

## REASONING

**Directions (1-2) :** Study the following information carefully and answer the questions given below :

Point A is 5m to the North of point C. Point B is 10m to the West of point A. Point D is 2.5m to the South of point B. Point E is 10m to the East of point D. Point E is 5m to the South of point F.

1. How far is point F from point A?

(1) 2 metres (2) 8 metres  
(3) 2.5 metres (4) 5 metres  
(5) 10 metres

2. Which of the following represents the direction of point B with respect to point C?

(1) North-East  
(2) South-West  
(3) North  
(4) South-East  
(5) North-West

3. All the letters of the word JUMBLED are arranged as per the English alphabetical series. Then a meaningful English word (starting with D) is formed with the first, second, sixth and seventh alphabets of the word so formed, which of the following will be the second last letter of the word?

(1) L (2) M  
(3) U  
(4) Other than those given as options  
(5) E

4. How many alphabets (as per the English alphabetical series) are there between the second and seventh letters of the word JUVENILE?

(1) 6 (2) 8  
(3) 10 (4) 12  
(5) 5

5. How many such pairs of letters are there in the word BAROMETER each of which has as many letters between them (in both forward and backward directions) in the word as they have in the English alphabetical series?

(1) None (2) One  
(3) Two (4) Three  
(5) More than three

**Directions (6-10) :** Study the following information carefully and answer the questions given below :

A building has eight floors numbered one to eight, in such a way that the ground floor is numbered one, the floor above it, numbered two and so on such that the topmost floor is numbered eight. One out of eight persons viz, J, K, L, M, V, W, X and Y lives on one of these floors.

L lives on floor number 6. Only one person lives between L and X. Only two persons live between V and W. V lives on a floor above W's floor. V lives on an even numbered floor. Only one person lives between W and K. Only two persons live between Y and J. J lives on one of the floors above Y.

6. Who lives on the topmost floor (i.e. floor number 8)?  
(1) X (2) V  
(3) M (4) W  
(5) K

7. Who live exactly between the floors on which Y and J live?  
(1) V, W (2) W, X  
(3) L, V  
(4) M, W  
(5) V, K

8. Who lives on floor number 5?  
(1) X (2) K  
(3) M (4) J  
(5) W

9. Who amongst the following lives on the floor immediately above the floor on which Y lives?

(1) M  
(2) K  
(3) L  
(4) No one as Y lives on the topmost floor.  
(5) J

10. Which of the following statements is true with respect to the given arrangement?

(1) Y lives on floor number 7  
(2) W lives on a floor immediately above Y's floor.  
(3) None of the given options is true  
(4) M lives on the lowermost floor.  
(5) V lives on floor number 2.

**Directions (11-15) :** In each of the following questions two or three statements followed by two Conclusions numbered I and II are given. You have to take the given statements to be true even if they seem to be at variance from the commonly known facts and then decide which of the given Conclusions logically follows from the given statements disregarding commonly known facts.

**Give answer (1)** if neither Conclusion I nor Conclusion II follows

**Give answer (2)** if either Conclusion I or Conclusion II follows

**Give answer (3)** if only Conclusion I follows

**Give answer (4)** if only Conclusion II follows

Give answer (5) if both the Conclusion I and Conclusion II follow

**11. Statements :**

- All drawers are tables.
- Some tables are chairs.
- No chair is a stool.

**Conclusions :**

- I. Some tables are definitely not stools.
- II. All drawers can never be stools.

**12. Statements :**

- Some pens are erasers.
- Some erasers are markers.

**Conclusions :**

- I. No marker is a pen.
- II. At least some markers are pens.

**13. Statements :**

- All numbers are integers.
- All integers are equations.

**Conclusions :**

- I. All numbers are equations.
- II. No equation is a number.

**14. Statements :**

- No box is a carton.
- Some cartons are folders.
- No folder is a rack.

**Conclusions :**

- I. Some racks are boxes.
- II. All boxes are folders.

