IBPS PO PRELIMINARY GRAND TEST : IPP-170753 - HINTS AND SOLUTIONS

ANSWER KEY

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

1. (2) According to the sense of the sentence, Present Perfect Tense is required. It should be 'has pulled the brakes.'
2. (1) It should be 'would hit panicky buttons.'
3. (4) The correct use is 'alarmed something'.
4. (5) The sentence is correct.
5. (1) The sentence is in Part Tense. So, it should be 'were at increased risk'.
11. (4) Use 'students' in place of 'student'. After all a plural noun is used.
12. (4) Use 'a' in place of 'the'. There is no need of definite article here.
13. (1) Use 'themselves' in place of 'them'. Usually dressed himself/yourself/themselves is used.
14. (2) Remove 'due to'. Its use is superfluous.
15. (3) use 'spending' in place of 'spend'.
26. (2) 'dates' fits the blank appropriately.
27. (5) 'invented' fits the blank appropriately.
28. (3) 'exchange' fits the blank appropriately.

29. (4) 'key' fits the blank appropriately.
30. (1) 'originated' fits the blank appropriately.
31. (5) Ravi, Rakesh and Vijay invest ratio

$$= \frac{7}{2} : \frac{4}{3} : \frac{6}{5} = 105 : 40 : 36$$

Ravi's invest after 4 months $= \frac{150}{100} \times 105 = 157.5$.

Profit = invest × period of time.
Ravi, Rakesh & Vijay
$= 105 \times 4 + 157.5 \times 8 : 40 \times 12 : 36 \times 12$
$= 105 : 30 : 27$
Total profit = 32400
Rakesh's share in the profit

$$= \frac{30}{150 + 30 + 27} \times 32400 = ` 6000$$

32. (2) With using '7', 481$\underline{7}$637 is completely divisible by '9'.

33. (4)

34. (3) Let the C.P. of milk = ` 1.

1 litre 1st can contains milk $= \frac{7}{10}$ and C.P. of 1st can milk $= ` \frac{7}{10}$

1 litre 2nd can contains milk $= \frac{1}{2}$ and C.P. of 2nd can milk $= ` \frac{1}{2}$

1 litre both can's milk $= \frac{5}{8}$ and C.P. of final mix milk $= ` \frac{5}{8}$

By alligation rule,

$$\Rightarrow \frac{1}{8} : \frac{1}{40} = 5 : 3$$

From 1st can - $\frac{5}{8} \times 12 = 7.5$ lit.

From 2nd can - $\frac{3}{8} \times 12 = 4.5$ lit.

35. (1) One day she earns = $2.10 \times 10 = 21$
4 weeks i.e. $(4 \times 6 = 24 \Rightarrow 24 \times 10 \text{ hrs.} = 240 \text{ hrs.})$
She earns = $21 \times 24 = 504$.
Extra work she earn per hour = 4.2
$\therefore 525 - 504 = 21$

$\therefore$ Extra hours = $\dfrac{21}{4.2} = 5$ hr.

$\therefore$ Total time = $240 + 5 = 245$ hrs.

36. (3) D = 18 km, Time = 45 min.

He covered half distance in $\dfrac{1}{3}$ rd of the time.

Remaining time = $1 - \dfrac{1}{3} = \dfrac{2}{3}$ rd time.

$\therefore$ Speed = $\dfrac{9}{\dfrac{2}{3} \times 45} = 18$ kmph

37. (2) Let speed of one train = x kmph = $x \times \dfrac{5}{18}$ m/sec

Another train = 2x kmph = $2x \times \dfrac{5}{18}$ m/sec.

Length of trains = $120 + 120 = 240$
Time = 8 sec.

$\therefore \dfrac{240}{(x+2x)\dfrac{5}{18}} = 8 \Rightarrow \dfrac{240 \times 18}{5 \times 8 \times 3} = x \Rightarrow x = 36$

Faster train = $36 \times 2 = 72$ kmph.

38. (1) Let the average score of 16 innings = x
Total score = 16x
17 innings average score = (x + 4)
From question,
$16x + 96 = 17(x + 4)$
$\Rightarrow 16x + 96 = 17x + 68 \Rightarrow x = 28$
$\therefore$ 17 innings average = $x + 4 = 28 + 4 = 32$.

39. (3) Let distance = x km.
Upstream speed = $30 - 10 = 20$ kmph
Downstream speed = $30 + 10 = 40$ kmph.

