

## REASONING

**Directions (1 - 5) :** Study the following information to answer the given questions :

In a certain code

'share market doing well' is written as 'va jo ba ma'.

'learn to share stuff' is written as 'si pa la va'.

'well known to market' is written as 'si nu ma jo' and

'stuff the whole market' is written as 'fi ma pa do'.

1. What is the code for 'whole' ?  
 (1) pa (2) fi  
 (3) ma (4) do  
 (5) Either 'fi' or 'do'
2. What is the code for 'market' ?  
 (1) va (2) jo  
 (3) ba (4) ma  
 (5) Cannot be determined
3. What does the code 'ba' stand for ?  
 (1) well  
 (2) share  
 (3) doing  
 (4) whole  
 (5) Either 'market' or 'doing'
4. Which of the following represents 'well known share' ?  
 (1) jo nu pa (2) va nu fi  
 (3) nu va jo (4) va jo qo  
 (5) jo ma la
5. Which of the following may represent 'learn to excel' ?  
 (1) zi si la  
 (2) la si pa  
 (3) la zi qo  
 (4) si fi qo  
 (5) si la do
6. Which of the following will come in place of the question mark (?) according to English alphabetical series ?

EFZ HIX LMU QRO ?

- (1) WXM (2) UVL  
 (3) WYL (4) XYM  
 (5) WXL

7. If each alphabet in the word ADVICES is arranged in alphabetical order from left to right and then each vowel of the word thus formed is changed to the next letter in the English alphabetical series and each consonant is changed to the previous letter in the English alphabetical series, which of the following will be third from the left ?  
 (1) J (2) C  
 (3) D (4) F  
 (5) R
8. How many meaningful English words can be formed with the letters ICNH using all the letters but each letter only once in each word ?  
 (1) None  
 (2) One  
 (3) Two  
 (4) Three  
 (5) More than three

**Directions (9 - 10) :** Read the following information carefully and answer the questions which follow :

Point H is 6m towards the East of Point G. Point R is 8m North of Point G. Point Q is exactly midway between Point R and Point G. Point K is 10m the South of Point Q. Point L is 3m towards the East of Point Q. Point S is exactly midway between Point G and Point H.

9. If a person walks 4m towards the South from Point L, takes a right turn and walks for another 3m, which of the following Points would he reach ?  
 (1) Q (2) G  
 (3) K (4) H  
 (5) Cannot be determined

10. If a person walks 8m towards North from Point S, which of the following points would he cross and how far will he be from Point R ?  
 (1) G, 4m (2) H, 3m  
 (3) L, 6m (4) L, 3m  
 (5) G, 8m

**Directions (11 - 15) :** In each question/group of questions below are two/three statements followed by two conclusions numbered I and II. You have to take the two/three given statements to be true even if they seem to be at variance from 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 only conclusion I follows.**

**Give answer (2) if only conclusion II follows.**

**Give answer (3) if either conclusion I or conclusion II follows.**

**Give answer (4) if neither conclusion I nor conclusion II follows.**

**Give answer (5) if both conclusion I and conclusion II follow.**

### 11. Statements :

Some symbols are figures.

All icons are figures.

#### Conclusions :

- I. All symbols being icons is a possibility.
- II. Atleast some icons are symbols.

### 12. Statements :

All numbers are alphabets.

All alphabets are digits.

No digit is a letter.

#### Conclusions :

- I. No letter is a number.
- II. Atleast some alphabets are letters.

**13. Statements :**

- No mail is a post.  
No post is a dispatch.

**Conclusions :**

- I. No mail is a dispatch.  
II. At least some dispatches are mails.

**Directions (14 - 15) :****Statements :**

- Some shields are trophies.  
All trophies are cups.  
No cup is a medal.

**14. Conclusions :**

- I. No trophy is a medal.  
II. All shields being medals is a possibility.

**15. Conclusions :**

- I. No medal is a shield.  
II. At least some cups are shields.

**Directions (16 - 20) :** Study the following information to answer the given questions :

A, B, C, D, E, F, G and H are seated in a straight line facing North but not necessarily in the same order. B sits third to left of E. Neither B nor E sits at an extreme end of the line. Only one person sits between E and G. G is not an immediate neighbour of B. C sits third to the right of A. A is not an immediate neighbour of B. Only one person sits between H and D. C is not an immediate neighbour of H.

**16. Who amongst the following sits exactly between E and G ?**

- (1) H (2) D  
(3) F (4) C  
(5) None of these

**17. What is the position of F with respect to D ?**

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

**18. Which of the following pairs represents persons seated at the two extreme ends of the line ?**

- (1) D, A (2) H, G  
(3) A, G (4) F, D  
(5) C, D

**19. How many persons are seated between A and H ?**

- (1) One (2) Two  
(3) Three (4) Four  
(5) More than four

**20. Which of the following is true with respect to the given arrangement ?**

- (1) Two people sit to the left of C  
(2) A sits second to right of B  
(3) E and C are immediate neighbours of each other  
(4) Only one person to the right of H  
(5) None is true

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

J, K, L, M, N, O, P and Q are sitting around a circular table facing the centre but not necessarily in the same order.

- N sits third to right of K. Only one person sits between N and J
- P sits second to right of L. L is not an immediate neighbour of N.
- O sits second to left of Q. Q is not an immediate neighbour of L.

**21. Who amongst the following sits exactly between N and J ?**

- (1) M (2) P  
(3) Q (4) O  
(5) Cannot be determined

**22. What is the position of L with respect to K in the above arrangement ?**

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

**23. Who amongst the following represent the immediate neighbours of O ?**

- (1) P, K (2) N, J  
(3) M, J (4) N, P  
(5) L, K

**24. What will come in place of the question mark according to the above seating arrangement ?**

- O J K N ?  
(1) L (2) P

- (3) Q (4) O  
(5) M

**25. Who sits second to the left of M ?**

- (1) K (2) Q  
(3) J (4) O  
(5) P

**Directions (26 - 30) :** Each of the 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. Read both the statements and —

**Give answer (1)** 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.

**Give answer (2)** 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.

**Give answer (3)** if the data either in Statement I alone or in Statement II alone are sufficient to answer the question.

**Give answer (4)** if the data in neither the Statement I nor Statement II is sufficient to answer the question.

**Give answer (5)** if the data in both the Statements I and II together are necessary to answer the question.

**26. Among A, B, C, D and E, each having a different height, who is the second tallest ?**

- (I) E is taller than only C and D. B is taller than A  
(II) Two people are shorter as well as taller than E. B is taller than A. A is not the shortest.

**27. How many daughters does A have ?**

- (I) B is the son of A. A is the only daughter of K. A has only one brother.  
(II) C, the cousin of B is the only grand-daughter of K.

28. Amongst ten children standing in a row and facing North, what is Akash's position from the right end of the line?

(I) Ravi is fifth from the left. Three students are standing between Ravi and Akash.

(II) Niharika is standing to the immediate right of Akash. Niharika is not standing at any of the extreme ends of the line.

