

IDBI Asst Manager 2021 Memory Based (Solutions)

Solutions (1-5): L lives East of M. F who doesn't live on even numbered floor lives North to L. B lives North-east to M as well as South-west to D. Here, we get three possibilities i.e. Case 1, Case 2 and case 3.

		Case 1			Case 2			Case 3	
Floors	Flat	Flat 2	Flat 3	Flat 1	Flat 2	Flat 3	Flat 1	Flat 2	Flat 3
	1								
4			D			D/			D
3		В	F		F	D/		B/	F
2	M		L		В			B/	
1				M	L		M		L

One floor gap is between G and K who doesn't live West of F. K lives above C and below A who live to South of J. J lives West of H. Here, Case 1 and Case 3 are ruled out. A lives above E who lives East of B. G. does not live in an even numbered flat.

So, the final arrangement will be: -

Floors	Flat 1	Flat 2	Flat 3
4	J	Н	G
3	A	F	D
2	K	В	Е
1	M	L	С

S1. Ans.(c)

S2. Ans.(c)

S3. Ans.(d)

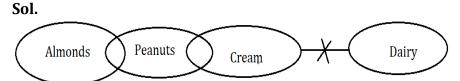
S4. Ans.(a)

S5. Ans.(b)

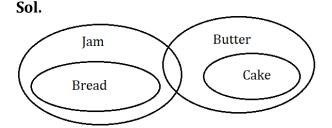


Solutions (6-7):

S6. Ans.(e)



S7. Ans.(b)





Solutions (8-12): Logic: In step 1: the place value of the first and last letter of the word is written.

In step2: the difference of the numbers are taken and kept at the last. The place value of the next letter from the left end is written at first.

In step 3: The sum of the numbers are taken and kept at first. The place value of the next letter from the right end is written at last.

In step 4: the difference of the numbers are taken and kept at the last. The place value of the next letter from the left end is written at first.

Step V: Sum of numeral value of all digits.

Input: offer right power annoy sheet

Step 1: 15ffe18 18igh20 16owe18 1nno25 19hee20

Step 2: 6fe3 9gh2 15we2 14no24 8ee1

Step 3: 9f5 11g8 17w5 38n15 9e5

Step4: 64 73 2312 1423 54

Step 5: 10 10 8 10 9

S8. Ans.(b)

S9. Ans.(a)

S10. Ans.(c)

S11. Ans.(d)

S12. Ans.(b)

S13. Ans.(b)

Sol. Clearly, trade unions provide a common platform for the workers to voice their demands and protests and thus ensure that they are not subdued or exploited. So, argument II holds strong, while I and III do not. Besides, the idea of imitation of other countries in the implementation of a certain policy, holds no relevance. So, argument IV also not hold strong.

S14. Ans.(e)

Sol. For I-False, because it cannot be assumed from the given statement that there is no other woman of India is enough capable for such designation.

For II-False, because we cannot said from the given statement that woman are better judge than man.

For III-True, because it is clear from the given statement that Neeru Chadha is selected as member of ITLOS. So, it can be assumed that she is better than all other candidates.

Solutions (15-19): From the given statements, only two employees are junior than the one who has 8 years of working experience. 15 years is the maximum years of working experience which means CEO has 15 years of experience. The CEO salary is 5k less than the square of the smallest two-digit number which means CEO has 95k salary (100-5=95). At most one person is senior to S. Here we have two possible cases i.e., case 1 and case 2. Only two designations are there in between the designations of S and P.

Designations	CASE 1			CASE 2		
	Persons	Experience (years)	Salary	Persons	Experience (years)	Salary
Chief Legal Officer (CLO)						
Chief Marketing Officer (CMO)	P					
Chief Technology Officer (CTO)		8		P	8	
Chief Financial Officer (CFO)						
Chief Operating Officer (COO)	S					
Chief Executive Officer (CEO)		15	95k	S	15	95k

CMO is getting 50K. The sum of the salaries of CLO and CMO is same as the salary of the one who has the maximum work experience which means CLO gets 45K. The working experiences of CMO and CTO are in consecutive years which means CMO has 7 years of experience.

Designations	CASE 1			CASE 2		
	Person	Experience (years)	Salary	Persons	Experience (years)	Salary
Chief Legal Officer (CLO)			45K			45K
Chief Marketing Officer (CMO)	P	7	50K		7	50K
Chief Technology Officer (CTO)		8		P	8	
Chief Financial Officer (CFO)						
Chief Operating Officer (COO)	S					
Chief Executive Officer (CEO)		15	95k	S	15	95k

R is junior than P. Q is junior than R and having the working experience equal to the sum of the digit of the salary what R gets and therefor, case 1 gets eliminated here. Hence, Q has 5 years of experience. The salary of CTO is less than 57K which means CFO gets 60 K. The one who is COO has 3 years more experience than the one who is getting 60K which means COO has 13 years of experience. The one who has 10 years of experience earns 10K less than U who is not CFO. The salary of P is a multiple of 11 which means salary of P is 55k (between 50K and 60K)

Designations	Persons	Experience (years)	Salary
Chief Legal Officer (CLO)	Q	5	45K
Chief Marketing Officer (CMO)	R	7	50K
Chief Technology Officer (CTO)	P	8	55K
Chief Financial Officer (CFO)	T	10	60K
Chief Operating Officer (COO)	U	13	70K
Chief Executive Officer (CEO)	S	15	95K

S15. Ans.(d)

\$16. Ans.(a)

S17. Ans.(c)

S18. Ans.(b)

\$19. Ans.(a)

Solutions (20-24):

S20. Ans.(e)

Sol. By Combining I, II and III we get "fortune" is coded as "pw".

