Test-I: Quantitative Aptitude

Directions (Q. 1-5): What approximate value should come in place of question mark (?) in the following questions?

1. 148% of 13785 = ?
   1) 20100   2) 20200   3) 20300   4) 20400   5) 20500

2. $\sqrt{1445} + \dfrac{8.01}{6.994} \times 168.08 = ?$
   1) 210   2) 220   3) 230   4) 240   5) 250

3. $\sqrt{24000} \times 36.06 + 174.98 \times 3.99 = ?$
   1) 6180   2) 6280   3) 6380   4) 6480   5) 6580

4. $4488 \div \sqrt{1935} + 171.991 \div 3.998 = ?$
   1) 105   2) 125   3) 145   4) 165   5) 185

5. (1884% of 73) ÷ 25.05 = ?
   1) 35   2) 45   3) 55   4) 65   5) 75

Directions (Q. 6-10): Find out the next number in the following number series.

6. 840   1112   1322   1478   1588   ?
   1) 1672   2) 1668   3) 1665   4) 1662   5) 1660

7. 76   588   2316   6412   14412   ?
   1) 28216   2) 28226   3) 28236   4) 28246   5) 28256

8. 20   100   244   452   724   1060   ?
   1) 1450   2) 1460   3) 1470   4) 1480   5) 1490

9. 4984   4408   3967   3643   3418   3274   ?
   1) 3193   2) 3183   3) 3173   4) 3163   5) 3153

10. 1338   2328   3048   3552   3888   4098   ?
    1) 4332   2) 4223   3) 4218   4) 4232   5) 4323

Directions (Q. 11-15): In each of these questions, two equations (I) and (II) are given. You have to solve both the equations and give answer
   1) if x > y   2) if x ≥ y
   3) if x < y   4) if x ≤ y
   5) if x = y or no relationship can be established between 'x' and 'y'.

11. **I.** $x = \sqrt[3]{357911}$ **II.** $y = \sqrt{5041}$

12. **I.** 5x + 7y = – 43   **II.** 9x – 17y = 41

13. **I.** $x^2 + 11x + 30 = 0$ **II.** $y^2 + 9y + 20 = 0$

14. **I.** $4x^2 + 3x - 1 = 0$ **II.** $6y^2 - 5y + 1 = 0$

15. **I.** $3x^2 + 15x + 18 = 0$ **II.** $2y^2 + 15y + 27 = 0$

Directions (Q. 16-20): Study the following table and answer the questions given below. The given table shows the total number of candidates appeared, passed and selected in a competitive examination in different states for the period 2006 to 2011.

State	A			B			C			D		
Year	A	P	S	A	P	S	A	P	S	A	P	S
2006	5600	780	80	7500	480	75	4800	800	80	7500	700	95
2007	4200	800	120	6400	600	72	5500	450	60	7200	540	84
2008	5500	840	72	5400	520	104	4500	540	66	6500	660	77
2009	7200	600	96	6000	540	112	5100	500	55	5400	720	78
2010	8500	800	64	5100	700	60	6800	650	52	6400	640	64
2011	8000	850	68	7000	720	75	6000	640	60	5000	500	58

16. What is the difference between the average number of students selected in State B and that in State D during the whole period?
     1) 6   2) 7   3) 8   4) 9   5) 10

17. In the year 2006, which state had the highest percentage candidates passed over the candidates appeared?
     1) A   2) B   3) C   4) D   5) None of these

18. The total number of students selected in State C is approximately what percentage of the total number of students selected in State A?
     1) 70%   2) 75%   3) 80%   4) 85%   5) 90%

19. In which of the following years is the percentage of selected candidates with respect to passed candidates the highest in State D?
     1) 2006   2) 2007   3) 2008   4) 2009   5) 2011

20. The total candidates passed in State A in the year 2006 is what percentage more than the total candidates passed in State C in the year 2009?
     1) 16%   2) 36%   3) 44.4%   4) 51%   5) 56%

21. A person lent a certain sum of money at 8% simple interest, and in 8 years the interest amounted to ₹612 less than the sum lent. Find the sum lent.
     1) ₹1400   2) ₹1500   3) ₹1600   4) ₹1700   5) ₹1800

22. If the compound interest on a certain sum for 2 years at 15% is ₹193.50, what will be the simple interest at the same rate for the same period?

1) ₹150   2) ₹160   3) ₹180   4) ₹172   5) ₹175

23. The circumference of a circular park is 968m. The park is surrounded on the outside by a road 2.8 m wide. What is the area of the road?
   1) 2640.12 sq m   2) 2735.04 sq m   3) 2831.6 sq m
   4) 2942 sq m   5) None of these

24. From a group of five males and six females, in how many ways can four be chosen to include exactly one female?
   1) 210   2) 180   3) 120   4) 80   5) 60

25. A bag contains 6 red, 7 blue and 8 green balls. Three balls are drawn randomly. What is the probability that the balls drawn contain exactly two blue balls?
   1) $\dfrac{147}{665}$ 2) $\dfrac{518}{665}$ 3) $\dfrac{54}{455}$ 4) $\dfrac{44}{455}$ 5) $\dfrac{401}{455}$

26. The sum of the ages of A, B and C at present is 85 years. 10 years ago the ratio of their ages was 1 : 3 : 7. The present age of C is what percentage of the present age of B?
   1) 55.55%   2) 80%   3) 120%   4) 180%   5) 300%

27. 13 men and 12 women earn ₹11120 in 8 days. 9 men and 11 women earn ₹12840 in 12 days. In how many days will 8 men and 15 women earn ₹17400?
   1) 12 days   2) 13 days   3) 14 days   4) 15 days   5) 16 days

28. Two pipes can separately fill a tank in 10 hours and 40 hours respectively. Both the pipes are opened together to fill the tank, but when the tank is half-filled a leakage develops, through which $\dfrac{1}{2}$ of the water supplied by both the pipes leaks out. What is the total time taken to fill the tank?
   1) 8 hours   2) 10 hours   3) 12 hours   4) 16 hours   5) 18 hours

