## prepp

## Practice，Learn and Achieve Your Goal with Prepp

## NIACLAO Exam

Previous Paper

## Simplifying <br> Government Exams

© SSC CHSL

（4）SSC CGL


戈 NDA
（1）SBIPO
i⿺廴⿱龴⿵⺆⿻二丨⿱刀⿰㇒⿻コ一⿰⿷匚一亅⿱一𧰨刂灬 IBPS CLERK
姞AFCAT © SSC JE © CTET
© CSIR UGC NET
CAPF
itz IBPS RRB

## Solutions

1. Ans. D.

It can be inferred from the second paragraph that both options $A$ and $C$ are true. Hence, the correct answer is option $D$.
2. Ans. E.

The passage does not mention any request on part of the author to take the water conflicts less negatively and thus none of the statements mentioned in the options can be considered.
3. Ans. C.

The main theme of the passage is centered around water disputes and various aspects related to it. It is just an informative article and does not involve any proclamation, claim or call for action. It is an attempt to make a serious case of the issue of water conflicts. 4. Ans. C.

The concluding part of the second paragraph talks about the fact that the water disputes in India will worsen before getting solved for good and the poorer people will be the worst sufferers due to it. Thus option B is the correct response.
5. Ans. D.

In the opening line of the passage, the statement from the prime minister makes it very clear that rivers should act as a connecting link between the people instead of acting as a source of division. This theory can be extended and an inference can be drawn that the prime minister is in favor of solving the river disputes through consensus. Hence option D is the right answer.
6. Ans. D.

The author goes to lengths to imply the fact that water conflicts have negative effects on various fronts; economic, social, environmental etc. Thus, option D becomes incorrect because of the use of the word 'only', which gives a wrong connotation to the concept of exclusiveness with respect to social consequences.
7. Ans. D.

Inherent means existing in something as a permanent, essential,
or characteristic attribute.

Functional means having a special activity, purpose, or task.
Intense means of extreme force, degree, or strength.
Persistent means continuing firmly or obstinately in an opinion or course of action in spite of difficulty or opposition.
Note: Do not get confused by genetic because the questions has asked for an option with reference to the context.
8. Ans. D.

Materialised means to become actual fact.
Mattered means to be important or significant.
Interfered means intervene in a situation without invitation or necessity.
Presented means give or award formally or ceremonially.
Hidden means concealed.
Expanded means being or having been enlarged or extended, in particular.
Hence option D is the answer.
9. Ans. C.

Worsen is the comparitive form of 'good'.
'Bad' is the antonym of 'good' and 'worse' is the comparitive form of 'bad'. So, 'worse' is opposite' in meaning to 'better'.
Bounty means a sum paid for killing or capturing a person or animal.
Stable means sane and sensible; not easily upset or disturbed.
Hence option C is the answer.

## 10. Ans. B.

Assymetric means something non identical in shape, size or characteristics.
Unsteady means unstable.
Uniform means remaining the same in all cases and at all times; unchanging in form or character.
Discouraging means causing someone to lose confidence or enthusiasm.
Superior means higher in rank, status, or quality.
Contradictory means mutually opposed or inconsistent.
Hence option B is the right answer.
11. Ans. B.

The concerned statement ends with a question mark, indicating that there is a doubt being expressed. So evidently, despite the availability of the technologies, telecommunication is not beneficial. Thus, option $B$ is the most appropriate answer.
12. Ans. C.

To cut out means (of a motor or engine) suddenly stop operating. The context expresses the idea that the employees are still reluctant to opt for remote working. Thus, option C is the most appropriate answer.
13. Ans. B.

The statement states that something was thought to exist by a certain time in the future" "that 60\% of office-based employees will regularly work from home by 2022". Obviously, this was a prediction. Thus, option $B$ is the correct answer.
14. Ans. A.

The context so far talks about the idea of remote working/ work from home becoming a phenomenon by 2022. The concerned sentence states that some other feature related to the idea will be unheard of by 2036. Of all the options, "commute" best fits the blank as the word "commute" is used to refer to the journey made from home to office and the other way round.. Thus, option $A$ is the correct answer.
15. Ans. D.

The concerned paragraph talks about the comfort of people with respect to remote working and it shows how people are not yet very comfortable. The mention of "only $25 \%$ of respondents felt", indicates that since they are not used to the process, they do not feel productive while working from home. Thus, option D is the most apt answer.
16. Ans. A.
"Collaborative" is the most appropriate adjective for "apps" in the given context. Thus, option A is the correct answer.
17. Ans. C.

If someone isn't productive while working from home, this means that there are
technical restrictions. Thus, option $C$ is the correct answer.
18. Ans. B.

The condition mentioned here indicates that working from home carries a risk of lowering down of productivity that too even if they do not purposefully do it. Thus, "intentionally" best fits in the given blank.
19. Ans. B.

The concerned sentence mentions a positive idea, "Business leaders are embracing this shift in culture." This indicates the other aspect is also seeing a positive change. Thus, "fuelling" is the correct word for the blank. 20. Ans. A.

The concerned sentence mentions "more productive ways of". This means that with the development of technologies, different ways of working would come up. Thus, "disparate" which means different fits the blank appropriately.
21. Ans. D.

Replace 'would' with 'will'.
'Would' is used if one is reporting an action of future in past frame.
Hence, option D is the correct answer.
22. Ans. C.

Replace 'have' with 'has'. The subject is 'the tea company' which is singular, hence 'has' should be used. Thus option $C$ is the right answer.
23. Ans. C.

The error is in the third part of the sentence. The preposition "in" is missing after "increase". Hence option C is the right answer.
24. Ans. D.

The error is in the last part of the statement.
'Form' needs to be replaced with 'forms' or there needs to be the article 'a' before 'different'.
Please note that the verb "recast" here is in past participle form. It remains same in all the three form and not written as "recasted". 25. Ans. B.

The error is in the second part of the statement.
'Linkage' as a noun means the action of linking or the state of being linked, but fails
to make any sense in the context of the statement. It should be replaced with 'linked'.
26. Ans. E.

There is no error in this sentence.
Please note: Both 'under any circumstances' and 'under any circumstance' are correct.
27. Ans. C.