Words	Codes
The	Ws
Christmas	Rw
New	Кр
This	Pm
Tree	Mk
Fortune	Pw
Year	Sm

S21. Ans.(e)

Sol. By Combing I, II and III we get R lives on 2nd floor.

Floors	Persons	Persons
7	P	Т
6	S	S
5	U	V
4	Q	U
3	V	Q
2	R	R
1	T	P



S22. Ans.(a)

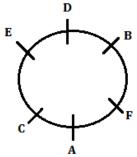
Sol. By combining the both I and II. M was born on 5th April.

Months	Dates	Case 1	Case 2
		Persons	Persons
January	5	K	K
	14	Q	Q
April	5	M	M
	14	N	N
June	5	L	P
	14	P	L



S23. Ans.(b)

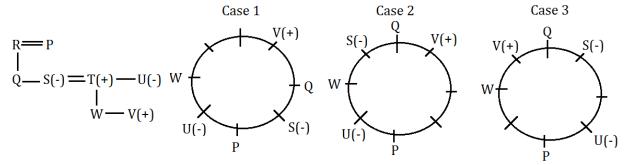
Sol. By combining the both I and III. F sits 2^{nd} to the left of D.





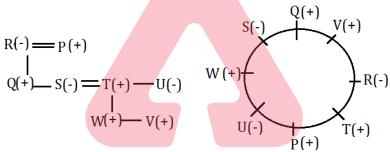
S24. Ans.(d)

Solutions (25-29): W sits 2nd to the left of P who is spouse of R. Two persons sit between P and Son of T. T is son in law of R. S is spouse of T who is father of W. Q who is sibling of S is an immediate neighbor of V and S. V faces U who is sister in law of S. U is unmarried. Here, we get three possibilities i.e. Case 1, Case 2 and Case 3.



R sits immediate right of T who doesn't sit next to V. Here, Case 1 and Case 3 are ruled out. No two females sit adjacent to each other.

So, the final arrangement will be: -



S25. Ans.(b)

S26. Ans.(d)

S27. Ans.(c)

S28. Ans.(a)

S29. Ans.(b)

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Solutions (30-31): A S 2 ! D F @ 9 G H 7 # 8 J K 3 \$ % L Z * 5 ^ X C 4 V & B 6 N 1

Step I. A S 2 D L X ! F @ 9 G H 7 # 8 J K 3 \$ % Z * 5 ^ C 4 V & B 6 N 1 Step II. A S 2 D L X ! F @ G H 7 # J K 3 \$ % Z * 5 ^ C 4 V & B 6 9 8 N 1 Step III. B C A S 2 D L X ! F @ G H 7 # J K 3 \$ % Z * 5 ^ 4 V & 6 9 8 N 1

S30. Ans.(e)

S31. Ans.(e)

S32. Ans.(d)

Sol. In the above question it is clear that Statement II will be the cause and Statement I will be its effect. Because it is mentioned in statement II that jawans have doubt how to deal with the women so this will be cause and its effect will be, The Indian Army will recruit women in combat roles to tackle such kind of situation.

\$33. Ans.(c)

Sol. Statement (I) suggests that royals are not kings or queens by choice but because they have to, for the welfare of the country which is in line with the statement. (II) fortifies the statement by stating out an example in which he had to face problems because of his royal background. (III) is irrelevant to the statement.

Solutions (34-35):

$$B > C > E > D > A$$
 32
 20

S34. Ans.(b)

S35. Ans.(b)

Solutions (36-40): Step I- P works in Mumbai but doesn't work at HR department. Q works in Wipro but doesn't work in Jaipur and Kolkata. O works in Content department but doesn't work in TCS and IBM. Person who works at Production in Infosys doesn't work in New Delhi and Mumbai.

Persons	Department	Company	City
P	HR		Mumbai
Q		Wipro	Jaipur ,
			Kolkata
0	Content	TCS, IBM	
	Production	Infosys	New Delhi

Step II- N works at Sales but doesn't work in Chennai. Person who works in Mahindra works in Chennai. M doesn't work in Kolkata. Person who works in Marketing department doesn't work in IBM.

