IBPS Clerk Model Paper

English language

(1-5) **Direction:** Read the given passage carefully and answer the questions that follow. Certain words are printed in bold to help you locate them while answering some of these.

Once synonymous with long work hours, Japanese companies are beginning to embrace — or at least consider — the idea of a four-day work week. This is part of a global trend. One of the experts observed that if one reduces work hours, people are able to focus their attention more effectively. They end up producing just as much, often with higher quality and creativity, and they are also more loyal to the organizations that are willing to give them the flexibility to care about their lives outside of work.

In Japan, the government is pushing companies to change the way they work. The Prime Minister has made work-style reform a key priority in the hopes of giving employees more flexibility and enabling them to balance work with care-giving or treating their own illnesses, as the country's population ages and workforce continues to shrink. For employees, it obviously allows for a more diverse and flexible way of working. At least one case suggests that a shorter week makes for happier workers. It was found that its experiment led to lower stress, higher levels of job satisfaction and improved work-life balance among its 240 employees.

For employers, providing different work styles is a way to attract and retain talented employees, an important feature given Japan's diminishing domestic workforce. This demographic change makes it important for employers to maintain employees' **vitality**. By maintaining it, employers can prevent resignations, serious accidents and abusive behavior."

Three days a week away from the workplace may sound good on paper, but there are potential drawbacks. One is whether workers choosing the four-day week would receive discriminatory treatment in terms of pay raises and promotions, compared with those who work five days. Another worry is whether a shorter workweek may not necessarily lead to more free time. Consider the example of an individual working four days a week for a total of 40 hours at an office in the Tokyo area, an hour away from home. In this scenario, each workday would be 10 hours. Add to that an hour for lunch, as well as the two hours of commuting. The result is little free time on workdays, says Hiroki Sato, a professor of human resources management at Chuo University's Graduate School of Strategic Management.

1.According to the passage, which of the following is **not** a possible drawback of having a "four-day work week"?

I. Shorter workweek does not necessarily mean more free time.

II. The ones availing the four-day week would discriminate against and look down upon those not availing it.

III. The provisions as on paper cannot be entirely executed in reality

Only I

Only II

Only II and III Only III None of these

Solution:

Note that you have to find the points which are **not** the drawbacks of "four-day work week" as discussed in the passage. The last paragraph of the passage discusses the drawbacks of the "four-day work-week" system. They are:

- 1. Whether workers choosing the four-day week would receive discriminatory treatment in terms of pay raises and promotions, compared with those who work five days.
- 2. Whether a shorter workweek may not necessarily lead to more free time.

Thus, alternative I is correct. II is incorrect as the ones availing the benefit will not discriminate against the ones not availing it. The problem is that, the process may lead to discriminatory treatment in terms of pay raises and

promotions. III is not discussed as a possible drawback of "four-day work week" in the passage, thus it can be eliminated.

2. Which of the following word is not similar in meaning to "vitality" as used in the passage?

Energy Drive Liveliness Construct Vibrancy

Solution:

Note that we have to find the word dissimilar in meaning to "vitality", which means energy. Options A, B, C and E are similar in meaning to the word. "Construct" means to build and is not similar in meaning to "vitality".

3. What does the phrase "**Once synonymous with long work hours**" mean with reference to the context of the given passage?

Japanese employees are highly productive as they put in extra hours of work. Japanese companies were known for long working hours.

Japanese companies exploit their employees to work extra hours.

The technological growth of Japan can be attributed to long working hours.

None of these

Solution:

To be synonymous to something means that two things share similar characteristics. The opening lines of the passage, "Once synonymous with long work hours", means that the Japanese companies were once known for long working hours. Thus, option B is the correct answer.

4. Which of the following is True with respect to the passage?

The shrinking workforce is a concern in Japan.

It was found that a four-day work week allows employees to focus their attention more effectively.

The government of Japan is concerned about the personal well-being of the employees.

The four day work week strategy facilitates employees to retain talented employees.

All the above

Solution:

All the statements are true with respect to the passage. Refer to the following lines:

A. "For employers, providing different work styles is a way to attract and retain talented employees, an important feature given Japan's diminishing domestic workforce". Here, it is implied that the concerned system acts as a tool to attract and retain employees, given that there is a declining domestic workforce. In the second paragraph, it has already been mentioned that "The Prime Minister has made work-style reform a key priority as the country's population ages and workforce continues to shrink." So, the shrinking workforce is definitely a concern in Japan.

B. "One of the experts observed that if one reduces work hours, people are able to focus their attention more effectively".

C. "The Prime Minister has made work-style reform a key priority in the hopes of giving employees more flexibility and**enabling them to balance work with**caregiving**or treatingtheir own illnesses**." Thus, the government of Japan is concerned about the personal well-being of the employees.

D. "For employers, providing different work styles is a way to attract and retain talented employees, an important feature given Japan's diminishing domestic workforce."

Thus, option E is the correct answer.

5. From the given alternatives, choose the valid observations made by experts with respect to the 'four-day work week' system.

I. With the same output as in a five- day work week system, the resultant quality and creativity also often gets enhanced.

II. The employees were found to invest holidays in creative, progressive and medical aspects of their life, while ignoring the professional responsibilities.

III. The system lowers stress, promotes job satisfaction and improves work-life balance in the employees.

Only I Only II Both I and II Both I and III All of these

Solution:

The passages discuss several observations based on with respect to the fourday work week. Of these only alternatives I and II have been discussed in the passage, while II is completely invalid. Refer to the following lines of the passage:

1. "One of the experts observed they end up producing just as much, often with higher quality and creativity..." (1st paragraph)

2. "At least one case suggests that a shorter week makes for happier workers. It was found that its experiment led to lower stress, higher levels of job satisfaction and improved work-life balance among its 240 employees" (2ndparagraph)

6. **Direction:** In this question, two **columns I and II** and three sentences are given, which are divided into two parts. **Column I (A, B and C)** consists of first half of each sentence and **Column II (D, E and F)** consists of second half of each sentence. Match column I with column II, so that the sentences formed are both meaningful and grammatically correct. Choose the option as your answer.

...Read More

(I)

A) Server is a computer which provides

B) When we lose something

C) The abbreviation P.T.I. stands

(II)

D) for Press Trust of India.

E) services to other computers.

F) we understand its value.

A-E C-F A-E, B-F, C-D B-E none of the above

Solution:

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 note that A ends in 'provides' and E answers the question what..which is the 'services' so contextually and grammatically they are pair. In pair B-F 'When we lose something we understand its value.' 'something' here is used to denote ant general thing losing which we realize the value. So, B and E are a pair. Also C and D can be joined to complete the phrase 'stands for', thus making a grammatically correct statement.

As all the pairs are grammatically and contextually correct, so the correct choice is option C.

7. **Direction:** In this question, two **columns I and II** and three sentences are given, which are divided into two parts. **Column I (A, B and C)** consists of first half of each sentence and **Column II (D, E and F)** consists of second half of each sentence. Match column I with column II, so that the sentences formed are both meaningful and grammatically correct. Choose the option as your answer.

(I)

A) If you lie constantly no

B) Life is short

C) She is a beautiful person,

(II)

D) live to the fullest.

E) one will trust you.

F) hence she has many followers.

A-F C-F A-E, B-D, C-F B-E none of the above

Solution:

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 we have option A, B, C and D, E, F. Hence when we pair the options meaningfully then we get this 'A-E, B-D, C-F. Thus, we see the pair A-E 'If you lie constantly no one will trust you.' It is contextually and grammatically correct. In pair B-D 'Life is short live to the fullest.' In pair C-F 'She is a beautiful person, so she has many followers.' Here it is contextually and grammatically correct .

Hence the correct choice is option C.

8. Direction: In this question, two columns I and II and three sentences are given, which are divided into two parts. Column I (A, B and C) consists of first half of each sentence and Column II (D, E and F) consists of second half of each sentence. Match column I with column II, so that the sentences formed are both meaningful and grammatically correct. Choose the option as your answer.

(I)

A) The Sun shine brightly

B) The thief came to

C) She new the

(II)

D) during the day.

E) steel her diamond necklace.

F) girl very well.

A-D C-F A-D, C-E B-E None of the above

Solution:

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 we have option A, B, C and D, E, F. Hence when we pair the options meaningfully then we get this 'A-D, C-F, B-E'. Thus we see the pair A-D 'The Sun shine brightly during the day.' It is contextually and grammatically incorrect. Here the word 'Sun' must take a singular verb with it. In pair B-E 'The thief came to steel her diamond necklace.' Here we see the word 'steel' has to be replaced with 'steal'. In pair C-F 'She new the girl very well.' Here we see the word 'new' has to be replaced with 'knew'. Thus none are grammatically correct.

Hence the correct choice is option E.

9. **Direction:** In this question, two columns I and II and three sentences are given, which are divided into two parts. Column I (A, B and C) consists of first half of each sentence and Column II (D, E and F) consists of second half of each sentence. Match column I with column II, so that the sentences formed are both meaningful and grammatically correct. Choose the option as your answer.

I.

A) Cooking for our family

B) Having green tea is

C) Don't forget to leave the door

II.

