IBPS PO SPECIAL PHASE -I MOCK TEST - 237 (SOLUTION)

REASONING

(1-5) :

Month	Date	Persons
May	7	R
	10	P
	15	B
June	7	D
	10	E
	15	A
October	7	Q
	10	S
	15	C

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

(6-10) :

Floor	Subject	Person
7	Biology	B
6	Hindi	A
5	English	F
4	Chemistry	D
3	Physics	E
2	Geography	G
1	History	C

6. (4) 7. (3) 8. (2)
9. (2) 10. (3)

(11–15) :

© → ≥ @ → <
® → = $ → ≤
→ >

11. (2) Combining all statements
M < T ≤ R ≥ J
I. J > M → Can't say
II. R > M → True
III. J = T → Can't Say
Only II is true.

12. (5) Combining all statements
D ≥ B > H = F
I. F < B → True
II. F < D → True
III. H < D → True
All are true.

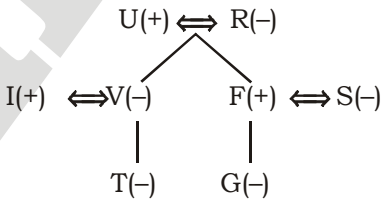
13. (5) Combining all statements
H = M < T ≤ K
I. K > M ® True
II. T > H ® True
III. H < K ® True
All are true.

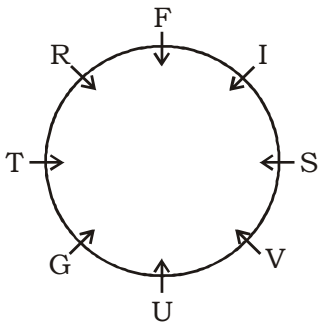
14. (3) Combining all statements
N ≤ A > J ≥ D
I. N < J → False
II. A ≥ D → False
III. D < A → True
Only III is true.

15. (2) Combining all statements
R = T < M ≤ K
I. K < R → False
II. M > R → True
III. K > T → True
II and III are true.

(16–20) :

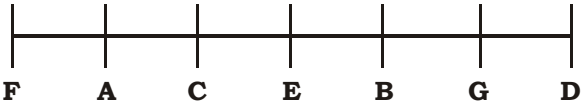
Family tree



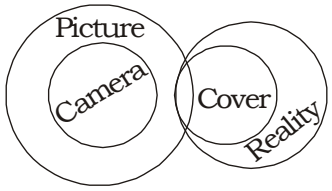


16. (2) 17. (4) 18. (3)
19. (3) 20. (1)

(21-25) :



21. (1) 22. (3) 23. (2)
24. (5) 25. (2)
26. (4)

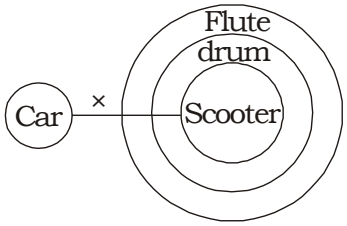


I. True II. False
III. True IV. False
Only I and III follows

27. (4)

I. True II. False
III. True IV. False
Only I and III follows

28. (5)



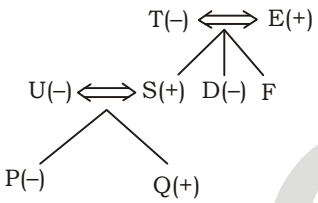
I. True II. True
III. True IV. False
Only I, II and III follows

29. (5) T

30. (3) 1st, 3rd, 4th and 6th letters are I, T, R, D
The meaningful word formed is DIRT

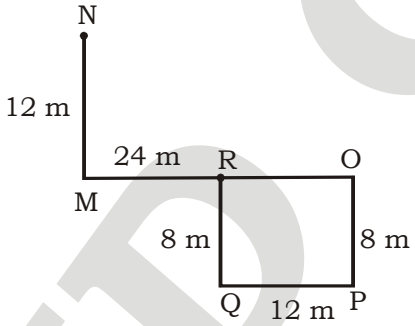
(31–32) :

Family Tree



31. (3) 32. (1) 33. (3)

(34–35) :



34. (4) 35. (1)

MATHS

36.(4) Let cost price of article – A be Rs. 10x

So, cost price of article – B = $10x \times \frac{80}{100}$

= Rs. 8x

And, Selling price of article – A = $10x \times \frac{140}{100}$ = Rs. 14x

And selling price of article – B = $8x \times \frac{120}{100}$

= Rs. 9.6 x

ATQ,

14x – 9.6x = 528

4.4x = 528

x = Rs.120

Hence, cost price of article – B = 8x = Rs. 960

37.(5) Area of circle = πr^2

ATQ,

$\pi r^2 = 144p$

$\Rightarrow$ r = 12cm

Let side of a square be 'a' cm.

