## SBI PO Preliminary -2021. SBPP-2021-100020 HINTS \& SOLUTIONS

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

1-5. The correct sequence is EDACFB.
4.(2)
5.(5)
'evading, absence' is the correct use.
Evading means escape or avoid (someone or something), especially by guile or trickery.
7.(2) 'decided, assurance' is the correct use.

Assurance means a positive declaration intended to give confidence; a promise.
9.(4)
10.(1)
11.(2) The correct preposition should be used. Note that it is patience 'with' people and not 'to' people.
12.(4) The same friend is both a singer and a scientist. So it should be 'who is a singer and scientist'.
13.(3) Incorrect preposition is used. We abstain 'from' something.
14.(4) 'Have' must replace 'has' as 'best players' are referred to.
15.(2) Charges are 'levelled' against a person, not 'levied'.
16.(1) It is said in the 1st paragraph that they never have seemed to realize the importance of the experiment and author also mentions in the same paragraph that crudeness of their instruments of measurement is just an excuse which
makes option (3) incorrect hence option (1) is the correct option.
17.(2) Metamorphosingthe problems of physics into the problems of mathematics constitutes the essential characteristic of the Newtonian method and because of which he was considered the greatest scientist.
18.(3) Prior to Newton, mathematics, chiefly in the form of geometry, had been studied as a fine art without any view to its physical applications but Newton's method changed the pattern. Refer to the 3rd paragraph of the passage, "But here again the real significance of Newton's achievement lay not so much in the exact quantitative formulation of the law of attraction, as in his having established the presence of law and order at least in one important realm of nature, namely, in the motions of heavenly bodies"
Refer to the 4th paragraph of the passage, "Einstein's special principle, by adding increased emphasis to this relativity of velocity, making absolute velocity metaphysically meaningless,"
Option (4) is the correct choice as it best explains the theme of the passage.
21.(4) Metamorphosed means change or cause to change completely in form or nature hence stagnant is the word most opposite in meaning.
Resort means something that one uses to accomplish an end especially when the usual means is not available hence imprudent is the word most opposite in meaning.
Adherent means someone who supports a particular party, person, or set of ideas hence adversary is the word most opposite in meaning.
24.(3) Conceived means form or devise (a plan or idea) in the mind hence contrive is the word most similar in meaning. Emphasis means special importance, value, or prominence given to something hence accentuation is the word most similar in meaning.
26.(3)
28.(2)
31.(4)
32.(4)

$$
\begin{align*}
& 27 .(2) \\
& 29 .(3) \tag{2}
\end{align*}
$$

Required percentage $=\frac{100-50}{50} \times 100=100 \%$.
Average production of TATA $=\frac{60+90+50+100+80}{5}$
$=\frac{380}{5}=76$ lakh
Mahindra $=\frac{50+70+70+80+100}{5}=\frac{370}{5}=74$ lakh
Suzuki $=\frac{70+80+90+70+70}{5}=\frac{380}{5}=76$ lakh
Percentage rise or fall in the production of Mahindra in differentyears
For year $2010=\frac{70-50}{50} \times 100=40 \%$ (maximum)
For year $2011=\frac{70-70}{70} \times 100=0$
For year $2012=\frac{80-70}{70} \times 100=\frac{100}{7}=14 \frac{2}{7} \%$
For year $2013=\frac{100-80}{80} \times 100=25 \%$
34.(2) The percentage of production of company

Suzuki to production of company Mahindra
For year $2009=\frac{70}{50} \times 100$
44.(3) $x=-1.909 ; y=+7.0227$;

Therefore $x<y$.

For year $2010=\frac{80}{70} \times 100$
For year $2011=\frac{90}{70} \times 100$
For year $2012=\frac{70}{80} \times 100$
For year $2013=\frac{70}{100} \times 100$
45.(3) $x=13$ (approx.); $y=14,15$

Therefore $x<y$.
46.(5) Bob's present age $=x$

Abby's present age $=(x+8)$ years
$\frac{x+4}{x+12}=\frac{4}{5}$
$x=28$ years
47.(4) C's investment $=x$

Ratio $=(17600 \times 12):(12800 \times 12): x \times 8$
$=26400: 19200: x$
$\therefore 11000=\frac{x \times 36080}{26400+19200+x}$
$x=20,000 \mathrm{Rs}$.
48.(2) Distance covered in 2 hours $=62 \times 2=124 \mathrm{~km}$

Distance remaining $=(827-124)=703 \mathrm{~km}$
Required time $=\frac{703}{62+59}$
$=\frac{703}{121}$ hour
$=5 \mathrm{hrs} 48 \mathrm{~min}$
Hence they will meet $12: 48 \mathrm{pm}$.
No. of male visitors less than 20 years of age
$=78000-46800=31200$
Total female visitors $=120000 \times \frac{7}{12}=70000$.


