IBPS PO Preliminary Grand Test –IPP – 181036

HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1 – 5. D A G C F E B

1. (2)
2. (1)
3. (4)
4. (3)
5. (4)
6. (1) The correct spelling is adorned.
7. (5) No error.
8. (1) Replace 'seen' with 'see'.
9. (3) The correct spelling is awkwardness.
10. (1) The correct spelling is fraternity.
11. (5)
12. (4)
13. (4)
14. (2)
15. (2)
16. (3)
17. (1)
18. (3)
19. (4)
20. (5)
21. (1)
22. (3)
23. (5)
24. (2)
25. (3)
26. (4)
27. (2)
28. (1)
29. (5)
30. (4)
31. (4) $x = \sqrt{1369} = \pm 37$ .....(I)

$y = \sqrt[3]{29791} = 31$ .....(II)

$\therefore x \le y$

32. (3) $\text{equn.}(I) \times 4 + \text{equn}(II) \times 3$

$32x - 12y = 124$

$15x + 12y = 252$

$47x = 376$

$\therefore x = 8$ and from this $y = 11$

$\therefore x < y$

33. (2) $20x^2 - 35x - 44x + 77 = 0$

$5x(4x - 7) - 11(4x - 7) = 0$

$(4x - 7)(5x - 11) = 0$

$x = \frac{7}{4}, \frac{11}{5}$

$4y^2 + 16y - 7y - 28 = 0$

$4y(y+4) - 7(y + 4) = 0$

$(4y - 7)(y + 4) = 0$

$y = -4, \frac{7}{4}$ $\quad \therefore x \ge y$

34. (4) $6x^2 + 8x + 21x + 28 = 0$

$2x(3x + 4) + 7(3x + 4) = 0$

$(3x + 4)(2x + 7) = 0$

$x = -\frac{4}{3}, -\frac{7}{2}$

$6y^2 + 3y + 8y + 4 = 0$

$3y(2y + 1) + 4(2y + 1) = 0$

$(3y + 4)(2y + 1) = 0$

$\therefore y = -\frac{4}{3}, -\frac{1}{2}$ $\quad \therefore x \le y$

35. (5) $x^2 + 9x - 6x - 54 = 0$

$x(x + 9) - 6(x + 9) = 0$

$x = 6, -9$

$y^2 + 11y - 7y - 77 = 0$

$y(y + 11) - 7(y + 11) = 0$

$(y - 7)(y + 11) = 0$

$\therefore y = 7, -11$

i.e. No relation between x & y

36. (2) $\frac{4}{3}\pi r^3 : a^3, \quad \therefore r = \frac{a}{2}, \qquad \frac{4}{3}\pi\left(\frac{a}{2}\right)^3 = a^3,$

$4\pi r^3 : 24a^3, \qquad \pi = 6$

37. (2) $\pi l : 2\pi rh : 2\pi r^2 \quad \therefore r = h \quad \therefore l = r\sqrt{2}$

$\pi r\sqrt{2} : 2\pi r^2 : 2\pi r^2 \quad = \sqrt{2} : 2 : 2 \quad = 1 : \sqrt{2} : \sqrt{2}$

38. (2) $r_1^2 h_1 : r_2^2 h_2, \qquad 9\times 6 : 25 \times 4$

54 : 100, 27 : 50

39. (2) If he works al 40 days, he get total

40 × 10 = ₹ 400, but get ₹ 220

∴ 400 – 220 = 180

Now on leave he losses his total ₹ (10 + 2) = ₹ 12

So leave days $= \dfrac{180}{12} = 15 \text{ days}$ ∴ ∴ ∴

∴ Working days = 40 – 15 = 25 days

40. (4) $\dfrac{(10x+y)-(10y+x)}{10} = 3.6, \qquad 9x - 9y = 36$

x – y = 4

41. (2) Required average number of instruments manufactured by Company C $= \left(\dfrac{48+52+50+45+55+47}{6}\right) \text{lakh}$

$= \dfrac{297}{6} \text{lakh} = 4950000$

42. (3) Instruments manufactured by , all the companies together in 2004

= (48 + 36 + 50 + 43 + 56 + 48) = 281 lakh

∴ Required percentage = $\dfrac{56}{281} \times 100$ = 19.92 = 20

43. (1) Total number of instruments manufactured by Company A over the years

= (45 + 40 + 48 + 49+ 46 + 52) lakh = 280 lakh

Total number of instruments manufactured by Company F over the years

= (49 + 45 + 48 + 44 + 50 + 52) lakh = 288 lakh

Required percentage = $\dfrac{280}{288} \times 100$ = 97.22 = 97

44. (4) Total number of instruments manufactures by Company B over the years

= (35 + 32 + 36 + 37 + 30 + 38) lakh = 208 lakh

Required percentage = $\dfrac{37}{208} \times 100$ = 17.79= 18

45. (4) $\text{Avg.} = \dfrac{25+19+27+22+30+21}{6}$

$= \dfrac{144}{6} = 24 \text{ thousand}$

46. (3) $\text{Avg.}_{2012} = \dfrac{16+23+27+19+17+30}{6} = \dfrac{132}{6} = 22 \text{ thousand}$

$\therefore \text{Required}\% = \dfrac{22}{25} \times 100 = 88\%$

47. (2) $\text{Total}_{2008} = 119 \text{ thousand}, C_{\text{total}} = 140 \text{ thousand}$

