# SBI PO Preliminary Grand Test -SBPP-092202 <br> HINTS \& SOLUTIONS 

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

## HINTS \& SOLUTIONS

1. (5) Out of all the expressions provided in the options, only option (e) is the misfit from the context of the sentences provided. Contemporary means New or modern which is contextually correct as can be predicted from the sentences. Modern and present day are also synonyms for the word contemporary implying new or current. Ancient means old and back-dated and hence it will be a misfit in terms of the context of the sentences. Hence option (e) is the most suitable choice.
2. (5) Out of all the expressions provided in the options, only option (5) is a misfit from the context of the sentences provided. Protean means versatile which fits in the context of both the sentences. Similarly, adaptable,
versatile \& flexible carry the same meaning as that of the word 'Protean'. As can be predicted from the second part of the second sentence, can take any form reveals the versatility of the superhero and therefore, option (a), (b), (c) \& (d) favor the sentences whereas option (e) does not. Homogenous means one that lacks diversity. Hence option (e) is the most suitable choice.
3. (3) Among all the given words only option (c) i.e., 'superficial' does not fit appropriately in the given blanks. 'Superficial' means not thorough, deep, or complete; cursory, therefore, it does not fill the blank coherently. However, 'radical' is an adjective which means (especially of change or action) relating to or affecting the fundamental nature of something; far-reaching or thorough. 'Profound', intense' and 'rigorous' have similar meanings as that of 'radical. Hence, option (c) is the most suitable answer choice.
4. (4) Except for option (d) all the other words fit precisely in the given blanks providing a contextual meaning to the sentences. 'Pallid' means (of a person's face) pale, typically because of poor health. Hence, it does not make the sentence coherent.
Frivolous means not having any serious purpose or value.
Flippant means not showing a serious or respectful attitude.
Inane means lacking sense or meaning; silly.
Senseless means lacking common sense; wildly foolish.
5. (1) Except for option (a) all the other words fit precisely in the given blanks providing a contextual meaning to the sentences. 'Appropriate' means suitable or proper in the circumstances. Hence, it does not make the sentence coherent.
Grating means sounding harsh and unpleasant.
Raucous means making or constituting a disturbingly harsh and loud noise.
Harsh means unpleasantly rough or jarring to the senses. Strident means (of a sound) loud and harsh; grating.
(6-10) The correct sequence of sentences after the rearrangement is CEBADF.
6. (5) Hence, option (5) becomes the most suitable answer choice.
7. (1) Hence, option (1) becomes the most suitable answer choice.
8. (4) Hence, option (4) becomes the most suitable answer choice.
9. (3) Hence, option (3) becomes the most suitable answer choice.
10. (2) Hence, option (2) becomes the most suitable answer choice.
11. (2) Option (2) is the correct answer choice. 'Cut corners' means to do something perfunctorily so as to save time or money. Therefore, the word 'skimp' is perfectly depicting the meaning of the given idiom. 'Skimp' can be used as a noun or a verb which means to expend or use less time, money, or material on something than is necessary in an attempt to economize. All the other words fail to express the meaning of the given idiom. Insistent means insisting on or demanding something; not allowing refusal.
Obdurate means stubbornly refusing to change one's opinion or course of action.
Rigid means unable to bend or be forced out of shape; not flexible.
Lenient means of a punishment or person in authority) more merciful or tolerant than expected.
12. (5) Option (5) is the most suitable answer choice. The idiom ' to get bent out of shape' means to take offense; to become angry, agitated or upset. Therefore, the word ' livid is providing an absolute meaning of the idiom given in bold. ' Livid means furiously angry. All the other words fail to depict the meaning of the given idiom in bold.
Plumpness means the quality of having a full rounded shape.
Pile means a heap of things laid or lying one on top of another.

Nefarious means (typically of an action or activity) wicked or criminal.

