PRACTICE SET 7

INSTRUCTIONS

- **This practice set consists of two sections. Quantitative Aptitude (Qs. 1-40) & Reasoning Ability (Qs. 41-80).**
- **All the questions are compulsory.**
- **Each question has five options, of which only one is correct. The candidates are advised to read all the options thoroughly.**
- **There is negative marking equivalent to $1/4^{th}$ of the mark allotted to the specific question for wrong answer.**

Time : 45 min. **Max. Marks : 80**

QUANTITATIVE APTITUDE

DIRECTIONS (Qs. 1-10): What will come in place of the question mark (?) in the following questions.

1. $\frac{5}{11}$ of $\frac{4}{5}$ of $\frac{11}{6}$ of 848=?

(a) 216 (b) 222
(c) 208 (d) 212
(e) None of these

2. 1.4% of 750 + 2.2% of 480 = ?

(a) 21.06 (b) 21.16
(c) 20.88 (d) 21.18
(e) None of these

3. $\frac{3}{4}$ of $116 - \frac{2}{3}$ of 87=?

(a) 31 (b) 27
(c) 29 (d) 26
(e) None of these

4. $6.96 \div 1.2 - 18.24 \div 7.6 = ?$

(a) 3.4 (b) 3.14
(c) 3.04 (d) 3.24
(e) None of these

5. 136% of 250 + ? % of 550 = 670

(a) 64 (b) 55
(c) 56 (d) 65
(e) None of these

6. $\frac{14 \times 25 - 5^3}{24 \times 5 + 8 \times 9} = ?$

(a) $1\frac{9}{64}$ (b) $\frac{64}{75}$
(c) $1\frac{11}{64}$ (d) $1\frac{11}{75}$
(e) None of these

7. $17\frac{2}{5} \times 4\frac{5}{8} - ? = 46\frac{7}{8}$

(a) $32\frac{3}{5}$ (b) $33\frac{3}{5}$
(c) $33\frac{2}{5}$ (d) $32\frac{2}{5}$
(e) None of these

8. $5616 \div 18 \div 8 = ?$

(a) 36 (b) 76
(c) 49 (d) 39
(e) None of these

9. $22^2 + \sqrt{?} = 516$

(a) 1029 (b) 1024
(c) 1124 (d) 1128
(e) None of these

10. 45% of 660 + 28% of 450 = ?

(a) 413 (b) 428
(c) 423 (d) 418
(e) None of these

DIRECTIONS (Qs. 11-15) : What will come in place of the question mark (?) in the following number series.

11. 12 16 24 40 ?

(a) 76 (b) 72
(c) 84 (d) 88
(e) None of these

12. 9 19 39 79 ?
(a) 139 (b) 129
(c) 159 (d) 149
(e) None of these

13. 8 17 42 91 ?
(a) 170 (b) 142
(c) 140 (d) 172
(e) None of these

14. 7 8 18 57 ?
(a) 244 (b) 174
(c) 186 (d) 226
(e) None of these

15. 3840 960 240 60 ?
(a) 20 (b) 18
(c) 12 (d) 22
(e) None of these

16. Simple interest accrued on an amount in 8 years at the rate of 12 p.c.p.a. is ₹ 5,520. What is the principal?
(a) ₹ 5,750 (b) ₹ 8,500
(c) ₹ 5,650 (d) ₹ 8,250
(e) None of these

17. Srikant and Vividh started a business investing amounts of ₹ 1, 85,000 and ₹ 2, 25,000 respectively, If Vividh's share in the profit earned by them is ₹ 9,000, what is the total profit earned by them together?
(a) ₹ 17,400 (b) ₹ 16,400
(c) ₹ 16,800 (d) ₹ 17,800
(e) None of these

18. Present ages of father and son are in the ratio of 6 : 1 respectively. Four years after the ratio of their ages will become 4 : 1 respectively. What is the son's present age?
(a) 10 years (b) 6 years
(c) 4 years (d) 8 years
(e) None of these

19. A DVD player was purchased for Rs. 4,860. At what price should it be sold so that 25% profit is earned?
(a) ₹ 6,225 (b) ₹ 6,275
(c) ₹ 6,075 (d) ₹ 6,025
(e) None of these

20. 65% of a number is more than its $\frac{2}{5}$th by 140. What is 30% of that number?
(a) 186 (b) 168
(c) 164 (d) 182
(e) None of these

21. Number obtained by interchanging the digit of a two digit number is more than the original number by 27 and the sum of the digits is 13. What is the original number?
(a) 58 (b) 67
(c) 76 (d) 85
(e) None of these

