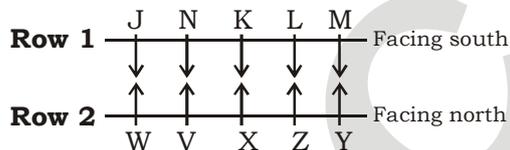


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7. (3) **Given statements :**
 $G > R \geq E = A \leq T \leq S$... (i)
 $D \leq A \leq J$... (ii)
 Combining (i) and (ii), we get
 $D \leq A \leq T$
 Thus, $D \leq T$ or $T \geq D$. Hence I is true. Again, we can't compare R and S. Hence II ($R > S$) is not true.
8. (4) **Given statements :**
 $A \geq B > C \leq D \leq E < F$
 Thus, we can't compare A and E. Hence I ($A \leq E$) is not true.
 Again, $C \geq F$ is true. Hence II is true.
9. (1) **Given statements :**
 $G > R \geq E = A < T < S$... (i)
 $D \leq A \leq J$... (ii)
 Combining (i) and (ii), we get
 $G > R \geq E = A \leq J$
 Thus, we can't compare G and J. Hence neither I ($J > G$) nor II ($J = G$) is true.
10. (2) **Given statements :**
 $S < L < I = P \geq E > R$... (i)
 $L > Q$... (ii)
 Combining (i) and (ii), we get
 $Q < L < I = P \geq E$
 Thus, we can't compare E and Q. Hence II ($E \geq Q$) is not true. Again, we can't compare L and R. Hence I ($L < R$) is not true.

(11-15) :



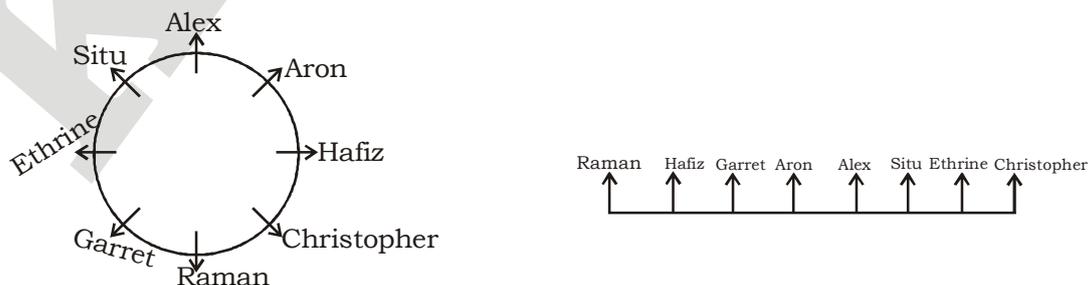
11. (3) 12. (4) 13. (1) 14. (3) 15. (3)

(16-20) :

Person	Game	T-Shirt	Mobile
U	Carrom	Blue	Moto G
V	Kho-Kho	Yellow	Lenovo
W	Chess	Violet	Lenovo
X	Hockey	Red	Micromax
Y	Tennis	Orange	Moto G

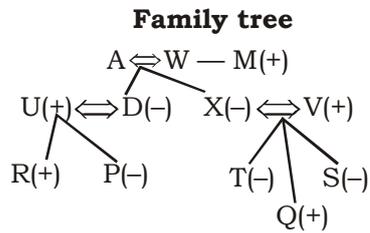
16. (3) 17. (4) 18. (1) 19. (3) 20. (3)

(21-26) :



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

(27-31) :



27. (2) 28. (1) 29. (3) 30. (4) 31. (3)

(32-35) :

must adapt and change → ki la bx tu
 little better than nothing → ex qa fn rm
 change a must here → gm tu dr la
 here to adapt better → fn bx ms dr

32. (5) better ⇒ fin

and ⇒ fn

and ⇒ ki

The code for 'improved' may be 'yz'.

33. (4) gm ⇒ a

34. (1) must bring change → op la tu

Now,

bring ⇒ op

here ⇒ dr

The code for 'peace' may be 'ov'.

