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Startup India</div> <div><div><input checked="" type="checkbox"/></div>2. MUDRA Yojana</div> <div><div><input checked="" type="checkbox"/></div>3. Stand-Up India Scheme</div> <div><div><input checked="" type="checkbox"/></div>4. Pradhan Mantri Rozgar Yojana (PMRY)</div>
Q.73	Which Indian table tennis player won her maiden international title in the women's singles event at the WTT Feeder Corpus Christi 2024 in Texas, USA, in January 2024?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Sreeja Akula</div> <div><div><input checked="" type="checkbox"/></div>2. Ankita Das</div> <div><div><input checked="" type="checkbox"/></div>3. Sutirtha Mukherjee</div> <div><div><input checked="" type="checkbox"/></div>4. Manika Batra</div>
Q.74	Who among the following wrote the book 'Significance of Vimanam and Gopuram'?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Niketan Anand Gaur</div> <div><div><input checked="" type="checkbox"/></div>2. Sashi Tharoor</div> <div><div><input checked="" type="checkbox"/></div>3. Dr. V Ganapati Sthapati</div> <div><div><input checked="" type="checkbox"/></div>4. Romila Thapar</div>
Q.75	In which year did King George V and Queen Mary of Britain visit India, and the announcement regarding the transfer of India's capital from Calcutta (Kolkata) to Delhi take place?
Ans	<div><div><input checked="" type="checkbox"/></div>1. 1911</div> <div><div><input checked="" type="checkbox"/></div>2. 1908</div> <div><div><input checked="" type="checkbox"/></div>3. 1858</div> <div><div><input checked="" type="checkbox"/></div>4. 1901</div>
Q.76	Delhi Sultanate signifies the rule over India with capital as Delhi, of which community?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Persian</div> <div><div><input checked="" type="checkbox"/></div>2. Arabian</div> <div><div><input checked="" type="checkbox"/></div>3. African</div> <div><div><input checked="" type="checkbox"/></div>4. Turkish</div>
Q.77	Which of the following articles deals with the power of the President to make regulations for certain Union territories?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Article 248</div> <div><div><input checked="" type="checkbox"/></div>2. Article 235</div> <div><div><input checked="" type="checkbox"/></div>3. Article 240</div> <div><div><input checked="" type="checkbox"/></div>4. Article 244</div>
Q.78	How many amino acids out of the 22 needed by the human body, are NOT produced in the human body?
Ans	<div><div><input checked="" type="checkbox"/></div>1. 8</div> <div><div><input checked="" type="checkbox"/></div>2. 16</div> <div><div><input checked="" type="checkbox"/></div>3. 12</div> <div><div><input checked="" type="checkbox"/></div>4. 14</div>
Q.79	Which equation demonstrates that electricity, magnetism and light are all manifestations of the electromagnetic field?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Laplace equation</div> <div><div><input checked="" type="checkbox"/></div>2. Maxwell's equation</div> <div><div><input checked="" type="checkbox"/></div>3. Kirchhoff's equation</div> <div><div><input checked="" type="checkbox"/></div>4. Ohm's equation</div>
Q.80	The synthetic auxin 2,4-D is commonly used as a _____.
Ans	<div><div><input checked="" type="checkbox"/></div>1. signalling hormone</div> <div><div><input checked="" type="checkbox"/></div>2. defense hormone</div> <div><div><input checked="" type="checkbox"/></div>3. herbicide</div> <div><div><input checked="" type="checkbox"/></div>4. stress hormone</div>
Q.81	According to Census of India 2011, how many states recorded less than 10 lakhs population?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Two</div> <div><div><input checked="" type="checkbox"/></div>2. Zero</div> <div><div><input checked="" type="checkbox"/></div>3. One</div> <div><div><input checked="" type="checkbox"/></div>4. Three</div>

**Q.82 Which musical instrument is commonly associated with Rajasthani folk music?**

Ans

- ☒ 1. Tabla
- ☒ 2. Morchang
- ☐ 3. Shehnai
- ☐ 4. Dholak

**Q.83** According to the Indian Meteorological Department (IMD), how many seasons are there in India?




Ans  1.7  
 2.3  
 3.6  
 4.4

**Q.84** Who among the following renowned musicians is celebrated for popularising the unique instrument known as the 'Sarod' and is considered one of the most famous maestros of the Senia Shahjahanpur gharana?

Ans

- ✓ 1. Ustad Amjad Ali Khan
- ✗ 2. Ustad Bismillah Khan
- ✗ 3. Ustad Ali Akbar Khan
- ✗ 4. Pandit Ravi Shankar

**Q.85** Which initiative has been introduced in DISC 12 to foster the development of medical technologies for the Armed Forces in 2024?

