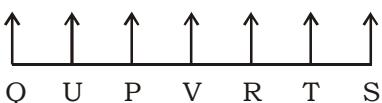


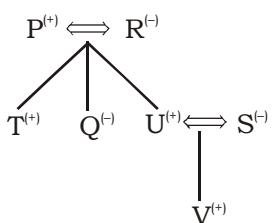
**IBPS PO SPECIAL PHASE - I - 287 (SOLUTION)**

**REASONING**

**(1-4) :**



**Family Tree**



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

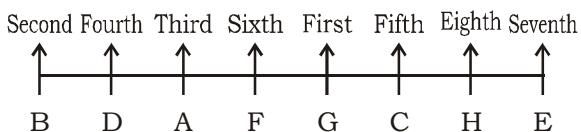
**(5-9):**

5. (1)  $Q \geq P < N = R \leq W$   
     I.  $W > P \rightarrow$  True  
     II.  $Q \geq R \rightarrow$  False  
     Only conclusion I is true
6. (5)  $K \geq G = C \geq T = S < V$   
     I.  $K \geq S \rightarrow$  True  
     II.  $T < V \rightarrow$  True  
     Both conclusions I and II are true
7. (2)  $D \geq W \leq R = T \leq S$   
     I.  $D \leq T \rightarrow$  False  
     II.  $S \geq W \rightarrow$  True  
     Only conclusion II is true
8. (4)  $B > U \leq X < Z$   
      $B \geq C = A$   
     I.  $B \geq Z \rightarrow$  False  
     II.  $A \leq U \rightarrow$  False  
     Neither conclusion I nor II is true
9. (4)  $B = R \geq Q < U = P \geq S$   
     I.  $B < U \rightarrow$  False  
     II.  $Q \geq S \rightarrow$  False  
     Neither conclusion I nor II is true

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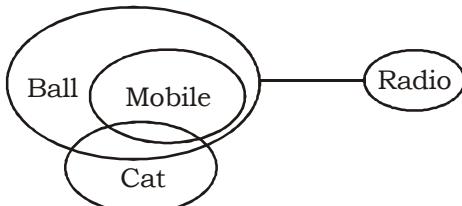
**(10-14):**



10. (3)      11. (2)      12. (3)      13. (2)      14. (2)

**(15-19) :**

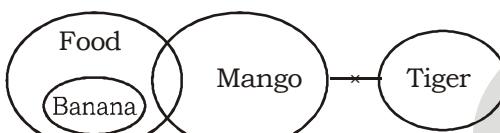
15. (2)



- I. False      II. True

Only conclusion II is true

**(16-17):**



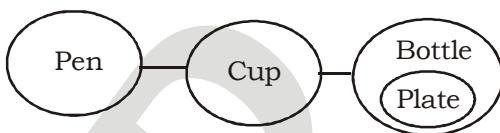
16. (2) I. False      II. True

Only conclusion II is true

17. (2) I. False      II. True

Only conclusion II is true

**(18-19):**



18. (4) I. False      II. False

Neither conclusion I nor II is true

19. (5) I. True      II. True

Both conclusions I and II are true

**(20-22) :**

$$E > A > B \dots\dots(i)$$

$$B > D > C > F \dots\dots(ii)$$

From (i) and (ii),

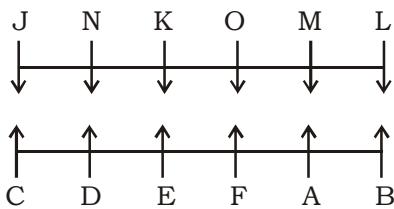
$$E > A > B > D > C > F$$

20. (2)      21. (1)      22. (3)

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**(23-24) :**



23. (2)

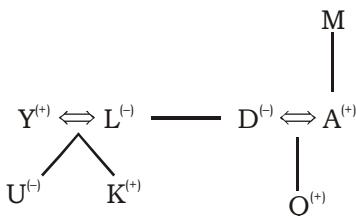
24. (3)

25. (1)

26. (4)

27. (2)

**(28-30) :**

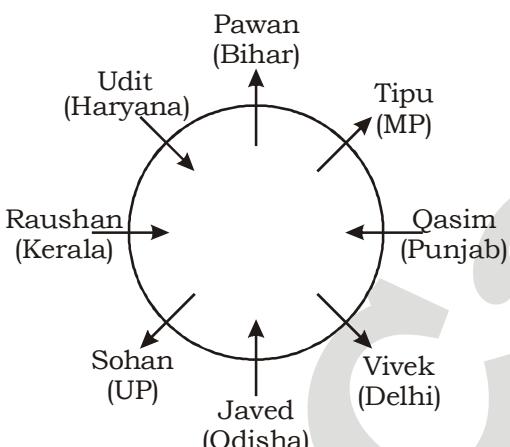


28. (2)