D) Gives us a happiness

E) good for heath

F) open for fresh air come in

A-D C-D, B-E A-D and B-E, C-F A-D, B-E A-F and C-D

Solution:

We must join two parts of a sentence in a way that they form a meaningful and grammatically correct sentence. Part A and D makes a correct pair. We can figure that out by reading them one after another. Similarly, B and E makes a correct pair. Part C and F could make a right pair, had part F been grammatically correct.

Therefore, the correct answer choice is option D.

10. Direction: In this question, two columns I and II and three sentences are given, which are divided into two parts. Column I (A, B and C) consists of first half of each sentence and Column II (D, E and F) consists of second half of each sentence. Match column I with column II, so that the sentences formed are both meaningful and grammatically correct. Choose the option as your answer.

(I)

A) We gifted her crystal pendent

B) Life is full of

C) Rohit and Priya are like

(II)

D) on her Birthday.

E) hurdles and temptation.

F) Beauty and the Beast.

A-D C-F A-D, B-E, C-F B-E none of the above

Solution:

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 we have option A, B, C and D, E, F. Hence when we pair the options meaningfully then we get this 'A-D, B-E, C-F'. Thus we see the pair A-D 'We gifted her crystal pendent for her birthday.' It is contextually and grammatically correct. In pair B-E 'Life is full of hurdles and temptation.' In pair C-F 'Rohit and Priya are like Beauty and the Beast.' Here it is contextually and grammatically correct.

Hence the correct choice is option C.

11. **Direction**: In the given question, a sentence is divided into five parts out of which the last part is correct. Out of the remaining four, there are errors in three parts. Choose the part which doesn't have an error. If all the four parts are correct, mark E, i.e., "All are correct" as the answer.

The Food and Drug Administration (FDA) announce (A)/ that it has approving a 'breakthrough device' (B)/ that has the potentially to match cancer (C)/ patients with individualized treatment regiments (D)/ with just one test.

- A
- В
- С
- D

All are correct

Solution:

The error in A is the incorrect use of the verb 'announce'. The singular form of the verb 'announces' (in present) or 'announced' (in past) should be used here, as it is referring to a singular organization (FDA).

The error in B is the incorrect use of verb 'approving' and needs to be replaced with the past participle form of the verb 'approved'. This is because past participle form of verb should be used with the present perfect tense construction (has + verb).

The error in C is the incorrect use of the adverb 'potentially' and needs to be replaced with the noun 'potential'. This is because it forms the object of the verb.

12. **Direction:** In the given question, a sentence is divided into five parts out of which the last part is correct. Out of the remaining four, there are errors in three parts. Choose the part which doesn't have an error. If all the four parts are correct, mark E, i.e., "All are correct" as the answer.

The global credit crunch has caused investment banks (A)/ to crumble, stock markets to plunge and South Korean (B)/ parents to wonder if they can still (C)/ afford to be the world's largest exporter of (D)/ **foreign students to U. S. schools.**

A B C D All are correct

Solution:

The sentence is grammatically and contextually correct.

In part A, 'has' is the correct form of verb according to the subject verb agreement. Since, the subject is singular verb used should be singular in form. In part B, 'to crumble' is the correct form of infinitive as 'to' is followed by the first form of verb.

In part C, 'to' is the form of preposition as 'to wonder' is the correct form of phrasal verb.

In part D, 'of' is the correct form of preposition as 'exporter of' is the correct form of phrasal verb.

13. **Direction:** In the given question, a sentence is divided into five parts out of which the last part is correct. Out of the remaining four, there are errors in three parts. Choose the part which doesn't have an error. If all the four parts are correct, mark E i.e. All are correct as the answer.

Living on major roadways (A)/ were associated with increased risk (B)/ of cardiovascular morbidity and mortality, (C)/ presumably from exposure to elevated level (D)/ of traffic-related air and/or noise pollution.

A B C D All are correct

Solution:

Only part C is correct.

The preposition 'on' has been incorrectly used in part A of the sentence. It implies that people are living on the road. The correct preposition here is 'near'.

In part B, the usage of the auxiliary verb 'were' is incorrect. "Living" is a singular noun and must have a singular to agree with. Thus, 'is' or 'has been' should be used o allow the sentence to be grammatically correct. In part D, instead of the singular 'level', the plural 'levels' should be used to convey a clear meaning.

14. **Direction:** In the given question, a sentence is divided into five parts out of which the last part is correct. Out of the remaining four, there are errors in three parts. Choose the part which doesn't have an error. If all the four parts are correct, mark E, i.e., "All are correct" as the answer.

Although Soviet communism collapse in 1989 (A)/ and China has significantly retreated from many aspects of Maoist communism in practice, (B)/ the concept of socialism remain in various forms (C)/ ranging from democratic socialist governments on Latin America and Europe (D)/ to industrialized welfare states.

A B C D All are correct

Solution:

Only part B is correct.

There is an error in the tense used in part A. Since the 'collapse' took place in the past, the past tense form 'collapsed' should be used.

The error in part C of the sentence is the lack of subject-verb agreement. Since 'concept' is singular, it should be followed by the singular verb 'remains' to maintain the subject-verb agreement.

The preposition 'on' has been incorrectly used in part D of the sentence. Instead of 'on' the preposition 'in' should be used to show location with the country range.

Note: In the highlighted part, "to" has been used as a preposition, to complete the structure 'ranging from...to'.

15. **Direction:** In the given question, a sentence is divided into five parts out of which the last part is correct. Out of the remaining four, there are errors in three parts. Choose the part which doesn't have an error. If all the four parts are correct, mark E, i.e., "All are correct" as the answer.

Socialism have also been influential (A)/ on other political ideologies such that radical environmentalism, (B)/ various anarchist movements, (C)/ but even as part of economically capitalist countries (D)/ **in the form of social welfare policies.**

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A
B
C
D
All are correct
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Solution:

Only part C is correct.

'Have' has been incorrectly used in the sentence. It is a present tense verb and generally used with plural nouns. But 'socialism' is a singular noun andhence

the correct tense to be used here is 'has'.

'Radical environmentalism' is an appositive. An appositive is a word group that explains or clarifies through example the words preceding it. "Such that" is a subordinating conjunction. It introduces a subordinate clause. The correct phrase to be used here is "such as" since it introduces an appositive. The conjunction 'but' has been incorrectly used in part D of the sentence. The example of 'economically capitalist countries' is equal in importance to the preceding examples and thus should be joined by the conjunction 'and'. https://www.freshersnow.com/previous-year-question-papers/

(16-20) **Direction:** In the following passage, there are blanks each of which has been numbered. These numbers are printed below the passage and against each five groups of words have been suggested, one of which fills the blanks appropriately.

In a major win for the govt's Aatamnirbhar India initiative, Apple (16) of one of (17), the iPhone 11, at Chennai's Foxconn plant. This is the first time Apple has manufactured a top-of-the-line model in India. Commerce Minister Piyush Goyal announced the news on Twitter on Friday. Goyal wrote, "Significant boost to Make in India! Apple has started manufacturing iPhone 11 in India, (18) a top-of-the-line model for the first time in the country." (19), the Cupertino-based tech giant had started assembling the iPhone XR in India in 2019. In 2017, Apple had started the (20) the Apple iPhone SE 2016 in the Bangalore plant.

16. Choose the correct answer from the given options to fill the blanks which are numbered.

had manufactured have been manufacturing ceased all manufacturing has started manufacturing will be manufactured

Solution:

In the second sentence, we see that "This is the first time Apple has manufactured..." indicates that this is an event of the present and tense should be present tense. So, options A, C & E should be negated. Since apple has started manufacturing already, the correct tense present perfect (has started). Hence, the correct answer is D. 17. Choose the correct answer from the given options to fill the blanks which are numbered.

Their flogged products its flannel items its flagship devices it's flagged phones their flopped gadgets

Solution:

"Apple" since it is a single company, is a singular noun. So, using "their" is wrong. We can thus, negate options A & E. Option D is also wrong as we need to show possession of "it" by Apple. This means that the answer is B or C.

Flannel refers to a kind of clothing. Since, we are talking about a mobile phone, "flagship" is the best suited adjective. Hence, the correct answer is C.

18. Choose the correct answer from the given options to fill the blanks which are numbered.

bringing had brought have been bringing should had brought up may bring

Solution:

The first part of the sentence states an event. The second part states the process by which the said event took place. The verb in the blank should denote the process and thus, should be in continuous tense without any auxiliary verb. Here, the continuous verb (bringing) will act as a gerund. Hence, the correct answer is A.

19. Choose the correct answer from the given options to fill the blanks which are numbered.

following this prior to this earlier that year about the same time it is likely that

Solution:

The passage is talking about the current year (2020). The sentence is, however, talking about the year before it (2019). So, options A, C & D cannot fit in the blank.

Since, the sentence is stating a fact, we cannot use "likely", as in option E, to show probability. Hence, the correct answer is B.

20. Choose the correct answer from the given options to fill the blanks which are numbered.

discrete marketing in devoted manufacture in doubtful production of defunct factory by domestic manufacturing of

Solution:

Options A & B use "in" at the end of their phrase. If either of them is used in the blank, it would be repletion of the preposition "in", as it is used later in the sentence (in the Bangalore plant). So, the answer is C, D or E.

