

1. ARITHMETIC

Directions :

Questions : The following questions are based on simple arithmetic calculations. There are four alternatives given under each question. After identifying the right answer, indicate it as per the "Instructions".

1. $99999 + 9999 + 999 + 99 = ?$ ()
 1) 11096 2) 111096
 3) 111196 4) 110096
2. $778 + 64 - 214 - 128 + 174 = ?$ ()
 1) 705 2) 613 3) 694 4) 674
3. $13.141 + 31.417 - 27.118 = ?$ ()
 1) 16.441 2) 17.543
 3) 17.490 4) 17.440
4. $\frac{x}{\sqrt{128}} = \frac{\sqrt{162}}{x}, x =$ ()
 1) 12 2) 144 3) 14 4) 196
5. $?^3 \div 32 = 54$ ()
 1) 318 2) 12 3) 14 4) 16
6. $\sqrt{5^4} \times 14 - 6 \times 7 + 4^x = 18^2, x = \dots\dots$ ()
 1) 1 2) 3 3) 4 4) 2
7. $496 \div 0.6 \times 0.5 = ?$ (approximately) ()
 1) 413 2) 595 3) 148 4) 653
8. $151.011 - 419.999 + 649.991 = ?$ ()
 1) 381.003 2) 420.03
 3) 358.3 4) 410.3
9. $\frac{9^2 + 8^2}{25} = ?$ ()
 1) 2.8 2) 4.8 3) 5.8 4) 6
10. $0.009 \times 0.002 = ?$ ()
 1) 0.18 2) 0.00018
 3) 0.0018 4) 0.000018
11. $159 \div \dots\dots\dots = 15900$ ()
 1) 10.0 2) 1.0 3) 0.001
 4) 0.01 5) 0.1
12. $(65 \div 100) \times 7$ ()
 1) 4.55 2) 4.05 3) 4.5
 4) 4.65 5) 4.75
13. $\frac{40 + (6 \times 0.04)}{8}$ ()
 1) 0.503 2) 5.3 3) 5.003
 4) 5.13 5) 5.03
14. $\frac{5x + 215}{3} = 4x + 60$, then $x = ?$ ()
 1) 3 2) 4 3) 5
 4) 2 5) 0.5
15. If $64 \times 27 \times 25 = 2^a \times 3^b \times 5^c$ then $a + b + c = ?$ ()
 1) 11 2) 10 3) 8
 4) 7 5) 6
16. $4789 + ? = 6500$ ()
 1) 1701 2) 1611 3) 1711
 4) 1601 5) 2711
17. $55555 + 5555 + 555 = ?$ ()
 1) 60655 2) 61665 3) 60605
 4) 61655 5) 61660
18. $(14 - 9)^3 = ?$ ()
 1) 124 2) 216 3) 64
 4) 125 5) 196
19. $\sqrt{36} + \sqrt{x} = 14$ ()
 1) 64 2) 49 3) 36
 4) 81 5) 60
20. $5678 - ? \dots\dots\dots = 4321$ ()
 1) 1257 2) 1358 3) 1347
 4) 1247 5) 1357
21. 15% of 90 = ? ()
 1) 12.5 2) 13.0 3) 14.0
 4) 13.5 5) 14.5

22. $0.5 \times 0.0008 = ?$ ()

- 1) 0.004 2) 0.04 3) 0.00004
4) 0.0014 5) 0.0004

23. $\frac{4}{7}$ of 294 = ? ()

- 1) 168 2) 166 3) 158
4) 128 5) 188

24. $8.512 - 4.4011 = ?$ ()

- 1) 4.0109 2) 4.1119 3) 4.1109
4) 4.1110 5) 4.1100

25. $6464 \div 8 = ?$ ()

- 1) 818 2) 808 3) 880
4) 908 5) 828

26. $7894 + ? = 23100$ ()

- 1) 15106 2) 15200 3) 15026
4) 15206 5) 25206

27. $3 + 33 + 333 + 3333 = ?$ ()

- 1) 3702 2) 3701 3) 3700
4) 3999 5) 4702

28. $(13 - 9)^3 = ?$ ()

- 1) 81 2) 125 3) 27
4) 216 5) 64

29. $\sqrt{25} + \sqrt{x} = 12; x = ?$ ()

- 1) 25 2) 36 3) 49
4) 64 5) 16

30. $7654 - \dots\dots\dots = 1234$ ()

- 1) 6424 2) 6420 3) 6422
4) 5420 5) 5422

31. 20% of 80 = ? ()

- 1) 12 2) 20 3) 15
4) 16 5) 10

32. $0.08 \times 0.009 = ?$ ()

- 1) 0.0072 2) 0.00072 3) 0.000072
4) 0.072 5) 0.72

33. $\frac{726}{6} = ?$ ()

- 1) 120 2) 122 3) 121
4) 201 5) 126

34. $9 - 6.4321 = ?$ ()

- 1) 2.5678 2) 2.5689 3) 2.4679
4) 3.5679 5) 2.5679

35. $\frac{64}{10000} = ?$ ()

- 1) 0.0064 2) 0.064 3) 0.062
4) 0.64 5) 0.0164

36. $0.032 \div 100 \dots\dots\dots$ ()

- 1) 3.2 2) 0.00032
3) 0.0032 4) 32 5) None

37. Increase 5 by 40% ()

- 1) 2 2) 6 3) 7
4) 45 5) None

38. $\frac{5004}{139} - 6 ?$ ()

- 1) 25 2) 27 3) 29
4) 30 5) None

39. $7500 + \frac{1250}{50}$ ()

- 1) 7500 2) 7525 3) 7550
4) 7775 5) 7630

40. $\sqrt{41 - \sqrt{21 + \sqrt{19 - \sqrt{9}}}}$ ()

- 1) 3 2) 4 3) 5
4) 6 5) 7

41. 28% of 450 + 45% of 280 = ? ()

- 1) 232 2) 242 3) 252
4) 262 5) 272

42. 0.07×0.003 ()

- 1) 0.21 2) 0.021 3) 0.0021
4) 0.00021 5) 0.000021

43. $7 + 7007 + 707 + 70007$ ()

- 1) 77728 2) 77777 3) 28777
4) 77077 5) 77735

44. $425 \times ? = 170$ ()

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

45. $? - 12345 = 41976$ ()

- 1) 54301 2) 50321 3) 54021
4) 54321 5) 55431

46. $4444 + 444 + 44 + 4 = \dots$ ()

- 1) 4934 2) 4836 3) 4834
4) 4944 5) 4936

47. $45 \times ? = 2025$ ()

- 1) 25 2) 35 3) 45
4) 55 5) 15

48. $120 \div 500 = ?$ ()

- 1) 0.24 2) 0.024 3) 24.0
4) 2.4 5) 0.4

49. $\sqrt{625} - x = 10, x = ?$ ()

- 1) 10 2) 4 3) 15
4) 5 5) 6

50. $75 \div \dots = 75000$ ()

- 1) 1.01 2) 0.1 3) 0.0001
4) 0.001 5) 0.01

51. $\frac{75 + 6 \times 0.5}{6} = ?$ ()

- 1) 37.5 2) 7.5 3) 75
4) 12 5) 13

52. $65,430 - \dots = 11,000$ ()

- 1) 54,030 2) 54,400 3) 54,430
4) 64,430 5) 55,430

53. $40\% \text{ of } 4200 = ?$ ()

- 1) 1680 2) 1600 3) 1480
4) 1580 5) 1640

54. $\frac{8^2 + 60}{2^2} = \dots$ ()

- 1) 30 2) 31 3) 28
4) 36 5) 32

55. $0.01 \times 0.05 = ?$ ()

- 1) 1.005 2) 0.05 3) 0.000005
4) 0.0005 5) 0.00005

56. $406 \times 5 + 8 = ?$ ()

- 1) 2030 2) 2038 3) 2033
4) 2031 5) 2131

57. $253 \times 20 = ?$ ()

- 1) 5050 2) 5060 3) 4760
4) 4750 5) 4050

58. $98 + \dots = 220$ ()

- 1) 230 2) 126 3) 122
4) 124 5) 118

59. $7.20 \div 4.8 = ?$ ()

- 1) 1.2 2) 15.0 3) 12.0
4) 0.12 5) 1.5

60. $(7)^3 = ?$ ()

- 1) 342 2) 343 3) 340
4) 349 5) 346

61. $\frac{5}{7} \text{ of } 245 = ?$ ()

- 1) 165 2) 175 3) 185
4) 207 5) 343

62. $125\% \text{ of } 32 = ?$ ()

- 1) 6 2) 12 3) 36
4) 52 5) 40

63. $\sqrt{196} = ?$ ()

- 1) 14 2) 16 3) 24
4) 36 5) 98

64. $\frac{1344}{8} = ?$ ()

- 1) 162 2) 164 3) 166
4) 168 5) 160

65. $35 \times ? = 1225$ ()

- 1) 25 2) 35 3) 30
4) 45 5) 15

66. $120 \div 500 = ?$ ()

- 1) .24 2) .024 3) 24.0
4) 2.4 5) .04

67. $\sqrt{225} - x = 10 ; x = ?$ ()

- 1) 10 2) 4 3) 15
4) 5 5) 6

68. $75 \div \dots\dots\dots = 75000$ ()

- 1) 1.01 2) .1 3) .0001
4) .001 5) .01

69. $\frac{75 + 6 \times .5}{6} = ?$ ()

- 1) 37.5 2) 7.5 3) 75
4) 12 5) 13

70. $65,430 - \dots\dots\dots = 11,000$ ()

- 1) 54030 2) 54,400 3) 54,430
4) 64,430 5) 55,430

71. $40\% \text{ of } 4200 = \dots\dots\dots$ ()

- 1) 1680 2) 1600 3) 1480
4) 1580 5) 1640

72. $\frac{8^2 + 60}{2^2} = \dots\dots\dots$ ()

- 1) 30 2) 31 3) 28
4) 36 5) 32

73. $.01 \times .005 = ?$ ()

- 1) 1.0005 2) .005 3) .000005
4) .0005 5) .00005

74. $66666 + 6666 + 666 + 66 =$ ()

- 1) 24064 2) 64604 3) 74064
4) 74604 5) 73634

75. $25 \times ? = 625$ ()

- 1) 20 2) 15 3) 35
4) 125 5) 25

76. $75 \div 1000 = ?$ ()

- 1) 7.5 2) 7.05 3) 75
4) 0.075 5) 0.0075

77. $8 + x = 12 - x ; x = ?$ ()

- 1) -2 2) 6 3) 3
4) 2 5) 4

78. $121 \div \dots\dots\dots = 12100$ ()

- 1) 0.1 2) 1000 3) 0.001
4) 100 5) 0.01

79. $\frac{28 + 8 \times 0.5}{11 - 8} = ?$ ()

- 1) 20.33 2) 6 3) 10.66
4) 56.6 5) 60.0

80. $9763 + \dots\dots\dots = 12464$ ()

- 1) 2071 2) 2709 3) 2701
4) 3709 5) 3701

81. $60\% \text{ of } 420 = ?$ ()

- 1) 70 2) 252 3) 70.6
4) 200 5) 220

82. $(8)^3 = ?$ ()

- 1) 128 2) 16 3) 256
4) 64 5) 512

83. $376.9 - 38.3 = ?$ ()

- 1) 338.06 2) 328.6 3) 338.6
4) 346.8 5) 328.8

84. $(205 \times 4) + 2 = ?$ ()

- 1) 820 2) 822 3) 821
4) 922 5) 824

85. $(12 - 3)^2 - 9 = ?$ ()

1) 71 2) 82 3) 81

4) 73 5) 72

86. $\sqrt{25} + x = 10; x = ?$ ()

1) 5 2) 4 3) 3

4) 10 5) 2

87. $81 - (27 + 14) = ?$ ()

1) 51 2) 50 3) 40

4) 41 5) 31

88. $7531 - \dots\dots\dots = 3120$ ()

1) 4311 2) 4410 3) 4411

4) 4419 5) 4319

89. $0.05 \times 0.001 = ?$ ()

1) 0.0005 2) 0.00005 3) 0.005

4) 0.00001 5) 0.0001

90. $30\% \text{ of } 60 = ?$ ()

1) 25 2) 15 3) 20

4) 18 5) 28

91. $\frac{4949}{7} = ?$ ()

1) 707 2) 717 3) 770

4) 697 5) 727

92. $406 \times 5 + 1 = ?$ ()

1) 2030 2) 2034 3) 2033

4) 2031 5) 2131

93. $(11 - 8)^3 = ?$ ()

1) 49 2) 28 3) 27

4) 9 5) 16

94. $\sqrt{16} + \sqrt{x} = 20, \sqrt{x} = ?$ ()

1) 10 2) 16 3) 6

4) 7 5) 8

95. $93 - (27 + 63) = \dots\dots\dots$ ()

1) 7 2) 5 3) 3

4) 8 5) 9

96. $7691 - \dots\dots\dots = 3481$ ()

1) 4212 2) 4211 3) 4310

4) 4410 5) 4210

97. $0.07 \times 0.008 = ?$ ()

1) 0.00056 2) 0.056 3) 56

4) 0.0056 5) 5.6

98. $25\% \text{ of } 60 = ?$ ()

1) 20 2) 15 3) 10

4) 30 5) 45

WORKED OUT ANSWERS

1. (2)

$$\begin{array}{r} \text{Sol.} \quad 99999 \\ \quad 9999 \\ \quad \quad 999 \\ \quad \quad \quad 99 \\ \hline \quad \quad 111096 \end{array}$$

2. (4)

$$\begin{array}{r} \text{Sol.} \quad 778 \qquad \qquad 214 \qquad \qquad 1016 \\ \quad 64 \qquad \quad + 128 \qquad \quad - 342 \\ \hline + 174 \qquad \quad 342 \qquad \quad 674 \\ \hline 1016 \end{array}$$

3. (4)

$$\begin{array}{r} \text{Sol.} \quad 13.141 \\ + 31.417 \\ \hline 44.558 \\ (-) 27.118 \\ \hline 17.440 \end{array}$$

4. (1)

$$\begin{aligned} \text{Sol.} \quad \frac{x}{\sqrt{128}} &= \frac{\sqrt{162}}{x} \\ \Rightarrow \frac{x}{\sqrt{8 \times 16}} &= \frac{\sqrt{2 \times 81}}{x} \\ \Rightarrow \frac{x}{\sqrt{4 \times 2 \times 16}} &= \frac{\sqrt{2 \times 81}}{x} \\ \Rightarrow \frac{x}{8\sqrt{2}} &= \frac{9\sqrt{2}}{x} \\ \Rightarrow x^2 &= 72 \times 2 \\ x^2 &= 144 \\ x &= 12 \end{aligned}$$

5. (2)

$$\begin{aligned} \text{Sol.} \quad x^3 \div 32 &= 54 \\ x^3 &= 54 \times 32 \\ x^3 &= 1728 \\ x &= \sqrt[3]{1728} \\ x &= \sqrt[3]{12 \times 12 \times 12} = (12^3)^{\frac{1}{3}} = 12^{\cancel{3} \times \frac{1}{\cancel{3}}} \\ x &= 12 \end{aligned}$$

6. (4)

$$\begin{aligned} \text{Sol.} \quad \sqrt{5^4} \times 14 - 6 \times 7 + 4^x &= 18^2, x = ? \\ (5^4)^{\frac{1}{2}} \times 14 - 42 + 4^x &= 324 \\ 25 \times 14 - 42 + 4^x &= 324 \\ 350 - 42 + 4^x &= 324 \\ 4^x &= 324 - 308 \\ 4^x &= 16 \\ 4^x &= 4^2 \\ x &= 2 \end{aligned}$$

7. (1)

$$\begin{aligned} \text{Sol.} \quad 496 \div 0.6 \times 0.5 & \qquad \qquad (0.6 = \frac{6}{10}) \\ &= 496 \times \frac{10}{6} \times \frac{5}{10} \\ &= 413.333 \\ &= 413 \text{ (approximately)} \end{aligned}$$

8. (1)

$$\begin{array}{r} \text{Sol.} \quad 151.011 \\ (+) 649.991 \\ \hline 801.002 \\ (-) 419.999 \\ \hline 381.003 \end{array}$$

9. (3)

$$\text{Sol.} \quad \frac{81 + 64}{25} = \frac{145}{25} = 5.8$$

10. (4)

$$\begin{aligned} \text{Sol.} \quad 0.009 \times 0.002 \\ \Rightarrow 0.000018 \end{aligned}$$

11. (4)

$$\begin{aligned} \text{Sol.} \quad 159 \div x &= 15900 \\ x &= \frac{159}{15900} = \frac{1}{100} = 0.01 \end{aligned}$$

12. (1)

$$\begin{aligned}\text{Sol. } (65 \div 100) \times 7 &= \frac{65}{100} \times 7 \\ &= 0.65 \times 7 \\ &= 4.55\end{aligned}$$

13. (5)

$$\begin{aligned}\text{Sol. } \frac{40 + (6 \times 0.04)}{8} &= \frac{40 + 0.24}{8} \\ &= \frac{40.24}{8} = 5.03\end{aligned}$$

14. (3)

$$\begin{aligned}\text{Sol. } \frac{5x + 215}{3} &= 4x + 60 \\ 5x + 215 &= 3(4x + 60) \\ &= 12x + 180 \\ 215 - 180 &= 12x - 5x \\ 35 &= 7x \\ x &= \frac{35}{7} = 5\end{aligned}$$

15. (1)

$$\begin{aligned}\text{Sol. } 64 \times 27 \times 25 &= 2^a \times 3^b \times 5^c \\ 2^6 \times 3^3 \times 5^2 &= 2^a \times 3^b \times 5^c \\ a = 6, b = 3, c = 2 \\ a + b + c &= 6 + 3 + 2 = 11\end{aligned}$$

16. (3)

$$\begin{aligned}\text{Sol. } 4789 + ? &= 6500 \\ ? &= 6500 - 4789 \\ ? &= 1711\end{aligned}$$

17. (2)

$$\begin{array}{r} \text{Sol. } 55555 \\ 5555 \\ 555 \\ \hline 61665 \end{array}$$

18. (4)

$$\begin{aligned}\text{Sol. } (14 - 9)^3 &= ? \\ (5)^3 &= 125\end{aligned}$$

19. (1)

$$\text{Sol. } \sqrt{36} + \sqrt{x} = 14$$

$$\begin{aligned}6 + \sqrt{x} &= 14 \\ \sqrt{x} &= 14 - 6 = 8 \\ \sqrt{x} &= 8 \Rightarrow x = (8)^2 \\ x &= 64\end{aligned}$$

20. (5)

$$\begin{aligned}\text{Sol. } 5678 - ? &= 4321 \\ 5678 - 4321 &= ? \\ 1357 &= ? \\ ? &= 1357\end{aligned}$$

21. (4)

$$\begin{aligned}\text{Sol. } 15\% \text{ of } 90 &= ? \\ 15 \times \frac{1}{100} \times 90 &= ? \\ \frac{15}{10} \times 9 &= ? \\ \frac{3}{2} \times 9 &= ? \\ \frac{27}{2} &= ? \\ ? &= 13.5\end{aligned}$$

22. (5)

$$\begin{aligned}\text{Sol. } 0.5 \times 0.0008 &= ? \\ 0.5 \times 0.0008 &= ? \\ \frac{5}{10} \times \frac{8}{10000} &= ? \\ \frac{40}{100000} &= ? \\ ? &= 0.0004\end{aligned}$$

23. (1)

$$\begin{aligned}\text{Sol. } \frac{4}{7} \text{ of } 294 &= ? \\ \frac{4}{7} \times 294 &= ? \\ 4 \times 42 &= ? \\ ? &= 168\end{aligned}$$

24. (3)

Sol. $8.512 - 4.4011 = ?$

$$8.512 - 4.4011 = ?$$

$$\begin{array}{r} 8.51210 \\ - 4.4011 \\ \hline \end{array}$$

$$\begin{array}{r} 4.1109 \\ \hline \end{array}$$

25. (2) $6464 \div 8 = ?$

$$\begin{array}{r} 6464 \\ 8 \overline{) 6464} \\ \hline \end{array}$$

$$? = 808$$

26. (4) 15206

27. (1) 3702

28. (5) 64

29. (3) 49

30. (2) 6420

31. (4) 16

32. (2) 0.00072

33. (3) 121

34. (5) 2.5679

35. (1) 0.0064

36. (2) 0.00032

37. (3) 7

38. (4) 30

39. (2) 7525

40. (4)

Sol.
$$\begin{aligned} & \sqrt{41 - \sqrt{21 + \sqrt{19 - \sqrt{9}}}} \\ &= \sqrt{41 - \sqrt{21 + \sqrt{19 - 3}}} \\ &= \sqrt{41 - \sqrt{21 + \sqrt{16}}} \\ &= \sqrt{41 - \sqrt{21 + 4}} \\ &= \sqrt{41 - \sqrt{25}} = \sqrt{41 - 5} = \sqrt{36} = 6 \end{aligned}$$

41. (3) 252

42. (4) 0.00021

43. (1) 77728

44. (2) $\frac{2}{5}$

45. (4) 54321

46. (5)

Sol. 4444

$$444$$

$$44$$

$$4$$

$$\begin{array}{r} 4936 \\ \hline \end{array}$$

47. (3)

Sol. $45 \times ? = 2025$

$$? = 2025 \div 45$$

$$? = 45$$

48. (1)

Sol. $120 \div 500 = 0.24$

49. (3)

Sol. $\sqrt{625} - x = 10$

$$25 - x = 10$$

$$x = 25 - 10$$

$$x = 15$$

50. (4) 0.001

51. (5) 13

52. (3) 54,430

53. (1)

Sol. $\frac{4200}{x} = \frac{100}{40}$

$$4200 = 2.5x$$

$$x = 1680$$

54. (2) 31

55. (4) 0.0005

56. (2) 2038

57. (2) 5060

58. (3) 122

59. (5) 1.5

60. (2) 343

61. (2) 175

62. (5) 40

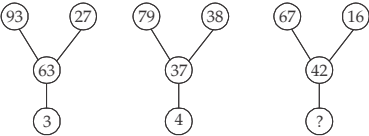
63. (1) 14
64. (4) 168
65. (2) 35) 1225 (35
- $$\begin{array}{r} 105 \\ 175 \\ 175 \\ \hline 0 \end{array}$$
66. (1) $\frac{12\cancel{0}}{50\cancel{0}} = \frac{12}{50} = .24$
67. (4) $\sqrt{225} - x = 10; x = ?$
 $10 + x = \sqrt{225}; 10 + x = 15$
 $x = 15 - 10 = 5$
68. (4) $\frac{75}{x} = 75000$
 $x = \frac{75}{75000} = \frac{1}{1000} = 0.001$
69. (5) $\frac{75 + 6 \times 0.5}{6} = \frac{75 + (6 \times 0.5)}{6}$
 $= \frac{75 + 3}{6} = \frac{78}{6} = 13$
70. (3) 65,430 - x = 11000
 $x = 65430 - 11000 = 54430$
71. (1) 40% of 4200
 $\frac{42\cancel{00} \times 40}{1\cancel{00}} = 1680$
72. (2) $\frac{8^2 + 60}{2^2} = \frac{64 + 60}{4} = \frac{124}{4} = 31$
73. (5) $0.01 \times 0.005 = .00005$
 $\frac{1}{100} \times \frac{5}{1000} = \frac{5}{100000} = 0.00005$
74. (3) 74064

75. (5) $\frac{625}{25} = 25$
76. (4) $8 + x = 12 - x$
 $x + x = 12 - 8$
 $2x = 4$
 $x = \frac{4}{2} = 2$
77. (4) 2
78. (5) $\frac{12100}{121} = 100.$
79. (3) $\frac{28 + 8 \times 0.5}{11 - 8} = \frac{28 + 4}{3}$
 $= \frac{32}{3} = 10.66 \quad (8 \times 0.524)$
80. (3) 2701
81. (2) $\frac{420}{100} \times 60 = 252.$
82. (5) $8^3 = 8 \times 8 \times 8 = 512.$
83. (3) 376.9
 $- 38.3$
 $\hline 338.6$
84. (2) $(205 \times 4) + 2 = 820 + 2 = 822$
85. (5) $(12 - 3)^2 - 9 = 9^2 - 9 = 81 - 9 = 72$
86. (1) $\sqrt{25} + x = 10; 5 + x = 10 \Rightarrow x = 10 - 5 = 5$
87. (3) $81 - (27 + 14) = 81 - 41 = 40$
88. (3) $7531 - \dots\dots\dots = 3120$
 $7531 - 3210 = 4411$
89. (2) $0.05 \times 0.001 = 0.00005$
90. (4) $30\% \text{ of } 60 = \frac{30}{100} \times 60 = 18$
91. (1) $\frac{4949}{7} = 707$
92. (4) 2031
93. (3) 27
94. (2) 16
95. (3) 3
96. (5) 4210
97. (1) 0.00056
98. (2) 15

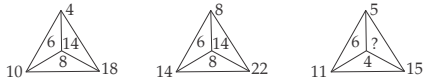
2. MISSING CHARACTERS

Directions :

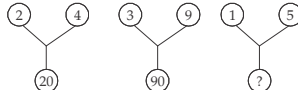
Questions : In each of the following questions, a set of figures carrying certain characters is given. Assuming that the characters in each set follow a similar pattern, find the missing character in each case.

1.  ()

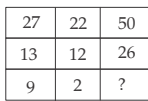
- 1) 5 2) 6 3) 8 4) 9

2.  ()

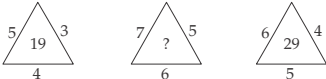
- 1) 8 2) 14 3) 10 4) 6

3.  ()

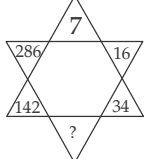
- 1) 20 2) 25 3) 26 4) 75

4.  ()

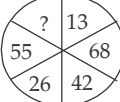
- 1) 12 2) 39 3) 18 4) 24

5.  ()

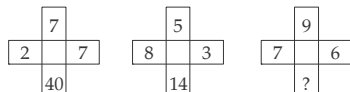
- 1) 25 2) 47 3) 37 4) 41

6.  ()

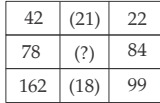
- 1) 70 2) 68
3) 56 4) 92

7.  ()

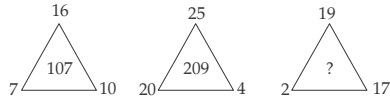
- 1) 41 2) 37 3) 29 4) 25

8.  ()

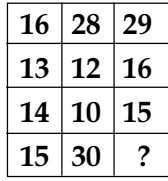
- 1) 72 2) 68 3) 82 4) 96

9.  ()

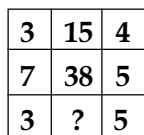
- 1) 12 2) 13 3) 60 4) 50

10.  ()

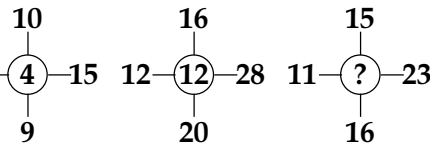
- 1) 68 2) 93 3) 175 4) 217

11.  ()

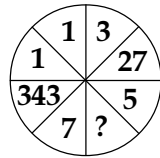
- 1) 60 2) 30 3) 20
4) 45 5) 15

12.  ()

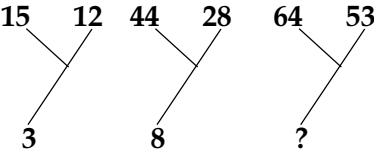
- 1) 15 2) 19 3) 20
4) 18 5) 17

13.  ()

- 1) 11 2) 14 3) 10
4) 12 5) 13

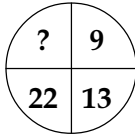
14.  ()

- 1) 125 2) 124 3) 120
4) 126 5) 130

15.  ()

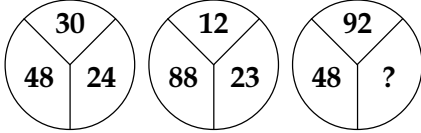
- 1) 30 2) 13 3) 70
4) 118 5) 16

16. ()



- 1) 40 2) 38 3) 44
4) 39 5) 36

17. ()



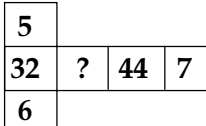
- 1) 60 2) 46 3) 86
4) 75 5) 64

18.

O	V	H	M	E	T	D	N	X
17	10	24	18	26	11	26	16	?