22. 22 men can complete a job in 16 days. In how many days will 32 men complete that job?
(a) 14 (b) 12
(c) 16 (d) 9
(e) None of these

23. Mr. Davar spends 38% of his monthly income on food, 25% on children's education and 12% on transport and the remaining amount of ₹ 5,800 he saves. What is Mr. Davar's monthly income?
(a) ₹ 23,200 (b) ₹ 24,200
(c) ₹ 23,800 (d) ₹ 24,400
(e) None of these

24. A, B, C, D and E are five consecutive odd numbers. Average of A and C is 59. What is the smallest number?
(a) 65 (b) 63
(c) 61 (d) 57
(e) None of these

25. Out of the fractions
$\frac{9}{31}, \frac{3}{17}, \frac{6}{23}, \frac{4}{11}$ and $\frac{7}{25}$, which is the largest fraction?
(a) $\frac{9}{31}$ (b) $\frac{3}{17}$
(c) $\frac{6}{23}$ (d) $\frac{4}{11}$
(e) None of these

26. What will come in place of both the question marks (?) in the following question?
$\frac{23}{?} = \frac{?}{92}$
(a) 56 (b) 54
(c) 44 (d) 46
(e) None of these

27. The salary of a man increases by 20% every year in the month of January. His salary was ₹ 5,000 in the month of February in year 2009. What will be his salary in the month of February in the year 2011 ?
(a) ₹ 7,200 (b) ₹ 6,200
(c) ₹ 7,800 (d) ₹ 6,800
(e) None of these

28. The simple interest on a certain principal in 5 years at the J dte of 12 p.c. p.a. is ₹ 1,536. What amount of the simple interest would one get if one invests ₹ 1,000 more than the previous principal for 2 years and at the same rate p.c.p.a.?
(a) ₹ 845.40 (b) ₹ 614.40
(c) ₹ 2,136 (d) ₹ 1,536
(e) None of these

29. If 3 men or 9 boys can finish a piece of work in 21 days. In how many days can 5 men and 6 boys together do the same piece of work?
(a) 12 days (b) 8 days
(c) 14 days (d) Cannot be determined
(e) None of these

30. In a test, Rajesh got 112 marks which is 32 more than the passing marks. Sonal got 75% marks which is 70 more than the passing marks. What is the minimum passing percentage of the test?
(a) 35 (b) 45
(c) 40 (d) 30
(e) None of these

DIRECTIONS (Qs. 31-35): Study the following information carefully and answer the questions given below it.

Out of the 15,000 candidates eligible for an Officer's post in a Public Sector Bank, 450 candidates have prior experience of working in Public Sector banks in rural area only. 25% of the total number of candidates have prior experience of working in Public Sector Banks in urban areas only. 12% of the total number of candidates have prior experience of working in Private Sector Banks in urban areas only. 2% of the total number of candidates have prior experience of working in Private Sector banks in rural areas only. 3,600 candidates have worked in both Public and Private Sector Banks in urban areas only. 600 candidates have worked in both Public and Private Sector Banks in rural areas only. The remaining candidates have no prior experience of working in the Banking industry.

31. How many candidates have prior experience of working in rural areas (both Public Sector and Private Sector Banks together)?
(a) 4,350 (b) 4,950
(c) 4,800 (d) 4,900
(e) 4,850

32. How many candidates have prior experience of working in Public Sector Banks (Urban and Rural areas together)?
(a) 12,450 (b) 8,400
(c) 10,050 (d) 10,650
(e) None of these

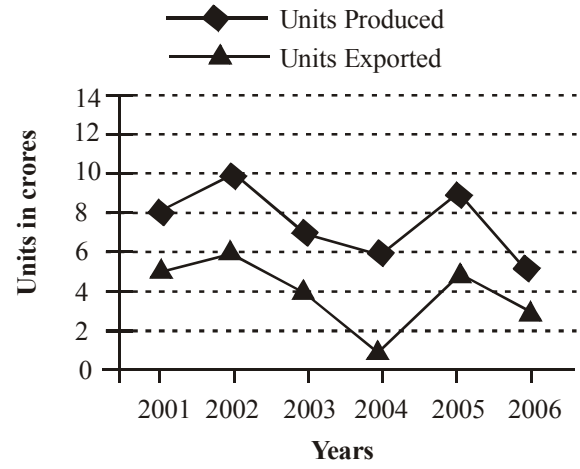
33. What is the ratio of the candidates who have a prior experience of working in Public Sector Banks in rural areas only to the candidates who have a prior experience of working in Private Sector Banks in rural areas only?
(a) 4 : 3 (b) 3 : 2
(c) 2 : 3 (d) 3 : 4
(e) None of these

34. What is the total number of candidates who have worked in Private Sector Banks in urban areas?
(a) 1,800 (b) 2,250
(c) 4,050 (d) 36,600
(e) None of these

35. The candidates who have no prior experience of working in the banking industry are what per cent of the candidates who have worked in Public Sector Banks in both urban and rural areas together?
(a) 60.5 (b) 63.5
(c) 62 (d) 64
(e) None of these

DIRECTIONS (Qs. 36-40) : Study the following graph carefully to answer the questions that follows :

Number of units produced (in crores) and exported (in crores) by a Company over the years.