Persons	Department	Company	City	
P	Marketing	TCS	Mumbai	
Q	HR	Wipro	New Delhi	
0	Content	Ma <mark>hi</mark> ndra	Chennai	
M	Production	Infosys	Jaipur	
N	Sales	IBM	Kolkata	

\$36. Ans.(d)

\$37. Ans.(a)

S38. Ans.(c)

\$39. Ans.(e)

S40. Ans.(c)

S41. Ans.(b)

Sol. Diameter of the circle= $\frac{112}{4}$ = 28 cm

So, the final arrangement will be: -

Area of the square= 784 cm²

Area of the circle= πr^2 =616 cm²

Quantity I - Required difference=168 cm²

Quantity II - 172 cm²

So, Quantity I < Quantity II

\$42. Ans.(a)

Sol. Let the cost price of the table be Rs x

ATO

$$\frac{1600 - x}{x} \times 100 + 16 = \frac{1800 - x}{x} \times 100$$

x = 1250

Quantity I - Rs. 1250

Quantity II - Rs. 1200

So, Quantity I > Quantity II

\$43. Ans.(e)

Sol. Equivalent interest received in two years at 15% CI

$$= 15 + 15 + \frac{15 \times 15}{100} = 32.25\%$$

Amount received from B= $2400 \times \frac{132.25}{100} = Rs \ 3174$ Amount received from C= $Y \times \frac{132.25}{100} = Rs \ 1.3225Y$

ATQ

$$1.3225Y - 3174 = 1058$$

$$\Rightarrow Y = Rs \ 3200$$

Quantity I - Required average = $\frac{2400+3200}{2}$ = Rs. 2800

Quantity II - Rs. 2800

So, Quantity I = Quantity II

S44. Ans.(a)

Sol. ATQ -

$$72 \times \frac{5}{18} = \frac{L + 420}{30}$$

$$L = 600 - 420$$

$$L = 180 \text{ meters}$$

Let speed of man = s km/hr

$$(72 + s) \times \frac{5}{18} = \frac{180 \times 8}{54}$$

$$360 + 5s = 480$$

$$5s = 120$$

$$s = 24 \text{ km/hr}$$

Quantity I - Speed of man = 24 km/hr

Quantity II - 20 km/hr

So, Quantity I > Quantity II

\$45. Ans.(e)

Sol. ATQ

$$\frac{x \times (x+10)}{x + (x+10)} = 12$$

$$x = 20$$
 hours

Quantity I – Required percentage = 150%

Quantity II - 150%

So, Quantity I = Quantity II



\$46. Ans.(a)

Sol. Total number of females visit P and Q

$$= 2400 \times \frac{(100-40)}{100} + 2000 \times \frac{(100-45)}{100} = 2540$$

Total number of children visit R and S = $4500 \times \frac{15}{100} + 6000 \times \frac{20}{100} = 1875$

Required ratio = 2540 : 1875 = 508 : 375

S47. Ans.(c)

Sol. Req. average =
$$\frac{6000 \times \frac{45}{100} + 2400 \times \frac{30}{100}}{2}$$

= $\frac{2700 + 720}{2}$ = 1710

S48. Ans.(e)

Sol. Total number of females visit S = $6000 \times \frac{(100-65)}{100} = 2100$

Total number male visit Q = $2000 \times \frac{40}{100} = 800$

Required $\% = \frac{2100}{800} \times 100 = 262.5\%$

S49. Ans.(c)

Sol. Total number of children visit P and S

$$=2400 \times \frac{10}{100} + 6000 \times \frac{20}{100}$$

$$= 240 + 1200 = 1440$$

Total number female visits Q and R

$$=2000\times\frac{(100-45)}{100}+4500\times\frac{(100-65)}{100}$$

$$= 1100 + 1575 = 2675$$

Required difference = 2675 - 1440 = 1235

\$50. Ans.(b)

Sol. Req. sum =
$$4500 \times \frac{(100-65)}{100} + 2000 \times \frac{(100-45)}{100} + 6000 \times \frac{(100-65)}{100}$$

$$= 1575 + 1100 + 2100 = 4775$$

S51. Ans.(c)

Sol. Amount received by Rohit =
$$4000 + \frac{4000 \times 10 \times 2}{100} = Rs. 4800$$

S52. Ans.(e)

Sol. interest amount received by Karan =
$$\frac{8000 \times 10 \times 2}{100}$$
 = $Rs. 1600$ Interest amount received by Mahesh = $\frac{6000 \times 12 \times 4}{100}$ = $Rs. 2880$

Interest amount received by Mahesh =
$$\frac{6000 \times 12 \times 4}{100}$$
 = Rs. 2880

Required
$$\% = \frac{2880 - 1600}{1600} \times 100 = 80\%$$

\$53. Ans.(d)

Sol. total interest amount received by Anurag & Rohit together = $\frac{4000 \times 16 \times 4}{100} + \frac{4000 \times 10 \times 2}{100} = \text{Rs.}3360$

\$54. Ans.(a)

Sol. interest received by Karan (SI) = $\frac{8000 \times 10 \times 2}{100}$ = Rs.1600

Interest received by Karan (CI) = $8000 \left(1 + \frac{10}{100}\right)^2 - 8000 = \text{Rs.}1680$

Required value = 1680 - 1600 = Rs.80

\$55. Ans.(e)

Sol. Interest received by Karan = $\frac{8000 \times 10 \times 2}{100}$ = Rs. 1600 Interest received by Anurag = $\frac{4000 \times 16 \times 4}{100}$ = Rs. 2560 Interest received by Mahesh = $\frac{6000 \times 12 \times 4}{100}$ = Rs. 2880 Interest received by Rohit = $\frac{4000 \times 10 \times 2}{100}$ = Rs. 800

