SBI PO Preliminary Grand Test –SPP-170330
HINTS & SOLUTIONS

1.(4) misconceptions about the aid given to the poor nations by developed countries

2.(2) improving their own national behaviour

3.(3) despite rampant corruption, nations may prosper

4.(5) All the three

5.(4) the U.S., on its own, assumes the obligation of helping the poor countries

6.(1) The U.S. aid meant for per capita African does not reach the incumbent

7.(5) The meaning of the word Obligation (Noun) as used in the passage is : the state of being forced to do something because it is your duty or because of a law etc; commitment; moral binding.
Look at the sentence :
We have a moral obligation to protect the environment.

8.(2) The meaning of the word Squander (Verb) as used in the passage is : to waste time, money etc. in a stupid or careless way.
Look at the sentence :
She squandered all her money on gambling.

9.(5) The meaning of the word Extensive (Adjective) as used in the passage is : covering a large area; great in amount.
Look at the sentence :
The fire caused extensive damage.
The word Negligible (Adjective) means : of very little importance or size: insignificant. Hence, the antonym of the word extensive should be negligible.

10.(4) The meaning of the word Prolonged (Adjective) as used in the passage is : continuing for a long time.
Its antonym should be short-lived which means : lasting only for a short time.

11.(1) Here, adjective i.e. necessary should be used, not an adverb.

12.(2) Here, adjectives should be used.

13.(5)

14.(2) Here, adjective should be used and the clause should be in Present Tense.

15.(1) Help is followed by infinitive without to. That should be replaced by how.
Look at the sentences :
He knows how to swim.
He knows what to do.

16.(3)   17.(1)
18.(4)   19.(5)
20.(2)   21.(1)
22.(5)   23.(4)
24.(1)   25.(4)
26.(2)   27.(1)
28.(5)   29.(5)
30.(4)

31.(3) Series is +23, +(23×2), +(23×3), +(23×4), +(23×5) and so on.
Next no 739 + 23 × 6 = 927

32.(5) Series is ×1 + 2, ×2 + 3, ×3 + 4 and so on.
Next no. is 3291 × 6 + 7 = 19753.

33.(4) Series is ×1, ×(1+4), ×(5+4) = ×9, ×(9 + 4) = ×13 and so on.
Answer = 129285 × 21 = 2714985.

34.(2) Seiries is 1^4, 2^4, 3^4, 4^4, and so on.
Next number is 2401.

35.(1) Series is ×2 + 6, ×2 + 6, ×2 + 6, ×2 + 6.
Next number is 410.

36.(3) $x^2 = \dfrac{1}{9} \Rightarrow x = \dfrac{1}{3}, -\dfrac{1}{3}$

$y = \dfrac{1}{4}, -3$

Hence there is no relation between x and y.

37.(1) $x = -2, \dfrac{1}{3}$ and $y = \dfrac{5}{2}, 1$

Hence x is less than y.

38.(5) $x = -\dfrac{5}{3}, -\dfrac{1}{2}$ and $y = -\dfrac{5}{3}, -2$

Hence $x \geq y$.

39.(1) $x^2 = 5$

$\therefore x = +\sqrt{5}$ and $-\sqrt{5}$

$y = \dfrac{5}{2}, \dfrac{7}{2}$

Hence x < y.

40.(4) x = 7, y = 5
Hence x > y.

41.(2) Number of male members in 2008 :

Health club A $\Rightarrow \dfrac{2400 \times 20}{100}$ = 480

Health club D $\Rightarrow \dfrac{2400 \times 12}{100}$ = 288

Let the increase in members in each club be x.

$\therefore \dfrac{480 + x}{288 + x} = \dfrac{17}{11}$

$\Rightarrow$ 4896 + 17x = 5280 + 11 x

$\Rightarrow$ 17x - 11x = 5280 - 4896

$\Rightarrow$ 6x = 384

$\Rightarrow$ x = $\dfrac{384}{6}$ = 64

$\therefore$ Number of male members in health club D in 2009
= 288 + 64 = 352

42.(3) Total members in health clubs C, D and E

$= 4200 \times \left(\dfrac{32 + 12 + 10}{100} \right)$

$= \dfrac{4200 \times 58}{100} = 2436$

Number of male members in health clubs C, D, and E

$= 2400 \times \left(\dfrac{33 + 12 + 10}{100} \right) = 24 \times 55 = 1320$

∴ Number of female members = 2436 -1320 = 1116

∴ Required average $= \dfrac{1116}{3} = 372$

43.(4) Total members health club E $= \dfrac{4200 \times 8}{100} = 336$

Male members $= \dfrac{2400 \times 10}{100} = 240$

Life time members $= \dfrac{336}{2} = 168$

Life time male members = 168 - 44 = 124

∴ Required percent $= = \dfrac{124}{240} \times 100 = \dfrac{155}{3} = 51\dfrac{2}{3}$