29. Two stations X and Y are 1040 km apart. A train starts from station X at 11 am, and moves towards Y at a speed of 40 kmh^{-1}, and the other train starts from Y at 1pm and moves towards X at a speed of 80 kmh^{-1}. At what time will both the trains meet?.
   1) 7 pm   2) 11 pm   3) 8 pm   4) 10 pm   5) 9 pm

30. A square park is surrounded on the outside by a path 2m wide. If the area of the path is 184 sq m, then what will be the area of the park?
   1) 400 sq m   2) 441 sq m   3) 484 sq m   4) 529 sq m   5) 576 sq m

Directions (Q. 31-35): The following graph shows the net percentage profit of two companies, A and B for the period 2006 to 2012.
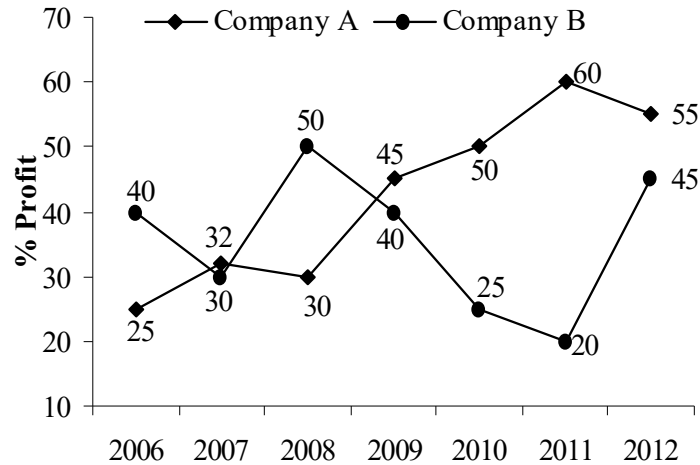
31. If the income of Company A in year 2007 is ₹85.8 lakh, then what will be its expenditure (in ₹) in that year?

1) 56 lakh 　　2) 65 lakh 　　3) 72.8 lakh 　　4) 97.64 lakh 　5) 113.256 lakh

32. If in year 2012 the expenditure of Company A was ₹90.6 lakh, what was its income (in ₹) in that year?

1) 139.18 lakh 2) 148 lakh 　　3) 138.2 lakh 　4) 140.43 lakh 5) 144.64 lakh

33. In which of the following years is the percentage increase in the profit of Company A the highest over the preceding year?

1) 2007 　　　2) 2009 　　　3) 20010 　　　4) 2011 　　　5) None of these

34. In which of the following years is the difference between the income and the expenditure of Company B the maximum?

1) 2006 　　　2) 2008 　　　3) 20011 　　　4) 2012 　　　5) None of these

35. If in the year 2008, the expenditure of Company A and the income of Company are ₹84 lakh each, what is the difference (in ₹) between the income of Company A and the expenditure of Company B in that year?

1) 48.6 lakh 　2) 50.4 lakh 　3) 51 lakh 　　4) 53.2 lakh 　5) 57.6 lakh

Test-II: REASONING

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

In a certain code language, 'no lo pe to' means 'we love our country', 'le pe no ze' means 'India is our country', 'ko pe ge co' means 'proud to be country', 'le ko' means 'proud India', 'ge lo so' means 'love to all' and 'fo le gm' means 'India independence day'.

36. What is the code for 'independence'?

1) fo 　　　　2) gm 　　　　3) le 　　　　4) co 　　　　5) Can't be determined

37. Which of the following is the code for 'proud to be india'?
    1) ge pe ko co 2) ge le no ze 3) le ge lo pe 4) ge le ko co 5) None of these

38. Which of the following may be the code for 'I love our country'?
    1) pe no lo ge 2) lo no pe to 3) me no pe lo 4) lo no le pe 5) None of these

39. What is the code for 'day'?
    1) gm   2) fo   3) lo
    4) Either 'gm' or 'fo'   5) None of these

40. If 'love' is related to 'lo', 'proud' is related to 'ko', in the same way 'our' is related to which of the following?
    1) no   2) to   3) le   4) ge   5) None of these

Directions (Q. 41-45): Study the following information to answer the given questions.
    M, N, O, P, Q, R, S and T are captains of eight different football teams, England, Brazil, Spain, Holland, Hungary, Germany, Chile and Real Madrid but not necessarily in the same order. All of them are seated around a circular table and are facing the centre.
    M sits third to the left of the captain of Germany. The captain of Chile, who is not Q, is an immediate neighbour of T. S and T are not immediate neighbours. Only one person sits between T and the captain of Real Madrid. P is neither the captain nor the immediate neighbour of the Brazilian team. Only two people sit between Q and S. Neither Q nor S is an immediate neighbour of M. Neither Q nor S is the captain of Germany. The captain of Spain sits second to the right of P. P is not an immediate neighbour of M. P is not the captain of Germany and M is not the captain of Spain. The captain of England sits third to the left of R. The captains of England and Germany are not immediate neighbours. Only one person sits between P and the captain of the Holland team. N is not the captain of Chile.

41. Who is the captain of the Chile team?
    1) O   2) T   3) M   4) N   5) None of these

42. P is related to which of the following teams?
    1) Hungary   2) England   3) Spain   4) Holland   5) None of these

43. Which of the following combinations is definitely true?
    1) T – Hungary   2) Q – Real Madrid   3) N – Brazil
    4) R – Holland   5) None of these

44. Which of the following combinations is false in respect of the given information?
    1) N – Brazil   2) Q – Hungary   3) O – Chile
    4) Data inadequate   5) None of these

45. If R is related to Brazil, N is related to Chile, in the same way T is related to which of the following?
    1) Real Madrid   2) Hungary   3) Spain
    4) Chile   5) England

Directions (Q. 46-50): In each question below are given two/three statements followed by two conclusions numbered I and II. You have to take the given two statements to be true even if they seem to be at variance with commonly known facts. Read all the conclusions 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.
2) if only conclusion II follows.
3) if either conclusion I or II follows.
4) if neither conclusion I nor II follows.
5) if both conclusions I and II follow.