**15. Statements :**

- Some days are weeks.
- All weeks are months.
- Some months are years.

**Conclusions :**

- I. All weeks are years.
- II. At least some days are months.

**Directions (16-20) :** Study the following information carefully and answer the questions given below :

Eight friends - Q, R, S, T, U, V, W and X - are sitting around a square table in such a way that four of them sit at four corners of the square while four sit in the middle of each of the four sides. The ones who sit at the four corners

face the centre while those who sit in the middle of the sides face outside (i.e. opposite to the centre).

T sits second to left of V. V sits at one of the corners of the table. Only two persons sit between T and R. W sits third to right of S. S does not sit at any of the corners. S is not an immediate neighbour of V. Both the immediate neighbours of U face outside. Q is not an immediate neighbour of V.

**16. Who sits third to left of W?**

- (1) X
- (2) Q
- (3) R
- (4) V
- (5) U

**17. Four of the following five are alike in a certain way based on the given arrangement and so form a group. Which is the one that does not belong to that group?**

- (1) S
- (2) R
- (3) Q
- (4) X
- (5) U

**18. Who sit exactly between W and S when counted from the right of W?**

- (1) T, X
- (2) R, V
- (3) Q, U
- (4) Q, V
- (5) U, V

**19. Which of the following statements is true regarding U?**

- (1) U sits exactly between T and X.
- (2) U sits to immediate left of V.
- (3) U faces outside.
- (4) U is an immediate neighbour of S.
- (5) None of the given options is true.

**20. What is the position of Q with respect to X?**

- (1) Second to the right
- (2) Fourth to the left
- (3) Second to the left
- (4) Third to the right
- (5) Third to the left

**Directions (21-25) :** Study the following information carefully and answer the questions given below :

Twelve persons are sitting in two parallel rows containing six persons each, in such a way that there is equal distance between adjacent persons. In row-1, C, D, E, F, G and H are seated (but not necessarily in the same order) and all of them are facing South. In row-2, R, S, T, U, V and W are seated (but not necessarily in the same order) and all of them are facing North. Therefore in the given seating arrangement, each member seated in a row faces another member of the other row.

C sits fourth to the left of H. R faces one of the immediate neighbours of C. S sits to the immediate right of R. Only three persons sit between S and W. U sits second to the right of W. One who faces U sits to the immediate right of E. V is not an immediate neighbour of W. F sits to the immediate right of D.

**21. What is the position of D with respect to H?**

- (1) Third to the right
- (2) Third to the left
- (3) Fourth to the right
- (4) Second to the right
- (5) Second to the left

**22. Who amongst the following is facing H?**

- (1) R
- (2) W
- (3) T
- (4) U
- (5) V

**23. Four of the following five are alike in a certain way based on the given arrangement and hence form a group. Which one of them does not belong to that group?**

- (1) C
- (2) F
- (3) V
- (4) T
- (5) S

**24. Which of the following statements is true regarding C?**

- (1) C sits to the immediate left of D.
- (2) None of the given statements is true
- (3) C faces T.

(4) C faces one of the immediate neighbours of V

(5) C sits to the immediate right of E.

25. Who amongst the following is facing G?

(1) V (2) T

(3) R (4) U

(5) W

**Directions (26-28) :** Study the following information carefully and answer the questions given below :

K is the sister of H. N is the father of H. N is married to J. N has only one daughter. F is the sister of J. F is married to P. F is the daughter of S.

26. How is N related to S?

(1) Cannot be determined

(2) Son

(3) Nephew

(4) Son-in-law

(5) Brother

27. How is K related to F?

(1) Sister

(2) Niece

(3) Cousin

(4) Cannot be determined

(5) Sister-in-law

28. If H is married to T, then how is T related to J?

(1) Son

(2) Son-in-law

(3) Daughter

(4) Cannot be determined

(5) Daughter-in-law

29. The question is based on the following four-digit numbers.

4189 2824 8174 9596 6631

Which of the following will be the sum of the third digit of the number which is second from the left and the second digit of the number which is first from the right?