The given sentence is in past tense, hence 'make' is incorrect and should be replaced by 'made'. Hence option C is the right answer. 28. Ans. D.

The error is in the fourth part of the statement. The helping verb 'were' is missing in this part and thus the statement is incorrect. 'Accidents' is plural so 'were' should be used. Hence option D is the correct response.
29. Ans. B.

The second part of the statement is erred. It can be corrected by replacing 'why' with a word that could be used for indicating a reason i.e. 'because' or 'as'. Hence option B is the right answer.
30. Ans. A.

Here, passive voice should be used to express the correct context of the statement. So, in the first part of the statement, 'been' needs to introduced after 'has'. Hence option A is the correct answer.
31. Ans. A.

32. Ans. E.


None follows

33. Ans. D.

34. Ans. B.
35. Ans. B.

36. Ans. A.

Sanjay
Step 1: The one who belongs to Noida stays on the fourth floor. The one who belongs to Lucknow stays on the topmost floor. Saurabh stays on the second floor and belongs to Mirzapur. The one who belongs to Allahabad stays on the third floor.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  |  | Lucknow |
| 8 |  |  |  |
| 7 |  |  |  |
| 6 |  |  |  |
| 5 |  |  |  |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh |  | Mirzapur |
| 1 |  |  |  |

Step 2: Kamal does not belong to Varanasi and does not like Anita and Komal. Sanjay does not belong to Allahabad. The one who likes Sanjana stays immediately below the one who likes Amita. Sanjay likes Anita and does not stay on the ground floor. Vikash belongs to Chennai and stays on an even numbered floor and he likes Sanjana. As we are uncertain about the step 2, so we shall write them separately to be considered later.
a. Kamal - Varanasi
b. Kamal - Anta Kơmal
c. Sanjay - Allahabad
d. Amita

Sanjana
e. Sanjay - Anita - Ground Floor
f. Vikash - Sanjana - Chennai

Step 3: The one who likes Saroj does not stay on sixth floor. The boy who likes Komal is from Mathura. Sushil belongs to Patna. Again we are uncertain about Step 3.
g. Saroj -

h. Sushil - Patna

Step 4: There are three boys between the one who likes Suhana and the one who likes Komal. The one who likes Suhana stays below the boy who likes Komal. There are two floors between the floors on which the boys who are from Mathura and Chennai.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 |  |  |  |
| 6 |  |  |  |
| 5 |  | Komal | Mathura |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh |  | Mirzapur |
| 1 |  | Suhana |  |

Step 5: Kamal stays on an even numbered floor below the floor on which Vikash stays. The one who likes Kumkum stays immediately above Sushil. Considering some points of step 2 and 3.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 |  |  | Varanasi |
| 6 | Kamal |  | Agra |
| 5 |  | Komal | Mathura |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh | Kumkum | Mirzapur |
| 1 | Sushil | Suhana | Patna |

Step 6: There is one floor between the floors in which the one who likes Susheela and the one who likes Kumkum stay. The one who likes Surabhi stays on an even numbered floor. There are three floors between the floors on which Sushil and Amit stay. Sunil stays on a floor immediately above the Anit's floor.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 | Rohit | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 | Sanjay | Anita | Varanasi |
| 6 | Kamal | Surabhi | Agra |
| 5 | Amit | Komal | Mathura |
| 4 | Sunil | Susheela | Noida |
| 3 | Anit | Saroj | Allahabad |
| 2 | Saurabh | Kumkum | Mirzapur |
| 1 | Sushil | Suhana | Patna |

Finally we have the complete floor arrangement.
37. Ans. A.

Anit
Step 1: The one who belongs to Noida stays on the fourth floor. The one who belongs to Lucknow stays on the topmost floor. Saurabh stays on the second floor and belongs to Mirzapur. The one who belongs to Allahabad stays on the third floor.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  |  | Lucknow |
| 8 |  |  |  |
| 7 |  |  |  |
| 6 |  |  |  |
| 5 |  |  |  |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh |  | Mirzapur |
| 1 |  |  |  |

Step 2: Kamal does not belong to Varanasi and does not like Anita and Komal. Sanjay does not belong to Allahabad. The one who likes Sanjana stays immediately below the one who likes Amita. Sanjay likes Anita and does not stay on the ground floor. Vikash belongs to Chennai and stays on an even numbered floor and he likes Sanjana.
As we are uncertain about the step 2 , so we shall write them separately to be considered later.
a. Kamal - Varanasi
b. Kamal - Anta Kormal
c. Sanjay - Allahabad
d. Amita

Sanjana
e. Sanjay - Anita - Ground Floor
f. Vikash - Sanjana - Chennai

Step 3: The one who likes Saroj does not stay on sixth floor. The boy who likes Komal is from Mathura. Sushil belongs to Patna. Again we are uncertain about Step 3.
g. Saroj - 6throor
h. Sushil - Patna

Step 4: There are three boys between the one who likes Suhana and the one who likes

Komal. The one who likes Suhana stays below the boy who likes Komal. There are two floors between the floors on which the boys who are from Mathura and Chennai.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 |  |  |  |
| 6 |  |  |  |
| 5 |  | Komal | Mathura |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh |  | Mirzapur |
| 1 |  | Suhana |  |

Step 5: Kamal stays on an even numbered floor below the floor on which Vikash stays. The one who likes Kumkum stays immediately above Sushil. Considering some points of step 2 and 3.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 |  |  | Varanasi |
| 6 | Kamal |  | Agra |
| 5 |  | Komal | Mathura |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh | Kumkum | Mirzapur |
| 1 | Sushil | Suhana | Patna |

Step 6: There is one floor between the floors in which the one who likes Susheela and the one who likes Kumkum stay. The one who likes Surabhi stays on an even numbered floor. There are three floors between the floors on which Sushil and Amit stay. Sunil stays on a floor immediately above the Anit's floor.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 | Rohit | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 | Sanjay | Anita | Varanasi |
| 6 | Kamal | Surabhi | Agra |
| 5 | Amit | Komal | Mathura |
| 4 | Sunil | Susheela | Noida |
| 3 | Anit | Saroj | Allahabad |
| 2 | Saurabh | Kumkum | Mirzapur |
| 1 | Sushil | Suhana | Patna |

Finally we have the complete floor arrangement.
38. Ans. D.