46. **Statements:**   Some cats are kittens.
    All dogs are kittens.
    No kittens are black.
    Conclusions: **I.** All kittens being cats is a possibility.
    II. Some dogs can never be black.

47. **Statements:**   60% of the government teachers went on strike.
    Miss Rani is a government teacher.
    Conclusions: **I.** That Miss Rani went on strike is a possibility.
    II. Miss Rani did not participate in the strike.

48. **Statements:**   All scholars are eccentric.
    No woman is eccentric.
    All eccentrics are studies.
    Conclusions: **I.** No woman is a scholar.
    II. All studies being scholar is a possibility.

49. **Statements:**   Some eggs are hard-boiled.
    No eggs are uncrackable.
    Conclusions: **I.** Some hard-boiled are uncrackable.
    II. No hard-boiled are uncrackable.

50. **Statements:**   Some perfumes reek badly.
    All perfumes are expensive.
    All expensive things are unique.
    Conclusions: **I.** There is a possibility that all unique things are perfumes.
    II. Unique things can never reek badly.

Directions (Q. 51-55): Study the following information carefully to answer the given questions.

Amongst five friends, M, N, O, P and Q, each got a different percentage of marks in the class 10th examination.

P scored more than N but less than Q. N scored 80% marks. The one who scored the minimum marks, scored 75% marks, and the one who scored the highest, scored 97% marks. O scored more than only M.

51. Who scored the second lowest marks?
    1) N   2) O   3) M   4) P   5) None of these

52. Who among the following is most likely to have scored 85% marks?
    1) O   2) P   3) Q
    4) Can't be determined   5) None of these

53. Which of the following could possibly be O's percentage?
    1) 82%   2) 80%   3) 75%
    4) Can't be determined   5) None of these

54. Which of the following is true with respect to the given information?
    1) O's percentage was definitely less than 65%.
    2) Q scored the second highest percentage.
    3) Only two people scored more than M.
    4) The possible percentage obtained by P is 98%.
    5) None of these

55. Which of the following is false with respect to the given information?
    1) N scored more than only O and M.
    2) O scored 80% marks.
    3) Q scored the highest percentage.
    4) M scored the least percentage.
    5) All are true

Directions (Q. 56-60): Study the following information carefully to answer the given questions.

Ten members of a family are sitting in a restaurant in two parallel rows of chairs containing five people each, in such a way that there is equal distance between adjacent persons. In row 1, M, N, O, P and Q are seated and all of them are facing south. In row 2, A, B, C, D and E are seated and all of them are facing north. Each of them likes different flavours of ice cream, viz Butterscotch, Vanilla, Strawberry, Black Cherry, Chocobar, Mango Bar, Butter Cluster, Tutti Frutti, Orange Sorbet and Kurly Wurly but not necessarily in the same order. In the given seating arrangement, each member seated in a row faces another member of the other row.

D sits third to the left of the person who likes Orange Sorbet. M, who likes Black Cherry faces the immediate neighbour of D. O, who likes Strawberry, sits second to the right of M. Only one person sits between N and P, who like Vanilla and Mango Bar respectively. B and E are immediate neighbours of each other. E who does not face M and N, likes Butterscotch. B does not like Orange Sorbet. A sits second to the right of the person who likes Choco Bar. C likes neither Black Cherry nor Butter Cluster. The one who likes Vanilla faces the one who likes Kurly Wurly. Q does not like Black Cherry.

56. Who likes Black Cherry?
    1) Q   2) D   3) C   4) M   5) None of these

57. Who sits third to the left of N?
    1) P   2) Q   3) M   4) O   5) None of these

58. Which of the following information is true in respect of the given information?
    1) D likes Tutti Frutti.
    2) P likes Mango Bar and sits on the immediate left of N.
    3) A likes Black Cherry.

4) E is the immediate neighbour of B and D.

5) None of these

59. Who faces the one who likes Butter Cluster?

    1) E   2) A   3) B   4) D   5) None of these

60. Which of the following combinations is false in respect of the given information?

    1) D – Kurly Wurly   2) M – Black Cherry   3) Q – Orange Sorbet

    4) Data inadequate   5) None of these

Directions (Q. 61-65): Each of the questions below consists of a question and three statements numbered I, II and III given below it. You have to decide whether the data provided in the statements are sufficient to answer the question. Read all the statements carefully and find which of the statements is/are sufficient to answer the given question. Choose the correct alternative in each question.

61. There are six letters, R, U, E, A, N and M. What is the word formed after performing the following operations using these six letters only?

    I.   R is placed fourth to the right of M.

    II. E is not placed immediately after either N or M and N is immediately after A.

    III. E is placed second to the right of U and to the immediate right of R.

    1) Only I and II   2) Only II and III   3) Only I and III

    4) All I, II and III   5) None of these

62. What does 'friends' represent in a code language?

    I.   'pti dit nli' means 'we are friends' and 'dit pti chi' 'friends are good'.

    II. 'nic pti dit' means 'friends are necessity' and 'dit pti jio' means 'friends are life'.

    III. 'fic pti dit fee' means 'all are good friends' and 'dit pti bee jeo' means 'friends are new type'.

    1) Only I and II   2) Only III and II   3) Only I and III

    4) Only II and either I or III   5) Even I, II and III are not sufficient to answer the question.

63. M, N, O, P, Q, R and S are seven friends studying in different classes – II, III, IV, V, VI, VII and VIII. Each of them likes different colour pens, viz. Pink, Yellow, Green, Black, Blue, Red and Silver, but not necessarily in the same order. In which class does Q study and which colour does he like?

    I.   R studies in class IV and likes Green pen. S likes Silver pen and studies in class II. M, who studies in class VII, does not like either Pink or Red pen.

    II. O, who likes Black pen, does not study either in class VI or in class III.

    III. P, who likes Blue pen, studies in class V. Q does not study in class III. N does not like Red pen.

    1) All I, II and III   2) Only I and II   3) Only III and I

    4) Only II and III   5) I, II and III even together are not sufficient.