Let Leena had a sum of money $=x$ Rs.
Sum invested by her in scheme $x=\frac{5 x}{11}$
Sum invested by her in scheme $y=\frac{6 x}{11}$
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 $=23200-18800=4400$
37.(5) No. of visitors in Nov 2012 $=65000$

Total no. of visitors in all the given months $=441000$
Therefore, required $\%=\frac{65}{441} \times 100=14.74 \%$.
38.(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 $=30: 72=5: 12$
39.(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 $=94625-65000=29625$
40.(3) Required no. of visitors
$=\frac{120000 \times 65}{100}+\frac{126000 \times 60}{100}$
$=75600+78000=153600$,
average $=\frac{153600}{2}=76800$
41.(1) $x=7,3.75 ; y=2,2.142$

Therefore $x>y$.
42.(4) $x=-8,-5 ; y=-5,-2$

Therefore $x \leq y$.
43.(4) $x=13 ; y=13,14$

Therefore $x \leq y$.
$\therefore \frac{5 x}{11} \times \frac{6 \times 18}{100}-\frac{6 x}{11}\left[\left(1+\frac{20}{100}\right)^{2}-1\right]=1518$
$x=6050 \mathrm{Rs}$.
$\therefore$ Required amount $=\frac{6050 \times 5}{11}$
$=2750$ Rs.
50.(1) Let radius $=r \mathrm{~cm}$

Height $=\mathrm{h} \mathrm{cm}$
$\frac{2 \pi r h+2 \pi r^{2}}{2 \pi r h}=\frac{5}{4}$
$\frac{h+r}{h}=\frac{5}{4}$
$r=\frac{h}{4}$ $\qquad$
$2 \pi r h=1232$
$h^{2}=\frac{1232 \times 7 \times 4}{2 \times 22}=784$
$h=28 \mathrm{~cm}$
Probability of first ball to be red
$=\frac{5 c_{1}}{15 c_{1}}=\frac{5}{15}=\frac{1}{3}$
Probability of second ball to be yellow
$=\frac{7 c_{1}}{14 c_{1}}=\frac{7}{14}=\frac{1}{2}$
$\therefore$ Required probability $=\frac{1}{3} \times \frac{1}{2}=\frac{1}{6}$
52.(2) Let the new average age of the class $=x$ years
$\therefore 48 \times(x-2.5)-60=(48-12+8) \times x$
$4 x=180$
$x=45$ years
53.(4) Let the total number of candidates be $=x$

Number of candidates passed in English
$=\mathrm{x} \times 60 \%=\frac{x \times 60}{100}=0.6 x$
Number of candidates passed in mathematics $=0.7 \mathrm{x}$
Number of candidates failed in both subjects $=0.2 \mathrm{x}$
Number of candidates passed in at least one subject $=\mathrm{x}-0.2 \mathrm{x}$
$=0.8 \mathrm{x}$
According to questions.
$0.6 \mathrm{x}+0.7 \mathrm{x}-2500=0.8 \mathrm{x}$
$1.3 \mathrm{x}-0.8 \mathrm{x}=2500$
$0.5 \mathrm{x}=2500, \mathrm{x}=\frac{2500}{0.5}=5000$
54.(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
55.(2) Loss/gain $\%=\left(10-10-\frac{10 \times 10}{100}\right) \%$
$=-1 \%$
( - sign indicate that there is a loss of $1 \%$ )
56.(3) Total unsold toys in 2012
$=\frac{20}{100} \times 100+\frac{15}{100} \times 141=41.15$ thousand
57.(5) Required difference $=744-720=24$ thousand
58.(1) Required percentage
$=\frac{159-78}{78} \times 100 \approx 104 \%$
59.(3) Average number of toys in $P$
$=\frac{744}{6}=124$ thousand
Average number of toys in $\mathrm{Q}=\frac{720}{6}=120$
$\therefore$ Required percentage
$=\frac{124-120}{120} \times 100=3 \frac{1}{3} \%$
60.(4) Cost incurred in manufacturing $=109000 \times 50=$ Rs. 54,50,000 S.P of $90 \%$ products
$=\frac{90}{100} \times 109000 \times 80=$ Rs. 78,48,000
$\therefore$ Required profit $\%=\frac{23,98,000}{54,50,000} \times 100=44 \%$
61.(2) $107 \times 79-(54)^{2}=\sqrt{?}+5476$
$8453-2916-5476=\sqrt{?}$
$\sqrt{?}=61$
? $=3721$
62.(3)
$24 \times 8+21 \times 8+8 \times 8+7 \times 8-98$
$=8(60)-98$
$=480-98$
$=382$
63.(1) $1021585-18611-5883=997091$.
64.(2) $\frac{3}{11}+\frac{39}{44}+\frac{5}{22}=\frac{12+39+10}{44}=\frac{61}{44}=1 \frac{17}{44}$
65.(3) $533.61+777.92-1147.69=163.84$

66-70.


Tree Form (Blood-Relation)-

66.(1)
68.(5)
67.(3)
70.(3)
71.(3)
72.(1)
73.(2)
74.(4)
75.(5)

76-80.
I. $R \geq W=H$
II. $R \geq W=H$
I. $D=K<T$
II. $\mathrm{K}<\mathrm{T}>\mathrm{M}$
I. $F \leq N \geq R$
II. $B<F \leq N$
I. $\mathrm{K} \leq \mathrm{M}>\mathrm{W}$
II. $\mathrm{H}>\mathrm{W}<\mathrm{M}$
I. $D<M=T$
II. $\mathrm{R} \geq \mathrm{T}=\mathrm{M}$

Facing South
(False)
(False)
(True)
(False)
(False)
(True)
(False)
(False)
(True)


Facing North

80.(5)
76.(2)
78.(4)

81-85.
79.(2)
87.(3)

89.(5)

90.(4)

92.(1)
$X \& Y$ 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 .
$U$ 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 $\mathrm{U} \& \mathrm{~W}$. so the boys team are H and L .

## 96.(4)


97.(2)


98-100.

98.(5) 99.(2)