Sunil - Susheela - Noida
Step 1: The one who belongs to Noida stays on the fourth floor. The one who belongs to Lucknow stays on the topmost floor. Saurabh stays on the second floor and belongs to Mirzapur. The one who belongs to Allahabad stays on the third floor.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  |  | Lucknow |
| 8 |  |  |  |
| 7 |  |  |  |
| 6 |  |  |  |
| 5 |  |  |  |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh |  | Mirzapur |
| 1 |  |  |  |

Step 2: Kamal does not belong to Varanasi and does not like Anita and Komal. Sanjay does not belong to Allahabad. The one who likes Sanjana stays immediately below the one who likes Amita. Sanjay likes Anita and does not stay on the ground floor. Vikash belongs to Chennai and stays on an even numbered floor and he likes Sanjana. As we are uncertain about the step 2 , so we shall write them separately to be considered later.
a. Kamal - Varanasi
b. Kamal - Anta Kormal
c. Sanjay - Allahabad
d. Amita

Sanjana
e. Sanjay - Anita - Ground Floor
f. Vikash - Sanjana - Chennai

Step 3: The one who likes Saroj does not stay on sixth floor. The boy who likes Komal is from Mathura. Sushil belongs to Patna. Again we are uncertain about Step 3.
g. Saroj -

h. Sushil - Patna

Step 4: There are three boys between the one who likes Suhana and the one who likes Komal. The one who likes Suhana stays below the boy who likes Komal. There are two floors between the floors on which the boys who are from Mathura and Chennai.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 |  |  |  |
| 6 |  |  |  |
| 5 |  | Komal | Mathura |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh |  | Mirzapur |
| 1 |  | Suhana |  |

Step 5: Kamal stays on an even numbered floor below the floor on which Vikash stays.
The one who likes Kumkum stays immediately above Sushil. Considering some points of step 2 and 3.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 |  |  | Varanasi |
| 6 | Kamal |  | Agra |
| 5 |  | Komal | Mathura |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh | Kumkum | Mirzapur |
| 1 | Sushil | Suhana | Patna |

Step 6: There is one floor between the floors in which the one who likes Susheela and the one who likes Kumkum stay. The one who likes Surabhi stays on an even numbered floor. There are three floors between the floors on which Sushil and Amit stay. Sunil stays on a floor immediately above the Anit's floor.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 | Rohit | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 | Sanjay | Anita | Varanasi |
| 6 | Kamal | Surabhi | Agra |
| 5 | Amit | Komal | Mathura |
| 4 | Sunil | Susheela | Noida |
| 3 | Anit | Saroj | Allahabad |
| 2 | Saurabh | Kumkum | Mirzapur |
| 1 | Sushil | Suhana | Patna |

Finally we have the complete floor arrangement.
39. Ans. D.

Noida
Step 1: The one who belongs to Noida stays on the fourth floor. The one who belongs to Lucknow stays on the topmost floor. Saurabh stays on the second floor and belongs to Mirzapur. The one who belongs to Allahabad stays on the third floor.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  |  | Lucknow |
| 8 |  |  |  |
| 7 |  |  |  |
| 6 |  |  |  |
| 5 |  |  |  |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh |  | Mirzapur |
| 1 |  |  |  |

Step 2: Kamal does not belong to Varanasi and does not like Anita and Komal. Sanjay does not belong to Allahabad. The one who likes Sanjana stays immediately below the one who likes Amita. Sanjay likes Anita and does not stay on the ground floor. Vikash belongs to Chennai and stays on an even numbered floor and he likes Sanjana.
As we are uncertain about the step 2, so we shall write them separately to be considered later.
a. Kamal - Varanasi
b. Kamal - Anita Komal
c. Sanjay - Allahabad
d. Amita

Sanjana
e. Sanjay - Anita - Ground Floor
f. Vikash - Sanjana - Chennai

Step 3: The one who likes Saroj does not stay on sixth floor. The boy who likes Komal is from Mathura. Sushil belongs to Patna. Again we are uncertain about Step 3.
g. Saroj -

h. Sushil - Patna

Step 4: There are three boys between the one who likes Suhana and the one who likes Komal. The one who likes Suhana stays below the bov who likes Komal. There are
two floors between the floors on which the boys who are from Mathura and Chennai.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 |  |  |  |
| 6 |  |  |  |
| 5 |  | Komal | Mathura |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh |  | Mirzapur |
| 1 |  | Suhana |  |

Step 5: Kamal stays on an even numbered floor below the floor on which Vikash stays. The one who likes Kumkum stays immediately above Sushil. Considering some points of step 2 and 3.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 |  |  | Varanasi |
| 6 | Kamal |  | Agra |
| 5 |  | Komal | Mathura |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh | Kumkum | Mirzapur |
| 1 | Sushil | Suhana | Patna |

Step 6: There is one floor between the floors in which the one who likes Susheela and the one who likes Kumkum stay. The one who likes Surabhi stays on an even numbered floor. There are three floors between the floors on which Sushil and Amit stay. Sunil stays on a floor immediately above the Anit's floor.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 | Rohit | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 | Sanjay | Anita | Varanasi |
| 6 | Kamal | Surabhi | Agra |
| 5 | Amit | Komal | Mathura |
| 4 | Sunil | Susheela | Noida |
| 3 | Anit | Saroj | Allahabad |
| 2 | Saurabh | Kumkum | Mirzapur |
| 1 | Sushil | Suhana | Patna |

Finally we have the complete floor arrangement.
40. Ans. D.