So,

$a^2 + a^2 = (12)^2$

$2a^2 = 144$

$a^2 = 72$

$a = 6\sqrt{2}$ cm

So, required perimeter = $4a = 24\sqrt{2}$ cm

38.(4) Let rate of interest offered by scheme – A be R% p.a.

Amount invested by Ayush at C.I = $\frac{5000 \times R \times 2}{100} + 5000$

= (100R + 5000) Rs.

Equivalent rate of interest of 10% C.I. for two years = $10 + 10 + \frac{10 \times 10}{100} = 21\%$

ATQ,

$= \frac{(100R + 5000) \times 21}{100} = 1218$

$\Rightarrow 21R + 1050 = 1218$

$\Rightarrow$ R = 8%

39.(4) Required ratio = $\frac{(72 + 48)}{108} = \frac{120}{108}$

= 10 : 9

40.(5) Domestic crockery items sold in 2015 and imported crockery items sold in 2016 together = 80 + 56 = 136

Imported crockery items sold in 2014 and domestic crockery items sold in 2017 together = 72 + 96 = 168

Required difference = 168 – 136 = 32

41.(1) Domestic crockery items sold in 2013

$= 132 \times \frac{100}{88} = 150$

Imported crockery items sold in 2013

$= 150 \times \frac{4}{5} = 120$

Now, required % = $\frac{120}{80} \times 100 = 150\%$

42.(4) Domestic crockery items sold in 2016 & 2017 together = 108 + 96 = 204
Imported crockery items sold in 2016 & 2018 together = 56 + 104 = 160

Now, required % = $\frac{204 - 160}{160} \times 100$

$\frac{440}{16}\% = 27.5\%$

43.(2) Average of imported crockery items sold in 2017 & 2018 = $\frac{80 + 104}{2} = 92$

Average of domestic crockery items sold in 2015, 2017 & 2018 = $\frac{80 + 96 + 136}{3}$

= 104
Required difference = 104 – 92 = 12

44.(1) ATQ,
Imported crockery items sold in 2019 = 96 × $\frac{4}{3}$ = 128

Domestic crockery items sold in 2019 = 128 × $\frac{925}{800}$ = 148

So, required ratio = $\frac{(148 + 128)}{(72 + 132)} = \frac{276}{204}$

= 23 : 17

45. (3) Wrong number = 18
Pattern of series
6 × 2 = 12
12 × 3 = 36
36 × 4 = 144
144 × 5 = 720
720 × 6 = 4320
4320 × 7 = 30240
So, there should be 12 in place of 18.

46. (4) Wrong number = 1170
Pattern of series
$1487 - (7)^3 = 1487 - 343 = 1144$
$1144 - (6)^3 = 1144 - 216 = 928$
$928 - (5)^3 = 928 - 125 = 803$
$803 - (4)^3 = 803 - 64 = 739$
$739 - (3)^3 = 739 - 27 = 712$
$712 - (2)^3 = 712 - 8 = 704$
So, there should be 1144 in place of 1170.

47. (1) Wrong number = 840
Pattern of series
$19 + (19)^2 = 19 + 361 = 380$
$380 + (17)^2 = 380 + 289 = 669$
$669 + (13)^2 = 669 + 169 = 838$
$838 + (11)^2 = 838 + 121 = 959$
$959 + (7)^2 = 959 + 49 = 1008$
$1008 + (5)^2 = 1008 + 25 = 1033$
So, there should be 838 in place of 840.

48.(4) Wrong number = 110
Pattern of series
957 – 597 = 360
597 – 360 = 237
360 – 237 = 123
237 – 123 = 114
123 – 114 = 9
So, there should be 114 in place of 110.

49.(1) Wrong numbers = 1597
Pattern of series
1764 – 83 = 1681
1681 – 81 = 1600
1600 – 79 = 1521
1521 – 77 = 1444
1444 – 75 = 1369
1369 – 73 = 1296
So, there should be 1600 in place of 1597.