Subjugate means bring under domination or control, especially by conquest.
13. (1) The most suitable phrase that exactly portrays the meaning of the given idiom in bold is 'disastrous situation'. 'A perfect storm'means an especially bad situation caused by a combination of unfavourable circumstances. All the other words given in options fail to provide the meaning of the given idiom. Hence, option (a) becomes the most viable answer choice.
Powerful thunder means a strong climatic thunder
Contagious means (of a disease) spread from one person or organism to another, typically by direct contact.
Embracing event means a willful accepted event
Retribution means punishment inflicted on someone as vengeance for a wrong or criminal act.
14. (4) The most suitable phrase that exactly portrays the meaning of the given idiom in bold is 'unparalleled'. 'Comparing oranges and apples' means something which is both the same and different simultaneously depending on your point of view. 'Unparalleled'means two different things which cannot be compared parallelly. All the other words given in options fail to provide the meaning of the given idiom. Hence, option (d) becomes the most viable answer choice.

Resplendent means attractive and impressive through being richly colourful or sumptuous.
Exquisite means extremely beautiful and delicate.
Surpassed means exceed; be greater than.
Renowned means known or talked about by many people; famous.
15. (3) 'By the skin of my teeth' means 'by a very narrow margin; only just.' Thus, 'narrowly' serves as the most just word to describe the meaning of the given idiom in bold. However, all the words do not provide the exact meaning of the idiom. Hence, option (c) is the most feasible answer choice.
Scantily means in a way that is small or insufficient in quantity or amount.
Gradually means in a gradual way; slowly; by degrees.
Recently means at a recent time; not long ago.
Deliberately means consciously and intentionally; on purpose.
16. (2) The idiom ' a wild goose chase' means a search that is completely unsuccessful and a waste of time because the person or thing being searched for does not exist or is somewhere else. Therefore, the phrase "futile search" perfectly depicts the context of the idiom. All the other phrases fail to provide the meaning of the given idiom. Hence, option (b) is the most suitable answer choice.
Exuberant means full of energy, excitement, and cheerfulness.

Fruitful errand means a short successful journey
Fecund emulation means producing many achievable ideas
17. (5) The idiom ' on thin ice' means in a precarious or risky situation. Therefore, the word "worried" perfectly reflects the meaning of the idiom. All the other phrases fail to provide the meaning of the given idiom hence, option (e) is the most suitable answer choice.
Relaxed means free from tension and anxiety.
Tortured means inflict severe pain on.
Skated means move on ice skates or roller skates in a gliding fashion.
18. (1) Option (a) is the correct answer choice. 'devil's advocate' means someone who pretends, in an argument or discussion, to be against an idea or plan that a lot of people support, in order to make people discuss and consider it in more detail. Therefore, the word ' sophism is perfectly depicting the meaning of the given idiom. 'Sophism' means a clever but false argument, especially one used deliberately to deceive. All the other words fail to express the meaning of the given idiom.
Exhibit means manifest clearly (a quality or a type of behaviour).
Consort means habitually associate with (someone), typically with the disapproval of others.
Opine means hold and state as one's opinion.
Counsel means give advice to (someone).
19. (2) Option (b) is the correct answer choice. ' throw caution to the wind' means to do something without worrying about the risk or negative results. Therefore, the word ' riskily' is perfectly depicting the meaning of the given idiom. 'riskily' is an adverb which means the possibility that something unpleasant or unwelcome will happen. All the other words fail to express the meaning of the given idiom.
Deliberately means consciously and intentionally; on purpose.
Decisively means in a manner that settles an issue convincingly or produces a definite result.
Trickily means (of a task, problem, etc.) requiring care and skill because difficult or awkward.
20. (3) Option (c) is the correct answer choice. 'rain or shine' means to do it regularly, without being affected by the weather or other circumstances. Therefore, the word 'regardless' is perfectly depicting the meaning of the given idiom. 'Regardless' is an adverb which means despite the prevailing circumstances. All the other words fail to express the meaning of the given idiom.

Extravagant means lacking restraint in spending money or using resources.

Inaccurate means not accurate
Improvident means not having or showing foresight; spendthrift or thoughtless.