64. How is Rani related to Raju?

    I.   Arti, the only daughter of Rani, has two brothers.

    II. Rani's son is the brother of the only sister of Raju.

    III. Raju and Arti are children of Rani.

    1) Only I and III   2) Only II   3) Either Only III or II

    4) All II and III are sufficient to answer the question.

5) Even I, II and III are not sufficient to answer the question.

65. Six persons, viz P, Q, R, S, T and U are sitting around a circular table facing the centre. What is the position of R with respect to P in the given information?
   I. Q sits second to the left of S. T and U are not immediate neighbour of S.
   II. Q sits second to the right of T.
   III. R is not an immediate neighbour of Q.
1) Only I   2) Only II   3) Only III
4) All I, II and III   5) None of these

Directions (Q. 66-70): In the following questions, the symbols δ, %, H, $ and © are used with the following meanings as illustrated below:

'P % Q' means 'P is not smaller than Q'.
'P H Q' means 'P is neither greater than nor equal to Q'.
'P δ Q' means 'P is neither smaller than nor equal to Q'.
'P $ Q' means 'P is neither greater than nor smaller than Q'.
'P © Q' means 'P is not greater than Q'.

Now, in each of the following questions, assuming the given statements to be true, find which of the two conclusions I and II given below them is/are definitely true. Give answer
1) if only conclusion I is true.
2) if only conclusion II is true.
3) if either conclusion I or II is true.
4) if neither conclusion I nor II is true.
5) if both conclusions I and II are true.

66. **Statements:** D $ T,   T % M,   M H J
    Conclusions: I. J δ D   **II.** M © D
67. **Statements:** 8 H K,   K $ N,   N % R
    Conclusions: I. R $ K   **II.** R H K
68. **Statements:** H % F,   F H W,   W $ E
    Conclusions: I. E δ F   **II.** H δ W
69. **Statements:** Z δ D,   D © K,   K δ M
    Conclusions: I. M H D   **II.** Z δ K
70. **Statements:** W © B,   N δ B,   N © F
    Conclusions: I. F δ B   **II.** W H N

Test-III: English Language

Directions (Q. 71-79): Read the following passage carefully and answer the questions given below it. Certain words/phrases are given in bold to help you locate them while answering some of the questions.

One of the reasons the rich get richer, the poor get poorer and the middle class struggles in debt is because the subject of money is taught at home and not at school. Most of us learn about money from our parents. Schools focus on **scholastic** and professional skills. This explains how smart bankers, doctors and accountants, who earned excellent grades in school, may still struggle financially all their lives. Our **staggering** national debt is due in large part to politicians and government officials making financial decisions with little or no training on the subject of money.

I often look ahead to the new millennium and what will happen when we have millions of people who will need financial and medical assistance. Because I had two influential fathers, I

learned from both of them. I had to think about each dad's advice and in doing so I gained valuable insight into the power and effect of one's thoughts on one's life. For example, one dad had a habit of saying, "I can't afford it." The other dad **forbade** those words to be used. He insisted I say "How can I afford it?" He did not mean you to buy everything you wanted. He was fanatical about exercising your brain, the most powerful computer in the world. He believed that automatically saying "I can't afford it" was a sign of mental laziness.

Although both dads worked hard, I noticed that one dad had a habit of putting his brain to sleep when it came to money matters and the other had a habit of exercising his brain. The long-term result was that one dad grew stronger financially and the other grew weaker. It is not much different from a person who goes to gymnasium to exercise on a regular basis versus someone who sits on the couch watching television. Proper physical exercise increases your chance for health, and proper mental exercise increases your chance for wealth. Laziness of both **decreases** health and wealth.

Money is one form of power. But what is more powerful is financial education. Money comes and goes, but if you have the education about how money works, you gain power over it and can begin building wealth. The reason why positive thinking alone does not work is because most people went to school and never learned how money works, so they spent their lives working for money.

71. Which of the following can be inferred from the given passage?
    1) School education is not required to be rich.
    2) By working for money and keeping it in mind, one can be rich.
    3) School plays a very important role in making us rich.
    4) Training in the subject of money is very important to be rich.
    5) None of these

72. According to the author of the passage, a nation cannot progress to economic stability and independence if
    1) mom and dad make financial decisions.
    2) the educated work only for money and nothing else.
    3) schools focus on scholastic and professional skills only.
    4) our parents keep on saying "how can we afford it?".
    5) All the above

73. Why are most people poor and are struggling in debt?
    1) Because people are or have not been trained to make money work for them.
    2) Because schools focus on scholastic and professional skills only.
    3) Because general people have no "money power".
    4) Because politicians and government officials make financial decisions.
    5) All the above

74. The phrase "how can I afford it?" used in the passage
    1) rejects things which one cannot afford.
    2) envisages how to make things happen.
    3) highlights the point that how one can afford something which is not in one's control.
    4) emphasises the importance of positive thinking.
    5) None of these

75. Which of the following is true in the context of the passage?
    1) Education and learning about money matters should be a must.
    2) One must learn how to gain power over money.
    3) Positive thinking, power over money and exercising brain are a must.
    4) School education must be improved on the topic "how to make money".
    5) All the above

Directions (Q. 76-77): Choose the word/group of words which is MOST SIMILAR in meaning to the word/group of words printed in bold as used in the passage.
76. **Scholastic**
    1) academic   2) economic   3) political   4) artistic   5) None of these

77. **Staggering**
    1) energetic   2) failing   3) reeling   4) surging   5) None of these

Directions (Q. 78-79): Choose the word/group of words which is MOST OPPOSITE in meaning to the word/group of words printed in bold as used in the passage.
78. **Decrease**
    1) ascend   2) augment   3) implement   4) work   5) None of these

79. **Forbade**
    1) banned   2) stopped   3) allowed   4) prohibited   5) None of these

Directions (Q. 80-84): The following questions consist of a single sentence with one blank only. You are given six words denoted by A, B, C, D, E and F as answer choices and from the six choices you have to pick two correct answers, either of which will make the sentence meaningful complete.
80. _____ the *Washington Post* corrected the story to say that the comments on the article first appeared in *Caravan.*
    (A) Subsequently   (B) Previously   (C) Later
    (D) When   (E) After   (F) Now
    1) (A) and (F)   2) (A) and (C)   3) (B) and (C)
    4) (E) and (F)   5) (B) and (D)