$\therefore \text{Required}\% = \dfrac{119}{140} \times 100 = 85\%$

48. (4) $\text{Avg.}_{2013} = \dfrac{141}{6} = 23.5 \text{ thousand}$

$\text{Avg.}_{2010} = \dfrac{117}{6} = 19.5 \text{ thousand}$

Difference = 4 thousand

49. (3) $D_{\text{total}} = 119 \text{ thousand}$

$T_{(2009+2011)} = 119 + 129 = 248 \text{ thousand}$

$\therefore \text{Required}\% = \dfrac{119\times 100}{248} = 47.98\% \approx 48\%$

50. (1) ?=$(49)^3 \div (7)^2$

$\dfrac{49\times 49\times 49}{7\times 7} = 2401$

51. (5) ?= 28.217- 14.241 + 6.873- 2.434

= 35.090- 16.675= 18.415

52. (3) $\times 1 - 5^2, \times 1 - 4^2, \times 1 - 3^2, \times 1 - 2^2, \times 1 - 1^2 - \text{No.}$

should be 33.

53. (1) $(\times 1 + 11), (\times 3 + 11), (\times 5 + 11), (\times 7 + 11) - \text{No.}$

should be 321.

54. (3) $\times 3 + 1, \times 3 + 3, \times 3 + 5, \times 3 + 7 - \text{No.}$

should be 1238.

55. (1) $+4^2, +5^2, +6^2, +7^2, +8^2, + - \text{No,}$

should be 865

56. (4) $13^3, 11^3, 7^3, 13^3, 8^3, 5^3, 3^3,$

512 is a cube of even number, rest of the cube of prime numbers.

57. (2) $\dfrac{t}{12} + \dfrac{t}{15} + \dfrac{t}{20} = 1, \quad \dfrac{5t+4t+3t}{60} = 1, \quad 12t = 60$

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

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

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

59. (3) $\dfrac{1}{15} + \dfrac{1}{8} + \dfrac{1}{12}, \quad \dfrac{8t+15+10}{120} = \dfrac{33}{120}$

$\therefore \dfrac{120}{33} = 3 \times 3 = 9$ rest work = 120 – 99 = 21

Now B works, 9 + 1 = 10 days,

Remaining work = 21 – 15 = 6

$10\dfrac{6}{10} = 10\dfrac{3}{5} \text{ days}$

60. (2) $\dfrac{1}{15} + \dfrac{1}{8} + \dfrac{1}{12}, \quad \dfrac{8t+15+10}{120} = \dfrac{33}{120} = \dfrac{120}{33}$

A + B + C complete work in 3 days 33 × 3 = 99

∴ Remaining = 120 – 99 = 21

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

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

61. (2) $\dfrac{t-3}{12} + \dfrac{t}{20} = 1, \quad \dfrac{5t-15+3t}{60} = 1, \; 8t = 60 + 15$

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

62. (2) ?= 8537.986- 2416.005- 221.996

= 8537.986- 2638.001

= 5899.985= 5900

63. (3) ?= 1019.999÷60.007

$= \frac{1019.999}{60.007}$ = 16.998 =17

64. (4) ? =111111÷1111÷11

$= 111111 \times \frac{1}{1111 \times 11}$ = 9.09=9

65. (5) $? = \sqrt[3]{5000} = 17.1 = 17$

66. (2)

67. (5)

68. (2)

69. (2)

70. (1)

71. (4) It is clear that the government is failed to control and prevent the economic slowdown and corruption.

72. (1) Building up a strong mechanism that prevent corruption is an effective step.

73. (2) It is obvious that corruption has badly effected the whole system and it is the soul assumption behind the information.

74. (1) The movement of Sunil are shown in fig. from A to D. Clearly Δ BCD is right angled at –

$BC^2 = CD^2 + BD^2$

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

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

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

75. (5) N is either brother or sister of R

76. (1)

77. (3)

78. (1)

79. (5)

80. (3)

81. (3) It is clearly inferred that the parking in the Ghaziabad city is a chaos and unorganized.

82. (4) Due to unorganized parking and absence of proper parking system citizens are forced to parks on the road which cause traffic hindrance and jams.

83. (5) To overcome from the parking problem the authorities must create underground and multi – level parking in congested areas of the city.

84. (3) The present scenario of transport is not well so airport should be more passenger friendly.

85. (4) Providing low – floor buses for easy go is the valid course of action for authorities.

86. (2) The high floor buses are mostly causing trouble or annoyance for passengers specially the eaderly passengers.

87. (5) 300 + 28 - 5 × 32 +14

After changing the sign

300-28 x 5 + 32 + 14

$300 + 14 - \frac{28 \times 5}{32}$

314- 4.375= 309.625

88 – 92.

Name of person	works in	Rank according to salary
F	accounts	1st
H	administration	2nd
E	accounts	3rd
K	IT	4th
I	accounts	5th
G	IT	6th
J	IT	7th
D	Administration	8th

88. (2)

89. (1)

90. (3)

91. (4)

92. (2)

93. (5)

94. (4) It is clear that until schools becomes an options for the parents for their children schooling there is no end to nursery admission chaos.

95. (2) To prevent the nursery admission chaos, the quality education should be offered in government schools. Which can easily be affordable by parents.

96. (4)

97. (1)

98. (5)

99. (4)

100. (1)