29. Among four friends P, Q, R and S, each sitting around a circular table, facing outside (i.e. opposite to the centre), who sits to the immediate left of Q?

(I) P sits to the immediate left of S. Only one person sits between P and R.

(II) R and Q are immediate neighbours of each other. Only one person sits between Q and S.

30. How many kilometres did Karen drive? (The number of kilometres driven was a multiple of ten)

(I) Karen's friend correctly remembers that Karen drove more than 50 kms but less than 120 kms.

(II) Karen correctly remembers that she drove less than 100 kms but more than 30 kms. She also correctly remembers that the number of kms that she drove was a multiple of three.

**Directions (31 - 35):** In these questions, relationship between different elements is shown in the statements. The statements are followed by two conclusions.

**Give answer (1) if only Conclusion I is true**

**Give answer (2) if only Conclusion II is true**

**Give answer (3) if either Conclusion I or II is true**

**Give answer (4) if neither Conclusion I nor II is true**

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

**Directions (31-32):**

**Statements :**

$$A \geq S < T; P \leq S > C$$

**31. Conclusions :**

$$I. P \leq A$$

$$II. T > C$$

**32. Conclusions :**

$$I. T \geq P$$

$$II. C < A$$

**33. Statements :**

$$X < Y = Z \geq W; Z < V$$

**Conclusions :**

$$I. V > X$$

$$II. W > V$$

**Directions (34-35):**

**Statements :**

$$F \geq G = H \leq I; G > T; E \leq H$$

**34. Conclusions :**

$$I. T \leq I$$

$$II. T \geq F$$

**35. Conclusions :**

$$I. F \geq E$$

$$II. I < E$$

**36.** How many such pairs of letters are there in the word **WEBCAST**, each of which has as many letters between them in the word (in both forward and backward Directions) as they have between them in the English alphabetical series?

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

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

- (1) JK (2) ST  
(3) PQ (4) FG  
(5) BC

**Directions (38 - 40):** Read the following information carefully and answer the questions which follow :

T, V, W, X, Y and Z live on different floors in the same building having six floors numbered one to six (the ground floor is numbered 1, the floor above it, number 2 and so on and the topmost floor is numbered 6).

There are two floors above the floor on which X lives. T lives on an even numbered floor. Only two people live between the floors on which T and Y live. V lives on a floor immediately above the floor on which Z lives.

**38.** Who amongst the following lives on the ground floor (i.e. the floor numbered 1)?

- (1) W (2) Y  
(3) Z (4) T  
(5) Cannot be determined

**39.** On which of the following floors does W live?

- (1) 2nd (2) 5th  
(3) 6th (4) 3rd  
(5) Cannot be determined

**40.** Who amongst the following lives on the floor exactly between the floors on which X and V live?

- (1) Y (2) Z  
(3) W (4) T  
(5) Cannot be determined

**Directions (41 – 50) :** In each of the questions given below which one of the five answer figures on the right should come after the problem figures on the left, if the sequence were continued ?

**Problem Figures**

**Answer Figures**

41. (1) (2) (3) (4) (5)
42. (1) (2) (3) (4) (5)
43. (1) (2) (3) (4) (5)
44. (1) (2) (3) (4) (5)
45. (1) (2) (3) (4) (5)
46. (1) (2) (3) (4) (5)
47. (1) (2) (3) (4) (5)
48. (1) (2) (3) (4) (5)
49. (1) (2) (3) (4) (5)
50. (1) (2) (3) (4) (5)

**NUMERICAL ABILITY**

**Directions (51 – 55) :** What will come in place of the question mark (?) in the following questions?

51.  $36.7\% \text{ of } 1760 - 22.2\% \text{ of } 675 = (?)^2 + 12.07$   
 (1) 468 (2) 22  
 (3) 484 (4) 28  
 (5) 784
52.  $(73)^2 - 6205 \div 17 = (?)^2 + 1243$   
 (1) 3481 (2)  $(69)^2$   
 (3) 59 (4) 69  
 (5) 61
53.  $5\frac{2}{7} - 12 + 6\frac{1}{8} = ? - \frac{17}{28}$   
 (1)  $\frac{5}{56}$  (2)  $\frac{3}{28}$   
 (3)  $\frac{1}{56}$  (4)  $\frac{1}{28}$   
 (5) None of these
54.  $\sqrt{(1.6)^2 \times 5 + 1.6 \times (8)^3} - 103 = (?)^3$   
 (1)  $\sqrt{3}$  (2) 81  
 (3) 9 (4) 27  
 (5) None of these
51.  $(0.17 \times 10)^5 \div (2.89)^5 \times (4.913)^7 = (1.7)^{?+15}$   
 (1) 5 (2) 2  
 (3) 6 (4) 1  
 (5) None of these
- Directions (56 – 60) :** What approximate value will come in place of the question mark (?) in the following question ? (You are not expected to calculate the exact value)
56.  $(47.1)^2 - (7.9)^2 - (12.01)^2 = ?$   
 (1) 2010 (2) 2070  
 (3) 2160 (4) 2280  
 (5) 2340
57.  $\sqrt{5667} \times \sqrt{3321} \div \sqrt{7440} = \sqrt{?}$   
 (1) 2530 (2) 2680  
 (3) 2780 (4) 2120  
 (5) 2260
58.  $(458 + 343) \times 123 \div 191 + 324 = ?$   
 (1) 920 (2) 780  
 (3) 700 (4) 840  
 (5) 650
59.  $87\% \text{ of } 3981 - 725.14 = ? + 45\% \text{ of } 2789$   
 (1) 1360 (2) 1780  
 (3) 1480 (4) 1860  
 (5) 1660



60.  $(35.9)^2 + 26.01 \times 29 = ? - 677$   
 (1) 2300 (2) 2110  
 (3) 2000 (4) 2410  
 (5) 2490

**Directions (61 - 65) :** What will come in place of the question mark (?) in the following number series?

61. 621 808 587 842 553 (?)  
 (1) 866 (2) 877  
 (3) 856 (4) 867  
 (5) None of these
62. 23.5 40 73 122.5 188.5 (?)  
 (1) 267.5 (2) 271  
 (3) 267 (4) 278.5  
 (5) None of these
63. 146 1394 770 1082 926 (?)  
 (1) 1022 (2) 1004  
 (3) 848 (4) 842  
 (5) None of these
64. 55.5 122 173.5 212 239.5 (?)  
 (1) 256 (2) 264  
 (3) 262 (4) 258  
 (5) None of these
65. 9 65 217 513 (?)  
 (1) 926 (2) 1486  
 (3) 1001 (4) 1484  
 (5) None of these

**Directions (66 - 70) :** In the following questions three equations numbered I, II and III are given. You have to solve all the equations either together or separately, or two together and one separately, or by any other method and

Give answer if

- (1)  $x > y = z$   
 (2)  $x \geq y < z$   
 (3)  $x < y > z$   
 (4)  $x = y > z$   
 (5)  $x = y = z$  or if none of the above relationship is established

