## Solutions

## 1. Ans. C.

We have to join two parts of a sentence in a way that they form a meaningful and grammatically correct sentence. In the given question $A$ joins with $F$ and $C$ joins with $D$ to make correct sentences. $F$ tells what the farmers depend on, thus completing A. D tells the duration and the consequence of the downpour in the city, thus logically completing C . Contextually, B and E may join, only if the article ' $a$ ', with which $E$ starts, is omitted. The presence of 'a' makes the sentence grammatically incorrect. Thus, option C is the correct answer.
2. Ans. A.

Contextually speaking, A can connect $E$, but the two if joined will make a grammatically incorrect sentence. A intends to state a fact and not make a comparison, thus the usage of "fewer" is incorrect. Moreover, "a fewer" is never used in a comparative sentence, "fewer" (used when discussing countable things) is the correct word to be used in such cases. Thus, to make E correct, "a fewer" should be replaced by "a few".
Similar to A and $\mathrm{E}, \mathrm{C}$ and F can be connected contextually, but they would form a grammatically incorrect statement, if joined. C states what the PR is responsible for and F states features in relation to the celebrities. So both the words should be nouns. "Image" is a noun, but is an adjective after which a noun is missing. Hence, it should be changed to "valued" in order to make the sentence grammatically correct.
$B$ and $D$ join to form a meaningful as well as a grammatically correct sentence. B contains an arguments, and D, with the usage of the conjunction "but" states a counter- argument. Thus, option A is the correct answer.
3. Ans. D.

Let's follow the process of elimination to get the correct answer. Note that D uses the word "run" incorrectly. Since it is preceded by a preposition, the gerund form "running" should be used. Hence none of the parts in the first column can combine with D. This eliminates options B, C and E. Now, note that F is also grammatically correct as rather than being in the comparative degree, the adjectives in this part should be in the positive degree to appropriately join with B. Also, if B has to be joined with $F$, the preposition "for" in $F$ should be changed to "on" (since the verb "impact" is there). This eliminates option A. Now we are only
left with option D, and B and E appropriately join together to make a meaningful and grammatically correct sentence. Thus, option D is the correct sentence.
4. Ans. C.

A could connect with E, but the elements would not be parallel. A supervisor can be a communicator (noun), thus, he should be a problem- solver and motivator. Thus, the present continuous tense should be replaced by nouns.
C could have appropriately connected with D, but since 'a neutral particle" is a singular noun, the plural "particles" is incorrect. It should be particle instead.
$B$ and $F$ when joined make a meaningful and grammatically correct sentence. Thus, option C is the correct answer.
5. Ans. B.

The first sentence talks about worthless currency. Statement A uses the word 'it' to refer to the worthless currency and hence should follow 1. Statement D refers to the use of a worthless currency and hence follows A. The use of 'they' in C refers to the zero rupee notes mentioned in D and thus, C should come after D. what follows is what is left i.e. B. The correct sequence is ADCB.
6. Ans. D.

The opening sentence talks about the outcomes of a natural disaster and that of infrastructure destruction. Statement $D$ talks about what follows a natural disaster and uses the word aftershocks, which inevitably tells us that the disaster that is being talked about is an earthquake. A introduces the word earthquake and names the business houses being closed, thus, should follow B (B talks about business disruptions introduced in D). C is the concluding statement as it gives an overall summary of the after-effects of a natural disaster. Hence, the correct sequence is DBAC.
7. Ans. A.

The opening sentence talks about the positives of a free market economy. Statement B builds on the positives by talking about the higher profits earned by certain firms. D uses the word 'nevertheless' which implies that a contrast is being stated with respect to the previously mentioned facts, hence $D$ should follow B. A follows D as the capitalist model which was introduced in $D$ is being talked about. C gives the reason for the capitalist model being flawed. Hence, the correct sequence is BDAC.

## 8. Ans. E.

The central theme of the passage is the fact that science is not the enemy of mankind, but war is. B should follow 1 as it builds on the argument given in statement 1 and that we should stop war rather than curbing science. D follows as it gives reason in support of the argument laid in B. C talks about the fact that science making weapons which has made things worse and 'brought us to the doorstep of doom', talked about in statement C. The use of 'therefore' gives us a clue, that it is the concluding bit of the passage. The correct order is BDCA. 9. Ans. A.

Statement $D$ is referring to the same-gender rights which are mentioned in statement C. So, C must be followed by $D$. Hence CD is a mandatory pair. The theme of the series is that of same-gender marriage, and it is statement $C$ that takes the argument a step ahead along with the use of 'at first', and hence it should follow statement 1. D conveys that the idea of same-sex marriage is gaining a lot of popularity amongst the young crowd and public support. Logically what should follow $D$ from the remaining two options is A as it is talking about the states reflecting the same view as that held by the public and youngsters. Thus, the correct sequence is CDAB.
10. Ans. B.
$B$ should be at the beginning since it provides the length and location of the river. Next should be A as it gives other introductory details. Next, comes C which mentions the holiness of the river which is an important aspect given the history and the importance of the river in Hindu religion. D follows. CD as a pair talk about the importance of the river. The correct sequence is BACD and the correct answer is option B.
11. Ans. B.
I. Doesn't go with the given statement as it has a pronoun "they" which can't be used for a noun in the given sentence.
II. Goes with the statement as the clause "before taking a decision" adds to the sentence to support the context that has been stated in the statement. III. Doesn't go with the sentence, as the given statement doesn't talk about an example of something. Hence, only iii is correct.
New sentence: Before taking a decision, discuss the matter objectively with other people who are wellinformed and if it is proved that you are about to take a step in the wrong direction, accept the reality and admit your mistake.
12. Ans. A.
I. Goes with the statement because the given statement provides a general fact through a large amount of evidence and evidence is something that can be collected with time.
II. Doesn't go with the sentence as whenever "as soon as" is used in the starting of a sentence, it should be proceeded by a clause.
III. Doesn't go with the sentence as "in contrast" tells a fact opposite to a given fact when used as a connector between two sentences and the given statement doesn't tell any contrasting fact. Hence, i is correct.
New Sentence: Over the last few years a wealth of evidence has accumulated to suggest that a lack of sleep is bad for mind and body and working memory is important for keeping things in mind for briefer periods of time, which thereby facilitates reasoning and planning.