Clearly, Mahesh had received highest interest

\$56. Ans.(c)

Sol. Required percentage = $\frac{20-12.5}{20} \times 100$

 $=\frac{7.5}{20}\times 100=37.5\%$

\$57. Ans.(d)

Sol. Required angle = $\frac{22.5}{100} \times 360 = 81^{\circ}$

S58. Ans.(a)

Sol. No. of male employee who use $car = \frac{60}{100} \times \frac{22.5}{100} \times 800 = 108$

No. of female employee who use Rickshaw = $\frac{25}{100} \times \frac{20}{100} \times 800 = 40$

So, required difference = 108 - 40 = 68

\$59. Ans.(b)

Sol. Average no. of employee who use Car, Bus and Bike $=\frac{1}{3} \times \left[\frac{(22.5+12.5+25)}{100} \times 800\right]$ = 160

Total no. of employee who use Rickshaw and Bicycle together = $\frac{20+20}{100} \times 800 = 320$

So, required difference = 320 - 160 = 160

S60. Ans.(d)

Sol. Percentage of employee who use transport = 100 - 20 = 80%

So, no. of employee who do not use any transport $=\frac{800}{80}\times20=200$

No. of employee who use Bus = $\frac{25}{100} \times 800 = 200$

So, required ratio = 200:200

=1:1

S61. Ans.(c)

Sol. From the first paragraph and the line "The current regulatory architecture is woefully inadequate to comprehend and determine whether this corporate concentration gives rise to monopoly power." We can infer the statement in option (c) is correct. Hence, Option (c) is correct answer choice.

S62. Ans.(a)

Sol. As per the line in the third paragraph "The dictionary definition of monopoly is "a market situation where one firm, or a group of firms acting in concert, controls the supply of a good or a service"." option (a) is correct. Whereas option (b) is false and contradicts the given line. As for option (c), it gives the implication of monopoly. Hence, option (a) is correct answer choice.

S63. Ans.(b)

Sol. Statement (III) is correct as per the lines of the paragraph second "The intent and structure of regulation around the world has therefore attempted to mitigate or break up monopolies in an attempt to negate this abusive pricing power". As for statements (I) and (II) they either contradict the passage or are not mentioned in the passage. Hence, option (b) is correct answer choice.

S64. Ans.(c)

Sol. The lines of the third paragraph "With significant inputs from the Chicago school, this "Brandeis philosophy" has morphed into one of consumer welfare, measured principally by the price paid by consumers as the test of policy effectiveness" can be used to answer the question. And option (c) can be inferred from these lines. Hence, option (c) is correct answer choice.

S65. Ans.(e)

Sol. Options (a), (b) and (c) are not mentioned in the passage. And (d) contradicts the line of the paragraph "Landmark rulings came in 2004 against the "lack of interoperability" of the Microsoft operating system and in 2017 against Google's Android operating system". Hence, option (e) is correct answer choice.

S66. Ans.(d)

Sol. The line given in the paragraph one "The report points out that changes in land use, and not just vehicular and industrial emissions, have upset natural climatic conditions, and that the world's food systems are responsible for between 25% and 30% of greenhouse gas emissions." shows that statements (I) and (II) are true, whereas (III) is nowhere mentioned. Hence, option (d) is correct answer choice.

S67. Ans.(d)

Sol. The last lines of the paragraph 1 "These relate directly to agriculture and land use, as also to the storage, packaging, processing, retailing and consumption of food. It's not just the way we eat that has to change—vegetarian diets are better—but also how we grow, store and transport our food. The world's farms and forests have to be managed better to prevent land degradation, says the Special Report on Climate Change and Land. No amount of funding for disaster relief will be enough if we're not willing to confront the way we abuse the land we live on (and off)".proves that the option (a) is false and options (b) and (c) are the correct. Hence, option (d) is correct answer choice.

S68. Ans.(a)

Sol. From the last line of the paragraph second "The relationship between degradation and flooding is long established: Intensive rainfall tends to erode soil, leaving croplands with lower capacity to retain moisture, which eventually leads to drought." Option (a) is only true. Hence, option (a) is correct answer choice.

S69. Ans.(d)

Sol. Statement (I) can be inferred from the lines "The diversity of India's geography means each region is likely to need a localized management plan." And Statement (III) from the lines "changes in land conditions can affect temperature and rainfall in regions as far as hundreds of kilometers away". As for the statement (II) it contradicts the lines "Turning farms eco-friendly will mean adopting farming practices that are in harmony with nature. Yet, "modernity" in India often means quite the opposite. This irony needs to be overcome." Hence, option (d) is correct answer choice.

S70. Ans.(c)

Sol. Though all the options can help to counter climate change but only option (c) is mentioned in the passage. The lines in the beginning of the third paragraph "The diversity of India's geography...... the report observes" can be used to infer the option (c). Hence, option (c) is correct answer choice.

S71. Ans.(d)

Sol. From the paragraph and the lines "Usually, a delayed monsoon or a drought, combined with compelling images of parched lands and queues for water in urban areas raise an alarm in the minds of the public. Similarly, episodes of inter-State river water disputes catch public attention. However, this time, it was somewhat different. Videos and news reports claiming that Indian cities are running out of groundwater went viral." We can infer the statements (I) and (II). Whereas the statement (III) is nowhere mentioned. Hence, Option (d) is correct answer choice.