Considerate means careful not to inconvenience or harm others.
21. (1) Refer the fourth paragraph of the passage where it is clearly mentioned that the second half of the 1970s and the early 1980s saw the invention of most important tool of the computer i.e. the single-chip CPU (central processing unit) which was invented by a microchip design team. This makes the first statement a correct choice as the answer. However, the other two options are contextually incorrect. Hence option (a) is the correct choice.
22. (5) Refer the sixth paragraph of the passage, all the three factors that governed the electronics industry with respect to Moore's law are mentioned there. Thus, all three statements together constitute the answer. Hence option (e) is the correct choice.
23. (3) All the three statements could be considered the reasons that led to the invention of Integrated Circuit (I.C.). For the reference, read the third paragraph of the passage. These statements are mentioned in detail and with proper explanation suggesting what inspired the introduction of Integrated Circuit (I.C.). Hence option (c) is the correct choice.
24. (2) Among the given alternatives, only the first event led to the prediction of doubling of components per chip every year. It was predicted by Gordon Moore, one of the founders of Intel. For the reference, read the fifth paragraph carefully. The other two statements are not
correct in the context of the passage. Hence option (b) is the correct choice.
25. (5) All the three statements could be termed as the impacts of the digital revolution driven by I.C.s on all spaces of human activities. All these statements can be inferred from the last paragraph of the passage where all these points are mentioned along with few more. Hence option (e) is the correct choice in the context of the passage.
26. (3) Before answering the given question, one needs to understand in what context the author has used the statement in the passage. Read the first two paragraphs carefully, try to understand the generation of gigantic mainframe computers which the author had gone through as well. The author had implicitly mentioned that the evolution of information technology had hardly been imagined even by the brightest of students during that period. Among the given alternatives, only the second statement decipher the meaning what the author had tried to convey. The other two statements are out of the context. Hence option (c) is the correct choice.
27. (2) The word " invade" means enter (a country or region) so as to subjugate or occupy it. Thus, in the context of the usage of the word in the passage, the word "Occupy" is most similar in meaning. Hence option (b) is the correct choice.
Blister means a swelling filled with air or fluid on the surface of a plant, heated metal, painted wood, etc.
28. (4) The word "paradigm" means a typical example or pattern of something; a pattern or model. The word "archetype" means an original which has been imitated; a prototype. Thus, in the context of passage, both these words are similar in meanings. Hence option (d) is the correct choice.

Wisp means a small thin or twisted bunch, piece, or amount of something.
Ubiquity means the fact that something or someone seems to be everywhere.
Magnanimity means the fact or condition of being magnanimous; generosity.
Allusion means an expression designed to call something to mind without mentioning it explicitly; an indirect or passing reference.
29. (3) The word "prohibitive" means (of a law or rule) forbidding or restricting something. Thus, in the context of the usage of the word in the passage, the word opposite in meaning to it is " unrestrictive". Hence option (c) is the correct choice.

Difficile means hard on someone; hard to do.
Ambitious means having or showing a strong desire and determination to succeed.
Intricate means very complicated or detailed.
30. (1) The word "proliferation" means rapid increase in the number or amount of something. The word " curtailment" means the action or fact of reducing or restricting something. Thus, in the context of the usage
of the word in the passage, both are opposite in meanings. Hence option (a) is the correct choice.
Capaciousness means spaciousness.
Breeding means the good manners regarded as characteristic of the aristocracy and conferred by heredity.
31. (2)

$$
\begin{aligned}
& \text { (i) } 6 x^{2}-17 x+12=0 \\
& 6 x^{2}-8 x-9 x+12=0 \\
& x=\frac{3}{2}, \frac{4}{3} \\
& \text { (ii) } 6 y^{2}-23 y+21=0 \\
& 6 y^{2}-9 y-14 y+21=0 \\
& y=\frac{3}{2}, \frac{7}{3} \\
& \therefore y \geq x
\end{aligned}
$$

32. (4)

$$
\begin{aligned}
& \text { (i) } 21 x^{2}-4 x-1=0 \\
& 21 x^{2}-7 x+3 x-1=0 \\
& x=\frac{-1}{7}, \frac{1}{3} \\
& \text { (ii) } 30 y^{2}+11 y+1=0 \\
& \quad 30 y^{2}+6 y+5 y+1=0 \\
& \quad y=\frac{-1}{6}, \frac{-1}{5} \\
& \therefore x>y
\end{aligned}
$$