## 13. Ans. B.

Special emphasis is given to the fact that the regulator's statement was a departure from the regular practice and norms of SEBI. Hence, 'In a departure from' is the correct choice.
New Sentence: In a departure from the regular practice and norms of the SEBI, the regulator also spoke of two on-going investigations in the matter of NSE and Rs5,548-crore National Spot Exchange Ltd (NSEL) scam.
14. Ans. A.

We can clearly decipher from the second sentence that it is about student's behaviour in the classrooms.
Option II: the starting phrase would be grammatically incorrect.
Option III: 'Even if the violations are technically against the rules' is relatable to only ignorance. We can only use this option and join it with the second sentence. But with the first sentence, it makes no sense.
Therefore, only option A is the apt answer.
New sentence:
Ignoring certain minor misbehaviours, even if the violations are technically against the rules, can actually serve to strengthen the classroom culture and increase trust with some students.
15. Ans. C.

The correct preposition to be used after 'moves' is 'to'. Address is the correct form. Cores is an incorrect usage. The correct usage is core. Core concern means primary concern.
Hence, option C is the correct answer.
16. Ans. A.

The correct usage is "wasn't" not "weren't". It should either be 'ideas were' or 'idea was'. Hence, option A is the correct answer.
17. Ans. B.

The given segment has an error of preposition.
At describes position at a specific point and is used with a larger place (a store, bank, or airport) and before the names of group activities.
In refers to the position within large areas or in spaces that surround something on all sides. The given segment signifies the economic productivity within an agrarian society. The correct usage is 'in' and not 'at'.
Hence, 'economic productivity in an agrarian society' is the correct answer.
18. Ans. D.
'To be associated with the' makes the sentence grammatically correct.
'To being' is incorrect in the given context. The sentence brings out an existing relationship or association. Hence, 'associated' should be used. 'Associate' doesn't make sense.
19. Ans. E.

The given sentence is correct and needs no improvement. It means that the government did not have any control in the development of the subject.
20. Ans. C.
'Would let transacting parties remain' is the correct answer.
'Would' is used to preserve the future aspect when talking about the past. If you are writing about past events, you can use it to indicate something that was in the future at that point in time but is not necessarily in the future right now.
'Could' represents past of 'can' and when you want to convey something politely.
Here, the future aspect of Bitcoin is being discussed, hence would is a more suitable response.
Would letting is grammatically incorrect; hence option A can be eliminated.
Option D makes the sentence grammatically incorrect; hence it can be eliminated.
21. Ans. D.

The correct structure for the given sentence is affirmative.
Hence, 'it' must be placed before 'should'. This eliminates the given sentence and option B. The given sentence is generic; hence had is an incorrect form. Hence, option A can be eliminated. Option C is incomplete.

Option D completes the sentence well.
Hence, 'but it should have been linked less' is the correct answer.

## 22. Ans. C.

A noun is required after 'a saga of'. Dedicating is the gerund form (verb).
Option A: 'dedicated the cause of' is incorrect.
Option B: Having before dedication distorts the structure.
Option C: It fits the given sentence well.
Option D: The correct proposition after saga should be 'of' and not 'for'.
Hence, 'of dedication to' is the correct answer.
23. Ans. C.

The answer to this is statement 'C.' The correct sentence is "The building had been under construction for a long time until a series of unprecedented events brought it to a halt." Bring something to halt is a phrase that means causing something to stop. According to the sentence some unprecedented events stopped the construction of the building. Thus the phrase (in its past tense) 'Brought it to a halt' is apt for this sentence.
24. Ans. C.

The answer to this question is statement ' $C$ '. The correct sentence is 'At work, if you are unable to follow the rules, you will find yourself running into a disagreement with many people.'
Running into something means coming across something. The phrase running across disagreements means coming across problems.
25. Ans. A.

The passage discusses how the population of the age is on a relative increase in Japan, so much so that more than young babies, there are old people. However, the passage goes on to show how this fact has not negatively affected the economy and, a new market has flourished altogether which provides products to cater to the needs of the old. For this reason, option $B$ is incorrect. Option $A$ is the best-fit answer.
26. Ans. D.

Statement 1 is correct as the second paragraph mentions that "the government began testing the Robot Shuttle, an autonomous bus intended for use in rural areas, where Japan's shrinking pains have hurt the most." Since the government is concerned about the old, statement 1 is a correct inference.

Statement 2 is correct as the passage discusses how the case of more old people has not negatively affected the economy: "Amid this elder boom, a new, 100 trillion yen ( $\$ 800$ billion) consumer category has emerged, known as "the silver market.""
Statement 3 is incorrect as nowhere in the passage gas it been stated that the capital spent on the is a waste
Thus, option D is the correct answer.
27. Ans. D.