\$72. Ans.(b)

Sol. As per the line in the third paragraph "Her perseverance led to an eventual conclusion that there was no sure evidence for this assessment" option (b) is correct answer choice.

S73. Ans.(b)

Sol. The statements (I) and (II) are false as per the lines "To be fair to Niti Aayog, its projection was only a means to an end goal: leveraging some action from the Indian States. The report's central goal was to propose a tool, an index, to monitor the States' water resource management strategies and provide the necessary course-shift, beyond supply augmentation approaches" of the fourth paragraph. And statement (III) is correct as per the lines of the paragraph third "the Niti Aayog report, especially the piece of information that said: "21 major cities are expected to run out of groundwater as soon as 2020, affecting [nearly] 100 million people."". Hence, option (b) is correct answer choice.

S74. Ans.(a)

Sol. The phrase "**lost some of its sheen**" means decrease in the amount or craze of something. So, option (a) depicts the exact meaning of the phrase as used in the passage. Hence, option (a) is correct answer choice.

\$75. Ans.(b)

Sol. The words "approaches" and "engage" need to be interchanged. As with 'to' plurals are never used. Other words are in their correct positions. Hence, option (b) is correct answer choice.

\$76. Ans.(a)

Sol. *world* is replaced by *world's*

\$77. Ans.(d)

Sol. Replace 'is' with 'are'

\$78. Ans.(d)

Sol. Replace 'are' with 'is'

\$79. Ans.(c)

Sol. Replace 'competency' with 'competence'

\$80. Ans.(b)

Sol. Replace 'on' with 'for'

S81. Ans.(c)

Sol. Replace 'does make him feel' with 'makes him feel'.

S82. Ans. (a)

Sol. Replace 'what he wanted me' with 'how he wanted me'.

S83. Ans.(b)

Sol. Replace 'that we could extend' with 'that we had extended'

S84. Ans.(e)

Ans. No correction required

\$85. Ans.(e)

Sol. No correction required

\$86. Ans.(c)

Sol. Option (c) is the most appropriate choice. The paragraph talks about the privatization of God, the supreme entity. As the second line refers about how God cannot be controlled by certain individuals or communities or some dominant males, only option (c) fits as it mentions about how equivalently no human can claim copyright over their 'gods'.

S87. Ans.(d)

Sol. The sentence that must be filled in the given blank is option (d). This is so because the paragraph is referring about the social expenditure that was raised by the government which raised wages in the informal sector. To portray its aftermaths the only option that suits is option (d), that is it increased minimum support prices(MSP) for farmers .All other options do not satisfy the given blank .Hence option (d) is the answer.



S88. Ans.(b)

Sol. Only option (b) fills the blank in the most appropriate way. As the next line after the blank mentions about the specific exception, we have to fill the blank with the exception that is referred. In option (b), the only exception to the rule of anti -corruption law is given that is, when one is forced to give a bribe. Hence option (b) is the answer.

\$89. Ans.(c)

Sol. The most suitable option here is option (c). As the paragraph talks about macroeconomics, the branch of economics concerned with large-scale or general economic factors, such as interest rates and national productivity, which tend to advance, this is the only statement among the given options which acts as an opener for the paragraph. The next line also supports the first line which talks about the economies which are basically self-correcting. Hence option (c) is the appropriate answer.

S90. Ans.(e)

Sol. The most appropriate answer here that fills the blank is option (e). This is so because the line before the blank talks about the action which has a goal or destination. So the next line must describe about how that action must be led to or in what way it must work and that is described by the statement (e). That is, one's concentration should not be diverted as it affects a goal ,once the action starts. Hence option (e) is the answer.

S91. Ans.(c)

Sol. among the given words, "staunch" has been used correctly in the statements (ii) and (iii). In the statement (i), "staunch" must be replaced with "forlorn". Hence, option (c) is the most suitable answer choice.

Staunch- very loyal and committed in attitude/ (of a wall) of strong or firm construction Forlorn is something or someone with a very poor condition, or is pitifully lonely or sad.

S92. Ans.(d)

Sol. Among the given statements, "magnanimous" has been used incorrectly in the statements (i) and (ii). Hence, option (d) is the most suitable answer choice.

Magnanimous- generous or forgiving, especially towards a rival or less powerful person

\$93. Ans.(e)

Sol. Among the given statements, "tantamount" has been used incorrectly in all the statements. Hence, option (e) is the most suitable answer choice.

Tantamount- equivalent in seriousness to; virtually the same as

S94. Ans.(b)

Sol. Among the given statements, "delineate" has been correctly used in the statements (i) and (ii). In the statement (iii), "delineate" must be replaced with "tantamount". Hence, option (b) is the most suitable answer choice.

Delineate- describe or portray (something) precisely/ indicate the exact position of (a border or boundary)

S95. Ans.(c)

Sol. Among the given statements, "ameliorate" has been correctly used in statements (ii) and (iii). In the first statement "ameliorate" must be replaced with "". Hence, option (c) is the most suitable answer choice.