Ans  1. AIM  
 2. MIRA  
 3. iDEX  
 4. ADITI

Q.86 What is the name of the half humanoid robot that India is planning to launch in space before the actual human mission Gaganyaan to test flight criticalities?

Ans ☒ 1. Vyommitra  
☐ 2. Nabhmitra  
☐ 3. Gaganmaitri  
☐ 4. Antariksha vicharak

**Q.87** El Nino is a narrow warm current which occasionally appears off the coast of \_\_\_\_\_.

Ans

- ☒ 1. Uganda
- ☒ 2. Australia
- ☒ 3. Brazil
- ☒ 4. Peru

Q.88 Match the states in list I with the sex ratios as per Census 2011 in list II.

	State (List-I)		Sex Ratio (as per Census 2011) (List-II)
1.	Uttar Pradesh	a.	931
2.	Bihar	b.	918
3.	Madhya Pradesh	c.	929
4.	Maharashtra	d.	912

**Ans**


-  1. 1-d, 2-a, 3-b, 4-c
-  2. 1-b, 2-d, 3-a, 4-c
-  3. 1-d, 2-b, 3-c, 4-a
-  4. 1-d, 2-b, 3-a, 4-c


Q.89 Which of the following is NOT one of the recent initiatives of the Government of India to generate opportunities of employment?


**Ans**


- ☒ 1. Start Up India
- ☒ 2. Skill India
- ☒ 3. Make in India
- ☒ 4. Unicorn India

Q.90 The Hindustan Aeronautics Limited handed over the first twin-seater Light Combat Aircraft 'Tejas' to the Indian Air Force in the year \_\_\_\_\_.

**Ans**  1. 2018

 2. 2023

 3. 2014

 4. 2024

**Q.91** Mopin Festival is celebrated in which state of India?

**Ans** ☒ 1. Arunachal Pradesh  
☐ 2. Uttar Pradesh  
☐ 3. Haryana  
☐ 4. Rajasthan

**Q.92** Which government programme in India aims at eradicating poverty through employment generation in rural areas?

**Ans** ✓ 1. Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)  
✗ 2. National Rural Health Mission (NRHM)  
✗ 3. National Food Security Act (NFSA)  
✗ 4. Pradhan Mantri Awas Yojana (PMAY)

Q.93	What is the name of the United Nations specialised agency for Information and Communication Technologies (ICTs), which has released the 5 <sup>th</sup> edition of Global Cybersecurity Index (GCI) in 2024?
Ans	<div><div><input type="checkbox"/></div>1. World Telecommunication Union</div> <div><div><input type="checkbox"/></div>2. Global Telecommunication Union</div> <div><div><input type="checkbox"/></div>3. United Nations World Communication Union</div> <div><div><input checked="" type="checkbox"/></div>4. International Telecommunication Union</div>
Q.94	Arrange the following rivers in the ascending order based on the size of their basins:  Godavari, Krishna, Mahanadi, Ganga.
Ans	<div><div><input type="checkbox"/></div>1. Ganga &gt; Mahanadi &gt; Godavari &gt; Krishna</div> <div><div><input type="checkbox"/></div>2. Ganga &gt; Krishna &gt; Mahanadi &gt; Godavari</div> <div><div><input checked="" type="checkbox"/></div>3. Ganga &gt; Godavari &gt; Krishna &gt; Mahanadi</div> <div><div><input type="checkbox"/></div>4. Ganga &gt; Mahanadi &gt; Krishna &gt; Godaveri</div>
Q.95	Which of the following countries rejoined the UNESCO in July 2023 and became its 194 <sup>th</sup> member?
Ans	<div><div><input type="checkbox"/></div>1. India</div> <div><div><input type="checkbox"/></div>2. United Kingdom</div> <div><div><input checked="" type="checkbox"/></div>3. United States of America</div> <div><div><input type="checkbox"/></div>4. Iran</div>
Q.96	Which of the following is the first stage of karyokinesis of mitosis that follows the S and G2 phases of interphase?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Prophase</div> <div><div><input type="checkbox"/></div>2. Anaphase</div> <div><div><input type="checkbox"/></div>3. Telophase</div> <div><div><input type="checkbox"/></div>4. Metaphase</div>
Q.97	Which house of the parliament has the most powers in matters of Money bills?
Ans	<div><div><input checked="" type="checkbox"/></div>1. Lok Sabha</div> <div><div><input type="checkbox"/></div>2. Rajya Sabha</div> <div><div><input type="checkbox"/></div>3. Vidhan Parishad</div> <div><div><input type="checkbox"/></div>4. Vidhan Sabha</div>
Q.98	The Vande Bharat Express is made in which country?
Ans	<div><div><input type="checkbox"/></div>1. Korea</div> <div><div><input checked="" type="checkbox"/></div>2. India</div> <div><div><input type="checkbox"/></div>3. England</div> <div><div><input type="checkbox"/></div>4. Japan</div>
Q.99	_____ has won the National Award for the best implementation of Pradhan Mantri Fasal Bima Yojana (PMFBY), which is a crop subsidy insurance scheme, for the year 2022-23?
Ans	<div><div><input type="checkbox"/></div>1. Punjab</div> <div><div><input type="checkbox"/></div>2. Uttar Pradesh</div> <div><div><input checked="" type="checkbox"/></div>3. Karnataka</div> <div><div><input type="checkbox"/></div>4. Tamil Nadu</div>
Q.100	The Delimitation Commission is appointed by the _____ and works in collaboration with the Election Commission of India.
Ans	<div><div><input type="checkbox"/></div>1. Lok Sabha Speaker</div> <div><div><input type="checkbox"/></div>2. Chief Justice of India</div> <div><div><input type="checkbox"/></div>3. Prime Minister of India</div> <div><div><input checked="" type="checkbox"/></div>4. President of India</div>
Q.101	In which sport did Indian player Nitesh Kumar win a gold medal at the Paris Paralympic Games 2024?
Ans	<div><div><input type="checkbox"/></div>1. Athletics</div> <div><div><input type="checkbox"/></div>2. Shooting</div> <div><div><input type="checkbox"/></div>3. Archery</div> <div><div><input checked="" type="checkbox"/></div>4. Badminton</div>
Q.102	Who among the following was the first Indian woman to become the President of Indian National Congress?
Ans	<div><div><input type="checkbox"/></div>1. Annie Besant</div> <div><div><input checked="" type="checkbox"/></div>2. Sarojini Naidu</div> <div><div><input type="checkbox"/></div>3. Nelli Sengupta</div> <div><div><input type="checkbox"/></div>4. Madam Bhikaji Cama</div>
Q.103	Who is the Chairperson of NITI Aayog?
Ans	<div><div><input type="checkbox"/></div>1. Vice-President</div> <div><div><input type="checkbox"/></div>2. President</div> <div><div><input type="checkbox"/></div>3. Home Minister</div> <div><div><input checked="" type="checkbox"/></div>4. Prime Minister</div>

