IBPS PO Preliminary Grand Test –IPP-180914

HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1.(2)   2.(1)   3.(5)
4.(3)   5.(4)   6.(5)
7.(2)   8.(4)

9.(3)   **Consequence** means a result or effect, typically one that is unwelcome or unpleasant

10.(3)   Still and clear fits the blank correctly

11.(2)   **Divulged** means to make known (private or sensitive information).

12.(4)   **Purview** means the scope of the influence or concerns of something

13.(1)   thought, fell fits the blank perfectly.

14.(4)   Replace 'start' by 'started' as part (c) of the sentence uses '**could have**'. "**Have/has/had**" is followed by V3 form of the verbs. Hence "could **have taken**…… and **started**…" is the correct usage.

15.(3)   Use 'when' in place of 'that' as "**Scarcely/Hardly**" is followed by '**when'** or '**before'** in a correct grammatical usage.

16.(1)   Replace 'or' by 'if' as "**seldom if ever**" and '**seldom'** or '**never'** are the correct usage.

17.(2)   Use 'by' before 'whom' to make the sentence grammatically correct. Look at these sentences;
I know the man **by whom he was helped**. [Passive]
I know the man **who helped** him. [Active]

18.(5)   The given sentence is grammatically correct.

19.(2)   Replace 'has' by 'had' as part (a) of the sentence denotes the past event while part (b) signifies past of the past event for which **Past Perfect Tense**should be used.
e.g. **I did not know** [Simple Past] **when he had come** [Past Perfect Tense].

20.(2)   Replace 'each and every' by 'each' as '**each'** is used for '**two or more than two**' while '**every'** or '**each and every'** is always used for '**more than two**'.
e.g. There were **two boys** and **each** boy had a red pen.
There were **ten students** in the class room and **each/every/each and every** student had a red pen.

21.(5)   There is no error in the given statement.

22.(4)   Replace 'sweetly' by 'sweet' as "**taste, feel, seem, appear, look, smell, remain, etc.**" are '**Copula Verbs'** or **Linking Verbs** which take **Adjective** and not Adverb.
e.g. She **tastes sweet** [Adjective].
A rose **smells sweet** [Adjective].
She **looks beautiful** [Adjective].
She **looks suspiciously** [Adverb] at him.

23.(5)   All the given sentences are correct in context of the passage. "The Guardian drones, manufactured by General Atomics, will complement India's maritime surveillance aircraft at sea in intelligence, surveillance and reconnaissance", "UAVs have the potential to play a role in enabling the Indian military not only in fighting wars but also in intelligence, reconnaissance and surveillance, and deterring cross-border terrorist attacks.", "The additional capability will free up the navy's Boeing P-81s for anti-submarine warfare (ASW)." "The use of unmanned systems such as drones removes potential political costs".

24.(4)   Sentences (2) and (3) are correct while sentence (1) is about Nishant drone. Other two are the features of The Israel Aerospace Industries' (IAI's) Heron TPs.

25.(5)   Refer the sixth and seventh paragraphs of the passage, "Modern air defences……………………target them". It can be easily inferred that author talks about the existing concern towards the air securities of countries which are vulnerable to attacks. All three statements are related to the facts given in the passage indicating the expression what author means to say. Hence (5) is the correct choice.

26.(4)   According to the passage, statements (II) and (III) are correct. Statement (I) does not go in agreement with the passage as it tells about UAV's role in economy which is irrelevant in context of it.

27.(4)   The theme of the passage revolves around the import of armed drones by India from USA and Israel. Hence the title 'India's quest for Armed drones' is an appropriate title.

28.(2)   **Ludicrous** means foolish or unreasonable. Hence it has same meaning as **preposterous**. **Veracity** means unwillingness to tell lies.
Winsome means charming in a childlike or naive way.
Vociferous means conspicuously and offensively loud.
Detract means divert or reduce.

29.(3)   **Doctrines** means belief. Hence it has same meaning as **dogma**.
Devout means holy, given to religious duties, solemn.
Demure means quiet, modest.
Feral means savage, wild.
Furtive means secretive.