S96. Ans.(c)

Sol. 'pitfalls, systematic' fits the sentence appropriately where 'pitfalls' means a hidden or unsuspected danger or difficulty and 'systematic' means done or acting according to a fixed plan or system.

S97. Ans.(a)

Sol. 'need, urgency' fits the sentence appropriately where 'urgency' means importance requiring swift action.

S98. Ans.(b)

Sol. 'What, blunder' fits the sentence appropriately where 'blunder' means a stupid or careless mistake.

S99. Ans.(d)

Sol. 'pushy, persuasive' fits the sentence appropriately where 'pushy' means excessively or unpleasantly self-assertive or ambitious and 'persuasive' means good at persuading someone to do or believe something through reasoning or the use of temptation.

S100. Ans.(e)

Sol. 'have, exists' is the correct use.

S101. Ans.(b)

Sol. Let population of city B = 100x

So, population of city A = 120x

And, population of city C = 140x

30% of population of city A = 36x

 $28\frac{4}{7}\%$ of population of city C = $140x \times \frac{2}{7} = 40x$

Required percentage = $\frac{40x-36x}{40x} \times 100 = 10\%$

S102. Ans.(b)

Sol. Let length of train be 'L' meters

ATQ -

$$(144 + 18) \times \frac{5}{18} = \frac{L}{8}$$

L = 360 meters

Length of platform = $360 + 360 \times \frac{2}{3} = 600$ meters

Let train takes 't' sec to cross the platform

$$144 \times \frac{5}{18} = \frac{360 + 600}{t}$$

40 t = 960

t = 24 sec

S103. Ans.(b)

Sol. Let speed of stream = s km/hr So, speed of boat in still water = 2s km/hr ATQ -

$$(2s + s) - (2s - s) = 8$$

2s = 8

s = 4 km/hr

Downstream speed = $(2 \times 4 + 4) = 12 \, km/hr$ Upstream speed = $(2 \times 4 - 4) = 4 \, km/hr$

Required time = $\frac{48}{12} + \frac{32}{4} = 12$ hours



S104. Ans.(e)

Sol. Let total quantity of mixture in vessel = x liters Ratio of milk to water in vessel = 100%: 40% = 5: 2ATQ -

$$\frac{\frac{5x}{7} - 42 \times \frac{5}{7}}{\frac{2x}{7} - 42 \times \frac{2}{7} + 32} = \frac{7}{6}$$

$$\frac{5x - 210}{2x + 140} = \frac{7}{6}$$

$$30x - 1260 = 14x + 980$$

$$16x = 2240$$

$$x = 140 \text{ liter}$$

\$105. Ans.(a)

Sol. Given,

Mark price of jeans = 700 Rs

Discount = x Rs

Cost price of jeans = 560 Rs

ATQ,

$$(700 - x) = 560 \times \frac{112.5}{100}$$

x = 70 Rs

Required discount percentage =
$$\frac{70}{700} \times 100 = 10\%$$

Solutions (106-110): Let number of female patients in Q=100x

Then number of male patients in hostel Q=200x

Number of female patients in P = $100x \times \frac{130}{100} = 130x$

Number of male patients in R = 120 + 100 = 220

Number of female patients in hostel R=1000-220=780

Total number of female patients in P and that of in $S=2 \times 223 = 446$

Number of female patients in hostel S=(446-130x)

Number of male patients in S = 302

ATQ

200x-302=98

x=2

Hospital	Male patients	Female patients
Hospital	Male patients	Female patients

P	120	260
Q	400	200
R	220	780
S	302	186

S106. Ans.(b)

Sol. Required percent=
$$\frac{(302-186)}{(400-200)} \times 100 = 58\%$$

\$107. Ans.(a)

Sol. Required difference=
$$(302 + 186) - (120 + 260) = 108$$

\$108. Ans.(a)

Sol. Required ratio=
$$\frac{600}{1000} = \frac{3}{5}$$

S109. Ans.(d)

Sol. Required average=
$$\frac{100+380+200+282}{4}$$
 = 240.5

S110. Ans.(b)

Sol. Total number of male patients in P and female patients in R together =900 Required percentage =
$$\frac{900-400}{400} \times 100 = 125\%$$

S111. Ans.(d)

Sol. Let present age of Ankita and Saumya be x and y respectively.

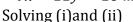
$$\frac{x-4}{y-4} = \frac{9}{7}$$

$$\Rightarrow -7x + 9y = 8 \dots (i)$$

Also,

$$\frac{x+8}{y+8} = \frac{11}{9}$$

$$\Rightarrow 9x - 11y = 16$$
(ii)



x=58yr

required average=
$$\frac{1}{2}(58 + 46) = 52 \text{ yr}$$

S112. Ans.(a)

Sol. Let per day work of A = 2x units

So, per day work of B = x unit

So, total unit of work = $(2x + x) \times 60 = 180x$ units

Let, per day work of C = y unit

$$(2x + x + y) \times 45 = 180x$$
 units

$$y = x$$

Time required to complete the work by B & C together

$$=\frac{180x}{(x+x)} = 90 \text{ days}$$

S113. Ans.(a)

Sol. ATQ,

$$P \times \frac{120}{100} \times \frac{120}{100} \times \frac{120}{100} - P \times \frac{120}{100} \times \frac{120}{100} = 2700$$

$$P \times \frac{12 \times 12}{100} [1.2 - 1] = 2700$$

$$P = \frac{2700 \times 100}{12 \times 12 \times 0.2}$$

$$P = Rs 9375$$

S114. Ans.(d)

Sol. Let the radius of smaller and bigger circle be 2x cm and 3x cm respectively.

