

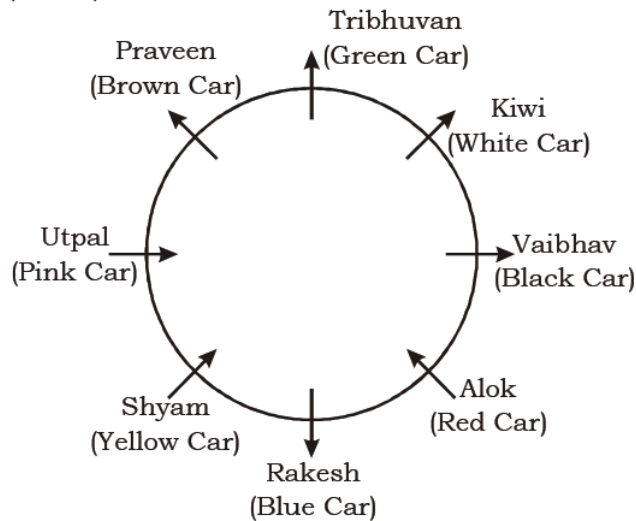
BANK PRE MOCK TEST – 22 (SOLUTION)

(1-5):

Floor	Person	Person
9	I	Karnal
8	H	Hisar
7	D	Sirsa
6	B	Rohtak
5	G	Jind
4	A	Panipat
3	F	Ambala
2	E	Gohana
1	C	Sonipat

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

(6 - 10):



6. (5) 7. (5) 8. (3)
 9. (3) 10. (4)

(11-15):

11. (5) $P < L \leq A = N \leq Q$,
 $P < L \leq A = N \geq E \geq D$
 I. $L \leq E \rightarrow$ false
 II. $P < Q \rightarrow$ true
 Only Conclusion II is true.
12. (3) $P < L \leq A = N \leq Q$,
 $P < L \leq A = N \geq E \geq D$
 I. $Q \geq L \rightarrow$ true
 II. $N < D \rightarrow$ false
 Only Conclusion I is true.
13. (3) $P \leq U = N \leq C \geq H > E$
 I. $P \leq C \rightarrow$ true
 II. $U > H \rightarrow$ false
 Only Conclusion I is true.

14. (2) $P \leq U = N \leq C \leq K$

I. $K > U \leftarrow$
 II. $U = K \leftarrow$ either or

Either conclusion I or II is true.

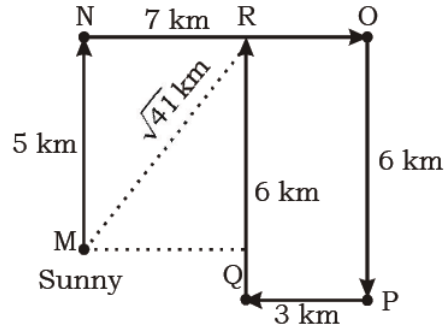
15. (1) $D \geq I > S \geq M \leq A < L$

I. $D \geq A \rightarrow$ false

II. $L > I \rightarrow$ false

Neither conclusion I nor II is true.

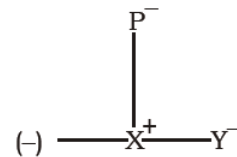
(16-17):



16. (5) 17. (4)

(18-22):

18. (1) From statement I and III.



Statement I and III are sufficient to answer the question

19. (3) **From I :-**

Eshwar > Dipu

Bittu > Eshwar

Bittu > Frank

From II :-

$_ > \text{Abby} > _ > _ > _ > _$

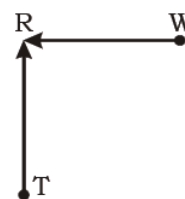
Frank > Dipu

From III :-

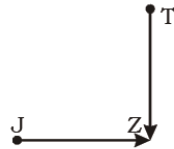
Eshwar > Frank

From all statement I, II and III together are not sufficient to answer the question

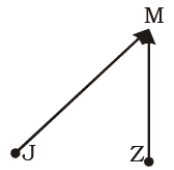
20. (5) **From I :-**



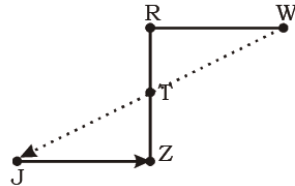
From II :-



From III :-



From statement I and II



Shop J is South - West from the position Shop W

Statement I and II are sufficient to answer the question

21. (5) All statement I, II and III together are not sufficient to answer the question.