<p><b>Q.104</b> Which of the following statements regarding Fundamental Rights is/are NOT CORRECT?</p> <p>1. Fundamental Rights are described in Articles 12 to 36 in Part-3 of the Constitution. 2. This part is called the Magna Carta of India. 3. Their objective is to create a government of law in the country and not of individuals. 4. These are not absolute; the state can impose reasonable restrictions on them.</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Only 1 and 3 <input checked="" type="checkbox"/> 2. Only 3 and 4 <input checked="" type="checkbox"/> 3. Only 1 <input checked="" type="checkbox"/> 4. Only 1 and 4</p>
<p><b>Q.105</b> Who among the following was appointed as the Governor of Chitor after Akbar invaded it in 1567?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Asaf Khan <input checked="" type="checkbox"/> 2. Bairam Khan <input checked="" type="checkbox"/> 3. Adham Khan <input checked="" type="checkbox"/> 4. Maan Singh</p>
<p><b>Q.106</b> Which of the following is/are food as well as fodder crops grown under semi-arid climatic conditions sown all over India except in eastern and northeastern regions?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Areca nut <input checked="" type="checkbox"/> 2. Cotton <input checked="" type="checkbox"/> 3. Maize <input checked="" type="checkbox"/> 4. Pulses</p>
<p><b>Q.107</b> How many members of Rajya Sabha are nominated by the President of India?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. 12 <input checked="" type="checkbox"/> 2. 10 <input checked="" type="checkbox"/> 3. 14 <input checked="" type="checkbox"/> 4. 08</p>
<p><b>Q.108</b> What is the role of the Experts Advisory Committee (EAC) in the implementation of the Startup India Seed Fund Scheme (SISFS)?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Approving individual startup funding requests <input checked="" type="checkbox"/> 2. Monitoring the performance of startups receiving funding <input checked="" type="checkbox"/> 3. Disbursing funds directly to startups <input checked="" type="checkbox"/> 4. Evaluating and selecting incubators for fund allocation</p>
<p><b>Q.109</b> In September 2024, who among the following launched the Jan Sunwai Portal of the Department of Commerce, designed to streamline communication between stakeholders and authorities?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Piyush Goyal <input checked="" type="checkbox"/> 2. Bimal Borah <input checked="" type="checkbox"/> 3. Krishna Kumar Vishnoi <input checked="" type="checkbox"/> 4. Chetanya Kasyap</p>
<p><b>Q.110</b> Which of the following Fundamental Duties was added by the 42<sup>nd</sup> Constitutional Amendment, 1976?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. To work for the country <input checked="" type="checkbox"/> 2. To safeguard private property <input checked="" type="checkbox"/> 3. Amend the Constitution and its ideals <input checked="" type="checkbox"/> 4. To uphold and protect the harmony and the spirit of common brotherhood amongst all the people of India</p>
<p><b>Q.111</b> The acid present in the cells of our body is _____.</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. deoxyribonucleic acid <input checked="" type="checkbox"/> 2. ribonucleic acid <input checked="" type="checkbox"/> 3. sulphuric acid <input checked="" type="checkbox"/> 4. oxalic acid</p>
<p><b>Q.112</b> What was the role of Nayakas under the Amara-Nayaka system of Vijayanagar administration?</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Revenue Collector <input checked="" type="checkbox"/> 2. Village Head <input checked="" type="checkbox"/> 3. Army Commander <input checked="" type="checkbox"/> 4. Head of the Spies</p>
<p><b>Q.113</b> The Indian Pharmacopoeia Commission (IPC) issued a drug safety alert in December 2023 advising healthcare professionals and patients to monitor adverse reactions to 'Meftal', which has _____ properties</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. antipruritic <input checked="" type="checkbox"/> 2. antipyretic <input checked="" type="checkbox"/> 3. antacid <input checked="" type="checkbox"/> 4. antihistamine</p>
<p><b>Q.114</b> In August 2023, the Defence Ministry of India decided to switch its operating system from Windows to a locally built OS amid rising trends in cyberthreats. The name of the new OS is _____.</p> <p><b>Ans</b> <input checked="" type="checkbox"/> 1. Surakshakavach <input checked="" type="checkbox"/> 2. Survekshan <input checked="" type="checkbox"/> 3. Maya <input checked="" type="checkbox"/> 4. Megh</p>