35. (2) than ⇒ cx/ qa/rm

MATHS

36. (4) ? ≈ 466 + 765 - 212 = 1019 ≈ 1020

37. (1) ? ≈ $\frac{150 \times 150}{100} + 150 = 225 + 150 = 375$

38. (4) ? ≈ $\frac{3000 \times 750}{1000} - 1400 = 2250 - 1400 = 850$

39. (3) ? ≈ 51 - 34 + 21 = 38 ≈ 40

40. (5) ? ≈ $\frac{900}{30} \times \frac{90}{300} \times \frac{600}{50} = 108 \approx 110$

41. (1) Total IR rays received in 1 minute = $3600 \times \frac{10}{100} = 360$ units

Time taken to receive 8750 units of IR = $\frac{8750}{360}$ minutes = 24.3 minutes

42. (3) Amount of UV rays in 5 minutes = $3600 \times \frac{18}{100} \times 5 = 3240$ units
- Amount of IR rays received in 2 minutes = $3600 \times \frac{10}{100} \times 2 = 720$ units
- Amount of UV rays in 5 minutes of sun rays is $\left(\frac{3240}{720}\right) = 4.5$ times the amount of IR rays received in 2 minutes.
43. (2) The amount of Gamma rays received when the ozone layer cover completely disappears = 100%
- The amount of Gamma rays received in one minute if the ozone layer were to completely disappear = $3600 \times \frac{12}{100}$ units = 432 units
44. (4) Amount of Microwaves received in 4 minutes = $3600 \times \frac{15}{100} \times 4 = 2160$ units Amount of Alpha rays received in 3 minutes = $3600 \times \frac{8}{100} \times 3 = 864$ units
- \therefore Amount of Microwavers received in 4 minutes is $(2160 - 864)$ units = 1296 units more than the amount of Alpha rays received in 3 minutes.
45. (4) Given that the body requires 40 units of vitamin D every day.
To generate 1 unit of vitamin D, requirement of Beta rays = 30 units
To generate 40 units of vitamin D, requirement of Beta rays = $(30 \times 40) = 1200$ units
- Now, in 1 minute $3600 \times \frac{5}{100} = 180$ units Beta rays are received.
- \therefore 180 units Beta rays are received in 1 minute
- \therefore 1200 units Beta rays are received in $\frac{1}{180} \times 1200 = \frac{120}{18} = 6\frac{2}{3}$ minutes
46. (5) The given number series is based on the following pattern :
- 7413 + 9 × 1 = 7422
7422 + 9 × 2 = 7440
7440 + 9 × 3 = **7467**
7467 + 9 × 4 = 7503
7503 + 9 × 5 = 7548
Hence, 7467 will replace the question mark.
47. (4) The given number series is based on the following pattern :
- 4 = 2² ; 16 = 4²;
36 = 6² ; 64 = 8² ;
100 = 10².
 \therefore ? = 12² = **144**
Hence, 144 will replace the question mark.
48. (1) The given number series is based on the following pattern:
- 12 × 3 – 3 = 33
33 × 3 – 3 = 96
96 × 3 – 3 = **285**
285 × 3 – 3 = 852
Hence, 285 will replace the question mark.

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

$$70000 \div 5 = 14000$$

$$14000 \div 5 = 2800$$

$$2800 \div 5 = \mathbf{560}$$

$$560 \div 5 = 112$$

$$112 \div 5 = 22.4$$

Hence, 560 will replace the question mark.

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

$$102 - 3 = 99$$

$$99 + 5 = 104$$

$$104 - 7 = 97$$

$$97 + 9 = 106$$

$$106 - 11 = \mathbf{95}$$

Hence, 95 will replace the question mark.

51. (3) Selling price of mixture = ₹ 20

$$\text{Cost price of mixture} = \frac{100}{125} \times 20 = ₹ 16$$

By the rule of alligation,

$$\begin{array}{ccc} 25 & & 0 \\ & \diagdown & / \\ & 16 & \\ & / & \diagdown \\ 16 & & 9 \end{array}$$

So, required ratio = 16 : 9

52. (2) Let the total number of boys and girls be B and G respectively.

$$\therefore \text{Total score of boys} = 71 B$$

$$\text{Total score of girls} = 73G$$

$$\text{Total score of the class} = 71.8 (B+G)$$

$$\therefore 71 B + 73 G = 71.8 (B+G)$$

$$0.8B = 1.2G$$

$$\frac{B}{G} = \frac{1.2}{0.8} = \frac{3}{2} = 3 : 2$$

53. (2) Let the sum be ₹ x .