22. (1)

From I : 'Now or never again' - to, ka, na, sa

From II : 'You come again now' - ja, ka, ta, sa

From III : 'again go now never' - 'na, ho, ka, sa, to'

From I and III

'**now or never again**' - '**to, ka, na, sa**'

'**again go now ro never**' - '**na, ho ka, sa, to**'

In code language 'go' is written - 'ho'
Statement I and III are sufficient answer the question.

(23-27) :

Days	Shop	No. of Motors
Monday	P	6
Tuesday	Q	4
Wednesday	S	12
Thursday	O	18
Friday	R	27
Saturday	N	15
Sunday	M	9

23. (5) 24. (3) 25. (5)

26. (1) 27. (4)

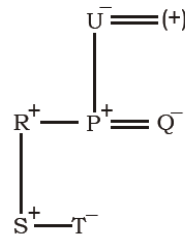
(28-31) :

Teacher	Subject	Hobby
M	Science	Cooking
N	English	Painting
O	Geography	Shayari
P	History	Swiming
Q	Maths/Eco	Music/Tracking
R	Eco/Maths	Tracking/Music
S	Biology	Peotry
T	Chemistry	Singing

28. (1) 29. (3) 30. (1)

31. (4) 32. (3)

(33-35) :



33. (1) 34. (2) 35. (5)

(36-40) :

$$36. (2) \Rightarrow 95^2 \approx 95^4 \div 95^1 \\ \Rightarrow 95^2 = 95^{4-1} = 95^3 \\ \Rightarrow ? = 3$$

$$37. (2) ? \approx \sqrt{10000} + \frac{3}{5} \times 1892 \\ = 100 + 1135.2 \\ = 1235.2 \approx 1230$$

$$38. (3) ? \approx \frac{0.0004}{0.0001} \times 36 = 4 \times 36 \\ = 144 \approx 145$$

$$39. (1) ? = 12345 \times \frac{137}{100} \\ = 16912.65 \approx 17000$$

$$40. (3) ? = 3739 + 164 \times 27 \\ = 3739 + 4428 \\ = 8167 \approx 8200$$

(41-45) :

41. (5) Number of people in Teaching profession

$$\frac{30}{100} \times 25000 = 7500$$

Number of people in Medical profession

$$= \frac{10}{100} \times 25000 = 2500$$

$$\backslash \text{ Required \%} = \frac{7500}{2500} \times 100 = 300\%$$

42. (3) Total numbers of males in Banking and Medical professions

$$= 25000 \times \frac{20}{100} \times \frac{60}{100} + 25000 \times \frac{10}{100} \times$$

$$\frac{40}{100} = 3000 + 1000 = 4000$$

The total number of females in Medical and Banking profession = 10% of 60% of 25000 + 20% of 40% of 25000 = 1500 + 2000 = 3500

$$\backslash \text{ Required ratio} = \frac{4000}{3500} = \frac{8}{7} = 8 : 7$$

43. (3) Females in Engineering professions

$$25000 \times \frac{25}{100} \times \frac{70}{100} = 4375$$

Males in Banking profession

$$25000 \times \frac{20}{100} \times \frac{60}{100} = 3000$$

$$\text{Required\%} = \left(\frac{4375}{3000} \times 100 \right) \% = 145.83 \approx 146\%$$

44. (3) Number of males in Banking and Medical = 20% of 60% of 25000 + 10% of 40% of 25000 = 3000 + 1000 = 4000
Number of females in Law and Teaching

$$\frac{15}{100} \times \frac{20}{100} \times 25000 + \frac{30}{100} \times \frac{60}{100} \times 25000 = 5250$$

$$\therefore \text{Required ratio} = \frac{4000}{5250} = \frac{16}{21} = 16 : 21$$

45. (1) Number of females in Engineering profession = 25% of 70% of 25000 = 4375
Number of males in Law profession = 15% of 80% of 25000 = 3000

$$\text{Required \%} = \left(\frac{4375 - 3000}{3000} \times 100 \right) \% = 45.83 \approx 46\%$$

(46-50):

46. (1) The given number series is based on the following pattern.

$$1^1 = 1; 2^2 = 4$$

$$3^3 = 27; 4^4 = 256$$

$$5^5 = 3125; 6^6 = 46656 \neq 46658$$

Hence, 46658 is the wrong number.

