ANSWER SET - 10

01. (4) **02.** (1) **03.** (3) **04.** (1) **05.** (1)
06. (3) **07.** (5) **08.** (2) **09.** (1) **10.** (3)
11. (1) **12.** (3) **13.** (2) **14.** (4) **15.** (5)
16. (2) **17.** (1) **18.** (4) **19.** (5) **20.** (1)
21. (4) **22.** (5) **23.** (1) **24.** (5) **25.** (1)
26. (2) **27.** (1) **28.** (3) **29.** (4) **30.** (5)
31. (1) **32.** (4) **33.** (2) **34.** (4) **35.** (2)
36. (2) **37.** (3) **38.** (2) **39.** (3) **40.** (5)
41. (1) **42.** (4) **43.** (3) **44.** (1) **45.** (4)
46. (4) **47.** (2) **48.** (1) **49.** (3) **50.** (5)
51. (4) **52.** (5) **53.** (1) **54.** (4) **55.** (3)
56. (5) **57.** (2) **58.** (2) **59.** (3) **60.** (2)
61. (3) **62.** (1) **63.** (2) **64.** (3) **65.** (5)
66. (1) **67.** (2) **68.** (4) **69.** (3) **70.** (5)
71. (4) **72.** (1) **73.** (2) **74.** (3) **75.** (2)
76. (5) **77.** (4) **78.** (2) **79.** (1) **80.** (5)
81. (4) **82.** (3) **83.** (4) **84.** (2) **85.** (1)
86. (2) **87.** (5) **88.** (3) **89.** (4) **90.** (1)
91. (2) **92.** (5) **93.** (3) **94.** (2) **95.** (1)
96. (2) **97.** (4) **98.** (1) **99.** (3) **100.** (5)

EXPLANATION - 10

1. (4) **2.** (1) **3.** (3) **4.** (1) **5.** (1)
6. (3) **7.** (5) **8.** (2) **9.** (1) **10.** (3)
11. (1) **12.** (3) **13.** (2) **14.** (4) **15.** (5)
16. (2) Replace 'one' with 'a'
17. (1) Replace 'is' with 'are'
18. (4) Insert 'the' after 'for'
19. 5
20. (1) Replace 'give up' with 'giving up'
(21-25): D B F E C A
21. (4) **22.** (5) **23.** (1) **24.** (5) **25.** (1)
26. (2) **27.** (1) **28.** (3) **29.** (4) **30.** (5)

31. (1) CP of the article $= \frac{38\times100}{95}$

$= 40$

$\therefore$ Gain percentage $= \frac{44-40}{40}\times 100 = 10\%$

32. (4) Perimeter of the square = circumference of the circle

or, $4a = 2\pi r$

$\therefore a = \frac{1}{4}\times 2\times\frac{22}{7}\times 42 = 66$ cm

33. (2) Percentage change in area

$= 50 - 20 - \frac{50\times20}{100}$

$\left[\text{Formula}: x + y + \frac{xy}{100}\right]$

$= 50 - 20 - 10 = 20\%$ increase

34. (4) $36 \times d = 45 \times (d - 5)$

$\therefore d = 25$ days

$36 \times 25 = 20 \times d$

$\therefore d = 45$ days

35. (2) The population two years ago was 8000

$\therefore$ Population at present

$= 8000\left(1+\frac{r}{100}\right)^2 = 10000$

or, $\left(1+\frac{r}{100}\right)^2 = \frac{5}{4}$

Two years hence, population

$= 10000\left(1+\frac{r}{100}\right)^2$

$= 10000\times\frac{5}{4} = 12500$

36. (2) Suppose the total number of students is 100.

Students interested in playing

$= 100\times\frac{12}{100} = 12$

Students interested in dancing

$= 100\times\frac{3}{4} = 75$

Students interested in singing

$= 100\times\frac{10}{100} = 10$

Remaining students = 100 – (12 + 75 + 10) = 3

Remaining students = 15 (Given)

Total students = $\frac{100}{3}\times 15 = 500$

37. (3) The total number of letters in the word 'OPERATE' = 7

And E appears 2 times

Required number of ways

$= \frac{7!}{2!} = \frac{5040}{2} = 2520$

38. (2) Simple interest

$= \frac{4540\times8\times8}{100} = 2905.6$

39. (3) Suppose the ten's digit = x

And unit's digit = x + 5

Then, x + 5 = 6x

if, x = 1

$\therefore$ unit's digit = x +5 = 1 + 5 = 6

Therefore the required number is 16.