Factories are not setup under doubtful (feeling uncertain about something) conditions. Since the factory has just started, it cannot be defunct (no longer existing or functioning). So, options C & D are wrong.

Hence, the correct answer is E.

(21-25) **Direction:** Given below are six statements A, B, C, D, E and F, which when arranged in the correct order, form a coherent and meaningful paragraph. The sentence marked D is fixed and would fit in the fourth position. Rearrange the other statements in a proper sequence to form a meaningful paragraph, then answer the questions that follow.

A) The deadly Coronavirus epidemic in China has become a global healthcare crisis, and even though the number of new cases reported daily have reduced significantly this week, it has been hard to predict how long it will take to completely contain the disease.

B) In Maharashtra's Sindhudurg district, for instance, locals of the port town of Redi have been terrified by the docking of a Singaporean cargo ship carrying ten Chinese crew members.

C) Since the outbreak in January, China has placed all of Wuhan in a state of lockdown, forcing residents to stay indoors while converting entire stadiums into makeshift quarantine camps.

D) While Chinese authorities work against time to battle the virus and travellers from China are being routinely screened and tested at airports around the world, a general panic has set in about Coronavirus among Indians.

E) The virus, officially named COVID-19 by the World Health Organisation, is believed to have originated in a live seafood market in Wuhan, a city in eastern China's Hubei province.

F) Even though the Chinese nationals tested negative for Coronavirus, fear among local residents forced the state health department to test them again.

21. Which of the following will be the first statement after rearrangement?

С	
Е	
В	
F	
Α	

Solution:

Sentence D states that "a general panic has set in about Coronavirus among Indians". Sentence B gives an example for this. So, sentence B will come after D. Sentence F states how the authorities reacted to the incident mentioned in B, and thus, will come after B.

Of the remaining sentences (A, C & E), only A doesn't require any prior information to the terms mentioned in it. So, it will act as the introductory sentence and will come first in the sequence. Sentence E further explains the virus by giving it a name. It also states the origin of the virus, the city of Wuhan. So, it will come after E. Sentence C will come after E as it mentions the reaction of the authorities to outbreak in Wuhan. Since, D is fixed at the fourth position, AEC will come before D. So, the final sequence becomes AECDBF.

22. Which of the following will be the fifth statement after rearrangement?

C E B F A

Solution:

Sentence D states that "a general panic has set in about Coronavirus among Indians". Sentence B gives an example for this. So, sentence B will come after D. Sentence F states how the authorities reacted to the incident mentioned in B, and thus, will come after B.

Of the remaining sentences (A, C & E), only A doesn't require any prior information to the terms mentioned in it. So, it will act as the introductory sentence and will come first in the sequence. Sentence E further explains the virus by giving it a name. It also states the origin of the virus, the city of Wuhan. So, it will come after E. Sentence C will come after E as it mentions the reaction of the authorities to outbreak in Wuhan. Since, D is fixed at the fourth position, AEC will come before D. So, the final sequence becomes AECDBF.

23. Which of the following will be the third statement after rearrangement?

C E B F A

Solution:

Sentence D states that "a general panic has set in about Coronavirus among Indians". Sentence B gives an example for this. So, sentence B will come after D. Sentence F states how the authorities reacted to the incident mentioned in B, and thus, will come after B.

Of the remaining sentences (A, C & E), only A doesn't require any prior information to the terms mentioned in it. So, it will act as the introductory sentence and will come first in the sequence. Sentence E further explains the virus by giving it a name. It also states the origin of the virus, the city of Wuhan. So, it will come after E. Sentence C will come after E as it mentions the reaction of the authorities to outbreak in Wuhan. Since, D is fixed at the fourth position, AEC will come before D. So, the final sequence becomes AECDBF.

24. Which of the following will be the second statement after rearrangement?

C E B F A

Solution:

Sentence D states that "a general panic has set in about Coronavirus among Indians". Sentence B gives an example for this. So, sentence B will come after D. Sentence F states how the authorities reacted to the incident mentioned in B, and thus, will come after B.

Of the remaining sentences (A, C & E), only A doesn't require any prior information to the terms mentioned in it. So, it will act as the introductory sentence and will come first in the sequence. Sentence E further explains the virus by giving it a name. It also states the origin of the virus, the city of Wuhan. So, it will come after E. Sentence C will come after E as it mentions the reaction of the authorities to outbreak in Wuhan. Since, D is fixed at the fourth position, AEC will come before D. So, the final sequence becomes AECDBF.

25. Which of the following will be the last statement after rearrangement?

C E B F A

Solution:

Sentence D states that "a general panic has set in about Coronavirus among Indians". Sentence B gives an example for this. So, sentence B will come after D. Sentence F states how the authorities reacted to the incident mentioned in B, and thus, will come after B.

Of the remaining sentences (A, C & E), only A doesn't require any prior information to the terms mentioned in it. So, it will act as the introductory sentence and will come first in the sequence. Sentence E further explains the virus by giving it a name. It also states the origin of the virus, the city of Wuhan. So, it will come after E. Sentence C will come after E as it mentions the reaction of the authorities to outbreak in Wuhan. Since, D is fixed at the fourth position, AEC will come before D. So, the final sequence becomes AECDBF.

26. **Direction:** Which of the following phrases (i), (ii), and (iii) given below each sentence should replace the phrase printed in bold letters to make the sentence grammatically correct? Choose the best option among the five given alternatives that reflect the correct use of phrase in the context of the grammatically correct sentence. If the sentence is correct as it is, mark (E) i.e., "No correction required" as the answer.

Nabin's car was badly damaged in the accident and he was angry about what had happened, **but he soon realized that their was no use crying over spilt milk**.

i. but he soon realized that there was no use crying on spilt milk.ii. but he soon realized that there was no use crying over spilt milk.iii. unless he soon realized that there was any use crying over spilt milk.

Only i Only ii Only iii ii and iii No correction required

Solution:

Instead of the reflexive pronoun 'their', 'there' should be used. The idiom 'crying over spilt milk' is used to mean to express regret about something that has already happened or cannot be changed. Thus, option B is the correct answer.

27. **Direction:** Which of the following phrases (i), (ii), and (iii) given below each sentence should replace the phrase printed in bold letters to make the sentence grammatically correct? Choose the best option among the five given alternatives that reflect the correct use of phrase in the context of the grammatically correct sentence. If the sentence is correct as it is, mark (E) i.e., "No correction required" as the answer.

The palaeontologist claimed that he had found a most unique dinosaur fossil but it turned out to be a mare's nest.

i. claimed that he has found a unique dinosaur fossil but it turns out to be a mare's nest.

ii. claims that he had found a unique dinosaur fossil but it turned out to be a mare's nest.

iii. claimed that he had found a unique dinosaur fossil but it turned out to be a mare's nest.

Only i Only ii Only iii ii and iii No correction required

Solution:

The correct answer is 'claimed that he had found a unique dinosaur fossil but it turned out to be a mare's nest'.

The entire exchange is taking place in the past. Thus, the past perfect tense is correct.

Thus, option C is the correct answer.

'A mare's nest' is English idiom which is used to suggest a false discovery, illusion, or deliberate hoax.

28. **Direction:** Which of the following phrases (i), (ii), and (iii) given below each sentence should replace the phrase printed in bold letters to make the sentence grammatically correct? Choose the best option among the five given alternatives that reflect the correct use of phrase in the context of the grammatically correct sentence. If the sentence is correct as it is, mark (E) i.e., "No correction required" as the answer.

I had never done anything like this before, **but I just jumped in with both** hands and learned it in no time.

i. but I just jumped in with both feet and learned it in no timeii. but I just jumped beneath with both feet and learned it in any time.iii. but I just jumped in with both feet and got learned it in no time.

Only i Only ii Only iii ii and iii No correction required

Solution:

The correct answer is 'but I just jumped in with both feet and learned it in no time'. Nobody jumps with hands. 'To jump in with both feet' means to become involved with something very quickly, enthusiastically, and completely. To commit completely to something without carefully thought about the situation beforehand.

29. **Direction:** Which of the following phrases (i), (ii), and (iii) given below each sentence should replace the phrase printed in bold letters to make the sentence grammatically correct? Choose the best option among the five given alternatives that reflect the correct use of phrase in the context of the grammatically correct sentence. If the sentence is correct as it is, mark (E) i.e., "No correction required" as the answer.

My partner **stole my thunder when me told the professor that he did all the work on** the presentation.

i. steal my thunder when he told the professor that he did all the work on ii. stole my thunder when he tells the professor that he did all the work on iii. stole my thunder when he told the professor that he did all the work on

Only i Only ii Only iii ii and iii No correction required

Solution:

In the given sentence the use of the personal pronoun 'me', where actually we need a nominative pronoun to refer to the subject 'partner', which can be well sufficed by 'he'. Also note that

"To steal someone's thunder" is an English idiomatic expression that suggests 'to win praise for oneself by pre-empting someone else's attempt to impress'. As the sentence is in past tense thus, past tense of steal is used. Thus, option C is the correct answer.

