

## ■ ENGLISH ABILITY

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

## ■ NUMERICAL ABILITY

31. (e)    32. (c)    33. (c)    34. (c)    35. (d)    36. (e)    37. (e)    38. (b)    39. (d)    40. (a)  
 41. (a)    42. (b)    43. (e)    44. (c)    45. (a)    46. (b)    47. (d)    48. (e)    49. (e)    50. (a)  
 51. (c)    52. (b)    53. (b)    54. (d)    55. (a)    56. (d)    57. (c)    58. (c)    59. (e)    60. (b)  
 61. (e)    62. (a)    63. (a)    64. (d)    65. (c)

## ■ REASONING ABILITY

66. (b)    67. (a)    68. (d)    69. (a)    70. (c)  
 71. (e)    72. (e)    73. (c)    74. (c)    75. (b)    76. (d)    77. (b)    78. (c)    79. (b)    80. (e)  
 81. (a)    82. (b)    83. (a)    84. (a)    85. (d)    86. (d)    87. (a)    88. (e)    89. (e)    90. (c)  
 91. (a)    92. (d)    93. (e)    94. (d)    95. (b)    96. (c)    97. (a)    98. (d)    99. (b)    100. (e)

## ■ SOLUTIONS

31. (e)

$$\begin{array}{r} ? \quad 415.25 \quad 627.10 \quad 958.55 \\ 1373.8 \quad 627.10 \quad 746.7 \end{array}$$

32. (c)

$$\begin{array}{r} ? \quad 34928 \quad 2591 \quad 14986 \\ 34928 \quad 17577 \quad 17351 \end{array}$$

33. (c)

$$\begin{array}{r} ? \quad 311 \quad 17 \quad 2482 \\ 5287 \quad 2482 \quad 2805 \end{array}$$

34. (c)

$$\begin{array}{r} ? \quad 12.5 \quad 6.7 \quad 4.2 \quad 351.75 \end{array}$$

35. (e)

$$\begin{array}{r} 45678 \quad 14 \quad 98 \\ 5038 \quad ? \\ 45678 \quad 137.2 \quad 5038 \quad ? \\ 4750 \quad 5038 \quad ? \\ ? \quad 5038 \quad 4705 \quad 333 \end{array}$$

36. (e)

$$\begin{array}{r} 51 \quad ? \quad 1632 \\ ? \quad \frac{1632}{51} \quad 32 \end{array}$$

37. (e)

$$\begin{array}{r} 4 \quad ? \quad 6924 \quad 15 \\ ? \quad \frac{6924}{15} \quad 4 \quad 115.4 \end{array}$$

38. (b)

$$\begin{array}{r} 8888 \quad 4444 \quad 222 \\ 4666 \end{array}$$

39. (d)

$$? \quad \frac{468 \quad 23}{100} \quad 107.64$$

40. (a)

$$\begin{array}{r} ? \quad 6^3 \quad 2^4 \quad 9^2 \\ 216 \quad 16 \quad 81 \quad 3456 \quad 81 \\ 3375 \end{array}$$

41. (a)

$$\begin{array}{r} ? \quad 11304 \quad (6839 \quad 4331) \\ 11304 \quad 2508 \\ 11 \quad 2.5 \quad 27.5 \end{array}$$

Required answer 30

42. (b)

$$? \quad 61 \quad 25 \quad 8 \quad 190$$

43. (e)

$$\begin{array}{r} ? \quad (4)^2 \quad 14 \quad 6 \\ 224 \quad 6 \quad 218 \end{array}$$

Required answer 200

44. (c)

$$\begin{array}{r} ? \quad 15 \quad 2 \quad 59 \\ 224 \quad 59 \quad 66.5 \end{array}$$

Required answer 68

45. (a)

$$? \quad \frac{3450}{10} \quad 3 \quad 1035$$

Required answer 1035

46. (b) Let each student get  $x$  sweets.