66. I.  $x = (16)^{\frac{1}{2}} \times (216)^{\frac{1}{3}}$

II.  $x + 3y = 96$

III.  $2x + 2y + z = 112$

67. I.  $12x = (8)^2 + \sqrt{64}$   
 II.  $8y^2 = 240 + 32 + (4)^2$   
 III.  $8(9z + 8z) = 1088$
68. I.  $x + y = 36$   
 II.  $x - y = 0$   
 III.  $x + 2z = 50$
69. I.  $3x + 4y + 3z = 61$   
 II.  $x + y + 2z = 24$   
 III.  $2x + 2y + z = 30$

70. I.  $3x + 5y = 59$   
 II.  $2x + 3y = 37$   
 III.  $8z = 14 + 6z$

71. Cost of nine pencils is equal to the cost of four pens. Cost of thirteen pencils and six pens is ₹159. What is the cost of twenty one pencils and seventeen pens together?  
 (1) ₹345.50 (2) ₹354.50  
 (3) ₹342 (4) ₹355  
 (5) None of these

72. The average marks obtained by Sunny in seven subjects are 75. If after re-evaluation average marks in all the seven subjects changed to 82. How many marks were increased over all?

- (1) 48 (2) 59  
 (3) 57 (4) 49  
 (5) None of these

73. What value will be obtained if five-ninth of sixty percent of cube of eighteen is added to forty percent of square of twenty five?

- (1) 2216 (2) 2186  
 (3) 2194 (4) 2212  
 (5) None of these

74. Ramesh is five years older than Suresh. Respective ratio between Suresh's age and Madan's age is 3:8. Raju is 8 years younger than Madan. Raju's present age is 48 years. What is Ramesh's present age?

- (1) 16 years (2) 21 years  
 (3) 26 years  
 (4) Cannot be determined  
 (5) None of these

75. A vendor sells deodorants at the rate of ₹160. The profit is 15% of the selling price. He also sells talc powder at the rate of ₹90 each. The profit of talc powder is 12% of its selling price. What amount of profit will he earn in three days if he sells 4 deodorants and 5 talc powder per day?

- (1) ₹520 (2) ₹480  
 (3) ₹540 (4) ₹450  
 (5) None of these

76. The length of a rectangle is twenty five percent more than

its breadth. The area of the rectangle is 1620 sq. cm. What is the area of a square whose side is half the length of the rectangle?

- (1) 506.25 sq. cm.  
 (2) 512.75 sq. cm.  
 (3) 515.25 sq. cm.  
 (4) 509.75 sq. cm.  
 (5) None of these

77. Two angles of a triangle are in the ratio 2:3. Remaining angle is the largest angle which is twice the smallest angle of the triangle. What is the measure of larger angle of a parallelogram if the largest angle of the triangle is equal to smaller angle of the parallelogram?

- (1)  $100^\circ$   
 (2)  $110^\circ$   
 (3)  $120^\circ$   
 (4) Cannot be determined  
 (5) None of these

78. In a test, minimum passing percentage for girls and boys are 45% and 60% respectively. A boy scored 767 marks and failed by 313 marks. What are the minimum passing marks for girls?

- (1) 910 (2) 920  
 (3) 840 (4) 810  
 (5) None of these

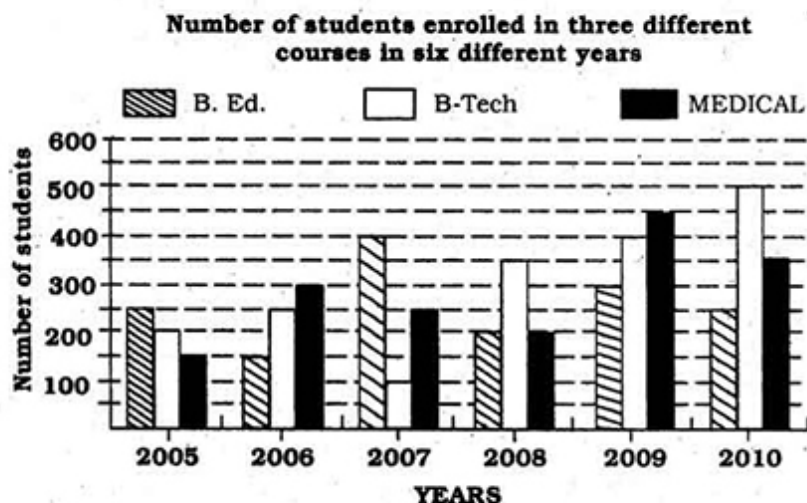
79. Train-A crossed a stationary train in 39 seconds. It also crossed a man standing on a platform in 19 seconds. The length of the train - A is 456 metre. What is the length of the stationary train?

- (1) 460 metre (2) 480 metre  
 (3) 490 metre  
 (4) Cannot be determined  
 (5) None of these

80. In a metro train there are 600 passengers out of which 34 percent are females. Fare of each male is ₹20 and each female's fare is 25 percent less than each male. What is the total revenue generated by all the passengers together?

- (1) ₹10,880 (2) ₹10,980  
 (3) ₹10,740 (4) ₹10,680  
 (5) None of these

**Directions (81 – 85) :** Study the following graph carefully to answer the questions that follow :



- 81.** Number of students enrolled in B.Ed. in the years 2005 and 2009 together was **approximately** what percentage of the total number of students enrolled in Medical over all the years together ?
- (1) 32                      (2) 37  
(3) 42                      (4) 46  
(5) 29

- 82.** What was the average number of the students enrolled in B. Tech. over all the years together ?
- (1) 400                      (2) 1600  
(3) 1800  
(4) 900  
(5) None of these

- 83.** What was the respective ratio between the number of students enrolled in Medical in the year 2010 and the number of students enrolled in B.Ed. in the year 2007 ?

(1) 7 : 8                      (2) 8 : 5  
(3) 5 : 8                      (4) 7 : 9  
(5) None of these

- 84.** In which year was the difference between the students enrolled in B.Ed. and B-Tech third highest ?

(1) 2005                      (2) 2006  
(3) 2008                      (4) 2009  
(5) 2010

- 85.** What was the percentage increase in number of students enrolled in B-Tech in the year 2008 as compared to previous year ?

(1) 150  
(2) 250  
(3) 450  
(4) 350  
(5) None of these.