81. In a statement, the anti-corruption _____ reiterated its demand for investigation by a three-judge Special Investigation Team.
    (A) party   (B) wing   (C) leader   (D) outfit   (E) people   (F) brigade
    1) (A) and (B)   2) (A) and (E)   3) (C) and (F)
    4) (B) and (D)   5) (B) and (E)

82. A woman officer was _____ by a large mob of Congress workers in Bhubaneswar.
    (A) felicitated   (B) garlanded   (C) assaulted
    (D) honoured   (E) attacked   (F) demoralised
    1) (B) and (C)   2) (A) and (E)   3) (C) and (E)
    4) (D) and (F)   5) (A) and (D)

83. The Supreme Court _____ the Gujarat government for adopting an "adversarial attitude" in the Sohrabuddin Sheikh fake encounter case.

(A) appraised	(B) slammed	(C) despised
(D) criticised	(E) warned	(F) appreciated
1) (A) and (B)	2) (B) and (F)	3) (E) and (F)
4) (D) and (F)	5) (B) and (D)	

84. Plans of restricting cyberspace by censoring contents that are _____ and defamatory by government standards is debatable.

(A) decent	(B) obscene	(C) obscure
(D) nebulous	(E) vulgar	(F) obsolete
1) (A) and (B)	2) (B) and (E)	3) (C) and (E)
4) (D) and (F)	5) (D) and (E)	

Directions (Q. 85-89): Read each sentence to find out whether there is any grammatical or idiomatic 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', the answer is 5). (Ignore errors of punctuation, if any.)

85. 1) A truly great artist seeks creative expression / 2) when he is overwhelmed from / 3) the spontaneous overflow /4) of feelings. / 5) No error

86. 1) Beethoven, the greatest music wizard, / 2) suffered from serious aural handicaps / 3) but it did not stop from / 4) composing the most beautiful music ever written. / 5) No error

87. 1) Everyone likes to work under perfect / 2) conditions but if that cannot be created then / 3) one should learn to adapt and adjust / 4) with ease to ensure that the work is not affected. / 5) No error

88. 1) If we want to acquire experience / 2) we have to learn to swim ourselves / 3) instead just collecting pearls of wisdom / 4) through reading books. / 5) No error

89. 1) There is a pleasure unique in itself / 2) in being an architect of one's destiny, 3) / which a life of / 4) servitude can never promise. / 5) No error

Directions (Q. 90-94): Rearrange the following six sentences, (A), (B), (C), (D), (E) and (F) in the proper sequence to form a meaningful paragraph and then answer the questions given below.

(A) Consequently, after you achieve success, if you further want to continue your journey of success, you can discover another goal and mission.

(B) As success is a continuous process or journey and there is no end to this journey in life.

(C) And, those who are genuinely tempted with passion, for them quite often opportunities smile at their door.

(D) Therefore, you should not mingle your thoughts and decisions that it is an end after you reached to a particular destination.

(E) But, before making another move it is tremendously important to integrate all your sources and foresee your workable projects foresightedly and also their prospects to continue your journey of success.

(F) Only destinations may keep on changing one after another in the space of time.

90. Which of the following should be the **FIRST** sentence after rearrangement?
    1) A   2) B   3) C   4) D   5) E

91. Which of the following should be the **SECOND** sentence after rearrangement?
    1) B   2) C   3) D   4) F   5) E

92. Which of the following should be the **LAST** sentence after rearrangement?
    1) C   2) D   3) E   4) F   5) A

93. Which of the following should be the **THIRD** sentence after rearrangement?
    1) F   2) E   3) C   4) A   5) D

94 Which of the following should be the **FIFTH** sentence after rearrangement?
    1) F   2) A   3) E   4) B   5) D

Directions (Q. 95-100): In the following passage, some of the words have been left out, each of which is indicated by a number. Find the suitable word from the options given against each number and fill up the blanks with appropriate words to make the paragraph meaningfully complete.

Normally, the police **(95)** a missing person's **(96)** to the missing persons **(97)**, which issues lookout notices. The police search hospitals, mortuaries and even their lock-ups for the missing people. If anyone is **(98)**, relatives are **(99).** According to data available with the missing persons bureau on an average 28 people **(100)** missing in Mumbai every day.

95. 1) forward   2) ask   3) call   4) approve   5) sign

96. 1) letter   2) facts   3) complaint 4) story   5) tale

97. 1) cell   2) bureau   3) team   4) post   5) court

98. 1) assumed 2) known   3) seen   4) found   5) remembered

99. 1) informed 2) referred 3) conveyed 4) confirmed 5) accused

100. 1) come   2) go   3) went   4) are   5) reported

Answers

1. 4; $? = \dfrac{148 \times 13785}{100} = 20401.8 \approx 20400$

2. 3; $\because \sqrt{1445} = 38$

    $\therefore \ ? \approx 38 + \dfrac{8}{7} \times 168 = 38 + 192 = 230$

3. 2; $\because \sqrt{24000} \approx 155$

   $\therefore ? \approx 155 \times 36 + 175 \times 4 = 5580 + 700 = 6280$

4. 3; $\because \sqrt{1935} = 44$

   $\therefore ? = \dfrac{4488}{44} + \dfrac{172}{4} = 102 + 43 = 145$

5. 3; $? = \dfrac{1884 \times 73}{100} \div 25 \approx \dfrac{1375}{25} = 55$

6. 5; The series is $+17^2 - 17$, $+15^2 - 15$, $+13^2 - 13$ ...

7. 3; The series is $+8^3$, $+12^3$, $+16^3$, $+20^3$, ...

8. 2; The series is $2^2 + 4^2$, $6^2 + 8^2$, $10^2 + 12^2$, $14^2 + 16^2$ ...

9. 1; The series is -24^2, -21^2, -18^2, -15^2 ...

10. 3; The series is $+10^3 - 10$, $9^3 - 9$, $+8^3 - 8$ ...