30. **Direction:** Which of the following phrases (i), (ii), and (iii) given below each sentence should replace the phrase printed in bold letters to make the sentence grammatically correct? Choose the best option among the five given alternatives that reflect the correct use of phrase in the context of the grammatically correct sentence. If the sentence is correct as it is, mark (E) i.e., "No correction required" as the answer.

The other children were always picking up on Charlie because of his red hair.

i) were used to picking on Charlie forii) picked up Charlie because ofiii) were always picking on Charlie because of

Only i Only ii Only iii ii and iii No correction required

Solution:

The answer is 'were always picking on Charlie because of'. 'Pick on' is a phrasal verb. It means to blame, punish or bully someone. Hence, option C is the correct answer.

Quantitative aptitude

31. **Direction**: What should come in place of the question mark ('?') in the following number series?

100, 105, 112, 121, 132, ? 145 150 140 155 160

Solution:

Pattern of the series is:

 $100 - 2^{2} + 3^{2} = 105$ $105 - 3^{2} + 4^{2} = 112$ $112 - 4^{2} + 5^{2} = 121$ $121 - 5^{2} + 6^{2} = 132$

 $132 - 6^2 + 7^2 = 145$

32. **Direction**: What should come in place of the question mark ('?') in the following number series?

19, 26.5, 36, 47.5, ?, 76.5 51 59 71 81 61

Solution:

Pattern of the series is:

 $5 \times 2 + 9 = 19$

7×2.5 +9 = 26.5

9×3 + 9= 36

11× 3.5 + 9= 47.5

 $13 \times 4 + 9 = 61$

15×4.5+ 9 =76.5

33. Direction: What should come in place of the question mark ('?') in the following number series?

28, 17, 22, 40, 89, ?, 713.50 222.50 233.50 244.50 235.50 232.50

Solution:

Pattern of the series is:

 $28 \times .5 + 3 = 17$ $17 \times 1 + 5 = 22$ $22 \times 1.5 + 7 = 40$ $40 \times 2 + 9 = 89$ $89 \times 2.5 + 11 = 233.50$ $233.5 \times 3 + 13 = 713.50$

34. **Direction**: What should come in place of the question mark ('?') in the following number series?

5, 17, 35, 61, 97, 145, ? 204 205 206 207 208

Solution:

Pattern of the series is:

5+2² +8= 17 17 +3² +9= 35 35 +4² +10=61

61+5² +11=97

97+6² +12=145

 $145 + 7^2 + 13 = 207$

35. **Direction:** What should come in place of the question mark '?' in the following number series?

```
22680,3240,540,108,27,?
9
8
5
3
13
```

Solution:

Series Pattern

22680	22680
22680 ÷ 7	3240
3240 ÷ 6	540
540 ÷ 5	108
$108 \div 4$	27
27÷3	9

Hence, 9 should come in place of Question mark.

36. **Direction**: What value will come in place of the question mark (?) in the following question?

83% of 1600 + $\sqrt[3]{1331} - \frac{5}{8}$ of 128 + 6⁵ ÷ 81 = ? 1376 1365 1355 1387 1348

Solution:

```
= \frac{83}{100} \times 1600 + 11 - \frac{5}{8} \times 128 + \frac{6^5}{81}= 83 \times 16 + 11 - 5 \times 16 + 96= 1328 + 11 - 80 + 96= 1435 - 80
```

= 1355

37. **Direction**: What value will come in place of the question mark (?) in the following question?

 $\sqrt{7225} + \sqrt{?} + 13954.55 - 6954.55 = 7999.75 + 85.25$ 100000 10000000 10⁶ 1100000 None of these

Solution:

 $\sqrt{7225} + \sqrt{?} + 13954.55 - 6954.55 = 7999.75 + 85.25$

 $85 + \sqrt{?} + 7000 = 7999.75 + 85.25$

 $85 + \sqrt{?} + 7000 = 8085$

√(?) = 8085 - 7085

√(?) = 1000

 $? = 1000000 = 10^{6}$

Hence, option C is correct.

is correct.

38. **Direction:** What value will come in place of the question mark (?) in the following question?

?% of (17895.35 - 16764.10) = 10² + 9² 16 15 12 13 None of these

Solution:

?% of $(17895.35 - 16764.10) = 10^{2} + 9^{2}$?% of 1131.25 = 100+81 $\frac{?}{100} \times 1131.25 = {}_{181}$? = $\frac{18100}{1131.25}$? = 16 Hence, option A is correct.

39. **Direction**: What value will come in place of the question mark (?) in the following question?

$$3\frac{1}{3} - ? \times \frac{3^2}{2^3} \div \frac{27}{18} = 2\frac{5}{6}$$

Solution:

```
3\frac{1}{3} - ? \times \frac{3^{2}}{2^{3} \div 18} = 2\frac{5}{6}3\frac{1}{3} - ? \times \frac{9}{8\times 27} = 2\frac{5}{6}3\frac{1}{3} - ? \times \frac{9}{8\times 27} = 2\frac{5}{6}3\frac{1}{3} - \frac{5}{2^{6}} = ? \times \frac{9}{8\times 27} = 2\frac{18}{27}
```

$$\frac{1}{2} = ? \times \frac{3}{4}$$
$$\frac{2}{3}$$

40. **Direction:** What value should come in place of question mark (?) in the following question

37.5 % of 64 + 7.69% of 52 = ? + 5.88% of 340 10 15 **8** 25 35

Solution:

This question can easily be solved by the percentage value of all the given terms

37.5% = 3/8 7.69% = 1/13 5.88% = 1/17So, $\rightarrow 3/8 * 64 + 1/13 * 52 = X + 1/17 * 340$ $\rightarrow 24 + 4 = ? + 20$

41. The compound interest on a certain sum of money at a certain rate per annum for two years is Rs. 12300 and the simple interest on the same amount of money at the same rate for 3 years is Rs. 18000. Then the sum of money is?

Rs. 140,000

Rs. 120,000 Rs. 160,000 Rs. 155,000 None of these

Solution:

Simple interest for 3 years is Rs 18000

: Simple interest for two years = Rs 12000

Difference between SI and CI for two years 12300-12000 =Rs 300

Rate =
$$\frac{300}{6000} \times 100 = 5\%$$

 $\frac{P \times 5 \times 3}{100} = 18000$

Principal = Rs 120,000

42. Ajay, Amit and Sameer initially have some amount of money such that if Amit gives 20% of his share to Ajay, then share of both becomes equal and when Sameer gives 10% of his share to Amit, then share of both becomes equal. Initially, if Sameer has Rs.2400, then what is the ratio of share of Ajay to share of Amit?

- 3 : 5
- 2:3
- 5:7
- 4:5
- 4:7

Solution:

Sameer = 2400

According to the data in the question, we get

Amit + 10% of 2400 = 2400 - 10% of 2400

Amit + 240 = 2400 – 240

Amit = 2400 – 480 = Rs. 1920

And,

Ajay + 20% of 1920 = 1920 - 20% of 1920

Ajay = Rs. 1152

Ratio of shares of Ajay and Amit = 1152 : 1920

Ajay: Amit = 3 : 5

43. A king decided to distribute ______ gold coins among his three sons Ram, Lakshman and Bharat in the ratio of 3 : 4 : 5, but mistakenly distributed in the ratio of 4 : 5 : 6 and Bharat received ______ less/more gold coins than he was supposed to receive. The values given in which of the following options will fill the blanks in the same order in which it is given to make the above statement true:

A) 1200, 20

B) 900, 15

C) 1500, 30

Only A Only B Only C Only A and B Only B and C

Solution:

For option a:

Number of gold coins Bharat was supposed to receive = $\frac{5}{3+4+5} \times 1200 = 500$

Number of gold coins Bharat received = $\frac{6}{4+5+6} \times 1200 = 480$

Therefore, required difference = 500 - 480 = 20

So, a can be the answer

For option b:

Number of gold coins Bharat was supposed to receive = $\frac{5}{3+4+5} \times 900 = 375$

Number of gold coins Bharat received = $\frac{6}{4+5+6} \times 900 = 360$

Therefore, required difference = 375 - 360 = 15

So, b can be the answer

For option c:

Number of gold coins Bharat was supposed to receive = $\frac{5}{3+4+5} \times 1500 = 625$

Number of gold coins Bharat received = $\frac{6}{4+5+6} \times 1500 = 600$

Therefore, required difference = 625 - 600 = 25

So, c can't be the answer

So option (d) is the correct answer.

44. Ratio of present age of Roman and Calibri is 5 : 7 and Calibri and Arial is 2 :1. After 12 years, the ratio of their age becomes 16 : 20 : 13. What was their average age of 5 years ago?

15.66 years 15.25 years 14.26 years 18.29 years 16.25 years

Solution:

R: C = 5: 7 C: A = 2:1 R: C: A = 10:14: 7Let their present age are 10x, 14x and 7 x $\frac{10x+12}{14x+12} = \frac{16}{20}$ 50x+60 = 56x+48 $6x = 12 \Rightarrow x = 2$ Their present age =20, 28 and 14 years

5 years ago their age =15, 23 and 9 years Their average age 5 years ago= 47/3 =15.66

45. A tank is fitted with 3 taps - A, B and C. All the 3 taps, if opened together, can drain the full tank in $1\frac{1}{2}$ minutes. Taps B and C togethertake 2 minutes to drain the tank while taps A and C together take $2\frac{4}{13}$ minutes to drain it. How long will tanks A and B together take to drain the tank.

