Grand Test – SPP 190334



SBI PO Preliminary Grand Test – SPP-190334

HINTS & SOLUTIONS

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

HINTS & SOLUTIONS

1.(4) 2.(1) 3.(3) 4.(5) 5.(2) 6.(1) 7.(4) 8.(4) 9.(5) 10.(4) 11.(3)	
12. (1)	Key (Adjective) = most important: essential; vital.
	Look at the sentence :
	He played a key role in the dispute.
13. (3)	Guard (Verb) = to protect property, places or people
	look at the sentence :
	The dog was guarding its owner's luggage.
14. (5)	Vital (Adjective) = necessary or essential. Superfluous (Adjective) = unnecessary Look at the sentences :

+~1 od financial

15. (4)	 Good financial accounts are vital to the success of enterprise. She gave him a look that made words superfluous. Alleviate (Verb) = to make something less severe; ea 					
	Aggravate (Verb) = to make worse; worsen.					
	Pollution can aggravate asthma.					
	A sincere effort is needed to alleviate the sufferings of					
16 (2)	the poor.					
17.(3)						
18.(4)						
19.(1)						
20.(1)						
21.(2)	For more than two things one another should be used					
AA,	Hence, have dragged one another's should be					
22.(2)	In/with regard to some-body/something = concerning					
	somebody/something.					
	Hence, with regard to the crisis in state should be used here					
23.(1)	Here, the executives of companies or company					
	executives areshould be used.					
24.(5)						
25.(1)	Here Active voice i.e. Our country is targeting/our					
26 (2)	country has targeted should be used.					
20.(2) 27 (4)						
27.(4) 28.(1)	24					
29. (2)						
30. (3)	~ /					
31.(5)	$117 \xrightarrow{+272} 389 \xrightarrow{+136} 525 \xrightarrow{+68} 593 \xrightarrow{+34} 627 \xrightarrow{+17} 644$					
32.(4)						
	7 11 23 51 103 187					
	+4 $+12$ $+28$ $+52$ $+84$					
	+8 $+10$ $+24$ $+32$					
22 (4)	+8 +8 +8					
33.(4)	18 27 49 84 132 193					
	+9 +22 +35 +48 +61					
	+13 +13 +13 +13					
34.(1)	series is 6, 6*1-2=4					
	4*2-4=4					
	4*3-6=6					
	6*4-8=16 16*5 10-70					
25 (5)	18.2-10=70					
33.(3)	655 439 314 250 223 215					
2c(2)	$(-6)^{\circ}$ $(-5)^{\circ}$ $(-4)^{\circ}$ $(-3)^{\circ}$ $(-2)^{\circ}$					
30.(2) Number of complaints received per 1000 w						
	For year 2008 = $\frac{1000}{40000} \times 1000 = 25$					
	Similarly for 2009 = 33.33, 2010 = 30, 2011 = 22.5.					

OF

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Clearly, it is maximum for the years 2009. 37.(4) End of 2008 = (0.4 x 0.9) lacs $= 0.4 \times \frac{90}{100} = 0.36$ lacs End of 2009 = 0.9(0.36 + 0.6) lacs = 0.86 lacs End of 2010 = 0.9 (1 + 0.86) = 1.67 lacs End of 2011 = 0.9(1.67 + 2) = 3.3 lacs 38.(3) Required % increase in 2010 2000 And in 2011 = $\frac{4500 - 3000}{3000} \times 100 = 50\%$ 39.(1) Actual number of complaints = 0.9(4500) = 4050 Hence, actual complaints per 1000 washing machines $=\frac{4050}{200000}\times1000=20.25$ 40.(1) Complaints in 2008 = 1000 No. of complaints of 'fuse blowing' = 500 In 2009 = 1.2 × 500 = 600 In 2010 = 1.2 × 600 = 720 In 2011 = 1.2 × 720 = 864 LOF % of complaints of fuse blowing in 2011 $= \frac{864}{4500} \times 100 = 19.2\%$ Let initially total number of men was 'x' any 'y' no. of 41.(2) men renorted

$$\therefore y \times \left(\frac{480}{x} + 20\right) = 480 \text{ Or } \frac{20}{480} = \frac{1}{y} - \frac{1}{x}$$
$$\therefore \frac{1}{y} - \frac{1}{x} = \frac{1}{24}$$

From option, only 12, 8 satisfies the above arrangement. Therefore total men initially = 12, total men reported = 8.

