IBPS PO PHASE -I MOCK TEST - 176 (SOLUTION)

Reasoning

(1-5) :

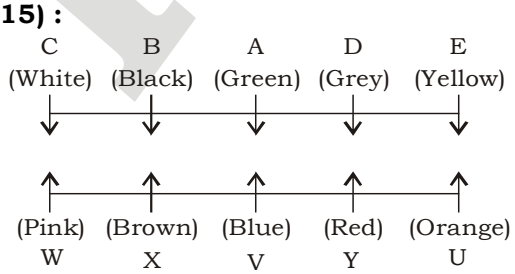
Student	Day	Time
K	Monday	7 : 00 AM
F	Monday	10 : 00 AM
M	Tuesday	7 : 00 AM
H	Tuesday	10 : 00 AM
I	Wednesday	7 : 00 AM
G	Wednesday	10 : 00 AM
J	Thursday	7 : 00 AM
E	Thursday	10 : 00 AM
L	Friday	7 : 00 AM
N	Friday	10 : 00 AM

1. (3) 2. (2) 3. (5)
4. (2) 5. (4)
6. (4) $P > N \geq E \leq C < G$
   I. $P > C \rightarrow$ False
   II. $G \geq N \rightarrow$ False
   If Neither conclusion I nor II is true.

(7-8) :

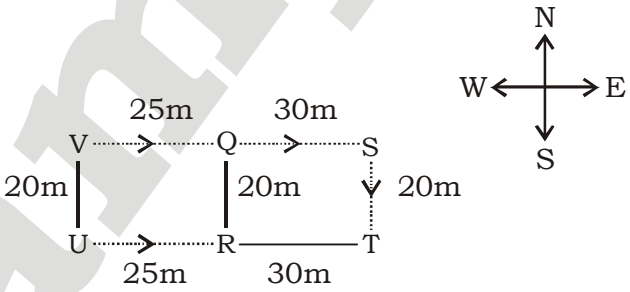
7. (2) $I = K < H > Q = G > S = L$
   I. $Q < K \rightarrow$ False
   II. $H > I \rightarrow$ True
   If only conclusion II is true.
8. (4) I. $I \geq K \rightarrow$ False
   II. $K \leq S \rightarrow$ False
   If neither conclusion I nor II is true.
9. (1) $T = R > U = M \leq D < F$
   I. $D \geq U \rightarrow$ True
   II. $T > F \rightarrow$ False
   Only conclusion I is true.
10. (5) $W \geq R > T = D > V \geq Z$
    I. $W > V \rightarrow$ True
    II. $Z < R \rightarrow$ True
    Both conclusion I and II is true.

(11-15) :



11. (2) 12. (1) 13. (5)
14. (3) 15. (2)
16. (2) Twelfth to the left of the twenty second from the left end is (22–12 =) 10th from the left, i.e @.
17. (4)
18. (1) New arrangement becomes:
    F % D A © I B @ R H E * N $ U W P T 9 V # Z Q.
    Hence sixteenth from the right end is @.
19. (2) 20. (2)

(21 –22) :



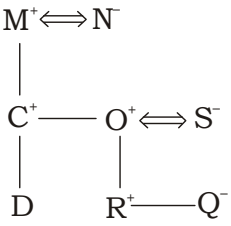
21. (3) SV = VQ + SQ = 25 + 30 = 55m
22. (2) Northeast

(23 – 27):

Floor	Person
8	Q
7	P
6	Z
5	O
4	X
3	Y/N
2	M
1	N/Y

23. (5) 24. (3) 25. (1)
26. (4) 27. (5)

(28-29) :



28. (1) 29. (5)

(30-34):

The machine rearranges words and numbers in such a way that numbers are arranged from the left side with the smallest number coming first and moving subsequently so that in the last st©ep numbers are arranged in descending order. While the words are arranged from the right side as they appear in English alphabetical order.

Input: 75 wild show 19 42 never break heart for 59 21 value 68 99

Step I: 19 75 wild show 42 never heart for 59 21 value 68 99 break

Step II: 21 19 75 wild show 42 never heart 59 value 68 99 break for

Step III: 42 21 19 75 wild show never 59 value 68 99 break for heart

Step IV: 59 42 21 19 75 wild show value 68 99 break for heart never

Step V: 68 59 42 21 19 75 wild value 99 break for heart never show

Step VI: 75 68 59 42 21 19 wild 99 break for heart never show value

Step VII: 99 75 68 59 42 21 19 break for heart never show value wild

30. (5) 31. (3) 32. (4)
33. (2) 34. (4)
35. (3)