30.(4) **Nascent** means just coming into existence and beginning to display signs of future potential. Hence it has opposite meaning to **wither**.
Fractious means troublesome or irritable.
Enmity means ill will, hatred.
Impudent means casually rude.
Inhibit means restrain.

31.(3)

I. $\dfrac{3}{\sqrt{x}} + \dfrac{4}{\sqrt{x}} = \sqrt{x}$

or, $\dfrac{3+4}{\sqrt{x}} = \sqrt{x}$

or, $7 = x$

or, $x = 7$

II. $y^2 = \dfrac{7^{\frac{5}{2}}}{\sqrt{y}}$

or, $y^2 \times \sqrt{y} = 7^{\frac{5}{2}}$

or, $y^2 \times y^{\frac{1}{2}} = 7^{\frac{5}{2}}$

or, $y^{\frac{5}{2}} = 7^{\frac{5}{2}}$

$\therefore y = 7$

Thus $x = y$

32.(3)

I. $x^2 - 264 = 361$

or, $x^2 = 361 + 264$

$\therefore x^2 = 625$

$\therefore x = \sqrt{625} = \pm 25$

II. $y^3 - 878 = 453$

or, $y^3 = 483 + 878$

or, $y^3 = 1331$

$\therefore y = \sqrt[3]{1331} = 11$

Hence no relation can be established.

33.(2)

I. $9x + 8y = 64$ .....(i)

II. $3x + 4y = 28$ ....(ii)

From, (i) – (ii) × 3, we get

$9x + 8y = 64$

$9x + 12y = 84$

_____

$-4y = -20$

$\therefore y = 5$

Putting the value of y in equation (i), we get

$9x + 8 \times 5 = 64$

or, $9x = 64 - 40$

$\therefore x = \dfrac{24}{9}$

Hence $x < y$

34.(1)

I. $x^2 - 48x + 575 = 0$

or, $x^2 - 23x - 25x + 575 = 0$

or, $x(x - 23) - 25(x - 23) = 0$

or, $(x - 25)(x - 23) = 0$

$\therefore x = 25, 23$

II. $46y^2 - 35y - 11 = 0$

or, $46y^2 - 46y + 11y - 11 = 0$

or, $46(y - 1) + 11(y - 1) = 0$

or, $(46y + 11)(y - 1) = 0$

$\therefore y = -\dfrac{11}{46}, 1$

Hence $x > y$

35.(3)

I. $15x^2 - 11x - 12 = 0$

or, $15x^2 - 20x + 9x - 12 = 0$

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

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

$\therefore x = -\dfrac{3}{5}, \dfrac{4}{3}$

II. $20y^2 - 49y + 30 = 0$

or, $20y^2 - 25y - 24y + 30 = 0$

or, $5y(4y - 5) - 6(4y - 5) = 0$

or, $(4y - 5)(5y - 6) = 0$

$\therefore y = \dfrac{5}{4}, \dfrac{6}{5}$

Hence, no relation can be established.

36.(4) 7.5% of C.P. = 60 paise

CP $= \dfrac{60}{7.5} \times 100 = 800$ paise

37.(2) Original company price $= 1660 \times \dfrac{100}{83} = 2000$ Rs.

SP $= 2000 \times \dfrac{107}{100} = 2140$ Rs.

38.(2) No. of years $= \dfrac{1200 \times 100}{4500 \times 12} = \dfrac{20}{9}$ years

Required rate $= \dfrac{5400 \times R \times \left(\frac{20}{9}\right)}{100} = 1800$

R = 15%

39.(4) Let the sum = P

$P\left(1 + \dfrac{10}{100}\right)^2 = P + 420$

SI $= \dfrac{2000 \times 10 \times 2}{100} = 400$ Rs.