11. 5; **I.** $x = \sqrt[3]{357911}$ $\qquad\qquad \therefore x = 71$

   II. $y = \sqrt{5041}$ $\therefore y = 71$

   $\therefore x = y$

12. 1; Eqn (I) $\times 9$ − Eqn (II) $\times 5$

$$45x + 63y = -387$$
$$45x - 85y = 205$$
$$\underline{\quad - \qquad + \qquad - }$$
$$148y = -592$$

   $\therefore y = -4$ and $x = -3$

   $\therefore x > y$

13. 4; **I.** $x^2 + 11x + 30 = 0$

   or $x(x + 5) + 6(x + 5) = 0$

   or $(x + 5)(x + 6) = 0$

   $\therefore x = -5, -6$

   II. $y^2 + 4y + 5y + 20 = 0$

   or $y(y + 4) + 5(y + 4) = 0$

   or $(y + 4)(y + 5) = 0$

   $\therefore y = -4, -5$

   $\therefore x \leq y$

14. 3; **I.** $4x^2 + 4x - x - 1 = 0$

   or $4x(x + 1) - 1(x + 1) = 0$

   or $(4x - 1)(x + 1) = 0$

$\therefore \ x = -1, \ \frac{1}{4}$

II. $6y^2 - 3y - 2y + 1 = 0$

or $3y(2y - 1) - 1(2y - 1) = 0$

or $(3y - 1)(2y - 1) = 0$

$\therefore \ y = \frac{1}{2}, \ \frac{1}{3}$

$\therefore \ x < y$

15. 2; **I.** $3x^2 + 9x + 6x + 18 = 0$

or $3x(x + 3) + 6(x + 3) = 0$

or $(x + 3)(3x + 6) = 0$

$\therefore \ x = -3, -2$

II. $2y^2 + 6y + 9y + 27 = 0$

or $2y(y + 3) + 9(y + 3) = 0$

or $(2y + 9)(y + 3) = 0$

$\therefore \ y = -3, \ -\dfrac{9}{2}$

$\therefore \ x \geq y$

16. 2; The total number of selected students in State B = 75 + 72 + 104 + 112 + 60 + 75 = 498

$\therefore$ Average = $\dfrac{498}{6} = 83$

The total number of selected students in
State D = 95 + 84 + 77 + 78 + 64 + 58 = 456

$\therefore$ Average = $\dfrac{456}{6} = 76$

$\therefore$ Difference = 83 – 76 = 7

17. 3; Percentage of candidates passed in

State A = $\dfrac{780}{5600} \times 100 = 13.92\%$

Percentage of candidates passed in State B = $\dfrac{480}{7500} \times 100 = 6.4\%$

Percentage of candidates passed in State C = $\dfrac{800}{4800} \times 100 = 16.66\%$

Percentage of candidates passed in State D = $\dfrac{700}{7500} \times 100 = 9.33\%$

18. 2; Total number of students selected in State C = 80 + 60 + 66 + 55 + 52 + 60 = 373

Total number of students selected in State A = 80 + 120 + 72 + 96 + 64 + 68 = 500

$\therefore$ Reqd % = $\dfrac{373}{500} \times 100 = 74.6\%$

19. 2;

Percentage of selected candidates in State D in 2006 $\rightarrow \dfrac{95}{700} \times 100 = 13.57\%$

Percentage of selected candidates in State D in 2007 $\rightarrow \dfrac{84}{540} \times 100 = 15.5\%$

Percentage of selected candidates in State D in 2008 $\rightarrow \dfrac{77}{660} \times 100 = 11.6\%$

Percentage of selected candidates in State D in 2009 $\rightarrow \dfrac{78}{720} \times 100 = 10.83\%$

Percentage of selected candidates in State D in 2010 $\rightarrow \dfrac{64}{640} \times 100 = 10\%$

Percentage of selected candidates in State D in 2011 $\rightarrow \dfrac{58}{500} \times 100 = 11.6\%$

20. 5; Total candidates passed in State A in 2006 = 780
Total candidates passed in State C in 2009 = 500

$\therefore$ Reqd % $= \dfrac{(780 - 500)}{500} \times 100 = \dfrac{280}{5} = 56\%$

21. 4; Let the sum lent be ₹x.
Then,
Interest $= \dfrac{x \times 8 \times 8}{100}$
Now,

$\therefore$ $x - \dfrac{64x}{100} = 612$

or, 36x = 61200
$\therefore$ x = ₹1700

22. 3; Let the amount be x.

$$CI = x\left[1 + \dfrac{15}{100}\right]^2 - x = x\left[\left(\dfrac{23}{20}\right)^2 - 1\right] = x\left(\dfrac{129}{400}\right)$$

$$SI = \dfrac{x \times 15 \times 2}{100} = \dfrac{3x}{10}$$

$$\therefore \ \dfrac{SI}{CI} = \dfrac{3x}{10} \times \dfrac{400}{129x} = \dfrac{40}{43}$$

$$\therefore \ SI = \dfrac{40}{43} \times 193.5 = ₹180$$

23. 2; Area of the park $= \dfrac{(968)^2}{4\left(\dfrac{22}{7}\right)} = 74536 \text{ sq m}$

$$\therefore \text{ Radius of the park} = \sqrt{\frac{74536 \times 7}{22}} = 154 \text{ m}$$

$$\therefore \text{ Area of the road} = \pi b\,(b + 2r)) = \frac{22}{7} \times 2.8 \times (2.8 + 308) = 22 \times 0.4 \times 310.8 = 2735.04 \text{ sq m}$$

24. 5; Required number of ways = $^6C_1 \times {}^5C_3 = 6 \times 10 = 60$ ways

25. 1; Total balls = 6 + 7 + 8 = 21

$n(s) = {}^{21}C_3 = 1330$

Two blue balls can be selected from 7 blue balls in $^7C_2 = 21$ ways and the remaining one ball can be selected from the remaining 14 balls in $^{14}C_1 = 14$ ways

$\therefore n(E) = 21 \times 14 = 294$

$$\therefore P(E) = \frac{294}{1330} = \frac{147}{665}$$

26. 4; Let 10 years ago the ages of A, B and C be x, 3x and 7x respectively. Then the present ages of A, B and C are (x + 10), (3x + 10) and (7x + 10) respectively.

