

IBPS PO Preliminary Grand Test -IPP-181039 **HINTS & SOLUTIONS**

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

HINTS & SOLUTIONS

	AL .
2. (5)	VL
4. (2)	5. (3)
7. (1)	
9. (4)	10. (2)
12. (1)	
14. (5)	15. (4)
The correct spelling is adorned.	
No error.	
Replace 'seen' with 'see'.	
The correct spelling is awkwardness.	
The correct spelling is fraternity.	
22.(2)	
24.(3)	25.(2)
27.(1)	
29.(3)	30.(3)
Series is $\times 1 + 5$, $\times 2 + 10$, $\times 3 + 15$, $\times 4 + 20$	
	4. (2) 7. (1) 9. (4) 12. (1) 14. (5) The correct spelling is adorned. No error. Replace 'seen' with 'see'. The correct spelling is awkwardness. The correct spelling is fraternity. 22. (2) 24. (3) 27. (1) 29. (3)

34. (1) Series is
$$+1^2 + 2$$
, $+2^2 + 3$, $+3^2 + 4$
35. (2) Series is $1 \rightarrow 4$, $4+6=10$, $10+12=22$, $22+24=26$
Series is $2 \rightarrow 7$, $7+4=11$, $11+8=19$, $19+16=35$

Series is $\times 0.5 + 8$, $\times 1.0 + 12$, $\times 1.5 + 24$

Series is $1+1^2+1^3$, $2+2^2+2^3$, $3+3^2+3^3$

32. (2)

33. (3)

After first increment it is
$$100 + 100 \times \frac{25}{100} = 125$$

After second increment it is $125 + 125 \times \frac{25}{100}$

37. (2)
$$1^3 + 2^3 + \dots + 15^3 = \left[\frac{15(15+1)}{2}\right]^2$$

$$= (15 \times 8)^2 = 14400$$

$$\therefore \text{ Required sum } = 14400 - (1^3 + 2^3 + 3^3)$$

Now,
$$\frac{x}{80} = \frac{17 + 15}{17 - 15}$$
or, $\frac{x}{80} = \frac{32}{2}$
or, $\frac{x}{80} = 16$

40. (3) Population after 3 years =
$$8000000 \times \left[1 - \frac{8}{100}\right]^3$$

$$= 8000000 \times \frac{92 \times 92 \times 92}{1000000}$$
$$= 8 \times 92 \times 92 \times 92 = 6229504$$

$$= 8000000 \times \frac{92 \times 92 \times 92}{1000000}$$

$$= 8 \times 92 \times 92 \times 92 = 6229504$$
41. (2)
$$\frac{t}{12} + \frac{t}{15} + \frac{t}{20} = 1, \quad \frac{5t + 4t + 3t}{60} = 1, \quad 12t = 60$$

$$\therefore t = \frac{60}{12} = 5 \, \text{days}$$

42. (3)
$$\frac{2}{12} + \frac{t}{15} + \frac{t-2}{20} = 1$$
, $\frac{10+4t+3t-6}{60} = 1$

7t = 56,
$$t = \frac{56}{7} = 8 \text{ days}$$

43. (3)
$$\frac{1}{15} + \frac{1}{8} + \frac{1}{12}$$
, $\frac{8t + 15 + 10}{120} = \frac{33}{120}$

$$\therefore \frac{120}{33} = 3 \times 3 = 9 \text{ rest work} = 120 - 99 = 21$$

Remaining work = 21 - 15 = 6

$$10\frac{6}{10} = 10\frac{3}{5}$$
 days

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44. (2)
$$\frac{1}{15} + \frac{1}{8} + \frac{1}{12}$$
, $\frac{8t + 15 + 10}{120} = \frac{33}{120} = \frac{120}{33}$