The word "bode" means to predict or promise. So the given excerpt means that the old population of Japan had never promised a prosperous economy.
Thus, option D is the correct answer.
28. Ans. E.

Option A is correct because if $40 \%$ of the population will be old by 2060 and a quarter (25\%) is old at the present, the increase will be $15 \%$.
Option B is correct as the passage states: "It's long been observed that Japan's aging doesn't bode well for its economy. Lots of old people means a financial drain on both the private and public sectors, as health-care and pension costs skyrocket and productivity declines."
Option C is correct and can be deciphered from the following lines given in the second paragraph, "an autonomous bus intended for use in rural areas, where Japan's shrinking pains have hurt the most"
Option D is correct and can be gathered from the last paragraph. Thus, E is the correct answer. 29. Ans. A.

The sentence using the word intends to convey that japan's lessening pain has been affected in a manner so as to be detrimental to it. Option A is the correct answer.
Hurt = cause pain or injury to.
Harm = physical injury, especially that which is deliberately inflicted.
Cut = make an opening, incision, or wound in (something) with a sharp-edged tool or object. Burn = be or cause to be destroyed by fire. Suffer = experience or be subjected to (something bad or unpleasant).
Procured $=$ obtain (something), especially with care or effort.
30. Ans. B.

The word drain has been used in a context whereby it is conveying the idea that the ageing population is a burden on the Japanese economy. The population is The correct answer is option $B$. Drain $=$ deprive of strength or vitality.

Absorption $=$ the state of being engrossed in something.
Downflow $=$ a downward flow or something that flows down.
Effective $=$ successful in producing a desired or intended result.
Radiation $=$ divergence out from a central point, in particular evolution from an ancestral animal or plant group into a variety of new forms.
Discharge = tell (someone) officially that they can or must leave, in particular.
31. Ans. A.

In the arrangement, number are arranged as least number is arranged from left end and second least number is arranged from right after adding +1 in both sides. Same rule followed till the arrangement is completed.
Input: 50178534885511921078
Step I: 11501785348855927812
Step II: 18115085885592781235
Step III: 51181185889278123556
Step IV: 79511811889212355686
Step V: 89795118111235568693
Five steps will be needed to complete the arrangement. So answer is 1).
32. Ans. C.

In the arrangement, number are arranged as least number is arranged from left end and second least number is arranged from right after adding +1 in both sides. Same rule followed till the arrangement is completed.
Input: 50178534885511921078
Step I: 11501785348855927812
Step II: 18115085885592781235
Step III: 51181185889278123556
Step IV: 79511811889212355686
Step V: 89795118111235568693
79511811889212355686 IV step of Input. So answer is 3).
33. Ans. D.

In the arrangement, number are arranged as least number is arranged from left end and second least number is arranged from right after adding +1 in both sides. Same rule followed till the arrangement is completed.
Input: 50178534885511921078
Step I: 11501785348855927812
Step II: 18115085885592781235
Step III: 51181185889278123556
Step IV: 79511811889212355686
Step V: 89795118111235568693
In Step $V$, ' 12 ' would be at 6 th position from the right. So answer is 4).

## 34. Ans. B.

In the arrangement, number are arranged as least number is arranged from left end and second least number is arranged from right after adding +1 in both sides. Same rule followed till the arrangement is completed.
Input: 50178534885511921078
Step I: 11501785348855927812
Step II: 18115085885592781235
Step III: 51181185889278123556
Step IV: 79511811889212355686
Step V: 89795118111235568693
Final arrangement would be '89 795118111235
5686 93'. So answer is 2).
35. Ans. C.

In the arrangement, number are arranged as least number is arranged from left end and second least number is arranged from right after adding +1 in
both sides. Same rule followed till the arrangement is completed.
Input: 50178534885511921078
Step I: 11501785348855927812
Step II: 18115085885592781235
Step III: 51181185889278123556
Step IV: 79511811889212355686
Step V: 89795118111235568693
' 92 ' would be at fifth position from the right in step IV. So answer is 3.
36. Ans. A.

As per given information coding description is as follows:
'business is easy to do' - 'pa ro se yo ze'......1)
'business aries difficulty in life' - 'lo fe pa so te'.
......2)
'life is easy' - 'so ro yo'. ......3)
'difficulty to do work' - 'se lo ze me' ......4)
'easy business life' - 'pa yo so'. ......5)
From 1) and 2) business is coded as: pa
From 1), 2) and 5) easy is coded as: yo
From 1), 2) and 5) life is coded as: so
From 1) and 3) 'is' is coded as: ro
From 2) and 4) 'difficulty' is coded as: lo
From 1), 2), 3) and 4) 'to' is coded as: Either 'se' or 'ze'
From 1), 2), 3) and 4) 'do' is coded as: Either 'se' or 'ze'
From 1), 2), 3) and 4) 'work' is coded as: me
From 1), 2), 3) and 4) 'aries' is coded as: Either 'fe' or 'te'
From 1), 2), 3) and 4) 'in' is coded as: Either 'fe' or 'te'
'lo, te, fe, pa' is the code for 'difficulty aries in business'. So answer is 1)
37. Ans. D.