33. (3)

$$
\begin{aligned}
& \text { (i) } 4 x^{2}+57 x+189=0 \\
& 4 x^{2}+21 x+36 x+189=0 \\
& x=\frac{-21}{4},-9
\end{aligned}
$$

(ii) $2 \mathrm{y}^{2}+27 \mathrm{y}+85=0$

$$
2 y^{2}+17 y+10 y+85=0
$$

$$
y=\frac{-17}{2},-5
$$

$\therefore$ No relation
34. (4)
(i) $3 x+7 y=28$
(ii) $5 x+3 y=38$

Multiple (i) by 5 and multiple (ii) by 3 and subtract
So, $y=1$
$\mathrm{x}=7$
$\therefore \mathrm{x}>\mathrm{y}$
35. (3)
(i) $x^{2}+5 x=4-4 x+9 x$
$x^{2}=4$
$\mathrm{x}= \pm 2$
(ii) $y^{2}+7 y-8=0$
$y^{2}+8 y-y-8=0$
$y=-8,1$
$\therefore$ No relation
36. (5)

Watches sold in February $=3300$
$\Rightarrow 27.5 \% \rightarrow 3300$
$\Rightarrow 100 \% \rightarrow 12000$
Watches sold in first six months $=12000$
Watches sold in last six months
$=22500-12000=10500$
Required average $=\frac{1}{6} \times[10500]=1750$
37. (3)

Watches sold in first six months of 2017
$=\frac{2}{5} \times 22500=9000$
Watches sold in April $=\frac{37.5}{100} \times 9000=3375$
Watches sold in March, May and June together
$=(7 \%+7.5 \%+8 \%) \times 9000$
$=\frac{22.5}{100} \times 9000=2025$
Required difference $=3375-2025=1350$
38. (1)

Total watches sold in $2018=\frac{110}{100} \times 22500=24750$
Watches sold in last six months of $2018=\frac{1}{3} \times 24750=8250$
Watches sold in first six months of 2018
$=24750-8250$
$=16500$
$\Rightarrow 100 \% \rightarrow 16500$
Watches sold in June 2018 $=8 \% \rightarrow \frac{16500}{100} \times 8=1320$
Watches sold in June 2018 $=1320$

Watches sold in May 2017 $=\frac{10}{3 \times 100} \times 22500=750$
$\Rightarrow 7.5 \% \rightarrow 750$
$100 \% \rightarrow 10000$
Watches sold in first six months of $2017=10,000$
Watches sold in last six months of 2017
$=22,500-10,000=12,500$
40. (2)

ATQ,
Watches sold in February - Watches sold in January $=3000$
$\Rightarrow 27.5 \%-12.5 \% \rightarrow 3000$
$\Rightarrow 15 \% \rightarrow 3000$
$\Rightarrow 100 \% \rightarrow 20000$
Watches sold in first six months $=20,000$
Watches sold in last six months $=22500-20000=2500$
Required percent $=\frac{2500}{22500} \times 100=11 \frac{1}{9} \%$

Ritu and Anu's one day work $=\frac{1}{16}$
Anu's one day work $=\frac{1}{24}$
Ritu's one day work $=\frac{1}{16}-\frac{1}{24}=\frac{1}{48}$
Neha's one day work $=\frac{1}{30}$
Ratio of Efficiency of Neha and Ritu is $=\frac{1}{30}: \frac{1}{48}=8: 5$
42. (4)

Let initially quantity of Iron and copper is 7 x and 12 x respectively
After adding 30 kg Iron and 40 kg Copper
$\frac{7 x+30}{12 x+40}=\frac{5}{8}$
$\Rightarrow \mathrm{x}=10$
Required ratio $=\frac{7 \times 10}{12 \times 10+40}=7: 16$

Total Sugar $=800 \mathrm{~kg}$
By using Allegation method

| Profit |  | Loss |
| :--- | :--- | :--- |
| $+10 \%$ |  | $-15 \%$ |
|  | $-5.625 \%$ |  |
| 9.375 |  | 15.625 |
| 3 |  | 5 |