(1) Other than those given as options

(2) 3 (3) 5

(4) 8 (5) 12

30. In a certain code language, 'PARTY' is coded as 'JYHFA' and 'CHART' is coded as 'WRYPHF', then how will 'CROWS' be coded in the same code language?

(1) WHKCG

(2) Cannot be determined

(3) XHLCH (4) WIKDG

(5) XJLDF

**Directions (31-35) :** In each of the following questions, a relationship between different elements is shown in the statements. The statements are followed by two Conclusions numbered I and II. Study the Conclusions based on the given statement(s) and select the appropriate answer :

**Give answer (1)** if neither Conclusion I nor Conclusion II is true.

**Give answer (2)** if either Conclusion I or Conclusion II is true

**Give answer (3)** if only Conclusion I is true.

**Give answer (4)** if only Conclusion II is true

**Give answer (5)** if both the Conclusion I and Conclusion II are true

(31-32) :

**Statements :**

$G = R \geq A < M \leq I > N$ ;

$D < A \geq P$

31. **Conclusions :**

I.  $I > D$

II.  $A < N$

32. **Conclusions :**

I.  $G > P$

II.  $G = P$

(33-34) :

**Statements :**

$B < S \leq W \leq K = Y > L$ ;  $X > B$ ;

$Y \leq Z$

33. **Conclusions :**

I.  $X > W$

II.  $S \leq Z$

34. **Conclusions :**

I.  $B < Y$

II.  $K \geq X$ .

35. **Statements :**

$J \leq I < R = M$ ;  $D = I$

**Conclusions :**

I.  $M > D$

II.  $J < M$

**Directions (36-40) :** Study the following information carefully and answer the questions given below :

In a certain code language, 'acting good to people' is written as 'te bh nk ms'

'artists liked to sing' is written as 'so kr ap te'

'good people are liked' is written as 'bh ms ru ap'

'artists are acting well' is written as 'nk ru kr zi'

(All codes are two letter codes only)

36. What is the code for 'to' in the given code language?

(1) te

(2) Other than those given as options

(3) kr

(4) bh

(5) so

37. What may be the possible code for 'street artists' in the given code language?

(1) co nk

(2) zi ap

(3) kr co

(4) kr ms

(5) nk ms

38. What is the code for 'acting' in the given code language?

(1) zi

(2) so

(3) te

(4) ru

(5) nk

39. If 'sing pretty well' is coded as 'zi so od' in the given code language, then what is the code for 'pretty'?

(1) ru

(2) od

(3) so

(4) zi

(5) Cannot be determined

40. In the given code language, what does the code 'bh' stand for?

(1) artists

(2) liked

(3) are

(4) either 'good' or 'people'

(5) either 'acting' or 'to'

## ENGLISH LANGUAGE

**Directions (46 - 50) :** Read this sentence to find out whether there is any grammatical mistake/ error in it. The error, if any, will be in one part of the sentence. Mark the part with the error as your answer. If there is no error, mark 'No error' as your answer. (Ignore the errors of punctuation, if any)

**Directions (41 - 45) :** In the following questions, each sentence has a blank, indicating that something has been omitted. Choose the word for the blank which best fits the meaning of the sentence as a whole.

41. Timmy was a tiny squirrel who was locked in a hollow tree for \_\_\_\_\_ nuts.

- (1) stealing
- (2) diverting
- (3) kidnapping
- (4) robbed
- (5) robbery

42. While Jojo was busy eating an ice cream, Karan \_\_\_\_\_ a water balloon at him.

- (1) fire
- (2) casting
- (3) stopped
- (4) threw
- (5) fling

43. The capital of Vijayanagar was \_\_\_\_\_ by King Raman.

- (1) empower
- (2) abducting
- (3) worship
- (4) ruled
- (5) throne

44. A young man decided to take the Princess as his wife but \_\_\_\_\_ to give up his habit of travelling across the globe.