40. (5) Total cost price of TV

= 12500 + 300 + 800 = 13600

Sellinmg price to earn a profit of 15%

$= 13600 + 13600\times\frac{15}{100}$

= 13600 + 2040 = 15640

41. (1) Relative speed = (60 + 48) km/hr = 108 km/hr

$= 108\times\frac{5}{18} = 30$ m/s

Distance = 240 + 270 = 510 m

Time = $\frac{\text{Distance}}{\text{Speed}} = \frac{510}{30}$

= 17 seconds

42. (4) Let the 1st part be ₹x.

And the 2nd part be ₹(8600 – x)

Then by the given condition,

$\frac{x\times15\times4}{100} = \frac{(8600-x)\times20\times33}{100}$

$60x = 8600 \times 20 \times 3 - 60x$

or, $120x = 8600 \times 20 \times 3$

$\therefore x = \frac{8600\times20\times3}{120} = 4300$

Thus, the amounts in both the parts are equal.

43. (3) Reduction price = $\frac{130\times20}{5.2\times100}$

= ₹5

Original price = $\frac{5\times100}{80}$ = ₹6.25

44. (1) Students who failed in both the subjects = 15%

Students who passed in either of the subjects

Mathematics or English = 100 – 15 = 85%

$n(A \cup B) = n(A) + n(B) - n(A \cap B)$

$85 = 80 + 75 - n(A \cap B)$

or, $n(A \cap B) = 70$

ie, the number of students who passed in both the subjects = 70% = 350

$\therefore$ The total number of students

$= 350\times\frac{100}{70} = 500$

45. (4) Let the capital be x.

Now, A's capital = $\frac{x}{4}$

$\therefore$ B's capital = $x - \frac{x}{4} = \frac{3x}{4}$

Therefore ratio of A's capital to B's = 1 : 3

$\therefore$ Suppose B uses capital for t months.