36. What is the average number of units exported over the years?
(a) 40000000 (b) 38333333
(c) 36666666 (d) 20000000
(e) None of these

37. In which year is the percent of units exported with respect to the units produced the **minimum** ?
(a) 2001 (b) 2002
(c) 2003 (d) 2004
(e) None of these

38. In which year is the percent of units exported with respect to the units produced the **maximum** ?
(a) 2003 (b) 2004
(c) 2005 (d) 2006
(e) None of these

39. In which year is the difference between the units produced and exported the **maximum** ?
(a) 2002 (b) 2003
(c) 2004 (d) 2005
(e) None of these

40. What is the difference between the number of units exported in 2002 and 2005 ?
(a) 100000000 (b) 1000000
(c) 10000000 (d) 100000
(e) None of these

REASONING ABILITY

41. How many meaningful three letter English words can be formed with the letters AER, using each letter only once in each word ?
(a) None (b) One
(c) Three (d) Two
(e) Four

42. Each vowel of the word ADJECTIVE is substituted with the next letter of the English alphabetical series, and each consonant is substituted with the letter preceding it. How many vowels are present in the new arrangement ?

(a) Four (b) One
(c) Two (d) Three
(e) None of these

43. In a certain code '*na pa ka so*' means 'birds fly very high', '*ri so la pa*' means 'birds are very beautiful' and '*ti me ka bo*' means 'the parrots could fly'. Which of the following is the code for 'high' in that language ?
(a) *na* (b) *ka*
(c) *bo* (d) *so*
(e) None of these

44. If the digits in the number 86435192 are arranged in ascending order, what will be the difference between the digits which are second from the right and fourth from the left in the new arrangement ?
(a) One (b) Two
(c) Three (d) Four
(e) None

45. If it is possible to make only one meaningful word with the Third, Seventh, Eighth and Tenth letters of the word COMPATIBILITY, which of the following would be the last letter of that word ? If no such word can be made, give 'X' as your answer and if more than one such word can be formed, give your answer as 'Y'.
(a) I (b) B
(c) L (d) X
(e) Y

46. In a certain code FINE is written HGPC. How is SLIT written in that code ?
(a) UTGR (b) UTKR
(c) TUGR (d) RUGT
(e) None of these

47. If in a certain language LATE is coded as 8 & 4 $ and HIRE is coded as 7*3$ then how will HAIL be coded in the same language ?
(a) 7 & 8* (b) &7*8
(c) 7*& 8 (d) 7&*8
(e) None of these

48. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group ?
(a) Stem (b) Tree
(c) Root (d) Branch
(e) Leaf

49. If 'Apple' is called 'Orange', 'Orange' is called 'Peach', 'Peach' is called 'Patato', 'Potato' is called 'Banana', 'Banana' is called 'Papaya' and 'Papaya' is called 'Guava', which of the following grows underground ?
(a) Potato (b) Guava
(c) Apple (d) Banana
(e) None of these

50. How many such pairs of letters are there in word ENGLISH, each of which has as many letters between its two letters as there are between them in the English alphabets ?
(a) None (b) One
(c) Two (d) Three
(e) More than three

DIRECTIONS (Qs. 51 -55): Study the following information carefully and answer the given questions.

Eight friends, Meenal, Rumia, Shikha, Ali, Peter, Harleen, Ketan and Bharat, 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.

Bharat sits second to the right of Shikha. Bharat does not sit at any of the corners. Meenal sits third to the right of Peter. Peter is not an immediate neighbour of Shikha. Rumia and Ketan are immediate neighbours of each other but Rumia does not sit at any of the corners of the table. Harleen is an immediate neighbour of neither Peter nor Shikha.