As per given information coding description is as follows:
'business is easy to do' - 'pa ro se yo ze'......1)
'business aries difficulty in life' - 'lo fe pa so te'. ......2)
'life is easy' - 'so ro yo'. ......3)
'difficulty to do work' - 'se lo ze me' ......4)
'easy business life' - 'pa yo so'. ......5)
From 1) and 2) business is coded as: pa
From 1), 2) and 5) easy is coded as: yo
From 1), 2) and 5) life is coded as: so
From 1) and 3) 'is' is coded as: ro
From 2) and 4) 'difficulty' is coded as: lo
From 1), 2), 3) and 4) 'to' is coded as: Either 'se' or 'ze'
From 1), 2), 3) and 4) 'do' is coded as: Either 'se' or 'ze'
From 1), 2), 3) and 4) 'work' is coded as: me
From 1), 2), 3) and 4) 'aries' is coded as: Either 'fe' or 'te'
From 1), 2), 3) and 4) 'in' is coded as: Either 'fe' or 'te'
'life is complicated' can written as 'so fa ro' complicated is the new word for coding so we should write new code also which is fa. So answer is 4).
38. Ans. E.

As per given information coding description is as follows:
'business is easy to do' - 'pa ro se yo ze'......1)
'business aries difficulty in life' - 'lo fe pa so te'.
......2)
'life is easy' - 'so ro yo'. ......3)
'difficulty to do work' - 'se lo ze me' ......4)
'easy business life' - 'pa yo so'. ......5)
From 1) and 2) business is coded as: pa
From 1), 2) and 5) easy is coded as: yo
From 1), 2) and 5) life is coded as: so
From 1) and 3) 'is' is coded as: ro
From 2) and 4) 'difficulty' is coded as: lo
From 1), 2), 3) and 4) 'to' is coded as: Either 'se' or 'ze'
From 1), 2), 3) and 4) 'do' is coded as: Either 'se' or 'ze'
From 1), 2), 3) and 4) 'work' is coded as: me
From 1), 2), 3) and 4) 'aries' is coded as: Either 'fe' or 'te'
From 1), 2), 3) and 4) 'in' is coded as: Either 'fe' or 'te'
'aries' can be coded as Either 'fe' or 'te'. So answer is 5 ).
39. Ans. B.

As per given information coding description is as follows:
'business is easy to do' - 'pa ro se yo ze'......1)
'business aries difficulty in life' - 'lo fe pa so te'.
......2)
'life is easy' - 'so ro yo'
'difficulty to do work' - 'se lo ze me' ......4)
'easy business life' - 'pa yo so'. ......5)
From 1) and 2) business is coded as: pa
From 1), 2) and 5) easy is coded as: yo
From 1), 2) and 5) life is coded as: so
From 1) and 3) 'is' is coded as: ro
From 2) and 4) 'difficulty' is coded as: lo
From 1), 2), 3) and 4) 'to' is coded as: Either 'se' or 'ze'
From 1), 2), 3) and 4) 'do' is coded as: Either 'se' or 'ze'
From 1), 2), 3) and 4) 'work' is coded as: me
From 1), 2), 3) and 4) 'aries' is coded as: Either 'fe' or 'te'
From 1), 2), 3) and 4) 'in' is coded as: Either 'fe' or 'te'
Code for 'difficulty' is 'lo'. So answer is 2 ).
40. Ans. E.

As per given information coding description is as follows:
'business is easy to do' - 'pa ro se yo ze'......1)
'business aries difficulty in life' - 'lo fe pa so te'.
......2)
'life is easy' - 'so ro yo'
'difficulty to do work' - 'se lo ze me' ......4)
'easy business life' - 'pa yo so'. ......5)
From 1) and 2) business is coded as: pa
From 1), 2) and 5) easy is coded as: yo
From 1), 2) and 5) life is coded as: so
From 1) and 3) 'is' is coded as: ro
From 2) and 4) 'difficulty' is coded as: lo
From 1), 2), 3) and 4) 'to' is coded as: Either 'se' or 'ze'
From 1), 2), 3) and 4) 'do' is coded as: Either 'se' or 'ze'
From 1), 2), 3) and 4) 'work' is coded as: me
From 1), 2), 3) and 4) 'aries' is coded as: Either 'fe' or 'te'
From 1), 2), 3) and 4) 'in' is coded as: Either 'fe' or 'te'
Code for 'difficulty' is 'lo'. So answer is 2 ).
Code for 'do' in the given code language is Either 'se' or 'ze'. So answer is 5)
41. Ans. C.

As per given information family tree is as follows: B


So $F$ is grandson of $B$ and son of $A$ and $D$. So answer is 3).
42. Ans. E.

As per given information $B$ gender is not defined. So, option E is the correct response.
43. Ans. C.


As per above diagram, $P$ and $C$ sit at extreme left ends of the parallel rows. So answer is 3 ).
44. Ans. E.


S faces $A$. So answer is 5).
45. Ans. C.


Three persons are seated between T and S. So answer is 3).
46. Ans. A.

$P$ is related to $V$ in the same way as $C$ is related to $F$. In the same pattern $E$ related to $B$. So answer is 1).
47. Ans. E.

As per given information arrangement figure is as follows:


As per above diagram, $F$ faces $V$ is the true information regarding $F$. So answer is 5).
48. Ans. B.