Six
Step 1: The one who belongs to Noida stays on the fourth floor. The one who belongs to Lucknow stays on the topmost floor. Saurabh stays on the second floor and belongs to Mirzapur. The one who belongs to Allahabad stays on the third floor.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  |  | Lucknow |
| 8 |  |  |  |
| 7 |  |  |  |
| 6 |  |  |  |
| 5 |  |  |  |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh |  | Mirzapur |
| 1 |  |  |  |

Step 2: Kamal does not belong to Varanasi and does not like Anita and Komal. Sanjay does not belong to Allahabad. The one who likes Sanjana stays immediately below the one who likes Amita. Sanjay likes Anita and does not stay on the ground floor. Vikash belongs to Chennai and stays on an even numbered floor and he likes Sanjana.
As we are uncertain about the step 2, so we shall write them separately to be considered later.
a. Kamal - Varanasi
b. Kamal - Anita Komal
c. Sanjay - Allahabad
d. Amita

Sanjana
e. Sanjay - Anita - Ground Floor
f. Vikash - Sanjana - Chennai

Step 3: The one who likes Saroj does not stay on sixth floor. The boy who likes Komal is from Mathura. Sushil belongs to Patna. Again we are uncertain about Step 3.
g. Saroj- 6thFloor
h. Sushil - Patna

Step 4: There are three boys between the one who likes Suhana and the one who likes Komal. The one who likes Suhana stays below the boy who likes Komal. There are two floors between the floors on which the boys who are from Mathura and Chennai.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 |  |  |  |
| 6 |  |  |  |
| 5 |  | Komal | Mathura |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh |  | Mirzapur |
| 1 |  | Suhana |  |

Step 5: Kamal stays on an even numbered floor below the floor on which Vikash stays. The one who likes Kumkum stays immediately above Sushil. Considering some points of step 2 and 3.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 |  | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 |  |  | Varanasi |
| 6 | Kamal |  | Agra |
| 5 |  | Komal | Mathura |
| 4 |  |  | Noida |
| 3 |  |  | Allahabad |
| 2 | Saurabh | Kumkum | Mirzapur |
| 1 | Sushil | Suhana | Patna |

Step 6: There is one floor between the floors in which the one who likes Susheela and the one who likes Kumkum stay. The one who likes Surabhi stays on an even numbered floor. There are three floors between the floors on which Sushil and Amit stay. Sunil stays on a floor immediately above the Anit's floor.

| Floor | Boy | Girl | City |
| :---: | :--- | :--- | :--- |
| 9 | Rohit | Amita | Lucknow |
| 8 | Vikash | Sanjana | Chennai |
| 7 | Sanjay | Anita | Varanasi |
| 6 | Kamal | Surabhi | Agra |
| 5 | Amit | Komal | Mathura |
| 4 | Sunil | Susheela | Noida |
| 3 | Anit | Saroj | Allahabad |
| 2 | Saurabh | Kumkum | Mirzapur |
| 1 | Sushil | Suhana | Patna |

Finally we have the complete floor arrangement.
41. Ans. A.
I. $A>X \rightarrow$ true (as $A \geq P=S>T>X$ )
II. $\mathrm{P}<\mathrm{B} \rightarrow$ false

Hence, only conclusion I follows.
42. Ans. B.
I. $S<Z \rightarrow$ false (as $S>U<Z$ )
II. $\mathrm{X}>\mathrm{Y} \rightarrow$ true (as $\mathrm{Y}<\mathrm{U}<\mathrm{Z}<\mathrm{X}$ )

Hence, only conclusion II follows.
43. Ans. E.
I. $V<S \rightarrow$ true (as $P<X<Y<S$ )
II. $\mathrm{T}>\mathrm{R} \rightarrow$ true (as $\mathrm{T}>\mathrm{Y}>\mathrm{X}>\mathrm{P}=\mathrm{V}>\mathrm{R}$ )

Hence, both conclusions follow.
44. Ans. D.
I. $\mathrm{H}<\mathrm{C} \rightarrow$ false (as there is no relation between H and C )
II. $\mathrm{H}>\mathrm{D} \rightarrow$ false (as $\mathrm{H} \geq \mathrm{I}=\mathrm{E} \leq \mathrm{D}$ )

Hence, no conclusion follows.
45. Ans. D.
I. $P<B \rightarrow$ false (as $P \geq Q>E \geq F>B$ )
II. $S>A \rightarrow f a l s e($ as $P \geq Q>E=S \geq F>B \leq A$ )

Hence, no conclusion follows.
46. Ans. B.


So, $S$ and $P$ are first cousin.
47. Ans. E.
$F$ is son of $S . M$ is paternal grandmother of $F$.
So, $M$ is mother of $S$. Hence, $S \times M$ is correct option.
48. Ans. C.

Taking into consideration the instructions, the diagram looks like

49. Ans. B.


The person going in west direction sees AC on his right hand i.e in North direction.
50. Ans. C.

The diagram is as follows

$R K=3+5+6=14 \mathrm{~m}$
51. Ans. B.

After careful analysis we can find code for the following words:-
Smart - stp
Hard - ghr
Work - rul
Luck - zmq
And - mkc
Follows - djp
52. Ans. D.

After careful analysis we can find code for the following words:-
Smart - stp
Hard - ghr
Work - rul
Luck - zmq
And - mkc
Follows - djp
53. Ans. A.

After careful analysis we can find code for the following words:-
Smart - stp
Hard - ghr
Work - rul
Luck - zmq
And - mkc
Follows - djp
54. Ans. C.

After careful analysis we can find code for the following words:-
Smart - stp
Hard - ghr
Work - rul
Luck - zmq
And - mkc
Follows - djp
55. Ans. A.

After careful analysis we can find code for the following words:-
Smart - stp
Hard - ghr
Work - rul
Luck - zmq
And - mkc
Follows - djp
56. Ans. B.

- A likes Green and facing outside. Two persons are sitting between $A$ and $D$.


Case 1


Case 2

Take case 1:

- One person sits between D and F who likes Black.


Take case 1A:

- Two persons sit between $F$ and the one who likes Pink. $B$ and $E$ are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C . H$ is not neighbor of $D$ so this case get rejected.


Case 1A
Take case 1B:

- Two persons sit between $F$ and the one who likes Pink. B and $E$ are neighbors and one of them likes Pink. E is neighbor of A . So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$. We can see that G must sit with $C$ but it is given they can't be neighbors so this case gets rejected.


Case 1B
Take case 2:

- One person sits between D and F who likes Black.



## Take case 2A:

- Two persons sit between $F$ and the one who likes Pink. $B$ and $E$ are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$. H cannot sit with $D$ so this case gets rejected.


