Quantitative Aptitude

**Direction (1-5)**: What value should come in place of question-mark (?) in the following number series?

**Ques 1.** 78, 294, 419, 483, ?
1. 518
2. 505
3. 515
4. 510
5. 516

**Ques 2.** 16, 26, 6, 46, -34, ?
1. 126
2. 116
3. 515
4. 510
5. 516

**Ques 3.** 174, 232, 298, 372, ?
1. 464
2. 454
3. 474
4. 445
5. 454

**Ques 4.** 17, 35, 109, 445, ?
1. 2214
2. 2231
3. 2411
4. 2421
5. 2241

**Ques 5.** 1498, 1473, 1437, 1388, ?
1. 1342
2. 1324
3. 1314
4. 1332
5. 1334

**Directions (6-10)**: Study the following pie-charts carefully and answer the questions given below:
Percentage break up of the number of children in five different villages and break up of children attending school from those villages.
Ques 6. What is the total number of children not attending school from village $V_2$ and $V_3$ together?
1. 528
2. 508
3. 518
4. 618
5. 628

Ques 7. The number of children attending school from village $V_1$ is approximate, what percent of the number of children from that village?
1. 54%
2. 56%
3. 60%
4. 53%
5. 58%

Ques 8. What is the approximate average number of children not attending school from village $V_2$, $V_3$ and $V_4$ together?
1. 269
2. 258
3. 264
4. 270
5. 266

Ques 9. The number of children not attending school from village $V_4$ and $V_5$ is approximately what percent of the total number of children from village $V_4$ and $V_5$ together?
1. 43.65%
2. 42.5%
3. 48%
4. 46%
5. 49.45%

Ques 10. What is the ratio of the total number of children from village $V_4$ to the number of children attending school from the same village?
1. 22:21
2. 29:28
3. 29:21
4. 29:27
5. 23:21

Direction(Questions 11 to 20):- What value should come in place of the question mark (?) in the following questions?
Ques 11. $1190 \div \sqrt{7225} \times ? = 3094$

a) 221  

b) 121  

c) 214  

d) 241  

e) None of these

Ques 12. $(\sqrt{5} - 1)^2 = ? - 2\sqrt{5}$

a) 6  

(b) 6+2\sqrt{5}  

c) 6\sqrt{5}  

d) 6-2\sqrt{5}  

(e) None of these

Ques 13. A man has Rs. 480 in the denominations of one-rupee notes, five-rupee notes and ten-rupee notes. The number of notes of each denomination is equal. What is the total number of notes that he has ?

a) 45  

b) 60  

c) 75  

d) 90  

e) None of these

Ques 14. There are two examinations rooms A and B. If 10 students are sent from A to B, then the number of students in each room is the same. If 20 candidates are sent from B to A, then the number of students in A is double the number of students in B. The number of students in room A is:

a) 20
Ques 15. Find the value of
\[ \sqrt{44 + \sqrt{44 + \sqrt{10000}}} \]
(a) 44
(b) 12
(c) 4
(d) 2
(e) None of these

Ques 16. The value of
\[ \sqrt{-\sqrt{3} + \sqrt{3} + 8\sqrt{7} + 4\sqrt{3}} \]
(a) 1
(b) 2
(c) 3
(d) 8
(e) None of these

Ques 17.
Ques 18.

The expression

\[
\sqrt{\frac{0.85 \times (0.105 + 0.024 - 0.008)}{0.22 \times 0.25 \times 17}}
\]

simplifies to:

(a) \sqrt{11}
(b) \sqrt{11}
(c) 11
(d) \sqrt{0.11}
(e) None of these

Ques 19.

If \( \frac{x}{2y} = \frac{3}{2} \) then the value of \( \frac{2x^2y}{x-2y} \) equals

(a) 1/7
(b) 7
(c) 7.1
(d) 6.8
(e) None of these
Ques 20.

\[
\begin{align*}
\text{If } a^b & = a^2 + ab + b^2 \text{ then } 2^3 \text{ equals } \\
& \quad a^b
\end{align*}
\]

(a) 29  
(b) 19  
(c) 9  
(d) 6  
(e) None of these

Directions (21-25): Study the following line graph and table carefully and answer the questions given below.

Numbers of employees working in five different banks A, B, C, D and E.

<table>
<thead>
<tr>
<th>Bank</th>
<th>M : F</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>13:6</td>
</tr>
</tbody>
</table>
Ques 21. What is the total number of male employees taking all the banks together?
1. Other than the given options
2. 9%
3. 15%
4. 11%
5. 13%

Ques 22. What is the average number of female employees taking all the banks together?
1. 656
2. 686
3. 668
4. Other than the given options
5. 646

Ques 23. Approximately by what percent is the number of male employees working in banks A and C together more than that of the total number of female employees working in bank B and D?
1. Other than the given options
2. 8%
3. 6%

Ques 24. What is the ratio of female employees working in bank D to that in E?
1. 7:4
2. Other than the given options
3. 8:5
4. 7:3
5. 9:5

Ques 25. Approximately by what per cent is the number of total employees of bank C more than that of bank D?
1. 8%
2. 6%
3. Other than the given options
4. 4%
5. 10%