$$x \left(1 + \frac{10}{100} \right)^4 - x \left(1 + \frac{20}{100} \right)^2 = 482$$

$$x \left(\frac{11}{10} \right)^4 - x \left(\frac{6}{5} \right)^2 = 482$$

$$x (1.4641 - 1.44) = 482$$

$$0.0241x = 482$$

$$x = \frac{482}{0.0241} = ₹ 20000$$

54. (4) Let the sides of the cuboid be a , b and c .

$$\therefore ab = 12 \text{ sq. cm.}$$

$$bc = 20 \text{ sq.cm.}$$

$$ac = 15 \text{ sq.cm.}$$

$$\text{Volume of cuboid} = abc$$

$$= \sqrt{a^2 b^2 c^2} = \sqrt{12 \times 20 \times 15}$$

$$= \sqrt{3600} = 60 \text{ cu.cm.}$$

55. (3) Let the two digit number = $10y + x$.

According to the question,

$$10y + x = 3(x + y)$$

$$10y + x = 3x + 3y$$

$$10y - 3y + x - 3x = 0$$

$$7y - 2x = 0 \quad \dots(i)$$

$$\text{and } 10y + x + 45 = 10x + y$$

$$9x - 9y = 45$$

$$9(x - y) = 45$$

$$x - y = \frac{45}{9} = 5$$

$$x = y + 5 \quad \dots(ii)$$

$$\text{Now, } 7y - 2x = 0$$

$$7y - 2(y + 5) = 0$$

$$7y - 2y - 10 = 0$$

$$5y = 10$$

$$y = \frac{10}{5} = 2$$

\therefore From equation (ii),

$$x = 2 + 5 = 7$$

\therefore Number = $2 \times 10 + 7 = 27$

Note : This problem can be easily solved by hit and trial method out of the given alternatives.

56. (3) Average = $\frac{210 + 204 + 231 + 231}{4} = \frac{876}{4} = 219$

57. (1) Total number of girls = $70 + 117 + 54 + 129 + 136 + 176 = 682$

58. (5) Required difference = $225 - 225 = 0$

59. (4) Let the total number of students be x .

$$\therefore \text{Boys} = \frac{44x}{100} \text{ and girls} = \frac{56x}{100}$$

$$\text{Different} = \frac{12x}{100} = 30$$

$$\therefore x = \frac{3000}{12} = 250$$

$$\therefore \text{Boys} = \frac{44}{100} \times 250 = 110$$

Similarly,

$$\text{Total students} = \frac{132 \times 100}{40} = 330$$

$$\text{Girls} = \frac{30 \times 330}{100} = 99$$

$$\therefore \text{Ratio} = \frac{110}{99} = \frac{10}{9}$$

60. (4) Students from $F_{1986} = 375$

Students from $C_{1986} = 250$

$$\text{Required\%} = \frac{375}{250} \times 100 = 150\%$$

61. (2) $\frac{A \times 90}{100} = \frac{30 \times B}{100}$

$$B = 3A$$

$$\frac{A \times x}{100} = 3A$$

$$x = 3 \times 100 = 300$$

62. (2) By question, number of ways of out comes when two dice are thrown = $n(s) = 36$

Possible cases of event when the sum of numbers on two dice is a prime numbers

= (1, 1), (1, 2), (1, 4), (1, 6), (2, 1), (2, 3), (2, 5), (3, 2), (3, 4), (4, 1), (4, 3), (5, 2), (5, 6), (6, 1), (6, 5)

Number of events = $n(A) = 15$

$$\text{Hence, required probability} = \frac{n(A)}{n(S)} = \frac{15}{36} = \frac{5}{12}$$

63. (1) According to the question,

SP of 12 marbles = ₹ 1, loss = 20%

$$\text{CP of 12 marbles} = ₹ \frac{1}{0.8} = ₹ 1.25$$

Now, SP of 12 marbles to gain of 20%

$$\text{CP} \times 1.2 = 1.25 \times 1.2 = ₹ 1.5$$

It means in order to gain 20%, he should sell 12 marbles for ₹ 1.5

$$\text{Thus, he should sell } \frac{12}{1.5} = 8 \text{ marbles for a rupee.}$$

64. (3) If the C.P. of table be ₹ x .