<p><b>Q.115</b> Which of the following universities is acclaimed as the 'Oxford of Mahayanism'?</p> <p><b>Ans</b>    <input checked="" type="checkbox"/> 1. Taxila</p> <p>          <input checked="" type="checkbox"/> 2. Vikramshila</p> <p>          <input checked="" type="checkbox"/> 3. Nalanda</p> <p>          <input checked="" type="checkbox"/> 4. Vallabhi</p>
<p><b>Q.116</b> The signatories of the Poona Pact were the Mahatma Gandhi Group and the _____.</p> <p><b>Ans</b>    <input checked="" type="checkbox"/> 1. Dr. BR Ambedkar Group</p> <p>          <input checked="" type="checkbox"/> 2. Sardar Vallabhbhai Patel Group</p> <p>          <input checked="" type="checkbox"/> 3. Subhas Chandra Bose Group</p> <p>          <input checked="" type="checkbox"/> 4. Jawaharlal Nehru Group</p>
<p><b>Q.117</b> The efficient market hypothesis (EMH) is foundational to the Capital Asset Pricing Model (CAPM). To test the validity of the EMH, one can examine whether historical data contradicts CAPM. If historical data were to contradict CAPM, which of the following would this imply about the efficient market hypothesis?</p> <p><b>Ans</b>    <input checked="" type="checkbox"/> 1. It would imply that the market is always efficient.</p> <p>          <input checked="" type="checkbox"/> 2. It would imply that the market is inefficient.</p> <p>          <input checked="" type="checkbox"/> 3. It would imply that the historical data is irrelevant to market efficiency.</p> <p>          <input checked="" type="checkbox"/> 4. It would imply that CAPM is infallible.</p>
<p><b>Q.118</b> In December 2023, Revanth Reddy became the Chief Minister of which state?</p> <p><b>Ans</b>    <input checked="" type="checkbox"/> 1. Karnataka</p> <p>          <input checked="" type="checkbox"/> 2. Chhattisgarh</p> <p>          <input checked="" type="checkbox"/> 3. Telangana</p> <p>          <input checked="" type="checkbox"/> 4. Madhya Pradesh</p>
<p><b>Q.119</b> As per the Indian Constitution, who among the following is considered as the chief aid and advisor of the Governor of a State?</p> <p><b>Ans</b>    <input checked="" type="checkbox"/> 1. Advocate General</p> <p>          <input checked="" type="checkbox"/> 2. Chief Secretary</p> <p>          <input checked="" type="checkbox"/> 3. Chief Justice of the High Court</p> <p>          <input checked="" type="checkbox"/> 4. Chief Minister of the State</p>
<p><b>Q.120</b> Which of the following statements is NOT correct about 'Globalisation'?</p> <p><b>Ans</b>    <input checked="" type="checkbox"/> 1. It helps to create borderless world</p> <p>          <input checked="" type="checkbox"/> 2. It encourages flows of investment, people and information</p> <p>          <input checked="" type="checkbox"/> 3. It helps in alleviating problems and increased sustainable development benefits</p> <p>          <input checked="" type="checkbox"/> 4. It is the process of interaction and integration among people</p>
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