**Directions (86 – 90) :** Study the table carefully to answer the questions that follow:

**Number of Officers and Clerks (in Hundreds)  
from five different districts in six different banks**

Banks	Districts									
	District-P		District-Q		District-R		District-S		District-T	
	Officers	Clerks	Officers	Clerks	Officers	Clerks	Officers	Clerks	Officers	Clerks
Bank.A	3.6	13.6	6.2	12.1	7.5	34.5	6.4	21.4	3.5	9.6
Bank.B	5.6	16.2	4.9	10.2	10.9	23.3	4.4	22.3	6.5	16.6
Bank.C	7.3	31.9	4.8	14.2	15.8	40.9	4.5	33.3	2.9	12.4
Bank.D	8.4	35.6	12.3	35.4	16.6	45.2	7.3	35.4	9.4	25.7
Bank.E	2.4	9.9	4.5	15.9	12.7	26.6	12.4	35.2	6.9	21.5
Bank.F	1.3	14.3	5.8	14.4	13.7	24.2	15.2	29.4	10.8	32.8

- 86.** Twenty six percent of the number of officers in Bank - A from District - T is female. What is the number of male officers in Bank - A from District - T ?
- (1) 336                      (2) 332  
(3) 248                      (4) 259  
(5) None of these

- 87.** What is the respective ratio between the number of clerks in Bank - E from District - Q and the number of officers in Bank - C from District - S ?

- (1) 51 : 16                      (2) 53 : 15  
(3) 43 : 16                      (4) 53 : 16  
(5) None of these
- 88.** Total number of officers in Bank - C and Bank - F from District - P together is **approximately** what percentage of the number of clerks in Bank - B from district - S ?
- (1) 29                      (2) 23  
(3) 45                      (4) 49  
(5) 39

- 89.** In which Bank from District - R is the difference between the number of officers and clerks second lowest ?

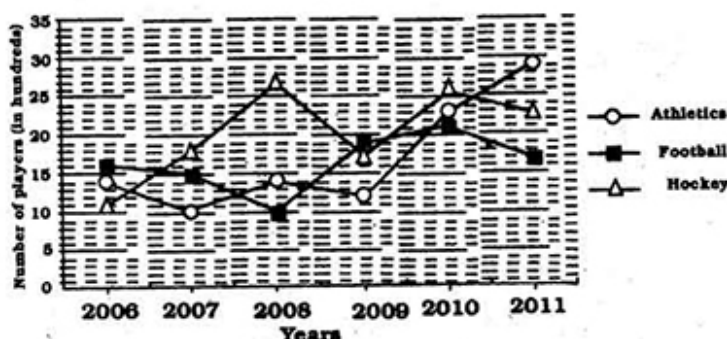
(1) Bank - A                      (2) Bank - B  
(3) Bank - C                      (4) Bank - D  
(5) Bank - E

- 90.** What is the average number of officers in Bank - D from all the districts together ?

(1) 400                      (2) 700  
(3) 800                      (4) 900  
(5) None of these

**Directions (91 – 95) :** Study the following graph carefully to answer the questions that follow :

**Number of players (in hundreds) who participated in a sports event in three different sports in six different years**



91. What was the difference between the number of players who participated in athletics in the year 2010 and the number of players who participated in Hockey in the year 2009 ?

- (1) 660 (2) 600  
(3) 580 (4) 700  
(5) None of these

92. If 23 percent of the players participated in athletics in the year 2006 found positive in doping test, what was the number of players who participated in athletics in the year 2006 found negative in doping test ?

- (1) 1078 (2) 1048  
(3) 1026 (4) 1064  
(5) None of these

93. What was the approximate average number of players participated in hockey over all the years together ?

- (1) 2034 (2) 2104  
(3) 2046 (4) 2146  
(5) 2004

94. Total number of players who participated in all the sports together in the year 2007 was approximately what percentage of the total number of players who participated in football over all the years together ?

- (1) 49 (2) 51  
(3) 35 (4) 44  
(5) 31

95. What was the percent decrease in number of players who participated in football in the year 2008 as compared to previous year ?

- (1) 30 (2) 44  
(3) 48 (4) 52  
(5) 33

96. What was the difference between the total yearly fee for all the courses together in the year 2009 and the yearly fees of MBA course in the year 2008?

- (1) ₹ 4,85,000 (2) ₹ 48,200  
(3) ₹ 4,82,000 (4) ₹ 48,500  
(5) None of these

97. Total yearly fees of BA course over all the years together was approximately what percentage of total yearly fees of BCA course in the years 2008, 2009 and 2010 together ?

- (1) 76 (2) 72  
(3) 58 (4) 62  
(5) 68

98. What was the percent increase in yearly fees of B.Sc. in the year 2010 as compared to the previous year ?

- (1) 46 (2) 38  
(3) 42 (4) 36  
(5) None of these

99. What was the average yearly fee of MBA course over all the years together ?

- (1) ₹ 16420 (2) ₹ 15640  
(3) ₹ 16120 (4) ₹ 15440  
(5) None of these

100. If twenty - five percent of the yearly fees were reduced for BCA course in the year 2009, what was the rectified yearly fee for BCA course in the year 2009 ?

- (1) ₹ 12,100 (2) ₹ 11,200  
(3) ₹ 11,010 (4) ₹ 12,110  
(5) None of these

**Directions (96 – 100) :** Study the following table carefully and answer the questions that follow :

**Yearly Fees (in thousands of Rs.) of five different courses in five different years**

COURSES					
YEARS	MBA	BCA	B.Sc.	BBA	B.A.
2006	9.4	6.8	2.5	6.3	1.2
2007	12.3	8.8	5.4	7.6	3.8
2008	14.5	12.4	5.6	10.2	5.4
2009	19.8	14.8	7.5	12.4	8.5
2010	24.6	18.6	10.2	14.9	9.4

## ANSWERS

1.(5)	2.(4)	3.(3)	4.(3)
5.(1)	6.(5)	7.(2)	8.(2)
9.(2)	10.(4)	11.(5)	12.(1)
13.(4)	14.(1)	15.(2)	16.(1)
17.(1)	18.(3)	19.(5)	20.(4)
21.(3)	22.(2)	23.(4)	24.(5)
25.(2)	26.(3)	27.(5)	28.(4)
29.(1)	30.(4)	31.(5)	32.(2)
33.(1)	34.(4)	35.(1)	36.(4)
37.(2)	38.(3)	39.(2)	40.(1)
41.(2)	42.(5)	43.(2)	44.(4)
45.(3)	46.(1)	47.(4)	48.(3)
49.(1)	50.(5)	51.(2)	52.(5)
53.(5)	54.(5)	55.(4)	56.(1)
57.(1)	58.(4)	59.(3)	60.(2)
61.(5)	62.(2)	63.(2)	64.(4)
65.(3)	66.(4)	67.(2)	68.(4)
69.(3)	70.(1)	71.(5)	72.(4)
73.(3)	74.(3)	75.(4)	76.(1)
77.(1)	78.(4)	79.(2)	80.(2)
81.(1)	82.(5)	83.(1)	84.(3)
85.(2)	86.(4)	87.(2)	88.(5)
89.(2)	90.(5)	91.(2)	92.(1)
93.(1)	94.(4)	95.(5)	96.(4)
97.(4)	98.(4)	99.(3)	100.(5)

## EXPLANATIONS

(1-5) :

share market doing well → va jo ba ma  
 learn to share stuff → si pa la va  
 well known to market → si nu ma jo  
 stuff the whole market → fi ma pa do