Case 2A
Take case 2B:

- Two persons sit between $F$ and the one who likes Pink. B and $E$ are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$.


Case 2B

- The one who likes Blue is facing outside. So

C must like Blue.

- G doesn't like Red and Orange. So G must like Brown.
- The one who likes Orange is neighbor of A. So E must like Orange and D must like Red.

Here is the final arrangement:


Case 2B
E likes Orange color.
57. Ans. C.

- A likes Green and facing outside. Two persons are sitting between $A$ and $D$.


Case 1


Case 2

## Take case 1:

- One person sits between D and F who likes Black.



## Take case 1A:

- Two persons sit between $F$ and the one who likes Pink. $B$ and $E$ are neighbors and one of them likes Pink. E is neighbor of A . So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$. $H$ is not neighbor of $D$ so this case get rejected.


Case 1A

## Take case 1B:

- Two persons sit between $F$ and the one who likes Pink. B and $E$ are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of C. We can see that G must sit with $C$ but it is given they can't be neighbors so this case gets rejected.


Case 1B

## Take case 2:

- One person sits between D and F who likes Black.


Case 2A


Case 2B

## Take case 2A:

- Two persons sit between $F$ and the one who likes Pink. B and $E$ are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$. H cannot sit with $D$ so this case gets rejected.


Case 2A

## Take case 2B:

- Two persons sit between $F$ and the one who likes Pink. B and $E$ are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$.


Case 2B

- The one who likes Blue is facing outside. So C must like Blue.
- G doesn't like Red and Orange. So G must like Brown.
- The one who likes Orange is neighbor of A. So E must like Orange and D must like Red.


## Here is the final arrangement:



Case 2B
C likes Blue color.
58. Ans. C.

- A likes Green and facing outside. Two persons are sitting between $A$ and $D$.


Case 1


Case 2

## Take case 1:

- One person sits between D and F who likes Black.


Take case 1A:

- Two persons sit between $F$ and the one who likes Pink. $B$ and $E$ are neighbors and one of them likes Pink. E is neighbor of A . So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C . H$ is not neighbor of $D$ so this case get rejected.


Case 1A

## Take case 1B:

- Two persons sit between $F$ and the one who likes Pink. B and E are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$. We can see that G must sit with $C$ but it is given they can't be neighbors so this case gets rejected.


Case 1B
Take case 2:

- One person sits between D and F who likes Black.


Case 2A


Case 2B

## Take case 2A:

- Two persons sit between $F$ and the one who likes Pink. $B$ and $E$ are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$. H cannot sit with $D$ so this case gets rejected.


Case 2A

## Take case 2B:

- Two persons sit between $F$ and the one who likes Pink. $B$ and $E$ are neighbors and one of them likes Pink. E is neighbor of A . So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$.


Case 2B

- The one who likes Blue is facing outside. So

C must like Blue.

- G doesn't like Red and Orange. So G must like Brown.
- The one who likes Orange is neighbor of A. So E must like Orange and D must like Red. Here is the final arrangement:


Case 2B
$E$ sits $2^{\text {nd }}$ to the left of $D$.
59. Ans. E.

- A likes Green and facing outside. Two persons are sitting between $A$ and $D$.


Case 1


Case 2

Take case 1:

- One person sits between $D$ and $F$ who likes Black.


Case 1A


Case 1B

## Take case 1A:

- Two persons sit between $F$ and the one who likes Pink. $B$ and $E$ are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of C. H is not neighbor of D so this case get rejected.


Case 1A
Take case 1B:

- Two persons sit between $F$ and the one who likes Pink. B and E are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$. We can see that $G$ must sit with $C$ but it is given they can't be neighbors so this case gets rejected.


Case 1B
Take case 2:

- One person sits between D and F who likes Black.


Case 2A


Case 2B

Take case 2A:

- Two persons sit between $F$ and the one who likes Pink. B and E are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C . H$ cannot sit with $D$ so this case gets rejected.


Case 2A
Take case 2B:

- Two persons sit between $F$ and the one who likes Pink. $B$ and $E$ are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$.


Case 2B

- The one who likes Blue is facing outside. So C must like Blue.
- G doesn't like Red and Orange. So G must like Brown.
- The one who likes Orange is neighbor of A. So E must like Orange and D must like Red.

Here is the final arrangement:


Case 2B
All the persons are facing outside except $F$. 60. Ans. D.

- A likes Green and facing outside. Two persons are sitting between $A$ and $D$.


Case 1


Case 2

Take case 1:

- One person sits between D and F who likes Black.


Take case 1A:

- Two persons sit between $F$ and the one who likes Pink. $B$ and $E$ are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $\mathrm{C} . \mathrm{H}$ is not neighbor of D so this case get rejected.


Case 1A

## Take case 1B:

- Two persons sit between $F$ and the one who likes Pink. $B$ and $E$ are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$. We can see that G must sit with $C$ but it is given they can't be neighbors so this case gets rejected.


Take case 2:

- One person sits between D and F who likes Black.


Take case 2A:

- Two persons sit between $F$ and the one who likes Pink. B and $E$ are neighbors and one of them likes Pink. E is neighbor of A . So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$. $H$ cannot sit with $D$ so this case gets rejected.


Take case 2B:

- Two persons sit between $F$ and the one who likes Pink. $B$ and $E$ are neighbors and one of them likes Pink. $E$ is neighbor of $A$. So B must like Pink.
- H likes Yellow and facing outside and sits $2^{\text {nd }}$ to the left of $C$.


Case 2B

- The one who likes Blue is facing outside. So

C must like Blue.

- G doesn't like Red and Orange. So G must like Brown.
- The one who likes Orange is neighbor of A. So E must like Orange and D must like Red.
Here is the final arrangement:


Case 2B
G likes Brown color.
61. Ans. C.