 $3\frac{2}{3}$ $5\frac{3}{4}$ $4\frac{1}{2}$ $2\frac{1}{2}$ None of these

Solution:

Let taps A, B and C individually take x, y and z minutes respectively to drain the tank.

All the 3 taps together can drain the full tank in $\frac{1}{2}$ minutes. Then we have,

 $\frac{\frac{1}{x} + \frac{1}{y} + \frac{1}{z} = \frac{1}{\frac{1}{2}}}{\frac{1}{x} + \frac{1}{y} + \frac{1}{z} = \frac{1}{\frac{3}{2}}}{\frac{1}{x} + \frac{1}{y} + \frac{1}{z} = \frac{2}{3}}$ $\frac{1}{x} + \frac{1}{y} + \frac{1}{z} = \frac{2}{3}$(1)

Taps B and C together take 2 minutes to drain the tank. Then we have,

 $\frac{1}{y} + \frac{1}{z} = \frac{1}{2}$(2) Taps A and C together take $2\frac{4}{13}$ minutes to drain the tank. Then we have,

$$\frac{1}{x} + \frac{1}{z} = \frac{1}{2\frac{4}{13}}$$
$$\frac{1}{x} + \frac{1}{z} = \frac{1}{\frac{30}{13}}$$
$$\frac{1}{x} + \frac{1}{z} = \frac{13}{30}$$
....(3)

If A and B are opened together their per minute rate will be $\frac{1}{x} + \frac{1}{y}$ Now,

$$\frac{1}{x} + \frac{1}{y} = 2\left(\frac{1}{x} + \frac{1}{y} + \frac{1}{z}\right) - \left(\frac{1}{y} + \frac{1}{z}\right) - \left(\frac{1}{x} + \frac{1}{z}\right)$$

$$\therefore \frac{1}{x} + \frac{1}{y} = 2\left(\frac{2}{3}\right) - \left(\frac{1}{2}\right) - \left(\frac{13}{30}\right)$$

$$\therefore \frac{1}{x} + \frac{1}{y} = \frac{4}{3} - \frac{1}{2} - \frac{13}{30}$$

$$\therefore \frac{1}{x} + \frac{1}{y} = \frac{12}{30}$$

$$\therefore \frac{1}{x} + \frac{1}{y} = \frac{2}{5}$$

$$\therefore \frac{1}{x} + \frac{1}{y} = \frac{1}{5/2}$$

Hence, A and b together can drain the tank in $\frac{5}{2}$ i.e $2\frac{1}{2}$ minutes. Hence the answer is option (D).

(46-50) **Direction:** Given bar graph shows the data of expenses (in percent distribution) of a family 'XYZ' in 4 months on rent, travel & food.



Study the graph carefully and answer the questions.

46.If the salary of family 'XYZ' in November is Rs. 48000 and savings is half of the expenditure on rent. Find its expenditure on travel.

Rs 35000 Rs 22000 Rs 12000 Rs 10000 Rs 14500

Solution:

Let his total expenditure in November be Rs. x

Savings
$$=\frac{40}{100} \times x \times \frac{1}{2} = \frac{x}{Rs.} \frac{x}{5}$$

ATQ,
 $x + \frac{x}{5} = 48000$
 $\Rightarrow x = \frac{1}{Rs.} \frac{40}{100} \times x = \frac{30}{100} \times 40,000 = \text{Rs.} \frac{12,000}{12,000}$
47. If the savings and salary of family 'XYZ' are same for all the given months then expenditure on travel in September is what percent more or less than that of expenditure on travel in October?

45% 40% 50% 60% 140%

Solution:

Let salary and saving be Rs. x & Rs. y respectively for September and October

Expenditure in September = Expenditure in October = Rs. (x - y)

Expenditure on travel in September = Rs. $\frac{35}{100} \times (x - y)$

Expenditure on travel in October = Rs. $\frac{25}{100} \times (x - y)$

Required percentage $=\frac{35-25}{25} \times 100 = 40\%$

48. If the ratio of total expenditure in September is 25% more than the total expenditure in November, then find the ratio of expenditure on food in September to the expenditure on rent in November.

15:16 16:17 3:5 21:25 17:19

Solution:

According to the data in the question,

Let the total expenditure in September & November is Rs. 5x & Rs. 4x, respectively

Required ratio =
$$\left(\frac{30}{100}\right) \times 5x :: \left(\frac{40}{100}\right) \times 4x = 15 : 16$$

49. Income of family 'XYZ' in August and November is Rs. 20000 & Rs. 32000 of which he saves only 10% in each month. Then find the total expenditure on food in both the months.

Rs 18120 Rs 13140 Rs 12250 Rs 14250 None of these

Solution:

Expenditure in August $=\frac{90}{100} \times 20000 = Rs. 18000$ Expenditure on food in August $=\frac{25}{100} \times 18000 = Rs. 4500$ Expenditure in November $=\frac{90}{100} \times 32000 = Rs. 28800$ Expenditure on food in November $=\frac{30}{100} \times 2880 = Rs. 8640$ Total expenditure in both the months = 4500 + 8640 = Rs. 13140

50. Expenditure on rent in August is approximately what percent more or less than expenditure on travel in September if total expenditure for both the months is same?

10% 28% 24% 20% 14%

Solution:

Let the expenditure for both the months be Rs. x

$$=\frac{\frac{40}{100}\mathbf{x} - \frac{35}{100}\mathbf{x}}{\frac{35}{100}\mathbf{x}} \times 100 = 14\%$$

Required percentage

51. A Ship of length 150 m traveling from point A to B downstream passes a Ghat along the river in 10 seconds, while in return it passes the same Ghat in 12.5 seconds. If the rate of current is 9 km/h. Find the length of the Ghat.

75 m 100 m 125 m 192 m 68 m

Solution:

Let the speed of boat in still water = x metre/second

Let the length of Ghat = a metre

Length of the ship = 150 m

Speed of current = 9 km/h = 9 × $\frac{1000}{3600}$ = 2.5 m/s

Speed of boat in downstream = (x + 2.5) m/s

Speed of boat in upstream = (x - 2.5) m/s

 $\hfill\square$ According to the data in the question, equating distance we get

2.5x = 56.25

x = 22.5 m/s

 $\frac{(150 + a)}{10} = 22.5 + 2.5$ 150 + a = 250a = 100 m

Hence, the length of the Ghat is 100 m.

52. A person covers 620 km in 16 hours. He covers some distance by a Scooter at an average speed of 30 km/h and the remaining distance by Train at an average speed of 75 km/hr. Find the distance covered by the person on Scooter ?

386.67 km 233.33 km 325.75 km 290.67 km 443.25 km

Solution:

Total distance covered by the person = 620 km

Total time taken = 16 hours

Speed of person on scooter = 30 km/h

Speed of man in train = 75 km/h

Let the distance covered by the person by scooter = x km

So, the distance covered by the person by train = (620 - x) km

 $\hfill\square$ According to the data in the question, equating time we get

 $\frac{x}{30} + \frac{620 - x}{75} = 16$

On solving the equation, we get

5x + 1240 - 2x = 2400

3x = 1160

x = 386.67 km

Hence, the distance travelled by the man on scooter is 386.67 km.

53. A total of Rs 1,25,000 is invested in a business. Investment of A is Rs 10,000 less than that of B and B's investment is Rs 30,000 more than that of C. If A invested his amount for 12 months and B invested his amount for 9 months and C invested his amount for 16 months, then find the share of B if there is a total profit of Rs. 50,225?

14,575 19,775 17,325 21,175 33,955

Solution:

Let the investment of B = x

So, the investment of A = x - 10,000

So, the investment of C = x - 30,000

Total amount invested = 1,25,000

 \Box according to the question:

x - 10,000 + x + x - 30,000 = 1,25,000

3x - 40,000 = 1,25,000

3x = 1,65,000

x = 55,000

B's investment = 55,000

Time period of B's investment = 9 months

A's investment = 55,000 - 10,000 = 45,000

Time period of A's investment = 12 months

C's investment = 55,000 - 30,000 = 25,000

Time period of C's investment = 16 months

Ratio of share in profit of A,B,C = 45,000 × 12 : 55,000 × 9 : 25,000 × 16

108:99:80

Let the share of A,B,C respectively = 108x , 99x , 80x

 \Box according to the question :

108x + 99x + 8x = 50,225

287x = 50,225

x = 175

Share of B in profit = $99x = 99 \times 175$

= 17,325

54. The ratio of volume of a cone to that of a cylinder if cylinder radius is 1/3 times and its height is 5 times to that of the cone, is

4:5 3:4 3:5 5:8 5:6

Solution:

Let radius of the base and height of the cone be 'r' & 'h' respectively.