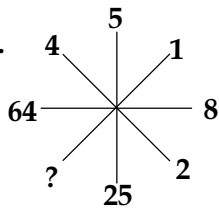
- 1) 5 2) 6 3) 4 ()
4) 3 5) 8

19. ()



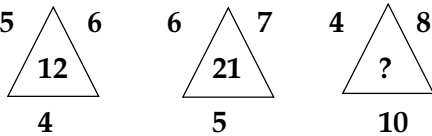
- 1) 33 2) 38 3) 32
4) 37 5) 36

20. ()



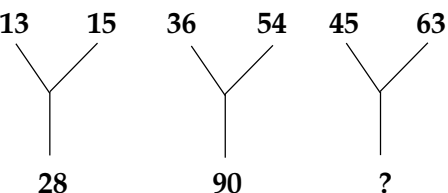
- 1) 1 2) 2 3) 3
4) 4 5) 5

21. ()



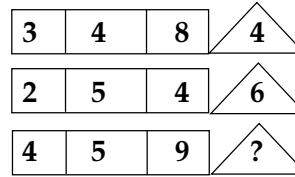
- 1) 14 2) 22 3) 32 ()
4) 320 5) 46

22. ()



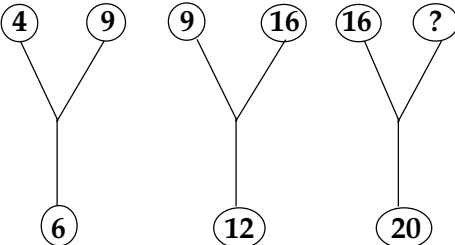
- 1) 18 2) 90 3) 108 ()
4) 28 5) 42

23. ()



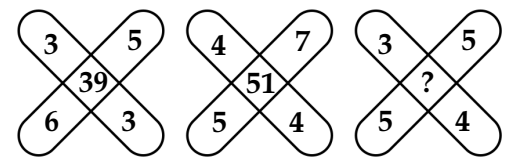
- 1) 8 2) 9 3) 10 ()
4) 11 5) 12

24. ()



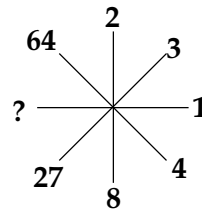
- 1) 60 2) 50 3) 25 ()
4) 21 5) 24

25. ()



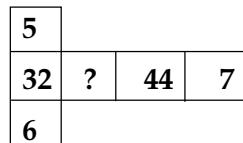
- 1) 47 2) 45 3) 37 ()
4) 35 5) 55

26. ()



- 1) 125 2) 16 3) 9
4) 1 5) 4

27. ()



- 1) 33 2) 38 3) 32 ()
4) 37 5) 36

28. ()

3	6	8
5	8	4
4	7	?

- 1) 6 2) 7 3) 8 ()
4) 9 5) 10

29. $\begin{matrix} 1 \\ 3 \text{ (510) } 5 \\ 4 \end{matrix}$ $\begin{matrix} 3 \\ 2 \text{ (650) } 4 \\ 6 \end{matrix}$ $\begin{matrix} 1 \\ 0 \text{ (?) } 2 \\ 8 \end{matrix}$

1) 660 2) 670 3) 610 ()

4) 690 5) 680

30. $\begin{matrix} 7 & 2 \\ 42 & 3 \end{matrix}$ $\begin{matrix} 9 & 1 \\ 18 & 2 \end{matrix}$ $\begin{matrix} 5 & -2 \\ ? & -3 \end{matrix}$ ()

1) 13 2) 18 3) 30

4) - 30 5) - 18

31.

5	6	7
3	4	5
9	10	11
345	660	?

 ()

1) 755 2) 775 3) 535

4) 477 5) 565

32. $\begin{matrix} 9 \\ 4 \text{ (58) } 8 \\ 10 \end{matrix}$ $\begin{matrix} 15 \\ 9 \text{ (?) } 8 \\ 10 \end{matrix}$ ()

1) 63 2) 78 3) 100

4) 117 5) 122

33.

4	6	3	8
2	8	4	4
6	5	?	10

 ()

1) 3 2) 6 3) 8

4) 10 5) 12

34. $\begin{matrix} 2 & 3 \\ 30 & 5 \end{matrix}$ $\begin{matrix} 5 & 1 \\ -5 & -1 \end{matrix}$ $\begin{matrix} 4 & 3 \\ ? & -1 \end{matrix}$ ()

1) 7 2) - 12 3) 12

4) 9 5) - 5

35.  ()

1) 23 2) 19 3) 20

4) 22 5) 17

36.

51	63	29
26	14	48
5	8	?
410	680	588

 ()

1) 9 2) 6 3) 5

4) 7 5) 11

37.

1	2	3
4	5	6
7	8	9
27	38	?

1) 49 2) 50 3) 51 ()

4) 52 5) 53

38.

28	60	48
5	6	7
14	39	27
7	?	16

 ()

1) 23 2) 24 3) 27

4) 18 5) 29

39.

3	5	7
4	9	8
2	3	?
5	11	10

 ()

1) 4 2) 6 3) 3

4) 5 5) 7

40.

11	2	18
5	2	?
12	5	14

 ()

1) 3 2) 6 3) 9

4) 12 5) 16

41.

7	4
2	8

6	5
3	0

2	9
1	8

4	8
3	?

 ()

1) 2 2) 4 3) 6

4) 0 5) 7

42.

6	8
7	5

8	7
4	2

7	?
9	2

 ()

1) 8 2) 5 3) 4

4) 3 5) 2

43.

2
4
6
7
1

5
5
11
?
9

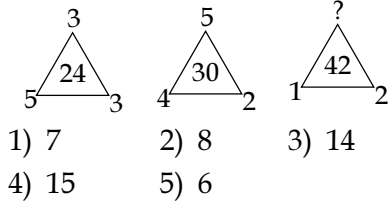
3
1
5
2
9

 ()

1) 7 2) 8 3) 9

4) 10 5) 11

44. ()

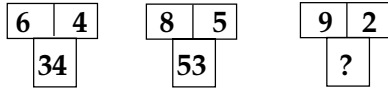


45. ()

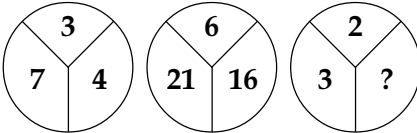
3	11	19
5	?	23
7	17	29

- 1) 9 2) 13 3) 15
4) 21 5) 25

46. ()



47. ()



48. ()

11	7	5
1	2	3
120	45	?

- 1) 15 2) 60 3) 40
4) 20 5) 16

WORKED OUT ANSWERS

1. (4)

Sol. $93 - (27 + 3) = 63$

$79 - (38 + 4) = 37$

In the same way, $67 - (16 + x) = 42$

$x = 9$

2. (3)

Sol. Observe sides $10 - 4 = 6, 18 - 4 = 14$

$14 - 8 = 6, 22 - 8 = 14$

In the same manner

$\rightarrow 11 - 5 = 6, 15 - 5 = 10$

3. (3)

Sol. $2^2 + 4^2 = 4 + 16 = 20$

$3^2 + 9^2 = 9 + 81 = 90$

$1^2 + 5^2 = 1 + 25 = 26$

4. (1)

Sol. $27 + 22 + 1 = 50$

$13 + 12 + 1 = 26$

$9 + 2 + 1 = 12$

5. (4)

Sol. $5 \times 3 + 4 = 15 + 4 = 19$

$6 \times 4 + 5 = 24 + 5 = 29$

$7 \times 5 + 6 = 35 + 6 = 41$

6. (1)

Sol. Logic is all are added ie, $16 = 1 + 6 = 7$

$34 = 3 + 4 = 7$

$142 = 1 + 4 + 2 = 7$

So, answer is $70 = 7 + 0$ $286 = 2 + 8 + 6$

$= 16$

$= 1 + 6 = 7$

$= 7$

7. (3)

Sol. Difference between the opposite numbers

$$68 - 55 = 13$$

$$26 - 13 = 13$$

$$42 - x = 13 ; x = 29$$

So, answer is 29.

8. (2)

Sol. $7^2 - (2 + 7) = 49 - 9 = 40$

$$5^2 - (8 + 3) = 25 - 11 = 14$$

$$9^2 - (7 + 6) = 81 - 13 = 68$$

9. (2)

Sol. HCF of 42, 22 = 2 ; $42 \div 2 = (21)$

HCF of 162, 99 = 9 ; $162 \div 9 = (18)$

In the same way

HCF of 78, 84 = 6 ; $78 \div 6 = (13)$

10. (1)

Sol. $\triangle_{16}^{107} = (16^2) - (7^2 + 10^2) = 107$

$$\triangle_{25}^{209} = (25^2) - (20^2 + 4^2) = 209$$

$$\triangle_{19}^{?} = (19^2) - (17^2 + 2^2) = 68$$

11. (2)

16	28	29
13	12	16
14	10	15
15	30	(30)

$$16 + 13 - 14 = 15$$

$$28 + 12 - 10 = 30$$

$$29 + 16 - 15 = 30$$

12. (4)

$$3 \times 4 + 3 = 15$$

$$7 \times 5 + 3 = 38$$

$$3 \times 5 + 3 = (18)$$

13. (1)

$$(10 + 15) - (12 + 9) = 4 \Rightarrow 25 - 21 = 4$$

$$(16 + 28) - (12 + 20) = 12 \Rightarrow 44 - 32 = 12$$

$$(15 + 23) - (11 + 16) = ? \Rightarrow 38 - 27 = 11$$

14. (1) $1^3, 3^3, 5^3$

15. (2) $\frac{64 + 53}{9} = 13$

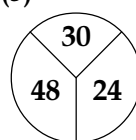
16. (2)

$$3^2 = 9 + 4 = 13$$

$$13 + 3^2 = 22$$

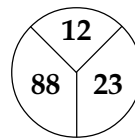
$$22 + 4^2 = 38$$

17. (3)



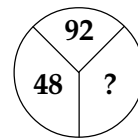
$$(30 - 24) \times 8$$

$$6 \times 8 = 48$$



$$(23 - 12) \times 8$$

$$11 \times 8 = 88$$



$$(92 - ?) \times 8 = 48$$

$$92 - ? = 6$$

$$? = 92 - 6$$

$$= 86$$

18. (2)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7

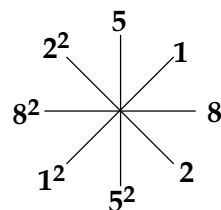
6	5	4	3	2	1
U	V	W	X	Y	Z

21 22 23 24 25 26

$$\therefore x = 6$$

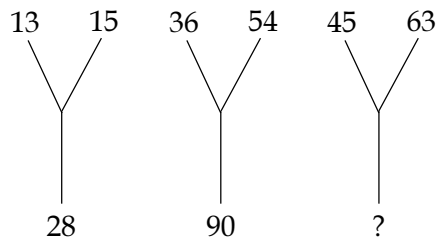
19. (4)

20. (1)



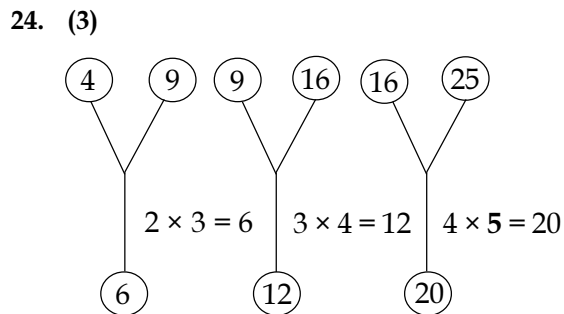
21. (3)

22. (3)

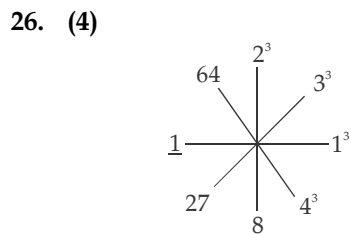


$$13 + 15 = 28 \quad 36 + 54 = 90 \quad 45 + 63 = 108$$

23. (4) $3 \times 4 - 8 = 4$
 $2 \times 5 - 4 = 6$
 $4 \times 5 - 9 = 11$



25. (3) $3 \times 3 + 5 \times 6 = 9 + 30 = 39$
 $4 \times 4 + 7 \times 5 = 16 + 35 = 51$
 $3 \times 4 + 5 \times 5 = 12 + 25 = 37$



27. (4) 37

28. (1) $3 + 6 + 8 = 17$
 $5 + 8 + 4 = 17$
 $4 + 7 + 6 = 17$

29. (4) $1^2 + 3^2 + 5^2 + 4^2 = 1 + 9 + 25 + 16$
 $= 51 \text{ '0'}$
 $2^2 + 3^2 + 4^2 + 6^2 = 4 + 9 + 16 + 36$
 $= 65 \text{ '0'}$
 $0^2 + 1^2 + 2^2 + 8^2 = 0 + 1 + 4 + 64$
 $= 69 \text{ '0'}$

30. (3)

Sol.

31. (4) 477

32. (2)

Sol.

 $(9 \times 10) - (4 \times 8)$
 $= 90 - 32 = 58$

$(15 \times 10) - (9 \times 8)$
 $= 150 - 72 = 78$
 $\therefore \text{Required number} = 78$

33. (1) 3

34. (2)

Sol. 1st figure, $2 \times 3 \times 5 = 30$
2nd figure, $5 \times 1 \times -1 = -5$
3rd figure, $4 \times 3 \times -1 = -12$
 $\therefore \text{Required number is } -12$

35. (1)

Sol.

 $\therefore \text{Required number is } 23$

36. (4)

Sol. 1st column $(51 + 26 + 5) \times 5$
 $= 82 \times 5 = 410$
2nd column $(63 + 14 + 8) \times 8$
 $= 85 \times 8 = 680$
3rd column $(29 + 48 + x) \times x = 588$
 $(77 + x) \times x = 588$
 $77x + x^2 = 588$
 $x^2 + 77x - 588 = 0$
 $x^2 + 84x - 7x - 588 = 0$
 $(x + 84)(x - 7) = 0$
 $x = -84; x = 7$
 $\therefore \text{Required number is } 7$

37. (3)

Sol. 1st column $(4 \times 7) - 1 = 28 - 1 = 27$

2nd column $(5 \times 8) - 2 = 40 - 2 = 38$

3rd column $(6 \times 9) - 3 = 54 - 3 = 51$

$\therefore$ Required number is 51

38. (3) 27

39. (4)

Sol. 1st column $3 + 4 - 2 = 7 - 2 = 5$

2nd column $5 + 9 - 3 = 14 - 3 = 11$

3rd column $7 + 8 - x = 10$

$$x = 7 + 8 - 10$$

$$= 15 - 10 = 5$$

40. (2)

$$(11 - 2) \times 2 = 18$$

$$(5 - 2) \times 2 = 6$$

$$(12 - 5) \times 2 = 14$$

41. (1)

7	4	6	5	2	9	4	8
2	8	3	0	1	8	3	?

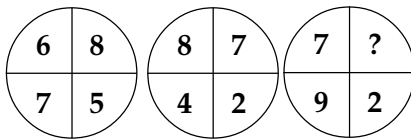
$$7 \times 4 = 28$$

$$6 \times 5 = 30$$

$$2 \times 9 = 18$$

$$4 \times 8 = 32$$

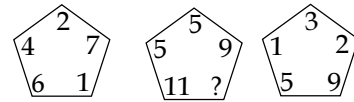
42. (4)



$$7 \times 8 = 56 \quad 7 \times 4 = 28 \quad 9 \times ? = 27$$

$$? = 27/9 = 3$$

43. (4)



$$\text{Difference of } 5, 2 = 3$$

$$5, 4 = 1$$

$$11, 6 = 5$$

$$9, 7 = 2$$

$$1, ? = 9$$

$$? = 10$$

44. (3)

$$(5 + 3) \times 3 = \triangle_{24}^3$$

$$(4 + 2) \times 5 = \triangle_{30}^5$$

$$(1 + 2) \times 14 = \triangle_{42}^?$$

45. (2)

3, 5, 7, 11, 13, 17, 19, 23, 29

All are prime numbers.

46. (3)

$$(6 + 4) + (6 \times 4) = 34$$

$$(8 + 5) + (8 \times 5) = 53$$

$$(9 + 2) + (9 \times 2) = 29$$

47. (4)

$$6/3 = 2$$

$$21/7 = 3$$

$$16/4 = 4$$

48. (5)

$$11^2 - 1^2 = 121 - 1 = 120$$

$$7^2 - 2^2 = 49 - 4 = 45$$

$$5^2 - 3^2 = 25 - 9 = 16$$

3. WORD ANALOGY

Questions : In each of the following questions, there are a certain relationship between two given words on one side of :: and one word is given on another side of ::, while another word is to be found from the given four alternatives, having the same relation with this word as the words of the given pair. Choose the correct alternatives.

1. **Burn : Ointment :: Grief : ?** ()
 1) Sorrow 2) Adversity
 3) Consolation 4) Pity
2. **Pen : Stationery :: Chair : ?** ()
 1) Wood 2) Rest
 3) Room 4) Furniture
3. **Dam : Water :: Godown : ?** ()
 1) Sweets 2) Crab
 3) Grain 4) Grass
4. **Crime : Court :: Disease : ?** ()
 1) Lawyer 2) Punishment
 3) Hospital 4) Doctor
5. **Millionaire : Wealth :: Genius : ?** ()
 1) Capability 2) Smartness
 3) Intelligence 4) Awareness
6. **Page : Book :: Brick : ?** ()
 1) Heap 2) Building
 3) Clay 4) Mason
7. **Driving : Bus :: Flying : ?** ()
 1) Air 2) Kite
 3) Bird 4) Aeroplane
8. **Bullet : Rifle :: Arrow : ?** ()
 1) Archer 2) Bow
 3) Target 4) Cord
9. **House : Mason :: Furniture : ?** ()
 1) Wood 2) Chair
 3) Table 4) Carpenter
10. **Needle : Thread :: Pen : ?** ()
 1) Write 2) Ink
 3) Cap 4) Paper
11. **Car : Garage :: Aeroplane : ?** ()
 1) Port 2) Depot
 3) Hangar 4) Harbour
 5) Busbay
12. **Race : Fatigue :: Fast : ?** ()
 1) Food 2) Appetite
 3) Hunger 4) Weakness
 5) Fever
13. **Candle : Wax :: Paper : ?** ()
 1) Wood 2) Tree 3) Bamboo
 4) Pulp 5) Oil
14. **Acting : Theatre :: Gambling : ?** ()
 1) Casino 2) Club 3) Bar
 4) Gym 5) Playground
15. **Water : Convection :: Space : ?** ()
 1) Conduction 2) Transference
 3) Vacuum 4) Radiation
 5) Evaluation
16. **Growth : Death :: Increase : ?** ()
 1) Ease 2) Decrease
 3) Tease 4) Cease
 5) Erase
17. **Oxygen : Burn :: Carbondioxide : ?**
 1) Isolate 2) Foam ()
 3) Extinguish 4) Explode
 5) Evaporate
18. **Dog : Bark :: Goat : ?** ()
 1) Bleat 2) Howl 3) Grunt
 4) Bray 5) Slap
19. **Planet : Orbit :: Projectile : ?** ()
 1) Trajectory 2) Track
 3) Milky way 4) Path
 5) Universe
20. **Oceans : Deserts :: Waves : ?** ()
 1) Sea 2) Dust 3) Sand dunes
 4) Ripples 5) Particles

21. Boy : Man :: Girl : ? ()

- 1) Mother 2) Father 3) Woman
4) Wife 5) Girl

22. Hand : Gloves :: Foot : ? ()

- 1) Pant 2) Nail 3) Socks
4) Thumb 5) Finger

23. $\frac{A}{Z} : 25 :: \frac{C}{T} : ?$ ()

- 1) 17 2) 18 3) 20
4) 21 5) 23

24.  : ? ()

- 1)  2)  3) 
4)  5) 

25.  :  ::  : ? ()

- 1)  2)  3) 
4)  5) 

26. ABE : BCF :: MPU : ? ()

- 1) NQV 2) PQW 3) NQW
4) PWQ 5) NVQ

27. PQR : ONM :: DEF : ?

- 1) BAC 2) CBA 3) CAB ()
4) BCA 5) ABC

28. Pond : Water :: Library : ? ()

- 1) Paper 2) Almira
3) Book 4) Chair 5) Table

29. $\frac{2}{3} : 8 :: \frac{4}{2} : ?$

- 1) 12 2) 64 3) 8 ()
4) 16 5) 18

30. DG : 47 :: BI : ?

- 1) 18 2) 28 3) 29 ()
4) 19 5) 27

31. Moon : Satellite :: Earth : ? ()

- 1) Sun 2) Planet
3) Solar system 4) Star
5) Asteroid

32. Melt : Liquid :: Freeze : ? ()

- 1) Ice 2) Condense 3) Solid
4) Crystal 5) Gas

33. Bread : Bakery :: Brick : ? ()

- 1) Mint 2) Kiln 3) Furnace
4) Mine 5) Burn

34. Soap : Wash :: Broom : ? ()

- 1) Clean 2) Dust 3) Sweep
4) Floor 5) Wipe

35. Newspaper : Press :: Cloth : ? ()

- 1) Tailor 2) Textile 3) Fibre
4) Factory 5) Mill

36. College : Dean :: Museum : ? ()

- 1) Supervisor 2) Custodian
3) Warden 4) Curator
5) Manager

37. Cobbler : Leather :: Tailor : ? ()

- 1) Thread 2) Cloth
3) Shirt 4) Needle
5) Scissor

38. Mason : Wall :: Carpenter : ? ()

- 1) Glass 2) Pen 3) Chair
4) Book 5) Pipe

39. Tea : Leaves :: Coffee : ? ()

- 1) Plant 2) Leaves
3) Stimulant 4) Flower
5) Seeds

40. House : Door :: Compound : ? ()

- 1) Gate 2) Fence
3) Foundation 4) Wall
5) Window

41. Crescograph : Jagdish Chandra Bose ::

Theory of Evolution : ? ()

- 1) Dr. Jayant V. Narlikar
2) Albert Einstein 3) S.S. Bhatnagar
4) C.R. Rao 5) Darwin

42. Maharashtra : Mumbai :: Rajasthan : ?

- 1) Udaipur 2) Jodhpur ()
3) Jaipur 4) Gwalior
5) Bikaner

43. Moscow : Russia :: Phnom Penh : ?

- 1) Cambodia 2) Thailand ()
3) Vietnam 4) North Korea
5) Mongolia

44. Flower : Rose :: Mammal : ? ()

- 1) Hen 2) Sparrow 3) Cobra
4) Cow 5) Eagle

45. Food : Stomach :: Fuel : ? ()

- 1) Car 2) Engine 3) Bus
4) Truck 5) Train

46. Satyajit Ray : Cinema :: R. K. Narayan : ?

- 1) Drama 2) Literature ()
3) Business 4) Politics 5) Painting

47. Chennai : Tamil Nadu :: Ranchi : ?

- 1) Madhya pradesh ()
2) Assam 3) Jharkhand
4) Chhattisgarh 5) Uttarakhand

48. Flowe : Fragrance :: Fruit : ?

- 1) Colour 2) Farmer 3) Plant ()
4) Garden 5) Taste

49. Paris : France :: Bangkok : ? ()

- 1) Vietnam 2) Indonesia
3) Malaysia 4) Thailand
5) Myanmar

50. Theory of Evolution : Darwin ::

Theory of Relativity : ? ()

- 1) Albert Einstein
2) Sir C. V. Raman
3) Sir Jagadish Chandra Vose
4) Dr. Subrahmanyam
Chandrasekhar
5) Dr. Jayant V. Narlikar

51. School :: Study :: Temple : ? ()

- 1) Pray 2) Sleep 3) Dance
4) Run 5) Play

52. West Bengal : Kolkatta ::

Maharashtra : ? ()

- 1) Delhi 2) Mumbai 3) Chennai
4) Darjeeling 5) Hyderabad

53. Karan Johar : Cinema ::

Vijay Malya : ? ()

- 1) Art 2) Literature 3) Business
4) Music 5) Painting

54. Radio : Listen :: Newspaper : ? ()

- 1) Talk 2) Read 3) Sing
4) Play 5) Write

55. Clock : Time :: Mobile : ? ()

- 1) Talk 2) Sleep 3) Pray
4) Eat 5) Dance

56. Fruit : Apple :: Mammal : ? ()

- 1) Sparrow 2) Fish 3) Cow
4) Snake 5) Hen

57. Satyajit Ray : Cinema :: Ravishanker:

- 1) Music 2) Painting 3) Poetry ()
4) Business 5) Dance

58. Cricket : Bat :: Badminton : ? ()

- 1) Player 2) Field 3) Ball
4) Racket 5) Coach

59. **Cricket : Bat :: Hockey : ?** ()
 1) Stick 2) Field
 3) Player 4) Ball
 5) Team
60. **Country : President :: State : ?** ()
 1) Chief Secretary
 2) Chief Minister
 3) Citizen
 4) Cabinet Minister
 5) Governor
61. **Temperature : Degrees :: Mass : ?** ()
 1) Litre 2) Watt 3) Kilogram
 4) Seconds 5) Joule
62. **Crop : Farmer :: Book : ?** ()
 1) Printer 2) Editor 3) Poet
 4) Author 5) Teacher
63. **Carpenter : Saw :: Chef : ?** ()
 1) Pen 2) Sword 3) Gun
 4) Knife 5) Needle
64. **Food : Stomach :: Fuel : ?** ()
 1) Plane 2) Truck
 3) Car 4) Bus
 5) Engine
65. **Mango : Fruit :: Potato : ?** ()
 1) Root 2) Fruit
 3) Stem 4) Flower
 5) Branch
66. **Temple : Pooja :: School : ?** ()
 1) Play 2) Friends 3) Teacher
 4) Games 5) Study
67. **Andhra Pradesh : Hyderabad :: Gujarat : ?** ()
 1) Surat 2) Bhuvaneswar 3) Raipur
 4) Bhopal 5) Ahmedabad
68. **Ramgopal Varma : Cinema :: Anil Ambani : ?** ()
 1) Industry
 2) Literature
 3) Music
 4) Art
 5) Painting
69. **Bhagat Singh : Freedom struggle :: Raja Ram Mohan Roy : ?** ()
 1) Poetry
 2) Social Reforms
 3) Literature
 4) Politics
 5) Administration
70. **Ramayana : Valmiki :: Gitanjali : ?**
 1) Ravindranath Tagore ()
 2) Sarat Chandra Bose
 3) Prem Chand
 4) Rajaji
 5) K.M. Munshi
71. **Mumbai : Maharastra :: Trivandrum : ?**
 1) Kolkata ()
 2) Gujarat
 3) Kerala
 4) Sikkim
 5) Karnataka

WORKED OUT ANSWERS

1. (3)
Sol. Second one is used for happening of first one.
2. (4)
Sol. First one is available in second one.
3. (3)
Sol. Second one is placed/ stored in first one.
4. (3)
Sol. Relief of first one is available in second one.
5. (3)
Sol. First one is related to second one or 1st one belonged to second one.
6. (2)
Sol. Book contains pages
Building is constructed with bricks
7. (4)
Sol. First is related to second.
8. (2)
Sol. First is placed in second.
9. (4)
Sol. First is prepared by second
10. (2)
Sol. Second is used with first one.
11. (3) Hangar
12. (3) Hunger
13. (4) Pulp
14. (1) Casino
15. (4) Radiation
16. (4) Cease
17. (3) Extinguish
18. (1) Bleat
19. (1) Trajectory
20. (3) Sand dunes
21. (3) Woman
22. (3) Socks

23. (1) 17
24. (4) 
25. (1) 
26. (1) NQV
27. (2) CBA
28. (3) Book
29. (4) 16
30. (3) 29
31. (2) Planet
32. (3) Solid
33. (2) Kiln
34. (3) Sweep
35. (5) Mill
36. (4) Curator
37. (2) Cloth
38. (3) Chair
39. (5) Seeds
40. (1) Gate
41. (5)
Sol. Theory of Evolution is related to Charles darwin.
42. (3)
Sol. Maharashtra state capital is Mumbai.
Rajasthan state capital is Jaipur.
43. (1)
Sol. Moscow is the capital city of Russia. Phnom Penh is the capital city of Cambodia.
44. (4)
Sol. Cow is a Mammal and remaining all are Birds and animals which lay eggs.
45. (2)
Sol. Food is for stomach in the similar way fuel is for Engine.