Ques 26. P and Q can complete a job in 24 days working together. P alone can complete it in 32 days. Both of them worked together for 8 days and then P left. The number of days Q will take to complete the remaining work is

1. 62
2. 60
3. 65
4. 64
5. 66

Ques 27. A passenger sitting in a train of a certain length which is running at a speed of 60 km/hr passing through two bridges. the notices that be crossed the first bridge and second bridge in time intervals which are in the ratio of 7:4 respectively. If the length of the first bridge is 350m, then the length of the second bridge is

1. 210m
2. 220m
3. 200 m
4. 190m
5. 180m

Ques 28. The average salary per head of all workers of an institution is Rs. 80. The average salary per head of 16 officers is Rs. 600. The average salary per head of 16 officers is Rs. 600. Then, the total number of workers in the institution is

1. 656
2. 665
3. 655
4. 676
5. 666

Ques 29. Anand finds that due to a fall in the rate of interest from 10% to 5%, his yearly income diminishes by Rs.500. His capital is?

1.10000
2. 12000
3. 15000
4. 18000
5. 25000

Ques 30. In a town, each of the 60% of families has a laptop, each of the 30% of families has a computer and each of the 15% of families has both a laptop and a computer. In all, there are 10800 families in the town. How many families in the town do not have a laptop or a computer?

1. 2600
2. 2850
3. 2900
4. 2650
5. 2550
Ques 31. An article of cost price Rs. 16000 is marked at Rs. 19200. After allowing a discount of \( x\% \) a profit of 15% is made. The value of \( x \) is.

1. 3.17%
2. 4.17%
3. 5.17%
4. 2.75%
5. 6.25%

Ques 32. \( 464.83 + 40.14 / 7.84 + 6.26 / 0.91 = ? \). Find approximate value?

1. 375
2. 475
3. 473
4. 450
5. Other than the given options

Ques 33. P,Q and R started a business by investing Rs. 40,500, Rs. 45000 and Rs. 50000 respectively. After 6 months R withdrew Rs. 10,000 while P invested Rs. 4500 more. In annual profit of Rs. 53,100 the share of R will exceed that of P by

1. Rs. 1000
2. Rs. 850
3. Rs. 950
4. Rs. 800
5. Rs. 900

Ques 34. Three taps X,Y and Z can fill a tank in 12 hrs, 15 hrs and 20 hrs respectively. If X is open all the time and Y and Z are open for one hour each alternately, starting with Y, then the tank will be full in how many hours?

1. 10 hr
2. 6 hr
3. 8 hr
4. 7 hr
5. 9 hr

Ques 35. If the simple interest on a certain sum of money for 9 months at 6% is Rs. 406 less than the simple interest on the same sum for 16 months at 7% pa, then find the sum.

1. Rs. 8600
2. Rs. 8400
3. Rs. 8800
4. Rs. 8900
5. Rs. 9000

Reasoning

Directions (Q.36-40) Study the following information to answer the given questions.

i) There are 9 friends A, B, C, D, E, F, G, H seated in a circle facing the centre.

ii) AC, DG, HE and FB are seated adjacent to each other. A is also seated adjacent to H.
iii) B is 2nd to the right of H.
iv) E is 3rd to the right of C.

Ques 36. Who is 2nd to the left of A?
   a) D
   b) G
   c) F
   d) Cannot be determined
   e) None of these

Ques 37. Who is 3rd to the left of C?
   a) G
   b) D
   c) B
   d) Cannot be determined
   e) None of these

Ques 38. What is C’s position with reference to E?
   a) 5th to the right
   b) 4th to the left
   c) 4th to the right
   d) 3rd to the right
   e) Cannot be determined

Ques 39. Who is 2nd to the right of A?
   a) B
   b) E
   c) F
   d) Cannot be determined
   e) None of these

Ques 40. Who among the following pairs may not
   be seated adjacent to each other?
   a) AH
   b) DC
   c) EB
   d) Cannot be determined
   e) None of these

Directions (Q. 41-46) Read the following
   information carefully and answer the questions
   that follow.

Seven friends A, B, C, D, E, F and G are sitting
   around a circular table facing either the centre or
   outside. Each one of them belongs to a different
department viz. Finance, Marketing Sales, HR, Corporate Finance,
Investment Banking and Operations but not necessarily in the
same order. C sits third to the right of G. G faces the centre. Only
one person sits between C and the person working in the HR
department immediate neighbours of C face outside.
Only one person sits between F and D. Both F and D face the
centre. D does not work in the HR department. A works in Investment Banking
Department. A faces the centre. Two people sit between the persons who work in Investment Banking and Marketing Departments. The person who works in Corporate Finance sits to the immediate left of E. C faces same direction as E. The person who works in corporate finance sits to the immediate left of the person who works for Operations Department.