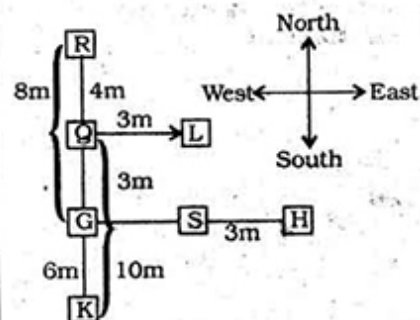
- (5) The code for 'whole' is either 'fi' or 'do'.
- (4) market ⇒ ma
- (3) ba ⇒ doing
- (3) well ⇒ jo; known ⇒ nu; share ⇒ va
- (1) Learn ⇒ la; to ⇒ si; excel ⇒ zi

6. (5)  $E \pm 3 \rightarrow H \pm 4 \rightarrow L \pm 5 \rightarrow Q \pm 6 \rightarrow W$   
 $F \pm 3 \rightarrow I \pm 4 \rightarrow M \pm 5 \rightarrow R \pm 6 \rightarrow X$   
 $Z \pm 2 \rightarrow X \pm 3 \rightarrow U \pm 4 \rightarrow Q \pm 5 \rightarrow L$

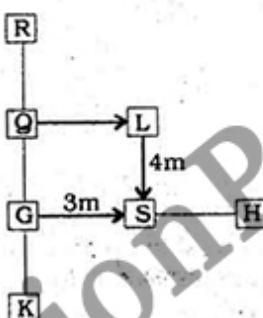
7. (2)

A	D	V	:	C	E	S
A	C	D	:	E	S	V
+1	-1	-1	+1	+1	-1	-1
B	B	C	F	J	R	U

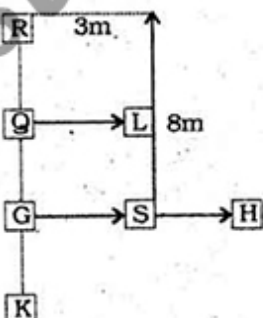
8. (2) Meaningful Word ⇒ CHIN  
 (9-10) :



9. (2)



10. (4)



(11-15) :

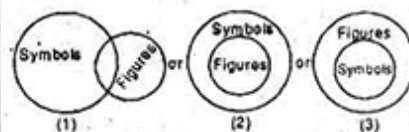
- All icons are figures → Universal Affirmative (A-type).
- Some symbols are figures → Particular Affirmative (I-type).
- No mail is a post → Universal Negative (E-type).
- Some mails are not posts → Particular Negative (O-type).

11. (5) All icons are figures.

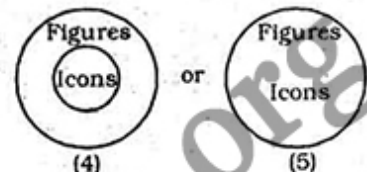
Some figures are symbols.  
 A + I ⇒ No Conclusion

### Venn-diagrams

Some symbols are figures.



All icons are figures.



If we combine the diagrams (3) and (5), then it can be said that "All symbols being icons is a possibility".  
 For the same reason, Conclusion II also follows.

12. (1) All numbers are alphabets.

All alphabets are digits.  
 A + A ⇒ A-type of Conclusion  
 "All numbers are digits".

All alphabets are digits.

No digit is a letter.  
 A + E ⇒ E-type of Conclusion  
 "No alphabet is a letter".

All numbers are digits.

No digit is a letter.  
 A + E ⇒ E-type of Conclusion  
 "No number is a letter"  
 Conclusion I is Converse of it.

13. (4) Both the Premises are Universal Negative (E-type). No Conclusion follows from the two negative premises.

(14-15):

Some shields are trophies.

All trophies are cups.

I + A ⇒ I-type of Conclusion  
 "Some shields are cups. (P)

All trophies are cups.

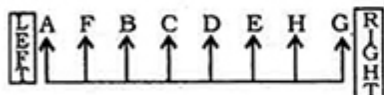
No cup is a medal.



A + E  $\Rightarrow$  E-type of Conclusion  
 "No trophy is a medal." (Q)

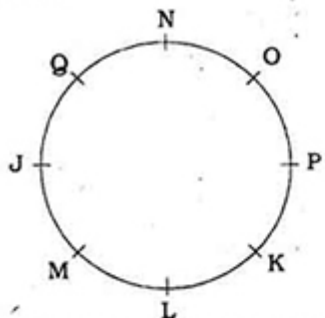
14. (1) Conclusion (Q) is Conclusion I.  
 15. (2) Conclusion (P) is Converse of Conclusion II.

(16-20):



16. (1) H sits exactly between E and G.  
 17. (1) F is third to the left of D.  
 18. (3) A and G are seated at the two extreme ends of the line.  
 19. (5) Five persons - F, B, C, D and E - are seated between A and H.  
 20. (4) There are three persons to the left of C.  
 A sits second to the left B.  
 E is second to the right of C.  
 Only G is to the right of H.

(21-25):

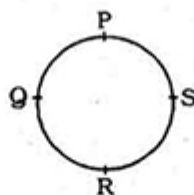


21. (3) Q sits exactly between N and J.  
 22. (2) L is to the immediate left of K.  
 23. (4) N and P are immediate neighbours of O.  
 24. (5)  $O \xrightarrow{+3} J \xrightarrow{+3} K \xrightarrow{+3} N \xrightarrow{+3} M$   
 25. (2) Q sits second to the left of M.  
 26. (3) From statement I  
 $B > A > E > C, D$   
 From statement II  
 $B > A > E > C, D$   
 27. (5) From both the statements A has no daughter.  
 28. (4) From statement I



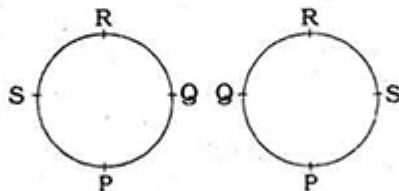
From statement II  
 ..... [A] [N] ..... •

29. (1) From statement I



R sits to the immediate left of Q.

From statement II



30. (4) From statement I  
 Karen drove 60, 70, 80, 90, 100 or 110 km.  
 From statement II  
 Karen drove 60 or 90 km.