46. (2) Literature
47. (3) Jharkhand
48. (5) Taste
49. (4) Thailand
50. (1) Albert Einstein
51. (1) Pray
52. (2) Mumbai
53. (3) Business
54. (2) Read
55. (1) Talk
56. (3) Cow
57. (1) Music
58. (4) Racket
59. (1) Stick
60. (5) Governor
61. (3)
Sol. Temperature is measured in degrees. Mass is measured in kilograms.
62. (4)
Sol. Farmer grows crop like author writes book.
63. (4)
Sol. Carpenter uses saw like chef (cook master in big hotels) uses knife.
64. (5)
Sol. Food digests in stomach and converts into energy. Fuel heats in engine and converts into energy.
65. (1)
Sol. Mango is a fruit. Potato is a root.
66. (5) Study
67. (5) Ahmedabad
68. (1) Industry
69. (2) Social Reforms
70. (1) Ravindranath Tagore
71. (3)
Sol. Mumbai is the capital of Maha-rastra. Trivendrum is the capital of Kerala.

4. ODD MAN OUT

Directions :

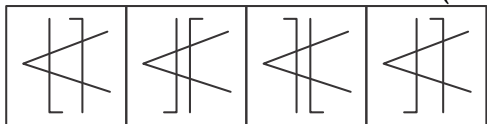
Questions : In each of the following questions, there are 4 figures. Three of them are similar in a certain way but one is not like the other three. Find out, which one of the figures different from the others.

1. ()



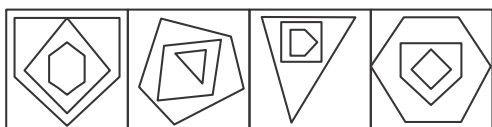
(1) (2) (3) (4)

2. ()



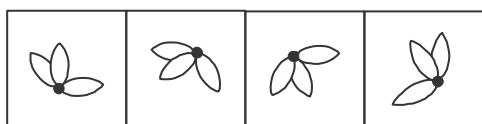
(1) (2) (3) (4)

3. ()



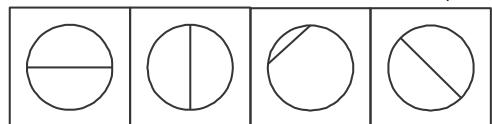
(1) (2) (3) (4)

4. ()



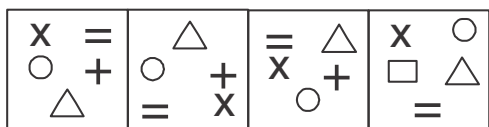
(1) (2) (3) (4)

5. ()



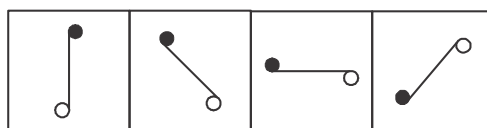
(1) (2) (3) (4)

6. ()



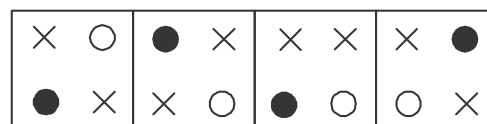
(1) (2) (3) (4)

7. ()



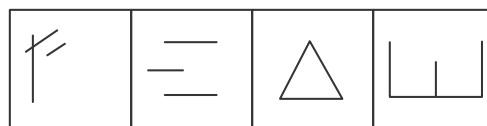
1) 1 2) 2 3) 3 4) 4

8. ()



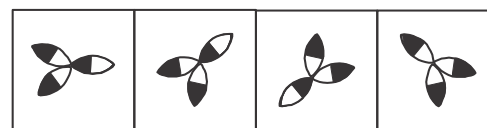
1) 1 2) 2 3) 3 4) 4

9. ()



1) 1 2) 2 3) 3 4) 4

10. ()

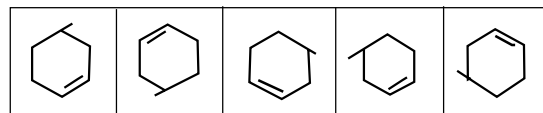


1) 1 2) 2 3) 3 4) 4

Directions :

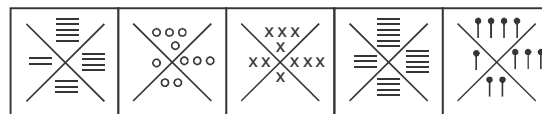
Questions : In each of the following questions, there are five figures. Four of them are similar in a certain way but one is not like the other four. Find out, which are of the figure different from the others.

11. ()



(1) (2) (3) (4) (5)

12. ()



(1) (2) (3) (4) (5)

13. ()



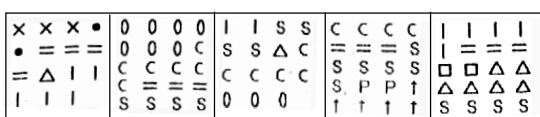
(1) (2) (3) (4) (5)

14. ()



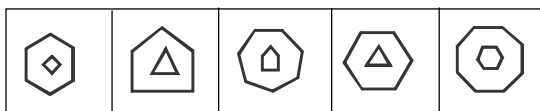
(1) (2) (3) (4) (5)

15. ()



(1) (2) (3) (4) (5)

16. ()



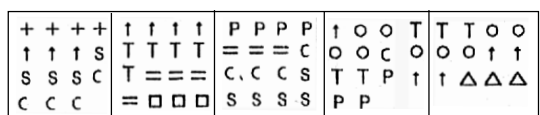
(1) (2) (3) (4) (5)

17. ()



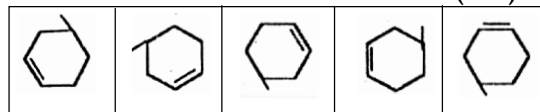
(1) (2) (3) (4) (5)

18. ()



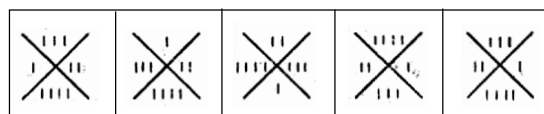
(1) (2) (3) (4) (5)

19. ()



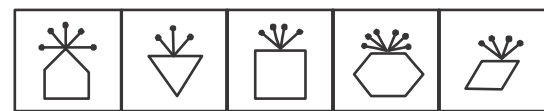
(1) (2) (3) (4) (5)

20. ()



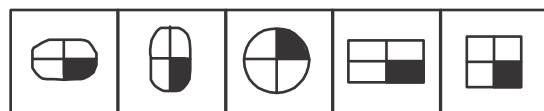
(1) (2) (3) (4) (5)

21. ()



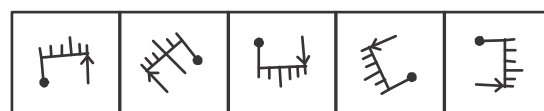
(1)	(2)	(3)	(4)	(5)
-----	-----	-----	-----	-----

22. ()

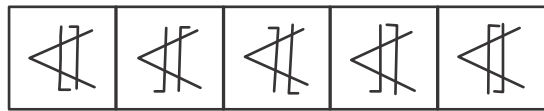


(1) (2) (3) (4) (5)

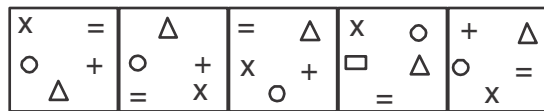
23. ()



24. ()

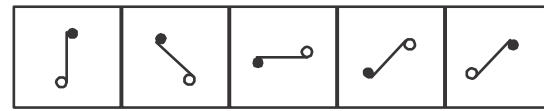


25. ()



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

26. ()



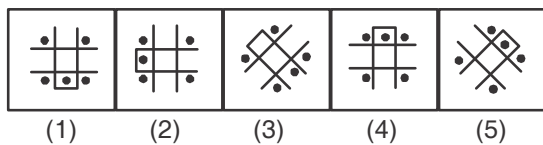
(1)	(2)	(3)	(4)	(5)
-----	-----	-----	-----	-----

27. ()

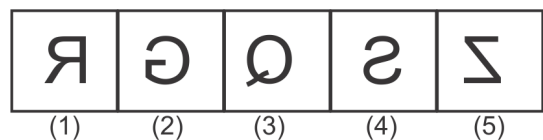


(1) (2) (3) (4) (5)

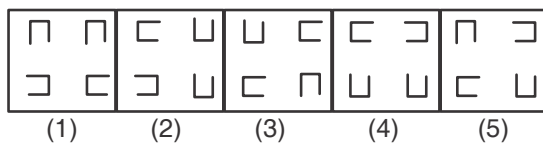
28. ()



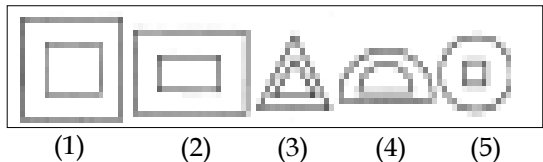
29. ()



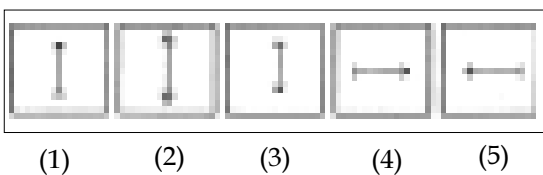
30. ()



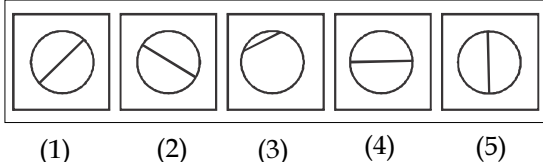
31. ()



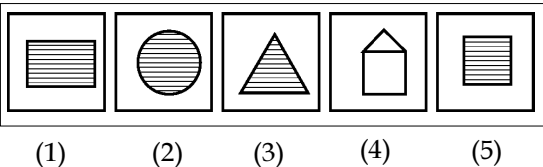
32. ()



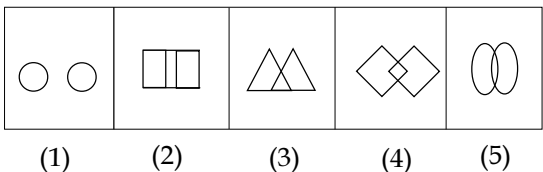
33. ()



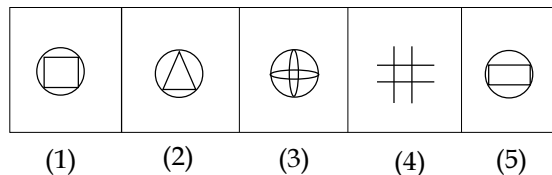
34. ()



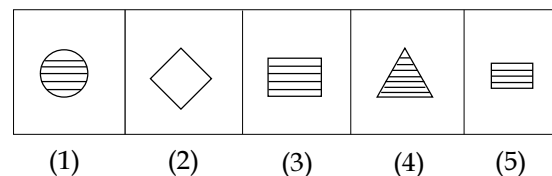
35. ()



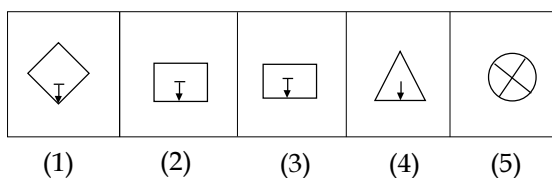
36. ()



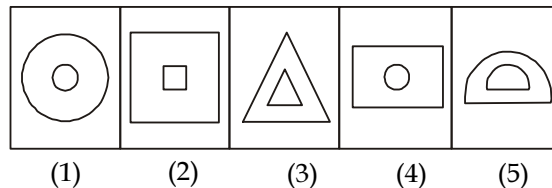
37. ()



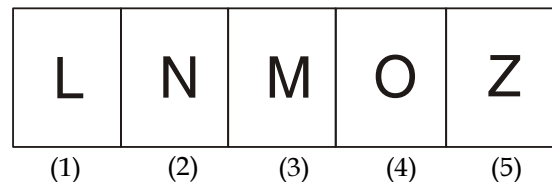
38. ()



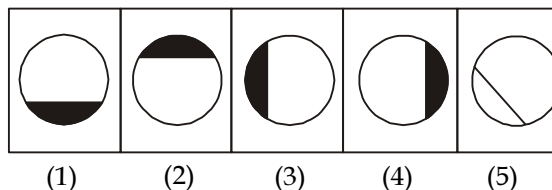
39. ()



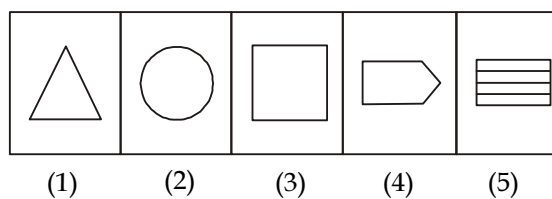
40. ()



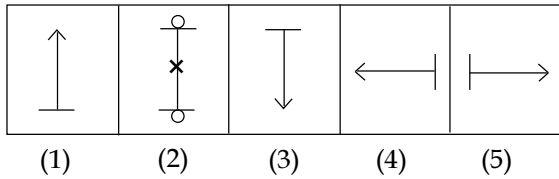
41. ()



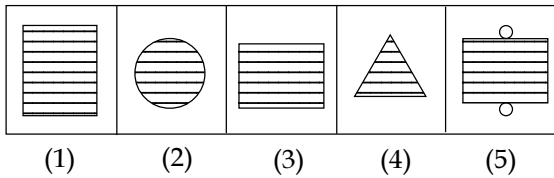
42. ()



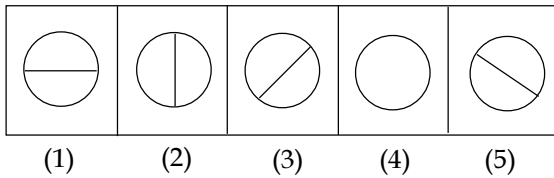
43. ()



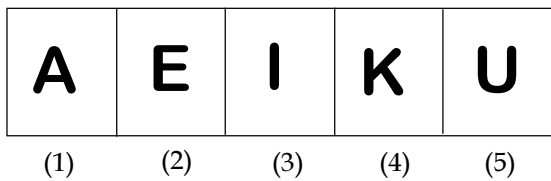
44. ()



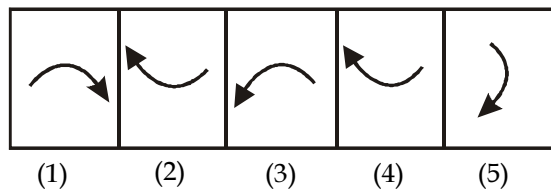
45. ()



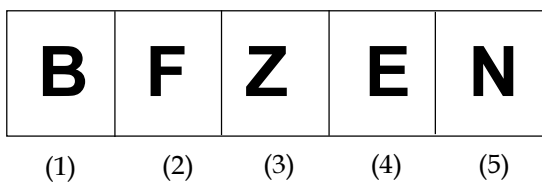
46. ()



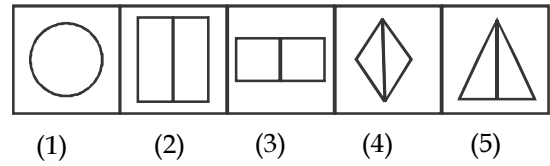
47. ()



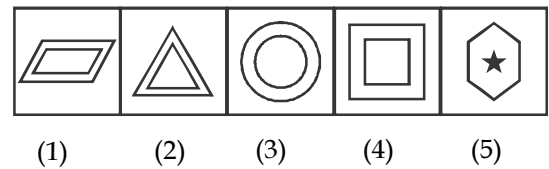
48. ()



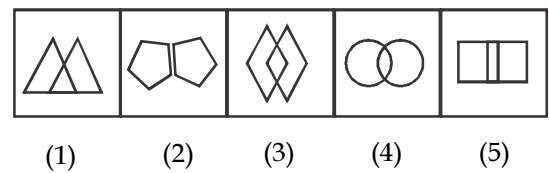
49. ()



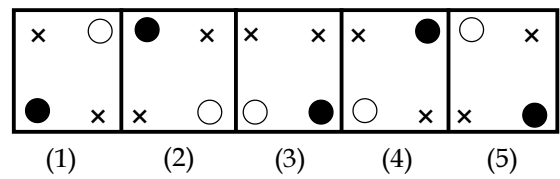
50. ()



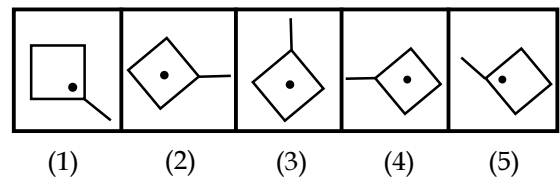
51. ()



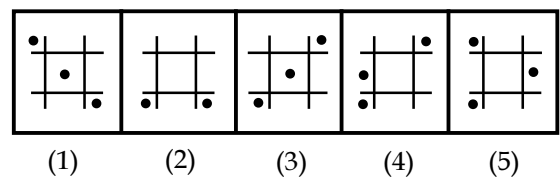
52. ()



53. ()



54. ()



WORKED OUT ANSWERS

1. (4)
- Sol. Two lines on the extreme ends of all the figures, except figure (4) have same direction of arrows. In figure (4) the direction of arrows are different.
2. (4)
- Sol. In figure (4) one line is in clockwise direction and another one is in anticlockwise direction.
3. (1)
- Sol. Except in figure (1), in all figures the lines in shapes are increasing either from inner figure or from outer figure.
4. (1)
- Sol. Except figure (1), all are moving with $\frac{1}{2}$ place and 1 place in anticlockwise direction.
5. (3)
- Sol. Except figure (3) all are divided into half.
6. (4)
- Sol. In figure (4) ☐ is a new figure.
7. (3)
- Sol. Empty circle is moving in clockwise direction in all figures except in figure (3).
8. (3)
- Sol. Except figure (3) all the figures are having diagonally same elements.
9. (4)
- Sol. Except figure (4), the remaining figures consist/ contain '3' lines.
10. (4)
- Sol. In figure (4) shaded parts are ended in petals.
11. 5
12. 4
13. 4
14. 3
15. 2
16. 4
17. 2
18. 1
19. 5
20. 5
21. 1
22. (3)
- Sol. Except option(3), the remaining are with straight lines (main figure)
23. 1
24. (4)
- Sol. Except (4) all are in same directions i.e, either in clockwise or anti clockwise.

25. (4)
- Sol. a new figure i.e, ☐ comes in figure '4'
26. (3)
27. (4)
- Sol. Except option/figure (4), all are formed with three lines.
28. (3)
- Sol. In figure (3) three dots are in outside where as in remaining figures three dots are in closed side. (base also observed.)
29. (2)
- Sol. Except (2), all are mirror images
30. (5)
- Sol. Except (5) in all other figures, two are in same side shape
31. 5
32. 2
33. 3
34. 4
35. 1
36. 4
37. 2
38. 5
39. 4
40. 4
41. 5
42. 5
43. 2
44. 5
45. 4
46. 4
- Sol. AEIU are vowels. K is a consonant.
47. (3)
- Sol. 1, 2, 4, 5 are moving in clockwise direction. 3 is moving in anti clockwise direction which is an odd figure.
48. (1)
- Sol. Except B which is a closed figure, F, Z, E, N are open figures.
49. 1
50. 5
51. 2
52. 3
53. 5
54. 2

5. SERIES

Questions : In the number series given below, one number is missing. Each series is followed by four alternatives (1), (2), (3), (4). One of them is the right answer. Indicate it as per the instructions.

11. 16, 33, 65, 131,?..... 523 ()
1) 521 2) 613 3) 721
4) 261 5) 324
12. 0, 5, 8, 17, 24, 37,?..... ()
1) 64 2) 48 3) 56
4) 75 5) 58
13. 5, 11, 21, 43, 85, 171, 341,?... ()
1) 570 2) 683 3) 596
4) 626 5) 356
14. 0, 3, 8, 15, 24, 35,?..... ()
1) 46 2) 51 3) 48
4) 57 5) 45
15. 2, 5, 10, 17, 26, 37,?..... ()
1) 50 2) 51 3) 46
4) 57 5) 39
16. 3, 6, 7, 14, 15, 30,
31, 62, 63,?.....,?..... ()
1) 128, 112 2) 119, 131
3) 127, 115 4) 126, 127
5) 135, 136
17. -2, 5, 24, 61, 122,?..... ()
1) 163 2) 176 3) 213
4) 227 5) 264
18. 6, 12, 21,?....., 48 ()
1) 40 2) 33 3) 45
4) 53 5) 56
19. 2460, 3750, 4680,?..... ()
1) 8640 2) 5670 3) 5970
4) 5790 5) 8460
20. 1, 8, 27, 64, 125,?..... ()
1) 216 2) 160 3) 148
4) 156 5) 210

21. 1695, 1700, 1710, 1727, 1753, ()
1) 1760 2) 1790 3) 1780
4) 1770 5) 1800
22. 55, 66, 187, 200, 369, 386, ()
1) 675 2) 575 3) 475
4) 875 5) 975
23. 2, 12, 36, 80, 150, ()
1) 242 2) 262 3) 252
4) 232 5) 272
24. 20, 141, 310, 599, 960, 1489, ()
1) 2430 2) 2330 3) 2230
4) 2130 5) 2530
25. 0, 10, 34, 78, ()
1) 135 2) 148 3) 156
4) 102 5) 124
26. 7, 31, 211, ()
1) 2311 2) 2211 3) 2561
4) 2781 5) 2111
27. 24, 60, 96, 132, ()
1) 126 2) 152 3) 144
4) 168 5) 135
28. 7, 6, 10, 27, 104, ()
1) 520 2) 420 3) 515
4) 525 5) 456
29. 1, 5, 15, 34, 65, ()
1) 111 2) 125 3) 117
4) 126 5) 105
30. 0, 7, 26, 63, 124, ()
1) 126 2) 135 3) 215
4) 211 5) 256
31. 2, 3, 5, 7, 11, ?, 17 ()
1) 12 2) 13 3) 14
4) 15 5) 16
32. 5, 11, 17, ?, 31, 41 ()
1) 19 2) 21 3) 23
4) 25 5) 27
33. 7, 13, 21, ?, 43, 57 ()
1) 27 2) 29 3) 31
4) 35 5) 41
34. 3, 15, 35, ?, 99, 143 ()
1) 63 2) 69 3) 77
4) 81 5) 85
35. 2, 1, 2, 4, 4, 5, 6, 7, 8, 8, 10, 11, ? ()
1) 9 2) 10 3) 11
4) 12 5) 13
36. 0, 7, 26, ?, 134, 215 ()
1) 37 2) 51 3) 63
4) 88 5) 120
37. 1, 1, 8, ?, 27, 9, 64 ()
1) 4 2) 6 3) 9
4) 16 5) 25
38. 2, 20, ?, 110, 182 ()
1) 56 2) 72 3) 90
4) 96 5) 100
39. 3, 8, 35, 48, ?, 120 ()
1) 64 2) 72 3) 80
4) 96 5) 99
40. 3, 6, 24, 30, 63, 72, ?, 132 ()
1) 42 2) 58 3) 90
4) 110 5) 120
41. 36, 29, 22, 15, ()
1) 6 2) 5 3) 8
4) 7 5) 4
42. 5, 6, 11, 17, ()
1) 28 2) 23 3) 22
4) 39 5) 25
43. 3, 9, 21, 45, ()
1) 135 2) 81 3) 69
4) 90 5) 93
44. 4, 12, 36, 108, ()
1) 216 2) 324 3) 432
4) 160 5) 540

45. 243, 81, , 9, 3. ()
 1) 18 2) 36 3) 45
 4) 27 5) 54
46. 583, 463, 343, 223, ()
 1) 113 2) 103 3) 123
 4) 93 5) 130
47. 115, 236, 357, 478, ()
 1) 589 2) 499 3) 699
 4) 498 5) 599
48. 3, 6, 18, 72, ()
 1) 360 2) 350 3) 432
 4) 216 5) 99
49. 7, 17, 37, 67, ()
 1) 106 2) 87 3) 973
 4) 107 5) 117
50. 160, 115, 80, 55, ()
 1) 45 2) 35 3) 40
 4) 30 5) 25
51. 3, 7, 10, 17, ()
 1) 20 2) 24 3) 27
 4) 29 5) 30
52. 31, 24, 17, 10, ()
 1) 7 2) 9 3) 6
 4) 5 5) 3
53. 2, 10, 26, 58, ()
 1) 120 2) 122 3) 114
 4) 84 5) 90
54. 3, 9, 27, 81, ()
 1) 108 2) 246 3) 90
 4) 243 5) 168
55. 48, 24, , 6, 3. ()
 1) 20 2) 12 3) 16
 4) 8 5) 9
56. 574, 463, 352, 241, ()
 1) 130 2) 230 3) 131
 4) 132 5) 140
57. 103, 223, 343, 463, ()
 1) 573 2) 566 3) 686
 4) 583 5) 483

58. 2, 4, 12, 48, ()
 1) 60 2) 66 3) 64
 4) 230 5) 240
59. 3, 13, 33, 73, ()
 1) 106 2) 119 3) 153
 4) 113 5) 122
60. 165, 110, 65, 30, ()
 1) 5 2) 35 3) 25
 4) 20 5) 15
61. 5, 10, 15, 25, 40, ()
 1) 45 2) 50 3) 65
 4) 60 5) 55
62. 1, 2, 8, 9, 15, 16 ()
 1) 20 2) 17 3) 18
 4) 22 5) 19
63. 4, 10, 22, 46, ()
 1) 94 2) 56 3) 66
 4) 76 5) 86
64. 4, 5, 7, , 19 ()
 1) 56 2) 66 3) 11
 4) 17 5) 14
65. 2, 6, 18, 54, , ()
 1) 108 2) 72 3) 216
 4) 162 5) 80
66. 128, 64, , 16, 8 ()
 1) 48 2) 80 3) 60
 4) 24 5) 32
67. 125, 115, 105, 95, ()
 1) 85 2) 80 3) 75
 4) 90 5) 70
68. 678, 567, 456, 345, ()
 1) 334 2) 234 3) 243
 4) 235 5) 305
69. 3, 6, 18, 72, ()
 1) 360 2) 144 3) 90
 4) 432 5) 288
70. 12, 32, 72, 152, , 632 ()
 1) 515 2) 613 3) 312
 4) 815 5) 413

71. 4, 8, 16, 32, 64, ()
1) 123 2) 128 3) 130
4) 132 5) 136
72. 5, 13, 29,, 125 ()
1) 59 2) 61 3) 63
4) 53 5) 57
73. 8, 24, 48, 80, ()
1) 160 2) 164 3) 156
4) 120 5) 116
74. 67, 56, 45, 34, ()
1) 23 2) 24 3) 27
4) 25 5) 19
75. 84, 87, 91, 96, ()
1) 103 2) 105 3) 102
4) 101 5) 104
76. 15, 18, 23, 30, ()
1) 36 2) 34 3) 38
4) 33 5) 39
77. 4, 12, 36, 108, ()
1) 320 2) 324 3) 216
4) 180 5) 112
78. 240, 120, 60,, 15 ()
1) 40 2) 35 3) 50
4) 30 5) 25
79. 897, 786, 675,, 453 ()
1) 564 2) 570 3) 575
4) 565 5) 664
80. 97, 76,, 34, 13 ()
1) 45 2) 46 3) 55
4) 56 5) 47
81. 37, 43, 49,, 61 ()
1) 45 2) 59 3) 55
4) 41 5) 53
82. 1, 4, 16,, 256 ()
1) 32 2) 80 3) 48
4) 64 5) 28
83. 960, 480, 240, 120, ()
1) 80 2) 60 3) 240
4) 40 5) 100
84. 3, 7, 10, 17, 27, ()
1) 34 2) 41 3) 37
4) 44 5) 39
85. 27, 26, 23, 18, ()
1) 9 2) 7 3) 11
4) 15 5) 13
86. 3, 6, 18, 72, 360, ()
1) 1800 2) 2160 3) 1900
4) 720 5) 1440
87. 27, 37, 57, 127 ()
1) 94 2) 67 3) 87
4) 63 5) 77
88. 9, 25, 49,, 121, 169 ()
1) 100 2) 81 3) 64
4) 36 5) 16
89. 987, 876, 654, 543 ()
1) 657 2) 756 3) 567
4) 675 5) 765
90. 847, 814, 781, 748, ()
1) 715 2) 725 3) 781
4) 718 5) 735
91. 8, 11, 17, 26, ()
1) 29 2) 35 3) 28
4) 38 5) 43
92. 80, 65,, 35, 20 ()
1) 55 2) 60 3) 45
4) 40 5) 50
93. 3, 5, 9, 17, ()
1) 25 2) 33 3) 23
4) 49 5) 21
94. 4, 20, 100,, 2500 ()
1) 500 2) 400 3) 2000
4) 8000 5) 1000
95. 2, 5, 7, 12, 19, ()
1) 26 2) 31 3) 24
4) 38 5) 36
96. 3, 6, 18, 72, ()
1) 288 2) 432 3) 360
4) 216 5) 144