Box - A, B, C, D, E, F and G
Number - 1, 2, 3, 4, 5, 6 and 7

1. There are two boxes between the box $B$ and box E . There is only one box between box E and box G . There are three boxes between box $G$ and box $A$, which is packed with number 1 . There are only two boxes between box A and box C , which is packed with number 6 . The box packed with number 2 is immediately above the box $G$.

| Box | Number |
| :--- | :--- |
|  | 2 |
| G |  |
| C | 6 |
| E |  |
|  |  |
| A | 1 |
| B |  |

2. Box $E$ is packed with number 3. Box $D$ is immediately above the box packed with number 5.

| Box | Number |
| :--- | :--- |
| D | 2 |
| G | 5 |
| C | 6 |
| E | 3 |
| F |  |
| A | 1 |
| B |  |

3. More than three boxes are there between box packed with number 4 and box packed with number 2. More than three boxes are there between box packed with number 5 and box packed with number 4.

| Box | Number |
| :--- | :--- |
| D | 2 |
| G | 5 |
| C | 6 |
| E | 3 |
| F | 7 |
| A | 1 |
| B | 4 |

Hence, box B is packed with number 4.
49. Ans. D.

Box - A, B, C, D, E, F and G
Number - 1, 2, 3, 4, 5, 6 and 7

1. There are two boxes between the box $B$ and box $E$. There is only one box between box $E$ and box $G$. There are three boxes between box $G$ and box $A$, which is packed with number 1 . There are only two boxes between box A and box C, which is packed with number 6 . The box packed with number 2 is immediately above the box $G$.

| Box | Number |
| :--- | :--- |
|  | 2 |
| G |  |
| C | 6 |
| E |  |
|  |  |
| A | 1 |
| B |  |

2. Box $E$ is packed with number 3. Box $D$ is immediately above the box packed with number 5 .

| Box | Number |
| :--- | :--- |
| D | 2 |
| G | 5 |
| C | 6 |
| E | 3 |
| F |  |
| A | 1 |
| B |  |

3. More than three boxes are there between box packed with number 4 and box packed with number 2. More than three boxes are there between box packed with number 5 and box packed with number 4.

| Box | Number |
| :--- | :--- |
| D | 2 |
| G | 5 |
| C | 6 |
| E | 3 |
| F | 7 |
| A | 1 |
| B | 4 |

Hence, three boxes are there between box A and box packed with number 5 .
50. Ans. E.

Box-A, B, C, D, E, F and G
Number-1, 2, 3, 4, 5, 6 and 7

1. There are two boxes between the box $B$ and box

E . There is only one box between box E and box G . There are three boxes between box $G$ and box A , which is packed with number 1 . There are only two boxes between box A and box C , which is packed with number 6 . The box packed with number 2 is immediately above the box G.

| Box | Number |
| :--- | :--- |
|  | 2 |
| G |  |
| C | 6 |
| E |  |
|  |  |
| A | 1 |
| B |  |

2. Box $E$ is packed with number 3. Box $D$ is immediately above the box packed with number 5 .

| Box | Number |
| :--- | :--- |
| D | 2 |
| G | 5 |
| C | 6 |
| E | 3 |
| F |  |
| A | 1 |
| B |  |

3. More than three boxes are there between box packed with number 4 and box packed with number 2. More than three boxes are there between box packed with number 5 and box packed with number 4.

| Box | Number |
| :--- | :--- |
| D | 2 |
| G | 5 |
| C | 6 |
| E | 3 |
| F | 7 |
| A | 1 |
| B | 4 |

Hence, the sum is $2+7=9$.
51. Ans. C.

Box-A, B, C, D, E, F and G
Number-1, 2, 3, 4, 5, 6 and 7

1. There are two boxes between the box $B$ and box

E . There is only one box between box E and box G . There are three boxes between box $G$ and box A, which is packed with number 1 . There are only two boxes between box $A$ and box $C$, which is packed with number 6 . The box packed with number 2 is immediately above the box $G$.

| Box | Number |
| :--- | :--- |
|  | 2 |
| G |  |
| C | 6 |
| E |  |
|  |  |
| A | 1 |
| B |  |

2. Box $E$ is packed with number 3. Box $D$ is immediately above the box packed with number 5 .

| Box | Number |
| :--- | :--- |
| D | 2 |
| G | 5 |
| C | 6 |
| E | 3 |
| F |  |
| A | 1 |
| B |  |

3. More than three boxes are there between box packed with number 4 and box packed with number 2. More than three boxes are there between box packed with number 5 and box packed with number 4.

| Box | Number |
| :--- | :--- |
| D | 2 |
| G | 5 |
| C | 6 |
| E | 3 |
| F | 7 |
| A | 1 |
| B | 4 |

Hence, box D is packed with number 2 .
52. Ans. B.

Box-A, B, C, D, E, F and G
Number-1, 2, 3, 4, 5, 6 and 7

1. There are two boxes between the box $B$ and box
$E$. There is only one box between box $E$ and box $G$. There are three boxes between box $G$ and box $A$, which is packed with number 1 . There are only two boxes between box $A$ and box $C$, which is packed with number 6 . The box packed with number 2 is immediately above the box $G$.

| Box | Number |
| :--- | :--- |
|  | 2 |
| G |  |
| C | 6 |
| E |  |
|  |  |
| A | 1 |
| B |  |

2. Box $E$ is packed with number 3. Box $D$ is immediately above the box packed with number 5 .

| Box | Number |
| :--- | :--- |
| D | 2 |
| G | 5 |
| C | 6 |
| E | 3 |
| F |  |
| A | 1 |
| B |  |

3. More than three boxes are there between box packed with number 4 and box packed with number 2. More than three boxes are there between box packed with number 5 and box packed with number 4.

| Box | Number |
| :--- | :--- |
| D | 2 |
| G | 5 |
| C | 6 |
| E | 3 |
| F | 7 |
| A | 1 |
| B | 4 |

Hence, box $F$ is packed with number 7 .
53. Ans. B.