D likes Banana and H is immediate right of the one who is facing $D$. So $D$ is sitting in row I and facing north. D and H are not sitting at any end.

| Row II(South) |  | H |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) |  |  | D(Banana) |  |

C likes White and $A$ is immediate right of $C$. C is not neighbor of D or H . As C likes color so $C$ is in row II and must be at left end and $A$ is immediate left of H .

| Row II(South) |  | H | A | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) |  |  | D(Banana) |  |

F likes Blue so $F$ is in row II and at the right end. The number of persons is sitting between $B$ and $D$ is same as $H$ and $C$. So $B$ is facing F. B likes Mango.

| Row II(South) | F(Blue) | H | A | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) | B (Mango) |  | D (Banana) |  |

E likes Apple and one person is sitting between $E$ and the one who is facing the one who likes Black. So $E$ is at the left end of row I and G is facing H and H likes Black then A likes Red and G likes Grapes.
Here is the final arrangement:

| Row II(South) | F(Blue) | H(Black) | A(Red) | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) | B(Mango) | G(Grapes) | D(Banana) | E(Apple) |

All the persons are sitting in row II except B. Hence, option C.
62. Ans. A.

D likes Banana and H is immediate right of the one who is facing $D$. So $D$ is sitting in row I and facing north. D and H are not sitting at any end.

| Row II(South) |  | H |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) |  |  | D(Banana) |  |

C likes White and A is immediate right of C. C is not neighbor of D or H . As C likes color so $C$ is in row II and must be at left end and $A$ is immediate left of H .

| Row II(South) |  | H | A | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) |  |  | D(Banana) |  |

F likes Blue so $F$ is in row II and at the right end. The number of persons is sitting between $B$ and $D$ is same as $H$ and $C$. So $B$ is facing F. B likes Mango.

| Row II(South) | F(Blue) | H | A | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) | B(Mango) |  | D(Banana) |  |

E likes Apple and one person is sitting between $E$ and the one who is facing the one who likes Black. So E is at the left end of row I and G is facing H and H likes Black then A likes Red and G likes Grapes.

## Here is the final arrangement:

| Row II(South) | F(Blue) | H(Black) | A(Red) | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) | B(Mango) | G(Grapes) | D(Banana) | E (Apple) |

$F$ is facing $B$.
Hence, option A.
63. Ans. D.

D likes Banana and H is immediate right of the one who is facing $D$. So $D$ is sitting in row I and facing north. D and H are not sitting at any end.

| Row II(South) |  | H |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) |  |  | D(Banana) |  |

C likes White and A is immediate right of C . C is not neighbor of $D$ or H . As C likes color so $C$ is in row II and must be at left end and $A$ is immediate left of H .

| Row II(South) |  | H | A | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) |  |  | D(Banana) |  |

$F$ likes Blue so $F$ is in row II and at the right end. The number of persons is sitting between $B$ and $D$ is same as $H$ and $C$. So $B$ is facing F. B likes Mango.

| Row II(South) | F(Blue) | H | A | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) | B(Mango) |  | D(Banana) |  |

E likes Apple and one person is sitting between $E$ and the one who is facing the one who likes Black. So E is at the left end of row I and G is facing H and H likes Black then A likes Red and G likes Grapes.
Here is the final arrangement:

| Row II(South) | F(Blue) | H(Black) | A(Red) | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) | B(Mango) | G(Grapes) | D(Banana) | E(Apple) |

A likes Red.
Hence, option D.
64. Ans. A.

D likes Banana and H is immediate right of the one who is facing $D$. So $D$ is sitting in row I and facing north. D and H are not sitting at any end.

| Row II(South) |  | H |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) |  |  | D(Banana) |  |

C likes White and A is immediate right of C. C is not neighbor of D or H . As C likes color so C is in row II and must be at left end and $A$ is immediate left of H .

| Row II(South) |  | H | A | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) |  |  | D(Banana) |  |

$F$ likes Blue so $F$ is in row II and at the right end. The number of persons is sitting between $B$ and $D$ is same as $H$ and $C$. So $B$ is facing F. B likes Mango.

| Row II(South) | F(Blue) | H | A | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) | B(Mango) |  | D(Banana) |  |

E likes Apple and one person is sitting between $E$ and the one who is facing the one who likes Black. So E is at the left end of row I and G is facing H and H likes Black then A likes Red and G likes Grapes.

## Here is the final arrangement:

| Row II(South) | F(Blue) | H(Black) | A(Red) | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) | B(Mango) | G(Grapes) | D(Banana) | E(Apple) |

H is $2^{\text {nd }}$ to the right of C .
65. Ans. B.

D likes Banana and H is immediate right of the one who is facing $D$. So $D$ is sitting in row I and facing north. D and H are not sitting at any end.

| Row II(South) |  | H |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) |  |  | D(Banana) |  |

C likes White and $A$ is immediate right of $C$. C is not neighbor of D or H . As C likes color so $C$ is in row II and must be at left end and $A$ is immediate left of H .

| Row II(South) |  | H | A | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) |  |  | D(Banana) |  |

F likes Blue so $F$ is in row II and at the right end. The number of persons is sitting between $B$ and $D$ is same as $H$ and $C$. So $B$ is facing F. B likes Mango.

| Row II(South) | F(Blue) | H | A | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) | B(Mango) |  | D(Banana) |  |

E likes Apple and one person is sitting between $E$ and the one who is facing the one who likes Black. So E is at the left end of row I and G is facing H and H likes Black then A likes Red and G likes Grapes.

Here is the final arrangement:

| Row II(South) | F(Blue) | H(Black) | A(Red) | C(White) |
| :--- | :--- | :--- | :--- | :--- |
| Row I(North) | B(Mango) | G(Grapes) | D(Banana) | E(Apple) |

$D$ is facing $A$ and $B$ is $2^{\text {nd }}$ to the left of $D$. Hence, option B.
66. Ans. A.