47. (4) The given number series is based on the following pattern.

$$18000 \div 5 = 3600$$

$$3600 \div 5 = 720$$

$$720 \div 5 = 144 \neq 142.2$$

$$144 \div 5 = 28.8$$

$$28.8 \div 5 = 5.76$$

Hence, 142.2 is the wrong number.

48. (5) The given number series is based on the following pattern.

$$12 + 15^2 = 12 + 225 = 237$$

$$237 + 13^2 = 237 + 169 = 406$$

$$406 + 11^2 = 406 + 121 = 527$$

$$527 + 9^2 = 608 = 527 + 81 = 608 \neq 604$$

$$608 + 7^2 = 608 + 49 = 657$$

Hence, 604 is the wrong number.

49. (3) The given number series is based on the following pattern.

$$3 \times 7 + 2 \times 7 = 21 + 14 = 35$$

$$35 \times 6 + 3 \times 6 = 210 + 18$$

$$= 228 \neq 226$$

$$228 \times 5 + 4 \times 5 = 1140 + 20 = 1160$$

$$1160 \times 4 + 5 \times 4 = 4640 + 20 = 4660$$

$$4660 \times 3 + 6 \times 3 = 13980 + 18 = 13998$$

Hence, 226 is the wrong number

50. (2) The given number series is based on the following pattern.

$$18 \times 7 - 7 = 126 - 7 = 119$$

$$119 \times 6 - 6 = 714 - 6 = 708$$

$$708 \times 5 - 5 = 3540 - 5 = 3535 \neq 3534$$

$$3535 \times 4 - 4 = 14140 - 4 = 14136$$

$$14136 \times 3 - 3 = 42405$$

Hence, 3534 is the wrong number.

51. (2) Clearly,

$$9 \times 360 \text{ children} = 18 \times 72 \text{ men}$$

$$= 12 \times 162 \text{ women}$$

$$\Rightarrow 45 \text{ children} = 18 \text{ men} = 27 \text{ women}$$

$$\Rightarrow 5 \text{ children} = 2 \text{ men} = 3 \text{ women}$$

$$\text{Now, } 4 \text{ men} + 12 \text{ women} + 10 \text{ children}$$

$$= 4 \text{ men} + 8 \text{ men} + 4 \text{ men} = 16 \text{ men}$$

\therefore 18 men can complete the work in 72 days.

\therefore 16 men can complete the same work

$$= \frac{18 \times 72}{16} = 81 \text{ days}$$

52. (3) Let the speed of boat in still water be x kmph and that of current be y kmph.

$$\therefore x + y = \frac{4.8}{8} = \frac{4.8 \times 60}{8 \times 60}$$

$$\Rightarrow x + y = 36 \quad \dots(i)$$

$$\text{and, } x - y = \frac{4.8}{9} = \frac{4.8 \times 60}{9 \times 60}$$

$$\Rightarrow x - y = 32 \quad \dots(ii)$$

By equation (i) - (ii),

$$x + y - x + y = 36 - 32 = 4$$

$$\Rightarrow 2y = 4 \Rightarrow y = \frac{4}{2} = 2 \text{ kmph}$$

53. (3) Let the amount be ₹ x

Investment is done as given below.

$$\text{Amount left} = x - \frac{40}{100}x = \frac{60x}{100}$$

$$\frac{40}{100}x \text{ at } 15\% \text{ p.a.}$$

$$\frac{50}{100} \text{ of } \frac{60x}{100} = \frac{30x}{100} \text{ at } 10\% \text{ p.a.}$$

Rest amount

$$= x - \frac{40x}{100} - \frac{30x}{100} = \frac{30x}{100} \text{ at } 18\% \text{ p.a.}$$

Interest earned by each at end of 1 year

$$\text{By 1st} \Rightarrow \frac{15}{100} \times \frac{40x}{100} = \frac{60}{1000}x$$

$$\text{By 2nd} \Rightarrow \frac{10}{100} \times \frac{30x}{100} = \frac{30}{1000}x$$

$$\text{By 3rd} \Rightarrow \frac{18}{100} \times \frac{30x}{100} = \frac{54}{1000}x$$

$$\text{Total interest} = \frac{144}{1000}x$$

$$\therefore \text{Rate}\% = \left(\frac{\frac{144x}{1000} \times 100}{x} \right) = 14.4\%$$