29. (2)

30. (2)

**(31-35) :**



31. (4)

32. (2)

33. (1)

34. (3)

35. (2)

### MATHS

**(36-40) :**

36. (1)  $\sqrt{454 + 985} - ?^2 \div 18.752 = 18.9001$

$$\sqrt{1439} - ?^2 \div 19 \approx 18$$

$$38 - ?^2 \times \frac{1}{19} = 18$$

$$?^2 = 20 \times 19$$

$$?^2 = 380$$

$$? = 19.49 \approx 19$$

37. (3)  $1127 \times 1373 \div 16.5 = ?$

$$? \approx 1127 \times 83 = 93541 \approx 93780$$

38. (1)  $3.001 \text{ of } 299.87 = ?\% \text{ of } 6271.98 - 2236.004$

$$3 \times 300 \approx \frac{?}{100} \times 6300 - 2236$$

$$63 \times ? = 2236 + 900$$

$$? = \frac{3136}{63} = 49.77 \approx 50$$

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39. (3)  $\sqrt[3]{824} \times (12.248)^3 \div \sqrt[3]{1345} = ?$

$$? \approx 29 \times 1728 \div 11$$

$$? = 29 \times 157.09 = 4555.63 \approx 4500$$

40. (2)  $788.475 + \sqrt[3]{45876} \div 4.5245 = ?$

$$? \approx 788 + 36 \div 5$$

$$\approx 788 + 7 = 795 \approx 800$$

**(41-45) :**

41. (4) Number of boys in institute A =  $39000 \times \frac{17}{100} \times \frac{72}{360} = 1326$

$$\therefore \text{Required number of girls} = 39000 \times \frac{17}{100} - 1326 = 5,304$$

42. (2) Number of boys in institute =  $39000 \times \frac{8.5}{100} \times \frac{120}{360} = 1105$

$$\therefore \text{Required difference} = 2210 - 1105 = 1,105$$

43. (5) Number of boys in institute D =  $39000 \times \frac{20}{100} \times \frac{34.8}{360} = 754$

$$\therefore \text{Required \%} = \left( \frac{7046}{7800} \times 100 \right)\% = 90.33\%$$

44. (1) Number of boys in institute A =  $39000 \times \frac{17}{100} \times \frac{72}{100} = 1326$

$$\text{Number of boys in institute B} = 39000 \times \frac{13.5}{100} \times \frac{72}{100} = 1053$$

$$\therefore \text{Required difference} = 1326 - 1053 = 273$$

45. (2) Number of boys in institute F =  $39000 \times \frac{26}{100} \times \frac{30}{360} = 845$

$$\text{Number of girls in institute F} = 39000 \times \frac{26}{100} - 845 = 9295$$

$$\therefore \text{Required \%} = \left( \frac{9295}{39000} \times 100 \right)\% = 23.83\% \approx 24\%$$

**(46-50) :**

46. (4) The number series is as follows:

$$949 \times 0.2 = 189.8$$

$$189.8 \times 0.3 = \mathbf{56.94}$$

$$56.94 \times 0.4 = 22.776$$

$$22.776 \times 0.5 = 11.388$$

$$11.388 \times 0.6 = 6.8328$$


  
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47. (5) The number series is as follows:

$$\begin{aligned} 25 \times 2 + 3 &= 53 \\ 53 \times 3 + 4 &= 163 \\ 163 \times 4 + 5 &= 657 \\ 657 \times 5 + 6 &= 3291 \\ 3291 \times 6 + 7 &= \mathbf{19753} \end{aligned}$$

48. (5) The number series is as follows:

$$\begin{aligned} 14 \times 3 + 1.5 &= 43.5 \\ 43.5 \times 6 + 3 &= 264 \\ 264 \times 12 + 6 &= \mathbf{3174} \\ 3174 \times 24 + 12 &= 76188 \end{aligned}$$

49. (3) The number series is as follows:

$$\begin{aligned} 120 \div 8 &= 15 \\ 15 \times 7 &= 105 \\ 105 \div 6 &= 17.5 \\ 17.5 \times 5 &= 87.5 \\ 87.5 \div 4 &= \mathbf{21.875} \end{aligned}$$

50. (2) The number series is as follows:

$$\begin{aligned} 499 + 123 \times 1 &= 622 \\ 622 + 123 \times 2 &= 868 \\ 868 + 123 \times 3 &= 1237 \\ 1237 + 123 \times 4 &= 1729 \\ 1729 + 123 \times 5 &= 2344 \\ 2344 + 123 \times 6 &= \mathbf{3082} \end{aligned}$$

