IBPS PO Preliminary Grand Test –IPP-170501

HINTS & SOLUTIONS

1.(1) Refer to the first sentence – the passage gives various instances of such invasions

2.(3) Refer to Paragraph 1, "It was in this century that the Frankish invasion Gaul into France and that the Vandals invaded Spain, giving their name to Andalusia. St. Patrick, during the middle years of the century, converted the Irish to Christianity."

3.(4) Refer to paragraph 2 "since Diocletian ... employed as Roman mercenaries". Therefore option (d) is most likely as it would refer to a Roman leader who hired Goths as mercenaries.

4.(2) Refer to the last paragraph "more or less an accident." Hence (b) is the correct option.

5.(5) Forbearance means patient self-control; restraint and tolerance. Clemency means mercy; lenience. Hence both are similar in meanings.

6.(1) Change 'if Rajeshwari would have' into 'If Rajeshwari had'.

7.(2) 'bade' takes 'plain infinitive' (V1) after it and not 'infinitive' (to + infinitive). So, change 'to submit' into 'submit'.

8.(4) Use 'no room' in place of 'no place'. Room means 'enough empty space for people or things to be fitted in.'

9.(2) Change 'respectively' into 'respectfully'.
Respectively: in the order already mentioned
Respectfully: Marked by respect

10.(5) No error.

11.(1) Replace 'a' with 'the'. Since, the given sentence talks about a particular hotel (the one which was inaugurated by the Prime Minister) hence, definite article should be used

12.(1) The given sentence talks about 'youth' (the stage of life) in a general way . Hence, 'the' cannot be used before 'youth'. However, if we talk about the 'youth' in a particular way, we will have to use 'the' For eg: The youth of India is very hardworking.

13.(5) No error.

14.(3) Replace 'they' with 'it'. Since, here the subject is 'The deepest ocean blue' which is singular.

15.(4) Change 'of' to 'on'

16.(2) 17.(4)
18.(5) 19.(1)
20.(1) 21.(3)
22.(3) 23.(2)
24.(3) 25.(4)

26-30. The correct sequence is EDFACB.

26.(5) 27.(2)
28.(2) 29.(5)
30.(2)

31.(3) Pattern is +9 × 1, –9 × 2, +9 × 3, –9 × 4, +9 × 5

32.(2) Pattern is ÷9, ×3, ÷9, ×3, ÷9, ×3 .....

33.(2) Pattern is

586	587	586	581	570	551
	+1	-1	-5	-11	-19
		-2	-4	-6	-8

34.(1) Pattern is ÷2 – 2, ÷2 – 3, ÷2 – 4, ÷2 – 5, ÷2 – 6

35.(1) Pattern is $+2^2, +4^3, +6^2, +8^3, +10^2$

36.(4) $P + R + 2K = 59$ .....(i)
$K + R + 3P = 68$ .....(ii)
$P + 3K + 3R = 108$ .....(iii)
From (ii) and (iii), $P = 12$

37.(3) Let filling capacity be x m^3/min
So, emptying capacity = $(x + 10)$ m^3/min
According to question

$$\frac{2400}{x} - \frac{2400}{x+10} = 8$$

$$\Rightarrow 2400\left(\frac{x+10-x}{x(x+10)}\right) = 8$$

$$\Rightarrow x^2 + 10x - 3000 = 0$$

$$\Rightarrow x = 50 \text{ m}^3/\text{min}$$

38.(2) Time when Rishi met Atul

$$= \frac{\text{Distance travelled by Atul in 1 hour}}{\text{Relative speed of them}}$$

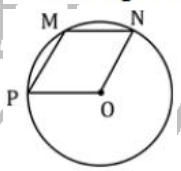
$$= \frac{3}{1} = 3 \text{ hr.}$$

i.e. Rishi catch Atul at 7 + 3 = 10 am at a distance of 4 × 3 = 12 km from start.
Now, time for Atul to catch Kanika

$$= \frac{12-(5\times2)}{5+3} = \frac{1}{4} \text{ hr.}$$

i.e. Kanika get the message at 10 : 15 am

39.(3)



The diagonal MO divides the rhombus in two equilateral triangles.

$\therefore$ Area of rhombus = $2 \times \frac{\sqrt{3}}{4} \times 10 \times 10 = 50\sqrt{3}$ cm^2

40.(4) $\frac{(6300+P)\times16\times3}{100} - \frac{6300\times14\times3}{100} = 618$

$$\Rightarrow 37800 + 48P = 61800$$

$$\Rightarrow P = \frac{24000}{48} = \text{Rs. } 500$$

41.(4) 5 × 8 = (5 × 6) + (4 × 1) + (3 × 1) + (2 × 1) + (1 × 1)
After 10 hours i.e. at 8:00 pm work is completed as per condition.