- (1) never
- (2) neither
- (3) refused
- (4) forced
- (5) thinking

45. Delnaz was an evil mother who wanted to get \_\_\_\_\_ of her step daughter.

- (1) freed
- (2) relieve
- (3) rid
- (4) lost
- (5) clear

46. In order to better (1) access to financial services, (2) RBI has granted licenses from (3) 11 entities to open payment banks.(4) No error (5)

47. If you have taken a home loan (1) for the renovation of (2) your residence you can claim (3) an income tax rebate under this Act.(4) No error (5)

48. As the young girl neared the village (1) she began to run because (2) she wanted to reach home (3) as soon as she could to surprise her parents.(4) No error (5)

49. Every state has been asked to nominate (1) a fixed number of city as (2) 'smart cities', keeping in mind (3) certain guidelines and criteria.(4) No error (5)

50. Unless the government (1) encourages investment in (2) manufacturing, many factories and (3) industrial units will closed.(4) No error (5)

**Directions (51 - 55) :** In the following questions, four words are given in bold. One of these words given in bold may be wrongly spelt or inappropriate in the context of the sentence. Find out the word that is inappropriate or wrongly spelt, if any. That word is your answer. If all the words given in bold are correctly spelt or appropriate in the context of the sentence, then mark 'All correct' as your answer.

51. The jackal wondered out of the jungle he lived in and reached a **deserted battle-field**.

- (1) wondered
- (2) reached
- (3) deserted
- (4) battlefield
- (5) All correct

52. Shaggy, the **rude giant**, owns a **beautiful** garden but never **allows** anyone to play in it.

- (1) rude
- (2) giant
- (3) beautiful
- (4) allows
- (5) All correct

53. Rohini has to live in a **tower** and let down her hair whenever the **enchantress**, who has **imprisoned** her, wants to **climb** up.

- (1) tower
- (2) enchantress
- (3) imprisoned
- (4) climb
- (5) All correct

54. Lucy was **surprised** to know that her **bare** could talk and **decided** to take him on a **trip** to the market.

- (1) surprised
- (2) bare
- (3) decided
- (4) trip
- (5) All correct

55. Mandavi was a **white** **flee** who lived in the folds of an **exquisite** white silk sheet that covered the bed of a king

- (1) white
- (2) flee
- (3) exquisite
- (4) covered
- (5) All correct

**Directions (56-60) :** Rearrange the given six sentences/ group of sentences (A), (B), (C), (D), (E) and (F) in a proper sequence so as to form a meaningful paragraph and then answer the given questions.

(A) As soon as Naseer began shouting at her, his wife again opened the door to run out, just then he promptly advised, "This time, go to the baker's house as he makes delicious cakes."

(B) He shouted at her till she could not bear it and fled to their neighbour's house.

(C) One day Naseer quarrelled with his wife.

(D) Naseer followed her there.

(E) Sometime later, when they returned to their house, they began quarrelling again.

(F) The neighbours managed to placate the angry husband and served the couple tea and sweets.

56. Which of the following should be the **LAST (SIXTH)** sentence after rearrangement ?

- (1) E (2) D  
(3) A (4) B  
(5) F

57. Which of the following should be the **SECOND** sentence after rearrangement ?

- (1) A (2) B  
(3) F (4) D  
(5) E

58. Which of the following should be the **FIFTH** sentence after rearrangement ?

- (1) E (2) D  
(3) A (4) F  
(5) C

59. Which of the following should be the **FOURTH** sentence after rearrangement ?

- (1) A (2) C  
(3) B (4) F  
(5) E

60. Which of the following should be the **FIRST** sentence after rearrangement ?

- (1) A (2) B  
(3) C (4) E  
(5) D

**Directions (61-70) :** Read the following passage carefully and answer the given questions. Certain words/phrases have been given in bold to help you locate them while answering some of the questions.