42.(4)

Current	A	В	C
After	2000	6000	10000
	3000 +	1000 +	3000 +
	5000 =	5000 =	1000 =
Ist	8000	6000	4000
	3000 +	4000 +	4000 +
lind	2000=	2000 =	3000 =
Year	5000	6000	5500
	3000 +	2500 +	2500 +
IIIrd	3500 =	3500 =	3000 =
Year	6500	6000	5500
	3000 +	3250 +	3250 +
Ivth	2750 =	2750 =	3000 =
year	5750	6000	6250

Hence, population of part A = 5750. Initial cost = $C = 0.03 \text{ ABt}^2$ 43.(2)

Amount after changes in price and time -

$$C^{1} = 0.03 \times \frac{150}{100} A \times \frac{120}{100} B \times \left(\frac{70}{100} t\right)$$

 $C^1 = 0.882C$

Therefore % decrease in cost

$$=\frac{C-C^{1}}{C}\times100=\frac{C-0.882C}{C}\times100=11.8\%$$

44.(3) Let total commodity be 'x'.

$$\therefore \left[\frac{x}{3} \times \frac{115}{100} + \frac{x}{4} \times \frac{120}{100} + \left(x - \frac{x}{3} - \frac{x}{4} \right) \times \frac{124}{100} \right] - x = 62$$

$$\Rightarrow \frac{23x}{60} + \frac{3x}{10} + \frac{31x}{60} - x = 62$$

$$\therefore x = `310$$
45.(4) Total No. of sheet of paper = $\frac{785.4}{46.2} = 17$
Total Area of papered portion

$$= 17 \times (13 \times 0.75) = 165.75$$
Since, $2 \times (7h + 5h) = 165.75$.
Therefore h = 6.91 m.
46.(3) Amount of IR Rays received in 1 minute

$$= \frac{36}{100} \times 3600 = 360 \text{ units}$$
Maximum tolerable limit of IR rays = 9720 units
So, maximum time one can be exposed to the sun

$$= \frac{9720}{360} = 27 \text{ min.}$$
47.(3) Beta rays in 1 minute of sunshine

$$= \frac{5}{100} \times 3600 = 180 \text{ units}$$
Beta rays in 1 minute of sunshine = $180 \times 10 = 1800$
units
IR rays in 1 minute of sunshine = $\frac{10}{100} \times 3600 = 360$
units
IR rays in 3 minutes of sunshine = $360 \times 3 = 1080$ units
Required ratio = $\frac{1800}{1080}$ i.e. 1.66 times.
48.(4) Beta rays in 1 minute = $\frac{5}{100} \times 3600 = 180$ units
Therefore 30 units of Beta rays = 1 units of vitamin D.
180 units of Beta rays = 6 units of vitamin D
1 minute of sunshine = 6 units of vitamin D
1 minutes.
49.(3) Amount of gamma rays with ozone layer
 $= \frac{5}{100} \times 3600 = 180$
This is 40% of gamma rays, therefore
 $100\% = \frac{180}{40} \times 100 = \frac{1800}{25 \text{ crore}}$ Air India = 4:25
50.(1) $20 - 5 = 15$
 $15\% of 3600 = 540$.
51.(2) Ratio = $(\frac{5 \text{ crore}}{5000}) \times (\frac{4000}{25 \text{ crore}})$ Air India = 4:25
52.(3) Percentage = $\frac{\text{Total of Indiago (2012, 2013, 2014)}}{(\text{Total of Jet Airways) (2012, 2013, 2014)}}$
 $= \frac{25 + 5 + 30}{5 + 25 + 20} \times 100 = 120\%$
53.(5) Since, Fare of Jet Airways for one Passenger
 $= 110\% of 7000 = `7700$
Therefore No. of passenger in 2014
 $= \frac{20 \text{ crore}}{7700} \approx 25975.$
54.(1) Total of All aviation company in 2009 = 70
In 2010 = 80