Then, volume of cone = $\pi r^2 h / 3$

For cylinder, radius = r/3

And, height = 5h

Volume of cylinder = $\pi R^2 H = \pi (r/3)^2 (5h) = \pi r^2 5h/9$

Ratio of volume of cone to volume of cylinder = $(\pi r^2 h/3)$: $(5\pi r^2 h/9)$

Or, Ratio = 3 : 5

55. A man has a pass of two matches A and B which is going to be held at the same time. For match A man has 5 different level passes and for match B man has 4 different level passes. How many ways he can watch the match ?

Solution:

Either he will attend match A or match B as both of them are held at the same time.

So number of ways = 5+4 = 9 ways

(56-60) **Direction:** Answer the questions based on the information given below.

Pie chart below shows the percentage production of wheat by 5 different farmers and bar graph shows the percentage of sales by these farmers in 2010

Total production of wheat by 5 farmers = 2400 kg





56. What is the ratio of total wheat sold by the farmers Q and T together to the total wheat produced by farmer Q and T together?

4:3 3:4 2:5 4:5 None of these

Solution:

According to the data from the question, we get

Total wheat produced by farmer Q = $2400 \times \frac{28}{100} = 672$ kg

Total wheat sold by farmer Q = $672 \times \frac{75}{100} = 504$ kg

Total wheat produced by farmer T = $2400 \times \frac{17}{100} = 408 \text{ kg}$

Total wheat sold by farmer T = $408 \times \frac{75}{100} = 306$ kg

Total wheat produced by the farmers Q and T together

= 672 + 408 = 1080 kg

Total wheat sold by the farmers Q and T together = 504 +306 = 810 kg

Required ratio = $\frac{810}{1080}$ = 3 : 4

57. What is the average of wheat (in kgs) produced by all the farmers together?

450 470 480 500 None of these

Solution:

Total Production = 2400 kg

Required average = $\frac{2400}{5}$ = 480

58. If the production of wheat for farmer P increased by 10% in 2011 and sales also increased by 25% in 2011 from the previous year, then find the ratio of production of wheat for farmer P in 2011 to that of sales in the same year.

45 : 44 43 : 47 44 : 45 40 : 43 None of these

Solution:

With the help of the data from the question, we get

Total wheat produced by farmer P in 2010= $2400 \times \frac{20}{100} = 480$ kg Total wheat produced by farmer P in 2011= $480 \times \frac{110}{100} = 528$ kg Total wheat sold by farmer P in 2010 = $480 \times \frac{90}{100} = 432$ kg Total wheat sold by farmer P in 2011= $432 \times \frac{125}{100} = 540$ kg Required ratio = $\frac{528}{540} = \frac{132}{135} = \frac{44}{45}$

59. Wheat's sales is lowest for which of the farmer?

Farmer R Farmer T Farmer P Farmer Q Farmer S

Solution:

According to the data from the question, we get

Total wheat sold by farmer P = $2400 \times \frac{20}{100} \times \frac{90}{100} = 432$ kg Total wheat sold by farmer Q = $2400 \times \frac{28}{100} \times \frac{75}{100} = 504$ kg Total wheat sold by farmer R = $2400 \times \frac{10}{100} \times \frac{65}{100} = 156$ kg Total wheat sold by farmer S = $2400 \times \frac{25}{100} \times \frac{80}{100} = 480$ kg Total wheat sold by farmer T = $2400 \times \frac{17}{100} \times \frac{75}{100} = 306$ kg 60. Wheat sold by the farmers Q and T together is how much percent more or less than the wheat produced by farmer P?

685% 504% 2 475% 3 684%None of these

Solution:

Total wheat sold by farmers Q and T together

 $= (2400 \times \frac{28}{100} \times \frac{75}{100}) + (2400 \times \frac{17}{100} \times \frac{75}{100})$

= 504 + 306 = 810 kg

Total wheat produced by farmer P = $2400 \times \frac{20}{100} = 480 \text{ kg}$

Required percent = $\left(\frac{810 - 480}{480}\right) \times 100 = \frac{3300}{48} = 68\frac{3}{4}\%$

61. **Direction:** In the following question two equations are given in variables X and Y. You have to solve these equations and determine the relation between X and Y.

I. $X^2 + 8X + 16 = 0$ II. $Y^2 + 17X + 72 = 0$ Y > X X > Y $X \le Y$ $X \ge Y$ X = Y or no relation can be established

Solution:

$$X^{2} + 8X + 16 = 0$$

$$\Rightarrow X^{2} + 4X + 4X + 16 = 0$$

$$\Rightarrow X(X + 4) + 4(X + 4) = 0$$

$$\Rightarrow (X + 4)(X + 4) = 0$$

$$\Rightarrow X = -4 \& -4$$

$$Y^{2} + 17X + 72 = 0$$

$$\Rightarrow Y^{2} + 9Y + 8Y + 72 = 0$$

$$\Rightarrow Y(Y + 9) + 8(Y + 9) = 0$$

$$\Rightarrow (Y + 9)(Y + 8) = 0$$

$$\Rightarrow Y = -9 \& -8$$

Hence, X > Y

62. **Direction:** In the following question two equations are given in variables X and Y. You have to solve these equations and determine the relation between X and Y.

I. $X = \sqrt[3]{50653}$ II. $Y^2 = 729$ Y > X X > Y $X \le Y$ $X \ge Y$ X = Y or no relation can be established

Solution:

 $X = \sqrt[3]{50653}$

$$\Rightarrow X = 37$$

$$Y^{2} = 729$$

$$\Rightarrow Y = \sqrt{729}$$

$$\Rightarrow Y = +27 \& -27$$
Hence, X > Y

63. **Direction:** In the following question two equations are given in variables X and Y. You have to solve these equations and determine the relation between X and Y.

I. $6X^2 - 7X + 2 = 0$ II. $2Y^2 - 5Y + 3 = 0$ Y > X X > Y $X \le Y$ $X \ge Y$ X = Y or no relation can be established

Solution:

(I) $6X^2 - 7X + 2 = 0$ $\Rightarrow 6X^2 - 4X - 3X + 2 = 0$ $\Rightarrow 2X(3X - 2) - 1(3X - 2) = 0$ $\Rightarrow (3X - 2)(2X - 1) = 0$ $\Rightarrow X = 2/3 & \frac{1}{2}$ (II) $2Y^2 - 5Y + 3 = 0$ $\Rightarrow 2Y^2 - 3Y - 2Y + 3 = 0$ $\Rightarrow Y(2Y - 3) - 1(2Y - 3) = 0$

$$\Rightarrow (2Y - 3)(Y - 1) = 0$$
$$\Rightarrow Y = 3/2 \& 1$$
Hence, Y > X

64. **Direction:** In the following question two equations are given in variables X and Y. You have to solve these equations and determine the relation between X and Y.

I. $6X^2 - 11X + 4 = 0$ II. $50Y^2 - 25Y + 3 = 0$ Y > X X > Y $X \le Y$ $X \ge Y$ X = Y or no relation can be established

Solution:

(I) $6X^2 - 11X + 4 = 0$ $\Rightarrow 6X^2 - 3X - 8X + 4 = 0$ $\Rightarrow 3X(2X - 1) - 4(2X - 1) = 0$ $\Rightarrow (2X - 1)(3X - 4) = 0$ $\Rightarrow X = \frac{1}{2} & \frac{4}{3}$ (II) $50Y^2 - 25Y + 3 = 0$ $\Rightarrow 50Y^2 - 10Y - 15Y + 3 = 0$ $\Rightarrow 10Y(5Y - 1) - 3(5Y - 1) = 0$ $\Rightarrow (5Y - 1)(10Y - 3) = 0$ $\Rightarrow Y = \frac{1}{5} & \frac{3}{10}$ Hence, X > Y

65. **Direction:** In the following question two equations are given in variables X and Y. You have to solve these equations and determine relation between X and Y.

I.
$$x^{\frac{1}{2}} = \sqrt{121} - \sqrt{(46656)^{\frac{1}{2}}}$$

 $\frac{y^{\frac{13}{2}}}{\frac{4}{3}} + 12538 = 26362$
II. $y^{\frac{1}{2}}$
 $X > Y$
 $X < Y$
 $X < Y$
 $X \ge Y$
 $X \le Y$
 $X \le Y$
 $X = Y$ or No relation can be established

Solution:

$$x^{\frac{1}{2}} = \sqrt{121} - \sqrt{(46656)^{\frac{1}{2}}}$$

$$x^{\frac{1}{2}} = 11 - \sqrt{36}$$

$$x^{\frac{1}{2}} = 11 - 6$$

$$x^{\frac{1}{2}} = 5$$

$$x = 25$$

$$x = 25$$

$$\frac{y^{\frac{13}{2}}}{\frac{4}{2}} + 12538 = 26362$$

$$y^{\frac{9}{2}} = 26362 - 12538$$

$$y^{3} = 13824$$

y=24

Hence, option A is correct.

Reasoning ability

(66-70) **Direction:** Study the following information carefully and answer the questions given below.

Eight persons - R, S, T, U, V, W, X and Y are sitting around a square table. Each of them likes different colors- Yellow, Red, Black, Brown, Blue, Green, Purple and Pink but not necessarily in the same order. Four of them are sitting at the corners while the other four are sitting in the middle of each side. The persons seated at the corners are facing inside while the others are facing outside the center.