51. Four of the following five are alike in a certain way and so form a group. Which is the one that does not belong to that group?
(a) Peter (b) Rumia
(c) Harleen (d) Shikha
(e) Bharat

52. Who sits third to the left of Ali?
(a) Bharat (b) Rumia
(c) Shikha (d) Peter
(e) Cannot be determined

53. What is the position of Peter with respect to Meenal?
(a) Immediate to the left
(b) Second to the left
(c) Third to the left
(d) Third to the right
(e) Second to the right

54. Who amongst the following sits second to the right of Ketan?
(a) Shikha (b) Ali
(c) Bharat (d) Harleen
(e) Meenal

55. Who amongst the following represent the immediate neighbours of Harleen?
(a) Meenal, Ketan (b) Bharat, Rumia
(c) Bharat, Meenal (d) Ali, Rumia
(e) Ali, Ketan

DIRECTIONS (Qs. 56-60) : In each of the questions below are given three statements followed by two conclusions numbered I and II. You have to take the given statements to be true even if they seem to be at variance from commonly known facts. Read both of the conclusions and then decide which of the given conclusions logically follows from the given statements disregarding commonly known facts.

Read the statements and the conclusions which follow it and give answer
(a) If only conclusion I is true.
(b) If only conclusion II is true.
(c) If either conclusion I or conclusion II is true.
(d) If neither conclusion I nor conclusion II is true.
(e) If both conclusions I and II are true.

56. Statements :
All stars are suns.
Some suns are planets.
All planets are satellites.
Conclusions :
I. Some satellites are stars.
II. No star is a satellite.

57. Statements :
All curtains are rods.
Some rods are sheets.
Some sheets are pillows.
Conclusions:
I. Some pillows are rods.
II. Some rods are curtains.

58. Statements :
All switches are plugs.
Some plugs are bulbs.
All bulbs are sockets.
Conclusions:
I. Some sockets are plugs.
II. Some plugs are switches.

59. Statements :
All fishes are birds.
All birds are rats.
All rats are cows.
Conclusions :
I. All birds are cows.
II. All rats are fishes.

60. Statements :
Some walls are windows.
Some windows are doors.
All doors are roofs.
Conclusions :
I. Some doors are walls.
II. No roof is a window.

DIRECTIONS (Qs. 61-65) : Read the following information carefully and answer the questions, which follow :

'A - B' means 'A is father of B'.
'A + B' means 'A is daughter of B'.
'A ÷ B' means 'A is son of B'.
'A × B' means 'A is wife of B'.

61. How is P related to T in the expression 'P + S – T' ?
(a) Sister (b) Wife
(c) Son (d) Daughter
(e) None of these

62. In the expression 'P × Q – T' how is T related to P ?
(a) Daughter (b) Sister
(c) Mother (d) Can't be determined
(e) None of these

63. Which of the following means T is wife of P ?
(a) P × S ÷ T (b) P ÷ S × T
(c) P – S ÷ T (d) P + T ÷ S
(e) None of these

64. Which of the following means P is grandson of S ?
(a) P + Q – S (b) P ÷ Q × S
(c) P ÷ Q + S (d) P × Q ÷ S
(e) None of these

65. In the expression 'P + Q × T' how is T related to P ?
(a) Mother (b) Father
(c) Son (d) Brother
(e) None of these

DIRECTIONS (Qs. 66-70) : In each question a group of letters is given followed by four combinations of number/symbol numbered (a), (b), (c) and (d). Letters are to be coded as per the scheme and conditions given below. You have to find out the serial number of the combination, which represents the letter group. Serial number of that combination is your answer. If none of the combinations is correct, your answer is (e) i.e. None of these.

Letters	Q	M	S	I	N	G	D	K	A	L	P	R	B	J	E
Number/ Symbol	7	@	4	#	%	$	6	1	2	£	5	*	9	8	3

Conditions :
(i) If the first letter is a consonant and the last a vowel, both are to be coded as the code of the vowel.
(ii) If the first letter is vowel and the last a consonant, the codes for the first and the last are to be interchanged.
(iii) If no vowel is present in the group of letters, the second and the fifth letters are to be coded as ©.

66. BARNIS
(a) 9 2 * % # 4 (b) 9 2 4 # * %
(c) 9 2 * # % 9 (d) 4 2 * # % 4
(e) None of these

67. DMBNIA
(a) 6 @ 9 % # 2 (b) 2 @ 9 % # 6
(c) 2 @ 9 % # 6 (d) 2 @ 9 % # 2
(e) None of these

68. IJBRLG
(a) # 8 9 * £ $ (b) # 8 9 * £ #
(c) $ 8 9 * £ # (d) $ 8 9 * £ $
(e) None of these

69. BKGQJN
(a) 9 © $ 7 © % (b) © 9 $ 7 % ©
(c) 9 1 $ 7 8 % (d) % 1 $ 7 8 9
(e) None of these

70. EGAKRL
(a) # £ $ 2 1 * (b) £ $ 2 1 * 3
(c) £ $ 2 1 * # (d) # £ $ 2 1 #
(e) None of these

DIRECTIONS (Qs. 71-75) : Study the following information carefully to answer these questions.