Ques 41. For which of the following departments
does B work?
   a) Finance
   b) Marketing
   c) HR
   d) Corporate Finance
   e) Operations

Ques 42. What is position of B with respect to the
   person who works for Sales Department?
   a) Immediate right
   b) Third to the left
   c) Second to the right
   d) Second to the left
   e) Fourth to the right
Ques 43. Who sits to the immediate right of E?
   a) The person who works for Marketing Department
   b) C
   c) B
   d) The person who works for HR Department
   e) A

Ques 44. Who amongst the following sits exactly between C and the person who works for HR Department?
   a) B
   b) The person who works for Marketing Department
   c) The person who works for Operations Department
   d) D
   e) G

Ques 45. Who amongst the following sit between the persons who work for Marketing and Investment Banking departments when counted for the left hand side of the person working for Marketing Department?
   a) F and G
   b) E and C
   c) C and B
   d) F and D
   e) B and D

Ques 46. How many people sit between the person who works for Operations Department and A, when counted from the right hand side of A?
   a) One
   b) Two
   c) Three
   d) Four
   e) None of these

Directions (47 - 51): In the following questions, the symbols @, ©, $, % and # are used with the following meaning as illustrated below:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>P $ Q</td>
<td>P is not greater than Q</td>
</tr>
<tr>
<td>P @ Q</td>
<td>P is neither smaller than nor equal to Q</td>
</tr>
<tr>
<td>P # Q</td>
<td>P is not smaller than Q</td>
</tr>
<tr>
<td>P © Q</td>
<td>P is neither greater than nor equal to Q</td>
</tr>
<tr>
<td>P % Q</td>
<td>P is neither smaller than nor greater than Q</td>
</tr>
</tbody>
</table>

Ques 47. Statement:
   D # K, K@T, T $ M, M % J
   Conclusions:
   I. J @ T
   II. J % T
   III. D @ T
   a) Only I is true
   b) Only II is true
   c) Either I or II is true
   d) Either I or II and II are True
   e) None of these

Ques 48. Statement:
   R @ N, N © D, D $ J, J # B
   Conclusions:
   I. R @ J
II. J @ N
III. B @ D

a) None is True
b) Only I is true
c) Only II is true
d) Only III is true
e) None of these

Ques 49. Statements:
W © B, B & V, V $ R, R @ K

Conclusions:
I. K © B
II. R # B
III. V @ W
a) I and II are true
b) I and III are true
c) II and III are true
d) All III are true
e) None of these

Ques 50. Statements:
H $ M, M # T, T @ D, D © R

Conclusions:
I. D © M
II. R @ M
III. H $ T
a) None is True
b) Only I is True
c) Only II is True
d) Only III is True
e) None of The Above

Ques 52. Statements:
F # B, B $ M, M @ K, K © N

Conclusions:
I. N @ M
II. F $ M
III. K © B
a) Only I is True
b) Only II is True
c) Only III is True
d) Only I and III is True
e) None is True

Directions (53-57): Study the following information carefully and answer the questions given below:
There are eight persons viz, A, B, C, D, E, F, H and J are sitting around a circle. Five of them are facing towards the centre. They read different newspapers viz, Hindustan Times (H.T), The Indian Express, The Hindu, The Economic Times, Navbharat Times, Washington Post, The Herald and The Dawn, but not necessarily in the same order. D is facing away from the centre but reads neither 'The Hindu' nor 'The Indian Express.' The one who reads The Washington post sits exactly between F and B. C is on the immediate right of H, who is not facing away from the centre. The one who reads The Indian Express is not the neighbour of B. The one who reads The Economic Times is on the immediate right of C. There are three persons between H and B. E sits second to the left of D and he reads The Indian Express. F is an immediate neighbour of both C and the one who reads The Washington Post. The Economics Times is read by either H or B. The one who read 'The Herald' is facing towards the centre. D sits on the immediate right of
the one who read Navbharat Times. The one who reads The Dawn sits exactly between J and the one who reads The Hindu. A does not read The Washington Post. The one who is on the immediate right of H read the Hindu and is not facing the centre.

Ques 53. Which of the following papers is read by the one who sits on the immediate right of J?
1. The Hindu
2. The Herald
3. The Dawn
4. Navbharat Times
5. The Economic Times

Ques 54. Which of the following is matched correctly?
1. A - Hindustan Times
2. H - The Dawn
3. C - The Economic Times
4. B - The Herald
5. E - The Hindu

Ques 55. Which of the following groups is facing away from the centre?
1. A, B, D
2. A, C, D
3. E, A, D
4. J, C, D
5. H, D, B

Ques 56. If D is related to A and in the same way H is related to C in a certain way, then F is related to
1. J
2. C
3. None
4. A
5. B

Ques 57. How many persons sit between the one who reads The Dawn and the one who reads Navbharat Times?
1. Three
2. Two
3. One
4. None
5. Other than the given options

Direction (58-63) Arvind, Nayan, Mayank, Rohit, Jai, Varun, Sumit and David are eight friends sitting around a circular table. Two of them are not facing the centre. All of them like different types of Automobile brands viz. Mahindra, Porsche, Hyundai, TVS, Fiat, Rolls Royce, Maruti and Opel, but not necessarily in the same order. Rohit and Mayank are sitting third and second to the left of Arvind respectively. Rohit and Sumit are neighbours of Nayan, who likes Fiat and facing outside. Sumit is sitting third to the right of Arvind who is facing outside and likes Mahindra. David is third to the right of Jai and likes Maruti. Arvind and Davindare not the neighbour of that person who likes Rolls Royce. Varun does not like Hyundai and TVS. The person who likes Opel is sitting opposite of Jai, who is not an immediate neighbour of TVS. An immediate neighbour of Summit likes Rolls Royce.