44.(3) ∵ 100% = 360°

∴ $24\% = \dfrac{360}{100} \times 24 = 86.4^{0}$

45.(5) Total members in health club A

$= \dfrac{4200 \times 18}{100} = 756$

Male members $= \dfrac{2400 \times 20}{100} = 480$

Female members = 756 - 480 = 276

In health club B

Male members $= \dfrac{2400 \times 25}{100} = 600$

∴ Required percent

$= \dfrac{600 - 276}{600} \times 100 = \dfrac{324}{6} = 54\%$

46.(5) Unsold units of the company in year 2008
= (25 – 17.5) = 7.5 lacs
Unsold unit of company in year 2011
= (30 – 20) = 10 lacs
Hence required difference = (10 – 7.5) = 2.5 lacs

47.(2) Required avg. = 1/6 x (35 + 37.5 + 25 + 40 + 32.5 + 30) lacs
= 1/6 x200 = 33 lacs

48.(2) Required ratio = 37.5 : 25 = 3:2

49.(3) Required percentage = [(20/27.5) x 100] = 73%

50.(2) Required number = (37.5 – 30)+ (32.5 – 25) lacs
= (7.5 + 7.5) lacs = 15 lacs

51.(2) Area of the circle $= \dfrac{22}{7} \times (14)^2 = 616 \text{ cm}^2$

Area of the rectangle = 1166 – 616 = 550 cm²

Breadth of the rectangle $= \dfrac{550}{25} = 22$ cm

So, required sum $= 2 \times \dfrac{22}{7} \times 14 + 2(25 + 22) = 182$ cm

52.(1) Let the length of train A and train B be x and 2x, then

Speed of train A = $\dfrac{x}{25}$

Speed of train B = $\dfrac{2x}{75}$

Required ratio $= \dfrac{x}{25} : \dfrac{2x}{75} = 3 : 2$

53.(2) Let the number of days he was absent be x days.
180 (40 – x) – 20 x = 5200
7200 – 180x – 20x = 5200
7200 – 200x = 5200
x = 2000/20 = 10 days

54.(5)
Efficiency		Days	
4	A	16	
5	B	64/5	LCM 64
2	C	32	

(A + B + C_ work together for 4 days
= 4 × (4 + 5 + 2) = 44
C work alone, last 3 days = 3 × 2 = 6
Remaining work done by (B + C)
= (64 – 50) / 7 = 14/7 = 2 days
Total days = 4 + 3 + 2 = 9 days.

55.(3) Let A complete the work in x days and
B complete the work in y days.
So, By 1ˢᵗ case,

$\dfrac{2}{x} + \dfrac{9}{y} = 1$ ...(1)

And By 2ⁿᵈ case,

$\dfrac{3}{x} + \dfrac{6}{y} = 1$ ...(2)

From Eq. (1) and (2), y = 15 days.

56.(2) $(x + 2520) = x\left(1 + \dfrac{10}{100}\right)^2$

x = Zaheer's profit
x = 12000
y = Aashish's profit

$4200 = \dfrac{y \times 20 \times 1}{100}$

y = 21000
Umesh's profit = Rs. 9000
Ratio of their profits
= 12000 : 21000 : 9000 = 4 : 7 : 3

Umesh's share $= \dfrac{3}{14} \times 70000 = \text{Rs.} 15000$

57.(2) Vidya and Priyanka cost price and marked price equal.

Vidya Selling price = (MP-20) × $\dfrac{80}{100}$ = 0.8MP – 16

Priyaka Selling price $= \left(MP \times \dfrac{80}{100}\right) - 20 = 0.8mp - 20$

Vidya % profit = 3 (Priyanka % loss)

$\left(\dfrac{SP - CP}{CP}\right) \times 100 = 3\left(\dfrac{CP - SP}{CP} \times 100\right)$

Vidya : $\left(\dfrac{8MP - 16 - CP}{CP}\right) \times 100$

= Priyanka : $3\left[\dfrac{CP[-0.8MP + 20]}{CP} \times 100\right]$

(0.8MP – 16 – CP) = 3(CP – 0.8MP + 20) ...(1)
Profit of vidya in Rupees = SP Vidya – CP
= 0.8 MP – 16 – CP

Putting value from eqn.(1)
Profit of Vidya = Rs. 3.