Once upon a time, there lived a poor woodcutter. He cut trees in the woods for a living. One day he

was cutting wood on the bank of a river. Suddenly, his axe slipped from his hand and fell into the river. The river was deep and the woodcutter could not take his axe out. **Distraught**, he sat on the bank of the river and began to weep. Mercury, the god of water appeared. He asked the woodcutter the reason for his sorrow. The woodcutter narrated the whole story to Mercury. Taking pity on the woodcutter, Mercury dived into water and brought out a gold axe. The woodcutter **refused** to take it saying that this was not his axe. Mercury again dived and brought out a silver axe. The woodcutter did not take this one either and repeated that this was not his axe. Finally, Mercury brought out an iron axe. The woodcutter, ecstatic on seeing his axe, grabbed it. Mercury was highly pleased with the woodcutter. He **rewarded** the woodcutter by giving him the gold and silver axes as well.

61. Which of the following can be said about Mercury ?

- (A) He had made plans to punish the woodcutter.  
(B) He felt sorry for the woodcutter.  
(C) He lived around the bank of the river.  
(1) Only A  
(2) Only A and C  
(3) Only B  
(4) Only A and B  
(5) All (A), (B) and (C)

62. Which of the following cannot be said about the woodcutter ?

- (A) The iron axe he possessed was a family heirloom.  
(B) He did not succumb to temptation.  
(C) He was well aware that he would be rewarded in the end.  
(1) Only A  
(2) Only B  
(3) Only A and C  
(4) All (A), (B) and (C)  
(5) Only C

63. Choose the word which is most opposite in meaning to the word given in bold as used in the passage.

**Distraught**

- (1) elated (2) loosened  
(3) tensed (4) objected  
(5) capable

64. Choose the word which is most similar in meaning to the word given in bold as used in the passage.

**Narrated**

- (1) parroted  
(2) recounted  
(3) rehearsed  
(4) shouted  
(5) practised

65. Which of the following is true according to the story ?

- (1) Mercury fell prey to the woodcutter's elaborate scheme.  
(2) The gold axe was useless when it came to chopping wood.  
(3) Mercury and the woodcutter were in fact very good friends.  
(4) The woodcutter observed the reward given by mercury.  
(5) All the given statements are true.

66. Choose the word which is most opposite in meaning to the word given in bold as used in the passage.

**Rewarded**

- (1) penalised  
(2) killed  
(3) retrieved  
(4) awarded  
(5) borrowed

67. Choose the word which is most similar in meaning to the word given in bold as used in the passage.

**Refused**

- (1) wasted  
(2) ignored  
(3) garbage  
(4) declined  
(5) hinted

68. Which one of the following aspects of the woodcutter's personality comes across very strongly in the story ?

- (1) He was cunning.
- (2) He was gullible.
- (3) He was careless
- (4) He was foolish.
- (5) He was honest.

69. Which of the following can be the most appropriate title for the story ?

- (1) Mercury-The Lord of Axes
- (2) "This is not Mine"
- (3) The Enchanted Axe
- (4) The Deep Lake
- (5) The Irregular River Bank

70. Why did the woodcutter start crying ?

- (1) He knew that someone would come around and help him if they saw him crying.
- (2) He had hurt himself while trying to cut wood.
- (3) He had the desire to meet Mercury for a very long time and could not stand to wait any longer.
- (4) He had not gathered enough wood for the day.
- (5) Other than those given as options

**Directions (71-80) :** In the given passage there are blanks, each of which has been numbered. Against each five words are suggested, one of which fits the blank appropriately. Find out the appropriate word in each case.

Three young merchants had heard tales of travelling overseas and prospering. One day, one of them suggested, "Let's go (71) a distant land and try our luck too." The other two agreed and they decided to (72) for a faraway land with the vague dream of (73) rich quickly. They managed to get a passage and sailed for days (74) on a small ship stopping at several cities along the way, (75) they had

no plan and no idea about the trade in these lands. Thus they did not earn (76) and spent more than they earned. One day their little ship was (77) in a storm and they were left on an island. A few hours (78) they saw what they thought was a huge ship in the distance. " (79) we had such a ship!" they said to one another as they waited for the ship to draw near. Finally when the 'ship' neared it was (80) a number of floating logs of wood. They realised that they had been wasting their time waiting for the ship and so also chasing after wealth without a plan.