$$\begin{array}{r} 960 \quad x \quad 600 \quad (x \quad 3) \\ 960x \quad 600x \\ 600 \quad 3 \quad 1800 \\ 360x \quad 1800 \\ x \quad \frac{1800}{360} \quad 5 \end{array}$$

47. (d) The pattern is:

$$\begin{array}{ccccccc} 9 & 1 & 1^2 & 10 & & & \\ 10 & 2 & 2^2 & 24 & & & \\ 24 & 3 & 3^2 & 72 & 9 & 81 & \\ 81 & 4 & 4^2 & 324 & 16 & 340 & \\ 340 & 5 & 5^2 & 1700 & 25 & & \end{array}$$

48. (e)

$$\begin{array}{r} \text{CI P 1} \frac{\text{R}}{100} \text{T} \\ 9000 \text{ 1} \frac{11}{100} \text{ 2} \\ 9000[(1.11)^2 - 1] \\ 9000 (1.2321 - 1) \\ 9000 \cdot 0.2321 \text{ Rs. 2088.9} \end{array}$$

49. (e)

$$\begin{array}{r} 50^2 \quad 2500 \\ 51^2 \quad 2601 \\ \text{Required number} \\ 2601 \quad 2530 \quad 71 \end{array}$$

50. (a) Let the number be  $x$ .

$$\begin{array}{r} x \frac{7}{15} \frac{x}{100} \quad 124 \\ \frac{7x}{15} \frac{x}{5} \quad 124 \\ \frac{7x}{15} \frac{3x}{5} \quad 124 \\ 15 \\ \frac{4x}{15} \quad 124 \\ x \frac{124}{4} \frac{15}{4} \quad 465 \end{array}$$

40% of 465

$$\frac{465}{100} \cdot 40 = 186$$

51. (c) Speed of train = 108 kmph

$$108 \frac{5}{18} \text{ m/second}$$

30 m/second

If the length of train be  $x$  metre, then Speed of train  
Length of train and platform

$$\frac{\text{Time taken}}{30} = \frac{x + 365}{21}$$

$$x = \frac{30}{21} (x + 365) - 365$$

52. (b) If the total maximum marks of the exam be  $x$ , then

$$\begin{array}{r} \frac{x}{100} \cdot 2 \quad 208 \quad 264 \quad 16 \\ x \frac{16}{2} \frac{100}{2} \quad 800 \end{array}$$

Required passing percentage

$$\frac{280}{800} \cdot 100 = 35\%$$

53. (b) Let cost of a fan be Rs.  $x$  and that of an oven be Rs.  $y$ .

$$\begin{array}{r} 8x \quad 14y \quad 36520 \\ 4x \quad 7y \quad 18260 \end{array}$$

Multiplying both sides by 3,

$$12x \quad 21y \quad \text{Rs. 54780}$$

54. (d)

$$\begin{array}{r} 2(l + b) \quad 364 \\ l + b \quad 182 \\ 6 \cdot 84 \quad 182 \\ l \quad 182 \quad 84 \quad 98 \text{ metre} \end{array}$$

Radius of circular garden

$$98 \cdot 7 = 105 \text{ metre}$$

Circumference of garden

$$2 \cdot r = 2 \cdot \frac{22}{7} \cdot 105$$

$$660 \text{ metre}$$

$$\text{Cost of fencing} = 660 \cdot 8$$

$$\text{Rs. 5280}$$

55. (a)

$$\begin{array}{r} 43x \quad 43y \quad 4816 \\ 43(x + y) \quad 4816 \\ x + y \quad \frac{4816}{43} \quad 112 \end{array}$$

Required average

$$\frac{x + y}{2} = \frac{112}{2} = 56$$

56. (d)

Men's age =  $3x$  years

Son's age =  $x$  years

$$3x + x = 2 \cdot 28$$

$$4x = 56$$

$$x = \frac{56}{4} = 14$$

Man's age =  $3x = 3 \cdot 14$

$$42 \text{ years}$$

57. (c) Required number of cars

$$\frac{96}{8} = 12 \cdot 204 \text{ dozens}$$

58. (c) A's 1 day's work

$$\frac{1}{16} + \frac{1}{24} = \frac{3}{48} + \frac{2}{48}$$

Hence, A alone will complete the work in 48 days.