1. RACE

54

NKOF

49

4

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In 2011=80 In 2012 = 75 In 2013 = 65 In 2014 = 110 Hence, in 2014, is maximum 55. (5) Can't be determined, as fare per Passengers is not given in the data. 56.(1) {3}A 20 {2}B 30 LCM = 60 Time take to fill the tank $1/3^{rd}$ i.e. $\frac{60}{3} = 20$ $\Rightarrow \frac{20}{3+2} = 4$ hr. Efficiency of pipe after leak developed $=\frac{2}{3}(3+2)=\frac{10}{3}$ Time taken to fill the remaining $\frac{2}{2}$ rd of the tank $=\frac{40}{10}=12$ hr. KOF i.e. Total time taken to fill the tank = 4 hr + 12 hr = 16 hrs. Let distance be x kmph and speed y kmph 57.(1) $\frac{x}{y} - \frac{x}{y+3} = \frac{40}{60}$...(1) $\frac{x}{y-2} - \frac{x}{y} = \frac{40}{60}$...(2) From Equation (1) and (2), x = 40 km and y = 12 kmph. 58.(3) Let speed of train = x kmph And speed of car = y kmph $\frac{120}{x} + \frac{480}{y} = 8$ hr. ...(1) And $\frac{200}{x} + \frac{400}{y} = 8\frac{1}{3}$ hr. ...(2) From eq. (1) and (2), $\frac{x}{v} = \frac{3}{4}$ 59.(5) The word BANANA contains 6 letter out of which A occurs thrice & N occurs twice. The three consonants B and N (Which occurs twice) can be arranged at the 3 even places 2, 4, & 6 i. e 3!/2! = 3 ways. The remaining 3 odd places can be arranged with triple A in 3!/3! = 1 way. Required No of words = $3 \times 1 = 3$. 60.(1) L: B = 7:5Breadth = $\frac{24.5}{7} \times 5 = 17.5$ = Diameter of circle Radius of circle = $\frac{17.5}{2} = 8.75$. Area of circle = $\frac{22}{7} \times 8.75 \times 8.75 = 240.625$.

Area of shaded region = Area of rectangle - Area of circle

= 17.5 × 24.5 – 240.625 = 188.125.

61.(1)
$$? = \frac{5555}{50} = 111.1$$

∴ Required answer = 110

 $? = (18)^3 = 5832$ $? = 23 \times 19 \times 18 = 3496$... Required answer = 3500 $? = \frac{10000}{100 \times 10} = 10$... Required answer = 11 $? = \frac{450 \times 22}{100} = 99$... Required answer = 100 $M \# R \Longrightarrow M > R$ R % P⇒R<P $P\delta J \Longrightarrow P=J$ Therefore, M > R < P = JConclusions I. M # P \implies M > P : Not true II. J # R \implies J > R : True III. J % M \Longrightarrow J < M : Not true $P^*D \Longrightarrow P > D$ $D # Q \implies D > Q$ $Q @ R \Longrightarrow Q \le R$ Therefore, $P \ge D > Q \le R$ Conclusions: I. Q % P \Rightarrow Q < P : True II. $R # D \implies R > D$: Not true III. P # D \implies P>D : Not true $T \% M \Longrightarrow T < M$ $M @ K \Rightarrow M \leq K$ $K * F \Longrightarrow K \ge F$ Therefore, $T < M \le K \ge F$ Conclusions: I. F % M \implies F < M : Not true II. F % T \implies F < T : Not true III. K # T \implies K > T : True 69. (5) H @ K \Longrightarrow H \le K

62.(1)

63.(3)

64. (4)

65.(2)

66.(3)

67.(2)

68.(1)

$$K \delta N \Longrightarrow K = N$$

$$N \% T \Longrightarrow N < T$$
Therefore, $H \le K = N < T$
Conclusions

$$I. T \# K \Longrightarrow T > K : True$$

$$II. N \delta H \Longrightarrow N = H : Not true$$

$$III. H \% N \Longrightarrow H < N : Not true$$
Either II or III is true.
$$D. (4) F \delta D \Longrightarrow F = D$$

70. (4)
$$F \delta D \Longrightarrow F = D$$

 $D * K \Longrightarrow D \ge K$
 $K \# M \Longrightarrow K > M$
Therefore, $F = D \ge K > M$
Conclusions:
I. M % D \Longrightarrow M < D : true
II. K % D \Longrightarrow M < D : true

II. K @ F \implies K \leq F : True

- III. F # M \implies F > M : true 71. (5) Obviously both the statements (A) and (B) are effects of
- same (common) cause. Both statements seek to promote education among slum children.
- 72.(2) It is clear that statement (B) is the cause and statement (A) is its effect.
- 73.(1) obviously, statement (A) is the cause and statement (B) is its effect.
- 74.(1) obviously, statement (A) is the cause and statement (B) is its effect
- 75.(1) obviously, statement (A) is the cause and statement (B) is its effect.