71. (1) far (2) away  
(3) to (4) off  
(5) about
72. (1) journey  
(2) arrive  
(3) enter  
(4) head  
(5) pass
73. (1) earning (2) getting  
(3) grow (4) turn  
(5) achieving
74. (1) after (2) together  
(3) forever (4) end  
(5) luckily
75. (1) but (2) though  
(3) fortunately  
(4) when  
(5) since
76. (1) much (2) any  
(3) lot (4) many  
(5) great
77. (1) sank (2) anchor  
(3) sailed (4) destroy  
(5) caught
78. (1) past (2) ago  
(3) went (4) time  
(5) later
79. (1) Perhaps (2) Only  
(3) Finally (4) Wish  
(5) Often
80. (1) carried  
(2) cutting  
(3) merely (4) typing  
(5) seen

## QUANTITATIVE APTITUDE

81. There are four consecutive positive odd numbers and four consecutive positive even numbers. The sum of the highest even number and highest odd number is 33. What is the sum of all the four consecutive odd and even numbers ?

- (1) 94 (2) 108
- (3) 88 (4) 86
- (5) 96

82. The respective ratio between two positive numbers 'X' and 'Y' is 4 : 7. Now, X is increased by 25% and 3 is added to it, Y is doubled and 3 is added to it. The respective ratio of the resultant X and Y becomes 2 : 5. What is the original value of Y ?

- (1) 24 (2) 12
- (3) 21 (4) 10
- (5) None of these

83. In a vessel, containing 60 litres of mixture of milk and water, water is only 30%. 12 litres of mixture was taken out and x litres of pure milk was added. As a result percentage of water in the mixture became 18%. What is the value of x ?

- (1) 28 (2) 27
- (3) 32 (4) 36
- (5) 22

84. The compound interest (compounded annually) on Rs. 9300 for 2 years at the rate of R% p.a. is Rs. 4092. Had the rate of interest been (R-10)% p.a. what would have been the interest on the same sum of money for the same time period of 2 years ?

- (1) Rs. 1945 (2) Rs. 2046
- (3) Rs. 1974 (4) Rs. 2027
- (5) Rs. 1953

85. B's monthly salary is 75% of A's monthly salary. From his salary, A spends 25% towards EMI and 35% towards miscellaneous expenditure. From the remaining amount, A invests 40% in shopping and now is left with Rs. 22,560. What is B's monthly salary ?

- (1) Rs. 75,000  
 (2) Rs. 64,000  
 (3) Rs. 60,000  
 (4) Rs. 76,000  
 (5) None of these

Directions (86 - 100): What will come in place of the question mark (?) in the following questions?

86.  $\sqrt{7^2 - 4.75} = \frac{1}{8} \times (31^2 - 61) + 25$

- (1) 2.5 (2) 1.5  
 (3) 5 (4) 4  
 (5) 25

87.  $\frac{16 + 5 \times 7 + 24}{143 \times 6 - 139 \times 6} = 1.45$

- (1) 140 (2) 136  
 (3) 132 (4) 145  
 (5) 158

88.  $(126 + 6 - 12) \times 18 = 72 + ?^2$

- (1)  $\frac{4}{7}$  (2)  $\frac{5}{9}$   
 (3)  $\frac{2}{3}$  (4)  $\frac{4}{9}$   
 (5)  $\frac{5}{7}$

89. 20% of 250  $\times$  120% of ? = 480

- (1) 14 (2) 12  
 (3) 10 (4) 15  
 (5) 8

90.  $\frac{(1.4)^2 - (0.7)}{(1.4)^2 + (0.7)} = ?$

- (1)  $\frac{11}{19}$  (2)  $\frac{11}{17}$   
 (3)  $\frac{9}{19}$  (4)  $\frac{8}{19}$   
 (5)  $\frac{9}{11}$