54. (1) C's present age = $85 - 7 = 78$ years
B's present age = $78 - 12 = 66$ years

$$\therefore \text{A's present age} = \frac{3}{11} \times 66 = 18 \text{ years}$$

$$\therefore \text{A's father's present age} = 25 + 18 = 43 \text{ years}$$

55. (3) According to question,
CP of 20 articles = SP of x articles = 1 (let)

$$\therefore \text{CP of 1 articles} = \frac{1}{20}$$

$$\text{SP of 1 articles} = \frac{1}{x}$$

$$\text{Profit per cent} = \frac{\frac{1}{x} - \frac{1}{20}}{\frac{1}{20}} = \frac{25}{100}$$

$$\Rightarrow \frac{20-x}{x} = \frac{1}{4}$$

$$\Rightarrow 80 - 4x = x$$

$$\Rightarrow 5x = 80$$

$$\Rightarrow x = 16$$

(56-60):

$$\begin{aligned} 56. (5) \text{ Total number} &= \frac{90000}{100} \left[\frac{14.3 \times 7}{18} + \right. \\ &\left. \frac{16.2 \times 5}{9} + \frac{18.4 \times 3}{10} + \frac{16.8 \times 3}{9} + \frac{12.6 \times 2}{5} + \frac{21.7 \times 2}{10} \right] \\ &= 5005 + 8100 + 4968 + 5040 + 4536 \\ &+ 3906 = 31555 \end{aligned}$$

$$57. (1) T_o = 90000 \times \frac{16.8}{100} \times \frac{4}{9} = 6720$$

$$T_p = 90000 \times \frac{12.6}{100} \times \frac{2}{5} = 4536$$

$$\backslash \text{ Required difference} = 6720 - 4536 = 2184$$

$$58. (5) M_{1-o} = 90000 \times \frac{16.8}{100} \times \frac{4}{9} = 6720$$

$$M_{3-L} = 90000 \times \frac{14.3}{100} \times \frac{4}{18} = 2860$$

$$\backslash \text{ Required \%} = \left(\frac{6720}{2860} \times 100 \right) = 234.96\% \approx 235\%$$

$$59. (5) \text{ Total}_o = \frac{90000}{100} \times 21.7 = 19530$$

$$\text{Total}_M = \frac{90000}{100} \times 16.2 = 14580$$

$$\backslash \text{ Reqd}\% = \left(\frac{19530 - 14580}{14580} \right) \times 100 = \frac{495000}{14580} = 33.95\% \approx 34\%$$

$$60. (2) \text{ Total}_N = \frac{90000}{100} \times 18.4 = 16560$$

$$M_{2-o} = \frac{90000}{100} \times 16.8 \times \frac{3}{9} = 5040$$

$$\backslash \text{ Required ratio} = \frac{16560}{5040} = \frac{23}{7} = 23 : 7$$

61. (4) According to question,
Mohan + Rohan + 2Shyam = 59(i)
Shyam + Rohan + 3Mohan = 68 (ii)
Mohan + 3Shyam + 3Rohan = 108 ... (iii)
Subtract equation (iii) from thrice the equation (ii), we get
 $3\text{Shyam} + 3\text{Rohan} + 9\text{Mohan} - \text{Mohan} - 3\text{Shyam} - 3\text{Rohan} = 204 - 108$

$$\Rightarrow 8\text{Mohan} = 96 \Rightarrow \text{Mohan} = \frac{96}{8} = 12 \text{ years}$$