42.(2) $25220 = \frac{x}{1+\frac{5}{100}} + \frac{x}{\left(1+\frac{5}{100}\right)^2} + \frac{x}{\left(1+\frac{5}{100}\right)^3}$

Or, $25220 = \frac{x}{\frac{21}{20}} + \frac{x}{\frac{441}{400}} + \frac{x}{\frac{9261}{8000}}$

Or, $25220 = \frac{25220x}{9261}$

Or, $x = \text{Rs. } 9261$

43.(4) Let total capital be 6 units.
$\therefore$ Ratio of investment = $1 \times 2 : 2 \times 4 : 3 \times 12$
$= 1 : 4 : 18$
So, required share of B = $\frac{4}{23} \times 23000 = \text{Rs. } 4000$

44.(1) C.P. = 1400 Rs.
$\therefore$ S.P. $= \frac{120}{100} \times 1400 =$ Rs. 1680
So, required M.P. $= 1680 \times \frac{100}{(100-12.5)} =$ Rs. 1920

45.(2) 1 child = 100
1 women = 125
1 man = 156.25
$\therefore 10 \times 100 + 10 \times 125 + 8 \times 156.25 = 2366$
or, 3500 units = 2366
Or, amount received by each woman
$= \frac{2366}{3500} \times 125 =$ Rs.84.5

46.(2) Females in 2013 $= 26.4 \times 100 = 2640$
Females in 2015 $= 44.5 \times 100 = 4450$
$\therefore$ Required percentage increase
$= \frac{1810}{2640} \times 100 \approx 68.56\%$

47.(3) Required difference
$|(6.2 + 5.8 + 9.8 + 1.8 + 5.4 + 7.5)$
$- (11.1 + 4.9 + 9.7 + 7.5 + 11.3)| \times 100$
$= |36.5 - 44.5| \times 100 = 800$

48.(5) Required ratio $= \frac{\frac{1}{5} \times 6040}{\frac{1}{6} \times 6150} = \frac{1208}{1025}$

49.(2) Number of employees in paper making team
$= 1090 - 109 - 654 - 109 = 218$
$\therefore$ Required percentage $= \frac{218}{1090} \times 100 = 20\%$

50.(2) Number of employee in 2013 = 5220
Number of male employee in 2014 = 3240
Number of female employee in 2014 = 3590
Remaining female employee in 2014
= 80% of 3590 =2872
Required difference = 6112 - 5220 = 892

51.(3) $x = 5, -8$; $y = 6, 8$; $x < y$

52.(2) $x = -2, 1$; $y = -2, -3$; $y \le x$

53.(1) $x = \frac{-6}{2}, \frac{-7}{2}$; $y = -8, \frac{-11}{2}$; $x > y$

54.(2) $x = -6, -5$; $y = -6, -6$; $x \ge y$

55.(4) $x = -1, \frac{1}{2}$; $y = 1, \frac{1}{2}$; $x \le y$

56.(2) Income of Roadster in 2012
$= \frac{216000}{45} \times 100 =$ Rs. 480000
Income of HRZ in 2012
$= \frac{90}{100} \times 480000 =$ Rs.432000
Expenditure of Roadster in 2012
$= \left(48 - \frac{45 \times 48}{100}\right) \times 1000 =$ Rs.264000
Expenditure of HRX in 2012
$= \left(432 - \frac{432 \times 35}{100}\right) \times 1000 =$ Rs.280800
$\therefore$ Required difference = Rs.16,800.

57.(3) Income of HRX in 2013 $= \frac{2,50,000 \times 100}{50} =$ Rs. 5,00,000
$\therefore$ Required profit $= \frac{50 \times 5,00,000}{100} =$ Rs. 2,50,000

58.(3) $\frac{E_{HRX}}{E_{Roadster}} = \frac{\left(\frac{100-55}{100}\right) \times I}{\left(\frac{100-50}{100}\right) \times I} = \frac{9}{10}$

59.(2) Percentage change in 2012 $= \frac{45-35}{45} \times 100 = 22.22\%$
Percentage change in 2013 $= \frac{15}{35} \times 100 \approx 42.86\%$
Percentage change in 2014 $= \frac{10}{50} \times 100 = 20\%$
Percentage change in 2015 $= \frac{10}{60} \times 100 \approx 16.67\%$
Percentage change in 2016 $= \frac{5}{50} \times 100 = 10\%$
$\therefore$ 2nd lowest percentage change is in year 2015

60.(4) Income in year 2013 $= \frac{100 \times 90,000}{100-55} =$ Rs. 2,00,000
And Income in year 2014 $= \frac{100 \times 2,00,000}{100-50} =$ Rs. 4,00,000
$\therefore$ Required percentage change $= \frac{2,00,000}{2,00,000} \times 100 = 100\%$

61.(3) $? = 2 \times (79)^2 + 2 \times (49)^2 = 2 \times [6241 + 2401] = 17284$

62.(2) $? = \frac{(7^3)^{\frac{2}{3}} \times (8^3)^{\frac{2}{3}}}{56} = \frac{49 \times 64}{56} = 56$