91.  $4 \times 1.6 \times 0.05 \times 80 = ? + 5.9$

- (1) 20.3 (2) 19.7  
 (3) 22.1 (4) 21.1  
 (5) 18.8

92.  $(\sqrt{405} - \sqrt{80}) \times \sqrt{45} = ?$

- (1)  $15\sqrt{3}$  (2) 80  
 (3) 75 (4)  $15\sqrt{5}$   
 (5) 45

93. 35% of  $(336 + 10.5 - 360 + 22.5) = ?$

- (1)  $6\frac{1}{10}$  (2)  $5\frac{3}{5}$   
 (3)  $7\frac{4}{5}$  (4)  $4\frac{2}{5}$   
 (5)  $8\frac{1}{10}$

94.  $\frac{5}{9}$  of  $\frac{2}{3}$  of  $\frac{27}{40}$  of ? = 71

- (1) 284 (2) 294  
 (3) 226 (4) 168  
 (5) 149

95.  $27^2 \times 12^3 + (48 + (0.5)^2) = 3^?$

- (1) 7 (2) 9  
 (3) 6 (4) 8  
 (5) 3

96.  $\sqrt{289 - 264 + 16 \times 2 - 87} = ?$

- (1) 18 (2) 15  
 (3) 13 (4) 14  
 (5) 20

97.  $33.6 + 14 \times 0.5 + 0.76 = ?^2$

- (1) 16 (2) 0.6  
 (3) 0.14 (4) 1.4  
 (5) 1.6

98.  $5\frac{1}{6} \times 2\frac{2}{5} + 5\frac{3}{5} = ?$

- (1)  $17\frac{1}{5}$  (2)  $19\frac{1}{5}$   
 (3) 18 (4) 20  
 (5)  $21\frac{1}{5}$

99.  $(0.9)^{2.5} \times (0.09)^{1.5} = 3^{10} \times 10^?$

- (1) 6.5 (2) -7.5  
 (3) 5.5 (4) -5.5  
 (5) -6.5

100.  $3.5 \times 3.5 + 3.5 \times 5.5 \times 2 + 5.5 \times 5.5 = ?$

- (1) 81 (2) 85.5  
 (3) 64 (4) 120.5  
 (5) 121

Directions (101 - 105): What will come in place of the question mark (?) in the following number series ?

101. 2 8 10 28 46 ?

- (1) 36 (2) 28  
 (3) 8 (4) 82  
 (5) 104

102. 11 24 50 102 206 ?

- (1) 428 (2) 424  
 (3) 436 (4) 414  
 (5) 396

103. 15 18 13 20 9 ?

- (1) 24 (2) 31  
 (3) 22 (4) 28  
 (5) 7

104. 7 16 54 228 ? 6990

- (1) 1120 (2) 1160  
 (3) 1080 (4) 1020  
 (5) 1180

105. 13 12 22 63 ? 235

- (1) 248 (2) 254  
 (3) 244 (4) 242  
 (5) 264

106. Train A can completely cross train B (from the moment they meet), travelling in opposite direction (towards each other), in 14 seconds. If the speed of trains A and B are 65 kmph and 52 kmph respectively and the length of the train A is 71 metre more than that of train B, what is the length of train A ? (in metre)

- (1) 228 (2) 263  
 (3) 251 (4) 192  
 (5) 276

107. A certain sum when invested for 2 years at 20% per annum compound interest (compounded annually), earns Rs. 2288 as interest. What will be the interest earned if the same sum of money is invested for 5 years at 12% per annum simple interest ?
- (1) Rs. 3720
  - (2) Rs. 3250
  - (3) Rs. 3140.75
  - (4) Rs. 3140.25
  - (5) Rs. 3120

108. A playground is built on  $\frac{1}{5}$ th of the area of a rectangular plot. The area of the playground is 1200 square metres and the length of the plot is seven times the breadth of the plot. What is the perimeter of the plot ?
- (1) 400 metre
  - (2) 380 metre
  - (3) 480 metre
  - (4) 440 metre
  - (5) 420 metre

**Directions (109 - 113) :** Study the following table carefully and answer the given questions.

This data is regarding number of visitors to five museums - A, B, C, D and E in five different days of one particular week - Wednesday, Thursday, Friday, Saturday and Sunday.