(31-32):

- $A \geq S < T$   
 $A \geq S \geq P$   
 $A \geq S > C$   
 $P \leq S < T$   
 $C < S < T$

31. (5) Conclusions

- I.  $P \leq A$ : True  
 II.  $P > C$ : True

32. (2) Conclusions

- I.  $T \geq P$ : Not True  
 II.  $C < A$ : True

33. (1)  $X < Y = Z \geq W$

- $X < Y = Z < V$   
 $V > Y = Z \geq W$

Conclusions

- I.  $V > X$ : True  
 II.  $W > V$ : Not True

(34-35):

- $F \geq G = H \leq I$   
 $F \geq G = H > T$   
 $T < G = H \leq I$   
 $F \geq G = H \geq E$   
 $E \leq G = H \leq I$

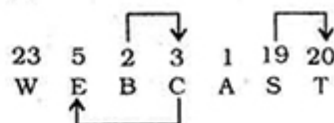
34. (4) Conclusions

- I.  $T \leq I$ : Not True  
 II.  $T \geq F$ : Not True

35. (1) Conclusions

- I.  $F \geq E$ : True  
 II.  $I < E$ : Not True

36. (4)



37. (2)  $10 \xrightarrow{+1} 11$   $19 \xrightarrow{+1} 20$   
 $J \xrightarrow{+1} K$   $S \xrightarrow{+1} T$   
 $16 \xrightarrow{+1} 17$   $6 \xrightarrow{+1} 7$   
 $P \xrightarrow{+1} Q$   $F \xrightarrow{+1} G$   
 $2 \xrightarrow{+1} 3$   
 $B \xrightarrow{+1} C$

(38-40)

6	T
5	W
4	X
3	Y
2	V
1	Z

38. (3) Z lives on the Ground Floor.

39. (2) W lives on 5th numbered floor.

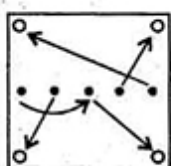
40. (1) Y lives on the floor exactly between the floors on which X and V live.

41. (2) In the subsequent figures the design (↑) rotates through 45° and 135° clockwise alternately; the design (T) rotates through 45° clockwise, the design (∇) rotates through 90° and 180° clockwise alternately while the design (†) rotates respectively through 45°, 90°, 135°, 180°, 225°..... anticlockwise.

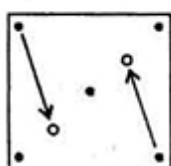
42. (5) From Problem Figure (1) to (2) the design rotates through 135° anticlockwise and two leaflets are added; from Problem Figure (3) to (4) the design rotates through 45° anticlockwise and two leaflets are added. Therefore, from Problem Figure (5) to Answer Figure, the design would rotate through 90° anticlockwise and two leaflets would be added.

43. (2) The following changes occur from Problem Figure (1) to (2) and from Problem Figure (2) to (3):

(1) to (2)



(2) to (3)



Similar changes would occur from Problem Figure (4) to (5) and from Problem Figure (5) to Answer Figure.

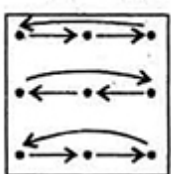
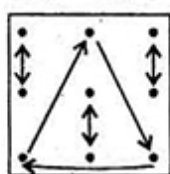
44. (4) The following changes occur in the subsequent figures:

(1) to (2)

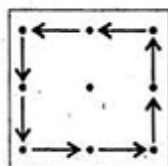
(2) to (3)

(4) to (5)

(5) to (6)



(3) to (4)



45. (3) In the subsequent figures respectively two and four designs are converted into circles alternately.

46. (1) From Problem Figure (1) to (2) the designs move one-half step in anticlockwise Directions. Similar changes would occur from Problem Figure (3) to (4) and from Problem Figure (5) to Answer Figure.

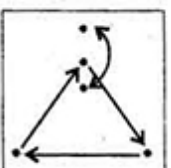
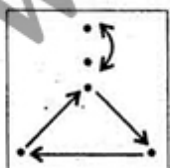
47. (4) The following changes occur in the subsequent figures:

(1) to (2)

(2) to (3)

(5) to (6)

(4) to (5)



(3) to (4)



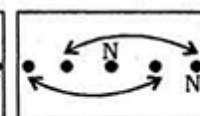
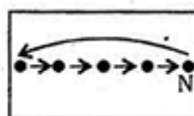
48. (3) The following changes occur in the subsequent figures:

(1) to (2)

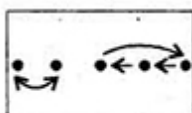
(2) to (3)

(4) to (5)

(5) to (6)



(3) to (4)



49. (1) In the subsequent figures respectively one, two and three triangle(s) are there at the bottom position. In each subsequent figure one design is added at the upper left corner and the designs rotate through 90° anticlockwise and move clockwise.

50. (5) In the subsequent figures the asterisk moves one-half and one and a half steps in anticlockwise Directions alternately; the design (B) moves along the diagonal while the circle moves respectively one-half, one, one and a half, two, two and a half steps in clockwise Directions.

51. (2)  $\frac{1760 \times 36.7}{100} - \frac{675 \times 22.2}{100}$   
 $= ?^2 + 12.07$   
 $\Rightarrow 645.92 - 149.85 = ?^2 + 12.07$   
 $\Rightarrow 496.07 = ?^2 + 12.07$   
 $\Rightarrow ?^2 = 496.07 - 12.07 = 484$   
 $\therefore ? = \sqrt{484} = 22$

52. (5)  $(73)^2 - \frac{6205}{17} = ?^2 + 1243$   
 $\Rightarrow 73^2 - 365 = ?^2 + 1243$   
 $\Rightarrow 73(73 - 5) = ?^2 + 1243$   
 $\Rightarrow 73 \times 68 = ?^2 + 1243$   
 $\Rightarrow 4964 = ?^2 + 1243$   
 $\Rightarrow ?^2 = 4964 - 1243 = 3721$   
 $\therefore ? = \sqrt{3721} = 61$

53. (5)  $5 + \frac{2}{7} - 12 + 6 + \frac{1}{8}$   
 $= ? - \frac{17}{28}$   
 $\Rightarrow -1 + \left(\frac{2}{7} + \frac{1}{8} + \frac{17}{28}\right) = ?$

$$\Rightarrow ? = -1 + \left(\frac{16 + 7 + 34}{56}\right)$$

$$= -1 + \frac{57}{56} = -1 + 1 + \frac{1}{56} = \frac{1}{56}$$

54. (5)

$$?^3 = \sqrt{2.56 \times 5 + 1.6 \times 512} - 103$$

$$= \sqrt{12.8 + 819.2} - 103 = \sqrt{729} = 27$$

$$\therefore ? = \sqrt[3]{27} = 3$$

55. (4)  $(1.7)^5 + ((1.7)^2)^5 + ((1.7)^3)^7$   
 $= (1.7)^{7+15}$   
 $\Rightarrow (1.7)^5 + (1.7)^{10} \times (1.7)^{21}$   
 $= (1.7)^{7+15}$   
 $\Rightarrow (1.7)^{5+10+21} = (1.7)^{36}$   
 $\Rightarrow (1.7)^{36} = (1.7)^{7+15}$

$$\left[ \begin{aligned} (a^m)^n &= a^{mn}; \\ a^m \times a^n &= a^{m+n}; \\ a^m \div a^n &= a^{m-n} \end{aligned} \right]$$

$$\Rightarrow ? + 15 = 16$$

$$\Rightarrow ? = 16 - 15 = 1$$

56. (1)  $? = (47)^2 - (8)^2 - (12)^2$   
 $= 2209 - 64 - 144 = 2001$   
 $\therefore$  Required answer = 2010