A + B + C complete work in 3 days $33 \times 3 = 99$

:. Remaining = 120 - 99 = 21

Now A work = 9 + 1 days 21 - 8 = 13 work left

Now B complete = $10\frac{13}{15} = 10\frac{13}{15}$ days

45. (2)
$$\frac{t-3}{12} + \frac{t}{20} = 1$$
, $\frac{5t-15+3t}{60} = 1$, $8t = 60+15$

8t = 75,
$$t = \frac{75}{8} = 9\frac{3}{8}$$
 days

It is obvious from the chart given above. 46. (2)

47. (4) The required per cent =
$$\frac{5}{12} \times 16\% = 6\frac{2}{3}\%$$

The required number of men = 675 + 340 = 1015 48. (3)

49. (1) The required per cent =
$$\frac{4}{5} \times 100 = 80\%$$

50. (2) It is obvious from the chart given above.

Using Statement I: 2(L + B) = 20L + B = 10 **51.** (5) Using Statement II: L + B = 10

So, even by using both the statements together we

cannot find the area of the rectangle.

52. (2) Using Statement II: In 2 days 5 typists type 200 letters.

In 1 day 5 typists type 100 letters.

In 1 day 1 typist types 20 letters. In a day 12 typist type 240 letters.

53. (5) Using Statement I: x = 6, 7, 8, 9

Using Statements II: y = 7, 8

So, even by using both the statements together we cannot find the answer, as x + y can be odd as well as even. MINK

54. (3) From statements I:

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

$$\therefore x + y + P = 30$$

From Statement II:

$$-x = y$$

$$\therefore x + y + P = 30$$

55. (5)

56. (3) **I.**
$$20x^2 - 31x + 12 = 0$$
 $(4x - 3)(5x - 4) = 0$

$$x = \frac{3}{4}, \frac{4}{5}$$

II.
$$20y^2 + y - 12 = 0$$

or,
$$(4y-3)(5y+4)=0$$

$$y = \frac{3}{4}, -\frac{4}{5}$$
 $(x \ge y)$

57. (5) I.
$$2x^2 - 27x + 91 = 0$$

or, $(x - 7)(2x - 13) = 0$

or,
$$(x-7)(2x-13)=0$$

$$\therefore x = 7, \frac{13}{2}$$

II.
$$2y^2 + y - 136 = 0$$

or,
$$(y-8)(2y+17)=0$$

$$\therefore y=8, \frac{-17}{2}$$

58. (4) **I.**
$$2x-13\sqrt{x}+21=0$$

$$=\left(\sqrt{x}-3\right)\left(2\sqrt{x}-7\right)=0$$

$$\therefore x=9, \frac{49}{4}$$

11.
$$2y-15\sqrt{y}+28=0$$

$$\operatorname{or.} \left(2\sqrt{y} - 7\right)\left(\sqrt{y} - 4\right) = 0$$

$$\therefore y = \frac{49}{4} y = 16, \text{ Hence, } x \le y$$

59. (5) I.
$$x^2 = 3136$$

$$\therefore x = \pm 56$$

$$y^2 = 1764$$
∴ $y = \pm 42$

$$\therefore y = \pm 4$$

$$x^2 - 20x + 91 = (x - 7)(x - 13) = 0$$
 $x = 7, 13$

$$x^2 - 20x + 91 = (x - 7)(x - 13) = 0$$
 $x = 7, 13$
 $y^2 - 6y - 91 = (y - 13)(y + 7) = 0$ $x = 13, -7$

61. (2)
$$(1.7^3)^{2/3} \div (1.7)^2 \times (1.7^4)^{-1.2}$$

$$(1.7)^2 \div (1.7)^2 \times (1.7)^{-4.8} = (1.7)^{2 \div 1 - 4.8}$$

 $\therefore ? = -4.8$

62. (3)
$$\left(\frac{21}{34} \times 68\right) \div 0.6 = 42 \div 0.6 = 70$$

63. (5)
$$? \times 72 = 13.74 - 0.78 = 12.96$$

$$? = \frac{12.96}{70} = 0.18$$

64. (4)
$$? \div 8 = \left(\frac{546 \times 546}{91}\right) \div 12 \Rightarrow 3276 \div 12 = 273$$

$$\therefore ? = 273 \times 8 = 2184$$

$$\therefore ? = 273 \times 8 = 2184$$
35. (4)
$$\frac{30 \times ?}{100} = \frac{3 \times 5 \times 2772}{7 \times 11} = 540$$

$$\therefore ? = \frac{540 \times 10}{3} = 1800$$

66.(2)