Eight persons A, B, C, D, E, F, G and H work for three different companies namely X, Y and Z. Not more than three persons work for a company. There are only two ladies in the group who have different specialisations and work for different companies. Of the group of friends, two have specialisation in each HR, Finance and Marketing. One member is an engineer and one is a doctor. H is an HR specialist and works with a Marketing specialist B who does not work for company Y. C is an engineer and his sister works in company Z. D is a specialist in HR working in company X while her friend G is a finance specialist and works for company Z. No two persons having the same specialisation work together. Marketing specialist F work for company Y and his friend A who is a Finance expert works for company X in which only two specialists work. No lady is a marketing specialist or a doctor.

71. Which of the following combinations is correct ?
(a) C - Z - Engineer (b) E - X - Doctor
(c) H – X – HR (d) C – Y – Engineer
(e) None of these

72. For which of the following companies does C work?
(a) Y (b) X
(c) Z (d) Data inadequate
(e) None of these

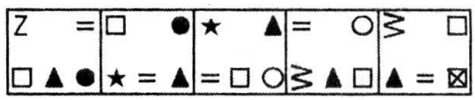
73. Which of the following pairs represents the two ladies in the group ?
(a) A and D (b) B and D
(c) D and G (d) Data inadequate
(e) None of these

74. Which of the following represents the pair working in the same company ?
(a) D and C (b) A and B
(c) A and E (d) H and F
(e) None of these

75. Who amongst the friends is a doctor ?
(a) H (b) E
(c) C (d) Either E or C
(e) None of these

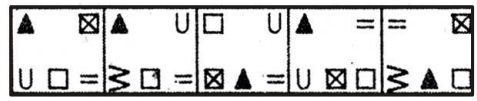
DIRECTIONS (Qs. 76-80) : In each of the questions given below which one of the five answer figures should come after the problem figures if the sequence were continued ?

76. Problem Figures



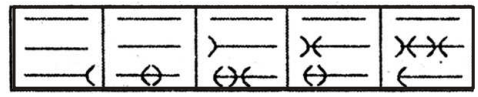
(a) (b) (c) (d) (e)

Answer Figures



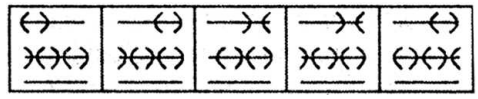
(a) (b) (c) (d) (e)

77. Problem Figures



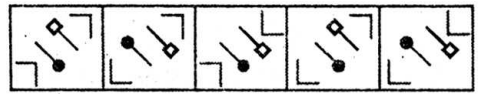
(a) (b) (c) (d) (e)

Answer Figures



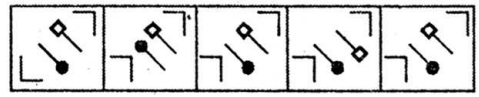
(a) (b) (c) (d) (e)

78. Problem Figures



(a) (b) (c) (d) (e)

Answer Figures

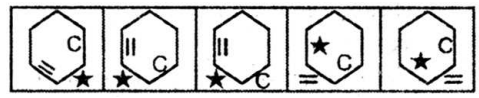


(a) (b) (c) (d) (e)

79. Problem Figures

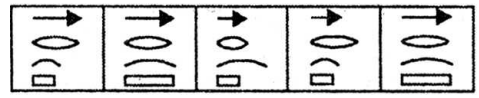
(a) (b) (c) (d) (e)

Answer Figures



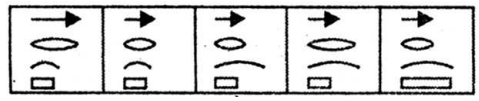
(a) (b) (c) (d) (e)

80. Problem Figures



(a) (b) (c) (d) (e)

Answer Figures



(a) (b) (c) (d) (e)

HINTS & EXPLANATIONS

1. (d) $? = 848 \times \frac{11}{16} \times \frac{4}{5} \times \frac{5}{11} = 212$

2. (a) $? = \frac{150 \times 1.4}{100} + \frac{480 \times 2.2}{100}$
$= 10.50 + 10.56 = 21.06$

3. (c) $? = \frac{116 \times 3}{4} - \frac{87 \times 2}{3}$
$= 87 - 58 = 29$

4. (a) $? = \frac{6.96}{1.2} - \frac{18.24}{7.6}$
$= 5.8 - 2.4 = 3.4$

5. (e) $\frac{250 \times 136}{100} + \frac{550 \times ?}{100} = 670$
$\Rightarrow 340 + 5.5 \times ? = 670$
$\Rightarrow 5.5 \times ? = 670 - 340 = 330$
$\Rightarrow ? = \frac{330}{5.5} = 60$