Sugar sold at $10 \%$ profit $=\frac{800}{8} \times 3=300 \mathrm{~kg}$
Sugar sold at $15 \%$ loss $=\frac{800}{8} \times 5=500 \mathrm{~kg}$
Let cost price $=x$ Rs. $/ \mathrm{kg}$
when quantity interchanged $\rightarrow$
Selling price of that quantity which is sold at loss
$=300 \mathrm{x} \times \frac{85}{100}=255 \mathrm{x}$
Selling Price of that quantity which is sold at Profit
$=\frac{500 \times x \times 110}{100}=550 \mathrm{x}$
Total Cost Price $=800 \mathrm{x}$
Total Selling Price $=255 \mathrm{x}+550 \mathrm{x}=805 \mathrm{x}$
Profit \% $=\frac{805 x-800 x}{800 x} \times 100=0.625 \%$
44. (4)

EXAMINATION
Vowels $\rightarrow 6$
Consonants $\rightarrow 5$
Required number of ways $=\frac{(6+1)!\times 5!}{2!2!2!}=75600$
45. (4)

Let Muskaan Salary $\rightarrow 100 \mathrm{x}$
Amount she gives to Simran $=\frac{100 x \times 20}{100}=20 \mathrm{x}$
Money invested by Simran $=\frac{20 x \times 60}{100}=12 \mathrm{x}$
Interest earned after 2 years $=12 x\left[\left(1+\frac{20}{100}\right)^{2}-1\right]=6600$
$\Rightarrow \mathrm{x}=1250$
Salary of Muskaan $=1250 \times 100=125000$
46. (2)

47. (4)

48. (5)

49. (1)

50. (3)

$$
\begin{aligned}
& \left(1^{3}+1\right)=2 \\
& \left(3^{3}+3\right)=30 \\
& \left(5^{3}+5\right)=130 \\
& \left(7^{3}+7\right)=350 \\
& \left(9^{3}+9\right)=738 \\
& \left(11^{3}+11\right)=1342
\end{aligned}
$$

51. (5)

Absent student of school $\mathrm{T}=32$
$\Rightarrow$ Total student of school T
$=\frac{32}{1} \times(1+7+4)=384$
Total students of school $\mathrm{P}=384$
Passed student in school $P$
$=\frac{384 \times 4}{8}=192$
Passed students of school T
$=\frac{384 \times 7}{12}$
$=224$
Required difference $=224-192=32$
52. (4)

Absent students of school U
= Absent student of school R
Let Absent students of school $U$ and $R=x$
Failed student of school $R=\frac{x}{2} \times 5=\frac{5}{2} x$
Failed student of school $U=\frac{{ }_{2}^{x}}{1} \times 2=2 \mathrm{x}$
Required $\%=\frac{2 \mathrm{x}}{\frac{5}{2} \mathrm{x}} \times 100=80 \%$

Absent student of school $\mathrm{Q}=312$
Total students of school $Q=\frac{312}{2} \times 10=1560$
Total students of school $R=\frac{1560}{3} \times 2=1040$
Total students of school $S=\frac{1560}{3} \times 4=2080$
Required Average $=\frac{1560+1040+2080}{3}=1560$

Let passed student of school $P=12 x$ which is equal to the failed students of school $U$
Absent student of school $P=\frac{12 x}{4} \times 1=3 x$
Absent student of school $U=\frac{12 \mathrm{x}}{2} \times 1=6 \mathrm{x}$
Required $\%=\frac{3 x}{6 x} \times 100=50 \%$
55. (5)

Let total students of school $R=13 x$
Passed student $=6 \mathrm{x}$
\% of Passed students of school R
$=\frac{6 \mathrm{x}}{13 \mathrm{x}} \times 100=\frac{600}{13} \%$
Let total student of school $S=10 y$
Passed student $=5 y$
$\%$ of Passed students of school S
$=\frac{5 y}{10 y} \times 100=50 \%$
Required percentage $=\frac{\frac{600}{13}}{50} \times 100$
$=\frac{1200}{13} \%$
$=92 \frac{4}{13} \%$
56. (1)

Let filling capacity of pump be ' $x$ ' $\mathrm{m}^{3}$ per min
Then, emptying capacity of pump is $(x+10) \mathrm{m}^{3}$ per min
ATQ,
$\frac{2400}{x}-\frac{2400}{x+10}=8$
$\Rightarrow 2400\left[\frac{x+10-x}{x^{2}+10 x}\right]=8$
$\Rightarrow \mathrm{x}^{2}+10 \mathrm{x}-3000=0$
$\Rightarrow(\mathrm{x}-50)(\mathrm{x}+60)=0$
$\Rightarrow \mathrm{x}=50,-60$
Filling capacity of pump is $50 \mathrm{~m}^{3}$ per min.