$\therefore$ Sum = 11x + 30 = 85

$\therefore 11x = 55 \qquad \therefore x = 5$

Hence, the present ages of A, B and C are 15, 25 and 45 years respectively.

$$\therefore \text{ Reqd } \% = \frac{45}{25} \times 100 = 180\%$$

27. 4; Let the daily earnings of the men and women be x and y respectively.

$$\therefore 13x + 12y = \frac{11120}{8} = 1390 \quad \dots \text{(i)}$$

$$\therefore 9x + 11y = \frac{12840}{12} = 1070 \quad \dots \text{(ii)}$$

Solving eqn (i) and (ii), we get

x = 70 $\qquad$ y = 40

$\therefore 8x + 15y = 1160$

$$\therefore \text{ Required days} = \frac{17400}{1160} = 15 \text{ days}$$

28. 3; Time taken to fill the tank by both the pipes = $\dfrac{40 \times 10}{40 + 10} = 8$ hours. So to fill the tank half, they will take 4 hours. After leakage half of the water leaks out, that is with leakage the pipes will fill the tank in 16 hours.

But here $\dfrac{1}{2}$ of the tank is already filled in 4 hours. So, the remaining half will be filled in $\dfrac{16}{2} = $ 8 hours.

$\therefore$ Total time = 4 + 8 = 12 hours.

29. 5; Let the train meet x km from station X.

($\therefore$ 1PM – 11AM = 2h)

or, $\dfrac{x}{40} - \dfrac{(1040 - x)}{80} = 2$

$2x - 1040 + x = 160$,   or, $3x = 1200$

$\therefore x = 400$ km

So, time taken by the first train $= \dfrac{400}{40} = 10$ hours.

So they will meet at 9pm.

30. 2; Let the side of the square ABCD (park) be x. So area $= x^2$

Side of square $A_1 B_1 C_1 D_1 = x + 2 + 2 = (x + 4)$ metres

Area of $A_1 B_1 C_1 D_1 = (x + 4)^2$

Area of path = Area of $A_1 B_1 C_1 D_1$ – Area of ABCD

or $(x + 4)^2 - x^2 = 184$

or $x^2 + 8x + 16 - x^2 = 184$

or $8x = 184 - 16 = 168$

$\therefore x = 21$ metres

$\therefore$ Area of the park $= x^2 = 441$ sq m

31. 2; Income of Company A in 2007

$I = E \times \dfrac{(100 + P)}{100}$

or $E = \dfrac{100 \times I}{(100 + P)} = \dfrac{85.8 \times 100}{(100 + 32)} = \dfrac{8580}{132} = 65$ lakh

32. 4; Company A's income in 2012 = Expenditure $\times \dfrac{(\% \, Profit + 100)}{100}$

$\therefore I = 90.6 \times \dfrac{155}{100} = 140.43$ lakh

33. 2; Company B's percentage profits in different years are as follows

% Profit in 2007 $\rightarrow \dfrac{32 - 25}{25} \times 100 = 28\%$

% Profit in 2009 $\rightarrow \dfrac{45 - 30}{30} \times 100 = 50\%$

% Profit in 2010 $\rightarrow \dfrac{50 - 45}{45} \times 100 = 11.11\%$

% Profit in 2011 $\rightarrow \dfrac{60 - 50}{50} \times 100 = 20\%$

34. 5; We can't find the exact value of the net profit from the given data.

35. 4; $E_A = I_B = 84$ lakhs

Percentage profit of Company A = 30%   Percentage profit of Company B = 50%

$$I_A = E_A \times \frac{100 + P_A}{100} = 84 \times \frac{130}{100} = 109.2 \text{ lakhs} \qquad E_B = I_B \times \frac{100}{(100 + P_B)} = 84 \times \frac{100}{150} = 56 \text{ lakhs}$$
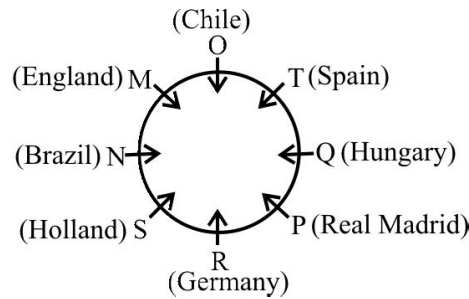
$\therefore$ Difference = 109.2 − 56 = 53.2 lakhs

36. 5; 'fo' or 'gm'

37. 4   **38.** 3   **39.** 4   **40.** 1

41. 1   **42.** 5   **43.** 3   **44.** 5   **45.** 1

46. 5; Conclusion I is inherent in the first statement.
Again,
All dogs are kittens (A) + No kittens are black (E) = A + E = E = No dog is black
Hence, conclusion II follows.

47. 1; There is no negative statement. Hence, Conclusion I follows. But conclusion II is a negative conclusion. Hence, II does not follow.

48. 5; All scholar are eccentric (A) + Conversion of No woman is eccentric → conversion → No woman is a scholar.
Hence, conclusion I follows.
Again, All scholars are eccentric (A) + All eccentrics are studies (A) = A + A = A. All scholars are studies. It means. All studies being scholar is a possibility. Hence, conclusion II follows.

49. 3; Some eggs are hard-boiled → conversion → Some hard-boiled are eggs (I) + No eggs are uncrackable (E) = I + E = O = Some hard-boiled are not uncrackable.
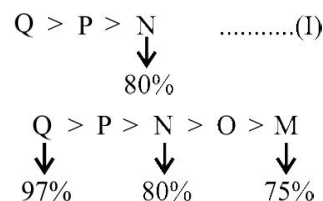But, conclusion I and II make a complementary pair (I–E).