50.(4) ATQ,
Number of bottles filled by machine – B in 1 hour = $\frac{200 \times 750}{500}$ = 300
Hence, numbers of bottles filled by machine – B in 8 hours = 300 × 8 = 2400

51.(2) Number of divisible of 5 in first 100 natural numbers = $\frac{100 - 5}{5} + 1 = 20$

Number of divisible of 7 in first 100 natural numbers = $\frac{98 - 7}{7} + 1 = 14$

Since, 35 and 70 both numbers are divisible by 5 & 7.
So, total number of possible outcomes = 20 + 14 – 2 = 32

Required probability = $\frac{32}{100} = \frac{8}{25}$

52.(3) Let number of teachers & students in I.T. branch be '3x' & '19x' respectively.
So,
19x – 3x = 256
x = 16
So, number of teachers in I.T. branch = 3x = 48
Let numbers of teacher and students in Chemical branch be 'y' & '13y' respectively.
So,
13y – y = 168
y = 14
Hence, number of teachers in Chemical branch = y = 14
Required difference = 48 – 14 = 34

53. (5) Let number of students & teachers in Computer Science branch be '12x' & 'x' respectively.

So,
$12x - x = 275$
$x = 25$
So, number of students in Computer Science branch = $12x = 300$
Now, let number of students & teachers in mechanical branch be '21y' & '2y' respectively.
So,
$21y - 2y = 228$
$y = 12$
Hence, number of students in Mechanical branch = $21y = 252$

So, required % = $\frac{252}{300} \times 100 = 84\%$

54.(2) Let number of students & teachers in Civil branch be '13x' and '4x' respectively.
So,
$13x - 4x = 126$
$x = 14$
Hence, number of students in Civil branch = $13x = 182$
Number of teachers in Civil branch = $4x = 56$
Now,

Number of girls in Civil branch = $182 \times \frac{3}{7}$

$= 78$

Required % = $\frac{78}{56} \times 100 = \frac{975}{7}\%$

$= 139\frac{2}{7}\%$

55. (3) Let number of students & teachers in Computer Science branch be '12x' & 'x' respectively.
So, $12x - x = 275$
$x = 25$
Hence, number of students in Computer Science branch = $12x = 300$
Number of boys in Computer Science

branch = $300 \times \frac{7}{12} = 175$

Number of girls in Computer Science branch = $300 - 175 = 125$
Now,
Let number of students & teachers in Electrical branch be '15y' & '2y' respectively.
So,
$15y - 2y = 234$
$y = 18$
Hence, number of students in Electrical branch = $15y = 270$
So,
Number of boys in Electrical branch = $270 \times \frac{3}{5} = 162$
And number of girls in Electrical branch = $270 - 162 = 108$
Required difference = $(175 + 162) - (108 + 125) = 337 - 233 = 104$

56.(1) Let number of students & teachers in I.T. branch be '19x' & '3x' respectively.
So,
$19x - 3x = 256$
$x = 16$
Hence, number of students in I.T. branch = $19x = 304$ and number of teachers in I.T. branch = $3x = 48$
Let number of students & teaches in Electrical branch be '15y' & '2y' respectively.
So,
$15y - 2y = 234$
$y = 18$
Hence, number of students in Electrical branch = $15y = 270$
And number of teachers in Electrical branch = $2y = 36$
Now,

Required ratio = $\frac{304 + 270}{48 + 36} = \frac{574}{84}$

$= 41 : 6$

57.(4) Let number of students and teachers in Chemical branch be '13x' & 'x' respectively.
So,
$13x - x = 168$
$x = 14$
And number of teachers in Chemical branch = $x = 14$
Let number of students and teachers in mechanical branch be 21y & 2y respectively
So, $21y - 2y = 228$
$19y = 228$
$y = 12$

Require percentage = $\frac{14}{252} \times 100 = 5\frac{5}{9}\%$

58. (3) Final quantity of mixture left after replacing 'x' lit. of water = total quantity of mixture $\frac{\text{quantity of mixture replaced}}{\text{total quantity of mixture}}$ no.of time process performed
ATQ,

$44.8 = 70\left(1 - \frac{x}{70}\right)^2$

$$\frac{16}{25} = \left(1 - \frac{x}{70}\right)^2$$

So, x = 14, 126 lit.
As x cannot be greater than 70 lit
So, x =14 lit.
So, 14 liters of mixture can be taken out as capacity of vessel is only 70 liters.

59. (5) Total number of students who got passed in 2018 = $1200 \times \frac{92}{100} = 1104$

Total number of boys who got passed in 2018 = $1200 \times \frac{11}{20} \times \frac{95}{100} = 627$

Required % = $\frac{(1104 - 627)}{1200 \times \frac{9}{20}} \times 100$

$= \frac{477}{540} \times 100 = \frac{265}{3} = 88\frac{1}{3}\%$

60. (2) CSA of hemispherical bowl = $2\pi r^2$
ATQ,
$2\pi r^2 = 693$

$r^2 = 693 \times \frac{7}{22} \times \frac{1}{2}$

$r^2 = \frac{441}{4}$

r = 10.5 cm
Now,

Height of conical tent = $10.5 \times \frac{10}{7}$

= 15 cm
Radius of conical tent = 10.5 cm
So,

Required volume = $\frac{1}{3} \times \frac{22}{7} \times 10.5 \times 10.5 \times 15 = 1732.5\ cm^3$