57. (1)

$$\sqrt{?} = \sqrt{5667} \times \sqrt{3321} + \sqrt{7440}$$

$$= \sqrt{5700} \times \sqrt{3300} + \sqrt{7400}$$

$$= 75 \times 57 + 86 = 50$$

$$\therefore ? = 2500$$

$$\therefore$$
 Required answer = 2530

58. (4)  $? = (458 + 343) \times 123 \div 191 + 324$   
 $= 801 \times 123 \div 191 + 324$   
 $= \frac{800 \times 123}{190} + 324 = 840$

59. (3)  $\frac{4000 \times 87}{100} - 725$

$$= ? + \frac{2800 \times 45}{100}$$

$$\Rightarrow 3480 - 725 = ? + 1260$$

$$\Rightarrow ? = 2755 - 1260 = 1495$$

$$\therefore$$
 Required answer = 1480

60. (2)  $(36)^2 \div 26 \times 29 = ? - 677$

$$\Rightarrow \frac{36 \times 36 \times 29}{26} = ? - 677$$

$$\Rightarrow 1445 = ? - 677$$

$$\Rightarrow ? = 1445 + 677 = 2122$$

$$\therefore$$
 Required answer = 2110

61. (5) The pattern is :

$$621 + 187 = 808$$

$$808 - 221 (=187 + 34) = 587$$

$$587 + 255 (=221 + 34) = 842$$

$$842 - 289 (= 255 + 34) = 553$$

$$553 + 323 (= 289 + 34)$$

$$= \boxed{876}$$

62. (2) The pattern is :  
 $23.5 + 16.5 = 40$   
 $40 + 2 \times 16.5 = 40 + 33 = 73$   
 $73 + 3 \times 16.5 = 73 + 49.5$   
 $= 122.5$   
 $122.5 + 4 \times 16.5 = 122.5 + 66 = 188.5$   
 $188.5 + 5 \times 16.5 = 188.5 + 82.5 = \boxed{271}$

63. (2) The pattern is :  
 $146 + 1248 = 1394$   
 $1394 - (1248 \div 2)$   
 $= 1394 - 624 = 770$   
 $770 + (624 \div 2) = 770 + 312$   
 $= 1082$   
 $1082 - (312 \div 2) = 1082 - 156 = 926$   
 $926 + (156 \div 2) = 926 + 78$   
 $= \boxed{1004}$

64. (4) The pattern is :  
 $122 - 55.5 = 66.5$   
 $173.5 - 122 = 51.5$   
 $(= 66.5 - 15)$   
 $212 - 173.5 = 38.5$   
 $(= 51.5 - 13)$   
 $239.5 - 212 = 27.5$   
 $(= 38.5 - 11)$   
 $\therefore ? = 239.5 + 27.5 - 9 = \boxed{258}$

65. (3) The pattern is :  
 $2^3 + 1 = 8 + 1 = 9$   
 $4^3 + 1 = 64 + 1 = 65$   
 $6^3 + 1 = 216 + 1 = 217$   
 $8^3 + 1 = 512 + 1 = 513$   
 $10^3 + 1 = 1000 + 1 = \boxed{1001}$

66. (4) I.  $x = (16)^{\frac{1}{2}} \times (216)^{\frac{1}{3}}$   
 $= (4^2)^{\frac{1}{2}} \times (6^3)^{\frac{1}{3}} = 4 \times 6 = 24$   
 II.  $x + 3y = 96$   
 $\Rightarrow 24 + 3y = 96$   
 $\Rightarrow 3y = 96 - 24 = 72$   
 $\Rightarrow y = 72 \div 3 = 24$   
 III.  $2x + 2y + z = 112$   
 $\Rightarrow 2 \times 24 + 2 \times 24 + z = 112$   
 $\Rightarrow 48 + 48 + z = 112$   
 $\Rightarrow z = 112 - 96 = 16$   
 $\therefore x = y > z$

67. (2) I.  $12x = 64 + 8 = 72$   
 $\Rightarrow x = \frac{72}{12} = 6$

$$\text{II. } 8y^2 = 240 + 32 + 16 = 288$$

$$\Rightarrow y^2 = \frac{288}{8} = 36$$

$$\Rightarrow y = \sqrt{36} = \pm 6$$

$$\text{III. } 8(9z + 8z) = 1088$$

$$\Rightarrow 17z = \frac{1088}{8} = 136$$

$$\Rightarrow z = \frac{136}{17} = 8$$

$$\therefore x \geq y < z$$

68. (4) By equations I and II,  
 $2x = 36 \Rightarrow x = 18 = y$   
 From equation III,  
 $x + 2z = 50$   
 $\Rightarrow 18 + 2z = 50$   
 $\Rightarrow 2z = 50 - 18 = 32$   
 $\Rightarrow z = 16$   
 $\therefore x = y > z$

69. (3) By equation I - equation II  $\times 3$ ,

$$3x + 4y + 3z = 61$$

$$3x + 3y + 6z = 72$$

$$\underline{\quad\quad\quad} \quad y - 3z = -11 \quad \dots \text{IV}$$

By equation II  $\times 2$  - equation III,

$$2x + 2y + 4z = 48$$

$$2x + 2y + z = 30$$

$$\underline{\quad\quad\quad} \quad 3z = 18 \Rightarrow z = 6$$

From equation IV,  
 $y - 18 = -11 \Rightarrow y = 18 - 11 = 7$

From equation II,

$$x + y + 2z = 24$$

$$\Rightarrow x + 7 + 2 \times 6 = 24$$

$$\Rightarrow x + 19 = 24$$

$$\Rightarrow x = 24 - 19 = 5$$

$$\therefore x < y > z$$

70. (1) By equation I  $\times 2$  - equation II  $\times 3$ ,

$$6x + 10y = 118$$

$$6x + 9y = 111$$

$$\underline{\quad\quad\quad} \quad y = 7$$

From equation II,

$$2x + 3 \times 7 = 37$$

$$\Rightarrow 2x = 37 - 21 = 16$$

$$\Rightarrow x = 8$$

From equation III,

$$8z - 6z = 14$$

$$\Rightarrow 2z = 14 \Rightarrow z = 7$$

$$\therefore x > y = z$$

71. (5) 9 pencils = 4 pens  
 13 pencils + 6 pens

$$= \frac{53}{2} \text{ pencils}$$

$$21 \text{ pencils} + 7 \text{ pens}$$

$$= \left( 21 + \frac{63}{4} \right) \text{ pencils}$$

$$= \frac{147}{4} \text{ pencils}$$

$$\therefore \frac{53}{2} \text{ pencils} = \text{Rs. } 159$$

$$\therefore \frac{147}{4} \text{ pencils}$$

$$= \frac{159 \times 2 \times 147}{53 \times 4} = \text{Rs. } 220.5$$

72. (4) Increased marks

$$= 82 \times 7 - 75 \times 7$$

$$= 7(82 - 75) = 7 \times 7 = 49$$

73. (3) Required value

$$= (18)^3 \times \frac{60}{100} \times \frac{5}{9} + (25)^2 \times \frac{40}{100}$$