50. 1; All perfumes are expensive (A) + All expensive things are unique (A) = A + A = All perfumes are unique.
Hence, All unique thing being perfumes is a possibility.
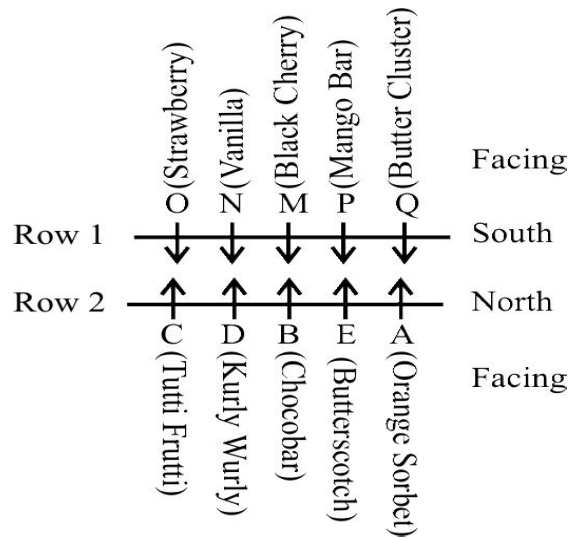Thus, conclusion I follows. But II does not follow.

(51-55):

$$Q > P > N \qquad ....(I)$$
$$\downarrow$$
$$80\%$$

$$Q > P > N > O > M$$
$$\downarrow \qquad\qquad \downarrow \qquad\qquad \downarrow$$
$$97\% \qquad 80\% \qquad 75\%$$

51. 2

52. 2; Because P lies between the one who scored 97% marks and the one who scored 80% marks.

53. 5   **54.** 5   **55.** 2

	O (Strawberry)	N (Vanilla)	M (Black Cherry)	P (Mango Bar)	Q (Butter Cluster)	Facing
Row 1	↓	↓	↓	↓	↓	South
Row 2	↑	↑	↑	↑	↑	North
	C (Tutti Frutti)	D (Kurly Wurly)	B (Chocobar)	E (Butterscotch)	A (Orange Sorbet)	Facing

56. 4   **57.** 2   **58.** 5   **59.** 2   **60.** 3

61. 4;

     From I M _ _ _ R _   ...(a)

           _ M _ _ _ R   ...(b)

From II M _ N _ R E   ...(a)

        M N _ _ R E   ...(b)

        A N   ...(c)

From III. U R E

Now, from I and III. M _ _ U R E

Now, combining this with II (c), we get MANURE.

62. 5; Both 'friends' and 'are' are common to all the statements.

63. 5; **From I.**

Friend	Pen colour	Class
M	Yellow / Black / Blue	VII
N		
O		
P		
Q		
R	Green	IV
S	Silver	II

    From II.

O – Black – does not study in VI or III.
From III.
P – Blue – V
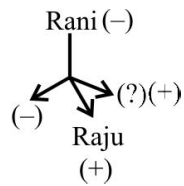Q does not study in III and N does not like Red pen.
From (I), (II) and (III).

Friend	Pen colour	Class
M	Yellow	VII
N	Pink	III/VI/VIII
O	Black	III/VIII
P	Blue	V
Q	Red	VI/VIII
R	Green	IV
S	Silver	II

Thus, even (I), (II) and (III) together are not sufficient to answer the question.

64. 3; **From I.**   Rani (–)

Arti
(–)   (+)
        (?)

(?)(+)

From II.   Rani (–)

(–)   (?)(+)
Raju
(+)

From III.   Rani (–)

(+)   (–)
Raju   Arti

65. 4;   **From I.**

T/U

T/U

Q→

T/U   S

From I and II.

U

T

Q→

U   S
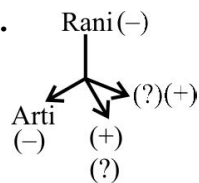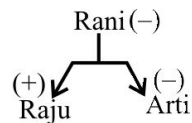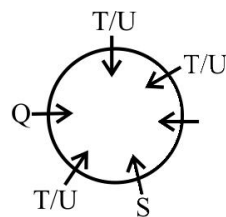
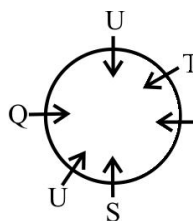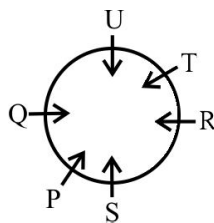**From (I), (II) and (III).**

Thus, (I), (II) and (III) are sufficient to answer the question.

66. 2; $D = T \geq M < J$

From the given expression

$D = T \geq M < J$

D and J cannot be combined. So, I is not true.

From the given expression

$D = T \geq M < J$

combining

$D \geq M$. So, II is true.

67. 3; $8 < K = N \geq R$

From the given expression

$8 < K = N \geq R$

combining

$R = K$

Which means either I (R = K)

or II (R < K) is true.

68. 1; Given, $H \geq F < W = E$

From the given expression

$H \geq F < W = E$

combining

$E > F$. So, I is true.

From the given expression, $H \geq F < W = E$

combining

We cannot compare H and W. Thus, II is not true.

69. 4; Given, $Z > D \leq K > M$

From the given expression,

$Z > D \leq K > M$

combining

M and D cannot be compared. Thus, I is not true.

From the given expression,

$Z > D \leq K > M$

combining

Z and K cannot be compared. Thus, II is also not true.

70. 5; Given, W ≤ B < N ≤ F
From the given expression,

W ≤ B < N ≤ F
　　└───────┘
　　combining

F > B. Thus, I is true.
From the given expression,

W ≤ B < N ≤ F
└───────┘
combining

W < N. Thus, II is also true.

71. 4	**72.** 3	**73.** 2	**74.** 4	**75.** 5
76. 1	**77.** 3	**78.** 2	**79.** 3	**80.** 2
81. 4	**82.** 3	**83.** 5	**84.** 2	

85. 2; Replace 'from' with 'by'

86. 3; add 'him' after 'stop'

87. 2; Replace 'that' with 'those'

88. 3; Add 'of' after 'instead'

89. 2; Add 'own' after 'one's

(90-94): BFDAEC

90. 2	**91.** 4	**92.** 1	**93.** 5	**94.** 3
95. 1	**96.** 3	**97.** 2	**98.** 4	**99.** 1
100. 2				