$\Rightarrow \dfrac{x}{20} + \dfrac{x}{40} = 3 \Rightarrow \dfrac{60x}{20 \times 40} = 3 \Rightarrow x = 40$ km.

40. (5) When Anil was born his father age = 32 years
When Anil brother (he is 3 years younger to Anil) was born their's mother age = 27 years.
$\therefore$ Father age at Anil's brother born
$= 32 + 3 = 35$ years.
$\therefore$ Parent's age difference = $35 - 27 = 8$ years.

41. (1) $(450 + 200 + 500 + 350 + 650) = 2150$
42. (4) $(350 + 600 + 650 + 700) = 2300$
43. (3) $(2300 - 1400) = 900$

44. (3) $\dfrac{2150}{5} = 430$

45. (3) $\left(2300 - \dfrac{2300}{4}\right) = 1725$

46. (4) The differences between two successive terms from the beginning are 7, 5, 7, 5, 7, 5. So, 40 is wrong.

47. (2) In this question, if you start from the beginning, firstly the difference is 31, then the difference is 17, then the difference is 8. So there is no logic. If you start backwards, you can see that firstly, 1 is added, then 2 is added, then 4 is added, then 8,16 and 32 should have been added. So you have got the right clue. So $15 + 32$ the first number should be 47 and afterwards, the series becomes + 16, + 8, + 4 and so on.

48. (3) $3 - 2 = 1$
$12 - 3 = 9$
$37 - 12 = 25$
$86 - 37 = 49$
$166 - 86 = 80$ (this must be $81 = 167 - 86 = 81$)
so wrong number in the sequence is 166
difference between two sucessive numbers sequence would be 1, 9, 25, 49, 81, 121(square of 1, 3, 5, 7, 9, 11)

49. (5) 2nd term = (1st term) * 1 + 1 = 15 * 1 + 1 = 16.
3rd term = (2nd term) * 2 + 2 = 16 * 2 + 2 = 34
4th term = (3rd term) *3 + 3 = 34 * 3 + 3 = 105
5th term = (4th term) * 4 + 4 = 105 * 4 + 4 = 424
6th term = (5th term) * 5 + 5 = 424 * 5 + 5 = 2125
6th term should 2125 instead of 2124.

50. (3) Go on multiplying the number by 2 and adding 1 to it to get the next number. So, 27 is wrong.

51. (2) $\dfrac{1}{\dfrac{1}{12} + \dfrac{1}{8} + \dfrac{1}{6}} = \dfrac{1}{\dfrac{2+3+4}{24}} = \dfrac{24}{9} = 2\dfrac{2}{3}$ days

52. (2) $\dfrac{4 \times 8}{4+8} = \dfrac{32}{12} = \dfrac{8}{3} = 2\dfrac{2}{3}$ days

53. (2) Req.% = $\dfrac{12}{8} \times 10 = 150\%$

54. (2) $\dfrac{4 \times 8}{4+8} = \dfrac{32}{12} = \dfrac{8}{3} = 2\dfrac{2}{3}$ days

55. (2) $\dfrac{6 \times 4}{6+4} = \dfrac{24}{10} = \dfrac{12}{5} = 2\dfrac{2}{5}$ days

56. (5) Total number of employees working in the marketing

department $= 800 \times \dfrac{24}{100} = 192$

Hence, required percentage

$= \dfrac{165}{192} \times 100 = 85.94\% = 86\%$

57. (1) Total number of employees working in the HR

department $=800 \times \dfrac{5}{100} = 40$

Total number of Female employees working in the HR department = 40 – 12 = 28
Hence, required ratio = 28 : 40 = 7 : 10

58. (4) Total number of employees working in the Production

department $=800 \times \dfrac{35}{100} = 280$

Hence, required percentage $= \dfrac{245}{280} \times 100 = 87.5\%$

59. (1) Total number of employees working in the IT

department $=800 \times \dfrac{20}{100} = 160$

Total number of female employees working in the IT department = 160 – 74 = 86

Hence, required percentage $= \dfrac{86}{800} \times 100 = 10.75\%$

60. (2) Cost of 20 kg apples $= \dfrac{1500}{12} \times 20 = Rs.\,2500$

So, the cost of 10 kg nuts = ₹ 2500

Now, the cost of 34 kg nuts $= \dfrac{2500}{10} \times 34 = Rs.\,8500$

∴ The monthly salary of Veena = ₹ 8500
∴ Annual salary = 8500 × 12 = ₹ 102000

61. (3) Suppose 50 paise coins = 2x and ₹ 1 coins = x both are ₹ 26 then the number of ₹ 1 coins will be 13 and number of 50 paise coins will be 26. Remaining amount = 50 - 26 = 24. Now if ₹ 5 coins are x in number then ₹ 2 coins will be x + 5. Then, with the help of hit and trial method ₹ 5 coins will be ₹ 2 in number and 2 coins will be x + 5 = 2 + 5 = 7 in number.