R likes Blue and faces inside the table. X sits to the immediate left of R. Two people sit between X and the one who likes Green. S likes Yellow and sits 2nd to the right of R. The one who likes Red sits 3rd to the right of S. One person sits between W and the one who likes Green. U and T are the neighbors of V. The one who likes Brown sits 2nd to the left of Y. The one who likes Yellow sits 3rd to the right of U. One person sits between the one who likes Pink and the one who likes Black. X doesn't like Pink.

66. Who among the following likes Pink color?

R X S Y None of these

Solution:

People- R, S, T, U, V, W, X and Y.

Colors- Yellow, Red, Black, Brown, Blue, Green, Purple and Pink.

Steps:

1) R likes Blue and faces inside the table.

2) X sits to the immediate left of R.

3) Two people sit between X and the one who likes Green.

Case 1:



Case 2:



4) S likes Yellow and sits 2nd to the right of R.

This condition doesn't satisfy in case 2 so case 2 gets eliminated.

- 5) The one who likes Red sits 3rd to the right of S.
- 6) One person sits between W and the one who likes Green.



7) U and T are the neighbors of V.

So, V likes Green.

8) The one who likes Brown sits 2nd to the left of Y.

9) The one who likes Yellow sits 3rd to the right of U.

So, U likes Red and T likes Brown.



10) One person sits between the one who likes Pink and the one who likes Black.

11) X doesn't like Pink.

So, W likes Purple and X likes Black and Y likes Pink.



Hence, Y likes Pink color.

67. Who among the following sits 2^{nd} to the right of W?

Y R V T None of these

Solution:

People- R, S, T, U, V, W, X and Y.

Colors- Yellow, Red, Black, Brown, Blue, Green, Purple and Pink.

Steps:

- 1) R likes Blue and faces inside the table.
- 2) X sits to the immediate left of R.
- 3) Two people sit between X and the one who likes Green.

Case 1:







4) S likes Yellow and sits 2nd to the right of R.

This condition doesn't satisfy in case 2 so case 2 gets eliminated.

- 5) The one who likes Red sits 3rd to the right of S.
- 6) One person sits between W and the one who likes Green.



7) U and T are the neighbors of V.

So, V likes Green.

- 8) The one who likes Brown sits 2nd to the left of Y.
- 9) The one who likes Yellow sits 3rd to the right of U.

So, U likes Red and T likes Brown.



10) One person sits between the one who likes Pink and the one who likes Black.

11) X doesn't like Pink.

So, W likes Purple and X likes Black and Y likes Pink.



Hence, R sits 2nd to the right of W.

68. Who among the following are the neighbors of S?

W and U U and V X and R Y and T None of these

Solution:

People- R, S, T, U, V, W, X and Y.

Colors- Yellow, Red, Black, Brown, Blue, Green, Purple and Pink.

Steps:

1) R likes Blue and faces inside the table.

2) X sits to the immediate left of R.

3) Two people sit between X and the one who likes Green.

Case 1:



Case 2:



4) S likes Yellow and sits 2nd to the right of R.

This condition doesn't satisfy in case 2 so case 2 gets eliminated.

5) The one who likes Red sits 3rd to the right of S.

6) One person sits between W and the one who likes Green.



7) U and T are the neighbors of V.

So, V likes Green.

8) The one who likes Brown sits 2nd to the left of Y.

9) The one who likes Yellow sits 3rd to the right of U.

So, U likes Red and T likes Brown.



10) One person sits between the one who likes Pink and the one who likes Black.

11) X doesn't like Pink.

So, W likes Purple and X likes Black and Y likes Pink.



Hence, Y and T are the neighbors of S.

69. Which color does W like?

Green Purple Black Pink None of these

Solution:

People- R, S, T, U, V, W, X and Y.

Colors- Yellow, Red, Black, Brown, Blue, Green, Purple and Pink.

Steps:

- 1) R likes Blue and faces inside the table.
- 2) X sits to the immediate left of R.
- 3) Two people sit between X and the one who likes Green.

Case 1:







4) S likes Yellow and sits 2nd to the right of R.

This condition doesn't satisfy in case 2 so case 2 gets eliminated.

- 5) The one who likes Red sits 3rd to the right of S.
- 6) One person sits between W and the one who likes Green.



7) U and T are the neighbors of V.

So, V likes Green.

- 8) The one who likes Brown sits 2nd to the left of Y.
- 9) The one who likes Yellow sits 3rd to the right of U.

So, U likes Red and T likes Brown.



10) One person sits between the one who likes Pink and the one who likes Black.

11) X doesn't like Pink.

So, W likes Purple and X likes Black and Y likes Pink.



Hence, W likes purple.

70. What is the position of R with respect to U?

3rd to the left 2nd to the right 3rd to the right 4th to the right None of these

Solution:

People- R, S, T, U, V, W, X and Y.

Colors- Yellow, Red, Black, Brown, Blue, Green, Purple and Pink.

Steps:

1) R likes Blue and faces inside the table.

2) X sits to the immediate left of R.

3) Two people sit between X and the one who likes Green.

Case 1:



Case 2:



4) S likes Yellow and sits 2nd to the right of R.

This condition doesn't satisfy in case 2 so case 2 gets eliminated.

5) The one who likes Red sits 3rd to the right of S.

6) One person sits between W and the one who likes Green.



7) U and T are the neighbors of V.

So, V likes Green.

8) The one who likes Brown sits 2nd to the left of Y.

9) The one who likes Yellow sits 3rd to the right of U.

So, U likes Red and T likes Brown.



10) One person sits between the one who likes Pink and the one who likes Black.

11) X doesn't like Pink.

So, W likes Purple and X likes Black and Y likes Pink.



Hence, R sits 3rd to the left of U.

(71-73) **Direction:** Study the data carefully and answer the questions accordingly.

Seven people R, S, T, U, V, W, and X are of different heights. R is taller than V, but shorter than T. The height of X, who is taller than U, is 150cm. The one, who is second shortest, is 138cm in height. Two people are shorter than W. Neither R nor V has the height, which is a multiple of 3. One of them has a height of 156cm. T is taller than X and W and does not has a height of 170cm. The one, who is second tallest, is 170cm in height.

71. Who is the tallest in the group?

S T U R None of these

Solution:

1) Two people are shorter than W.

2) The one, who is second tallest, is 170cm in height.

3) The one, who is second shortest, is 138cm in height.

	170cm
W	
	138cm

4) T is taller than X and W and does not have a height of 170cm.

5) The height of X, who is taller than U, is 150cm.

6) One of them has a height of 156cm.

Case 1

Case 2

Т			
	170cm		170cm
	156cm	Т	156cm
Х	150cm	Х	150cm
W		W	
	138cm		138cm

7) R is taller than V (both does not have the height which is a multiple of 3) but shorter than T.

(Here, case 2 will be eliminated)

(Refer point 5)

Т	
R	170cm
S	156cm
Х	150cm
W	
U	138cm
V	

Hence, T is the tallest.

72. How many people are shorter than X?

Two One Four Three None of these

Solution:

1) Two people are shorter than W.

- 2) The one, who is second tallest, is 170cm in height.
- 3) The one, who is second shortest, is 138cm in height.

	170cm
W	
	138cm

4) T is taller than X and W and does not have a height of 170cm.

5) The height of X, who is taller than U, is 150cm.

6) One of them has a height of 156cm.



Case 2

Т			
	170cm		170cm
	156cm	Т	156cm
Х	150cm	Х	150cm
W		W	
	138cm		138cm

7) R is taller than V (both does not have the height which is a multiple of 3) but shorter than T.

(Here, case 2 will be eliminated)

(Refer point 5)

Т	
R	170cm
S	156cm
Х	150cm
W	
U	138cm
V	

Hence, three people are shorter than X.

73. What could be the possible height of V?

139cm

145cm

140cm

132cm

None of these

Solution:

- 1) Two people are shorter than W.
- 2) The one, who is second tallest, is 170cm in height.
- 3) The one, who is second shortest, is 138cm in height.

	170cm
W	
	138cm

- 4) T is taller than X and W and does not have a height of 170cm.
- 5) The height of X, who is taller than U, is 150cm.
- 6) One of them has a height of 156cm.
 - Case 1

Case 2

Т			
	170cm		170cm
	156cm	Т	156cm
Х	150cm	Х	150cm
W		W	
	138cm		138cm

7) R is taller than V (both does not have the height which is a multiple of 3) but shorter than T.

(Here, case 2 will be eliminated)

(Refer point 5)

Т	
R	170cm
S	156cm
Х	150cm
W	
U	138cm
V	

As, 132cm is divisible by 3.

(74-76) **Direction:** Read the following information carefully and answer the questions given below.

There is a family of seven members - G, O, A, T, L, R and S. T's grandmother R has only two sons. L is the daughter of G. O is G's niece and A's daughter. S is T's dad and G's brother.

74. How is O related to L?

Cousin Sister Mother Aunt Grandmother

Solution:

Seven Members: T, S, G, L, O, A and R.

T's grandmother R has only two sons.

L is the daughter of G.