97. 15, 25, 45, 75, ()
1) 70 2) 120 3) 85
4) 105 5) 115
98. 3, 15, 60, 180, ()
1) 360 2) 240 3) 540
4) 258 5) 280
99. 64, 32, 16, 8, ()
1) 2 2) 3 3) 1
4) 4 5) 12
100. 3, 12, 21, 30, ()
1) 33 2) 36 3) 39
4) 42 5) 45
101. 4, 5, 9, 14, ? ()
1) 24 2) 20 3) 23
4) 28 5) 30
102. 35, 27, 19, 11, ? ()
1) 3 2) 10 3) 7
4) 5 5) 2
103. 2, 3, 5, 8, 13, ? ()
1) 17 2) 12 3) 21
4) 15 5) 13
104. 3, 15, 75, 375, ? ()
1) 1860 2) 1875 3) 1975
4) 1775 5) 1675
105. 2, 4, 16, 96, ? ()
1) 604 2) 768 3) 716
4) 702 5) 700
106. 7, 10, 16, 25, ? ()
1) 37 2) 28 3) 35
4) 36 5) 26
107. 4, 9, 16, 25, ? ()
1) 44 2) 30 3) 32
4) 36 5) 29
108. 8, 16, 32, 64, ? ()
1) 122 2) 120 3) 123
4) 124 5) 128
109. 2, 5, 9, ?, 20, 27, ()
1) 10 2) 12 3) 14
4) 16 5) 18
110. 125, 80, 45, 20, ? ()
1) 5 2) 10 3) 15
4) 12 5) 6
111. 4, 9, 25?....., 121, 169, 289, 361 ()
1) 36 2) 49 3) 64
4) 81 5) 100
112. 7, 10, 8, 11, 9, 12?..... ()
1) 7 2) 9 3) 10
4) 12 5) 13
113. 3, 7, 15, 31, 63?..... ()
1) 81 2) 91 3) 107
4) 117 5) 127
114. 14, 28, 20, 40, 32, 64,?..... ()
1) 52 2) 56 3) 80
4) 96 5) 128
115. 101, 98, 93, 86, 75?..... ()
1) 62 2) 64 3) 68
4) 71 5) 73
116. 4, 18,?..... 100, 180, 294, 448 ()
1) 48 2) 50 3) 58
4) 60 5) 81
117. 1, 2, 6, 15, 31,?..... ()
1) 42 2) 47 3) 56
4) 59 5) 61
118. 6, 12, 20, 30, 42, 56,?.... ()
1) 60 2) 64 3) 70
4) 72 5) 76
119. 6, 6, 12, 36, 144, 720,?.... ()
1) 1440 2) 1760 3) 2150
4) 3560 5) 4320
120. 5, 7, 11, 17, 25, 35,?.... ()
1) 37 2) 40 3) 42
4) 47 5) 50

WORKED OUT ANSWERS

1. (3)
 Sol. $380 \quad 188 \quad 92 \quad 44 \quad 20 \quad 8 \quad 2$
 $\quad \quad \quad -192 \quad -96 \quad -48 \quad -24 \quad -12 \quad -6$
 $\quad \quad \quad \times 2 \quad \times 2 \quad \times 2 \quad \times 2 \quad \times 2$

2. (3)
 Sol. Here two series are there.
 $\quad \quad \quad +3 \quad \quad +3 \quad \quad +3 \quad \quad +3$
 $3 \quad 7 \quad 6 \quad 5 \quad 9 \quad 3 \quad 12 \quad 1 \quad 15 \quad \boxed{-1}$
 $\quad \quad \quad -2 \quad \quad -2 \quad \quad -2$
 $\quad \quad \quad -2 + 1 = -1$

3. (4)
 Sol. $23 \quad 21 \quad 24 \quad 19 \quad 26 \quad _$
 $\quad \quad \quad -2 \quad +3 \quad -5 \quad +7 \quad -11$
 $\quad \quad \quad 26 - 11 = 15$
 Adding & Subtracting Prime numbers

4. (4)
 Sol. $5 \quad 12 \quad 23 \quad 50 \quad 141 \quad _$
 $\quad \quad \quad +7 \quad +11 \quad +27 \quad +91 \quad +347$
 $\quad \quad \quad +4 \quad +16 \quad +64 \quad +256$
 $\quad \quad \quad \therefore 347 + 141$
 $\quad \quad \quad = 488$

5. (3)
 Sol. $4 \quad 11 \quad 19 \quad 41 \quad _ \quad 161$
 $\quad \quad \quad \times 2 + 3 \quad \times 2 + 3 \quad \times 2 + 3$
 $\quad \quad \quad 79 \times 2 + 3$
 $\quad \quad \quad = 158 + 3 = 161$

6. (4)
 Sol. $9 \times 0.5 + 0.5 = 5$
 $5 \times 1 + 1 = 6$
 $6 \times 1.5 + 1.5 = 10.5$
 $10.5 \times 2 + 2 = 23$
 $23 \times 2.5 + 2.5 = 60$

7. (2)
 Sol. $1 \quad 20 \quad 58 \quad 134 \quad 286 \quad _$
 $\quad \quad \quad +19 \quad +38 \quad +76 \quad +152 \quad +304$
 $\quad \quad \quad \times 2 \quad \times 2 \quad \times 2 \quad \times 2$
 $286 + 304 = 590$

8. (4)
 $\quad \quad \quad -7 \quad \quad \quad -7$
 Sol. $68 \quad 117 \quad 61 \quad 124 \quad 54 \quad _$
 $\quad \quad \quad +7 \quad \quad +7$
 Here two series
 $124 + 7 = 131$

9. (2)
 Sol. $10 \quad 5 \quad 5 \quad 10 \quad 40 \quad _$
 $\quad \quad \quad \times \frac{1}{2} \quad \times 1 \quad \times 2 \quad \times 4 \quad \times 8$
 $40 \times 8 = 320$

10. (3)
 Sol. $8 \times 1 - 1 = 7$
 $7 \times 2 - 2 = 12$
 $12 \times 3 - 3 = 33$
 $33 \times 4 - 4 = 132 - 4 = 128$
 $128 \times 5 - 5 = 635$

11. (4)
 Sol. $16 \times 2 + 1 = 33$
 $33 \times 2 - 1 = 65$
 $65 \times 2 + 1 = 131$
 $131 \times 2 - 1 = 261$
 $261 \times 2 + 1 = 523$

12. (2)
 Sol. $1^2 - 1 = 0$
 $2^2 + 1 = 5$
 $3^2 - 1 = 8$
 $4^2 + 1 = 17$
 $5^2 - 1 = 24$
 $6^2 + 1 = 37$
 $7^2 - 1 = 48$

13. (2)
Sol. $3 \times 2 - 1 = 5$
 $5 \times 2 + 1 = 11$
 $11 \times 2 - 1 = 21$
 $21 \times 2 + 1 = 43$
 $43 \times 2 - 1 = 85$
 $85 \times 2 + 1 = 171$
 $171 \times 2 - 1 = 341$
 $341 \times 2 + 1 = 683$

Sol. $1 \times 1 - 1 = 0$
 $2 \times 2 - 1 = 3$
 $3 \times 3 - 1 = 8$
 $4 \times 4 - 1 = 15$
 $5 \times 5 - 1 = 24$
 $6 \times 6 - 1 = 35$
 $7 \times 7 - 1 = 48$

Sol. $1^2 + 1 = 2$
 $2^2 + 1 = 5$
 $3^2 + 1 = 10$
 $4^2 + 1 = 17$
 $5^2 + 1 = 26$
 $6^2 + 1 = 37$
 $7^2 + 1 = 50$

Sol. $\underline{2}, \underline{3} \times 2 = 6$
 $\underline{6}, \underline{7} \times 2 = 14$
 $\underline{14}, \underline{15} \times 2 = 30$
 $\underline{30}, \underline{31} \times 2 = 62$
 $\underline{62}, \underline{63} \times 2 = 126$
 126, 127

Sol. $1^3 - 3 = -2$
 $2^3 - 3 = 5$
 $3^3 - 3 = 24$
 $4^3 - 3 = 61$
 $5^3 - 3 = 122$
 $6^3 - 3 = 213$

Sol. $\begin{array}{ccccccc} 6, & 12, & 21, & -, & 48 \\ \underbrace{\hspace{1.5cm}} & \underbrace{\hspace{1.5cm}} & \underbrace{\hspace{1.5cm}} & \underbrace{\hspace{1.5cm}} & \\ 6 & 9 & 12 & 15 \end{array}$

So, the missing term is $21 + 12 = 33$

20. (1)

Sol. $1^3 = 1$
 $2^3 = 8$
 $3^3 = 27$
 $4^3 = 64$
 $5^3 = 125$
 $6^3 = 216$

Sol.

1695	1700	1710	1727	1753	1790
5		10		17	
5		7		9	
1753		37			

$1753 + 37 = 1790$

Sol.

55	66	187	200	369	386	675
	11	121	13	169	17	289
		↓		↓		↓
		11^2		13^2		17^2

$386 + 289 = 675$

Sol.

2	12	36	80	150	252	
10		24		44		
14			20		26	
6				6		

$150 + 102 = 252$

Sol. $\begin{array}{ccccccc} 20 & 141 & 310 & 599 & 960 & 1489 & 2330 \\ \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright & \curvearrowright \\ 121 & 169 & 289 & 361 & 529 & 841 & \\ \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \\ 11^2 & 13^2 & 17^2 & 19^2 & 23^2 & 29^2 & \end{array}$

$1489 + 841 = 2330$ ($\because$ Squares of prime numbers)

Sol.

0	10	34	78	148
	10	24	44	70
		14	20	26
			6	6

$78 + 70 = 148$

26. (1) 2311

27. (4)

Sol. $\begin{array}{ccccccccc} 24 & 60 & 96 & 132 & 168 \\ \hline & 36 & 36 & 36 & 36 \end{array}$
 $132 + 36 = 168$

28. (3)

Sol. $\begin{array}{ccccccccc} 7 & 6 & 10 & 27 & 104 & 515 \\ \hline \times 1-1 & \times 2-2 & \times 3-3 & \times 4-4 & \times 5-5 \end{array}$
 $7 \times 1 - 1 = 6, \quad 6 \times 2 - 2 = 10,$
 $10 \times 3 - 3 = 27, \quad 27 \times 4 - 4 = 104,$
 $104 \times 5 - 5 = 515$

29. (1)

Sol. $\begin{array}{ccccccccc} 1 & 5 & 15 & 34 & 65 & 111 \\ \hline \downarrow & \downarrow & \downarrow & \downarrow & \uparrow \\ 4 & 10 & 19 & 31 & 46 \\ \hline 2^2 & 3^2+1 & 4^2+3 & 5^2+6 & 6^2+10 \end{array}$
 $65 + 46 = 111$

30. (3)

Sol. $\begin{array}{ccccccccc} 0 & 7 & 26 & 63 & 124 & 215 \\ \hline +7 & +19 & 37 & 61 & 91 \\ \hline 12 & 18 & 24 & 30 \\ \hline 6 & 6 & 6 \end{array}$
 $124 + 91 = 215$

31. (2)

Sol. 2, 3, 5, 7, 11, ?, 17 are prime numbers.
 $\therefore$ Required number is 13

32. (3)

Sol. Prime numbers between 5 and 41
 $= 5, 7, 11, 13, 17, 19, 23, 29, 31, 37, 41$
 $\therefore$ Given series is alternate prime
 number series 5, 11, 17, 23, 31, 41
 Required number is 23

33. (3)

Sol. 7, 13, 21, ?, 43, 57
 $= 7, 7 + 6, 13 + 8, 21 + 10, 31 + 12, 43 + 14$
 Required number is $21 + 10 = 31$

34. (1)

Sol. 3, 15, 35, ?, 99, 143 $= 3, 3 + 12,$
 $15 + 20, 35 + 28, 63 + 36, 99 + 44$
 Required number is $35 + 28 = 63$

35. (4)

Sol. 2, 1, 2, 4, 4, 5, 6, 7, 8, 8, 10, 11,
 Required number in the series is 12

36. (3) 63

37. (1)

Sol. 1, 1, 8, ?, 27, 9, 64
 $= 1^3, 1^2, 2^3, 2^2, 3^3, 3^2, 4^3$

38. (1)

Sol. 2, 2 + 18, 20 + (2 $\times$ 18), 56 + (3 $\times$ 18),
 $110 + (4 \times 18) = 2, 20, 56, 110, 182$

39. (5)

Sol. 8 - 3 = 5, 48 - 35 = 13, 120, ?
 difference $13 + 8 = 21$.
 Required number is $120 - 21 = 99$

40. (5)

Sol. $3 \times 1, 3 \times 2, 3 \times 8, 3 \times 10, 3 \times 21,$
 $3 \times 24, -, 3 \times 44 = 3 \times 1, 3(1+1), 3 \times 8,$
 $3 \times (8 + 2), 3 \times 21, 3 \times (21 + 3), -,$
 $3 \times (40 + 44)$
 Required number is $3 \times 40 = 120$.

41. (3)

Sol. $\begin{array}{ccc} (-7) & (-7) & (-7) \\ 36, & 29, & 15, \underline{8} \end{array}$

Numbers are decreasing by 7 in
 the given series.

8.

42. (1) $\begin{array}{ccccccc} 5, & 6, & 11, & 17 & 28 & & \\ \hline & \downarrow & \downarrow & \downarrow & \downarrow & \downarrow & \\ & + & + & + & + & + & \end{array}$

Sol. Addition of first two numbers
 gives third number
 Addition of second & third
 numbers gives the fourth number
 Addition of third & fourth
 numbers gives the fifth number
 28.

43. (5) $3 \times 2 = 6 + 3, \quad 9 \times 2 = 18 + 3$

Sol. $21 \times 2 = 42 + 3, \quad 45 \times 2 = 90 + 3$

$\begin{array}{ccccccc} (\times 2+3) & (\times 2+3) & (\times 2+3) & (\times 2+3) \\ 3, & 9, & 21, & 45, & \underline{93} \end{array}$

By multiplying with 2 and
 adding 3 to the given series.

93.

44. (2) 4, 12, 36, 108, 324
($\times 3$) ($\times 3$) ($\times 3$) ($\times 3$)

Sol. In this series numbers are multiplied by 3
324.

45. (4) 243, 81, 27, 9, 3
 3^5 3^4 3^3 3^2 3^1

Sol. The given series can be written
as $3^5, 3^4, 3^3, 3^2, 3^1$
27.

46. (2) (-120) (-120) (-120) (-120)
Sol. 583, 463, 343, 223, 103

The given series is decreasing by (-120)
103.

47. (5) $(+121)$ $(+121)$ $(+121)$ $(+121)$
115, 236, 357, 478, 599

The given series is increasing by
 $(+121)$
599.

48. (1) 3, 6, 18, 72, 360
 $(\times 2)$ $(\times 3)$ $(\times 4)$ $(\times 5)$

Sol. In the given series numbers are
multiplying by 2, 3, 4, 5
360.

49. (4) $+10$ $+20$ $+30$ $+40$
Sol. 7, 17, 37, 67, 107

The given series is increasing by
10, 20, 30, 40
107.

50. (3) -45 -35 -25 -15
Sol. 160, 115, 80, 55, 40

In the given series numbers are
decreasing by 45, 35, 25, 15
40.

51. (3) 27

52. (5) 3

53. (2) 122

54. (4) 243

55. (2) 12

56. (1) 130

57. (4) 583

58. (5) 240

59. (3) 153

60. (1) 5

61. (3) 65

62. (4) 22

63. (1) 94

64. (3) 11

65. (4) 162

66. (5) 32

67. (1) 85

68. (2) 234

69. (1) 360

70. (3) 312

71. (2)

Sol. $4 \times 2 = 8$; $8 \times 2 = 16$; $16 \times 2 = 32$;

$$32 \times 2 = 64; 64 \times 2 = 128$$

72. (4)

Sol. $5 + 8 (1 \times 8) = 13$

$$13 + 16 (2 \times 8) = 29$$

$$29 + 24 (3 \times 8) = 53$$

$$53 + 32 (4 \times 8) = 85$$

$$85 + 4 (5 \times 8) = 125$$

73. (4)

Sol. $3^2 - 1 = 8$ $5^2 - 1 = 24$

$$7^2 - 1 = 48$$

$$9^2 - 1 = 80$$

$$11^2 - 1 = 120$$

74. (1)

Sol. $67 - 11 = 56$ $56 - 11 = 45$

$$45 - 11 = 34$$

$$34 - 11 = 23$$

75. (3)

Sol. $84 + 3 = 87$ $87 + 4 = 91$

$$91 + 5 = 96$$

$$96 + 6 = 102$$

76. (5)
Sol. $15 + 3 = 18$ $18 + 5 = 23$
 $23 + 7 = 30$ $30 + 9 = 39$
77. (2)
Sol. $4 \times 3 = 12$ $12 \times 3 = 36$
 $36 \times 3 = 108$ $108 \times 3 = 324$
78. (4)
Sol. $\frac{240}{2} = 120$ $\frac{120}{2} = 60$
 $\frac{60}{2} = 30$ $\frac{30}{2} = 15$
79. (1)
Sol. $897 - 111 = 786$; $786 - 111 = 675$;
 $675 - 111 = 564$; $564 - 111 = 453$.
80. (3)
Sol. $97 - 21 = 76$; $76 - 21 = 55$;
 $55 - 21 = 34$; $34 - 21 = 13$.
81. (3)
Sol. $37 + 6 = 43$, $43 + 6 = 49$,
 $49 + 6 = 55$
82. (4)
Sol. $1 \times 4 = 4$; $4 \times 4 = 16$,
 $16 \times 4 = 64$; $64 \times 4 = 256$
83. (2)
Sol. Half of 960 = 480, half of 480 is
240, half of 240 = 120.
so half of 120 is 60.
84. (4)
Sol. $3 + 7 = 10$, $7 + 10 = 17$,
 $10 + 17 = 27$, $17 + 27 = 44$.
(The earlier two numbers are
added and fresh number is generated)
85. (3)
Sol. Every number in the series is
made deducting odd number
beginning from 1.
 $27 - 1 = 26$, $26 - 3 = 23$,
 $23 - 5 = 18$.
So 7 is to be deducted to 18.
 $18 - 7 = 11$.

86. (2) 2160
87. (3) 87
88. (2)
Sol. $3^2 = 9$, $5^2 = 25$, $7^2 = 49$, $9^2 = 81$,
 $11^2 = 121$, $13^2 = 169$
The square roots of odd number
series.
89. (5) 765
90. (1) The numbers in the series are
generated deducting 33 to the
earlier number.
 $847 - 33 = 814$; $814 - 31 = 781$;
 $781 - 33 = 748$; $748 - 33 = 715$
91. (4)
Sol. $\begin{array}{cccc} 8, & 11, & 17, & 26 \\ +3 & +6 & +9 & +12 \end{array}$ 38
(Hint : 3×1 , 3×2 , 3×3 , 3×4)
92. (5)
Sol. $\begin{array}{cccc} 80, & 65, & 50, & 35 \\ -15 & -15 & -15 & -15 \end{array}$ 20
(Hint : Reducing 15)
93. (2)
Sol. $\begin{array}{cccc} 3, & 5, & 9, & 17 \\ +2 & +4 & +8 & +16 \end{array}$ 33
(Hint : 2 , 2^2 , 2^3 , 2^4)
94. (1)
Sol. 4, 20, 100, 500, 2500
(Multiplying with 5)
95. (2)
Sol. 2, 5, 7, 12, 19, 31
 $2 + 5 = 7$; $5 + 7 = 12$;
 $7 + 12 = 19$; $12 + 19 = 31$
96. (3)
Sol. 3, 6, 18, 72, 360
 $3 \times 2 = 6$; $6 \times 3 = 18$;
 $18 \times 4 = 72$; $72 \times 5 = 360$
97. (5)
Sol. 15, 25, 45, 75, 115
 $15 + 10 = 25$; $25 + 20 = 45$;
 $45 + 30 = 75$; $75 + 40 = 115$

98. (1)

Sol. 3, 15, 60, 180

$$3 \times 5 = 15; 15 \times 4 = 60;$$

$$60 \times 3 = 180; 180 \times 2 = 360$$

99. (4)

Sol. 64, 32, 16, 8, 4

$$\frac{64}{2} = 32; \frac{32}{2} = 16;$$

$$\frac{16}{2} = 8; \frac{8}{2} = 4$$

100. (3)

Sol. 3, 12, 21, 30, 39

$$3 + 9 = 12; 12 + 9 = 21;$$

$$21 + 9 = 30; 30 + 9 = 39$$

101. (3)

Sol. 4, 5, 9, 14, 23

$$4 + 5 = 9$$

$$5 + 9 = 14$$

$$9 + 14 = 23$$

102. (1)

Sol. $\begin{array}{ccccccc} 35 & 27 & 19 & 11 & 3 \\ \hline & -8 & -8 & -8 & -8 \end{array}$

103. (3)

Sol. 2 3 5 8 13 21

$$2 + 3 \rightarrow 5$$

$$3 + 5 \rightarrow 8$$

$$5 + 8 \rightarrow 13$$

$$8 + 13 \rightarrow 21$$

104. (2)

Sol. $\begin{array}{ccccccc} 3 & 15 & 75 & 375 & 1875 \\ \hline & \times 5 & \times 5 & \times 5 & \times 5 \end{array}$

105. (2)

Sol. $\begin{array}{ccccccc} 2 & 4 & 16 & 96 & 768 \\ \hline & \times 2 & \times 4 & \times 6 & \times 8 \end{array}$

106. (1)

Sol. $\begin{array}{ccccccc} 7 & 10 & 16 & 25 & 37 \\ \hline & +3 & +6 & +9 & +12 \end{array}$

107. (4)

Sol. $2^2, 3^2, 4^2, 5^2, 6^2$

108. (5)

Sol. $\begin{array}{ccccccc} 8 & 16 & 32 & 64 & 128 \\ \hline & \times 2 & \times 2 & \times 2 & \times 2 \end{array}$

109. (3)

Sol. $\begin{array}{ccccccc} 2 & 5 & 9 & 14 & 20 & 27 \\ \hline & +3 & +4 & +5 & +6 & +7 \end{array}$

110. (1)

Sol. $\begin{array}{ccccccc} 125 & 80 & 45 & 20 & 5 \\ \hline & -45 & -35 & -25 & -15 \end{array}$

111. (2)

Sol. $2^2, 3^2, 5^2, \underline{7^2}, 11^2, 13^2, 17^2, 19^2$

All are squares of prime numbers

112. (3)

Sol. $\begin{array}{ccccccc} 7 & 10 & 8 & 11 & 9 & 12 & - \end{array}$

Two series are there

7, 8, 9, 10, ...

10, 11, 12, 13,

So, answer is 10

113. (5)

Sol. $1 \times 2 + 1 = 3$ series

$$3 \times 2 + 1 = 7$$

$$7 \times 2 + 1 = 15$$

$$15 \times 2 + 1 = 31$$

$$31 \times 2 + 1 = 63$$

$$63 \times 2 + 1 = \underline{127}$$

114. (2)

Sol. $\begin{array}{ccccccc} 14 & 28 & 20 & 40 & 32 & 64 & - \\ \hline & \times 2 & -8 & \times 2 & -8 & \times 2 & -8 \end{array}$
 $64 - 8 = 56$

115. (1)

Sol. $\begin{array}{ccccccc} 101 & 98 & 93 & 86 & 75 & - \\ \hline & -3 & -5 & -7 & -11 & -13 \end{array}$
 (Subtraction of prime numbers)
 $= 75 - 13 = 62$

116.

(1)

Sol. The pattern is

$$4 = 1 \times 2^2$$

$$18 = 2 \times 3^2$$

$$\boxed{48} = 3 \times 4^2 \longrightarrow \text{Answer}$$

$$100 = 4 \times 5^2$$

$$180 = 5 \times 6^2 \text{ and so on } \dots\dots\dots$$

117.

(3)

1, 2, 6, 15, 31, —

Sol.

$$+1 \quad +4 \quad +9 \quad +16 \quad +25$$

$$1^2 \quad 2^2 \quad 3^2 \quad 4^2 \quad 5^2$$

$$31 + 25 = 56$$

118.

(4)

6 12 20 30 42 56 —

Sol.

$$+6 \quad +8 \quad +10 \quad +12 \quad +14 \quad +16$$

$$56 + 16 = 72$$

119.

(5)

6 6 12 36 144 720 —

Sol.

$$\times 1 \quad \times 2 \quad \times 3 \quad \times 4 \quad \times 5 \quad \times 6$$

$$720 \times 6 = 4320$$

120.

(4)

5 7 11 17 25 35 —

Sol.

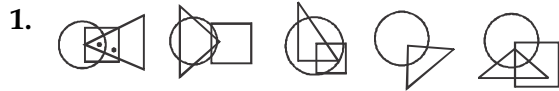
$$+2 \quad +4 \quad +6 \quad +8 \quad +10 \quad +12$$

$$35 + 12 = 47$$

6. DOT SITUATION

Directions :

Questions : From amongst the figures marked (1), (2), (3), (4); select the figure, which satisfies the same conditions of placement of the dots as in figure X.



(X) (1) (2) (3) (4)

1) 1 2) 2 3) 3 ()

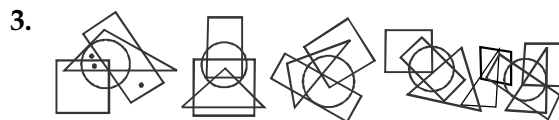
4) 4 5) None



(X) (1) (2) (3) (4)

1) 1 2) 2 3) 3 ()

4) 4 5) None



(X) (1) (2) (3) (4)

1) 1 2) 2 3) 3 ()

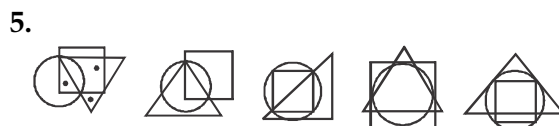
4) 4 5) None



(X) (1) (2) (3) (4)

1) 1 2) 2 3) 3 ()

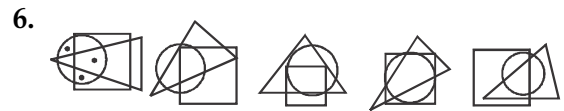
4) 4 5) None



(X) (1) (2) (3) (4)

1) 1 2) 2 3) 3 ()

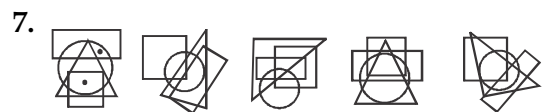
4) 4 5) None



(X) (1) (2) (3) (4)

1) 1 2) 2 3) 3 ()

4) 4 5) None



(X) (1) (2) (3) (4)

1) 1 2) 2 3) 3 ()

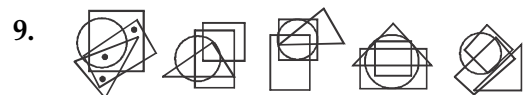
4) 4 5) None



(X) (1) (2) (3) (4)

1) 1 2) 2 3) 3 ()

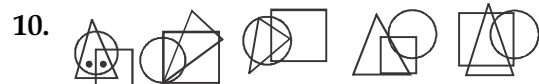
4) 4 5) None



(X) (1) (2) (3) (4)

1) 1 2) 2 3) 3 ()

4) 4 5) None



(X) (1) (2) (3) (4)

1) 1 2) 2 3) 3 ()

4) 4 5) None

11.
 (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None
12.
 (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None
13.
 (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None
14.
 (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None
15.
 (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None
16.
 (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None

17.
 (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None
18.
 (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None
19.
 (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None
20.
 (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None

KEY

- | | | | | | | | | | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1. 4 | 2. 3 | 3. 2 | 4. 2 | 5. 3 | 6. 1 | 7. 4 | 8. 3 | 9. 1 | 10. 2 |
| 11. 4 | 12. 3 | 13. 1 | 14. 3 | 15. 4 | 16. 1 | 17. 4 | 18. 1 | 19. 2 | 20. 4 |

7. ANALOGY

Directions :

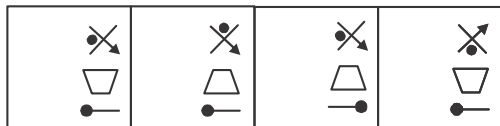
In each of the following questions , the second figure in the first unit of the problem figure bears a certain relationship to the first figure. Similarly one of the answer figure bears the same relationship of the first figure of the second unit of the problem figure. You have to therefore locate the figure, which would fit the question mark.