Ques 58. The person who is sitting second to the right of Arvind likes which of the following automobile brand?
1) Mahindara
2) Rolls Royce
3) Porsche
4) Opel
5) Other than given options

Ques 59. Who among the following likes TVS?
1) Nayan
2) Mayank
3) Rohit
4) David
5) Other than given options

Ques 60. What is the position of Varun with respect to Arvind?
1) Immediate left
2) Second to the right
3) Immediate right
4) Cannot be determined
5) Other than given options

Ques 61. If Sumit is immediate right of Nayan then in the same way who among the following sits third to the right of Nayan?
1) Mayank
2) Jai
3) David
4) Varun
5) Other than given options

Ques 62. How many person sit between the person who likes Mahindra and the one who likes Hyundai (count in clockwise direction starting from Hyundai)?
1) Two
2) One
3) None
4) Three
5) Four

Ques 63. Which of the following statements is true?
1) Mayank is the neighbour of Rohit and Nayan
2) Arvind likes Hyundai and faces outside the centre
3) Sumit likes Mahindra and does not face inside the centre.
4) All are true
5) None is true

Directions –(64–67) Each of the following questions below consists of a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statements are sufficient to answer the question.

Give Answer
a) If the data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question
b) If the data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question
c) If the data either in Statement I alone or Statement II alone are sufficient to answer the question
d) If the data in both the Statement I and II together are not sufficient to answer the question
e) If the data in both the Statement I and II are together necessary to answer the question

Ques 64. What is the difference in the age of Paarth and Keshav?
I. Paarth is 20 years older than Mohan
II. Mohan is 2 years younger than Zorawar

65. The sum of ages of Manak, Neesha and Opendar is 50 years. What is Neesha's age?
I. Neesha is 10 year older than Manak
II. Opendar is 30 year old

Ques 66. How many students are there in the class?
I. There are more than 20 but less than that 27 students in the class.
II. There are more than 24 but less than 31 students in the class. The number of students in the class can be divided into groups such that each group contains 5 students.

Ques 67. Among five friends - Jatin, Kalu, Lucky, Manish and Naresh each of a different height, who is the second tallest?
I. Naresh is taller than Manish and Kalu. Kalu is shorter than Manish.
II. Lucky is taller than Naresh. Jatin is not the tallest.

**Ques 68.** Banks can receive deposits from customers up to a maximum period of:
(a) 10 years  
(b) 15 years  
(c) 20 years  
(d) 25 years  
(e) None of these

**Ques 69.** Credit Card related grievances can also be referred to:
(a) Consumer Forum  
(b) Ombudsman  
(c) LokAdalat  
(d) All of these  
(e) None of these

**Ques 70.** Expand BIS:
(a) Bank for International Settlements  
(b) Bank for Industrial Settlements  
(c) Bank for Industrial Sectors  
(d) Bank for International Services  
(e) None of these

**English**

**Direction (71-75) Read the following passage carefully and answer the questions given below it.**

A long time ago, on a big tree in the lap of the mountain, lived a bird named Sindhuka. It was a rather special bird because its droppings turned into gold as soon as they hit the ground. One day, a hunter came to the tree in search of prey and he saw Sindhuka's droppings hit the ground and turn into gold. The hunter was struck with wonder. He thought, "I have been hunting birds and small animals since I was a boy, but in all my 80 years, I have never seen such a miraculous creature. He decided that he had to catch the bird somehow. He climbed the tree and skillfully set a trap for the bird. The bird, quite unaware of the danger it was in, stayed on the tree and sang merrily. But it was soon caught in the hunter's trap. The hunter immediately seized it and shoved it into a cage. The hunter took the bird home joyfully. But as he had time to think over his good fortune later, he suddenly realised, "If the king comes to know of this wonder, he will certainly take away the bird from me and he might even punish me for keeping such a rare treasure all to myself. So it would be safer and more honourable if I were to go to the king and present the unique bird to him," The next day, the hunter took the bird to the king and presented it to him in court with great reverence. The king was delighted to receive such an unusual and rare gift. He told his courtiers to keep the bird safe and feed it with the best bird food available. The king's prime minister though, was reluctant to accept the bird. He said "O Rajah, how can you believe the word of a foolish hunter accept this bird? Has anyone in our kingdom ever seen a bird dropping gold? The hunter must be either crazy or telling lies. I think it is best that you release the bird from the cage." After a little thought, the king felt that his prime minister's
words were correct. So he ordered the bird to be released. But as soon as the door of the cage was thrown open, the bird flew out, perched itself on a nearby doorway and defecated. To everyone's surprise, the dropping immediately turned into gold. The king mourned his loss.