40.(1)
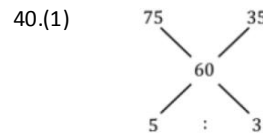
Milk = 25ℓ , water = 15ℓ

41.(1) Required percentage

$= \dfrac{\frac{18}{25} \times 3350}{\frac{7}{8} \times 2016} \times 100 = \dfrac{18 \times 134}{7 \times 252} \times 100$

$= \dfrac{2412}{1764} \times 100 = 136.73\%.$

42.(4) TA earned $= \dfrac{3}{19} \times 4256 \times 12.90 = 8668.8.$

43.(3) Distance travelled by Rail in -

Delhi $= \dfrac{11}{12} \times 432 = 396$

Kolkata $= \dfrac{3}{19} \times 4256 = 672$

Chennai $= \dfrac{5}{18} \times 3528 = 980$ (maximum)

Mumbai $= \dfrac{7}{15} \times 3350 = 938$

Hyderabad $= \dfrac{4}{13} \times 1456 = 448$

Bengaluru $= \dfrac{1}{8} \times 2016 = 252$

Lucknow $= \dfrac{3}{4} \times 1024 = 768$

44.(2) Required Ratio $= 1 \times 16.1 : 3 \times 12.10 = 16.1 : 36.3$

$= 161 : 363 \approx 2 : 5.$

45.(2) Required value $= \dfrac{11}{12} \times 432 \times 12.6 + \dfrac{1}{12} \times 432 \times 15.2$

$+ \dfrac{3}{4} \times 1024 \times 12.1 + \dfrac{1}{4} \times 1024 \times 16.1$

$= 4989.6 + 547.2 + 9292.8 + 4121.6$

$= 18951.2.$

46.(5) $\times \dfrac{1}{2} + 4, \times \dfrac{1}{2} + 4, \times \dfrac{1}{2} + 4,$ and so on

$128 \times \dfrac{1}{2} + 4 = 64 + 4 = 68.$

47.(2) $\times 2, \times \dfrac{1}{3}, \times 4, \times \dfrac{1}{5}$

$320 \times \dfrac{1}{5} = 64$

48.(5) $\times 2 + 3, \times 3 + 4, \times 4 + 5, \times 5 + 6$

$? \times 2 + 3 = 33 \Rightarrow ? \times 2 = 30 \Rightarrow ? = 15.$

49.(2) $+1^3, +2^3, +3^3, +4^3 \ldots$

$5 + 1^3 = 6$

$6 + 2^3 = 14$

50.(3)
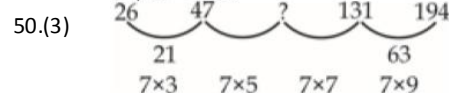
$47 + 35 = ? \Rightarrow ? = 82.$

51.(3) SI of 3 years = Rs. 3000

SI for 2 years = Rs. $\dfrac{3000}{3} \times 2 = $ Rs. 2000

SI for 2 years = Rs. 2000

CI for 2 years = Rs. 2050

difference = (2050 – 2000) = Rs. 50

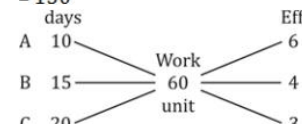Required rate% $= \dfrac{50}{1000} \times 100 = 5\%$

According to the question,

5% of sum = 1000

sum $= \dfrac{1000}{5} \times 100 = $ Rs. 20,000

52.(3) Let CP of the article = $100x$

According to question,

SP = $95x$

Again,

New CP = $90x$

Then,

New SP = $90x \times \dfrac{130}{100} = 117x$

Difference between new SP and actual SP

$\Rightarrow 117x - 95x = 33$

$\Rightarrow 22x = 33$

$\therefore x = \dfrac{3}{2}$

$\therefore$ CP of article = $100x$

$= 100 \times \dfrac{3}{2}$

$= 150$

53.(4)

	days		Eff.
A	10		6
B	15	Work 60 unit	4
C	20		3

A and C work for two days = (6 + 3) × 2 = 18 units

Work left = (60 – 18) = 42 units

Now A is replaced by B

(B + C) one day work = 4 + 3

(B + C) complete remaining work in —

$\dfrac{\text{total work}}{\text{Eff.}} = \dfrac{42}{7} = 6$ days.

Total days = 6 + 2 = 8 days

54.(3) Let the speed of Ravi = x km/hr

then Ajay's speed will be $(x + 4)$ km/hr.