Ratio of profit = A : B

$= 1 \times 15 : 3 \times t$

$= 15 : 3 \times t$

$= 5 : t$

or, $3t = 2t + 10$

$\therefore$ $t = 10$ months

$\therefore$ B's share $= \frac{t}{t+5} = \frac{2}{3}$

46. (4) $? = (284 + 114 + 324) \div (652 - 548 - 64)$

$\therefore$ $? = 722 \div 40 = 18.05$

47. (2) $(255 \times 2000) \div 5000 \times 25 = ?$

or, $102 \times 25 = ?$

$\therefore$ $? = 2550$

48. (1) $(7856 + 3214 + 6318) \div ? = 38.64$

or, $17388 \div ? = 38.64$

$\therefore$ $? = \frac{17388}{38.64} = 450$

49. (3) $\frac{12.5 \times 16 + 25}{6.4 \times 5.5 - 10.2} = ?$

or, $? = \frac{200 + 25}{35.2 - 10.2} = \frac{225}{25} = 9$

50. (5) $\sqrt[3]{512} + \sqrt[3]{1331} = \sqrt{?}$

or, $8 + 11 = \sqrt{?}$

or, $\sqrt{?} = 19$

$\therefore$ $? = (19)^2 = 361$

51. (4) $[(12)^2 + (?)^2] \div 125 = 3.2$

or, $\frac{(12)^2 + (?)^2}{125} = 3.2$

or, $(12)^2 + (?)^2 = 3.2 \times 125$

or, $(?)^2 = 400 - 144 = 256$

$\therefore$ $? = 16$

52. (5) $(0.64 \times 2.5 \times 3.2) \div 0.8 = ?$

or, $? = \frac{0.64 \times 2.5 \times 3.2}{0.8} = 6.4$

53.(1) $\frac{1287}{1645} \times \frac{235}{572} \times \frac{16}{63} = ?$

or, $\frac{143}{329} \times \frac{47}{143} \times \frac{4}{7} = \frac{4}{49}$

54. (4) $? = 7^3 + 5^2 + 4^3 \div (16)^2$

$= 343 + 25 + 64 \div 256$

$= 343 + 25 + 0.25 = 368.25$

55. (3) $?$ = 75% of 280 – 24% of 45

or, $? = \frac{75}{100} \times 280 - \frac{24}{100} \times 45$

or, $? = 3 \times 70 - 1.2 \times 9$

$= 210 - 10.8 = 199.2$

56. (5) Total candiates passed in state A in 2010 = 780

Total candidates passed in state C in 2013 = 500

$\therefore$ Required percentage $= \frac{780 - 500}{500} \times 100 = \frac{280}{5} = 56\%$

57. (2)

Percentage of selected candidates in state D in 2010

$= \frac{95}{700} \times 100 = 13.57\%$

Percentage of selected candidates in state D in 2011

$= \frac{84}{540} \times 100 = 15.5\%$

Percentage of selected candidates in state D in 2012

$= \frac{77}{660} \times 100 = 11.6\%$

Percentage of selected candidates in state D in 2013

$= \frac{78}{720} \times 100 = 10.83\%$

Percentage of selected candidates in state D in 2014

$= \frac{64}{640} \times 100 = 10\%$

Percentage of selected candidates in stgate D in 2015

$= \frac{58}{500} \times 100 = 11.6\%$

58. (2) Total number of students selected in state C

$= 80 + 60 + 66 + 55 + 52 + 60 = 373$

Total number of students selected in state A

$= 80 + 120 + 72 + 96 + 64 + 68 = 500$

$\therefore$ Required percentage $= \frac{373}{500} \times 100 = 74.6\% = 75\%$

59. (3) Percentage of candidates passed in state A

$= \frac{780}{5600} \times 100 = 13.92\%$

Percentage of candidates passed in state B

$= \frac{480}{7500} \times 100 = 6.4\%$

Percentage of candidates passed in state C

$= \frac{800}{4800} \times 100 = 16.66\%$

Percentage of candidates passed in state D

$= \frac{700}{7500} \times 100 = 9.33\%$

60. (2) The total number of selected students in state B

$= 75 + 72 + 104 + 112 + 60 + 75 = 498$

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

The total number of selected students in state D

$= 95 + 84 + 77 + 78 + 64 + 58 = 456$

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

$\therefore$ Difference $= 83 - 76 = 7$

61. (3) The series is $+10^3 - 10$, $+9^3 - 9$, $+8^3 - 8$,.....

62. (1) The series is -24^2, -21^2, -18^2, -15^2,.....

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

64. (3) The series is $+8^3$, $+12^3$, $+16^3$, $+20^3$,.....

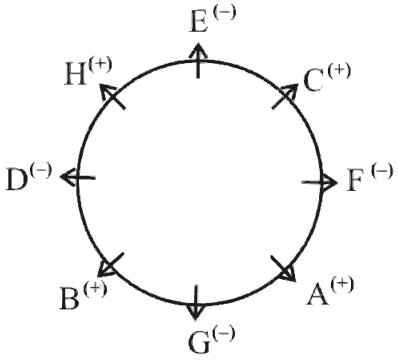
65. (5) The series is $+17^2 - 17$, $+15^2 - 15$, $+13^2 - 13$,.....

(66-70)

Persons	Days	State
Monika	Tuesday	Karnataka
Ragini	Friday	MP
Pooja	Wednesday	Bihar
Sahil	Saturday	Sikkim
Avinash	Sunday	Punjab
Anupam	Thursday	Maharshtra
Neetu	Monday	UP

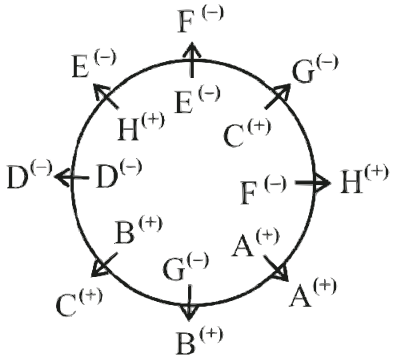
66. (1) **67.** (2) **68.** (4) **69.** (3) **70.** (5)