$$= 1944 + 250 = 2194$$

74. (3) Raju's present age

$$= 48 \text{ years}$$

$$\text{Madan's present age}$$

$$= 48 + 8 = 56 \text{ years}$$

$$\text{Suresh : Madan} = 3 : 8$$

$$\therefore \text{Suresh's present age}$$

$$= \frac{3}{8} \times 56 = 21 \text{ years}$$

$$\therefore \text{Ramesh's present age}$$

$$= 21 + 5 = 26 \text{ years}$$

75. (4) Profit on a deodorant

$$= \frac{160 \times 15}{100} = \text{Rs. } 24$$

$$\text{Profit on a talc powder}$$

$$= \frac{90 \times 12}{100} = \text{Rs. } 10.80$$

$$\text{Earned profit in three days}$$

$$= \text{Rs. } 3(4 \times 24 + 5 \times 10.80)$$

$$= \text{Rs. } 3(96 + 54) = \text{Rs. } 450$$

76. (1) If the breadth of rectangle

$$\text{be } x \text{ cm, then length} = \frac{5x}{4} \text{ cm}$$

$$\therefore \frac{5x}{4} \times x = 1620$$

$$\Rightarrow x^2 = \frac{1620 \times 4}{5} = 1296$$

$$\Rightarrow x = \sqrt{1296} = 36 \text{ cm}$$

$$\therefore \text{Length of rectangle}$$

- $$= \frac{5 \times 36}{4} = 45 \text{ cm}$$
- ∴ Side of square =  $\frac{45}{2}$  cm.
- ∴ Area of square
- $$= \frac{45}{2} \times \frac{45}{2} = 506.25 \text{ sq.cm}$$
77. (1) Ratio of angles of triangle = 2 : 3 : 4
- ∴  $2x + 3x + 4x = 180^\circ$
- ⇒  $9x = 180^\circ \Rightarrow x = 20$
- ∴ Largest angle =  $4 \times 20 = 80^\circ$
- ∴ Required angle of parallelogram =  $180 - 80 = 100^\circ$
78. (4) If the total maximum marks be  $x$ , then
- $$\frac{x \times 60}{100} = 767 + 313 = 1080$$
- ⇒  $x = \frac{1080 \times 100}{60} = 1800$
- ∴ Required answer = 45% of 1800
- $$= \frac{1800 \times 45}{100} = 810$$
79. (2) If the length of train B be  $x$  metre, then speed of train
- $$= \frac{456 + x}{39} = \frac{456}{19} = 24$$
- ⇒  $456 + x = 39 \times 24 = 936$
- ⇒  $x = 936 - 456 = 480$  metre
80. (2) Number of females
- $$= \frac{600 \times 34}{100} = 204$$
- Fare of a woman
- $$= \frac{20 \times 75}{100} = \text{Rs. } 15$$
- Number of males
- $$= 600 - 204 = 396$$
- ∴ Total revenue generated
- $$= \text{Rs. } (204 \times 15 + 396 \times 20)$$
- $$= \text{Rs. } (3060 + 7920)$$
- $$= \text{Rs. } 10980$$
81. (1) Number of students enrolled in Medical = 1700
- ∴ Required percentage
- $$= \frac{250 + 300}{1700} \times 100$$
- $$= \frac{550}{17} = 32$$

82. (5) Required average
- $$= \frac{200 + 250 + 100 + 350 + 400 + 500}{6}$$
- $$= \frac{1800}{6} = 300$$
83. (1) Required ratio = 350 : 400 = 7 : 8
84. (3) It is obvious from the graph.
85. (2) Percentage increase
- $$= \frac{350 - 100}{100} \times 100 = 250$$
86. (4) Required number of male officers
- $$= \frac{350 \times 74}{100} = 259$$
87. (2) Required ratio = 1590 : 450 = 53 : 15
88. (5) Required percentage
- $$= \frac{7.3 + 13}{22.3} \times 100$$
- $$= \frac{8.6}{22.3} \times 100 = 39$$
89. (2) Difference between the number of officers and clerks:
- Bank-A ⇒  $34.5 - 7.5 = 27$  hundreds
- Bank-B ⇒  $23.3 - 10.9 = 12.4$  hundreds
- Bank-C ⇒  $40.9 - 15.8 = 25.1$  hundreds
- Bank-D ⇒  $45.2 - 16.6 = 28.6$  hundreds
- Bank-E ⇒  $26.6 - 12.7 = 13.9$  hundreds
- Bank-F ⇒  $24.2 - 13.7 = 10.5$  hundreds
90. (5) Required average
- $$= \frac{(8.4 + 12.3 + 16.6 + 7.3 + 9.4) \times 100}{5}$$
- $$= \frac{5400}{5} = 1080$$
91. (2) Required difference = 2300 - 1700 = 600
92. (1) Number of hockey players found negative in doping test
- $$= \frac{1400 \times 77}{100} = 1078$$
93. (1) Required average
- $$= \frac{(11 + 18 + 27 + 17 + 26 + 23) \times 100}{6}$$

- $$= \frac{12200}{6} = 2034$$
94. (4) Total number of football players
- $$= (16 + 15 + 10 + 19 + 21 + 17) \times 100 = 9800$$
- Required percentage
- $$= \frac{(10 + 15 + 18) \times 100}{9800} \times 100$$
- $$= \frac{43}{98} \times 100 = 44$$
95. (5) Percentage decrease
- $$= \frac{(15 - 10)}{15} \times 100$$
- $$= \frac{100}{3} = 33\frac{1}{3} = 33$$
96. (4) Required difference = Rs. (19.8 + 14.8 + 7.5 + 12.4 + 8.5 - 14.5) thousand = Rs. 48500
97. (4) Total yearly fees of BA course
- $$= \text{Rs. } (1.2 + 3.8 + 5.4 + 8.5 + 9.4) \text{ thousand}$$
- $$= \text{Rs. } 28.3 \text{ thousand}$$
- Total yearly fees of BCA course in the years 2008, 2009 and 2010 together
- $$= \text{Rs. } (12.4 + 14.8 + 18.6) \text{ thousand}$$
- $$= \text{Rs. } 45.8 \text{ thousand}$$
- Required percentage
- $$= \frac{28.3}{45.8} \times 100 = 62$$
98. (4) Required percentage increase
- $$= \frac{10.2 - 7.5}{7.5} \times 100$$
- $$= \frac{270}{7.5} = 36$$
99. (3) Required average
- $$= \frac{(9.4 + 12.3 + 14.5 + 19.8 + 24.6) \times 1000}{5}$$
- $$= \frac{80.6 \times 1000}{5} = \text{Rs. } 16120$$
100. (5) Rectified yearly fees for BCA course in 2009
- $$= \frac{14.8 \times 1000 \times 75}{100} = \text{Rs. } 11100$$