Person - M, N, O, P, Q, R, S and T
Months - March, June, November and December
Date $-16^{\text {th }}$ or $25^{\text {th }}$

1. N has birthday in November. T's birthday is immediately after N's.
Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  | N |  |
| $25^{\text {th }}$ |  |  | T |  |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ |  |  | N |  |

2. O and Q have birthdays in month having 31 days. Q's birthday is not on $16^{\text {th }}$ of any month. N and Q have birthday on same date.
This is not possible in case 1 . So, case 2 is correct. Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ |  |  | N | Q |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ | Q |  | N |  |

3. N's birthday is somewhere after O's. There are two birthdays between O and $\mathrm{P} . \mathrm{P}$ and T do not have birthdays on same date. $O$ and $Q$ have birthdays in month having 31 days.
Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O |  |  | T |
| $25^{\text {th }}$ |  | P | N | Q |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O |  |  | T |
| $25^{\text {th }}$ | Q | P | N |  |

4. There are at least two birthdays between $M$ and
T. M does not have birthday in March. $M$ and $S$ have birthdays on same date. $R$ does not like December month.

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O | M | S | T |
| $25^{\text {th }}$ | R | P | N | Q |

Hence, P has birthday on $25^{\text {th }}$ of June.
54. Ans. E.

Person - M, N, O, P, Q, R, S and T
Months - March, June, November and December
Date $-16^{\text {th }}$ or $25^{\text {th }}$

1. N has birthday in November. T's birthday is immediately after N's.
Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  | N |  |
| $25^{\text {th }}$ |  |  | T |  |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ |  |  | N |  |

2. O and Q have birthdays in month having 31 days. Q's birthday is not on $16^{\text {th }}$ of any month. N and Q have birthday on same date.
This is not possible in case 1 . So, case 2 is correct. Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ |  |  | N | Q |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ | Q |  | N |  |

3. N's birthday is somewhere after O's. There are two birthdays between O and P. P and T do not have birthdays on same date. $O$ and $Q$ have birthdays in month having 31 days.
Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O |  |  | T |
| $25^{\text {th }}$ |  | P | N | Q |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O |  |  | T |
| $25^{\text {th }}$ | Q | P | N |  |

4. There are at least two birthdays between $M$ and T. M does not have birthday in March. $M$ and $S$ have birthdays on same date. R does not like December month.

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O | M | S | T |
| $25^{\text {th }}$ | R | P | N | Q |

Hence, five persons have birthdays between O and T.
55. Ans. E.

Person - M, N, O, P, Q, R, S and T
Months - March, June, November and December Date $-16^{\text {th }}$ or $25^{\text {th }}$

1. $N$ has birthday in November. T's birthday is immediately after N's.
Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  | N |  |
| $25^{\text {th }}$ |  |  | T |  |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ |  |  | N |  |

2. O and Q have birthdays in month having 31 days. Q's birthday is not on $16^{\text {th }}$ of any month. N and $Q$ have birthday on same date.
This is not possible in case 1 . So, case 2 is correct. Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ |  |  | N | Q |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ | Q |  | N |  |

3. N's birthday is somewhere after O's. There are two birthdays between $O$ and $P$. $P$ and $T$ do not have birthdays on same date. $O$ and $Q$ have birthdays in month having 31 days.
Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O |  |  | T |
| $25^{\text {th }}$ |  | P | N | Q |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O |  |  | T |
| $25^{\text {th }}$ | Q | P | N |  |

4. There are at least two birthdays between $M$ and
T. M does not have birthday in March. $M$ and $S$ have birthdays on same date. R does not like December month.

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O | M | S | T |
| $25^{\text {th }}$ | R | P | N | Q |

Hence, $M$ has birthday on $16^{\text {th }}$ June.
56. Ans. C.

Person - M, N, O, P, Q, R, S and T
Months - March, June, November and December
Date $-16^{\text {th }}$ or $25^{\text {th }}$

1. N has birthday in November. T's birthday is immediately after N's.
Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  | N |  |
| $25^{\text {th }}$ |  |  | T |  |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ |  |  | N |  |

2. $O$ and $Q$ have birthdays in month having 31 days. Q's birthday is not on $16^{\text {th }}$ of any month. N and Q have birthday on same date.
This is not possible in case 1 . So, case 2 is correct. Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ |  |  | N | Q |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ | Q |  | N |  |

3. N's birthday is somewhere after O's. There are two birthdays between O and P . P and T do not have birthdays on same date. $O$ and $Q$ have birthdays in month having 31 days.

Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O |  |  | T |
| $25^{\text {th }}$ |  | P | N | Q |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O |  |  | T |
| $25^{\text {th }}$ | Q | P | N |  |

4. There are at least two birthdays between $M$ and
T. M does not have birthday in March. $M$ and $S$ have birthdays on same date. R does not like December month.

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O | M | S | T |
| $25^{\text {th }}$ | R | P | N | Q |

Hence, except $P$ all have birthdays in the month having 31 days.
57. Ans. D.