71. (4) **I.** ke li pa
$$\rightarrow$$
 weather is hot

II. lee ke fi \rightarrow too hot summer

Even combing I and II, we can't find the code for too.

70.(1)

72. (4) From I: Arun > Nishi (not lightest)

From II: Rishi not heaviest > Aakash, Ravi, Tinku

67.(2)

By combining both, we can't determined who is lightest.

73. (3) From I: Vinay's rank from the top = 36 - 12 = 24Vinay is three rank below Kishan So, Kishan's rank = 21

From II: Kishan's rank = Sagar's rank is two ranks above Kishan = $4 + 2 = 6^{th}$ from top

From I: Sudha is mother of Manav **74.** (4)

From II: Yash is brother - in - law or sister - in -law of Sudha.

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Even using both the statements together, we cannot determined if Manav is nephew or Niece of Yash.

- **75.** (4) **From I**: C E
 - From II : B \underline{C} \underline{E} C E

Either C or E may be in the middle.

- **76-81.** Neeraj \rightarrow Taj Medanta Paesiatric.
 - $Pankaj \rightarrow \ Oberoi Fortis Orthopaedics$
 - Rajeev → Oberoi Apollo Radiologist
 - Mohit → Taj Max Neurologist
 - Puran → Radisson Batra Panthology/Oncologist
 - $Rinki \rightarrow Radisson Colimbia \ Asia Panthology$
 - Oncologist
- **76.** (3) **77.** (4)
- **78.** (5) **79.** (1)
- **80.** (1)

- **81.** (5)
- 82. (4) All scooters are vehicles + No vehicle is a four-wheeler = A + E = E = No scooter is a four-wheeler. Hence neither I nor II follows.
- 83. (1) Some pens are pencils(1) → conversion → Some pencils are pens (I). hence I follows. Some pens are pencils + No pencils are black = 1+1 = No conclusion. Hence II does not follow.
- 84. (4) All professionals are doctor + No doctor is rich = A + E = E = No professional is rich conversion →No rich is professional (E).
- 85. (1) 1+1 = No conclusion. So possibilities are open (hence I follows) but certainties are not (hence II does not follow).
- 86. (1) All shares are debentures + No debentures is an equity = A + E = E = No share is an equity -> conversion. No equity is a share (E) Some equalities are not shares (O). hence I and II does not follow.
- 87. (1) The movement of Sunil are shown in fig. from A to D. Clearly Δ BCD is right angled at BC² = CD² + BD²

$$BD = \sqrt{BC^2 - CD^2}$$

$$= \sqrt{13^2 - 12^2} = \sqrt{169 - 144} = \sqrt{25} = 5 \text{ KM}.$$

Therefore, Sunil is 5 km. east of central park.

- **88.** (5) N is either brother or sister of R
- **89.** (1) The option (I) is the valid reason as leather shoes production involves chemicals and leather from animals.
- 90. (4) Due to encouragement students will be more concerned towards the eco friendly options.
- 91-95.

Days	Subject	
Monday	Organization Behaviour	
Tuesday	Psychology	
Wednesday	Statistics	
Thursday	Computer Science	
Friday	Research Methods	
Saturday		
Sunday	Economics	

- 91.(5) Sunday- Economics.
- 92.(5) 93.(5)
- 94.(3) 95.(3)
- 96.(3) Chess is sitting game also indoor game
- 97.(4) Except Giraffes all are pet animals
- 98.(3) Page
- 99.(2) Planet/starts etc., blinks.
- 100. (1)