62. (4) Maximum marks $= \dfrac{175+35}{35} \times 100 = 600$ marks

63. (2) 2 (l + b) = 668
l + b = 332
l = (334 - b)
Length of a rectangle = twice the diameter of a circle
334 – b = 2 × d = 2 × 2r = 4r

$\therefore r = \dfrac{334-b}{4}$

Area of square = Circumference of circle
$(22)^2 = 2\pi r$

$484 = \dfrac{2 \times 22 (334 - b)}{7 \times 4}$

$\therefore 334 - b = \dfrac{484 \times 7 \times 4}{2 \times 22} = 308$

∴ b = 334 - 308 = 26 cm

64. (2) (8 4) Girls = (9 3) Boys = (7 2) Men = (5 4) Women
⇒ 32 Girls = 27 Boys = 14 Men = 20 Women
Hence, Girls have minimum capacity of work among them.

65. (2) Average of Set A $= \dfrac{376}{8} = 47$

Minimum number of second set = 47 + 15 = 62
Hence, required sum = 62 + 63 + 64 + 65 + 66 = 320

66. (5) RU, LN, NR, LR

67. (4)
D O W N	5 @ 9 #
	N A M E
# 6 % 3	
M O D E	% @ 5 3

68. (3) Meaningful words - GLUE, LUGE

69. (3) 42W7R8A6Q4 = ?
? = 42 ÷ 7 – 8 + 6 × 4 = 6 – 8 + 24 = 30 – 8 = 22.

70. (1)

71-75. The machine rearranges ne word and one number in each step. First, it rearranges words starting with vowel in alphabetical order, and then it rearranges words starting with a consonant in reverse alphabetical order. For numbers, it first arranged prime numbers in ascending order, then composite numbers in ascending order.

Input : east 17 altitude 31 united 39 foods 23 14 in nest 33 come 11 rest.

Step I : altitude 11 east 17 31 united 39 food 23 14 in nest 33 come rest.

Step II : altitude 11 east 17 in 23 31 united 39 food 14 nest 33 come rest.

Step III : altitude 11 east 17 in 23 united 31 39 food 14 nest 33 come rest.

Step IV : altitude 11 east 17 in 23 united 31 rest 14 39 food nest 33 come.

Step V : altitude 11 east 17 in 23 united 31 rest 14 nest 33 39 food come.

Step VI : altitude 11 east 17 in 23 united 31 rest 14 nest 33 food 39 come.

76-80.
A - Ravi , Rajan
(Electrical) (Mechanical)

B - Raju , Rajesh
(Mechanical) (Chemical)

C - Rahul , Raja
(Chemical) (Electronics)

Ranjan
(Electrical)

76. (3)   77. (2)
78. (2)   79. (3)
80. (3)

81. (4) J ≤ K > L = M > N
N < L is true.

82. (4) J ≤ K > L = M > N
N < K is true.

83-84.

@	≥
#	≤
©	>
$	<
*	=

83. (1) C ≤ D > A ≥ B, D < E
    (i) E > C - True
    (ii) C < B - False
84. (5) N < L < M ≤ J < K
    (i) N < K - True
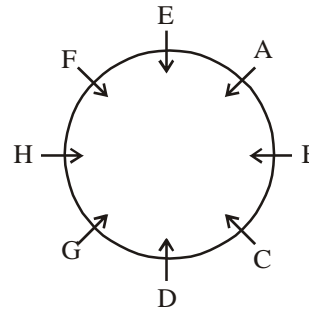   (ii) M < K - True
85. (4)
87. (5)
89. (2)

86. (3)
88. (2)
90. (5)

91-95.

91. (4) ABE
92. (3) C
93. (2) E
94. (5) Fourth to the left
95. (1) H

96-100. best way to win - **ad mi ja no**
the way to hell - **ku ja ig ad**
win of the day - **be ku zo ni**
to sell of night - **be li ya ja**
best - **no**
way - **ad**
to - **ja**
win - **mi**
the - **ku**
hell - **ig**
of - **be**
day - **zo**
sell - **li/ya**
night - **li/ya**