1. Problem Figures ()



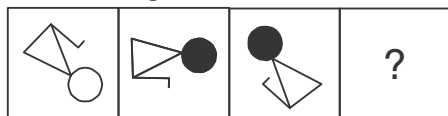
(A) (B) (C) (D)

Answer figures



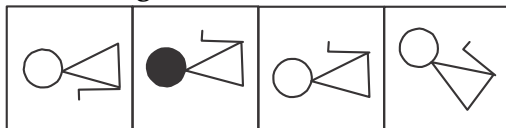
(1) (2) (3) (4)

2. Problem Figures ()



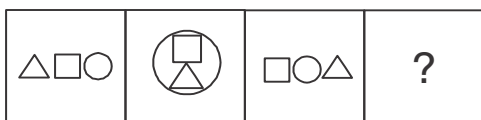
(A) (B) (C) (D)

Answer figures



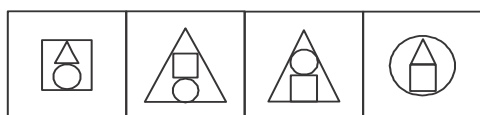
(1) (2) (3) (4)

3. Problem Figures ()



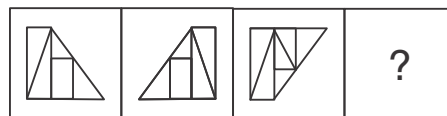
(A) (B) (C) (D)

Answer figures



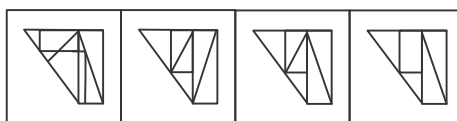
(1) (2) (3) (4)

4. Problem Figures ()



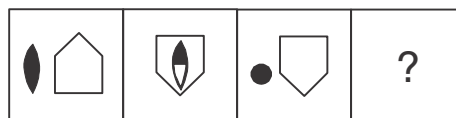
(A) (B) (C) (D)

Answer figures



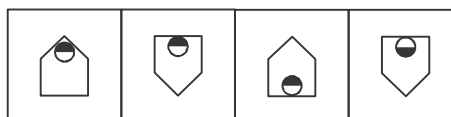
(1) (2) (3) (4)

5. Problem Figures ()



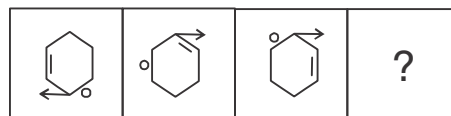
(A) (B) (C) (D)

Answer figures



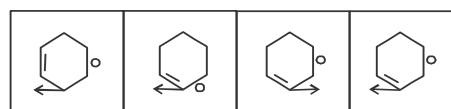
(1) (2) (3) (4)

6. Problem Figures ()



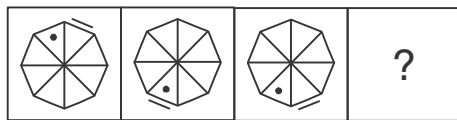
(A) (B) (C) (D)

Answer figures



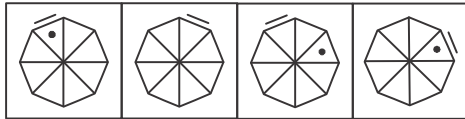
(1) (2) (3) (4)

7. Problem Figures ()



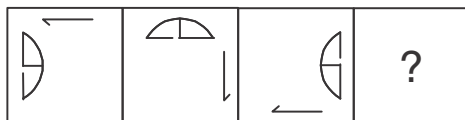
(A) (B) (C) (D)

Answer figures



(1) (2) (3) (4)

8. Problem Figures ()



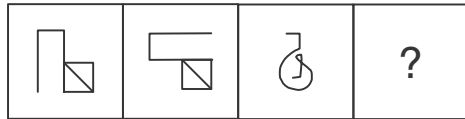
(A) (B) (C) (D)

Answer figures



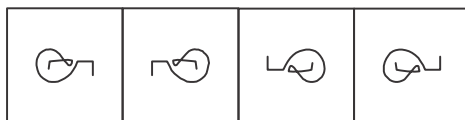
(1) (2) (3) (4)

9. Problem Figures ()



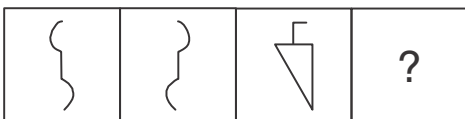
(A) (B) (C) (D)

Answer figures



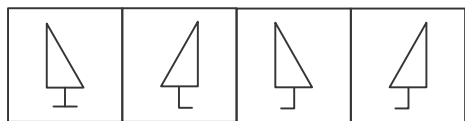
(1) (2) (3) (4)

10. Problem Figures ()



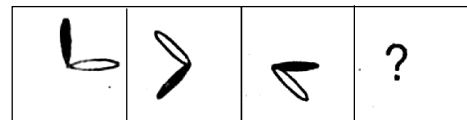
(A) (B) (C) (D)

Answer figures



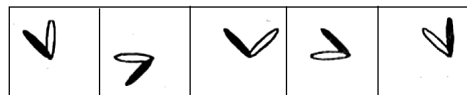
(1) (2) (3) (4)

11. Problem Figures ()



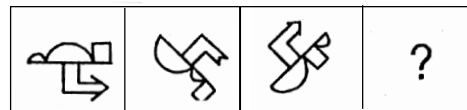
(A) (B) (C) (D)

Answer Figures



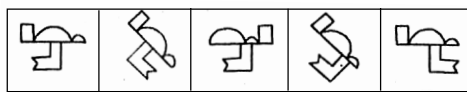
(1) (2) (3) (4) (5)

12. Problem Figures ()



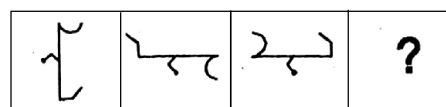
(A) (B) (C) (D)

Answer Figures



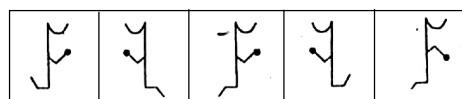
(1) (2) (3) (4) (5)

13. Problem Figures ()



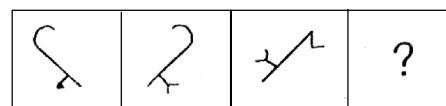
(A) (B) (C) (D)

Answer Figures



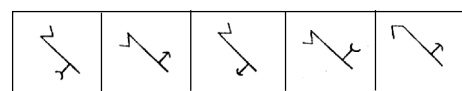
(1) (2) (3) (4) (5)

14. Problem Figures ()



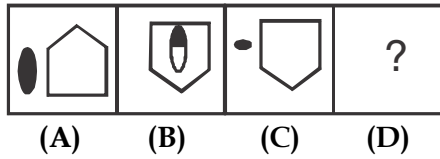
(A) (B) (C) (D)

Answer Figures

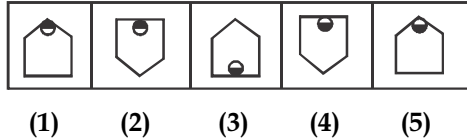


(1) (2) (3) (4) (5)

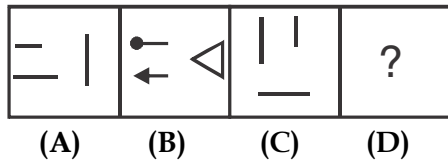
15. Problem Figures ()



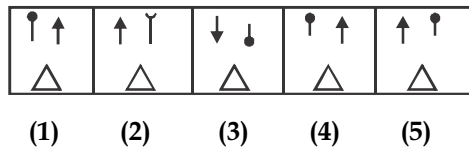
Answer Figures



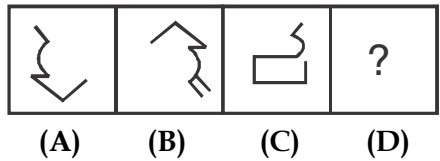
16. Problem Figures ()



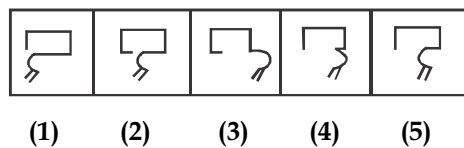
Answer Figures



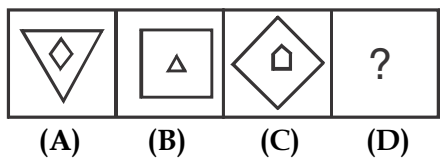
17. Problem Figures ()



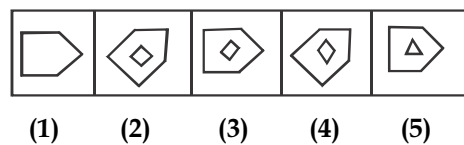
Answer Figures



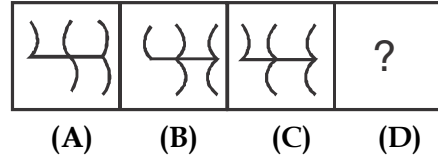
18. Problem Figures ()



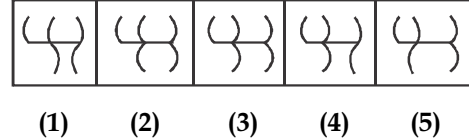
Answer Figures



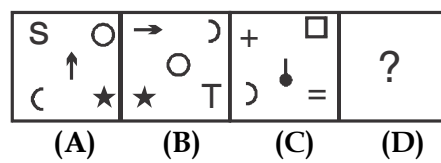
19. Problem Figures ()



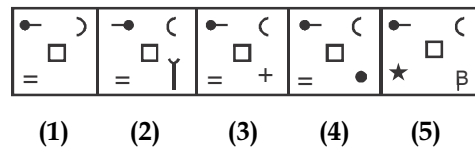
Answer Figures



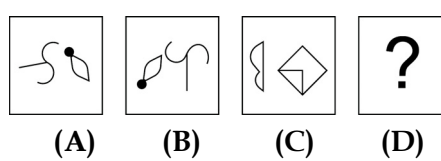
20. Problem Figures ()



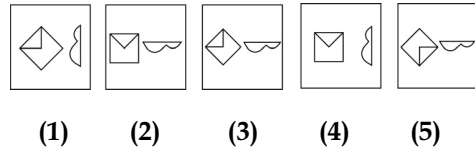
Answer Figures



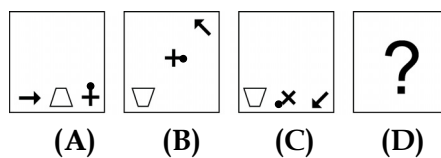
21. Problem Figures ()



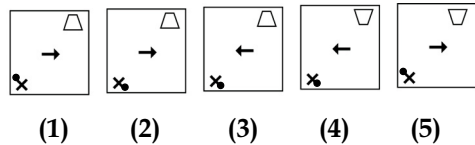
Answer Figures



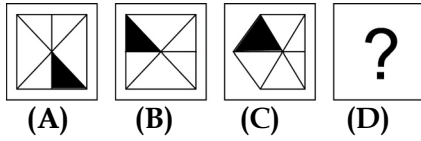
22. Problem Figures ()



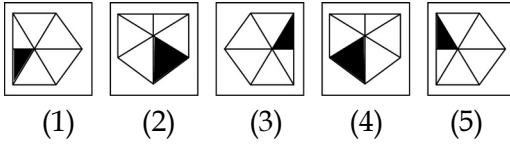
Answer Figures



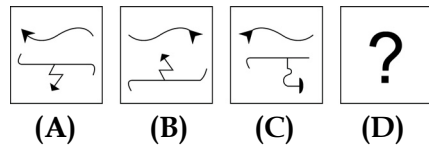
23. Problem Figures ()



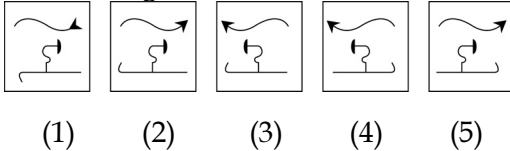
Answer Figures



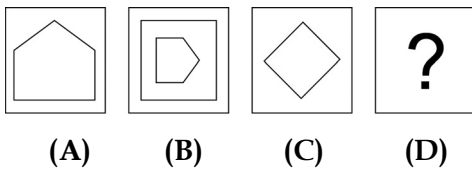
24. Problem Figures ()



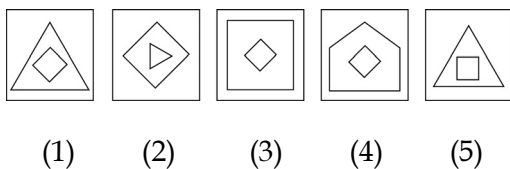
Answer Figures



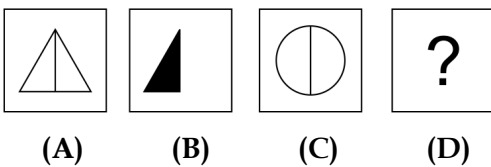
25. Problem Figures ()



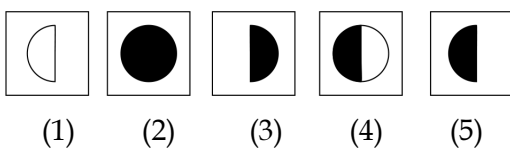
Answer Figures



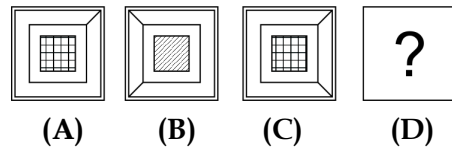
26. Problem Figures ()



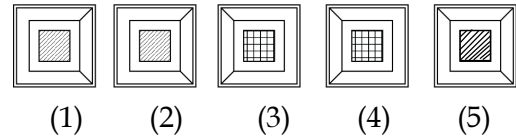
Answer Figures



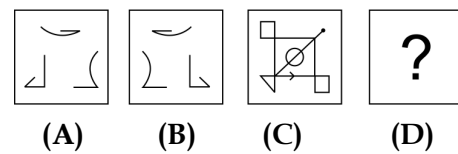
27. Problem Figures ()



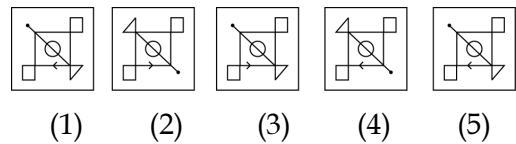
Answer Figures



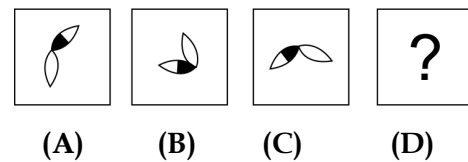
28. Problem Figures ()



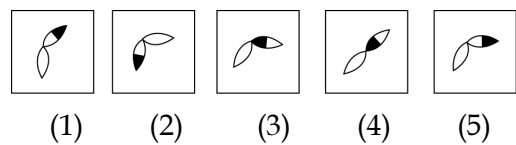
Answer Figures



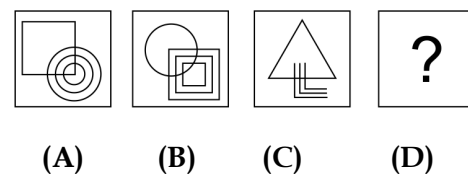
29. Problem Figures ()



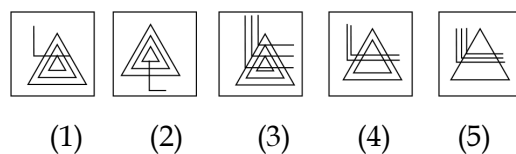
Answer Figures



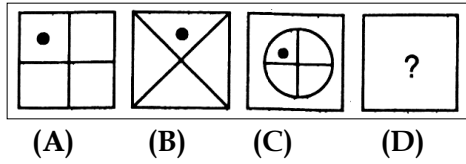
30. Problem Figures ()



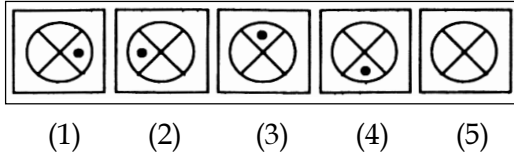
Answer Figures



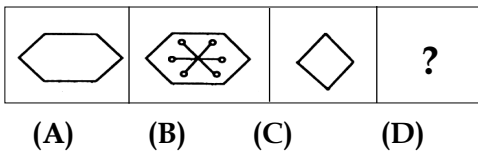
31. Problem Figures ()



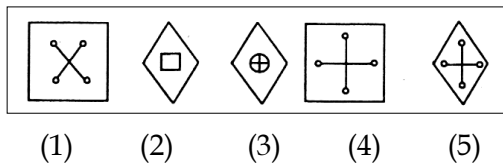
Answer Figures



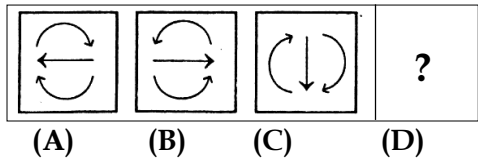
32. Problem Figures ()



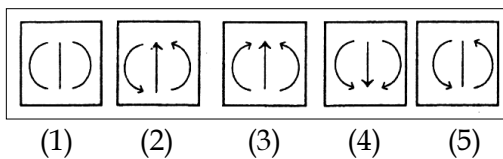
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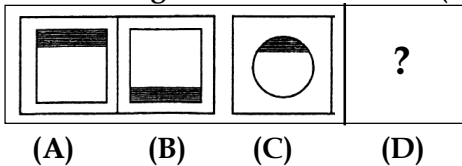
33. Problem Figures ()



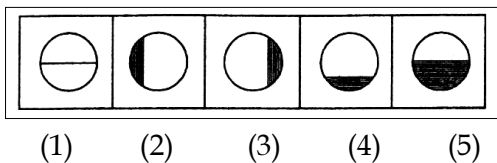
Answer Figures



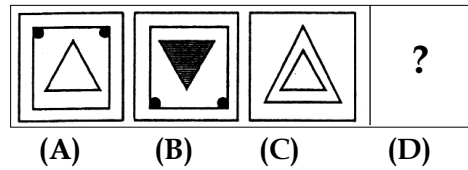
34. Problem Figures ()



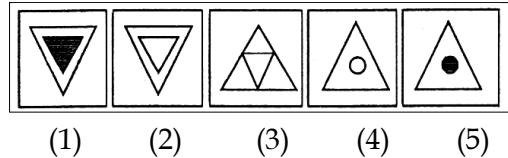
Answer Figures



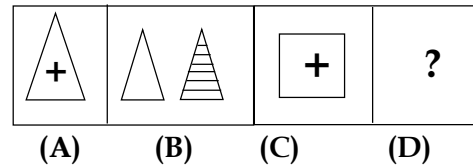
35. Problem Figures ()



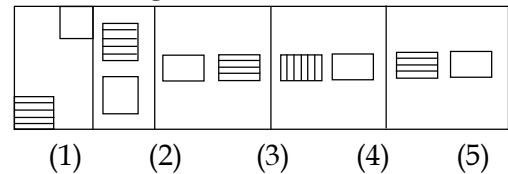
Answer Figures



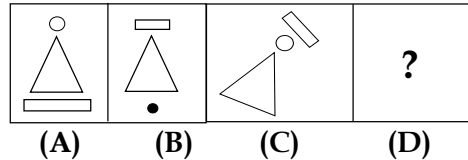
36. Problem Figures ()



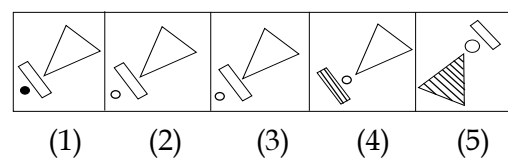
Answer Figures



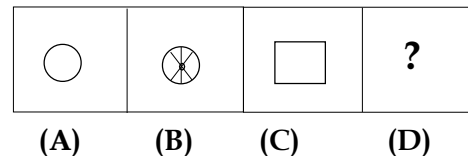
37. Problem Figures ()



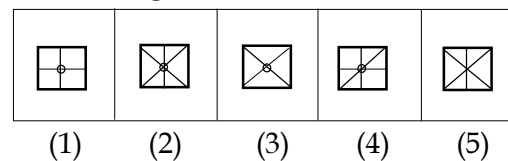
Answer Figures



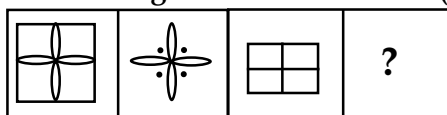
38. Problem Figures ()



Answer Figures

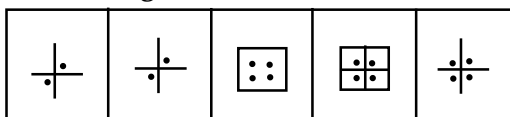


39. Problem Figures ()



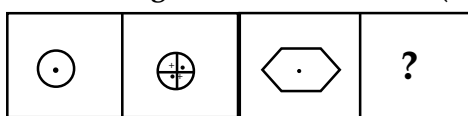
(A) (B) (C) (D)

Answer Figures



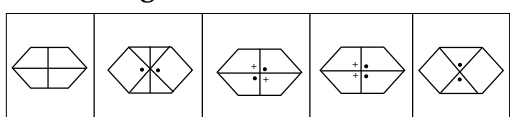
(1) (2) (3) (4) (5)

40. Problem Figures ()



(A) (B) (C) (D)

Answer Figures



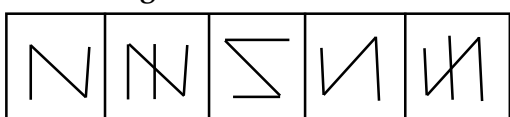
(1) (2) (3) (4) (5)

41. Problem Figures ()



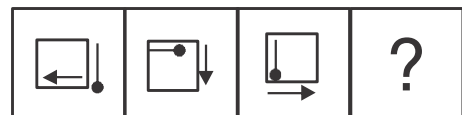
(A) (B) (C) (D)

Answer Figures



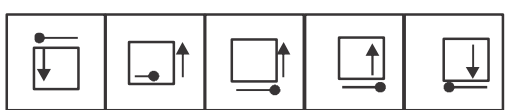
(1) (2) (3) (4) (5)

42. Problem Figures ()



(A) (B) (C) (D)

Answer Figures



(1) (2) (3) (4) (5)

43. Problem Figures ()



(A) (B) (C) (D)

Answer Figures



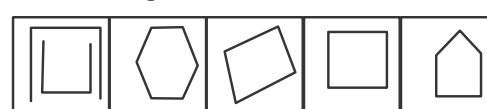
(1) (2) (3) (4) (5)

44. Problem Figures ()



(A) (B) (C) (D)

Answer Figures



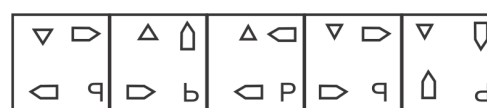
(1) (2) (3) (4) (5)

45. Problem Figures ()



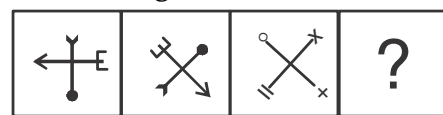
(A) (B) (C) (D)

Answer Figures



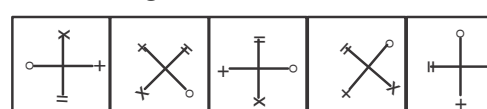
(1) (2) (3) (4) (5)

46. Problem Figures ()



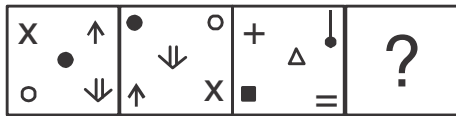
(A) (B) (C) (D)

Answer Figures



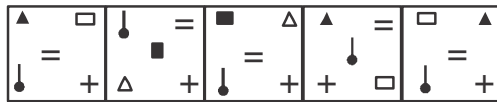
(1) (2) (3) (4) (5)

47. Problem Figures ()



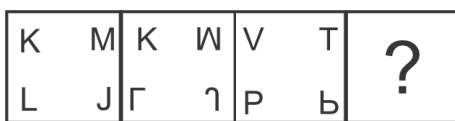
(A) (B) (C) (D)

Answer Figures



(1) (2) (3) (4) (5)

48. Problem Figures ()



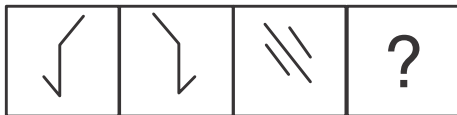
(A) (B) (C) (D)

Answer Figures



(1) (2) (3) (4) (5)

49. Problem Figures ()



(A) (B) (C) (D)

Answer Figures



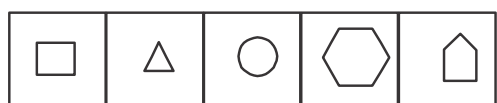
(1) (2) (3) (4) (5)

50. Problem Figures ()



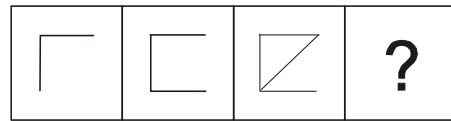
(A) (B) (C) (D)

Answer Figures



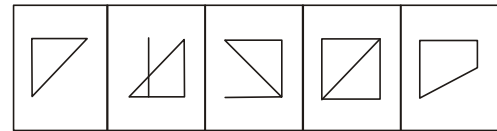
(1) (2) (3) (4) (5)

51. Problem Figures ()



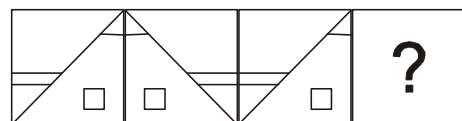
(A) (B) (C) (D)

Answer Figures



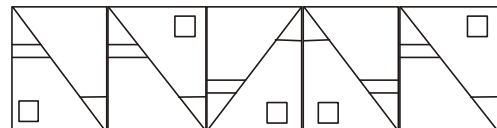
(1) (2) (3) (4) (5)

52. Problem Figures ()



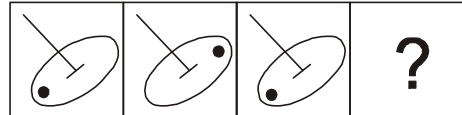
(A) (B) (C) (D)

Answer Figures



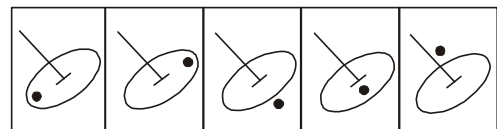
(1) (2) (3) (4) (5)

53. Problem Figures ()



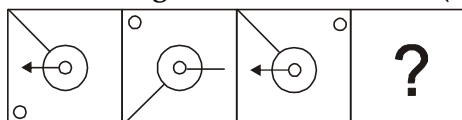
(A) (B) (C) (D)

Answer Figures



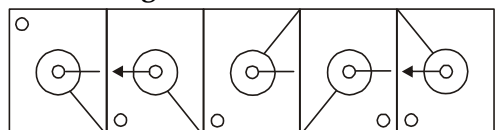
(1) (2) (3) (4) (5)

54. Problem Figures ()



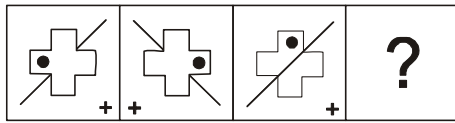
(A) (B) (C) (D)

Answer Figures



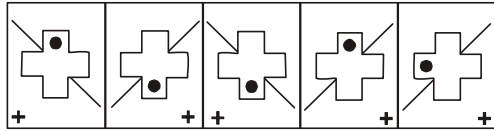
(1) (2) (3) (4) (5)

55. Problem Figures ()



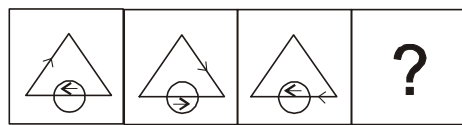
(A) (B) (C) (D)

Answer Figures



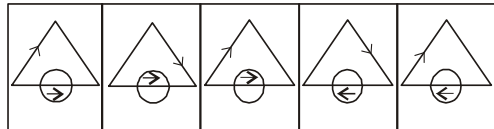
(1) (2) (3) (4) (5)

56. Problem Figures ()



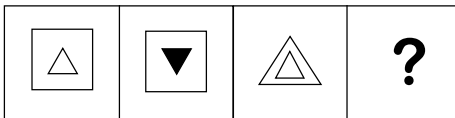
(A) (B) (C) (D)

Answer Figures



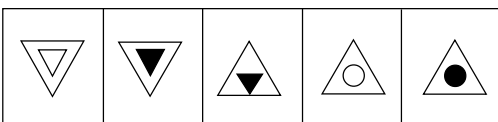
(1) (2) (3) (4) (5)

57. Problem Figures ()



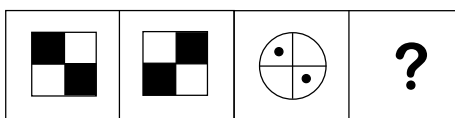
(A) (B) (C) (D)