Maths

36. Total girls = 420
Total boys = 810
Let the number of boys in Xavier = x

So, the number of girls in Xavier = $\frac{2}{3}x$

Let the number of boys in Vijaya = y

So, the number of girls in Vijaya = $\frac{2}{5}y$

Given,
$x + y = 810$

$\Rightarrow \frac{2}{3}x + \frac{2}{5}y = 420$

$\Rightarrow \frac{x}{3} + \frac{y}{5} = 210$

$\Rightarrow \frac{810 - y}{3} + \frac{y}{5} = 210$

$\Rightarrow 270 - \frac{y}{3} + \frac{y}{5} = 210$

So,

$60 = \frac{2y}{15}$;

$y = 450$
So, the number of boys in Vijaya = y = 450

So, the number of girls in Vijaya = $\frac{2}{5}y$ = 180
Let the number of boys in Xavier = x = 810 – y = 810 – 450 = 360

So, the number of girls in Xavier = $\frac{2}{3}x$ = 240
So,

$180 = \frac{x}{100} \times 240$

$x = 180 = \frac{x}{100} \times 240 = 75$

37. The number of boys in Vijaya = 450
And, the number of girls in Vijaya = 180
Also, the number of boys in Xavier = 360
And, the number of girls in Xavier = 240
Number of girls in X college = 640 – 240 = 400
Total students in Xavier = 600

So, total students in X = $600 \times \frac{125}{100} = 750$

Number of boys in X college = 750 – 400 = 350

38. The number of boys in Vijaya = 450
And, the number of girls in Vijaya = 180
Also, the number of boys in Xavier = 360
And, the number of girls in Xavier = 240
So, required difference = 630 – 600 = 30
So, option (d) is the correct answer.

39. The number of boys in Vijaya = 450
And, the number of girls in Vijaya = 180
Also, the number of boys in Xavier = 360
And, the number of girls in Xavier = 240
Number of boys in Y College

$= \frac{13}{9} \times 450 = 650$

Number of girls in Y College = 180 × $\frac{80}{100}$ =144

Total students = 650 + 144 = 794

40. The number of boys in Vijaya = 450
And, the number of girls in Vijaya = 180
Also, the number of boys in Xavier = 360
And, the number of girls in Xavier = 240

$\therefore$ Required percentage = $\frac{450-360}{360}\times 100$

= 25%

41. $15M \times x = 21W \times (x - 4)$
$35M \times y = 63W \times (y - 4)$
So, $21(x - 4) = 63(y - 4)$
$x = 3y - 8$
$15x = 35y$
$3x = 7y$

So, $y = \frac{3x}{7}$

So, $x = 3 \times \frac{3x}{7} - 8$

$\frac{2x}{7} = 8 \quad x = 28$

42. Let, CP of B = x
CP of A = 2x
Total CP = 3x

$MP = 3x \times \frac{120}{100} = 3.6x$

Discount = 9
SP = 3.6x – 9

$\text{Profit\%} = \frac{3.6x - 9 - 3x}{3x} \times 100 = 17$

$\Rightarrow \frac{3.6x - 9}{3x} = 1.17$

So, x = 100
CP of article A = 200

43. Two cases are possible

(1) $\frac{{}^4_4C \times {}^5_1C}{{}^9_5C}$ (2) $\frac{{}^4_3C \times {}^5_2C}{{}^9_5C}$

$\therefore$ Required Probability = $\frac{{}^4_4C \times {}^5_1C}{{}^9_5C} + \frac{{}^4_3C \times {}^5_2C}{{}^9_5C}$

$= \frac{\left(1\times\frac{5}{1}+\frac{4}{3}\times\frac{3}{2}\times\frac{2}{1}\times\frac{5}{2}\times\frac{4}{1}\right)}{\frac{9}{5}\times\frac{8}{4}\times\frac{7}{3}\times\frac{6}{2}\times\frac{5}{1}}$

$= \frac{5+40}{126} = \frac{45}{126} = \frac{5}{14}$

44. Let the length of the train = L
And, the length of the platform = P

So, $25 \times \frac{5}{18} \times \frac{L+P}{18}$

L + P = 125

And, $30 \times \frac{5}{18} = \frac{L}{12}$

L = 100
P = 25
Required difference = 100 – 25 = 75

45. Satish: Bhavya: Abhishek
$15000 \times 12 : 18000 \times (12 - x) : 24000 \times (12 - x)$
= 10 : 9 : 12
So,

$\Rightarrow \frac{15000\times 12}{(18000\times(12-x))} = \frac{10}{9}$

$\Rightarrow 90 = 120 - 10x$
$\Rightarrow 10x = 30; \quad x = 3$

46. Let the age of Sakshi 6 years ago = x
Present age of Sakshi = 5/4 x

So, $\frac{5}{4}x = x + 6$

So, x = 24
So present age of Sakshi = 30

Present age of her son = $\frac{1}{5}x = \frac{30}{5} = 6$

Age of Sakshi after 10 years = $\frac{5}{4}x + 10 = 40$

Age of her son after 10 years = 16

So, required ratio = $\frac{40}{16} = \frac{5}{2}$

47. SI in scheme A = $\frac{18000\times 2\times 15}{100} = 5400$

CI in scheme B = $15000\left(\left(\frac{118}{100}\times\frac{118}{100}\right)-1\right)$

