RACE

IBPS PO Preliminary Grand Test –IPP-180922
HINTS & SOLUTIONS

ANSWER KEY

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

HINTS & SOLUTIONS

1.(4) Refer to the first paragraph "The Act contains the controversial provision that condones the employment of children below 14 years under the rubric of family enterprises and the declassification of several industries as hazardous occupations" Hence both the statements (a) and (c) are true.

2.(2) Refer to the first paragraph "…….member-states to determine what constitutes acceptable or unacceptable work for children at different ages. Such flexibility has given the Indian government wiggle room in adopting the international standards in question". Hence sentence (ii) is the correct choice.

3.(2) Refer to the last few lines of first paragraph "The rules notified by the Ministry of Labour and Employment for the enforcement of the 2016 amendment include some small concessions. Under these stipulations, children may work in domestic enterprises only for three hours after school, and not between 7 p.m. and 8 a.m." Hence sentence (2) is correct answer.

4.(2) Refer to the last few lines of the second paragraph "Any genuine enforcement of a minimum age at work will elude governments so long as a universal minimum wage of subsistence for the adult workforce is not implemented scrupulously." Hence sentence (iii) is correct.

5.(3) Refer to last few lines of first paragraph "The rules notified by the Ministry of Labour and Employment for the enforcement of the 2016 amendment include some small concessions. Under these stipulations, children may work in domestic enterprises only for three hours after school". Hence sentence (3) is false.

6.(4) The title 'No time to work: On Child Labour Act' is the appropriate title for the passage.

7.(3) **Detrimental** means tending to cause harm. Hence it has same meaning as ' **inimical'**.
Hostile means showing or feeling opposition or dislike, unfriendly.

8.(4) **Ambit** means the scope, extent, or bounds of something. Hence it has same meaning as **scope**. **Camber** means the slightly convex or arched shape of a road or other horizontal surface.
Purlieus means the area near or surrounding a place.

9.(5) **Languish** means lose or lack vitality; grow weak. Hence it has opposite meaning as **thrive**.
Despond means become dejected and lose confidence.

10.(1) **Elude** means escape from or avoid. Hence it has opposite meaning to **abet**.
Entice means attract or tempt by offering pleasure or advantage.
Circumvent means find a way around.

11.(4) 'evading, absence' is the correct use.
Evading means escape or avoid (someone or something), especially by guile or trickery.

12.(2) 'decided, assurance' is the correct use.
Assurance means a positive declaration intended to give confidence; a promise.

13.(3)   14.(4)   15.(1)

16.(3) Use 'room' in place of 'place'.

17.(2) The use of 'very' is superfluous because 'positive degree adjective + enough' is used. Ex. Lucky enough, tall enough.

18.(5) The sentence is grammatically correct.

19.(2) 'its' will be used in place of 'their' because the subject of the sentence 'the college' is in singular number. Hence 'its' is used.

20. (1) Use 'had' in place of 'have' because after 'have, had, has', verb is always used in part participle (V3). Ex. He has written a book, Had they had me in their team, I would have helped him.

21.(2) 'is' should be used after 'a digital computer' because the sentence is assertive not interrogative.

22.(4) In place of 'a', 'the' is used as 'with the naked eye' is the correct expression.

23.(1) Use 'among' in place of 'between' because 'between' is used for the comparison of only two while 'among' is used for the comparison of more than two.

24.(2) In place of 'for', 'to' will be used because preposition 'to' is used after 'yield'. Ex. She yielded to bribery.

25.(2) Use 'of' in place of 'on' because preposition 'of' is used after 'guilty'. Ex. "guilty of murder, guilty of theft."

26.(3)   27.(2)
28.(2)   29.(3)   30.(2)

31.(1) x = 7, 3.75; y = 2, 2.142
Therefore x > y.

32.(4) x = –8, –5; y = –5, –2
Therefore x ≤ y.

33.(4) x = 13; y = 13, 14
Therefore x ≤ y.

34.(3) x = –1.909; y = +7.0227;
Therefore x < y.

35.(3) x = 13 (approx.); y = 14, 15
Therefore x < y.