51. (5) C's share in the profit =  $\frac{2142}{10500} \times 21500 = ₹ 4,386$

52. (4)  $18 \text{ men} \times 14 = 16 \text{ women} \times 22$

$$63 \text{ men} = 88 \text{ women}$$

$$7 \text{ men} + 8 \text{ women}$$

$$7 \text{ men} + 8 \text{ women} = \left( \frac{88}{63} \times 7 + 8 \right) \text{ women} = \frac{160}{9} \text{ women}$$

$$\therefore \text{Number of days} = \frac{16 \times 22}{160} \times 9 = \frac{99}{5} \text{ days} = 19 \frac{4}{5} \text{ days}$$

53. (1) Let the distance between point A to B =  $x$  km and that of point B to C =  $(x + 15)$  km

ATQ,

$$\frac{x+15}{18} = \frac{x}{12}$$

$$12x + 180 = 18x$$

$$6x = 180$$

$$x = 30 \text{ km}$$

$$\begin{aligned} \therefore \text{Required time to cover distance between point C to B in downstream} &= \frac{30}{18} \\ &= 1 \text{ hour } 40 \text{ minutes} \end{aligned}$$

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54. (5)  $S.I = \frac{3550 \times 10 \times 3}{100} = ₹ 1,065$

$$C.I = 3550 \times \frac{110}{100} \times \frac{110}{100} \times \frac{110}{100} - 3550 = ₹ 1,175.05$$

$$\therefore C.I - S.I = 1175.05 - 1065 = ₹ 110.05$$

55. (3) Let C.P of each computer is ₹ 100.

$$\text{Total S.P after selling at 12% profit} = 200 \times \frac{112}{100} = ₹ 224$$

$$S.P \text{ after selling one computer at 25% profit} = 100 \times \frac{125}{100} = ₹ 125$$

$$S.P \text{ of second computer} = 224 - 125 = ₹ 99$$

ATQ,

$$(125-99) \rightarrow 4212$$

$$\therefore 100 \text{ unit } \rightarrow \frac{4212}{26} \times 100 = ₹ 16,200$$

**(56-60):**

56. (4) Required ratio = 441 : 693 = 7 : 11

57. (2) Required average =  $\frac{256 + 563 + 347 + 651 + 412 + 321}{6} = \frac{2550}{6} = 425$

58. (3) Total number of employees working in all the years together in Company

$$\mathbf{A} = 664 + 569 + 440 + 256 + 717 = 2646$$

$$\mathbf{C} = 628 + 519 + 503 + 347 + 598 = 2595$$

$$\mathbf{E} = 638 + 621 + 541 + 412 + 519 = 2731$$

$$\mathbf{F} = 419 + 537 + 742 + 321 + 693 = 2712$$

$$\mathbf{D} = 552 + 438 + 527 + 651 + 582 = 2750$$

Required answer is company D.

59. (5) Required% =  $\left( \frac{440}{2750} \times 100 \right)\% = 16\%$

60. (3) Total number of employees working in company E in the year 2001, 2002 and 2004 together = 638 + 621 + 412 = 1671

$$\therefore \text{Required difference} = 2595 - 1671 = 924$$

61. (4) Let the average age of group of 25 people is  $x$  years.

ATQ,

$$25 \times x - 80 = 24(x - 2)$$

$$25x - 80 = 24x - 48$$

$$x = 32 \text{ years}$$

$$\therefore \text{Age of new person} = 32 - 2 = 30 \text{ years}$$

62. (4) Let the weight of three pieces be  $x$ ,  $3x$  and  $5x$ .  
and total weight =  $9x$

ATQ,

$$(9x)^2 = 8100$$

$$x^2 = 100$$

$$\text{Total cost after breaking} = (x)^2 + (3x)^2 + (5x)^2 = 35x^2$$

$$\therefore \text{Loss} = 81x^2 - 35x^2 = 46x^2 \\ = 46 \times 100 = ₹ 4,600$$

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63. (2) By alligation method,

$$\begin{array}{ccc}
 & \frac{1}{4} & \frac{3}{8} \\
 & \swarrow & \searrow \\
 & \frac{1}{3} & \\
 & \swarrow & \searrow \\
 \frac{3}{8} - \frac{1}{3} & & \frac{1}{3} - \frac{1}{4} \\
 = \frac{1}{24} & & = \frac{1}{12}
 \end{array}$$

$$\therefore \text{Required ratio} = \frac{1}{24} : \frac{1}{12} = 1 : 2$$

64. (2) MP of watch =  $\frac{960}{80} \times 100 = ₹ 1,200$

$$\text{CP of watch} = ₹ \left( \frac{1200}{140} \times 100 \right)$$

$$\therefore \text{S.P of watch to get } 54\% \text{ profit with no discount} = \frac{1200}{140} \times 100 \times \frac{154}{100} = ₹ 1,320$$