6. (c) $? = \frac{14 \times 25 - 125}{120 + 72} = \frac{225}{192}$
$= \frac{75}{64} = 1\frac{11}{64}$

7. (b) $\frac{87}{5} \times \frac{37}{8} - ? = \frac{375}{8}$
$\Rightarrow ? = \frac{3219}{40} - \frac{375}{8}$
$= \frac{3219 - 1875}{40} = \frac{1344}{40}$
$= \frac{168}{5} = 33\frac{3}{5}$

8. (d) $? = \frac{5616}{18 \times 8} = 39$

9. (b) $484 + \sqrt{?} = 516$
$\Rightarrow \sqrt{?} = 516 - 484 = 32$
$\therefore ? = 32 \times 32 = 1024$

10. (c) $? = \frac{660 \times 45}{100} + \frac{450 \times 28}{100}$
$= 297 + 126 = 423$

11. (b) The pattern of the number series is:
$12 + 2^2 = 16$
$16 + 2^3 = 24$
$24 + 2^4 = 40$
$40 + 2^5 = \boxed{72}$

12. (c) The patern of the number series is :
$9 + 10 = 19$
$19 + 20 = 39$
$39 + 40 = 79$
$79 + 80 = \boxed{159}$

13. (d) The pattern of the number series is:
$8 + 3^2 = 17$
$17 + 5^2 = 42$
$42 + 7^2 = 91$
$91 + 9^2 = \boxed{172}$

14. (e) The pattern of the number series is:
$7 \times 1 + 1 = 8$
$8 \times 2 + 2 = 18$
$18 \times 3 + 3 = 57$
$57 \times 4 + 4 = \boxed{232}$

15. (e) The pattern of the number series is:
$3840 \div 4 = 960$
$960 \div 4 = 240$
$240 \div 4 = 60$
$60 \div 4 = \boxed{15}$

16. (a) $\text{Principal} = \frac{\text{SI} \times 100}{\text{Time} \times \text{Rate}} = \frac{5520 \times 100}{8 \times 12} = ₹\,5750$

17. (b) Ratio of the profit of Srikant and Vividh
$= 185000 : 225000 = 37 : 45$
Sum of the ratios $= 37 + 45 = 82$
$\therefore$ Total profit earned
$= \frac{82}{45} \times 9000$
$= ₹\,16400$

18. (b) Father's present age = $6x$ years
Son's present age = x years
After four years
$\therefore \frac{6x + 4}{x + 4} = \frac{4}{1}$
$\Rightarrow 6x + 4 = 4x + 16$
$\Rightarrow 2x = 12 \Rightarrow x = \frac{12}{2} = 6$
$\therefore$ Son's present age = 6 years

19. (c) $\text{SP} = \frac{100 \times \text{Profit}\%}{100} \times \text{CP}$
$= ₹\left(4860 \times \frac{125}{100}\right) = ₹\,6075$

20. (b) Let the number be x.

$\therefore \frac{x\times 65}{100}-\frac{2x}{5}=140 \Rightarrow \frac{13x}{20}-\frac{2x}{5}=140$

$\Rightarrow \frac{13x-8x}{20}=140 \Rightarrow \frac{x}{4}=140$

$\Rightarrow x=4\times 140=560$

$\therefore$ 30% of $560=\frac{560\times 30}{100}=168$

21. (a) Let the original number be $10x+y$ where $y>x$.

$\therefore 10y+x-10x-y=27$

$\Rightarrow 9(y-x)=27$

$\Rightarrow y-x=3$ ....(i)

and $x+y=13$ ....(ii)

From equations (i) and (ii),

$y=8$ and $x=5$

$\therefore$ Original number $=58$

22. (e) $M_1D_1=M_2D_2$

$\Rightarrow 22\times 16=32\times D_2$

$\Rightarrow D_2=\frac{22\times 16}{32}=11$ days

23. (a) Davar's total expenditure percentage

$=(38+25+12)\%=75\%$

Savings percentage $=25\%$

If this monthly salary be ₹ x, then

$\frac{x\times 25}{100}=5820$

$\Rightarrow$ x = ₹(4×5800) = ₹23200

24. (d) Let the smallest odd number A be x

$x+x+4=2\times 59$

$\Rightarrow 2x=118-4=114$

$\therefore x=\frac{114}{2}=57$

25. (d) Decimal equivalent of each fraction :