then

$$\frac{400 - 350}{x} \times 100 = 5$$

$$50 \times 100 = 5x$$

$$x = ₹ 1000$$

65. (3) Let the work is completed in x days.

$$\text{Work done by (A + B) in 1 day} = \frac{1}{10} \text{ work}$$

$$\text{Work done by (B + C) in 1 day} = \frac{1}{18} \text{ work}$$

$$\text{A's 5 day's work} + \text{B's 10 day's work} + \text{C's 15 day's work} = 1$$

$$\text{(A + B)'s 5 day's work} + \text{(B + C)'s 5 day's work} + \text{C's 10 day's work} = 1$$

$$\frac{5}{10} + \frac{5}{18} - \frac{10}{x} = 1$$

$$x = 45$$

66. (5) I. $\frac{15}{\sqrt{x}} - \frac{9}{\sqrt{x}} = \sqrt{x}$

$$\frac{6}{\sqrt{x}} = \sqrt{x}$$

$$x = 6$$

II. $y^{10} = (36)^5 = (6^2)^5 = 6^{10}$

$$y = 6$$

$$\text{Clearly } x = y$$

67. (1) I. $5x + 2y = 96$

II. $3(7x + 5y) = 489$

$$7x + 5y = 489 \div 3 = 163$$

$$\text{By equation I} \times 5 - \text{equation II} \times 2,$$

$$25x + 10y - 14x - 10y = 480 - 326$$

$$11x = 154$$

$$x = \frac{154}{11}$$

$$x = 14$$

$$\text{From equation I,}$$

$$14 \times 5 + 2y = 96$$

$$2y = 96 - 70 = 26$$

$$y = 13$$

$$\text{Clearly, } x > y$$

68. (5) I. $(441)^{\frac{1}{2}} \cdot x^2 - 111 = 225$

$$21x^2 = 225 + 111 = 336$$

$$x^2 = \frac{336}{21} = 16$$

$$x = \pm 4$$

II. $\sqrt{121} y^2 + (6)^3 = 260$

$$11y^2 + 216 = 260$$

$$11y^2 = 260 - 216 = 44$$

$$y^2 = \frac{44}{11} = 4$$

$$y = \pm 2$$

69. (3) I. $17x = 169 + 14 + 25 + 4x$
 $13x = 208$

$$x = \frac{208}{13} = 16$$

II. $9y - 345 = 4y - 260$

$$9y - 4y = 345 - 260$$

$$5y = 85$$

$$y = 17$$

Clearly, $x < y$

70. (3) I. $3x^2 - 13x + 14 = 0$

$$3x^2 - 7x - 6x + 14 = 0$$

$$x(3x - 7) - 2(3x - 7) = 0$$

$$(x - 2)(3x - 7) = 0$$

$$x = 2 \text{ or } \frac{7}{3}$$

II. $y^2 - 7y + 12 = 0$

$$y^2 - 4y - 3y + 12 = 0$$

$$y(y - 4) - 3(y - 4) = 0$$

$$(y - 3)(y - 4) = 0$$

$$y = 3 \text{ or } 4$$

Clearly, $x < y$

English

77. (1) The error is in the first part of the sentence. We need to replace 'business' with 'businesses'. The determiner 'several' implies the context of 'more than two', so we need to use plural noun 'businesses'.
78. (4) The error is in the fourth part of the sentence. We need to replace 'waiting' with 'wait'. 'Rather than' is used with the infinitive form of a verb to indicate negation as a contrary choice or wish. The base form of the verb in the sentence is 'wait'.
79. (4) The error is in the fourth part of the sentence. We need to replace 'company' with 'companies'. The use of the plural auxiliary verb 'are' indicates the requirement of plural subject 'companies', in accordance to the rule of subject verb agreement.
80. (1) The error is in the first part of the sentence. We need to replace 'has' with 'have'. Plural subject 'Psychologists' should be accompanied by plural auxiliary verb 'have' in accordance with the rule of subject-verb agreement.
81. (4) The error is in the fourth part of the sentence. We need to replace 'we want to accomplishing' with 'what we want to accomplish'.
82. (2) The error is in the second part of the sentence. We need to replace 'few imagine' with 'few could imagine'.

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IBPS PO SPECIAL PHASE -I MOCK TEST - 253 (ANSWER KEY)

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