Let total distance between $A$ and $B$ be $5 x$
Then distance between $B$ and $C=5 x-\frac{1}{5} \times 5 x=4 x$ ATQ,
$\frac{5 x}{6+3}+\frac{4 x}{6-3}=34$
$\Rightarrow \frac{5 x}{9}+\frac{4 x}{3}=34$
$\Rightarrow 5 \mathrm{x}+12 \mathrm{x}=34 \times 9$
$\Rightarrow 17 \mathrm{x}=34 \times 9$
$\mathrm{x}=2 \times 9=18$
Required time $=\frac{4 \times 18}{6-3}=\frac{4 \times 18}{3}=24 \mathrm{hrs}$.
58. (2)


Circumference of circle $=20 \pi$
$\Rightarrow 2 \pi r=20 \pi$
$\mathrm{r}=10 \mathrm{~cm}$
$\mathrm{BC}=\frac{60}{100} \times 20=12 \mathrm{~cm}$
$\mathrm{AB}=10 \times \frac{160}{100}=16 \mathrm{~cm}$
$\triangle A B C$ is a right-angled triangle as angle formed by
diameter on circumference of semicircle is right angle.
$\therefore$ area of shaded region $=$ area of semi-circle $-1 / 2 \times A B \times B C$
$=\frac{\pi(10)^{2}}{2}-\frac{1}{2} \times 16 \times 12$
$=(50 \pi-96) \mathrm{cm}^{2}$
59. (1)

Let C.P. of $1 \ell$ milk $=$ Rs. $y$
$\therefore$ C.P. of ' $12 \mathrm{x}^{\prime} \ell$ milk $=$ Rs. 12 xy .
To earn $20 \%$ profit by selling the mixture at cost
price i.e. 12 xy Quantity of milk in mixture $=\frac{12 \mathrm{x}}{12} \times 10=10 \mathrm{x}$
Remaining mixture contains water $=12 \mathrm{x}-10 \mathrm{x}=2 \mathrm{x}$
Ratio of water and milk in the mixture $=2 \mathrm{x}: 10 \mathrm{x}=1: 5$
60. (4)

No. of ways of choosing face cards of red color or black color
$={ }^{6} \mathrm{C}_{2}+{ }^{6} \mathrm{C}_{2}$
$=\frac{6 \times 5}{2}+\frac{6 \times 5}{2}$
$=15+15=30$
Required probability $=\frac{30}{{ }^{52} \mathrm{C}_{2}}=\frac{30}{\frac{52 \times 51}{2}}=\frac{5}{221}$
61. (2)

$$
\begin{aligned}
& 23 \times 23+12 \times 8 \approx ?^{2} \\
& ? \approx 25
\end{aligned}
$$

62. (5)

$$
\begin{aligned}
& 87+914-338 \approx \frac{75}{100} \times(?) \\
& \frac{663 \times 100}{75}=?
\end{aligned}
$$

63. (2)

$$
\begin{aligned}
& ? \% \text { of } 1050+\frac{75}{100} \times 420=\frac{750 \times 70}{100} \\
& ? \% \text { of } 1050=525-315 \\
& ?=\frac{210}{1050} \times 100 \approx 20
\end{aligned}
$$

64. (1)

$$
\begin{aligned}
& \sqrt{324 \sqrt{20 \times 50 \times 8 \times 20}}+\frac{25 \times 32}{100} \approx ? \\
& \sqrt{324 \times 20 \times 20}+8 \approx ? \\
& 360+8 \approx ? \\
& ?=368
\end{aligned}
$$