$\frac{9}{31}=0.29$; $\frac{3}{17}=0.18$

$\frac{6}{23}=0.26$; $\frac{4}{11}=0.36$; $\frac{7}{25}=0.28$

$\therefore$ The largest fraction $=\frac{4}{11}$

26. (d) $\frac{23}{?}=\frac{?}{92}$

$\Rightarrow ?=23\times 92$

$\Rightarrow ?=\sqrt{23\times 23\times 4}$

$=2\times 23=46$

27. (a) Tricky Approach

Man's salary in the month of February, 2011

$=5000\left(1+\frac{20}{100}\right)^2=5000\times\frac{6}{5}\times\frac{6}{5}$

= ₹7200

28. (e) **Case I**

$\text{Principal}=\frac{\text{S.I.}}{\text{Time}\times\text{Rate}}$

$=\frac{1536\times 100}{5\times 12}=$ ₹ 2560

Case II

$\text{S.I.}=\frac{\text{Principal}\times\text{Time}\times\text{Rate}}{100}$

$=\frac{3560\times 2\times 12}{100}=$ ₹ 854.40

29. (e) $\because$ 3 men $\equiv$ 9 boys

$\therefore$ 1 man $\equiv$ 3boys

$\therefore$ 5 man + 6 boys

$\therefore (5\times 3+6)$ boys = 21 boys

$\therefore M_1D_1=M_2D_2$

$\Rightarrow D_2=\frac{9\times 21}{21}=9$ days

30. (c) Let the total marks of the exam be x.

Passing marks $=112-32=80$

$\therefore \frac{x\times 75}{100}=80+70=150$

$\Rightarrow x=\frac{150\times 100}{75}=200$

If the minimum Pass percentage is y, then

$\therefore$ y% of $200=80 \Rightarrow y=40$

(31-35): Distribution of officers in different categories is as follow:

Pub. R_u	Pub. U_r	Pri. R_u	Pri. U_r	Pub. (R_u+U_r)
450	3750	300	1800	3600

Pub. + Pri (R_u)	Pub. + Pri (U_r)
600	2250

31. (b)

32. (d) Total number of candidates.

$=450+3750+3600+600+2250=10650$

33. (b) Reqd ratio $\frac{450}{300}=\frac{3}{2}=3:2$

Required ratio $=300+450=2:3$

34. (c) Required number of candidates working in Private Sector Banks in Urban Areas only

$=1800+2250=4050$

35. (e) Number of candidate having no prior experience of working in banking sector

$=15000-(450+3750+300+1800+3600+600+2250)$

$=15000-12750=2250$

Req. $\%=\frac{2250}{15000}\times 100=15\%$

36. (a) Required average

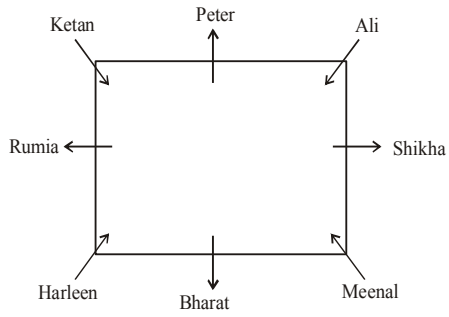
$=\frac{5+6+4+1+5+3}{6}=\frac{24}{6}=4$ crores

37. (d) It is clear from graph. The % value for 2004 is $\frac{1}{6} \times 100$ = 16.67, which is the lowest.
38. (e) % of units exported with respect to units produced is the maximum for year 2001.
It is equal to $\frac{5}{8} \times 100 = 62.5\%$
39. (c) The maximum difference is in 2004.
It is equal to 6 – 1 = 5 crore units.
40. (c) The required difference
= 1 cr = 10000000 units.
41. (c) Meaningful words : ARE, EAR, ERA
42. (c)

A	*D*	*J*	*E*	*C*	*T*	*I*	*V*	*E*
+1↓	–1↓	–1↓	+1↓	–1↓	–1↓	+1↓	–↓	+↓
B	*C*	*I*	*F*	*B*	*S*	*J*	*U*	*F*

43. (a) na *pa* ka *so* → *birds* fly *very* high
ri *so* la *pa* → *birds* are *very* beautiful
ti me *ka* bo → the parrots could fly
Thus *high* is coded as *na*.
44. (d) 1 2 3 **4** 5 6 7 **8** 9
Difference = 8 – 4 = 4
45. (b) 1 2 **3** 4 5 6 **7** **8** 9 **10** 11 12 13
C O **M** P A T **I** **B** I **L** I T Y
Meaningful word ⇒ L I M [B]
46. (e) As F $\xrightarrow{+2}$ H I $\xrightarrow{-2}$ G
N $\xrightarrow{+2}$ P E $\xrightarrow{-2}$ C
Similarly,
S $\xrightarrow{+2}$ U L $\xrightarrow{-2}$ J
I $\xrightarrow{+2}$ K T $\xrightarrow{-2}$ R
47. (d) As L → 8 and H → 7
A → & I → *
T → 4 R → 3
E → $ E → $
Similarly,
H ⟶ 7 A ⟶ &
I ⟶ * L ⟶ 8
48. (b) Others related to 'parts of tree'.
49. (d) Since 'Potato' is called Banana. Thus, 'Banana' grows underground.
50. (e) EI, EG, GI and NL.