The roots of $X^{2}+12 X=36 \rightarrow$
$X=-6$
And for Second equation the roots are $Y=-$
9
So, X>Y
67. Ans. C.
I. $X=7,8$
II. $y=+8$

Remember that if $y^{2}=64$ then $y=+8$ and -8
but if $Y=\sqrt{64}$ then $y$ will only be +8
68. Ans. E.
I. $X=+9,-9$
II. $Y=+3,-3$

Hence answer=(e)
69. Ans. C.
I. $X=-3$
II. $y=6,-3$

Hence answer=(c)
70. Ans. E.
I. $x=4,6$
II. $y=5,-3.5$

On comparing answer=(e)
71. Ans. A.
$105.126 \times 35.201-90.23 \times 3+55.11 \times$
27.01
$=105 \times 35-90 \times 3+55 \times 27$
$=3675-270+1485$
= 5160-270
$=4890$
72. Ans. B.
$\frac{27.5}{100} \times 1600+\frac{6.4}{100} \times 1500=(?)^{3}+24$
$(?)^{3}=440+96-24$
$(?)^{3}=512$
? $=8$
73. Ans. A.
$(27)^{2}+\sqrt[3]{5832}=$ ? \% of 5976
Or, $\frac{7 \times 5976}{100}=729+18=747$
$\therefore$ ? $=\frac{747}{5976} \times 100=12 \frac{1}{2}$
74. Ans. B.
$59220 \div 3214.05 \times 514.13+5231.92=$ ?
or, ? $=18.42 \times 514+5232$
$=8467.88+5232=14699.88 \approx 14700$ 75. Ans. D.
$\sqrt{ } 2401+96+170 \%$ of $900+\sqrt{ } 529=x+$ 346
$49+96+1530+23=x+346$
$\mathrm{x}=1352$
76. Ans. D.

When we observe the given series, we get to know that
$2+2^{0}=3$
$2+2^{1}=4$
$2+2^{2}=6$
$2+2^{3}=10$
$2+2^{4}=$ ? $=18$
77. Ans. C.

In this given number series, when we observe the numbers carefully, we can draw a pattern
$5^{2}-3=22$
$10^{2}-3=97$
$15^{2}-3=222$
$20^{2}-3=$ ? $=397$
Hence, ?= 397
Option C is correct.
78. Ans. A.

56142387112
$5+1\left(1^{2}\right)=6$
$6+8\left(2^{3}\right)=14$
$14+9\left(3^{2}\right)=23$
$23+64\left(4^{3}\right)=87$
$87+25\left(5^{2}\right)=112$
79. Ans. B.

4516815685113
$4 \times 1+1=5$
$5 \times 3+1=16$
$16 \times 5+1=81$
$81 \times 7+1=568$
$568 \times 9+1=5113$
80. Ans. D.

112759107171251
$27-11=16=16 \times 1$
$59-27=32=16 \times 2$
$107-59=48=16 \times 3$
$171-107=64=16 \times 4$
$251-171=80=16 \times 5$
81. Ans. C.

Participants from Karnataka
$=\frac{22}{100} \times 500=110$
Similarly, participants from Haryana $=65$
Participants from Gujarat $=85$
Participants from Goa $=50$
Participants from Kerala $=130$
Participants from Punjab $=60$
Average of participants from Punjab and
Kerala together $=\frac{60+130}{2}=95$
Hence, option (c) is the answer.
82. Ans. A.

Participants from Karnataka
$=\frac{22}{100} \times 500=110$
Similarly, participants from Haryana $=65$
Participants from Gujarat $=85$
Participants from Goa $=50$
Participants from Kerala $=130$
Participants from Punjab $=60$
Male participants in Karnataka
$=\frac{5}{11} \times 110=50$
Female participants in Karnataka
$=\frac{6}{11} \times 110=60$
Male participants in Kerala
$=\frac{6}{13} \times 130=60$
Female participants in Kerala
$=\frac{7}{13} \times 130=70$
Total males $=50+60=110$
Total females $=60+70=130$
Percentage $\%=\frac{130-110}{130} \times 100=15.38 \%$
Hence, option (a) is the answer.
83. Ans. D.

Participants from Karnataka
$=\frac{22}{100} \times 500=110$
Similarly, participants from Haryana $=65$
Participants from Gujarat $=85$
Participants from Goa $=50$
Participants from Kerala $=130$
Participants from Punjab $=60$
Male participants in Goa $=\frac{3}{10} \times 50=15$
Male participants in Haryana $=55-15=40$
Hence, option (d) is the answer.
84. Ans. B.

Participants from Karnataka
$=\frac{22}{100} \times 500=110$
Similarly, participants from Haryana $=65$
Participants from Gujarat $=85$
Participants from Goa $=50$
Participants from Kerala $=130$
Participants from Punjab $=60$
Qualified participants from Gujarat
$=\frac{80}{100} \times 85=68$
Qualified participants from Punjab
$=\frac{85}{100} \times 60=51$
Total $=68+51=119$
Hence, option (b) is the answer.
85. Ans. D.

Participants from Karnataka
$=\frac{22}{100} \times 500=110$
Similarly, participants from Haryana $=65$
Participants from Gujarat $=85$
Participants from Goa = 50
Participants from Kerala $=130$
Participants from Punjab $=60$
Participants from Kerala and Gujarat $=130+$
$85=215$
Participants from Karnataka, Goa and
Haryana together $=50+65+110=225$
Percentage $\%=\frac{215}{225} \times 100=95 \%$
Hence, option (d) is the answer.
86. Ans. C.

It is given that the under compound interest, a sum of money amounts to 12000 in 4 years and 9500 in 3 years.
So, percentage increase in value of money in $4^{\text {th }}$ year from the $3^{\text {rd }}$ year is:
$12000-9500$
$\frac{12000-9500}{9500} \times 100=26.3 \%$
So, the rate of interest per annum = 26.3\%
So option (c) is the correct answer.
87. Ans. C.

The book is sold at $11 \%$ loss.
$89 \%$ of CP = Rs. 178
$=>C P=(178 \times 100) / 89=$ Rs. 200
To gain $11 \%$, S.P. $=111 \%$ of Rs. $200=$ 111/100 x $200=$ Rs. 222
88. Ans. A.

Assume that amount of work is 100 units
Atul does = 10 units/day
Bhaskar does $=5$ units/day
Chetan does $=4$ units/day
Possible pairs:
Atul + Bhaskar = 15 units/day
Atul + Chetan $=14$ units/day
Bhaskar + Chetan $=9$ units/day
To minimize the time, we will use the first
two pairs.
So, $15+14+15+14+15+14+15=$ 102 units
So, 7 days are required.
Hence A. is the correct option.
89. Ans. B.