ATQ—

$$2\pi 2x + 2\pi 3x = 220$$

$$2\pi (2x + 3x) = 220$$

$$5x = \frac{110 \times 7}{22}$$

$$5x = 35$$

$$x = 7 \text{ cm}$$

radius of smaller circle = 14 cm

radius of larger circle = 21 cm

Required sum of area = $(2 \times 14)^2 + \frac{22}{7} \times 21 \times 21$

$$= 2170 \text{ cm}^2$$

S115. Ans.(c)

Sol. Veer : Arun profit ratio = 12000 : (18000 – 12000)

ATQ,

Let Arun invested X Rs. and Veer invested X + 16000 Rs.

$$\frac{(16000+X)8}{X\times12} = \frac{2}{1}$$

$$128000 + 8X = 24X$$

$$X = \frac{128000}{16}$$

$$X = 8000 \text{ Rs}.$$

S116. Ans.(b)

Sol. Favorable cases = (one red and one blue ball) or both red

So, required probability =
$$\frac{6 \times 8 \times 2}{14 \times 13} + \frac{6 \times 5}{14 \times 13}$$

$$= \frac{48}{91} + \frac{30}{182}$$

$$96 + 30$$

$$=\frac{96+30}{182}$$

$$=\frac{9}{13}$$

S117. Ans.(a)

Sol. Let the first number = 4x

So, second number = $4x \times \frac{125}{100} = 5x$

And third number = $5x \times \frac{120}{100} = 6x$

Let the fourth and fifth number be y and z respectively.

ATQ,

$$y + z = 126 \times 5 - (4x + 5x + 6x)$$

$$y + z = 630 - 15x$$
 ...(i)

and,
$$4x + y + z = 300$$

$$\Rightarrow$$
 630 -15x + 4x = 300 (from (i))

x = 30

Sum of last two numbers = 630 - 15x = 180



S118. Ans.(e)

Sol. Let his speed be x km/hr

$$\frac{48}{x} - \frac{48}{x+8} = \frac{60}{60}$$

$$\frac{48}{x} - \frac{48}{x+8} = \frac{60}{60}$$
$$\Rightarrow x^2 + 8x - 384 = 0.$$

$$\Rightarrow$$
 (x + 24) (x - 16) = 0 \Rightarrow x = 16.

$$a = \frac{48}{16} = 3$$
 hours.

S119. Ans.(c)

Sol. Let breadth of rectangle be b cm.

From I: Side of square = 24 cm

Perimeter of square = 96 cm = perimeter of the rectangle.

ATQ

$$2(30 + b) = 96 \Rightarrow b = 18 \text{ cm}$$

From II: Side of a square = 24 cm

Breadth of the rectangle = $\frac{24\sqrt{2}}{4\sqrt{2}} \times 3 = 18$ cm

Either statement I or statement II by itself is sufficient to answer the question.

S120. Ans.(d)

Sol. Let the length of the train be x meter and y meter respectively.

And let the speeds of the trains be a m/s and b m/s respectively.

Statement I. $a - b = 8_{\underline{}}(1)$

Statement II. a + b = 24

So,
$$\frac{x+y}{24} = 12$$

So,
$$x + y = 288$$

So, data given in both the statements together is not sufficient to answer the question.

S121. Ans.(e)

Sol. Statement I. efficiency of pipe $P = \frac{500}{25} = 20$ litre per minute.

Statement II. efficiency of pipe Q=2 litres per minute.

So, time taken by pipes P and Q together to fill the tank = $\frac{500}{20+2} = 22 \frac{8}{11}$ minutes

So, both the statements together are necessary to answer the questions.

S122. Ans.(d)

Sol. Let the four numbers be a, b, c and d respectively.

$$\frac{a+b+c}{3} = 3d$$

$$a + b + c = 9d$$

Statement I.
$$\frac{a+b}{2} = \frac{c+d}{2}$$

$$a+b = c+d_{(1)}$$

$$a+b = c+d$$
____(1)
Statement II. $\frac{b+c+d}{3} = 2a$

$$b+c+d = 6a_{(2)}$$

So, data given in both the statements together is not sufficient to answer the question.

S123. Ans.(c)

Sol. Statement I.

Time taken by X and Y together to complete the same work $=\frac{1}{\frac{5}{16}-\frac{1}{12}}=\frac{48}{11}=4\frac{4}{11}$ days.

Statement II,

Required time =
$$\frac{12\times4}{8+3} = \frac{48}{11} = 4\frac{4}{11}$$
 days.

So, either statement I alone or statement II alone are sufficient to answer the question.