62. (4) Let the money borrowed be ₹ x and rate be $r\%$.
and Time = 2 years

$$\therefore 4000 = \frac{x \times r \times 2}{100} \Rightarrow rx = 200000$$

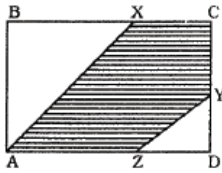
$$\text{and } x \left(1 + \frac{r}{100} \right)^2 = x + 4200$$

$$\Rightarrow x + \frac{xr^2}{10000} + \frac{2xr}{100} = 4200 + x$$

$$\Rightarrow 20r + 4000 = 4200$$

$$\Rightarrow r = 10\%$$

63. (4)



$$BC = BX + XC = 3x + 2x = 5x \text{ cm}$$

$$CD = CY + YD = 2y + y = 3y \text{ cm}$$

$$\therefore 5x \times 3y = 120$$

$$\Rightarrow xy = 8 \quad (= 4 \times 2)$$

$$BC = 20 \text{ cm}$$

$$CD = 6 \text{ cm}$$

$$BX = \frac{3}{5} \times 20 = 12 \text{ cm}$$

$$YD = \frac{1}{3} \times 6 = 2 \text{ cm}$$

$$ZD = \frac{1}{4} \times 20 = 5 \text{ cm}$$

\therefore Area of the shaded region

$$= 120 - \Delta ABX - \Delta ZYD$$

$$= 120 - \frac{1}{2} \times 12 \times 6 - \frac{1}{2} \times 2 \times 5$$

$$= 120 - 36 - 5 = 79 \text{ sq.cm.}$$

64. (1) Equivalent capital of Sonu for 3 year

$$= ₹ (60,000 \times 1 + 80,000 \times 2)$$

$$= ₹ (60,000 + 1,60,000) = ₹ 2,20,000$$

Equivalent capital of Monu for 3 year

$$= ₹ \left(90,000 \times 2 \frac{1}{2} \right)$$

$$= ₹ \left(90,000 \times \frac{5}{2} \right) = ₹ 2,25,000$$

Ratio of their capitals = 220000 : 225000

$$= 44 : 45$$

Sum of ratios = 44 + 45 = 89

Total profit = ₹ 71,20,000

\therefore Sonu's share

$$= ₹ \left(\frac{44}{89} \times 71,20,000 \right) = ₹ 35,20,000$$

65. (4) Salma's monthly salary

$$= ₹ \left(\frac{2170 \times 100}{7} \right) = ₹ 31000$$

Percentage monthly investment by

Sujata = 7 + 18 + 6 = 31%

Salma's annual investment

$$= 12 \times \frac{31}{100} \times 31000 = ₹ 1,15,320$$

(66-70) :

66. (4) I. $x^2 + 5x + 6 = 0$

$$\Rightarrow x^2 + 2x + 3x + 6 = 0$$

$$\Rightarrow x(x+2) + 3(x+2) = 0$$

$$\Rightarrow (x+3)(x+2) = 0$$

$$\therefore x = -3 \text{ or } -2$$

II. $y^2 + 3y + 2 = 0$

$$\Rightarrow y^2 + 2y + y + 2 = 0$$

$$\Rightarrow y(y+2) + 1(y+2) = 0$$

$$\Rightarrow (y+1)(y+2) = 0$$

$$\therefore y = -1 \text{ or } -2$$

Clearly, $x \leq y$

67. (2) I. $x^2 - 10x + 24 = 0$

$$\Rightarrow x^2 - 6x - 4x + 24 = 0$$

$$\Rightarrow x(x-6) - 4(x-6) = 0$$

$$\Rightarrow (x-4)(x-6) = 0$$

$$\therefore x = 4 \text{ or } 6$$

II. $y^2 - 9y + 20 = 0$

$$\Rightarrow y^2 - 5y - 4y + 20 = 0$$

$$\Rightarrow y(y-5) - 4(y-5) = 0$$

$$\Rightarrow (y-4)(y-5) = 0$$

$$\therefore y = 4 \text{ or } 5$$

$$\therefore x \geq y$$

68. (4) I. $x^2 = 961 = \pm 31$

$$\text{II. } y = \sqrt{961} = 31$$

Clearly, $x \leq y$

69. (5) I. $x^2 - x - 72 = 0$

$$\Rightarrow x^2 - 9x + 8x - 72 = 0$$

$$\Rightarrow x(x-9) + 8(x-9) = 0$$

$$\Rightarrow (x+8)(x-9) = 0$$

$$\therefore x = -8 \text{ or } 9$$

II. $y^2 = 64$

$$\Rightarrow y = \pm 8$$

70. (5) I. $x^2 = 463 + 321 = 784$

$$\therefore x = \pm 28$$

II. $y^2 = 308 + 421 = 729$

$$\therefore y = \pm 27$$

BANK PRE MOCK TEST – 22 (ANSWER)

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