Ques 71. Which of the following is possible the most appropriate title for the story?
   a) The Skilled Hunter
   b) The King's Prime Minister
   c) The King's Defeat
   d) The Bird with the Gold Dropping
   e) The Trials and Tribulations of the Foolish Bird Sindhuka

Ques 72. Which of the following emotions made the hunter gift the bird to the king?
   a) Respect     b) Joy        c) Pride
   d) Fear        e) Awe

Ques 73. Which of the following is true according to the story?
   a) Birds like Sindhuka were very common in the area near the mountain
   b) Sindhuka remained caged for the rest of its life
   c) Sindhuka was unaware of the trap laid by the hunter
   d) The King, when told to not accept the bird, did not listen to his Prime Minister
   e) All are true

Ques 74. Why was the king's Prime Minister reluctant to accept the bird?
   a) He believed that the bird would die if caged
   b) He know about the hunter's habit of lying
   c) He believed that the bird would bring bad luck to the king
   d) His sources had informed him that the hunter was crazy
   e) None of these

Ques 75. How did the hunter find Sindhuka?
   a) He had read stories about the bird and had set traps at various locations in the city
   b) He followed the bird's droppings
   c) He was on the lookout for a prey when he chanced upon it
   d) People from the city had informed him about the bird's whereabouts
   e) He was attracted by the birds calls

Direction (76-81) Read the following passage carefully and answer the questions given below it.

The King of Kanchi set off to conquer Kamat. He was victorious in battle. The elephants were laden with sandalwood, ivory gold and precious stones, taken from the conquered kingdom of Kamat. They would be a part of the victory parade for his subjects. On his way back home he stopped at a temple, finished his prayers to the goddess and turned to leave. Around his neck, was a garland of scarlet hibiscus and as was the custom for all, his forehead was anointed with red sandal paste. His Minister and the court jester were his only companions. At one spot, in a mango grove by the wayside, they spied some children play. The King said, “Let me go and see what they are playing.” The children had lined up two ros of clay dolls and were playing warriors and battles. The king asked, “Who is fighting with whom?” They said, “Kamat is at battle with Kanchi.” The king asked, “who is winning and who is the loser?” The children puffed their chests up and said, “Kamat will win and Kanchi will
lose.” The Minister froze in disbelief, the King was furious and the jester burst into laughter. The King was soon joined by his troops and the children were still immersed in their game. The King commanded, “Cane them hard.” The children’s parents came running from the nearby village and said, “They are naive, it was just a game, please grant them pardon.” The King called his commander and ordered, “Teach these children and the village a lesson so that they never forget the king of Kanchi.” He went back to his camp. That evening the commander stood before the King. He bowed low in shame and said, “Your Majesty, with the exception of hyenas and vultures, all lie silent in the village.” The Minister said, “His Majesty’s honour has been saved.” The priest said, “The goddess has blessed our King.” The jester said, “Your highness, please grant me leave to go now.” The King asked, “But why?” The jester said, “I cannot kill, I cannot maim, I can only laugh at God’s gift of life.” Trembling in the face of the King’s anger he bravely continued, “If I stay in your Majesty’s court, I shall become like you and I shall forget how to laugh.”

Ques 76. Why were the elephants carrying loads of gold and other valuables?

a) This was what the king had looted from Karnat to distribute among his soldiers as a reward  
b) This was the king’s offering to the deity out of gratitude for making him victorious  
c) It was what the king had plundered from Karnat to display to the people of his kingdom as a sign of victory  
d) So that the people of the kingdom of Karnat acknowledged him as their new ruler  
e) None of these

Ques 77. Why did the king anoint his head with red sandal paste?

a) As a mark of celebration to show he had been victorious  
b) It was the usual practice for all devotees at the temple  
c) To show other devotees that he was king  
d) To priest requested him to do so  
e) To show his soldiers that he had visited the temple

Ques 78. What excuse was given for the children’s behaviour?

a) They were disobedient to their parent’s wishes  
b) They were unaware of the true facts of the battle  
c) They were upset that their army had lost  
d) They were in the habit of lying  
e) None of these

Ques 79. Which of the following is true in the context of the passage?

a) The king stopped at the temple to see what else could be plundered  
b) The people of the village to which the children belonged developed great respect for the king  
c) The commander was ashamed at having obeyed the king’s orders to cane the children  
d) The jester was unhappy that the king had defeated the army of Karnat  
e) None of these
Ques 80. Why did the jester resign from his post?

a) He felt that the king was too influenced by the Minister
b) To show that he disapproved of the king’s action of punishing the children
c) He did not want to accompany the king on his war campaign
d) He was no longer able to make the king laugh
e) None of these

Ques 81. Why was the king angry with the children?

a) Because the game they were playing was dangerous
b) They had lied him
c) They did not recognize him as king
d) They had unknowingly insulted him
e) They were rude to him

Direction (82-83) In the following section each item consists of a word or a phrase which is bold in the sentence given. It is followed by four words or phrases. Select the word or phrase which is synonymous in meaning to the word in bold.