= 5886
$\therefore$ Required difference = 5886 – 5400 = 486

48. In 1st alloy,
Copper = 40%
Aluminum = 60%
So, ratio = 2: 3

In 2nd allow,
Ratio = 2: 7
Final mixture ratio = 5: 3
So, total amount of copper

$= \frac{2}{5} \times 5x + \frac{2}{9} \times 3x = 2x + \frac{2}{3}x = \frac{8x}{3}$

And, total amount of aluminum $= \frac{3}{5} \times 5x = 3x$

$\therefore$ Required percentage

$= \frac{\left(3x - \frac{8x}{3}\right)}{\frac{8x}{3}} \times 100 = \frac{9x - 8x}{8x} \times 100$

$= \frac{100}{8} = \frac{25}{2} = 12.5\%$

49. Relative speed of train = 15
Distance between them = 20 km

Time taken to cover that distance $= \frac{20}{15}$

$= \frac{4}{3}$ hours

So, They will collide in 80 minutes

So, distance covered in 79 minutes

$= 15 \times \frac{79}{60} = \frac{79}{4}$

Distance left $= 20 - \frac{79}{4} = \frac{80 - 79}{4} = \frac{1}{4}$ km

50. $\pi r^2 h = 616 m^3$

$2\pi rh = 352 m^3$

So, $\frac{\pi r^2 h}{2\pi rh} = \frac{616}{352}$

$\frac{r}{2} = 1.75$

$r = 3.5$

$\pi r^2 h = 616 m^3$

$h = \frac{616}{\pi r^2} = 16$

TSA $= 2\pi r(h + r)$

TSA $= 2 \times \frac{22}{7} \times 3.5(16 + 3.5) = 429 m^2$

51. Let the amount of mixture taken from 1 st allow = x
And, the amount of mixture from the second allow = y

So, $\left[\frac{\left(\frac{x}{3} + \frac{2y}{5}\right)}{\frac{2x}{3} + \frac{3y}{5}}\right] = \frac{5}{8}$

$= \frac{5x + 6y}{10x + 9y} = \frac{5}{8}$

$40x + 48y = 50x + 45y$
$10x = 3y;$

$\frac{x}{y} = \frac{3}{10}$

52. 3 men of the first group do as much work in 2 hour
as 4 men of the second group do in 3 hours
So, $3 \times M1 \times 2 = 4 \times M2 \times 3$
So, M1 = 2 M2
Men Hours Days Work .....?
$40\ M1 \times 8 \times 15 \times 2 = 60\ M2 \times 4 \times x$

$x = \frac{80M2 \times 8 \times 15 \times 2}{(60M2 \times 4)} = 80$ days

53. Let the speed of boat and stream be u and v respectively;

$(u + v) = \frac{75}{t}$

and, $(u - v) = \frac{60}{t}$

so, $\frac{75}{u + v} = \frac{60}{u - v}$

$75u - 75v = 60u + 60v$
So, $u = 9v$

$\therefore$ Required percentage $= \frac{10v}{9v} \times 100$

$= 111\frac{1}{9}\%$

54. A train crosses a pole in 24 sec
Let, Speed of the train = s
So, length of the train (L) = s x 24
A second train of same length crosses a platform in 30 sec with a speed 20% more than the first train.

Let, the length of the platform = p

$\frac{120}{100}s = \frac{24s + p}{30}$

$\frac{6s}{5} = \frac{4s}{5} + \frac{p}{30}$

$\frac{2s}{5} = \frac{p}{30}$

The ratio of length of train and length of platform = $\frac{s}{p} = \frac{5}{60} = \frac{1}{12}$

So, $s = \frac{p}{12} = \frac{L}{24} = \frac{P}{12}$; $\frac{L}{p} = \frac{2}{1}$

55. A and B can fill the tank in 36 minutes
Let the time taken by pipe A to fill the tank = x
minutes
Ans, the time taken by pipe B to fill the tank = y
minutes

So, $\frac{1}{x} + \frac{1}{y} = \frac{1}{36}$

So, part filled in 30 minutes = $\frac{30}{36} = \frac{5}{6}$

Remaining part = $1 - \frac{5}{6} = \frac{1}{6}$

So, $1/6^{th}$ part is filled by A alone in 10 minutes
So total time taken by A to fill the tank = 60 minutes
And, time taken by B to fill

$= \frac{1}{36} - \frac{1}{60} = \frac{10}{360} - \frac{6}{360} = \frac{4}{360} = \frac{1}{90}$

So, pipe B can fill the tank in 90 minutes.