Solutions (51-55) :



51. (c) All others sit in the middle of the sides.
52. (a) 53. (d) 54. (d) 55. (b)
56. (c) Some suns are planets.

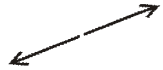
All planets are satellites.
(I + A ⇒ I-type)
"Some suns are satellites".
Conclusions I and II form Complementary Pair.
Therefore, either I or II follows.
57. (b) All curtains are rods.

Some rods are sheets.
(A + I ⇒ No Conclusion)
58. (e) Some plugs are bulbs

All bulbs are sockets.
(I + A ⇒ I-type)
"Some plugs are sockets".
Conclusion I is Converse of thi3s Conclusion.
Conclusion II is Converse of the first Premise.
59. (a) All fishes are birds. (conversion)

All birds are rats.
(A + A ⇒ A-type)
"All fishes are rats".
All birds are rats. (conversion)

All rats are cows.
(A + A ⇒ A-type)
"All birds are cows".
This is Conclusion I.
60. (d) Some windows are doors.



All doors are roofs.
(I + A ⇒ I-type)
"Some windows are roots".
61. (a) P + S → P is daughter of S.
S – T → S is father of T.
Therefore, P is sister of T.
62. (d) P × Q → P is wife of Q.
Q – T → Q is father of T.

T is child of P and Q.
The gender of T is not known.
T is either son or daughter of P.

63. (e) P × S → P is wife of S.
S ÷ T → S is son of T.
T is either father-in-law or mother-in-law of P.
P ÷ S → P is son of S.
S × T → S is daughter of T
Therefore, T is father of P.
P – S → P is father of T.
P + T → P is daughter of T
T ÷ S → T is son of S.
Therefore, T is father of P.

64. (c) P + Q → P is daughter of Q.
Q – S → Q is father of S.
Therefore, P is sister of S.
P ÷ Q → P is son of Q.
Q × S → Q is wife of S.
Therefore, P is son of S.
P ÷ Q → P is son of Q.
Q + S → Q is daughter of S.
Therefore, P is grandson of S.

65. (b) P + Q → P is daughter of Q.
Q × T → Q is wife of P.
Therefore, T is father of P.

66. (a) B → 9; A → 2; R → *; N → %; I → #; S → 4

67. (d) D → **2**; M → @; B → 9; N → %; I → #; A → **6**
Condition (i) is applied.

68. (c) I → **$;** J → 8; B → 9; R → *; L → £; G → **#**
Condition (ii) is applied.

69. (a) B → 9; K → ©; G → $; Q → 7; J → ©; N → %
Condition (iii) is applied.

70. (b) E → **£**; G → $; A → 2; K → 1; R → *; L → **3**
Condition (ii) is applied.

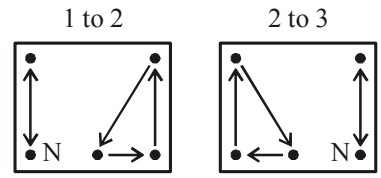
For (Qs. 71-75): Given information can be tabulated as follows

Person	Sex	Company	Specialisation
A	Male	X	Finance
B	Male	Z	Marketing
C	Male	Y	Engineer
D	Female	X	HR
E	Male	Y	Doctor
F	Male	Y	Marketing
G	Female	Z	Finance
H	Male	Z	HR

Thus, 'G' is a sister of 'C'.

71. (d) 72. (a) 73. (c) 74. (c) 75. (b)

76. (a) The movement and other changes in designs can be shown as :



These two steps are repeated alternately.

77. (d) In the subsequent figures respectively one, two zero..... curve(s) is/are added and curves move along the line segment and get reversed in each subsequent figure.

78. (c) In the subsequent figures one design is left intact while other three designs are inverted.

79. (d) In the subsequent figures the star moves three steps in clockwise direction inside the hexagon after every two figures. The equal sign moves respectively one and two step(s) in clockwise direction along the sides of the hexagon. The design C moves in and out the hexagon in the subsequent figures and moves respectively two and one step(s) in clockwise direction. In other words, this problem is based on the rule (1) = (5) and hence (2) = (6).

80. (e) In the subsequent figures respectively two and three designs change size alternately in a set order.