$\frac{360 \times 288}{15 \times 18}=\frac{(?)^{2}}{6}$
$(?)^{2}=2304$
$(?) \approx 48$
66. (4) I. E@F (False) II. E*F(False)
67. (5) I. D\%S (True) II. M@N(True)
68. (3) I. P\$C (False) II. N\%S(True)
69. (2) A*1
70. (3)
(71-75) N will be deliver in Chandigarh on an odd date. Both parcel N and M are delivered in same city and only two parcels are delivered in between N and M in that city. From this there can be four possible cases-
Case-1:

| Date $\downarrow /$ Cities $\rightarrow$ | Dehradun | Chandigarh |
| :--- | :--- | :--- |
| 3 |  | M |
| 6 |  |  |
| 24 |  |  |
| 31 |  | N |

Case-2:

| Date $\downarrow /$ Cities $\rightarrow$ | Dehradun | Chandigarh |
| :--- | :--- | :--- |
| 3 |  | N |
| 6 |  |  |
| 24 |  |  |
| 31 |  | M |

Both parcel L and P will be deliver on same date. Parcel L and $M$ are not delivered in the same city. From this we can say that Parcel L will be delivered in Dehradun and $P$ will be delivered in Chandigarh.
Case-1:

| Date $\downarrow /$ Cities $\rightarrow$ | Dehradun | Chandigarh |
| :--- | :--- | :--- |
| 3 |  | M |
| 6 | L/ | P/ |
| 24 | L/ | P/ |
| 31 |  | N |

Case-2:

| Date $\downarrow /$ Cities $\rightarrow$ | Dehradun | Chandigarh |
| :--- | :--- | :--- |
| 3 |  | N |
| 6 | L/ | P/ |
| 24 | L/ | P/ |
| 31 |  | M |

Parcel L will deliver after $Q$ in the same city. Parcel $Q$ is neither delivered on the same date as N nor on same date as $M$. So, we get that parcel $Q$ will be delivered on 6 and both L \& $P$ will be delivered on 24.
Case-1:

| Date $\downarrow /$ Cities $\rightarrow$ | Dehradun | Chandigarh |
| :--- | :--- | :--- |
| 3 |  | M |
| 6 | Q |  |
| 24 | L | P |
| 31 |  | N |

Case-2:

| Case-2: |  |  |
| :--- | :--- | :--- |
| Date $\downarrow /$ Cities $\rightarrow$ | Dehradun | Chandigarh |
| 3 |  | N |
| 6 | Q |  |
| 24 | L | P |
| 31 |  | M |

Parcel $K$ is not delivered on an odd date. So, parcel $K$ is delivered on 6 in Chandigarh. Both parcel $M$ and $O$ delivered before parcel K. So, from this case- 2 will be eliminated. Now, with case-1, Parcel O will be delivered
on 3 in Dehradun and $R$ will be delivered on 31 in
Dehradun. So, the final arrangement is----

| Date $\downarrow /$ Cities $\rightarrow$ | Dehradun | Chandigarh |
| :--- | :--- | :--- |
| 3 | O | M |
| 6 | Q | K |
| 24 | L | P |
| 31 | R | N |

71. (1)
72. (3)
73. (2)
74. (4)
75. (4)
(76-80) $S$ sits third to the right of $P$ but none of them sits at the corner of the rows. $S$ faces the one who is an immediate neighbour of J. So, there can be two possible cases----


Only two persons sit between J and O . N sits second to the right of $K$. One of the immediate neighbour of $K$ faces $U$. So, there can be two possible places for $U$ in case- 1 and $U$ faces O in case-2. Only one person sits between U and Q .