58.(1) Let Suresh take x days to complete the work. So in one day Suresh does = $\dfrac{1}{x}$

Given total efficiency of Ramesh and Suresh in one day = $\dfrac{1}{p}$

So Ramesh = $\dfrac{1}{p} - \dfrac{1}{x}$

According to question = $\dfrac{q}{p} + \left(\dfrac{1}{x}\right) = \dfrac{1}{r}$

So, $x = \dfrac{pr}{p-q}$

So, Suresh takes = $\dfrac{pr}{p-q}$

So, Ramesh takes = $\dfrac{pr}{r-p+q}$

59.(1) Initial speed of police = 10 m/s
Increase speed of police = 20 m/s
Speed of thief = 15 m/s
Initial difference between thief and police = 250 m
After 5 seconds difference between thief and police
= 250 – (5 × 10) = 200 m
After 10 seconds more the difference between thief and police = 200 + (5 × 10) = 250 m.
Now, the time required by police to catch the thief

$= \dfrac{250}{5} = 50\ s$

Distance travelled = 50 × 20 = 1000 m
Total time = 50 + 15 = 65 s
Total distance = 1000 + (15 × 10) = 1150 m.

60.(2) Pipe A fills $\dfrac{3}{5}$ th part of tank in 27 hours.

∴ Time taken in filling completely

$= \dfrac{27 \times 5}{3} = 45$ hours

∴ Part of tank filled by A and B in 1 hour =

$\dfrac{1}{45} + \dfrac{1}{30} = \dfrac{2+3}{90} = \dfrac{1}{8}$

Required time = 18 hours

61.(1) Average number = 1/6 (2 + 3 + 4 + 5 + 4 + 7) lacs
= 1/6×25=4.1 lakh

62.(2) Required % = [25/(5 + 6 + 5 + 8 + 5 + 9)]x 100
= 2500/38 = 66

63.(3) The total number of candidates who applied for both the banks together is 9 lacs in 2004, 2009 and 2007 separately.

64.(1) Required number of disqualified candidates
= (80/100)x9 lacs = 7200/100 lacs = 7.2 lacs

65.(2) Required ratio = (5 + 7)/(5 + 9) = 12/14 = 6 : 7.

66-70. @ → ≥
$ → ≤
% → >
# → <
© → =

66.(4) Statement : A ≥ B < C ≤ D
Conclusions :
I. D > A   II. C > A

67.(2) Statement: M ≤ N ≥ P > Q
Conclusions
I. P = M   II. Q < N

68.(4) Statement: E > F < G ≥ H
Conclusions
I. H < F   II. E > G

69.(3) Statement: J = K ≤ L > M
Conclusions
I. L = J   II. L > J
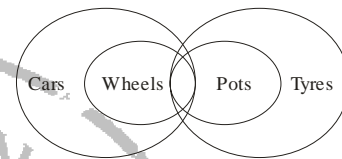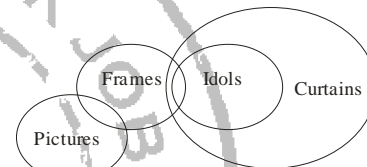
70.(1) Statement: W < X > Y = Z
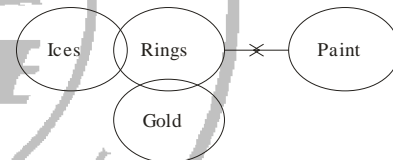Conclusions
I. Z < X   II. Y < W
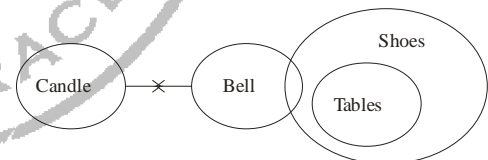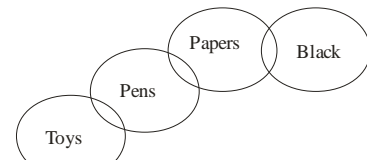
71.(3)