Ques 82. Nurturing

A. Enforce
B. Revolt
C. Track
D. Permanent

Ques 83. Jaunt

a. irresistible force
b. short drive
c. solitary
d. refuse
e. None of these

Direction (84-86) In the following questions choose the word which is the exact OPPOSITE of the given words.

Ques 84. ENORMOUS

a. Soft
b. Average
c. Tiny
d. Weak
e. None of these

Ques 85. COMMISSIONED

a. Started
b. Closed
c. Finished
d. Terminated
e. None of these

Ques 86. ARTIFICIAL

a. Red
b. Natural
c. Truthful
Directions (Q.87-91): In the following passage there are blanks, each of which has been numbered. These numbers are printed below the passage and against each, five words/phrases are suggested, one of which fits the blank appropriately.

In spite of globalization and the possibility of cheaper (_1_), large (_2_) like the United State and China have (_3_) that they cannot (_4_) to depend on imports for vital industrial products. So, they must build up the domestic manufacturing capabilities and capacities to (_5_) necessary skills and capacities.

Ques - Find out the appropriate word in each case.

Ques 87.
a) products
b) exports
c) imports
d) goods
e) trade

Ques 88.
 a) countries
b) economies
c) producers
d) traders
e) industrialists

Ques 89.
 a) realised
b) brandished
c) evolved
d) ascertained
e) developed

Ques 90.
 a) question
b) emerge
c) emphasise
d) behold
e) afford

Ques 91.
a) build
b) officiate
c) diagnose
d) create
e) supply

Direction ( 92-96) Read each part of the sentence to find out if there is any error in it.
The error, if any, will be in one part of the sentence. The number of that part is the answer. If there is no error, mark your answer as (5).

Spot grammatical errors

Ques 92. We received constantly calls (1)/ from the citizens complaining (2)/ that they are not receiving water (3)/ even once in two days (4)/ No error (5)

Ques 93. The road shows will be used as platform (1)/ to create awareness among general public (2)/ and tour operations of other cities (3)/ regarding the tourist potential of Odisha (4)/ No error (5)

Ques 94. To employ sportspersons (1)/ who have excel in international events (2)/ the state government has decided to (3)/ come up with comprehensive sports policy (4)/ No error (5)

Ques 95. Animal rights activists have threatened (1)/ to go on a fast if action is not taken against the foreign staffer (2)/ who killed Australian lizard (3)/ that had entered a resident home (4)/ No error (5)
Ques 96. In a smart city, all the departments which contribute (1) of the functioning of a city are interlinked (2) by means of computers and internet (3)/ bridging the gap between the comprehensive institutional mechanisms for easier functioning (4)/ No error (5)

Ques 97. (A) An old man in the/(B) crowd warned Julius/(C) Caesar from the/(D) danger of death on certain day/(E). No error

Answer :

1. 4;
The series is

\[
\begin{align*}
78 &+ 6^3 \\
294 &+ 5^3 \\
419 &+ 4^3 \\
483 &+ 3^3 \\
? &
\end{align*}
\]

\[
\begin{align*}
\Rightarrow \ ? &= 483 + 3^3 = 510
\end{align*}
\]

2. 1;
The series is

\[
\begin{align*}
16 &+ 10 \\
26 &- 20 \\
6 &+ 40 \\
46 &- 80 \\
-34 &+ 160 \\
? &
\end{align*}
\]

\[
\begin{align*}
\Rightarrow \ ? &= 34 + 160 = 160 = 126
\end{align*}
\]

Ques 98. (A) Mr. Parkash leads/(B) a very busy/(C) life so he goes/(D) everywhere by a scooter/(E). No error

Ques 99. (A) He does not like this/(B) type of a man who/(C) does nothing but find/(D) fault with others/.(E) No error

Ques 100. (A) Now days workers are/(B) less interested in money as/(C) such and appear to be more concerned/(D) about opportunities for autonomy and freedom./(E) No error

The Series is , \(13^2 + 5 = 174, 15^2 + 7 = 232, 17^2 + 9 = 298, 19^2 + 11 = 372\), ...

\[
\begin{align*}
\Rightarrow \ ? &= 21 \cdot + 13 = 454
\end{align*}
\]

4. 5;
The series is

\[
\begin{align*}
17 &\times 2 + 1^2 \\
35 &\times 3 + 2^2 \\
109 &\times 4 + 3^2 \\
445 &\times 5 + 4^2 \\
\ ? &
\end{align*}
\]

\[
\begin{align*}
\Rightarrow \ ? &= 445 \times 5 + 16 = 2241
\end{align*}
\]

5. 2;
The series is

\[
\begin{align*}
1498 &\times -5^2 \\
1473 &\times -6^2 \\
1437 &\times -7^2 \\
1388 &\times -8^2 \\
\ ? &
\end{align*}
\]

\[
\begin{align*}
\Rightarrow \ ? &= 1988 - 64 = 1324
\end{align*}
\]

6. 3;
Required answer
\[
\left( \frac{24}{100} \times 5800 - \frac{28}{100} \times 3600 \right) + \left( \frac{11}{100} \times 5800 - \frac{14}{100} \times 3600 \right)
\]
\[
= 1392 - 1008 + 638 - 504 = 384 + 134 = 518
\]