S124. Ans.(a)

Sol.
$$\sqrt{360 - 421 + 350} + 272 = (?)^2$$

$$? = \sqrt{289} = 17$$

S125. Ans.(c)

Sol.
$$2^? = (2)^6 \times (2^5)^2 \div 2^9$$

$$2^? = 2^7$$



S126. Ans.(b)

Sol. ? =
$$572 \div 26 \times 12 - 200$$

S127. Ans.(a)

Sol. ?
$$+2197 = 3481 - 681$$

\$128. Ans.(e)

$$88.2 - 84 = 9 - ?$$

$$? = 4.8$$



S129. Ans.(b)

Sol. I.
$$x^2 + x - 6 = 0$$

 $x^2 + 3x - 2x - 6 = 0$
 $x(x+3) - 2(x+3) = 0$
 $(x+3)(x-2) = 0$
 $x = -3, 2$
II. $y^2 + 7y + 12 = 0$
 $y^2 + 4y + 3y + 12 = 0$
 $y(y+4) + 3(y+4) = 0$
 $y = -3, -4$
So, $x \ge y$

S130. Ans.(a)

Sol.
$$2x^2 - 17x + 35 = 0$$

 $2x^2 - 10x - 7x + 35 = 0$
 $2x(x - 5) - 7(x - 5) = 0$
 $(2x - 7)(x - 5) = 0$
 $x = \frac{7}{2}, 5$
II. $4y^2 - 19y + 21 = 0$
 $4y^2 - 12y - 7y + 21 = 0$
 $4y(y - 3) - 7(y - 3) = 0$
 $(4y - 7)(y - 3) = 0$
 $y = \frac{7}{4}, 3$
So, $x > y$



S131. Ans.(c)

Sol. I.
$$x - 512 = 1331$$
 $x = 1843$
II. $y = 2197 - 353$
 $y = 1844$
So, $y > x$

S132. Ans.(d)

Sol. I.
$$x^2 + 39x + 380 = 0$$

 $x^2 + 19x + 20x + 380 = 0$
 $x(x + 19) + 20(x + 19) = 0$
 $(x + 19)(x + 20) = 0$
 $x = -19, -20$
II. $y^2 + 37y + 342 = 0$
 $y^2 + 18y + 19y + 342 = 0$
 $y(y + 18) + 19(y + 18) = 0$
 $(y + 18)(y + 19) = 0$
 $y = -18, -19$
So, $y \ge x$

S133. Ans.(e)

Sol. I.
$$x = \frac{2}{x} + \frac{2}{x}$$

$$x^2 = 4$$

$$x = \pm 2$$

II.
$$y^2 - y - y + 1 = 0$$

$$y(y-1) - 1(y-1) = 0$$

$$(y-1)^2=0$$

$$y = 1$$

So, no relation can be established.

S134. Ans.(d)

Sol. I.
$$x^2 - 21x + 38 = 0$$

$$x^2 - 19x - 2x + 38 = 0$$

$$x(x-19) - 2(x-19) = 0$$

$$x = 19, 2$$

II.
$$y^2 - 38y + 361 = 0$$

$$y^2 - 19y - 19y + 361 = 0$$

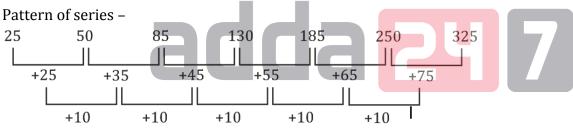
$$y(y-19) - 19(y-19) = 0$$

$$y = 19$$

So,
$$x \le y$$

S135. Ans.(b)

Sol. Wrong number = 245

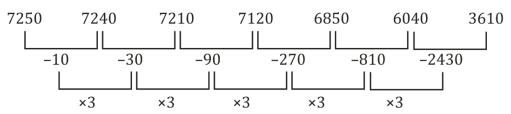


So, there should be 250 in place of 245.

S136. Ans.(e)

Sol. Wrong number = 7260

Pattern of series -

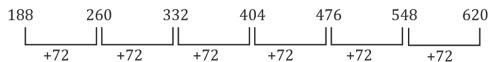


So, there should be 7250 in place of 7260.

S137. Ans.(b)

Sol. Wrong number = 550

Pattern of series –

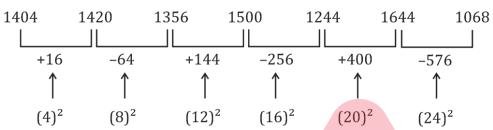


So, there should be 548 in place of 550.

S138. Ans.(c)

Sol. Wrong number = 1406

Pattern of series -

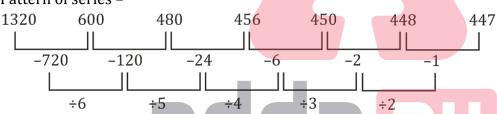


So, there should be 1404 in place of 1406.

S139. Ans.(b)

Sol. Wrong number = 598

Pattern of series -



So, there should be 600 in place of 598.

S140. Ans.(d)

Sol. Pattern of series -

Wrong number = 235

 $5+1^3+1=7$

 $7+2^3+2=17$

 $17+3^3+3=47$

47+43+4=115

115+5³+5=**245**

 $245 + 6^3 + 6 = 467$