36.(4) Pass marks = 175 + 35 = 210 = 35%
⇒ Total marks = 100% = 600 marks

37.(3) ⇒ 8000 + x = 9800 – 2x
3x = 1800
x = Rs.600
CP = 8000 + 600 = Rs.8600
∴ SP = $8600 \times \frac{120}{100}$
= Rs.10320

38.(1)

+36%   –24%

        –12%

12 : 48
1 : 4

Quantity of rice sold at 24% loss = $\frac{4}{5} \times 400$
= 320 kg

39.(2) $P \times \frac{105}{100} \times \frac{110}{100} \times \frac{120}{100} = 16632$
∴ $P = \frac{16632 \times 100 \times 100 \times 100}{105 \times 110 \times 120}$
= Rs.12000

40.(4) Let,
Teena's present age = 9x
Rakesh's present age = 10x
ATQ,
$\frac{9x - 10}{10x - 10} = \frac{4}{5}$
45x – 50 = 40x – 40
5x = 10
Rakesh's present age = 10x = 20 years

41.(2) The total no. of visitors in the age group less than or equal to 20 years visited in the park –
= $120000 \times \frac{65}{100} = 78000$.
So, no.of female visitors = $\frac{60}{100} \times 78000 = 46800$.
No. of male visitors less than 20 years of age
= 78000-46800 = 31200
Total female visitors = $120000 \times \frac{7}{12} = 70000$.
Total male visitors = 120,000 – 70,000 = 50,000
No. of females of age more than 20 years
= 70,000 – 46800 = 23200
No. of males of age more than 20 years
= 50000 – 31200 = 18800
Required difference = 23200 – 18800 = 4400

42.(5) No. of visitors in Nov 2012 = 65000
Total no. of visitors in all the given months = 441000
Therefore, required % = $\frac{65}{441} \times 100 = 14.74\%$.

43.(1) No. of female visitors to the park in the month of October 2012 = $\frac{2}{5} \times 75 = 30$.
No. of female visitors to the park in the month of December 2012 = $\frac{4}{7} \times 126 = 72$.
Ratio = 30 : 72 = 5 : 12

44.(1) Total no. of male visitors in Sep - 2012 and Oct 2012 together
= $\frac{4}{11} \times 55000 + \frac{3}{5} \times 75000 = 65000$.
Total no. of male visitors in Nov - 2012 and Dec 2012 together
= $\frac{5}{8} \times 65000 + \frac{3}{7} \times 126000 = 94625$.
Required difference = 94625 – 65000 = 29625

45.(3) Required no. of visitors
= $\frac{120000 \times 65}{100} + \frac{126000 \times 60}{100}$
= 75600 + 78000 = 153600,
average = $\frac{153600}{2} = 76800$

46.(1) Females in HR = $\frac{1}{2} \times 11 \times 46 = 253$
Males in Marketing = $\frac{1}{2} \times 22 \times 46 = 506$
Required difference = 506 – 253 = 253

47.(3) Required average
= $\frac{256 + \frac{1}{4} \times 8 \times 46 + \frac{2}{5} \times 15 \times 46}{3} = \frac{1}{3} \times 621 = 207$.

48.(2) Difference between male and female employees in HR = 0
Accounts = $\frac{2}{4} \times 8 \times 46 = 184$
Production = $\frac{1}{5} \times 15 \times 46 = 138$
IT = $\frac{2}{4} \times 26 \times 46 = 598$
Marketing = 0
Merchandising = $\frac{4}{6} \times 18 \times 46 = 552$
So, difference is 2nd minimum for production department.

49.(4) Total number of men
= $253 + \frac{3}{4} \times 8 \times 46 + \frac{3}{5} \times 15 \times 46 + \frac{1}{4} \times 26 \times 46 + 506 + \frac{5}{6} \times 18 \times 46$
= 253 + 276 + 414 + 299 + 506 + 690
= 2438

50.(4) Required percentage = $\frac{(2438 - 2162)}{4600} \times 100 = 6\%$.

51.(1) The number should be 5555 in place of 5531.
$-7^2, -9^2, -11^2, -13^2, -15^2, -17^2$ .....

52.(2) The number should be 21 in place of 26.
+1, +2, +4, +8, +16, +32.

53.(4) The number should be 770 in place of 760.
×1 + 2, ×2 + 4, ×3 + 6, ×4 + 8, ×5 + 10, ×6 + 12, ...

54.(4) The series is $0^2 + 4, 1^2 + 2, 3^2 + 0, 6^2 - 2, 10^2 - 4, 15^2 - 6, 21^2 - 8$ ....
Hence, 435 should be replaced with 433.

55.(1) The number should be 2 in place of 1.
÷3.5, ÷3, ÷2.5, ÷2, ÷1.5, ÷1, ...