61. (3) $(?)^2 = 63.9872 \times 9449.8780 \div 243.0034$
$(?)^2 \approx 64 \times 9450 \div 240$

$(?)^2 = \frac{64 \times 9450}{240} = 2520$

$\therefore \quad ? = \sqrt{2520} \approx 50$

62. (4) ? = 5237.897 – 6629.010 + 7153.999 – 2205.102
≈ 5238 – 6629 + 7154 – 2205
= (5238 + 7154) – (6629 + 2205)
= 12392 – 8834 = 3558

63. (2) ? = 4985.0346 ÷ 215.987 – 3768.112 ÷ 206.868
≈ 4985 ÷ 216 – 3768 ÷ 207
= 23. 078 – 18.202
= 4.876 ≈ 5

64. (1) ? $\sqrt{956240} \approx 977.8 \approx 979$

65. (5) ? = 459% of 849.947 + 266% of 6284.012 – 1486.002

$\approx \frac{460 \times 850}{100} + \frac{266 \times 6285}{100} - 1486$

≈ 3910 + 16718 – 1486
= 19142 ≈ 19130

(66-70) :
Total number of students studying in Science of College P = 1800
So, total number of students studying in Management of College P = $\frac{3}{4} \times 1800 = 1350$

Let number of students studying in Law and Arts of College P be 'x' and 'y' respectively.

As, $y = \frac{1800 + 1350 + x}{3}$

And $x = \frac{120}{100} \times y$

So, y = 1750 and x = 2100
Number of students studying in Commerce of College P = $\frac{400}{7} \times \frac{1}{100} \times 1750 = 1000$

Total students in college P = (1800 + 1140 + 1350 + 1750 + 2100 + 1000) = 9140
Let total number of students studying in Commerce of College Q be '8x'
So, total number of students studying in Management of College Q be '9x'
ATQ,
Given, 9x - 8x = 200
x = 200
Total number of students studying in Commerce of College Q = 1600
Total number of students studying in Management of College Q = 1800
Total number of students in College Q = 9140 - 2480 =6660
so, total number of students studying in Medical of College Q = $6660 \times \frac{10}{100} = 666$

Total students studying in science & law in college Q = 6660 - (1800 + 1600 + 1250 + 660) = 1344
total number of students studying in Science of College Q = $\frac{5}{12} \times 1344 = 560$

Total number of students studying in Law of College Q = (1344 - 560) = 784

Courses	P	Q
Commerce	1000	1600
Management	1350	1800
Arts	1750	1250
Medical	1140	666
Science	1800	560
Law	2100	784
Total	**9140**	**6660**

66. (3) Required ratio = $\frac{1800+1350}{1250+1600} = \frac{21}{19}$

67. (5) Required percentage

$$= \frac{(1000+1600)+(1750+1250)}{(1140+666)+(2100+784)} \times 100$$

$$= 119\frac{27}{67}\%$$

68. (1) Number of girls in Science of College Q = $\frac{40}{100} \times 560 = 224$

Number of girls in Management of College Q = $\frac{40}{100} \times 1800 = 720$

Let number of girls studying Law in College Q be 'x'
ATQ,

$$\frac{224+720+x}{3} = 458 \Rightarrow x = 430$$

So, boys studying in Law of College Q = 784 – 430 = 354

69. (2) Required ratio

$$= \frac{\frac{560+1250+1800+1600}{4}}{\frac{1800+1350+1140}{3}}$$

= 521 : 572

70. (1) Required percentage

$$= \frac{(1250+1750)-(1800+560)}{(1750+1250)} \times 100$$

$$= \frac{640}{3000} \times 100 = 21\frac{1}{3}\%$$

ENGLISH LANGUAGE

91. (1) Option (2) is incorrect because 'The first two chapters' will be used in place of 'The two first chapters' as ordinal adjective (like...first, second...next, last etc.) is used first then after that cardinal adjective is used (one, two, three, four etc.). Other options are also incorrect similarly and only option (1) is correct.

92. (1) Option (2) is incorrect because 'live' will be used in place of 'have been lived' as simple present tense is used for work done for some permanent work of present.

93. (4) All the options except (4) are incorrect.

94. (1) All the options are incorrect except option (1). Option (4) is incorrect as 'between' is used for two things or person.

IBPS PO SPECIAL PHASE -I MOCK TEST - 237 (ANSWER KEY)

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

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