65. (3) Area of square = 196 sq. cm

$$\therefore \text{Side} = 14 \text{ cm.}$$

$$\text{Radius of larger circle} = 14 \times 2 = 28 \text{ cm.}$$

$$\text{Radius of smaller circle} = 28 \times \frac{3}{7} = 12 \text{ cm.}$$

$$\therefore \text{Circumference of smaller circle} = 2\pi r$$

$$= 2 \times \pi \times 12 = 24 \pi \text{ cm}$$

**(66-70) :**

66. (5) I.  $2x^2 - 29x - 126 = 0$

$$2y^2 - 36x + 7x - 126 = 0$$

$$2x(x - 18) + 7(x - 18) = 0$$

$$x = \frac{-7}{2}, 18$$

$$\text{II. } y^2 + 19y - 120 = 0$$

$$y^2 + 24y - 5y - 120 = 0$$

$$y(y + 12) - 5(y + 12) = 0$$

$$y = 5, -12$$

67. (2) I.  $x^2 + 8x - 308 = 0$

$$x^2 + 22x - 14x - 308 = 0$$

$$x(x + 22) - 14(x + 22) = 0$$

$$x = 14, -22$$

$$\text{II. } y^2 + 47y + 550 = 0$$

$$y^2 + 22y + 25y + 550 = 0$$

$$y(y + 22) + 25(y + 22) = 0$$

$$y = -22, -25$$

Clearly,  $x \geq y$

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68. (4) I.  $x^2 + 8x - 384 = 0$

$$x^2 + 24x - 16x - 384 = 0$$

$$x(x+24) - 16(x+24) = 0$$

$$x = 16, -24$$

II.  $y^2 - 43y + 432 = 0$

$$y^2 - 27y - 16y + 432 = 0$$

$$y(y-27) - 16(y-27) = 0$$

$$y = 16, 27$$

Clearly,  $x \leq y$

69. (1) I.  $14x - 25 = 59 - 7x$

$$14x + 7x = 59 + 25$$

$$21x = 84$$

$$x = 4$$

II.  $13y^2 + 12^2 = 14^2$

$$13y^2 = 196 - 144$$

$$13y^2 = 52$$

$$y^2 = 4$$

$$y = +2, -2$$

Clearly,  $x > y$

70. (5) I.  $3x^2 + 7x = 6$

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

$$3x^2 + 9x - 2x - 6 = 0$$

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

$$x = \frac{2}{3}, -3$$

II.  $10y^2 - 7y + 1 = 0$

$$10y^2 - 5y - 2y + 1 = 0$$

$$5y(2y-1) - 1(2y-1) = 0$$

$$y = \frac{1}{2}, \frac{1}{5}$$

**ENGLISH LANGUAGE**

**(91-95) :**

91. (2) Change 'on' with 'over'

92. (1) Change 'is' with 'are'.

93. (3) Change 'chinese' with 'china's'

94. (4) Change 'task' with 'tasks'

95. (1) No error

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**VOCABULARIES**

<b>Word</b>	<b>Meaning in English</b>	<b>Meaning in Hindi</b>
Speculate	form a theory or conjecture about a subject without firm evidence	कल्पना करना
Instincts	an innate, typically fixed pattern of behavior in animals in response to certain stimuli	सहज ज्ञान
Quintessential	representing the most perfect or typical example of a quality or class	सर्वोत्कृष्ट
Replicates	make an exact copy of; reproduce	प्रतिकृति
Alluding	suggest or call attention to indirectly; hint at	संकेत करना
Pursuit	the action of following or pursuing someone or something	पीछा
Elusive	difficult to find, catch, or achieve	मायावी
Deterioration	the process of becoming progressively worse	क्षय
Dearth	a scarcity or lack of something	कमी
Voltage	an electromotive force or potential difference expressed in volts	तनाव
Clinging	(of a garment) fitting closely to the body and showing its shape	पकड़
Vivid	producing powerful feelings or strong, clear images in the mind	ज्वलंत
Worthwhile	worth the time, money, or effort spent; of value or importance	सार्थक
Thriving	(of a child, animal, or plant) grow or develop well or vigorously	संपन्न
Depriving	deny (a person or place) the possession or use of something	वंचित
Ducking	lower the head or the body quickly to avoid a blow or so as not to be seen	पूर्ण रूप से भीगना
Hedging	surround or bound with a hedge	प्रतिरक्षा
Swiftly	fleetly	तेजी से

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**IBPS PO SPECIAL PHASE - I - 287 (ANSWER KEY)**

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