56.(5) Probability of first ball to be red

$$= \frac{5c_1}{15c_1} = \frac{5}{15} = \frac{1}{3}$$

Probability of second ball to be yellow

$$= \frac{7c_1}{14c_1} = \frac{7}{14} = \frac{1}{2}$$

$\therefore$ Required probability $= \frac{1}{3} \times \frac{1}{2} = \frac{1}{6}$

57.(2) Let the new average age of the class $= x$ years

$\therefore 48 \times (x - 2.5) - 60 = (48 - 12 + 8) \times x$

$4x = 180$

$x = 45$ years

58.(4) Let the total number of candidates be $= x$

Number of candidates passed in English

$= x \times 60\% = \frac{x \times 60}{100} = 0.6x$

Number of candidates passed in mathematics = 0.7x

Number of candidates failed in both subjects = 0.2x

Number of candidates passed in at least one subject = x – 0.2x

= 0.8x

According to questions.

0.6x + 0.7x – 2500 = 0.8x

1.3x – 0.8x = 2500

$0.5x = 2500, x = \frac{2500}{0.5} = 5000$

59.(1) Remaining work after 3 days $= 1 - \frac{3}{18}$

$= \frac{5}{6}$

$\therefore$ Required no of days $= \frac{\frac{5}{6}}{\frac{25}{20 \times 18}}$

= 12 days

60.(2) Loss/gain % $= \left(10 - 10 - \frac{10 \times 10}{100}\right)\%$

$= -1\%$

(– sign indicate that there is a loss of 1%)

61.(3) $? = 779.98 \times 17.02 \div 33.98 \approx 780 \times 17 \div 34 = 390$

62.(3) $? \approx 110 \times 35 + 150 = 4000.$

63.(2) $? = \frac{33 \times 27}{77 \times 11} + 0.6 = 1.05 + 0.6 = 1.65 \approx 1.5.$

64.(4) $133.98 \times 17.05 = 40.04 \times ? + 277.98$
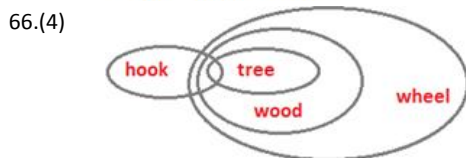
$\approx 134 \times 17 = 40 \times ? + 278$

$or, 2278 = 40 \times ? + 278$

$or, ? = \frac{2000}{40} = 50$

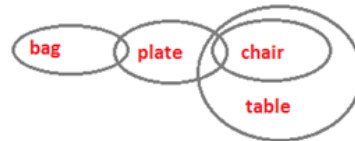65.(4) $? = 36.5\%$ of $140 \div 12.6\%$ of 80

$= \left(\frac{140 \times 36.5}{100}\right) \div \left(\frac{80 \times 12.6}{100}\right)$

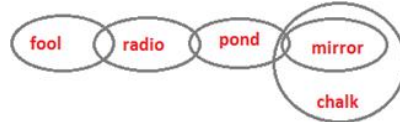$= 51.1 \div 10.08 = 5.11 \approx 5$

66.(4)

67.(3)

68.(2)

69.(5)

70.(4)

71-75. i. It is given that there are only four students attending exam between D and G .G does not attend his exam in January. so there can be three possibilities-

ii. **Case 1**- when D attends exam on 8th January. G attends exam on 22th May. K does not attend his exam in May. E does not attend his exam just before that date in which F attends his exam. H attends his exam immediately after that date in which F attends his exam. J and I attend their exams in the same month. J and I attend the exam in the month which has 30 days, so they attend exam in April. The number of students who attend their exams between the exams of F and D is the same as the number of students who attend their exams between the exams of F and K, this case is not possible so this case will be eliminated.

Months	Date	Students
January	8th	D
January	22nd	
April	8th	J
April	22nd	I
May	8th	
May	22nd	G
September	8th	
September	22nd	

iii. **Case 2**-When D or G attends exam on 8th April. D or G attends exam on 22th September. J and I attend their exams in the same month. J and I attend the exam in the month which has 30 days so this case will be eliminated.

iv. **Case 3**-When D attends exam on 22th January. G attends exam on 8th September. J attends exam in the month before the month of I. K does not attend his exam in May. H attends his exam immediately after that date in which F attends his exam. E does not attend his exam just before that date in which F attends his exam. After using the conditions which are used in Case-1, the final arrangement is-

Months	Date	Students
January	8th	E
January	22nd	D
April	8th	J
April	22nd	I
May	8th	F
May	22nd	H
September	8th	G
September	22nd	K

71.(5)   72.(2)

73.(3)   74.(4)   75.(4)

76-80.

76.(2)   77.(1)

78.(4)   79.(2)   80.(5)
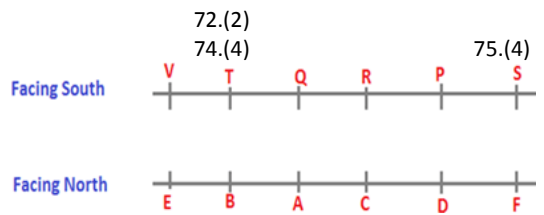
81-85. From the given information, B lives on 4th floor, V lives on 6th floor, C lives on top floor and his joining date is on 10th Feb and W lives on first floor. W's joining date is either on May or July. The persons whose joining date in February are live on adjacent floors so A lives on 7th floor as A's joining date is on 20th February . B's joining date is in May.