Total distance, covered by Ajay = 60 + 12 = 72 km

Total distance, covered by Ravi = 60 – 12 = 48 km

According to question,

$\Rightarrow \dfrac{72}{(x+4)} = \dfrac{48}{x}$

$\Rightarrow 72x = 48x + 192$

$\Rightarrow 24x = 192$

$\Rightarrow x = 8$ km/hr.

$\therefore$ Ravi's speed = 8 km/hr.

55.(2) Total no. of handshakes among the group of 42 men

$\Rightarrow {}^{42}C_2 = \dfrac{42!}{2!(42-2)!} = \dfrac{42!}{2!\,40!}$

$= \dfrac{42 \times 41 \times 40!}{2 \times 1 \times 40!}$

$= 21 \times 41$

$= 861$

Total no. of handshakes among the group of 16 women

$\Rightarrow {}^{16}C_2 = \dfrac{16!}{2!(16-2)!} = \dfrac{16!}{2!\,14!}$

$= \dfrac{16 \times 15 \times 14!}{2 \times 1 \times 14!}$

$= 8 \times 15 = 120$

$\therefore$ Maximum no. of handshakes = 861 + 120

$= 981$.

56.(4) $84 + 144 = \dfrac{1440}{x}$

$x = \dfrac{1440}{228}$

$x = 5$

57.(5)

58.(3) $3^2 = 5 + x \Rightarrow x = 4$.

59.(4) $4^{2x} = 4^8 \Rightarrow x = 4$.

60.(2) 1.135 + 2.55 = 3.68

61.(4) Total number of member enrolled in 2017

= 160% of (150 + 70)

$\dfrac{220 \times 160}{100} = 352$.

62.(5) Reqd ratio = $\dfrac{\text{No. of members in Project A and B in 2013}}{\text{No. of members in Project A and B in 2016}}$

$= \dfrac{60 + 210}{70 + 150} = \dfrac{270}{220} = \dfrac{27}{22} = 27 : 22$

63.(5) Reqd. %

$= \dfrac{\text{No. of members in Project A in 2013}}{\text{No. of members in Project B in 2016}} \times 100$

$= \dfrac{60}{150} \times 100 = 40\%$

64.(2) Total number of members enrolled in Project A from 2013 to 2016 = 60 + 140 + 200 + 70 = 470

Total number of members enrolled in Project B in 2015 and 2016 together = 240 + 150 = 390

$\therefore$ Difference = 470 – 390 = 80

Therefore required % more = $\dfrac{80}{390} \times 100 = 20.51\%$ more

65.(3) Total number of members enrolled in Project B in 2015 and 2016 together = 240 + 150 = 390

Total number of members enrolled in Project A in 2012 and 2016 = 170 + 70 = 240

$\therefore$ Difference = 390 – 240 = 150

Therefore required % = $\dfrac{150}{240} \times 100 = 62.5\%$.

66.(1)

67.(1)

68.(1)

69.(3)

70.(3)
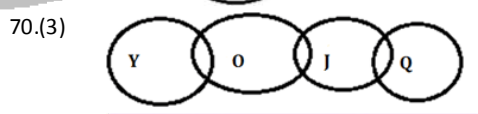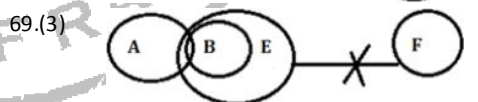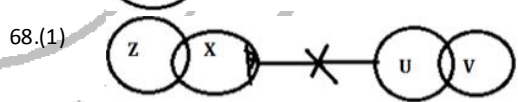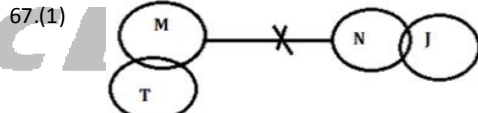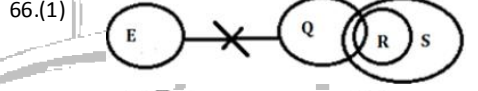
71-75.