Museum/Day	A	B	C	D	E
Wednesday	144	123	112	92	129
Thursday	168	129	121	102	134
Friday	243	152	163	184	159
Saturday	685	498	486	501	512
Sunday	712	702	672	725	685

109. On Monday, the total number of visitors to all the given Museums together was 25% more than that on Sunday. What was the total number of visitors to all the given

- Museums together on Monday ?
- (1) 4260
  - (2) 4652
  - (3) 4275
  - (4) 4146
  - (5) 4370

110. The total number of visitors to Museum D on Thursday and Friday together is what percent of the total number of visitors to Museum B on Friday and Saturday together ?
- (1)  $40\frac{1}{3}$
  - (2) 44
  - (3)  $35\frac{1}{8}$
  - (4)  $25\frac{1}{6}$
  - (5) 35

111. What is the average number of visitors to Museum E on the days - Friday, Saturday and Sunday ?
- (1) 418
  - (2) 402
  - (3) 452
  - (4) 456
  - (5) 428

112. The number of visitors to Museum C increased by approximately what percent from Wednesday to Friday ?
- (1) 30
  - (2) 34
  - (3) 38
  - (4) 50
  - (5) 45

113. What is the respective ratio between the total number of visitors to Museum A on Wednesday and Thursday together and the total number of visitors to Museum B on the same days together ?
- (1) 25 : 23
  - (2) 27 : 22
  - (3) 24 : 23
  - (4) 26 : 10
  - (5) 26 : 21

114. Present age of A is equal to B's age four years ago. The respective ratio between the present ages of A and C is 6 : 5. If B is 8 years older than C, what is B's present age ? (in years)
- (1) 20
  - (2) 24
  - (3) 28
  - (4) 32
  - (5) 26

115. The average score of the 25 boys in a class is 34 and the average score of the girls in the same class is 42. If the average score of the whole class (boys and girls together) is 37, how many girls are there in the class ?
- (1) 16
  - (2) 30
  - (3) 24
  - (4) 18
  - (5) 20

116. The speed of a boat in still water is 17.5 kmph and the speed of the stream is 3.5 kmph. If the boat takes a total time of 7 hours 40 minutes to travel from point A to B (upstream) and then returning to point A (downstream), what is the distance between points A and B? (in km)
- (1) 61.6
  - (2) 58.8
  - (3) 67.2
  - (4) 64.4
  - (5) 62.4

117. A and B started a business with investments in the respective ratio of 4 : 7. After 6 months from the start of the business C joined them with an investment equal to half of B's investment. If the difference between A's share of annual profit and B's share of annual profit is Rs. 2160, what is C's share in the annual profit ?
- (1) Rs. 1180
  - (2) Rs. 1260
  - (3) Rs. 1680
  - (4) Rs. 1360
  - (5) Rs. 1320

118. 16 men can finish a project in 45 days. Only 36 men started working and after 4 days 12 women replaced them. If these 12 women could finish the remaining work in 54 days, how many days will only 12 women take to finish the complete project ?
- (1) 71.5
  - (2) 68.5
  - (3) 67.5
  - (4) 69
  - (5) 66

119. The sum of diameter and circumference of circle A is 208 metres. If the radius of the circle B is 10.5 metre less



than the radius of circle A, what is the circumference of circle B ? (in metre)

(1) 88

(2) 77

(3) 96

(4) 110

(5) 66

120. The percent loss incurred when an article is sold for Rs. 639 is double of the percent loss incurred when the same article is sold for Rs. 654.50. What is the cost price of the article ?

(1) Rs. 770

(2) Rs. 795

(3) Rs. 765

(4) Rs. 790

(5) Rs. 775