63.(4) $? \left(\frac{4}{3} - 1\right) = \frac{7}{8} \times 616 \times 12 \times \frac{1}{16} - 17 \times 19 - 81$
$? \times \frac{1}{3} = \frac{308 \times 21}{16} - 323 - 81 = \frac{1617}{4} - 404$
$? \times \frac{1}{3} = \frac{1}{4}$
$\therefore ? = \frac{3}{4}$

64.(2)

65.(1) $(43)^{37-41+6} = (43)^2 = 1849$

66.(3) Statements:
$R \le J \le F \le C$
Conclusions :
I. R = C (may be true)
II. C > R (may be true)

67.(1) Statements:
$V > E < W \le P$
Conclusions:
I. $P > E \rightarrow$ True
II. $V = W \rightarrow$ False

68.(5) Statements:
$Z > P \ge R = J$
Conclusions:
I. $R < Z \rightarrow$ True
II. $J \le P \rightarrow$ True

69.(4) Statements:
$H > G \le O = N$
Conclusions
I. $O < H \rightarrow$ False
II. $G = N \rightarrow$ False

70.(2) Statements:
$Q < B = M \le K$
Conclusions:
I. $K = B \rightarrow$ False
II. $Q < K \rightarrow$ True

71-75.

Cities	Male	Company	Female	Company
Nagpur	V	Google	F	Tibco
Agra	B	Oracle	G	Oracle
Indore	N	Tibco/HCL	H/K	Wipro
Coimbatore	C	Adobe	A	Google
Surat	X	TCS	S	HCL
Ahmedabad	Z	Wipro	D	TCS
Hyderabad	M	HCL/Tibco	H/K	Adobe

71.(5) 72.(2)

73.(1) 74.(4)
75.(3)
76-80.

Person	City	Language	Shoes Brand
A	Delhi	English	Lakhani/Bata
B	Chennai	French	Adidas
C	Mumbai	Sanskrit	Relaxo
D	Patna	Marwari	Puma
E	Jaipur	Kashmiri	Lakhani/Bata
F	Shimla	Sindhi	Lotto
G	Calcutta	Urdu	Reebok

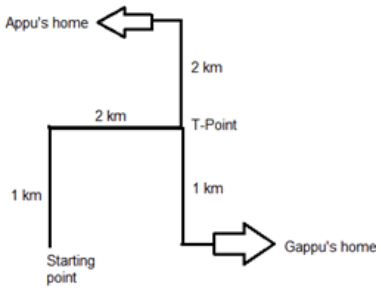
76.(4) 77.(1)
78.(2) 79.(5)
80.(5)
81-85.

T	Blue	S	Red
Q	Green	U	Orange
R	Yellow	P	White

T > Q/S > P > R > U

81.(4) 82.(3)
83.(2) 84.(2)
85.(5)
86.(1) I is strong because the backlog is a cause for concern. II is not strong because it is difficult to believe that strike is"the only meaningful weapon" to achieve the said objective
87.(4) I is not strong because it is not directly related to our core issue. II is also not strong because this is based on a wrong notion
88.(2) Only II is strong because this will ensure smooth functioning of the government.
89.(5) I is strong because stringent punishment is a good course of action to put restriction on the number of cases of rapes. II is also strong on the ground of impact of the crime on the life of the victim.
90.(4) Both the arguments are weak.
91-95. After careful, Analysis of the given input and various steps of arrangement it is evident that one number and one word are arranged alternately. The numbers are arranged in ascending order while the words are arranged in reverse alphabetical order.
91.(4)
92.(5) Step III : 21 victory 30 joint 64 47 all gone
Step IV : 21 victory 30 joint 47 64 all gone
Step V : 21 victory 30 joint 47 gone 64 all
93.(3) Input : 89 bind 32 goal house 61 12 joy
Step I : 12 89 bind 32 goal house 61 joy
Step II : 12 joy 89 bind 32 goal house 61
Step III : 12 joy 32 89 bind goal house 61
Step IV: 12 joy 32 house 89 bind goal 61
Step V : 12 joy 32 house 61 89 bind goal
Step VI: 12 joy 32 house 61 goal 89 bind
94.(5) Input : save 21 43 78 them early 36 for
Step I : 21 save 43 78 them early 36 for
Step II : 21 them save 43 78 early 36 for
Step III : 21 them 36 save 43 78 early for
Step IV : 21 them 36 save 43 for 78 early
95.(2) Input : desire 59 63 all few 38 46 zone
Step I : 38 desire 59 63 all few 46 zone
Step II : 38 zone desire 59 63 all few 46
Step III : 38 zone 46 desire 59 63 all few
Step IV: 38 zone 46 few desire 59 63 all
Step V : 38 zone 46 few 59 desire 63 all

96-98.



96.(3) 97.(4)
98.(4)
99-100.

99.(1) 100.(3)