Person - M, N, O, P, Q, R, S and T
Months - March, June, November and December Date $-16^{\text {th }}$ or $25^{\text {th }}$

1. N has birthday in November. T's birthday is immediately after N's.
Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  | N |  |
| $25^{\text {th }}$ |  |  | T |  |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ |  |  | N |  |

2. O and Q have birthdays in month having 31 days. Q's birthday is not on $16^{\text {th }}$ of any month. N and $Q$ have birthday on same date.
This is not possible in case 1 . So, case 2 is correct. Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ |  |  | N | Q |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ |  |  |  | T |
| $25^{\text {th }}$ | Q |  | N |  |

3. N's birthday is somewhere after O's. There are two birthdays between O and $\mathrm{P} . \mathrm{P}$ and T do not have birthdays on same date. $O$ and $Q$ have birthdays in month having 31 days.
Case 1:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O |  |  | T |
| $25^{\text {th }}$ |  | P | N | Q |

Case 2:

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O |  |  | T |
| $25^{\text {th }}$ | Q | P | N |  |

4. There are at least two birthdays between $M$ and
T. M does not have birthday in March. M and S have birthdays on same date. $R$ does not like December month.

|  | March (31) | June (30) | November (30) | December (31) |
| :--- | :--- | :--- | :--- | :--- |
| $16^{\text {th }}$ | O | M | S | T |
| $25^{\text {th }}$ | R | P | N | Q |

Hence, M has birthday in June.
58. Ans. C.

Here we have to go line by line to make the direction table-


So, now we can answer the given questions.
For Q. 19. No information is given that where is the person $U$ is standing. So, we can't predict the direction of $T$ with respect to $U$.
59. Ans. D.

Here we have to go line by line to make the direction table-


So, now we can answer the given questions.
For Q. 20 . No information is given that where is the person $U$ is standing. So, we can't predict the direction of $T$ with respect to $U$.
60. Ans. A.

Here we have to go line by line to make the direction table-


So, now we can answer the given questions.
For Q. 21 . No information is given that where is the person $U$ is standing. So, we can't predict the direction of $T$ with respect to $U$.
61. Ans. B.

From statement I - Q, R/S, T, P
From statement II - Q (50), R (48), S, P/T
62. Ans. E.

From statement I and II together Anu arrive on Thursday.
63. Ans. D.

In this type of question, we should start from statement I alone and then check the statement II alone.
If we are not able to answer the question from both the statements individually, merge both the statements and try to find the answer of the asked question. As, From statement I-
It is given that Faizan is the brother of Neelam who is mother of Rohan.
We can't answer the question using this statement alone because there is no relation given between Mohan and Faizan.
From statement II-
It is given that Mohan has two brothers and Rohan is one of them.
We can't answer the question using this statement alone as there is no relation given between Mohan and Faizan.
From statement I and II-

We have, 'Faizan is the brother of Neelam who is mother of Rohan' and 'Mohan has two brothers and Rohan is one of them'. We find the family tree as,


Although it is clear that Mohan is either nephew or niece of Faizan as gender of Mohan is not given. Hence, both the statements together are not sufficient to answer the question.
64. Ans. D.

In this type of question, we should start from statement I alone and then check the statement II alone.
If we are not able to answer the question from both the statements individually, merge both the statements and try to find the answer of the asked question. As,
From statement I-
It is given that, 'Puneet and Karishma are sisters of Ritik'.
We can't answer the question as the relation between any of four of them with Manvendra is not given.
From statement II-
It is given that, 'Daya is the mother of karishma and wife of Manvendra'.
We can't answer the question using this statement alone as we can only find the daughter of Manvendra who is karishma but not the son. From statement I and II-
Now we have, 'Puneet and Karishma are sisters of Ritik' and 'Daya is the mother of karishma and wife of Manvendra'.
Now, we can make a family tree as-


Since, gender of Ritik is unknown, therefore we can't answer the question using even both the statements together.
65. Ans. D.

In this type of question, we should start from statement I alone and then check the statement II alone.
If we are not able to answer the question from both the statements individually, merge both the statements and try to find the answer of the asked question. As,
From statement I-
Given that, 'Suhana is not standing on any of the extreme end of the row. Zoya is standing to the second left of Rashmi'.
We can't answer the question using this statement alone because there are so many possibilities for the position of Radha.
From statement II-
Given that, 'Zoya is standing in the middle of the row. Suhana is standing at third to the left of Rashmi who is at the extreme right'.

- Ranu/Radha Rashmi Zoya Radha/Ranu Suhana OR
Prashmi Ranu/Radha Zoya Suhana Radha/Ranu We can't answer the question using this statement alone as the position of Radha is not clear.
From statement I and II-
Given that, 'Suhana is not standing on any of the extreme end of the row. Zoya is standing to the second left of Rashmi' and 'Zoya is standing in the middle of the row. Suhana is standing at third to the left of Rashmi who is at the extreme right'. $\Rightarrow$ Rashmi Ranu/Radha Zoya Suhana Radha/Ranu We can't answer the question even after using both the statements together as the position of Radha is still not clear.

66. Ans. A.

59, 60 ,61, 64, 79, 1129
The differences of the series is $1,3,15,106 \ldots$. .
This can be formed on the basis like
$1 \times 1,1 \times 3,3 \times 5,15 \times 7$..so on
Hence the wrong no. is 185.
67. Ans. B.
$330,80,280,120,250,130,240$
The difference of 330 and $80=250$
The difference of 80 and $280=200$
The difference of 280 and $120=160$
The difference of 120 and $250=130$
The difference of 250 and $130=120$
And this difference will be 110, so the wrong no. is 130
68. Ans. C.

291, 147, 75, 39, 22,12,7.5
The series is
$291-147=144$
$147-75=72$
$75-39=36$
$39-22=17$ but this difference will be 18
So the wrong no. is 22
69. Ans. C.