56. $(421.98 + 478.21) \div ? = 60.029$
$\Rightarrow (422 + 478) \div ? \approx 60$
$\Rightarrow \frac{900}{?} \approx 60$
$\Rightarrow ? = 15$

57. $\sqrt{256} \times 19.17 + 8.15 \times 13.78 = ?$
$\Rightarrow \sqrt{256} \times 19 + 8 \times 14 = ?$
$\Rightarrow ? \approx 16 \times 19 + 8 \times 14 = 416$

58. $16.217 \times 23.88 + ? = 18.98 \times 32.12$
$\Rightarrow 16 \times 24 + ? \approx 19 \times 32$
$\Rightarrow ? = 608 - 384 = 224$

59. $27.897 \times 16.21 = ? \times 13.98 + 69.87$
$\Rightarrow 28 \times 16 \approx ? \times 14 + 70$
$\Rightarrow 448 \approx ? \times 14 + 70$
$\Rightarrow ? = 37814 = 27$

60. $272.112 + 189.98 + 84.101 = ? \times 12.89 \times 6.11$
$\Rightarrow 272 + 190 + 84 \approx ? \times 13 \times 6$
$\Rightarrow ? \approx 13 \times 6546 = 7$

61. $117.5 - \frac{1}{2} = 117$;
$\Rightarrow 117 + 2 = 119$;
$\Rightarrow 119 - 8 = 111$;
$\Rightarrow 111 + 32 = 143$;
$\Rightarrow 143 - 128 =$ **15**

62. $15 \times 1 - 3 = 12$
$12 \times 3 - 5 = 31$
$31 \times 5 - 7 = 148$
$148 \times 7 - 9 =$ **1027**

63. $1 \times 7 + 6 = 13$;
$13 \times 6 + 5 = 83$;
$83 \times 5 + 4 = 419$;
$419 \times 4 + 3 = 1679$;
$1679 \times 3 + 2 =$ **5539**

64. $12 \times 2 + 1 = 25$
$25 \times 2 - 1 = 48$
$48 \times 2 + 3 = 99$
$99 \times 2 - 4 = 194$
$194 \times 2 + 5 = 393$
$393 \times 2 - 6 =$ **780**

65. $1^3 + 2 = 3$
$2^3 + 3 = 11$
$3^3 + 4 = 31$
$4^3 + 5 = 68$
$5^3 + 6 = 131$
$6^3 + 7 =$ **223**

66. Required Ratio = $\frac{60 \times \frac{2}{5} + 68 \times \frac{9}{17}}{60 \times \frac{3}{5} + 72 \times \frac{4}{9}} = \frac{15}{17}$

67. Number of female who bought ticket from C2 and C4 Theater together = $70 \times \frac{4}{7} + 66 \times \frac{5}{11}$
$= 70$
Number of males who bought ticket from C5 theatre = $72 \times \frac{5}{9} = 40$

Required Percentage = $\frac{70 - 40}{40} = 75\%$

68. Total revenue earned by theatre C4
= 150 × 14 + 200 × 36 + 250 × 30 = 16800

69. Number of male who bought ticket from C1

$= 65 \times \frac{6}{13} = 30$

Number of male who bought ticket from C2

$= 70 \times \frac{3}{7} = 30$

Number of male who bought ticket from C3

$= 60 \times \frac{2}{5} = 24$

$= 30 + 30 + 24 = 84$

$\therefore$ Required average $= \frac{84}{3} = 28$

70. Number of males who bought ticket from C4, C5 and C6 together $= 66 \times \frac{6}{11} + 72 \times \frac{5}{9} + 68 \times \frac{8}{17} = 36 + 40 + 36 = 112$

Number of females who bought ticket from C4, C5 and C6 together $= 66 \times \frac{5}{11} + 72 \times \frac{4}{9} + 68 \times \frac{8}{17} = 30 + 32 + 32 = 94$

$\therefore$ Required difference = 112 – 94 = 18

IBPS PO PHASE -I MOCK TEST - 176 (ANSWER KEY)

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

Note:- If you face any problem regarding result or marks scored, please contact 9313111777

Note:- Whatapp with Mock Test No. and Question No. at 7053606571 for any of te doubts. Join the group and you may also share your suggestions and experience of sunday Mock Test.

Note:- If your opinion differs regarding any answer, please message the mock test and question number to 8860330003