59. (e)

Required average

$$\frac{142 + 93 + 102 + 206 + 115 + 98}{6}$$

$$\frac{756}{6} = 126$$

60. (b)

$$x + x + 2 + x + 4 + x + 6$$

$$4 + 104$$

$$4x + 12 = 416$$

$$4x = 416 - 12 = 404$$

$$x = \frac{404}{4} = 101 \text{ P}$$

$$S = x \quad 6 \quad 101 \quad 6 \quad 107$$

$$P \quad S \quad 101 \quad 107 \quad 208$$

61. (e) Total number of employees working in Delhi

$$1800 \quad \frac{32}{100} \quad 576$$

Male employees

$$\frac{576 \quad 75}{100} \quad 432$$

62. (a) Total number of employees working in Chennai

$$\frac{1800 \quad 12}{100} \quad 216$$

transferred employees

$$\frac{2}{9} \quad 216 \quad 48$$

Total employees in Patna

$$\frac{1800 \quad 8}{100} \quad 48$$

$$144 \quad 48 \quad 192$$

63. (a) Required percentage

$$\frac{16}{21} \quad 100 \quad 76$$

64. (d)

$$\text{Pune + Chennai} \quad 11 \quad 12 \quad 23\%$$

$$\text{Delhi} \quad 32\%$$

65. (c) Required ratio =  $8 : 32 = 1 : 4$

(66-68) :

66.(b) 67.(a) 68.(d) 69.(a) 70.(c) 71.(e) 72.(e) 73.(c)

74.(c) 75.(b)

(76-80) :

76.(d) 77.(b) 78.(c) 79.(b) 80.(e)

(81-85) :

- I. All animals are predators      Universal Affirmative (A-type).
- II. Some forms are cards      Particular Affirmative (I-type).
- III. No circle is a triangle      Universal Negative (E-type).
- IV. Some circles are not triangles      Particular Negative (O-type).

81.(a)

Both the Premises are Particular Affirmative (I-type)

No Conclusion follows from the two particular Premises.

Conclusion I is Converse of the first Premise.

82. 83.(a) 84.(a) 85.(d)

(86-90) :

Day	Play
Monday	A

Tuesday	F
Wednesday	B
Thursday	D
Friday	G
Saturday	C
Sunday	E

86.(d) 87.(a) 88.(e) 89.(e)

Day	Play	Alphabetical Order of Play
Monday	A	A
Tuesday	F	B
Wednesday	B	C
Thursday	D	D
Friday	G	E
Saturday	C	F
Sunday	E	G

90.(c)

91. (a)

$$N \quad O \quad P = Q > R$$

**Conclusions :**

I.  $N > R$  : True

II.  $R = N$  : Not True

92. (d)

$$B > W \quad X < Y = Z > A$$

**Conclusions :**

I.  $B > Z$  : Not True

II.  $W < A$  : Not True

93. (e)

$$H > I > J > K > M > L$$

**Conclusions :**

I.  $I > M$  : True

II.  $L < H$  : True

94. (d)

$$C < D < E$$

$$C < D < F \quad G, F < D < E$$

**Conclusions :**

I.  $C > G$  : Not True

II.  $F > E$  : Not True

95. (b)  $R > S \quad T > U$

$$R > S \quad T > V$$

$$V < T \quad U$$

**Conclusions :**

I.  $V > U$  : Not True

II.  $V < R$  : True

(96-100) :

96.(c) 97.(a) 98.(d) 99.(b) 100.(e)