1, 3, 9, 31, 129, 652
The series is
$1 \times 1+2=3$
$3 \times 2+3=9$
$9 \times 3+4=31$
$31 \times 4+5=129$
$129 \times 5+6=651$
Hence the no. 652 is wrong
70. Ans. A.
the series is
$26+1^{2}-1=26$
$26+3^{2}-1=34$
$34+5^{2}-1=58$
$58+7^{2}-1=106$ and so on.....
Hence wrong no. is 27
71. Ans. A.

Non defective pens sold on Thursday $=\frac{75}{15} \times 8=40$
72. Ans. A.
pens sold on Saturday $=30 \times 1.4=42$
Pens sold on Friday and Saturday $=50+42=92$
73. Ans. C.

Required difference $=25+75-50=5$
74. Ans. B.

Pens sold on Sunday $=\frac{75}{125} \times 100=60$
75. Ans. A.

Sale of blue ink pen on Thursday $=45 \times \frac{20}{100}=9$
25
Sale of Red ink pen on Thursday $=(45-9) \times \overline{100}=9$
Sale of Black ink pen on Thursday $=(45-9) \times \frac{75}{100}$ $=27$
Required sum $=9+27=36$
76. Ans. A.

Required difference $=\frac{900}{100} \times(44+24-32)=324$
77. Ans. A.

Required difference $=900 \times \frac{44}{100} \times \frac{19}{18}-900 \times \frac{24}{100} \times \frac{13}{12}$ $=184$
78. Ans. D.

Required difference $=900 \times \frac{32}{100} \times \frac{9}{16}-900 \times \frac{44}{100} \times \frac{1}{18}=4$
79. Ans. C.

Required ratio
=504:36
14:1
80. Ans. A.

Total no. of employees in company $D=$
$900 \times \frac{24}{100} \times \frac{1}{12} \times 1.25-900 \times \frac{24}{100} \times 1.5=297$
81. Ans. E.

Quantity I:
Let speed of current=x
Speed of boat $=x+5 x$
Downstream speed $=7 x$
$\frac{63}{7 x}=3$
X=3
Upstream speed $=6 x-x=5 x=15 k m p h$
Quantity II- 15 km/hr
Hence QuantityI = Quantity II or No relation
82. Ans. A.

Let no. be $x, x+2, x+4, x+6 \ldots .$.
Quantity $I=x+2+x+14=2 x+16$
Quantity $I I=x+4+x+10=2 x+14$
Hence
Quantity I > Quantity II
83. Ans. A.

Qunatity $1=x=-3,2$
Qunatity $11=y=-4,-3$
Qunatity1 $>$ Qunatity11
84. Ans. A.

Quantity I - Rs. 550
Quantity II - let Marked price of article=M
$M \times \frac{7}{8}=1500$ 1200
$M=7$
Hence Quantity I > Quantity II
85. Ans. A.

Quantity $\mathrm{I}=10$ days
Quantity II=12 days
Hence Qunatity1 $>$ Qunatity11
86. Ans. A.

Let $r$, $h$ be the dimensions of cylinder
And $\mathrm{R}, \mathrm{H}$ be the dimensions of the cone
ATQ $h=H=10$
$\pi r_{2+}{ }^{\frac{1}{3}} \pi \mathrm{R}^{2} \mathrm{~h}=2190 \pi$
$r=12$
$\mathrm{R}=15$
So r:R=4:5
87. Ans. A.
$?=20$
88. Ans. B.
? $=17$
89. Ans. A.
?=147
90. Ans. A.
$?=5$
91. Ans. B.
$?=220$
92. Ans. E.

Ratio of profit of $A, B$ and $C$ in scheme $S_{1}$ $80000 \times 2: 30000 \times 3: 50000 \times 5$
16:9:25
In scheme $\mathrm{S}_{1}$
Profit of $A=\times 200000=64000$
Profit of $B=\times 200000=36000$
Profit of $C=\times 200000=100000$
Ration of profit of $A$ and $C$ in scheme $S_{2}$
$3000010000 \times 3$
12:3
Profit of $A$ in scheme $S_{2}=\times 90000=72000$
Profit of $B$ in scheme $S_{2}=\times 90000=18000$
$64000 * 100 / 18000=3359 \%$
93. Ans. A.
$[(80000 * R * 3) / 100]-[3000 *\{(R+5) / 100\}]=30000$
R=15\%
94. Ans. B.

Total investment of $A=110000$
Total profit of $A=136000$
Rate of interest $=44 \%$
$\mathrm{CI}=\times(136000+110000)=108240$
95. Ans. B.
.Required average $==41000$
96. Ans. D.
.Required ratio $=(36000+10000): 100000$

$$
=23: 50
$$

97. Ans. A.
.Total numbers of ways $\rightarrow 7$ !
Favorable numbers of ways $\rightarrow 5$ ! $\times 3$ !
Probability $\rightarrow=$
98. Ans. D.

Let present age of $A$ be $x$ yrs\& present age of $B$ be y yrs.
ATQ
$X+y=88+12$
$x+y=100$
$x-18=y-6$
$x-y=12$
Solving (i) \& (ii)
$X=56$
Age of A 2 year here $=58$ yrs
99. Ans. A.
.ATQ
=
$X=8$
Sum of red and blue ball $=8+6=14$
100. Ans. A.

Let speed of train $A$ be $S$
$\mathrm{S} \times 18=360$
$S=20 \mathrm{~m} / \mathrm{s}$
$A: B=4: 5$
$A: B=4: 5$
Speed of $B=25 \mathrm{~m} / \mathrm{s}$
Length of train $B=25 \times 12=300 \mathrm{~m}$