Ratio of ages of $P$ and $Q$ is $3: 5$, i.e. $P=3 / 5$ Q
Age of $S$ and $T$ together is 20 more than the thrice of age of $R$, i.e. $S+T=3 R+20$
Q's present age $=43-8=35$
Then, $\mathrm{P}=21$
Thrice the age of $Q$ is equal to seven times the age of R, i.e. $3 Q=7 R$
So, $R=15$
Sum of ages of $\mathrm{Q}, \mathrm{R}$ and S is 95 , i.e. $\mathrm{Q}+\mathrm{R}+$ $\mathrm{S}=95$
$35+15+S=95$
So, $\mathrm{S}=45$
Now, $45+\mathrm{T}=(15 * 3)+20$
$\mathrm{T}=20$
Therefore, sum of age of $P$ after 11 years and aqe of $T$ before 9 years $=(21+11)+$
$(20-9)=43$
Hence, option (B) is the answer.
90. Ans. C.

Ratio of their investments i.e. A: $\mathrm{B}: \mathrm{C}=\mathrm{x}$ :
$(x+300):(x+600)$
Let the profit earned by $A$ be Rs. $r$
So,
$\frac{(\mathrm{r} \times 2 \times 12)}{100}=126$
$0.24 r=126$
$r=525$
So, the profit share of $A=$ Rs. 525
So, according to the question,
$\frac{x}{x+x+300+x+600}=\frac{525}{2100}$
$\frac{x}{3 x+900}=\frac{1}{4}$
$4 x=3 x+900$
$x=900$
So option (c) is the correct answer.
91. Ans. B.

The Profit \% and the Discount \% of the
Article D = x
Cost Price* $(100+x) / 100=$ S.P.
1000* $(100+x)=1100 * 100$
$100000+1000 x=110000$
$1000 x=110000-100000$
$1000 x=10000$
$x=10 \%$
M.P. $=1100 / 90 * 100$
M.P. $=$ Rs. $11000 / 9=1222.22$
92. Ans. B.

The ratio of Cost Price of the Article $D$ and
Article E is $4: 5$
C.P. of Article $D=$ Rs. 1000
C.P. of Article $\mathrm{E}=1000 * 5 / 4$
= Rs. 1250
S.P. of Article E = 1250*120\%
= Rs. 1500
M.P. of Article E = Rs. 4000

Discount \% = (M.P. - S.P.)*100/M.P.
$=(4000-1500) * 100 / 4000$
= 62.5\%
93. Ans. C.
M.P. of Article $A=$ Rs. 1400
C.P. of Article $B=1400-250=$ Rs. 1150
S.P. of Article $B=1150 * 108 \%$
= Rs. 1242.
M.P. of Article $B=1242+1258=$ Rs. 2500

Discount $\%=(2500-1242) * 100 / 2500$
Discount $\%=1258 * 100 / 2500$
Discount \% = 50.32\%
94. Ans. C.
M.P. of Article $A=$ Rs. 1400
C.P. of Article D = Rs. 1000

Difference = Rs. 1400-1000
Less \% $=(1400-1000) * 100 / 1400$
Less \% = 28.57\%
95. Ans. E.
M.P. of Article C = Rs. 2760
C.P. of Article C $=2760 * 100 / 120$
= Rs. 2300
New Profit\% $=(20 \%) *(1+12.5 / 100)=22.5$ \%
(it is an increase by $\mathbf{1 2 . 5 \%}$ of $\mathbf{2 0 \%}$ not an increase by $\mathbf{1 2 . 5}$ percentage points)
S.P. of Article C $=2300 * 122.5 / 100$
= Rs. 2817.5
96. Ans. A.

Quantity of zinc in the alloy initially
$=\frac{5}{8} \times 32=20 \mathrm{~kg}$
Quantity of copper in the alloy initially
$=\frac{3}{8} \times 32=12 \mathrm{~kg}$
Let the amount of zinc added in the alloy be x kg
Then the amount of copper added $=x+6 \mathrm{~kg}$
According to the question,
$32+x+x+6=42$
$\mathrm{x}=2 \mathrm{~kg}$
So, quantity of zinc in the final alloy $=$
$20+2=22 \mathrm{~kg}$
Required percentage
$=\left(\frac{22}{42}\right) \times 100=52.4 \%$
So option (a) is the correct answer.
97. Ans. A.

Relative speed of the thief and policeman = $(11-10) \mathrm{km} / \mathrm{hr}=1 \mathrm{~km} / \mathrm{hr}$

Distance covered in 6 minutes $=(1 / 60) \times 6$ $\mathrm{km}=1 / 10 \mathrm{~km}=100 \mathrm{~m}$
Therefore, Distance between the thief and policeman $=(200-100) \mathrm{m}=100 \mathrm{~m}$.
98. Ans. A.

Let the capacity of the tank be 48 units.
Then P's and Q's one minute's work is 4 units and 3 units respectively. And R's one minute work is 8 units.
Let ' $x$ ' minute be the required time to empty the tank filled.
$8 x=4(4+3)+x(4+3)$
$8 x=28+7 x$
$x=28$ minutes
99. Ans. C.

Sum of readings of all 8 students $=35.5 \times 8$ $=284$
Sum of readings of first two students $=2 \times$ $28=56$
Sum of readings of next three students $=3 \mathrm{x}$ $36=108$
So, sum of last three readings $=284-56-$ $108=120$
Let, the reading of $6^{\text {th }}$ student be x
According to the question,
According to the question,
$x+(x-8)+(x+8)=120$
$3 \mathrm{x}=120$
$x=40$
Therefore, the reading of sixth student $=40$ So option (c) is the correct answer.
100. Ans. A.

Let the side of the square $A B C D$ be 10 cm , then the side of the square PQRS $=11.5 \mathrm{~cm}$
Area of the square $A B C D=100 \mathrm{~cm}^{2}$
Area of square $\mathrm{PQRS}=132.25 \mathrm{~cm}^{2}$
Area of PQRS is more than ABCD by 32.25/100 * 100
=32.25\%

## prepp

# Latest Sarkari jobs, <br> Govt Exam alerts, <br> Results and Vacancies 

> Latest News and Notification

- Exam Paper Analysis
- Topic-wise weightage
- Previous Year Papers with Answer Key
- Preparation Strategy \& Subject-wise Books

To know more Click Here