72.(2)

73.(4)

74.(4)

75.(3)

76-80. In the first step the highest number is placed at the extreme left position and in second step the word which comes first in the alphabetical order is placed at the extreme right position. In the next step the second highest number is placed at the second position from the left. After that step the word which comes second in the alphabetical order is placed at the extreme right position. These two steps are continued alternatively till all numbers and words are arranged.
Input: class 25 war 15 race 73 heap 58 just 88 take 38
Step I: 88 class 25 war 15 race 73 heap 58 just take 38
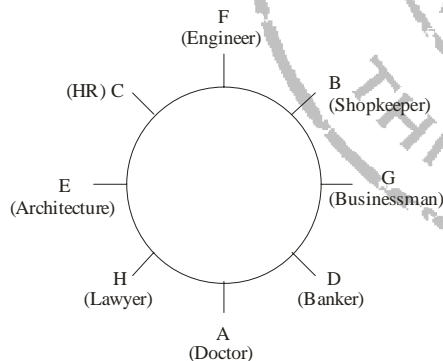Step II: 88 25 war 15 race 73 heap 58 just take 38 class

Step III: 88 73 25 war 15 race heap 58 just take 38 class
Step IV: 88 73 25 war 15 race 58 just take 38 class heap
Step V: 88 73 58 25 war 15 race just take 38 class heap
Step VI: 88 73 58 25 war 15 race take 38 class heap just
Step VII: 88 73 58 38 25 war 15 race take class heap just
Step VIII: 88 73 58 38 25 war 15 take class heap just race
Step IX: 88 73 58 38 25 15 war take class heap just race
Step X: 88 73 58 38 25 15 war class heap just race take
Step XI : 88 73 58 38 25 15 class heap just race take war

76.(5)   77.(2)
78.(1)   79.(1)
80.(3)
(81-85) :

Day	Dance Style
Monday	Western Dance style
Tuesday	Lavani Dance style
Wednesday	Bharatnatyam Dance style
Thursday	Bhangra Dance style
Friday	Kuchipudi Dance style
Saturday	Disco Dance style
Sunday	Freestyle Dance style

81.(2)   Lavani Dance style was performed on Tuesday.
82.(4)   Freestyle dance style was performed on Sunday.
83.(1)   The combination Monday-Western dance style is correct.
84.(3)   Four dance styles-Bharatnatyam, Bhangra, Kuchipudi and Disco-were performed between Lavani and Freestyle dance styles.
85.(5)   Bhangra dance style was performed immediately after Bharatnatyam dance style.

86-90.

F
(Engineer)
(HR) C
B
(Shopkeeper)
E
(Architecture)
G
(Businessman)
H
(Lawyer)
D
(Banker)
A
(Doctor)

86.(1)   A – Doctor
87.(2)   In both CW and ACW. You see there are three persons. In between C and D.
88.(3)   Lawyer is fourth right of shopkeeper B.
89.(1)   In both CW and ACR you see there are three persons in between Doctor and Engineer.
90.(3)   D is immediate right of A.
91.(5)   Except (5) in each case third person is sitting between first and second person.
92.(4) $A \xrightarrow{+1} D \xrightarrow{+2} B \xrightarrow{+3} E \xrightarrow{+4} G \xrightarrow{+5} H$
93.(3)   From I, weight of each pole = (4 × 5) kg = 20 kg
Total weight of 10 pole = 20 × 10 = 200 kg
From II, weight of each pole = (weight of 3 poles) – (weight of 2 poles)
Weight of 10 poles = (20 × 10) kg = 200 kg.

94.(5)   From both I and II we get that Rahul is (35-25) = 10 years older than his brother, M who was born in 1964, So, Rahul was born in 1954.
95.(4)   From I, we conclude that H is the only daughter of M. But this does not indicate that M has no son. The information given in II is immaterial.
96-100.   Use different symbols to different words as :
you are good ⟶ ni za ri
you are with me ⟶ ri si ni ti ⟩ ⟹ good → za
meet good person ⟶ ap li za ⟹ me → ti
you are me ⟶ ri ni ti
meet me now ⟶ ku ti ap ⟹ meet→ ap
Now from statement (iii), person → Li
Statement (v), now → ku
Also from (i), (ii) and (iii), you are → ni ri
From (ii), with → si
96.(4)   97.(5)
98.(1)   99.(1)
100.(3)