Answer Figures



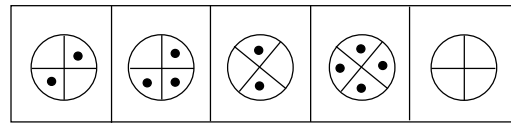
(1) (2) (3) (4) (5)

58. Problem Figures ()



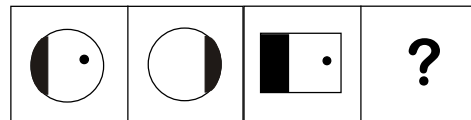
(A) (B) (C) (D)

Answer Figures



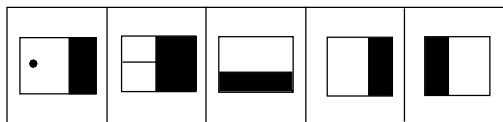
(1) (2) (3) (4) (5)

59. Problem Figures ()



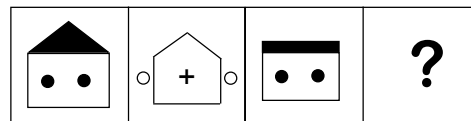
(A) (B) (C) (D)

Answer Figures



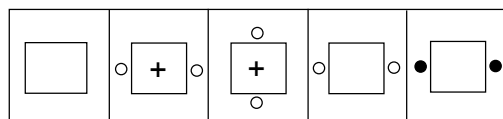
(1) (2) (3) (4) (5)

60. Problem Figures ()



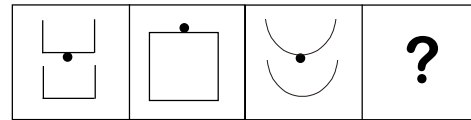
(A) (B) (C) (D)

Answer Figures



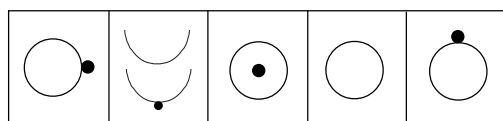
(1) (2) (3) (4) (5)

61. Problem Figures ()



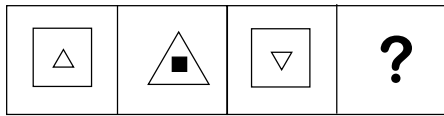
(A) (B) (C) (D)

Answer Figures



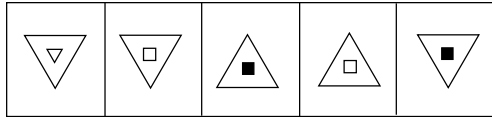
(1) (2) (3) (4) (5)

62. Problem Figures ()



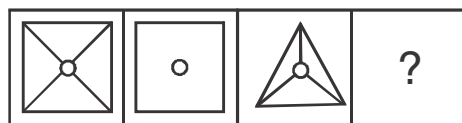
(A) (B) (C) (D)

Answer Figures



(1) (2) (3) (4) (5)

63. Problem Figures ()



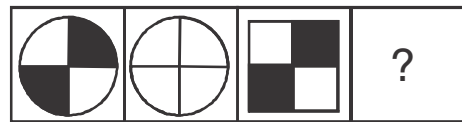
(A) (B) (C) (D)

Answer Figures



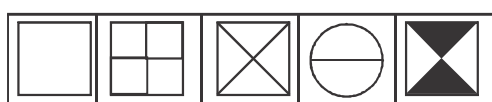
(1) (2) (3) (4) (5)

64. Problem Figures ()



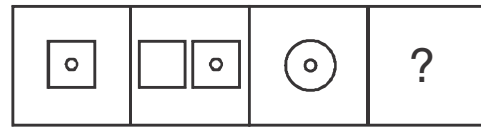
(A) (B) (C) (D)

Answer Figures



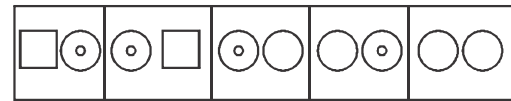
(1) (2) (3) (4) (5)

65. Problem Figures ()



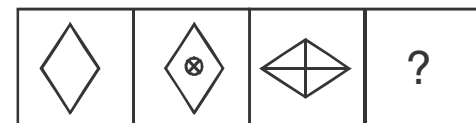
(A) (B) (C) (D)

Answer Figures



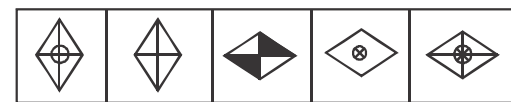
(1) (2) (3) (4) (5)

66. Problem Figures ()



(A) (B) (C) (D)

Answer Figures



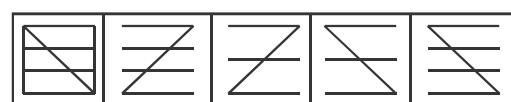
(1) (2) (3) (4) (5)

67. Problem Figures ()



(A) (B) (C) (D)

Answer Figures



(1) (2) (3) (4) (5)

WORKED OUT ANSWERS

1. (3)
Sol. Middle figure comes right bottom and turns clockwise. '⊕' symbol turns $1\frac{1}{2}$ times anti-clockwise. The remaining  figure reverses moving 135° anti clockwise.
2. (3)
Sol. Empty circle changes to shaded circle. In the same way, shaded circle should change to empty circle in the answer figure and triangle moves anti-clockwise.
3. (3)
Sol. Third figure, that is on right side, changes to big one, the remaining two figures goes to innerside of the big figure.
4. (3)
Sol. The 'B' figure is the mirror image of 'A' figure. Answer figure '3' is the mirror image of problem figure 'C'.
5. (1)
Sol. The pentagon in problem figure 'A' changed upward to downward and the wick went inside the pentagon changing half to white in problem figure 'B'. If the same changes take place in problem figure 'C', answer figure '1' will be an accurate figure.
6. (4)
Sol. The arrow on the bottom of hexagon moved clockwise upwards. The line inside the hexagon moved clockwise 2 steps ahead. The small circle outside the hexagon also moved clockwise two steps. These are the changes in the problem figure 'B' compared to 'A'. If the same changes take place in 'C', the answer figure '4' is correct answer.
7. (3)
Sol. If we look at the changes in the problem figure 'B' compared to 'A', the dot inside octagone (8 sides) moved 5 steps clockwise and the line outside the octagone 4 steps clockwise. If the same changes take place in problem figure 'C', answer figure '3' correctly satisfies the question box and best fits.

8. (4)
Sol. In problem figures A, B, C, the  moved clockwise. One side each time reversing its position. The  also moved anti clockwise and reversed its head every time. If the same changes take place, answer figure '4' fits the question box correctly.
9. (3)
Sol. There are two figures in 'A'. They are  and . The  moved clockwise and it should be like . But, it changed its shape and appeared like . Thus, if 'C' figure moves clockwise changes oppositely, answer figure '3' takes place in '?' box.
10. (2)
Sol. Problem figure 'B' is opposite to 'A'. So if 'C' changes opposite to its place, it will be like . But this is not in given answer figures. If we take water image, the figure will be like . This is in answer figure (2). Hence it is to be taken as answer.
11. 1
12. 5
13. 4
14. 3
15. 1
16. 5
17. 1
18. 4
19. 5
20. 4
21. (3)
Sol. From figure 'C' to 'D'.
 should move 2 spaces in clockwise direction.
 should also move in clockwise direction.
Note : The changes that occurred from 'A' to 'B' should also occur from 'C' to 'D'.

22. (1)

Sol. The changes from 'A' to 'B' are explained like this.

_____ / moving like this and shifting places. Following this the same changes occur from 'C' to 'D' like $\rightarrow$.

23. (2)

Sol. Should observe shaded part.

24. (2)

Sol. The total figure is shifting from left to right & up and down.

25. (1)

Sol. In figure 'A' the 5 sided  is rotating in clockwise direction in figure 'B'. And the $5 - 1 = 4$ sided square comes around it . Similarly from figure 'C' rotating in clockwise direction, $4 - 1 = 3$ sided triangle is found encircling the diamond, in option (1).

26. (5)

Sol. The half position of right side is deleted and the shade comes on to left side.

27. (5)

Sol. From 'A' to 'B' one line is added. Similarly there are 2 lines in 'C' and one more line is added in 'D'. i.e., option (5)

28. (1)

Sol. Anticlockwise rotation

29. (3)

Sol. Empty petal is moving in anticlockwise direction with $2\frac{1}{2}$ spaces.

Shaded petal is also moving in anticlockwise direction with $1\frac{1}{2}$ spaces.

30. (1)

Sol. From A to B the square and circle are interchanging their positions. So the positions of  and  are reversed as in (1).

31. 3

32. 5

33. 2

34. 4

35. 1

36. 3

37. 4

38. 2

39. 5

40. 3

41. 1

42. (4)

Inner arrow comes outside & outer dot line comes inside O Based on arrow direction answer is (4.)

43. (5)

One figure in to two figures and also turned/moved left to right & the new figure comes up & down basing on the old figure.

44. (4)

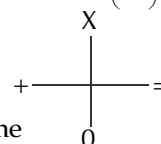
Completed the figure with the given lines in figure one.

45. (4)

First column is with water image second column is with mirror image.

46. (3)

Entire figure rotates one and a half. $\left(1\frac{1}{2}\right)$ anticlockwise direction. Actually answer is but according to given choices option (3) is best one



47. (5)

Elements changed (observation only), from one place to another place. option (1) is the best among options.

48. (2)

Water images of letters.

49. (1)

Turn from left to right lateral inversion

50. (2)

In figure (A) - 8 lines are there ; so $8/2 = 4$ 4 lines are formed as square.

Similarly, 6 - lines are there in circle (inner)

$6/2 = 3$ lines are formed with triangle.

51. 4

52. 4

53. 2

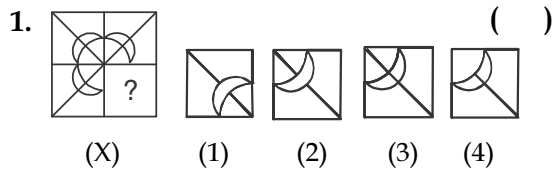
54. 4

55. 3
56. 1
57. (2) The problem figure A which is a white triangle got reversed and became a black triangle. If the same change takes place in problem figure C, it gets reversed and becomes black in 'D' block. Answer figure 2 is correct.
58. (1) The black square is moving in clockwise direction from A to B. Answer figure 1 correctly suits the problem figure 'D'.
59. (4) The dot on the right inner part of the circle in problem figure A disappeared in problem figure B. The black part changed to opposite direction from problem A to problem B. If same changes take place in problem figure 'C', the dot in the square disappears and the black part changes to opposite side to form figure D. Answer figure 4 correctly suits in the problem figure 'D'.
60. (2) The inner black circles in problem figure A changed into white circles and were placed out of the square. The upper black triangle became a white triangle and a 'plus' had come in the middle. The same changes have to take place in problem figure 'C'. The upper black part has to become white, a plus has to come in the middle. The inner black circles have to go out on opposite directions and become white circles. Answer figure 2 is correct.
61. (5)
62. (5) The big square in problem figure A has become a small one and black one. The small triangle became big in size. If the same happens in problem figure 'C', small triangle becomes big and big square becomes small and black.
63. 1
64. 2
65. 4
66. 5
67. 5

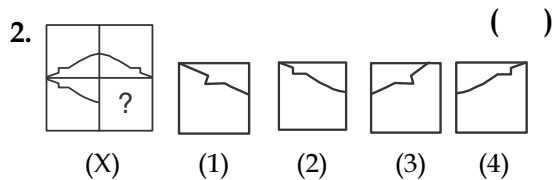
8. COMPLETING FIGURES

Directions :

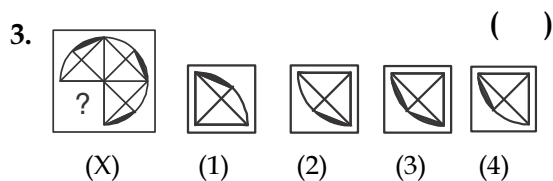
Questions : In these questions a figure (X) is given with three parts and fourth with a ? mark. Find the fourth part from the adjacent figures to complete the figure.



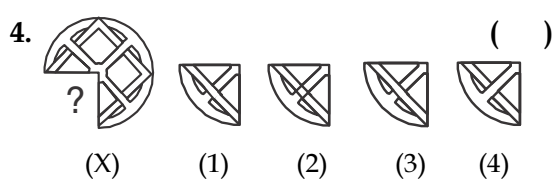
1) 1 2) 2 3) 3 4) 4



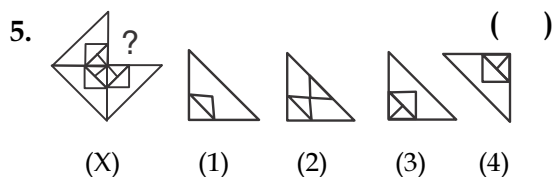
1) 1 2) 2 3) 3 4) 4



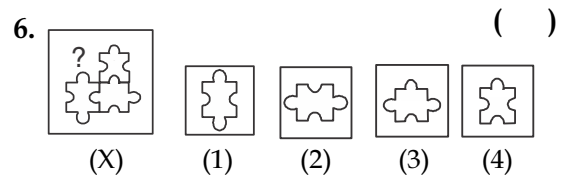
1) 1 2) 2 3) 3 4) 4



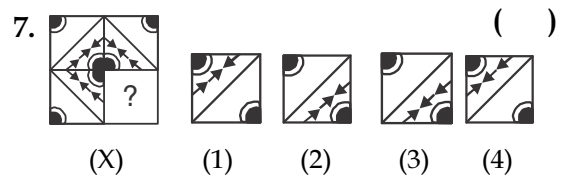
1) 1 2) 2 3) 3 4) 4



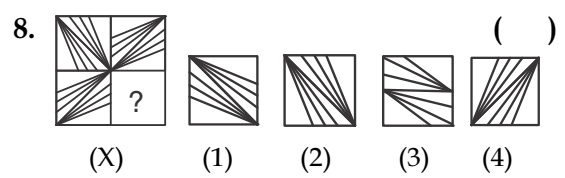
1) 1 2) 2 3) 3 4) 4



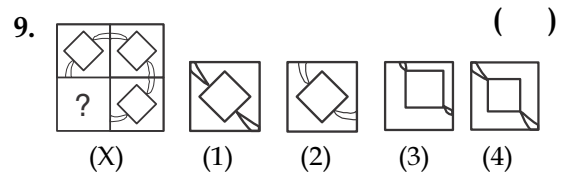
1) 1 2) 2 3) 3 4) 4



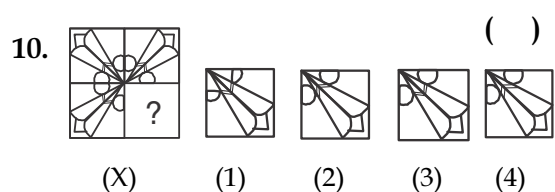
1) 1 2) 2 3) 3 4) 4



1) 1 2) 2 3) 3 4) 4



1) 1 2) 2 3) 3 4) 4



1) 1 2) 2 3) 3 4) 4

KEY

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

9. BALANCING EQUATIONS

Directions :

Questions : In these questions, there are equations that have become wrong due to incorrect order of signs. From the five alternatives given below, find out the correct order of signs, so that the equations become correct.

1. $5 - 2 + 7 = 17$ ()
 1) $+, -, =$ 2) $\times, +, =$ 3) $\times, -, =$
 4) $+, =, -$ 5) $-, +, =$
2. $20 + 10 \div 5 = 10$ ()
 1) $\times, \div, =$ 2) $-, +, =$ 3) $\div, \times, =$
 4) $\div, +, =$ 5) $=, \times, -$
3. $4 \times 42 - 7 \div 2$ ()
 1) $=, \div, -$ 2) $\times, -, \div$ 3) $+, =, \times$
 4) $\times, +, -$ 5) $=, \div, +$
4. $25 + 5 = 7 - 10$ ()
 1) $-, +, =$ 2) $=, -, +$ 3) $+, =, \times$
 4) $-, =, \times$ 5) $=, \times, -$
5. $22 + 5 - 34 = 2$ ()
 1) $+, =, -$ 2) $-, =, \div$ 3) $=, \times, \div$
 4) $+, -, =$ 5) $=, +, -$
6. $2 = 7 + 72 \times 8$ ()
 1) $\times, -, =$ 2) $-, +, =$ 3) $+, =, \div$
 4) $\times, =, \div$ 5) $=, +, \div$
7. $52 - 13 = 8 + 2$ ()
 1) $-, +, =$ 2) $=, +, \times$ 3) $+, =, \times$
 4) $=, \times, \div$ 5) $=, \times, -$
8. $51 + 3 = 5 - 12$ ()
 1) $+, \div, =$ 2) $\div, =, +$ 3) $-, =, \times$
 4) $-, +, =$ 5) $=, \times, +$
9. $15 - 3 + 4 = 3$ ()
 1) $=, -, +$ 2) $\times, -, =$ 3) $+, =, \times$
 4) $\div, =, +$ 5) $=, \times, +$
10. $7 + 2 = 4 - 10$ ()
 1) $+, -, =$ 2) $\times, \div, =$ 3) $-, =, +$
 4) $\times, -, =$ 5) $\times, \div, =$
11. $36 - 9 \times 4 = 8$ ()
 1) $=, +, \dots$ 2) $\times, -, =$ 3) $+, -, =$
 4) $\div, +, =$ 5) $+, -, \times$
12. $2 + 3 \times 5 = 1$ ()
 1) $\times, +, =$ 2) $=, +, -$ 3) $\times, -, =$
 4) $+, -, =$ 5) $+, -, \times$

13. $4 + 3 \times 5 = 17$ ()
 1) $\times, +, =$ 2) $-, +, =$ 3) $=, +, -$
 4) $-, \times, =$ 5) $+, -, \times$
14. $25 = 5 \times 3 + 2$ ()
 1) $-, +, =$ 2) $\div, -, =$ 3) $=, +, -$
 4) $\times, -, =$ 5) $+, -, \times$
15. $17 = 7 - 2 \times 3$ ()
 1) $+, -, =$ 2) $-, \times, =$ 3) $=, \times, +$
 4) $-, =, +$ 5) $+, -, \times$
16. $32 = 21 + 4 - 15$ ()
 1) $-, \times, =$ 2) $+, -, =$ 3) $=, \div, +$
 4) $-, +, =$ 5) $+, -, \times$
17. $15 \times 5 - 4 = 12$ ()
 1) $\div, \times, =$ 2) $=, \times, -$ 3) $+, -, =$
 4) $\div, -, =$ 5) $+, -, \times$
18. $15 - 3 + 4 = 3$ ()
 1) $=, -, +$ 2) $-, \div, =$ 3) $\times, -, =$
 4) $\div, -, =$ 5) $+, -, \times$
19. $6 = 3 + 5 - 8$ ()
 1) $\times, -, =$ 2) $\div, +, =$ 3) $-, +, =$
 4) $+, -, =$ 5) $+, -, \times$
20. $5 = 3 \times 7 - 8$ ()
 1) $=, +, -$ 2) $\times, \div, =$ 3) $+, -, =$
 4) $\times, -, =$ 5) $+, -, \times$
21. $56 = 7 + 2 - 16$ ()
 1) $+, \times, \div$ 2) $-, +, \times$
 3) $\div, \times, =$ 4) $\div, -, -$
22. $34 \times 2 = 17 \div 34$ ()
 1) $-, \times, \div$ 2) $+, +, +$
 3) $-, \div, \times$ 4) $\div, +, =$
23. $10 \times 5 = 2 \div 4$ ()
 1) $\div, +, =$ 2) $-, +, \div$
 3) $\times, -, =$ 4) $=, \times, -$
24. $210 \div 15 = 15 - 15$ ()
 1) $+, -, \times$ 2) $+, =, \div$
 3) $-, \times, \times$ 4) $=, \times, -$
25. $900 = 30 \div 2 \times 15$ ()
 1) $\times, =, +$ 2) $\div, =, \times$
 3) $+, \div, \times$ 4) $=, \times, \times$

26. $729 = 9 + 9 \times 9$ ()
 1) $+, +, +$ 2) $=, \times, \div$
 3) $=, \div, \times$ 4) $=, \times, \times$
27. $15 \div 10 = 2 \times 3$ ()
 1) $\times, \div, +$ 2) $\times, +, -$
 3) $=, +, +$ 4) $=, \div, +$
28. $64 \div 48 = 4 \div 4$ ()
 1) $=, +, \times$ 2) $=, -, \times$
 3) $\div, +, \div$ 4) $\times, \div, \div$

29. $30 = 2 + 9 + 12$ ()
 1) $=, +, \times$ 2) $=, \times, +$
 3) $\div, \times, -$ 4) $+, \times, \div$
30. $196 \div 13 + 13 = 27$ ()
 1) $=, +, \times$ 2) $=, \div, \times$
 3) $+, \div, +$ 4) $=, \times, +$

WORKED OUT ANSWERS

1. (2) $\times, +, =$
 2. (3) $\div, \times, =$
 3. (1) $=, \div, -$
 4. (5) $=, \times, -$
 5. (2) $-, =, \div$
 6. (3) $+, =, \div$
 7. (4) $=, \times, \div$
 8. (2) $\div, =, +$
 9. (5) $=, \times, +$
 10. (4) $\times, -, =$
 11. (4) $\div, +, =$
 12. (3) $\times, -, =$
 13. (1) $\times, +, =$
 14. (2) $\div, -, =$
 15. (3) $=, \times, +$
 16. (4) $-, +, =$
 17. (1) $\div, \times, =$
 18. (2) $-, \div, =$
 19. (3) $-, +, =$
 20. (4) $\times, -, =$
 21. (3)
 Sol. $56 = 7 + 2 - 16$
 $56 \div 7 \times 2 = 16$
 $8 \times 2 = 16$
 $16 = 16$
22. (4)
 Sol. $34 \times 2 = 17 \div 34$
 $34 \div 2 + 17 = 34$
 $17 + 17 = 34$
 $34 = 34$
23. (1)
 Sol. $10 \times 5 = 2 \div 4$
 $10 \div 5 + 2 = 4$
 $2 + 2 = 4$
 $4 = 4$

24. (4)
 Sol. $210 \div 15 = 15 - 15$
 $210 = 15 \times 15 - 15$
 $210 = 225 - 15$
 $210 = 210$
25. (2&4)
 Sol. $900 = 30 \div 2 \times 15$ | $900 = 30 \div 2 \times 15$
 $900 \div 30 = 2 \times 15$ | $900 = 30 \times 2 \times 15$
 $30 = 30$ | $900 = 900$
26. (4)
 Sol. $729 = 9 + 9 \times 9$
 $729 = 9 \times 9 \times 9$
 $729 = 729$
27. (3)
 Sol. $15 \div 10 = 2 \times 3$
 $\downarrow \quad \downarrow \quad \downarrow$
 $15 = 10 + 2 + 3$
 $15 = 15$
28. (1)
 Sol. $64 \div 48 = 4 \div 4$
 $64 = 48 + 4 \times 4$
 $64 = 48 + 16$
 $64 = 64$
29. (2)
 Sol. $30 = 2 + 9 + 12$
 $30 = 2 \times 9 + 12$
 $30 = 30$
30. (4)
 Sol. $196 \div 13 + 13 = 27$
 $196 = 13 \times 13 + 27$
 $196 = 169 + 27 \Rightarrow 196 = 196$

10. ODD MAN OUT

Directions :

Questions : In these questions, there are five alternatives among which four alternatives are alike but one is different from others. Find out that different one alternative and indicate your correct response.

1. 1) 131 2) 151 3) 161 ()
4) 171 5) 181
2. 1) Three 2) Four 3) Five ()
4) Six 5) Nine
3. 1) 169 2) 179 3) 135 ()
4) 149 5) 157
4. 1) Dr. Abdul Kalam ()
2) Sardar Vallabhbhai Patel
3) Pratibha Patil
4) Dr. Rajendra Prasad
5) Pranab Mukherjee
5. 1) Anxiety 2) Anger 3) Sorrow
4) Joy 5) Feeling ()
6. 1) Listen 2) Fell 3) Think ()
4) Sing 5) Hear
7. 1) Eye 2) Ear 3) Nose ()
4) Tongue 5) Hand
8. 1) A 2) U 3) I ()
4) Y 5) O
9. 1) Copper 2) Iron 3) Gold ()
4) Silver 5) Wood
10. 1) Crow 2) Pigeon 3) Bat ()
4) Bulbul 5) Parrot
11. 1) Malaysia 2) Tunisia 3) Brazil
4) Europe 5) Russia ()
12. 1) Bidar 2) Nagpur ()
3) Haryana 4) Jhansi 5) Indore
13. 1) Veena 2) Violin 3) Tabla ()
4) Guitar 5) Sitar
14. 1) Carrot 2) Brinjal 3) Tomato
4) Drumstick 5) Bitter Gourd ()
15. 1) Camel 2) Pigeon 3) Cow ()
4) Dog 5) Goat
16. 1) C.V. Raman ()
2) M.S. Swaminathan
3) U.R. Rao
4) Jayant V. Narlikar
5) Swami Agnivesh
17. 1) Chemistry 2) Geology 3) Astronomy
4) History 5) Physics ()
18. 1) Hatred 2) Anger 3) Happiness
4) Sorrow 5) Jealousy ()
19. 1) Kolkata 2) Bellary 3) Indore ()
4) Calicut (Kozhikode) 5) Patiala
20. 1) Curd 2) Oil ()
3) Butter 4) Ghee 5) Milk
21. 1) Lucknow 2) Jaipur ()
3) Indore 4) Ranchi 5) Shillong
22. 1) Norway 2) Finland ()
3) Portugal 4) Brazil 5) Belgium
23. 1) Dr. Sarvepalli Radhakrishnan ()
2) Dr. Rajendra Prasad
3) Sri. V. V. Giri
4) Dr. Zakir Hussain
5) Sardar Vallabhai Patel
24. 1) Potato 2) Peach ()
3) Papaya 4) Banana 5) Mango
25. 1) Eye 2) Ear 3) Nose ()
4) Tongue 5) Hand
26. 1) Cauliflower ()
2) Jasmine 3) Rose 4) Lily
5) Champak
27. 1) Kathakali 2) Bhangra ()
3) Disco 4) Kathak 5) Kuchipudi
28. 1) Ravindranath Tagore ()
2) Swami Vivekanand
3) R. K. Narayan
4) Subramania Bharati
5) Munshi Premchand
29. 1) Guitar 2) Sitar 3) Violin ()
4) Veena 5) Tabla
30. 1) Diamond 2) Sapphire ()
3) Ruby 4) Silver 5) Jade

31. 1) Mango 2) Potato 3) Onion ()
4) Cabbage 5) Cauliflower
32. 1) Ooty 2) Chennai ()
3) Bhopal 4) Hyderabad
5) Ahmedabad
33. 1) Tirupati 2) Amristar 3) Kashi ()
4) Agra 5) Badrinath
34. 1) Guitar 2) Tabla 3) Sitar ()
4) Veena 5) Dholak
35. 1) E-mail 2) SMS 3) Blog ()
4) MMS 5) Postal letter
36. 1) Kuchipudi 2) Kathak
3) Salsa 4) Bhangra ()
5) Bharatanattyam
37. 1) Tubelight 2) Fan 3) Bulb ()
4) Torch 5) Candle
38. 1) Notebook 2) Textbook 3) Novel ()
4) Magazine 5) Newspaper
39. 1) Water 2) Juice 3) Milk ()
4) Sandwich 5) Cool drink
40. 1) Uncle 2) Aunt 3) Mother
4) Niece 5) Nephew ()
41. 1) France 2) Germany ()
3) Spain 4) Srilanka 5) Italy
42. 1) Parrot 2) Cat 3) Cow ()
4) Goat 5) Rat
43. 1) Parrot 2) Duck ()
3) Sparrow 4) Cuckoo (Koel)
5) Eagle
44. 1) Guitar 2) Violin 3) Flute ()
4) Sitar 5) Veena
45. 1) Nose 2) Ear 3) Eye ()
4) Skin 5) Liver
46. 1) Milk 2) Curd 3) Ghee ()
4) Cream 5) Oil
47. 1) Physics 2) Sociology ()
3) Economics 4) Philosophy
5) Psychology
48. 1) Tomato 2) Beans ()
3) Potato 4) Brinjal 5) Cucumber
49. 1) Anger 2) Sorrow ()
3) Jealousy 4) Joy 5) Hatred
50. 1) Chennai 2) Nagpur ()
3) Shillong 4) Mumbai 5) Bhopal
51. 1) Curd 2) Butter 3) Oil ()
4) Cheese 5) Cream
52. 1) Puppy 2) Lamb 3) Larva ()
4) Hen 5) Cub
53. 1) Scale 2) Temperature ()
3) Odometer 4) Balance 5) Barometer
54. 1) Window 2) Terrace 3) Roof ()
4) Door 5) House
55. 1) Tomato 2) Potato 3) Brinjal ()
4) Lady's finger
5) Bitter gourd
56. 1) Root 2) Flower 3) Tree ()
4) Bud 5) Stem
57. 1) Gold 2) Pearl 3) Diamond
4) Silver 5) Iron ()
58. 1) Pyjamas 2) Pantaloon ()
3) Cloth 4) Coat 5) Shirt
59. 1) Pen 2) Pencil ()
3) Fountain pen 4) Crayon
5) Eraser
60. 1) Lotus 2) Sunflower ()
3) Rose 4) Jasmine 5) Marigold
61. 1) Table 2) Chair 3) Almarah
4) Bench 5) Jug ()
62. 1) India 2) Srilanka 3) Mexico
4) Asia 5) France ()
63. 1) Mysore 2) Odisha 3) Warangal ()
4) Nagpur 5) Jodhpur
64. 1) Hand 2) Intestine 3) Elbow ()
4) Leg 5) Knee
65. 1) Deer 2) Cow 3) Eagle ()
4) Cat 5) Goat
66. 1) Potato 2) Orange 3) Mango
4) Banana 5) Grape ()
67. 1) Ravindranath Tagore ()
2) C.V. Raman
3) Jagadish Chandra Bose
4) Ramanujam 5) Homi J. Bhabha
68. 1) M.L.A. 2) M.P. 3) M.P.P.
4) Sarpanch 5) Collector ()