T neither face N nor K . So, T sits at an extreme left end of row-2 in case-1 and at extreme right end in case-2. L neither face $U$ nor $Q$. So, $L$ sits immediate left to $O$ in row1 , in case- 1 and $L$ faces $S$ in case- 2 . $M$ does not face $U$ and does not sit to the right of the one who faces $U$. So, from this case- 2 will be eliminated as no place left for $M$ in case2. So, the final arrangement is----

76. (4)
77. (3)
78. (2)
79. (4)
80. (4)
81. (4)

82. (1) There are three books between physics and Maths, which is below the physics book i.e. Maths book is 13th from the top, 36 books between chemistry and Maths book, So Chemistry book is 50th from the top

Therefore, from the bottom, chemistry book is $=60-$ $50+1=11$ th
83. (2)

$$
\begin{aligned}
& \stackrel{10}{13} \stackrel{1417}{18} \underset{R}{1821}{ }_{V}^{2225} \\
& \text { JM NQ RU VY }
\end{aligned}
$$

84. (5)

85. (4) The 2nd, 5th, 6th, 7th letters of the word PAINTER are- A, T, E, R
As from these letters more than one-word ex- RATE, TEAR, TARE are formed then answer is Y .
( $\mathbf{8 6} \mathbf{- 9 0 )}$ Given, " $S$ and $P$ sit on same side of the table. The one who likes Jim Marison sits $2 n d$ right to $S$. Three people sit between the one who likes Jim Marison and W. R who likes evergreen faces $S$, who likes Cafe 1947. T sits opposite to Q.V sits 3rd right to U", we get the following arrangement:


Given, "Neither P nor its neighbors likes Shiva or Moon dance. More than three persons sit between the one who likes johnson and the one who like Moon dance, when counted in clockwise direction from of the one who likes Johnson. Neither W nor his neighbors like johnson. T R does not sit next to the one who like Johnson he one who likes Jim marison does not face the ones who like moonpeak espresso and johnson."
From these conditions only place left for the ones who likes Johnson that U likes Johnson, V likes Moon dance, Also, since, neither $P$ nor its neighbor likes shiva café so $T$ likes shiva café.
Also, No one sits between the one who likes freedom cafe and T . Only position left, T is immediate left to W , who likes freedom cafe and P likes moonpeak espresso.

86. (4)
87. (5)
88. (1)
89. (5)
90. (4)
(91-95) Given, B conducts session for SBI on Friday. There is threeday gap between sessions conducted by A and C. A conducts session before C. So, Either A conducts on Tuesday or on Wednesday. Two teachers conduct sessions between C and the one who conducted session for RBI, we get two possibilities:
CASE-1

| Day | Person | Exam |
| :--- | :--- | :--- |
| Monday |  |  |
| Tuesday | A |  |
| Wednesday |  | RBI |
| Thursday |  |  |
| Friday | B | SBI |
| Saturday | C |  |
| Sunday |  |  |

CASE-2

| Day | Person | Exam |
| :--- | :--- | :--- |
| Monday |  |  |
| Tuesday |  |  |
| Wednesday | A |  |
| Thursday |  | RBI |
| Friday | B | SBI |
| Saturday |  |  |
| Sunday | C |  |

Number of persons conducting session between C and F is same as that between $D$ and $F$, since there is no position left for $D$ and $F$ according to this condition, case1 gets eliminated.
Continuing with case2, F conducts session on Thursday and $D$ conducts session on Monday. G conducts the session before E, who conducts the session for RRB. So G conducts session on Tuesday and E on Saturday.

| Day | Person | Exam |
| :--- | :--- | :--- |
| Monday | D |  |
| Tuesday | G |  |
| Wednesday | A |  |
| Thursday | F | RBI |
| Friday | B | SBI |
| Saturday | E | RRB |
| Sunday | C |  |

Given, Session for LIC is conducted before NABARD. D conducts session for BOB. C does not conduct session for LIC and NABARD, so $C$ conducts session for IBPS.

| Day | Person | Exam |
| :--- | :--- | :--- |
| Monday | D | BOB |
| Tuesday | G | LIC |
| Wednesday | A | NABARD |
| Thursday | F | RBI |
| Friday | B | SBI |
| Saturday | E | RRB |
| Sunday | C | IBPS |

91. (3)
92. (4)
93. (3)
94. (5)
95. (2)
(96-100)

| Word | Code |
| :--- | :--- |
| Sports | ch |
| Agriculture | un |
| Economy | rk |
| Summits | fm |
| Appointments | nc |
| Schemes | rp |
| Business | ko |
| Awards | yz |

96. (5)
97. (2)
98. (4)
99. (3)
100. (1)