Stations	Get in	Get down
Base	E , C, F	-
I	B , D	-
II	-	F
III	G	D, B
IV	A	E
V	-	A, G, C

71.(3)   **72.(4)**

73.(1)   **74.(4)**   **75.(5)**

**76-81.** To solve this puzzle first we have to try to make family tree from the given conditions. It is given that, three are married couples. There are four male members in a family. Only 3 generations in a family. M and N have only one child.

E's husband's sister has two nephews. E's grandson's mother's husband is M. There is a line in the puzzle that, C sits at 120° anticlockwise direction of M's brother, that means M has a brother and D is niece of M now it is clear that N is father of D.

There is one generation gap between A's brother and N's wife, from this condition A has remaining only one position, that A is sister-in-law of E.

I is son of C from this condition there is only one possibility that I is son of M and C is wife of M. F is female, there is only one position of female that is N's wife. Hence F is wife of N. G's position will be fixed.
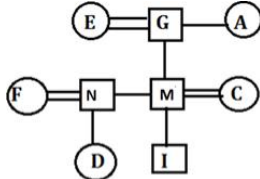
From the conditions, N sits at 30° to M that means N can sit either left of M or right of M. There is an angle of 90° between C and N's brother (M), hence C can sit either left or right of M.

I faces to the centre and C sits 4th left of M's son (I). F is an immediate neighbor M. Both the immediate neighbors of I face outside to the centre. From these conditions we will get 2 possible cases.
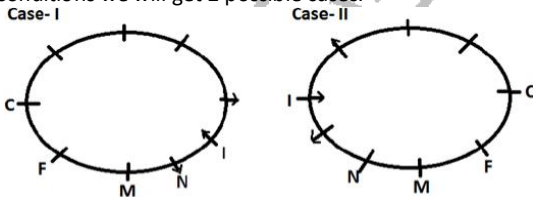
C sits at 120° anticlockwise direction of M's brother (N), from this condition case-I will be cancelled out. Only case-II will be continued with the rests conditions.

Grandmother of D (E), sits opposite to mother of D (F). G sits 3rd right of one, who is 3rd right of D's brother (I), Hence M faces to the centre. E's husband's sister (A), who sits 3rd place away from F. So there are 2 possibilities in case-II, Either A sits just near to N or just near to E. But from the given condition, "D faces to the centre", the possibility of A sits just near to E will be eliminated.

F faces to the centre. From these conditions we will get final answer.
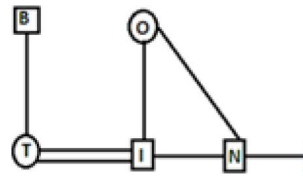

76.(1)   77.(2)
78.(3)   79.(4)   80.(2)
81.(1)
82.(4)
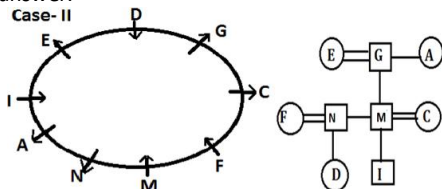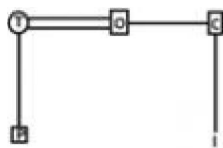
I is newphew of T, is false because gender of I is not given.

83.(2)

I is son-in-law of B.

84.(3)   A > D > E > C > B
Hence, C is the second youngest among them.

85.(2)   R > P > Q > A > C > B
Q is third eldest among them.

86.(4)   Rohit > Ravi > Deepak > Mohan > Arpit > Sachin. Four persons are between Rohit and Sachin if they are arranged in descending order of their age.

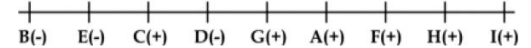87.(3)   88.(1)
89.(1)   90.(2)   91.(4)
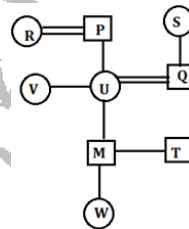92-96.
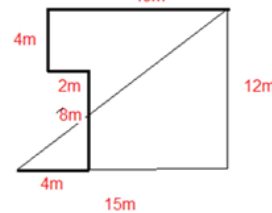

92.(1)   93.(1)
94.(2)   95.(4)   96.(4)
97-100.

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

$$\sqrt{15^2 + 12^2} = 3\sqrt{41}$$