69. 1) Centimeter 2) Meter 3) Yard ()
4) Gram 5) Kilogram
70. 1) Voice 2) Height 3) Weight
4) Character 5) Complexion ()
71. 1) Lucknow 2) Patna ()
3) Bhopal 4) Jaipur 5) Mysore
72. 1) Sitar 2) Guitar ()
3) Tanpur 4) Mrudangam
5) Violin
73. 1) Diamond 2) Gold ()
3) Sapphire 4) Ruby 5) Emerald
74. 1) Spinach 2) Potato ()
3) Radish 4) Carrot 5) Tomato
75. 1) Grandfather ()
2) Father-in-law 3) Son
4) Brother 5) Father
76. 1) Rice 2) Wheat ()
3) Maize 4) Jowar 5) Cotton
77. 1) Pituitary 2) Thyroid ()
3) Heart 4) Pancreas
5) Adrenal
78. 1) Fertilizer 2) Root ()
3) Stem 4) Branch 5) Leaf
79. 1) Necklace 2) Belt ()
3) Ring 4) Bangle 5) Bracelet
80. 1) Snake 2) Chameleon ()
3) Whale 4) Lizard 5) Crocodile

WORKED OUT ANSWERS

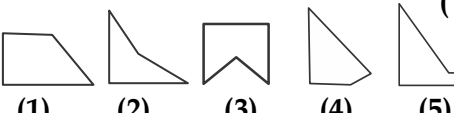
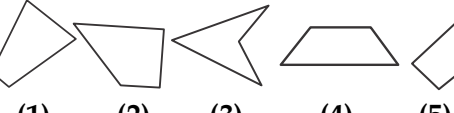
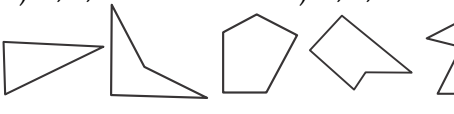
1. (1) 151, 161, 171 & 181 differ from one another by 10 digits successively but option (1) 131 has a difference of 20 with its succeeding number 151.
2. (5) The first four options are ascending with a difference of 1 whereas the last option nine differs from its preceding number by 3 digits.
3. (1) The number 169 have a square root of 13 whereas the remaining options do not have square roots.
4. (2) Sardar Vallabhai Patel was the Home Minister of India. The remaining four were Presidents.
5. (5) Anxiety, anger, sorrow and joy are the different types of feelings.
6. (4) Out of the 5 options, except sing all the four are ordinary activities where as 'Sing' is an art form.
7. (5) Except hand, eye, ear, nose and tongue are sense organs.
8. (4) All are vowels except 'Y' which is a consonant.
9. (5) All are metals except wood.
10. (3) Out of the 5 options bat is a mammal whereas the remaining 4 belong to aves group.
11. (4) Europe is a continent and remaining all are countries.
12. (3) Haryana is a state and remaining all are cities.
13. (3) Veena, Violin, Guitar and Sitar are musical string instruments. Tabla is not a musical string instrument.
14. (1) Carrot is an underground tuber which grows under the soil. It is stored food form of the plant. Remaining all are grown on the top of the soil.
15. (2) Pigeon is a bird and remaining all are animals.
16. (5) Swami Agnivesh is a Hindu religion guru remaining all are Scientists.
17. (4) History is the study of past events. Remaining all are related to science.
18. (3) Happiness is related to joy. Remaining all are related to sadness.
19. (1) Kolkata is a capital city remaining all are not.
20. (2) Curd, Butter, Ghee and Milk are Milk products. Oil is not.

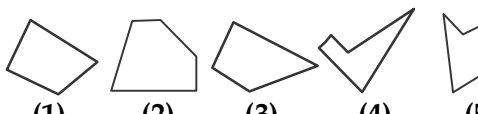
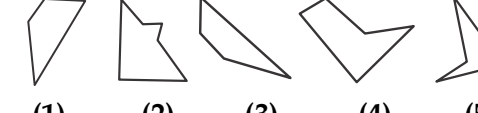
21. (3) Indore
22. (4) Brazil
23. (5) Sardar Vallabhai Patel
24. (1) Potato
25. (5) Hand
26. (1) Cauliflower
27. (3) Disco
28. (2) Swami Vivekanand
29. (5) Tabla
30. (4) Silver
31. (1) Mango
32. (1) Ooty
33. (4) Agra
34. (1) Guitar
35. (5) Postal letter
36. (3) Salsa
37. (2) Fan
38. (1) Notebook
39. (3) Milk
40. (3) Mother
41. (4) Except Srilanka, remaining France, Germany, Spain and Italy are in Europe.
42. (1) Parrot is a bird. The remaining all are not birds.
43. (2) Except duck, remaining all are birds.
44. (3) Except flute, remaining all are stringed musical instruments.
45. (5) Liver is an internal organ.
46. (5) Oil is not a produce of milk. Milk, curd, ghee and cream belong to milk group.
47. (1) Except Physics, all other are social sciences and humanity subjects.
48. (5) Cucumber is a creeper where as Tomato, Beans, Potato, Brinjal are Shrubs.
49. (4) Anger, Sorrow, Jealousy and Hatred are the words related to unhappiness. Joy is a word that expresses happiness.
50. (2) Nagpur is not a capital city. Remaining all are capitals of states.
51. (3) curd, butter, cheese, cream are related to milk. Oil is an odd word.
52. (4) Hen
53. (2) Temperature
54. (5) Window, door, terrace, roof are parts of a house. Here 'House' which is a complete identity is an odd word.
56. (3) Root, flower, bud and stem are parts of a tree. Tree which is a complete identity is an odd word.
57. (5) Gold, Diamond, Silver, Iron are metals and minerals available from ground. Pearl is an animal concerned calcium product.
58. (3) Pyjamas, pantaloons, coat, shirt are wearing dresses. Cloth is a finished product, which we don't wear directly. Hence cloth is an odd word.
59. (5) Pen, pencil, fountain pen, crayon are writing materials. Eraser is not a writing material.
60. (1) Lotus is a water plant. Hence it is an odd word.
61. (5) Jug
62. (4) Asia
63. (2) Odisha
64. (2) Intestine
65. (3) Eagle
66. (1) Potato
67. (4) Ramanujam
68. (5) Collector
69. (3) Yard
70. (1) Voice
71. (5) Mysore
72. (4) Mrudangam
73. (1) Diamond
74. (1) Spinach
75. (2) Father-in-law
76. (5) Cotton
77. (3) Heart
78. (1) Fertilizer
79. (2) Belt
80. (2) Chameleon

11. COMPLETING THE SQUARE

Directions :

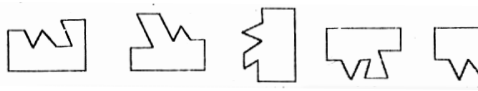
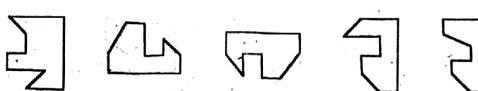
Questions : Select from the given 5 alternatives when filled into each other would form a complete Square.

1.  ()
 (1) (2) (3) (4) (5)
 1) 1, 4, 5 2) 2, 3, 4 3) 1, 3, 4 4) 2, 3, 5
2.  ()
 (1) (2) (3) (4) (5)
 1) 1, 4, 5 2) 1, 3, 5
 3) 2, 3, 5 4) 2, 3, 4
3.  ()
 (1) (2) (3) (4) (5)
 1) 1, 3, 4 2) 1, 2, 4
 3) 2, 3, 4 4) 3, 4, 5
4.  ()
 (1) (2) (3) (4) (5)
 1) 1, 2, 3 2) 2, 3, 5
 3) 2, 4, 5 4) 1, 4, 5
5.  ()
 (1) (2) (3) (4) (5)
 1) 1, 4, 5 2) 2, 3, 4
 3) 2, 4, 5 4) 1, 3, 5
6.  ()
 (1) (2) (3) (4) (5)
 1) 1, 2, 3 2) 1, 2, 5
 3) 2, 3, 4 4) 2, 4, 5

7.  ()
 (1) (2) (3) (4) (5)
 1) 1, 2, 4 2) 2, 3, 4
 3) 3, 4, 5 4) 2, 3, 5
8.  ()
 (1) (2) (3) (4) (5)
 1) 1, 2, 3 2) 1, 2, 4
 3) 1, 2, 5 4) 2, 3, 5
9.  ()
 (1) (2) (3) (4) (5)
 1) 1, 2, 5 2) 1, 2, 3
 3) 2, 3, 5 4) 2, 3, 4
10.  ()
 (1) (2) (3) (4) (5)
 1) 1, 2, 3 2) 1, 3, 4
 3) 1, 3, 5 4) 1, 4, 5

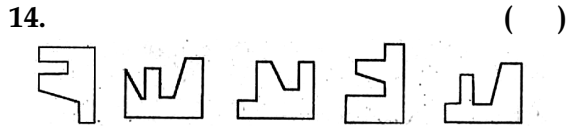
Directions :

Questions : Select a figure from the given 5 alternatives which fits exactly into figure X to form a complete Square.

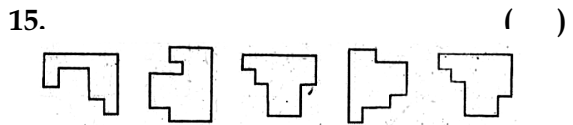
11.  ()
 (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3
 4) 4 5) None
12.  ()
 (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3
 4) 4 5) None



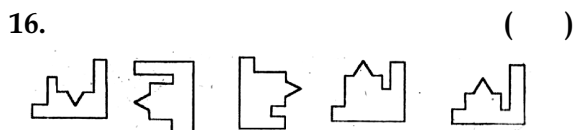
- (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3
 4) 4 5) None



- (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3
 4) 4 5) None



- (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3
 4) 4 5) None



- (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3
 4) 4 5) None



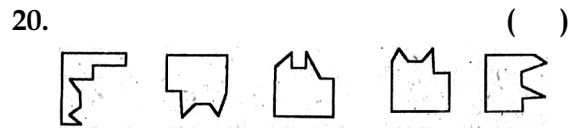
- (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3
 4) 4 5) None



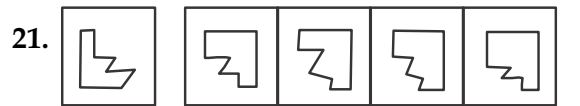
- (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3
 4) 4 5) None



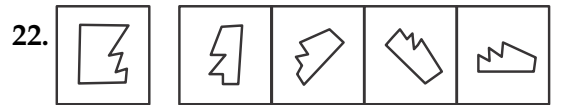
- (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3
 4) 4 5) None



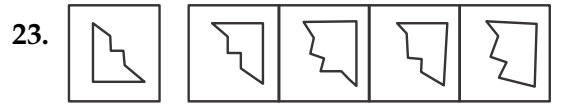
- (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3
 4) 4 5) None



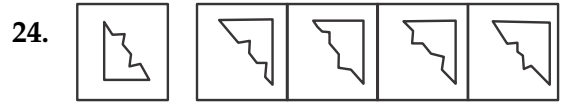
- (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None



- (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None

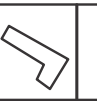
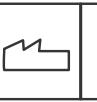
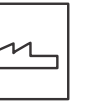
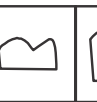


- (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None



- (X) (1) (2) (3) (4)
 1) 1 2) 2 3) 3 ()
 4) 4 5) None

25.  (X)  (1)  (2)  (3)  (4)
- 1) 1 2) 2 3) 3 ()
4) 4 5) None
26.  (X)  (1)  (2)  (3)  (4)
- 1) 1 2) 2 3) 3 ()
4) 4 5) None
27.  (X)  (1)  (2)  (3)  (4)
- 1) 1 2) 2 3) 3 ()
4) 4 5) None

28.  (X)  (1)  (2)  (3)  (4)
- 1) 1 2) 2 3) 3 ()
4) 4 5) None
29.  (X)  (1)  (2)  (3)  (4)
- 1) 1 2) 2 3) 3 ()
4) 4 5) None
30.  (X)  (1)  (2)  (3)  (4)
- 1) 1 2) 2 3) 3 ()
4) 4 5) None

KEY

1. 2	2. 4	3. 1	4. 3	5. 4	6. 3	7. 2	8. 1	9. 1	10. 2
11. 4	12. 3	13. 1	14. 4	15. 4	16. 3	17. 4	18. 4	19. 2	20. 3
21. 3	22. 2	23. 1	24. 2	25. 2	26. 2	27. 4	28. 4	29. 1	30. 2

12. LETTER SERIES

Directions :

In the following questions, letters/letter groups are arranged in a particular order with some underlying criterion. Study the order and choose the answer from the alternative to fill the gaps. Indicate the right answer as per the 'Instructions'.

1. A, C, F, H, ()
1) I 2) L 3) J
4) K 5) M
2. A, G, L, P ()
1) R 2) S 3) Q
4) T 5) U
3. AC, EG, IK, ()
1) MN 2) MP 3) LN
4) LO 5) MO
4. AZ, BX, CV, ()
1) DS 2) ET 3) DT
4) DU 5) DW
5. A, E, G, K, ()
1) M 2) L 3) N
4) O 5) J
6. AF, HL, NQ, ()
1) SV 2) SU 3) TU
4) TV 5) ST
7. ZYX, ABC, VUT, EFG, ()
1) PQR 2) RPQ 3) QPO
4) RQP 5) QOP
8. ABC, ZYX, DEF, WVU, ()
1) HIJ 2) IJK 3) GHI
4) UTS 5) HIG
9. Z, X, U, Q, ()
1) K 2) M 3) N
4) J 5) L
10. AFK, BGL, CHM, DIN, ()
1) GJO 2) EJO 3) GJN
4) EJN 5) FIO
11. A, B, D, E, G, ()
1) F 2) I 3) J
4) H 5) C
12. B, G, K,, P ()
1) N 2) O 3) M
4) L 5) H
13. B, E, H, K, N, ()
1) O 2) P 3) Q
4) R 5) M
14. AZ, CX, EV, GT, ()
1) HT 2) HR 3) RI
4) RS 5) IR
15. A, C, G, I, M, O, ()
1) R 2) S 3) T
4) Q 5) P
16. AB, EF, IJ, MN, ()
1) QS 2) RS 3) OP
4) QR 5) PQ
17. Y, WV, SRQ, MLKJ, ()
1) EBCA 2) EDCBA
3) EDCBF 4) FEDCB
5) FECBA
18. IJKL, KLMN, MNOP, ()
1) OPQR 2) OPRS 3) NOPQ
4) NOPR 5) PQRS
19. MEU, NFV, OGW, PHX, ()
1) QHY 2) RIY 3) QIY
4) RHY 5) QIX
20. QRST, OPQR, MNOP, KLMN ()
1) IJLM 2) JKLM 3) HIJK
4) HJKL 5) IJKL
21. A, D, E, H, I, L,, ()
1) M, P 2) M, N 3) M, O
4) M, Q 5) N, M
22. CD, HI, MN, ()
1) QS 2) RS 3) OP
4) PQ 5) ST

23. **A, G, L, P, S,** ()
1) X 2) Y 3) W
4) U 5) Z
24. **C, F, I, L, O,** ()
1) P 2) Q 3) R
4) S 5) D
25. **A, I, P, V, A, E,** ()
1) F 2) G 3) H
4) I 5) E
26. **C, E, I, K, O, Q,** ()
1) R 2) S 3) T
4) U 5) V
27. **CD, GH, KL, OP, ST,** ()
1) RS 2) QR 3) GH
4) WX 5) RN
28. **XD, WC,, YA** ()
1) XY 2) CD 3) OP
4) WV 5) ZB
29. **AI, BJ, CK,,** ()
1) LM 2) GH 3) QR
4) SE 5) DL
30. **AC, EG, BD, FH, IK,** ()
1) LM 2) OP 3) IJ
4) JL 5) JK
31. **A, D, G, J,,** ()
1) N, P 2) N, O 3) M, O
4) M, P 5) O, P
32. **A, D, H, M,, Z** ()
1) T 2) S 3) R
4) U 5) P
33. **Z, X, V, T,,** ()
1) R, Q 2) S, Q 3) P, Q
4) R, O 5) R, P
34. **AZ, BW, CT, DQ,** ()
1) AN 2) BN 3) EP
4) EM 5) EN
35. **AB, DE, HI, MN,** ()
1) ST 2) TU 3) TV
4) RS 5) UV
36. **D, FG, IJK, MNOP,** ()
1) QRSTU 2) RSTU 3) RSTUV
4) RST 5) STUV
37. **ZY, WU, TS, QP** ()
1) ON 2) MN 3) NM
4) OM 5) NO
38. **W, UT, RQP, NMLK,** ()
1) IHGFE 2) HGFED
3) IHGF 4) JIHGF 5) JIHG
39. **ZYX, YXW, XWV, WVU,** ()
1) UTS 2) VUT 3) UVT
4) TUV 5) VUS
40. **ADF, BEG, CFH, DGI,** ()
1) EFG 2) EGI 3) EGJ
4) EHJ 5) EGH
41. **A, E, I, M,,** ()
1) Q, V 2) P, S 3) Q, U
4) P, Q 5) Q, T
42. **B, E, I, N,, A** ()
1) S 2) R 3) T
4) U 5) Q
43. **Z, W, T, Q, N,,** ()
1) L, I 2) K, H 3) L, J
4) K, G 5) K, I
44. **AZ, CX, EV, GT,** ()
1) IQ 2) HR 3) IS
4) HS 5) IR
45. **BC, FG, JK,, RS** ()
1) ON 2) MN 3) OP
4) NO 5) NQ
46. **A, CD, GHI,, UVWXY** ()
1) MNOP 2) LMNO
3) NOPQ 4) MNO 5) LMN

47. DEFG, FGHI, HIJK,, LMNO.

()

- 1) KLMN 2) JKNO 3) LMNO
4) JKLM 5) JKMN

48. BDF, GIK, LNP, ()

- 1) QRT 2) RTV 3) QSU
4) RSU 5) QRS

49. ZYVU, TSPO, NMJI, ()

- 1) HFDB 2) GFHE 3) HGFE
4) HGDC 5) GHDC

50. ACF, ZXU, GIL, ()

- 1) SPN 2) TRO 3) SQO
4) TQP 5) TRP

51. BCEF, GHJK, LMOP, QRTU, ? ()

- 1) VWYZ 2) UWXY
3) WXYZ 4) UVWX
5) VXYW

52. B, G, K, N, ()

- 1) Q 2) P 3) R
4) O 5) S

53. ZA, XB, VC, TD, ()

- 1) RA 2) SE 3) SF
4) RE 5) RF

54. AC, DF, GI, JL, ()

- 1) MN 2) MO 3) MP
4) NP 5) NO

55. Z, XW, UTS, QPON, ()

- 1) LKJI 2) MLKJIH
3) MLKJI 4) MLKJ 5) LKJIH

56. AB, DF, HK, MQ, ()

- 1) RW 2) RX 3) SW
4) SX 5) SV

57. ZY, XV, UR, QM, ()

- 1) LG 2) LI 3) LH
4) KJ 5) KG

58. AFK, BGL, CHM, DIN, ()

- 1) EJO 2) EKO 3) EOP
4) EJP 5) FIO

59. XWV, WVU, VUT, UTS, ()

- 1) SRQ 2) TRS 3) TSR
4) TSQ 5) SRT

60. A, CD, GHI, MNOP, ()

- 1) VWXY 2) VWXYZ 3) UVXYZ
4) UVWX 5) UVWXY

61. A, C, E, G, ?, ? ()

- 1) I, K 2) H, I 3) I, J
4) K, M 5) M, N

62. B, D, F, H, ?, ? ()

- 1) I, J 2) J, L 3) K, L
4) L, M 5) K, M

63. DE, VW, FG, TU, ? ()

- 1) LS 2) IJ 3) JL
4) ST 5) HI

64. AB, EF, IJ, MN ? ()

- 1) PQ 2) OP 3) QR
4) RS 5) ST

65. ZX, VT, RP, NL, ? ()

- 1) JI 2) KI 3) JH
4) IH 5) IL

66. ACE, BDF, GIK, HJL, ? ()

- 1) LNO 2) KMO 3) NPQ
4) MOP 5) MOQ

67. YXW, BCD, UTS, FGH, ? ()

- 1) QPO 2) PQR 3) QOM
4) MNO 5) QRS

68. A, CD, FGH, JKLM, ? ()

- 1) OPQ 2) LMN 3) OPQRS
4) PQRST 5) NOPQR

69. UVWXY, VWXY, WXY, XY, ? ()

- 1) Y 2) XY 3) W
4) YZ 5) V

WORKED OUT ANSWERS

1. (4) 1 3 6 8 11
A, C, F, H, K.....
+2 +3 +2 +3

K

2. (2) 1 7 12 16 19
A, G, L, P, S.....
+6 +5 +4 +3

3. (5) AC, EG, IK, MO..
+2 +2 +2 +2

MO

4. (3) 1 26 2 24 3 22 4 20
A Z, B X, C V, D T
DT

5. (1) +4 +2 +4 +2
A, E, G, K, M.....
M

6. (2) 1 6 8 12 14 17 19 21
A F, H L, N Q, S U
+5 +4 +3 +2
SU

7. (4) 26 25 24 1 2 3 22 21 20 5 6 7 18 17 16
Z Y X, A B C, V U T, E F G, R Q P
X Y Z T U V P Q R
← ← ←
RQP

8. (3) 1 2 3 4 5 6 7 8 9
A B C, Z Y X, D E F, W V U, G H I
26 25 24 23 22 21

GHI

9. (5) 26 24 21 17 12
Z, X, U, Q, L.....
-2 -3 -4 -5
L

10. (2) 1 6 11 2 7 12 3 8 13 4 9 14 5 10 15
A F K, B G L, C H M, D I N, E J O
+5 +5 +5 +5 +5 +5 +5

11. (4) H

12. (1) N

13. (3) Q

14. (5) IR

15. (2) S

16. (4) QR

17. (2) EDCBA

18. (1) OPQR

19. (3) QIY

20. (5) IJKL

21. (1) M, P

22. (2) RS

23. (4) U

24. (3) R

25. (3) H

26. (4) U

27. (4) WX

28. (5) ZB

29. (5) DL

30. (4) JL

31. (4) A (B) (C) D (E) (F) G (H)
(I) J (K) (L) M (N) (O) P

32. (2) S

33. (5) Z (Y) X (W) V (U) T (S)
R (Q) P. Every alternative is
left out and the alphabet is in the
order of Z to P.

34. (5) AZ, BW, CT, DQ.

The first letters of the pairs are in
the order of Z to A with every two
following letters missing.

Z (Y) (X) W (V) (U) T (S)
(R) Q (P) (O) N

So EN is the answer.

35. (1) A B C D E F G H
1 letter missed 2 letters missed
I J K L M N
3 letters missed
O P Q R ST.
4 letters missed
36. (3) D E F G H I J K
1 letter 2 letters 3 letters
L M N O P Q
4 letters
R S T U V
5 letters
37. (3) Z Y X W V U T S
R Q P O N M
38. (1) W V U T S R Q P
1 letter 2 letters 3 letters
O N M L K J
4 letters
I H G F E
5 letters
39. (4) TUV
40. (4) A B C D E F;
B C D E F G,
C D E F G H,
D E F G H I,
E F G H I J
41. (3) A, B, C, D, E, F, G, H, I,
I, J, K, L, M, N, O, P, Q, R, S, T, U
Three alphabets are left and the next letter is coming.

42. (3) T
43. (2) K, H
44. (5) The first letter in the series are coming leaving one alphabet in the order from left to right.
A ~~B~~ C ~~D~~ E ~~F~~ G ~~H~~ I
The second letters are coming leaving one alphabet from right to left.
Z ~~X~~ W ~~V~~ U ~~T~~ R ~~S~~
IR is the correct order in the series.
45. (4) NO
46. (1) MNOP
47. (4) JKLM
48. (3) QSU
49. (4) HGDC
50. (2) A B C D E F, Z Y X W V U,
G H I J K L, T S R Q P O
51. (1) BCEF, GHJK, LMOP, QRTU, VWYZ
52. (2) B, C, D, E, F, G, H, I, J,
4 3
K, L, M, N, O, P
2 1
53. (4) a) ZA, XB, VC, TD, E
b) ZA, XB, VC, TD, R
Z X W V U T S R
54. (2) A B C, D E F, G H I, J K L, M N O
55. (5) Z, XW, UTS, QPON
Z, X, W, U, TS, QP
1 2 3
QPON, M, L, K, J, I, H, G
4 5
56. (4) AB, C, D ^E F, G, H ^{IJ} K, L, M ^{NOP} Q, R, S ^{TUVW} X
57. (1) ZY, XV, UR, QM
ZY, X ~~W~~ V, U ~~T~~ S R, Q ~~P~~ O N M,
L ~~K~~ J ~~I~~ H G

58. (1) A BCDEF GHIJK
 B CDEF GHIJKL
 C DEFGH IJKLM
 D EFGH IJKLMN
 E FGHI JKLMNO

59. (3) X W V, WVU, VUT, UTS, TSR

60. (5) ~~A~~ ~~B~~ ~~C~~ ~~D~~ ~~E~~ ~~F~~ ~~G~~ ~~H~~ ~~I~~ ~~J~~ ~~K~~ ~~L~~ ~~M~~ ~~N~~ ~~O~~
~~P~~ ~~Q~~ ~~R~~ ~~S~~ ~~T~~ ~~U~~ ~~V~~ ~~W~~ ~~X~~ ~~Y~~ ~~Z~~

61. (1) ~~B~~ ~~D~~ ~~F~~ ~~H~~ ~~J~~

A C E G I K

(Writing alphabets in odd series)

62. (2) ~~C~~ ~~E~~ ~~G~~ ~~I~~ ~~K~~

B D F H J L

(Writing alphabets in odd series)

63. (5) DE VW FG TU HI
 [] [] [] [] []
 ↑ ↑ ↑

There is a continuity in the letters of
 1st, 3rd and 5th word.

DE FG HI

64. (3) AB EF IJ MN QR

~~CD~~ ~~GH~~ ~~KL~~ ~~OP~~

65. (3) ZX VT RP NL JH

66. (5) ACE BDF GIK HJL MOQ NPR
 +1 +1 +1 +1 +1

67. (1) YXW BCD UTS FGH

68. (1) A CD FGH JKLM OPQRS

~~B~~ ~~E~~ ~~I~~ ~~N~~

69. (1) UVWXY, VWXY, WXY, XY, _____

~~V~~WXY, ~~X~~WXY, ~~W~~XY, ~~X~~Y, ~~X~~Y

13. LOGICAL VENN DIAGRAMS

Directions :

Questions : These are based on the following diagrams.
Study them carefully and indicate the correct answer as per the 'Instructions'.

I.

1. 
2. 
3. 
4. 
5. 

1. Animals, Cows, Horses ()
2. Doctors, Authors, Women ()
3. District, Mandal, Village ()
4. Parrots, Birds, Cats ()
5. Fish, Tigers, Snakes ()
6. Flowers, Jasmine, Banana ()

II.