(71-75)



71. (4) **72.** (1)

73. (2)



74. (3) **75.** (2)

(76-80)

M C A Y H U L D B M U K J O S G D M E A T R B K J A H T

76. (5) A, U, U, O and A

77. (4) M C Y H L D B M K J S G D M T R B K J H T

78. (2)

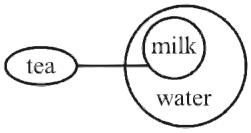
Twentieth from the right —B
Sixteenth from the left —G
Four letters C, D,E and F are there between them in English alphabetical series.

79. (1) 5th to the left of sevententh from the right end = (17 + 5) = 22nd from right and that is L.

80. (5) Total A's and B's in the series is 5.

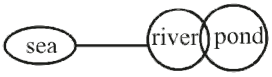
(81-85)

81. (4)



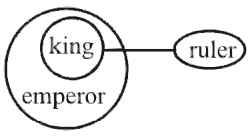
(I) Conclusion I doesn't follow.
(II) Conclusion II also doesn't follow.

82. (3)



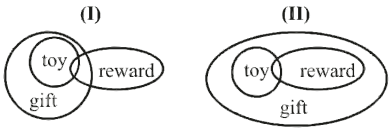
(I) Conclusion I doesn't follow.
(II) Conclusion II also doesn't follow.
But both are complamentary pair.

83. (4)



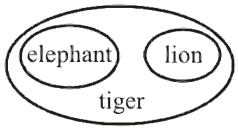
(I) Conclusion I doesn't follow.
(II) Conclusion II also doesn't follow.

84. (2)



(I) Conclusion I doesn't follow.
(II) Conclusion II follows.

85. (1)



(I) Conclusion I follow.
(II) Conclusion II doesn't follow.

(86-90)

86. (2) Given :

B % C — B = C (i)
C ÷ D — C ≥ D (ii)
D – E — D ≤ E (iii)
Combining (i), (ii) and (iii), we get
B = C ≥ D ≤ E

(I) E ÷ B — E ≥ B we can't compare E and B. So, conclusion I is not true.

(II) D – B — D ≤ B is true. So, conclusion II is true.

87. (5) Given :

B + A — B < A (i)
A – C — A ≤ C (ii)
D ÷ C — D ≥ C (iii)
Combining (i), (ii) and (iii), we get
B < A ≤ C ≤ D

(I) D × B — D > B is true. So, conclusion I is true.

(II) A – D — A ≤ D is true. So, conclusion II is also true.

88. (3) Given :

R × T — R > T (i)
T ÷ M — T ≥ M (ii)
M % N — M = N (iii)
Combining (i), (ii) and (iii), we get
R > T ≥ M = N
(I) N % T — N = T is not true.
(II) N + T — N < T is not true.

89. (4) Given :

H ÷ K — H ≥ K (i)
K % J — K = J (ii)
J + L — J < L (iii)
Combining (i), (ii) and (iii), we get
H ≥ K = J < L

(I) L ÷ K — L ≥ K is not true. So, conclusion I is not true.
(II) J % H — J = H is not true. So, conclusion II is not true.

90. (1) Given :

H % I — H = I (i)
I + J — I < J (ii)
J × K — J > K (iii)
Combining (i), (ii) and (iii), we get
H = I < J > K
(I) J × H — J > H is true. So, conclusion I is true.
(II) K + H — K < H we can't compare K and H. So, conclusion II is also not true.

91. (2) Meaningful word — MUTE

92. (5)

93. (3)

B > A > C > D, E

94. (2)

F R A U D	D E A F
7 @ # 6 5	5 2 # 7

Similarly

R E A D
@ 2 # 5

95. (1)

After arrangement : 13978465

(96-100)

data — pa
for — ka
ruler — ta
households — ma
the — ra
State — gi/sa
India — gi/sa
of — na
are — li
landless — yi

96. (2) **97.** (4) **98.** (1) **99.** (3) **100.** (5)