7. 5;
Required percentage

9. 4. 4;
Required percentage

\[
\text{Required percentage} = \frac{\left( 18 \times 58 - 21 \times 36 \right) + \left( 31 \times 58 - 22 \times 36 \right)}{\left( 31 \times 58 + 18 \times 58 \right)} \times 100
\]
\[
= \frac{\left( 1044 - 756 \right) + \left( 1798 - 792 \right)}{1798 + 1044} \times 100
\]
\[
= \frac{288 + 1006}{2833} \times 100 = \frac{1294}{2833} \times 100 = 46\%
\]

10. 3;
Required ratio
\[
= 18 \times 58 : 21 \times 36
\]
\[
= 58 : 42 = 29 : 21
\]

11. a
\[
1190 \div \sqrt[5]{7225} \times ? = 3094
\]
\[
or, \frac{1190 \times 7}{85} = 3094
\]
\[
or, \frac{3094 \times 85}{1190} = 221
\]

12. a

13.
Option D

Explanation:
Let number of notes of each denomination be \( x \).
Then \( x + 5x + 10x = 480 \)
\[
\Rightarrow 16x = 480
\]
\[
\Rightarrow x = 30.
\]
Hence, total number of notes = \( 3x = 90 \).

14.
Option C

Explanation:
Let the number of students in rooms A and B be \( x \) and \( y \) respectively.
Then, \( x - 10 = y + 10 \quad \Rightarrow \quad x - y = 20 \quad .. (i) \)
and \( x + 20 = 2(y - 20) \quad \Rightarrow \quad x - 2y = -60 \quad .. (ii) \)
Solving (i) and (ii) we get: \( x = 100, y = 80 \).
\[
\therefore \quad \text{The required answer A = 100.}
\]
16. (B)

17. 

\[ \sqrt[4]{1444} = \sqrt{44^2} = \sqrt{4 \times 11^2} = \sqrt{4} \times \sqrt{11^2} = 2 \times 11 = 22 \]

18. (A)

19. (B)

\[ \frac{X}{2Y} = \frac{3}{2} \quad \Rightarrow \frac{X}{Y} = 3 \]

\[ \frac{2x + 3y}{x - 2y} = \frac{2 \left( \frac{x}{y} \right)^{+1}}{\left( \frac{x}{y} \right)^{-2}} = \frac{2 \times 3 + 1}{3 - 2} = 7 \]

20. (B)

\[ 2 \times 3 = (2)^2 + 2 \times 3 + (3)^2 = 4 + 6 + 9 = 19 \]
(21-25)

<table>
<thead>
<tr>
<th>Banks</th>
<th>Male employee</th>
<th>Female employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1040</td>
<td>480</td>
</tr>
<tr>
<td>B</td>
<td>960</td>
<td>720</td>
</tr>
<tr>
<td>C</td>
<td>657</td>
<td>803</td>
</tr>
<tr>
<td>D</td>
<td>600</td>
<td>780</td>
</tr>
<tr>
<td>E</td>
<td>923</td>
<td>497</td>
</tr>
</tbody>
</table>

21. 4;
Required answer = 4180

22. 1;
Required average
\[= \frac{3280}{5} = 656\]

23. 5;
Required percentage more
\[= \frac{(1040+657)-(720+780)}{720+780} \times 100\]
\[= \frac{1697-1500}{1500} \times 100 = 13\%\]

24. 2;
Required ratio
\[= 780:497\]

25. 2;
Required percentage
\[= \frac{1460-1380}{1380} \times 100 = 6\%\]

26. 4;

\[(P+Q)’\] one day’s work = \[\frac{1}{24}\]
\[P’\] one day’s work = \[\frac{1}{32}\]
\[Q’\] one day’s work = \[\frac{1}{32} \times \frac{1}{32} = \frac{4-3}{96} = \frac{1}{96}\]
\[\therefore\] Work done by (P+Q) in 8 days = \[\frac{8}{24} = \frac{1}{3}\]

Remaining work = \[1 - \frac{1}{3} = \frac{2}{3}\]
Time taken by Q to complete the remaining work
\[= \frac{2}{3} \times 96 = 64\text{ days}\]

27. 3;
The length of the train in which passenger is sitting is not considered since we are concerned with the passenger instead of train.
\[\therefore\] Let the length of the second bridge be \(x\) m
\[\therefore \frac{350}{x} = \frac{7}{4} \Rightarrow x = 200\text{ m}\]

28. 1;

\[\begin{array}{c}
\text{Officer} 600 \\
\text{Others} 67 \\
13 \\
80 \\
520 \\
\end{array}\]

\[\because\text{ Ratio} = 1:40\]
So, total workers = \[\frac{40+1}{1} \times 16 = 656\]

29. 1;
Difference = 10-5 = 5%
5% -------- 500
100% ------ 10000
Capital = 10000

30. 5;
The percentage of families having either a laptop or a computer or both
= 60+30 -15 = 75%
Families having neither a laptop nor a computer
= 100 - 75 = 25%
So, required family = 25/100 x 10800 = 2700

31. 2;