1. 
2. 
3. 
4. 
5. 

7. Flowers, Jasmine, Birds ()
8. Year, Months, Days ()
9. Animals, Tigers, Cows ()
10. Trees, Animals, Humans ()
11. Humans, Doctors, Women ()
12. Food, Fruits, Milk ()

III.

1. 
2. 
3. 
4. 
5. 

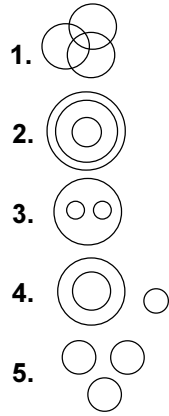
13. Minutes, Days, Months. ()
14. Uttar Pradesh, Jhansi, Madhya Pradesh. ()
15. Women, Teachers, Doctors ()
16. Criminals, Pick Pocketers, Burglers. ()
17. Thumsup, Fanta, Soft Drinks ()
18. Chilli, Salt, Vegetables ()

IV.

1. 
2. 
3. 
4. 
5. 

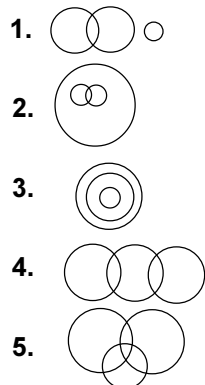
19. State, District, Mandal ()
20. Men, Poets, Teachers ()
21. Animals, Horses, Trees ()
22. Cows, Dogs, Camels ()
23. Fruits, Banana, Apple ()
24. Fish, Salmon, Shark ()

V.



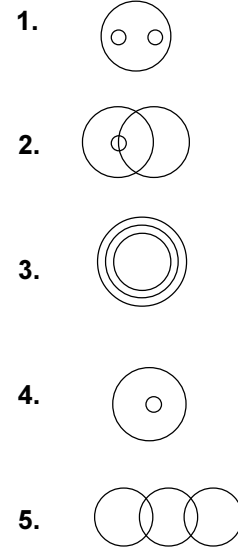
25. Elephants, Wolves, Animals ()
26. Authors, Teachers, Men ()
27. School, Benches, Classroom ()
28. Sparrows, Birds, Mouse ()
29. Dog, Fish, Parrot ()
30. Roses, Flowers, Apple ()

VI.



31. District, Mandal, Village ()
32. Men, Lawyers, Engineers ()
33. Women, Doctors, Children ()
34. Kilometer, Meter, Centimeter ()
35. Citizens, Educated, Senior Citizens ()
36. Boys, Players, Singers ()

VII.



37. Females, Mothers, Doctors. ()
38. Family, Husband, Wife. ()
39. Musicians, Men, Women. ()
40. Potato, Cabbage, Vegetables. ()
41. Week, Day, Year. ()
42. Teachers, Human beings. ()

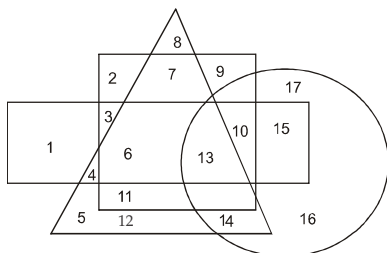
KEY

1. 3	2. 1	3. 2	4. 4	5. 5	6. 4	7. 3	8. 1	9. 2	10. 4
11. 5	12. 2	13. 1	14. 3	15. 4	16. 5	17. 2	18. 3	19. 2	20. 1
21. 3	22. 5	23. 4	24. 5	25. 3	26. 1	27. 2	28. 4	29. 5	30. 4
31. 2	32. 4	33. 1	34. 3	35. 4	36. 5	37. 2	38. 1	39. 1	40. 1
41. 3	42. 4								

14. SYLLOGISM

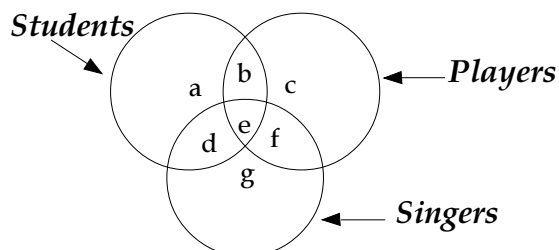
Questions : In the following questions, Engineers are depicted in rectangle, Doctors in triangle, Farmers in square and Leaders in circle. Therefore have a look on the following figure and indicate your correct alternatives.

1. How many people are only farmers? ()

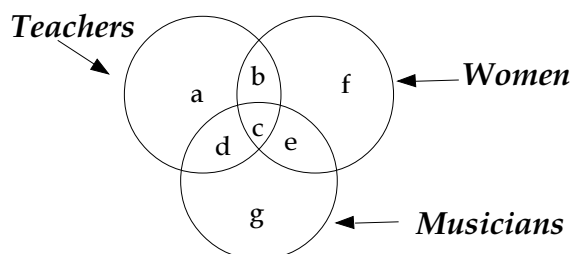


- 1) 0 2) 1 3) 2
4) 3 5) 4
2. How many Engineers are farmers, but not the doctors and leaders? ()
1) 0 2) 1 3) 2
4) 3 5) 4
3. How many Leaders are there, who are also farmers, doctors and engineers? ()
1) 5 2) 4 3) 3
4) 2 5) 1
4. Over all how many Doctors are there? ()
1) 6 2) 7 3) 8
4) 9 5) 10
5. How many Engineers are leaders but not the farmers and doctors? ()
1) 1 2) 3 3) 5
4) 6 5) 7
6. How many Farmers are there, who are also engineers, doctors and leaders? ()
1) 1 2) 5 3) 6
4) 4 5) 8
7. How many Engineers are also doctors? ()
1) 1 2) 2 3) 3
4) 4 5) 5
8. Over all how many Leaders are there? ()
1) 2 2) 3 3) 4
4) 5 5) 6

Questions : In these diagrams, some circles are given and questions are asked basing on the circles. Students have to draw inference looking at the questions.



9. Which letter indicates students who are players but not singers ()
1) d 2) c 3) b
4) a 5) e
10. Which letter indicates students who are neither players nor singers ()
1) a 2) b 3) e 4) d 5) f
11. Which letter indicates those who are both players and singers but not students? ()
1) e 2) d 3) b 4) c 5) f
12. Which letter indicates those who are players, singers and also students? ()
1) f 2) e 3) b
4) d 5) c
13. Which letter indicates singers who are neither players nor students ()
1) b 2) d 3) f
4) g 5) e



14. Women teachers who are not musicians ()
1) a 2) b 3) c
4) e 5) f

15. Women who are musicians but not teachers ()

- 1) e 2) b 3) g
4) c 5) f

16. Musicians who are also teachers but not women ()

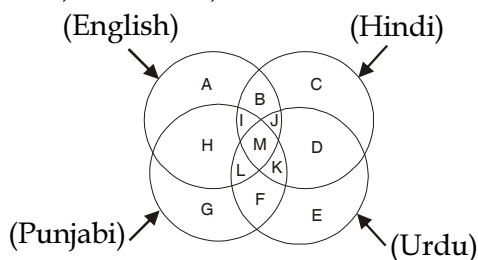
- 1) b 2) e 3) g
4) c 5) d

17. Women who are both musicians and teachers ()

- 1) g 2) f 3) c
4) d 5) e

18. Teachers who are neither musicians nor women ()

- 1) b 2) c 3) a
4) d 5) f



19. People who can read and write Hindi, Urdu and Punjabi but not English are represented by... ? ()

- 1) A 2) D 3) K
4) E 5) B

20. People who can read and write all the four languages are represented by

- 1) L 2) J 3) M ()
4) K 5) B

21. People who can read and write Hindi, English and Punjabi but not Urdu are represented by ()

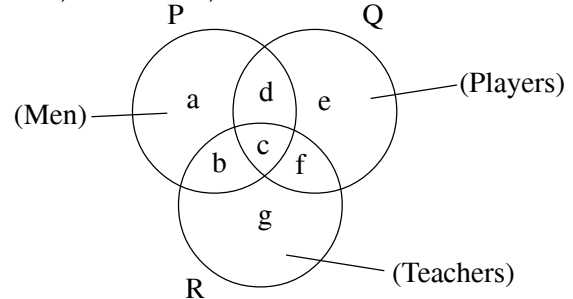
- 1) K 2) M 3) B
4) I 5) L

22. People who can read and write Urdu but not English, Hindi and Punjabi are represented by... ()

- 1) L 2) K 3) C
4) E 5) H

23. People who can read and write Urdu but Punjabi but can read and write English and Hindi are represented by...

- 1) M 2) B 3) J ()
4) K 5) F



24. Which letter represents players, who are both teachers and players ? ()

- 1) a 2) b 3) d 4) e 5) c

25. Which letter represents men who are players but not teachers ? ()

- 1) c 2) d 3) f 4) e 5) b

26. Which letter represents men who are teachers but not players ? ()

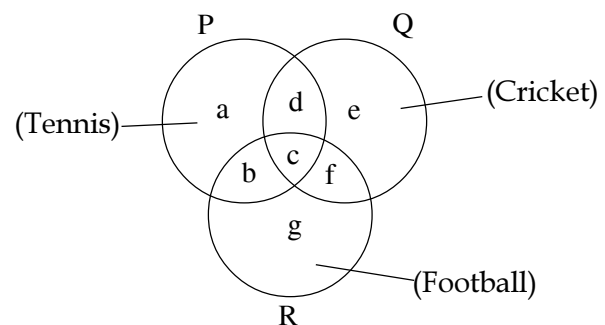
- 1) b 2) c 3) f 4) g 5) a

27. Which letter represents teachers who are neither players nor men ? ()

- 1) b 2) c 3) d 4) g 5) f

28. Which letter represents men who are neither teachers nor players ? ()

- 1) b 2) a 3) c 4) e 5) d



29. Which letter represents players, who play both Tennis and Cricket but not Football ()

- 1) b 2) f 3) d 4) c 5) g

30. Which letter represents players, who play all the three games ? ()

1) d 2) c 3) f 4) b 5) a

31. Which letter represents players, who neither play Football nor Tennis ? ()

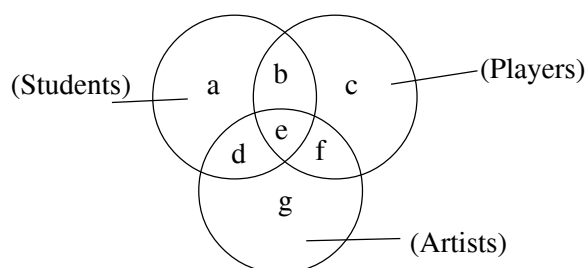
1) g 2) a 3) f 4) e 5) b

32. Which letter represents players, who play only Tennis ? ()

1) e 2) d 3) g 4) a 5) b

33. Which letter represents players, who play both Football and Cricket but not Tennis ()

1) f 2) d 3) c 4) b 5) a



34. Which letter represents students, who are players but not artists ? ()

1) e 2) d 3) c 4) b 5) a

35. Which letter represents artists, who are students but not players ? ()

1) d 2) e 3) g 4) f 5) b

36. Which letter represents players who are artists but not students ? ()

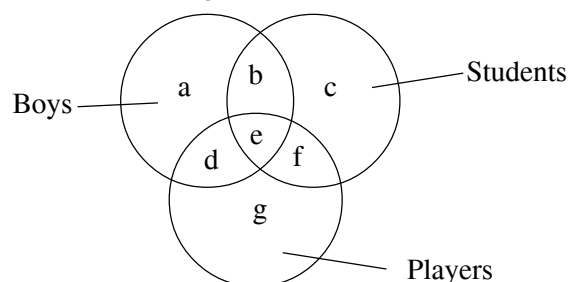
1) c 2) e 3) b 4) f 5) d

37. Which letter represents people, who are students, players and also artists ? ()

1) b 2) d 3) e 4) f 5) a

38. Which letter represents the artists, who are neither students nor players ? ()

1) e 2) g 3) d 4) f 5) c



39. Which letter represents boys who are neither students nor players ? ()

1) c 2) b 3) a 4) d 5) e

40. Which letter represents boys who are both students & players ? ()

1) a 2) e 3) g 4) f 5) b

41. Which letter represents students who are boys but not players ? ()

1) e 2) c 3) d 4) a 5) b

42. Which letter represents players who are boys but not students ? ()

1) d 2) b 3) c 4) e 5) f

43. Which letter represents students who are neither boys nor players ? ()

1) b 2) a 3) d 4) c 5) e

KEY

1. 3	2. 2	3. 5	4. 4	5. 1	6. 3	7. 2	8. 5	9. 3	10. 1
11. 5	12. 2	13. 4	14. 2	15. 1	16. 5	17. 3	18. 3	19. 3	20. 3
21. 4	22. 4	23. 2	24. 5	25. 2	26. 1	27. 4	28. 2	29. 3	30. 2
31. 4	32. 4	33. 1	34. 4	35. 1	36. 4	37. 3	38. 2	39. 3	40. 2
41. 5	42. 1	43. 4							

15. LETTER ANALOGY

Directions :

Questions : These questions involves letter coding, number coding and mixed coding. Each letter in a word is replaced by certain other alphabet number according to a specific rule.

1. **ROMAN : QMONA :: ITALIAN :**
()

- | | |
|------------|------------|
| 1) JUBMJBO | 2) HSZKHZM |
| 3) HATLIBM | 4) HATILNA |
| 5) LATPQRS | |

2. **FORMS : FPTPW :: CONVICT :**
()

- | | |
|------------|------------|
| 1) CPPYMHZ | 2) CPOWJDU |
| 3) CPPXKEV | 4) CPPYLFW |
| 5) COPJWUD | |

3. **SECOND : ARDBNMC :: FINISH :**
()

- | | |
|-----------|-----------|
| 1) EHNJRG | 2) EHOJSG |
| 3) EHMJTI | 4) EHMHRG |
| 5) EMHGRH | |

4. **DONKEY : XDJMNC :: ZEBRA :**
()

- | | |
|----------|----------|
| 1) YDAQZ | 2) ZQADY |
| 3) ZDAQB | 4) ZQYDA |
| 5) ZYQAD | |

5. **WINNER : ZLQQHU :: LOOSER :**
()

- | | |
|-----------|-----------|
| 1) MPPTFS | 2) MQQUGT |
| 3) OPPUFT | 4) ORRVHU |
| 5) ORVRUH | |

6. **SINGAPORE : NISPAGERO :: GUJRAT :**
()

- | | |
|-----------|-----------|
| 1) UGRJTA | 2) GURJTA |
| 3) GJURTA | 4) JUGTAR |
| 5) TARGUJ | |

7. **RADIO : UCHKT :: AUDIO :** ()

- | | |
|----------|----------|
| 1) CVHKT | 2) BWHKT |
| 3) DXHKT | 4) DWHKT |
| 5) DKTHW | |

8. **GOLD : SKNV :: SILVER :** ()

- | | |
|-----------|-----------|
| 1) TJMWFS | 2) RHKUDQ |
| 3) LISREV | 4) GQNDUH |
| 5) UKDQRH | |

9. **REGARD : TCIYTB :: THANKS :**
()

- | | |
|-----------|-----------|
| 1) UIBOLT | 2) SGZMJR |
| 3) VFCLMQ | 4) VJCPMU |
| 5) MZJRG | |

10. **SYSTEM : TAVXJS :: POLICY :**
()

- | | |
|-----------|-----------|
| 1) QPMJDZ | 2) QQNKEZ |
| 3) QLOCIE | 4) QQOMHE |
| 5) PQMJDZ | |

11. **LXNU : NYPV :: QTBR : ?** ()

- | | | |
|---------|---------|---------|
| 1) SDSU | 2) RSUD | 3) RUSD |
| 4) SRUD | 5) SUDS | |

12. **DFHJ : LNPR :: ? : BDFH** ()

- | | | |
|---------|---------|---------|
| 1) SVXZ | 2) TVXZ | 3) UVXZ |
| 4) VXZT | 5) TXVZ | |

13. **ACEG : ? :: BDFH : KMOQ** ()

- | | | |
|---------|---------|---------|
| 1) NLPR | 2) LMNO | 3) JLNP |
| 4) JNLO | 5) JLON | |

14. **DULC : EVMD :: ? : GXOF** ()

- | | | |
|---------|---------|---------|
| 1) FNWE | 2) HWNE | 3) FUEN |
| 4) FWNE | 5) HNWE | |

15. **MRPL : OTRN :: ? : EJID** ()

- | | | |
|---------|---------|---------|
| 1) CHGB | 2) HGFE | 3) GHBF |
| 4) EFGH | 5) CHEH | |

Directions :

These are based on letter analogy. There are two pairs of letter combinations in each question. The first (left hand side) pair has some relationship between its members. In the second pair, one member is missing. Find this out from the answers (1), (2), (3), (4) and (5) such that this pair has a similar relationship as the first pair. Indicate your answers as per the 'Instructions'.

16. **BD : AE :: HJ : ?** ()

- 1) FL 2) FK 3) IK
4) GL 5) GK

17. **CBA : GFE :: PON : ?** ()

- 1) TSR 2) TRS 3) SRT
4) RST 5) QRS

18. **FH : EG :: NP : ?** ()

- 1) MN 2) OP 3) MO
4) NO 5) MP

19. **TS : PO :: LK** ()

- 1) GH 2) HG 3) GI
4) HI 5) IJ

20. **ABCD : BCEF :: IJKL : ?** ()

- 1) JKML 2) JKLM 3) IJMN
4) JLMN 5) JKMN

21. **AC : EG :: MO : ?** ()

- 1) RS 2) NP 3) QR
4) QS 5) OP

22. **DCB : EFG :: LKJ : ?** ()

- 1) MON 2) MNO 3) NMO
4) NOP 5) MOP

23. **BD : AC :: FH : ?** ()

- 1) GI 2) GH 3) EH
4) GE 5) EG

24. **CBA : DEG :: ? : MNP** ()

- 1) JKL 2) JLK 3) LKJ
4) LJK 5) KLJ

25. **ABDE : FGHI :: RSUV : ?** ()

- 1) VWXY 2) WXYZ 3) VWXZ
4) UVWX 5) XWYZ

26. **ZA : YB :: XC : ?** ()

- 1) YZ 2) WD 3) NM
4) OP 5) BC

27. **AD : BE :: CF : ?** ()

- 1) DE 2) BC 3) DG
4) FG 5) GD

28. **BAC : DEF :: ? : NOP** ()

- 1) JLK 2) JKL 3) MKL
4) KLM 5) LKM

29. **ABCD : STUV :: EFGH : ?** ()

- 1) UVWX 2) TUVW 3) UVWZ
4) UXWZ 5) WYXZ

30. **ACDE : EFGH :: QSTU : ?** ()

- 1) UWXY 2) UVWX 3) XVWU
4) VXWY 5) WXYZ

31. **ABC : EFG :: KLM : ?** ()

- 1) OPQ 2) NOP 3) PQR
4) LMN 5) ABC

32. **AD : GJ :: MP : ?** ()

- 1) ST 2) TW 3) UW
4) SW 5) SV

33. **BCDE : EFGH :: KLMN : ?** ()

- 1) NOPQ 2) OPQR 3) MNOP
4) PQRS 5) LMOP

34. **ZY : VU :: TS : ?** ()

- 1) OP 2) PN 3) PO
4) PN 5) ON

35. **ABCD : ZYXW :: EFGH : ?** ()

- 1) VUTS 2) UTSR 3) STUV
4) WXYZ 5) WVUT

36. DEF : JKL :: OPQ : ? ()

- 1) STU 2) TUV 3) VWX
4) XYZ 5) UVW

37. AE : GK :: NR : ? ()

- 1) SW 2) SV 3) TX
4) RV 5) TW

38. CDEF : FGHI :: KLMN : ? ()

- 1) OPQR 2) NOPQ 3) MNOP
4) NOQP 5) PQRS

39. ZX : TR : JH : ? ()

- 1) BC 2) BD 3) DC
4) BA 5) DB

40. ABC : ZYX :: DEF : ? ()

- 1) WUT 2) UVT 3) WVU
4) VUT 5) UVW

41. BCD : GHI :: PQR : ? ()

- 1) UVW 2) WXY 3) XYZ
4) STU 5) TUV

42. AD : GJ :: MP : ? ()

- 1) TU 2) TV 3) SV
4) SU 5) ST

43. BDE : IKL :: NPQ : ? ()

- 1) UVW 2) VWX 3) UWY
4) XYZ 5) UWX

44. VU : SR :: PO : ? ()

- 1) ML 2) LM 3) MN
4) NM 5) KL

45. ABCD : CDEF :: IJKL : ? ()

- 1) LMNP 2) LMNO 3) KLMN
4) JKLM 5) KMNP

46. BC : EF :: HI : ? ()

- 1) JK 2) KM 3) MN
4) KL 5) LM

47. AD : ZW :: GJ : ? ()

- 1) TQ 2) ST 3) QR
4) UT 5) TU

48. BDF : GIK :: LNP : ? ()

- 1) STV 2) QST 3) RTV
4) STU 5) QSU

49. DEF : IJK :: NOP : ? ()

- 1) UVW 2) STV 3) STU
4) TVW 5) WXY

50. CDEF : UVWX :: GHIJ : ? ()

- 1) TSRQ 2) QRST 3) RSTU
4) STUV 5) TUVW

WORKED OUT ANSWERS

1. (4) R O M A N
 ↓
 Preceding
 Letter Q M O N A

In the same way I T A L I A N
 ↓
 H A T I L N A

2. (1) F O R M S
 | +1 | +2 | +3 | +4 |
 F P T P W

Similarly

C O N V I C T
 | +1 | +2 | +3 | +4 | +5 | +6 |
Ans. C P P Y M H Z

3. (4) S E C O N D
 ↑ ↑ ↑ ↑ ↑
 A R D B N M C

R, D, B, N, M & C are preceding letters of S, E, C, O, N & D. (A is given without any purpose.) So the preceding letters of FINISH-

F I N I S H
 ↑ ↑ ↑ ↑ ↑
 E H M H R G

4. (2) D O N K E Y
 X D J M N C

Next Letter of X, D, J, M, N & C come in reverse in the word D O N K E Y.

Like wise

Z E B R A
 X Q A D Y
Ans: Z Q A D Y

5. (4) W I N N E R
 | | | | |
 Z L Q Q H U

The difference is 2 letters. So

L O O S E R
 ↓ | | | |
Ans: O R R V H U

6. (4) SIN GAP ORE
 ↓ ↓ ↓
 NIS PAG ERO Letters are
 reversed.

So GUI RAT
 ↓ ↓
 JUG TAR

7. (4) R A D I O
 U C H K T

If we observe difference like this

A U D I O
 | | | | |
 D W H K T

8. (4) G O L D
 S K N V
 A B C D E F G H I J K L M
 Z Y X W V U T S R Q P O N

In the same way, the concerned word for SILVER is G Q N D U H

9. (3) R E G A R D
 +2 ↓ -2 ↑ +2 ↓ -2 ↑
 T C I Y T B

So

T H A N K S
 +1 ↓ -1 ↑ +1 ↓ -1 ↑
 V F C L M Q

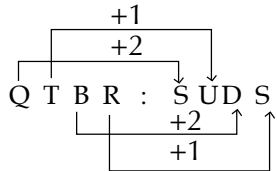
10. (4) S Y S T E M
 +1 ↓ +2 ↑ +3 ↓ +4 ↑ +5 ↓ +6 ↑
 T A V X J S

So

P O L I C Y
 +1 ↓ +2 ↑ +3 ↓ +4 ↑ +5 ↓ +6 ↑
 Q Q O M H E

11. (5) LXNU : NYPV :: QTBR : ?

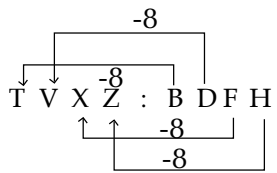
Adding 2 letters to L & N, gives N, P & adding 1 letter to X & U gives Y, V. In the same way



Adding 2 letters to Q & B gives S, D and adding 1 letter to T & R gives U, S. So answer is SUDS

12. (2) DFHJ : LNPR :: ? : BDFH

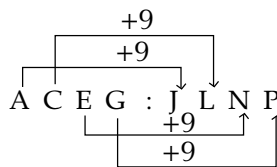
L is the 8th letter after D, N is the 8th letter after F, P is the 8th letter after H and R is the 8th letter after J.



In descending order T is the 8th letter after B, V is the 8th one after D, X is the 8th one after F and Z is the 8th one after H.

13. (3) ACEG : ? :: BDFH : KMOQ

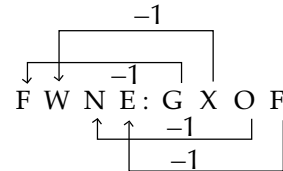
In ascending order KMOQ are the 9th letters from BDFH.



Similarly JLNP are the 9th letters from ACEG.

14. (4) DULC : EVMD :: ? : GXOF

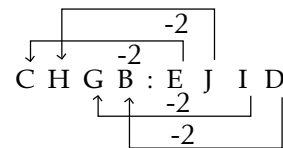
Adding 1 letter to each letter of DULC gives EVMD.



Thus preceding letters of G X O F are F W N E.

15. (1) MRPL : OTRN :: ? : EJID

The alternate letters of each one in MRPL are OTRN.



So in, descending order 2 letters after E, J, I & D are CHGB.

16. (5) 2 4 1 5 8 10
B D : A E :: H J : G K
+2 +4 +2

Alphabet before H is G

GK
+4

17. (1) CBA : GFE :: PON : TSR

ABC EFG NOP RST
← ← ← ←

TSR

$$18. \quad (3) \quad \begin{array}{c} -1 \qquad \qquad -1 \\ \boxed{FH : EG} :: \boxed{NP : MO} \\ -1 \qquad \qquad -1 \end{array}$$

MO

$$19. \quad (2) \quad \begin{array}{ccccccc} TS & : & PO & :: & LK & HG..... \\ ST & OP & & & KL & GH \\ \leftarrow & \leftarrow & & & \leftarrow & \leftarrow \end{array}$$

HG

$$20. \quad (5) \quad \begin{array}{c} +1 \qquad \qquad +1 \\ \boxed{ABCD : BCEF} :: \boxed{IJKL : JKMN} \\ +2 \qquad \qquad +2 \\ JKMN \end{array}$$

21. (4) QS

22. (2) MNO

23. (5) EG

24. (3) LKJ

25. (2) WXYZ

26. (2) WD

27. (3) DG

28. (5) LKM

29. (5) WYXZ

30. (1) UWXY

31. (1) ABC : EFG (Leaving D, all the letters from A to G are present). So KLM : OPQ.

32. (5) AD : GJ :: MP : ?

In the letters AD, two letters BC missed. And again two letters EF missed after D. In between GJ, two letters HI missed. After P, QR are to be missed and 'S' has to come. And after S two letters TU are to be missed and V has to come.

Ans : SV.

33. (1) BCDE : EFGH :: KLMN : NOPQ

34. (3) The alphabet are in the order from Z to A and two letters are missing (Z Y (X) (W) V U). Again from TSRQPO, two letters after TS have to miss. T S (R) (Q) P O.

PO is the answer.

35. (1) ABCD, EFGH are running in regular alphabet order. ZYXW are in Z to A order. So, for EFGH, VUTS have to come.

36. (5) JKL is formed leaving three letters (G,H,I) from F in DEF. Three letters from Q in OPQ are RST.

So UVW is correct answer.

37. (3) In AE : GK, G is 7th letter beginning from A. K is 7th letter beginning from E.

Seventh letter beginning from N is T, X is from R. TX is the answer.

38. 2

39. 5

40. (3) If A is given 1, B - two, C - three ZYX are 26th, 25th and 24th letters in the alphabetical order.

ABC : Z Y X

123 : 26 25 24

So for DEF which are 4, 5, 6 letters in the serial of alphabet, 23, 22, 21 letters are answer. They are WVU.

41. (1) BCD : GHI :: PQR : UVW
EF ST

42. (3) AD : GJ :: MP : SV

43. (5) Every second letter that comes after the first letter is omitted

44. (1) V U ~~X~~ S R ~~Q~~ P O ~~X~~ M L

45. (3) KLMN

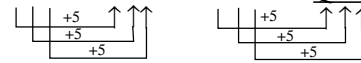
46. (4) BC : EF :: HI : KL

~~A~~ ~~D~~ ~~G~~ ~~J~~

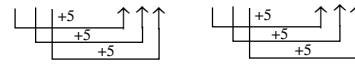
47. (1) AD : ZW :: GJ : TQ

Opposite pairs group.

48. (5) BDF : GIK :: LNP : QSU



49. (3) DEF : IJK :: NOP : STU



50. (2) CDEF : UVWX :: GHIJ : QRST



Opposite direction series.