Floors	Persons	Month	Date
8	C	February	10
7	A	February	20
6	V		
5			
4	B	May	
3			
2			
1	W	May/July	

It is given that there is one floor between A and X so X lives on 5th floor and U lives on 3rd floor as the number of persons live between A, U and W, X are same. D lives on 2nd floor.

It is given that the persons whose joining date is in May are live adjacent to each other so W has joining date in July. Three people have joining between C and D so D has joining date on 10th June.so W has joining date on 20 July. X has joining date on 20 June. U has joining date in May and It is given that U joined before B so U and B have joining dates on 10TH May and 20th May respectively. V has joining date on 10th July.

Floors	Persons	Month	Date
8	C	February	10
7	A	February	20
6	V	July	10
5	X	June	20
4	B	May	20
3	U	May	10
2	D	June	10
1	W	July	20

81.(2)　　　　　**82.(3)**

83.(5)　　　　　**84.(3)**　　　　**85.(3)**

86.(3) Only option (c), 'R ≤ V = N ≤ T ≥ B = C > M' holds 'B ≤ V' definitely false and 'T > M' definitely true.

87.(4)
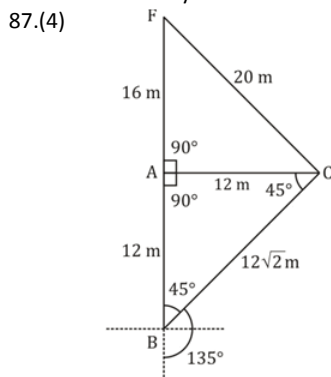
**88.(5)** G (99%) > F > E (78%) > D > H (75%)

89.(2) By using (2), N = M ≥ N ≥ D = X > Z ≤ B, 'D < B' being definitely false and 'Z < N' being definitely true.

90.(2) Total=56

Suppose- Girl=x, Boys= 3x

Then boys=42 and girls= 14
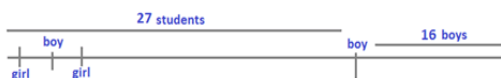
91.(2) X & Y have to be together, so X or Y cannot be the only girl member. H cannot be teamed with K so only one boy either H or K can be in the team. Hence boy J should be

in the team and J cannot go with U.so U cannot be the only girl member. I and V have to be together and H and W have to be together so G, I, K, J, L should be in boy team and the only girl is V.

92.(1) U is in the team so J & G cannot be in team so the I, L and either H or K should be in boy team. H and W have to be together and X & Y have to be together so the team is I, L, H, U, V, W.

93.(2) if I is in the team so V should also be there and the other girl can be U or W Because I cannot go with X. If the other girl is W so the team is G, H, I ,J, V, W but if the other girl is U, the team cannot be defined.

94.(2) K is in the team so H and W cannot be in the team. For completing four boys in the team, G & J have to be there.so U cannot be in team. X and Y have to be together so X & Y are in the team and boys are K, G, J, and L.

95.(3) For completing four girls in the team, X & Y should be there.so I and V cannot be in the team. Hence the other girl members are U & W. so the boys team are H and L.

96.(3) I. F = K (False)
II. K < F (False)

97.(5) I. G ≥ Z (True)
II. C ≥ R (True)

98.(5) I. O < M (True)
II. K > O (True)

99.(1) Non- overlapping Case
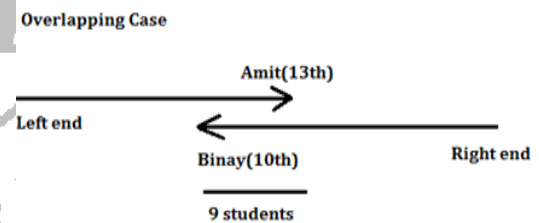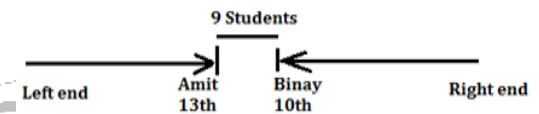
In a case of overlapping total students- 13+10 = 23-9 - 2(because of overlapping)= 12, means total students are 12 which is not possible because it is given in the question that Amit rank is 13th from left end.

In a case of non-overlapping total students= 13+10+9= 32. Boys and girls ratio is 3:1, suppose girls are x and boys are 3x, then girls= 8 and boys = 24.

100.(3)