32. 3;
=> 467+40/8+6/1
= 473

33. 5;

<table>
<thead>
<tr>
<th></th>
<th>P</th>
<th>Q</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>First 6 months</td>
<td>40500 x 6</td>
<td>45000 x 6</td>
<td>50000 x 6</td>
</tr>
<tr>
<td>Last 6 months</td>
<td>45000 x 6</td>
<td>45000 x 6</td>
<td>40000 x 6</td>
</tr>
<tr>
<td></td>
<td>513000</td>
<td>540000</td>
<td>540000</td>
</tr>
</tbody>
</table>

Ratio of their profits = 513 : 540 : 540
= 57:60:60 = 19:20:20
Share of R will exceed that of P by
\[
\frac{20-19}{19+20+20} \times 53100 = Rs. 900
\]

34. 4;

Work is progressing (X+Y) + (X+Z) + (X+Y) + (X+Z) + ......
Work done in two hours = (5+4) + (5+3) = 17
∴ Work done in 6 hrs = 17x 6/2 = 51 units
∴ Work done in 7 hours = 51+9=60 units
So, work will be completed in 7 hours.

35. 2;

36. D

37. E

38. A
39. B
40. B
41. A
42. D
43. D
44. B
45. C
46. A

47 (Option D)
D ≥ K > T ≤ M = J
Conclusions
I. J @ T means J > T
II. J % T means J = T (Either I or II is True)
III. D @ T means D > T (True)
So, it is clear that either Conclusion I or II and III are true.

48 (Option C)
R > N < D ≤ J ≥ B
Conclusions
I. R @ J means R > J (False)
II. J @ N means J > N (True)
III. B @ D means B > D (False)
So, it is clear that only Conclusion II is true

49 (Option C)
W < B = V ≤ R > K
Conclusions
I. K © B means K < B (False)
II. R # B means R ≥ B (True)
III. V @ W means V > W (True)
So, it is clear that both conclusion II and III are True.

50 (Option B)
H ≤ M ≥ T > D < R
Conclusions
I. D © M means D < M (True)
II. R # B means R ≥ B (False)
III. H $ T means H ≤ T (False)
So, it is clear that only Conclusion I is true.

51 (Option A)
B = J > K < T ≤ F
Conclusions
I. F @ K means F > K (True)
II. B @ K means B > K (True)
III. B @ F means B > F (False)
So, it is clear that both Conclusions I and II are True

52 (Option D)
F ≥ B ≤ M > K < N
Conclusions
I. N @ M means N > M (False)
II. F $ M means F ≤ M (False)
III. K © B means K < B (False)
So, it is clear that None of The Conclusions is True

Direction (53-57)
53. The Herald
54. B- The Herald
55. A, C, D

Direction (58-63)

58. 2
59. 3
60. 3
61. 4
62. 5

56. None
57. Three

58. (Option D)
Relation between Paarth and Keshav can not be established with the help of both Statements I and II.
So, both the statements are not sufficient to answer the question.

**65. (Option E)**
As given in the Question, \( M + N + O = 50 \) yr
\( N = M + 10 \)
So, Now solve the equation
\( M + N + O = 50 \)
\( M + (M + 10) + 30 = 50 \)
\( 2M + 40 = 50 \)
\( 2M = 50 - 40 \)
\( 2M = 10 \)
\( M = 10/2 \)
\( M = 5 \)
\( N = M + 10 \)
\( N = 5 + 10 \)
\( N = 15 \)
So, both statements are required to answer the question.

**66. (Option E)**
From Statement I
Number of Students in class = 21 or 22 or 23 or 24 or 25 or 26
From Statement II
Number of Students in class = 25 or 26 or 27 or 28 or 29 or 30
Since, number of students can be divided into groups of 5 students, therefore number of students must be multiple of 5.
Number of students in the class = 25 or 30
On combining Statements I and II
Number of students in the class = 25
Hence, the data in both the Statement I and II together are necessary to answer the question.

**67. (Option D)**
From Statement I
Naresh > Manish > Kalu
From Statement II
Lucky > Naresh
From both the Statements
Lucky > Naresh > Manish > Kalu
But height of Jatin is not clear.
Thus, second tallest friend can't be determined.
Hence, data neither in Statement I nor in Statement II are sufficient to answer the question.

68. A
69. B
70. A
71. D
72. D
73. C
74. E
75. C
76. C
77. B
78. B
79. C
80. E
81. D
82. D
83. B
84. C
85. D
86. B
87. c) imports
88. b) economies
89. a) realised
90. e) afford
91. d) create

92. **Option - (1)**
Constant should replace ‘constantly’ – an adjective is required

93 **Option - (5)**

94. **Option - (2)**
'Excelled' should replace 'excel' – past participate form of verb is to be used after 'have'

95. **Option - (4)**
Resident's should be used to indicate 'of the resident'

96. **Option - (2)**
'To' should replace 'of' – contribute always takes the preposition 'to'

97. **D; On a certain day should be used.**

98. **D; by scooter is correct. a should be removed.**

99. **B; this type of man is correct. a should be removed.**

100. **A; now a days is the correct answer.**