O is G's niece and A's daughter.

S is T's dad and G's brother.

Thus, we get that:

G and S are two sons of R.

G is a father of L.

O and T are children of A and S.





Hence, O is L's cousin.

75. Which of the given options has an uncle – niece pair?

O and L A and R

- S and O
- $\ensuremath{\mathsf{L}}\xspace$ and $\ensuremath{\mathsf{S}}\xspace$

R and G

Solution:

Seven Members: T, S, G, L, O, A and R.

T's grandmother R has only two sons.

L is the daughter of G.

O is G's niece and A's daughter.

S is T's dad and G's brother.

Thus, we get that:

G and S are two sons of R.

G is a father of L.

O and T are children of A and S.

Symbol in diagram	Meaning
0	Female
	Male
	Married Couple
	Siblings
	Difference of a generation



Hence, S and L form an uncle – niece pair.

76. Who is L's mother?
R O G Cannot be determined

Solution:

Seven Members: T, S, G, L, O, A and R.

T's grandmother R has only two sons.

L is the daughter of G.

O is G's niece and A's daughter.

S is T's dad and G's brother.

Thus, we get that:

G and S are two sons of R.

G is a father of L.

O and T are children of A and S.

Symbol in diagram	Meaning
0	Female
	Male
	Married Couple
	Siblings
	Difference of a generation



Hence, we cannot determine who is L's mother.

(77-81) **Direction:** Study the following data carefully and answer the questions accordingly.

Six people of different ages ranging from 40 to 80 years, visit a temple on six different days starting from Monday to Saturday of the same week. K, whose age difference with O is 24 years, visits the temple after G. G visits the temple before Y, who is not 43 years old. P is 6 years older than the one, who visits the temple immediately before P. Three people visit the temple between H and the one, whose age is 53 years. The age of the one, who visits the temple on Friday, is a perfect square more than 50. Three people visit the temple between Y and O, who is 8 years older than Y. One person visits the temple between Y and the one, whose age is 59 years. Two people visit the temple between P and H. The one, who visits the temple on Tuesday, is 11 years younger than the one, who visits the temple on Friday.

77. Who among the following is younger than K?

P O The one, who visits the temple on Saturday The one, whose age, is an even number None of these

Solution:

1. The age of the one, who visits the temple on Friday, is a perfect square more than 50.

2. The one, who visits the temple on Tuesday, is 11 years younger than the one, who visits the temple on Friday.

3. Three people visit the temple between H and the one, whose age is 53 years.

Monday		
Tuesday		53Y
Wednesday		
Thursday		
Friday		64Y
Saturday	Н	

4. Two people visit the temple between P and H.

5. P is 6 years older than the one, who visits the temple immediately before P.

6. One person visits the temple between Y and the one, whose age is 59 years.

7. G visits the temple before Y, who is not 43 years old.

Monday		
Tuesday		53Y
Wednesday	Р	59Y
Thursday		
Friday	Υ	64Y
Saturday	Н	

8. Three people visit the temple between Y and O, who is 8 years older than Y.

9. K, whose age difference with O is 24 years, visits the temple after G.

(Refer point 7)

Monday	0	72Y
Tuesday	G	53Y
Wednesday	Ρ	59Y
Thursday	К	48Y
Friday	Υ	64Y
Saturday	Н	43Y

Hence, the one, who visits the temple on Saturday i.e. H, is younger than K.

78. What is total age of the ones, who visit the temple on Monday and Wednesday?

119 years135 years131 years126 years137 years

Solution:

1. The age of the one, who visits the temple on Friday, is a perfect square more than 50.

2. The one, who visits the temple on Tuesday, is 11 years younger than the one, who visits the temple on Friday.

3. Three people visit the temple between H and the one, whose age is 53 years.

Monday		
Tuesday		53Y
Wednesday		
Thursday		
Friday		64Y
Saturday	Н	

4. Two people visit the temple between P and H.

- 5. P is 6 years older than the one, who visits the temple immediately before P.
- 6. One person visits the temple between Y and the one, whose age is 59 years.
- 7. G visits the temple before Y, who is not 43 years old.

Monday		
Tuesday		53Y
Wednesday	Р	59Y
Thursday		
Friday	Y	64Y
Saturday	Н	

8. Three people visit the temple between Y and O, who is 8 years older than Y.

9. K, whose age difference with O is 24 years, visits the temple after G.

(Refer point 7)

Monday	0	72Y
Tuesday	G	53Y
Wednesday	Ρ	59Y
Thursday	К	48Y
Friday	Υ	64Y
Saturday	Н	43Y

Hence, the required answer is '131 years'.

79. The one, whose age is, more than 65 years, visits the temple on-

Tuesday Monday Friday Wednesday None of these

Solution:

1. The age of the one, who visits the temple on Friday, is a perfect square.

2. The one, who visits the temple on Tuesday, is 11 years younger than the one, who visits the temple on Friday.

3. Three people visit the temple between H and the one, whose age is 53 years.

Monday		
Tuesday		53Y
Wednesday		
Thursday		
Friday		64Y
Saturday	Н	

- 4. Two people visit the temple between P and H.
- 5. P is 6 years older than the one, who visits the temple immediately before P.
- 6. One person visits the temple between Y and the one, whose age is 59 years.
- 7. G visits the temple before Y, who is not 43 years old.

Monday		
Tuesday		53Y
Wednesday	Р	59Y
Thursday		
Friday	Υ	64Y
Saturday	Н	

8. Three people visit the temple between Y and O, who is 8 years older than Y.

9. K, whose age difference with O is 24 years, visits the temple after G.

(Refer point 7)

Monday	0	72Y
Tuesday	G	53Y
Wednesday	Ρ	59Y
Thursday	К	48Y
Friday	Υ	64Y
Saturday	Н	43Y

Hence, the required answer is 'Monday'.

80. How many people are older than the one, who visits the temple on Thursday?

Three One Two Four None of these

Solution:

1. The age of the one, who visits the temple on Friday, is a perfect square.

2. The one, who visits the temple on Tuesday, is 11 years younger than the one, who visits the temple on Friday.

3. Three people visit the temple between H and the one, whose age is 53 years.

Monday		
Tuesday		53Y
Wednesday		
Thursday		
Friday		64Y
Saturday	Н	

4. Two people visit the temple between P and H.

5. P is 6 years older than the one, who visits the temple immediately before P.

6. One person visits the temple between Y and the one, whose age is 59 years.

7. G visits the temple before Y, who is not 43 years old.

Monday		
Tuesday		53Y
Wednesday	Ρ	59Y
Thursday		
Friday	Y	64Y
Saturday	Н	

8. Three people visit the temple between Y and O, who is 8 years older than Y.

9. K, whose age difference with O is 24 years, visits the temple after G.

(Refer point 7)

Monday	0	72Y
Tuesday	G	53Y
Wednesday	Ρ	59Y
Thursday	К	48Y
Friday	Υ	64Y
Saturday	Н	43Y

Hence, the required answer is 'four'.

81. Find the odd one.

Monday – 72 years Thursday - K Y – 64 years Saturday - H Wednesday – 48 years

Solution:

1. The age of the one, who visits the temple on Friday, is a perfect square.

2. The one, who visits the temple on Tuesday, is 11 years younger than the one, who visits the temple on Friday.

3. Three people visit the temple between H and the one, whose age is 53 years.

Monday		
Tuesday		53Y
Wednesday		
Thursday		
Friday		64Y
Saturday	Н	

4. Two people visit the temple between P and H.

5. P is 6 years older than the one, who visits the temple immediately before P.

6. One person visits the temple between Y and the one, whose age is 59 years.

7. G visits the temple before Y, who is not 43 years old.

Monday		
Tuesday		53Y
Wednesday	Р	59Y
Thursday		
Friday	Y	64Y
Saturday	Н	

8. Three people visit the temple between Y and O, who is 8 years older than Y.

9. K, whose age difference with O is 24 years, visits the temple after G.

(Refer point 7)

Monday	0	72Y
Tuesday	G	53Y
Wednesday	Ρ	59Y
Thursday	К	48Y
Friday	Υ	64Y
Saturday	Н	43Y

'Wednesday – 48 years' is the odd one.

82. If in a certain way PILLOW is coded as KROOLD, then how BLANKET will be coded in the same manner?

YOZNPVG YOZMBVG YOZMPVG YOZMPUG None of these

Solution:

All the alphabets of the word are replaced by their reverse alphabet according to English alphabetical series.

Clearly, **BLANKET will be coded as** YOZMPVG.

83. What should come in place of question mark (?) in the following series?

EV FU GT HS ? IS JR IR JS None of these

Solution:



Clearly, IR should come in the place of (?).

(84-85) **Direction:** Read the following information carefully and answer the questions which follow.

Point R is 7m to the west of point T which is 15m to the north of point P. Point C is 10m to the east of Point P. Point N is 15m to the south of Point C. Point F is 10m to the north of Point R. Point Q is 20m to the east of Point F. Point G is 10m to the south of Point Q.

84. What is the total distance between Point N and Point R?

57m 37m 47m 45m None of these

Solution:



Clearly, the total distance between Point N and Point R is 47m.

85. What is the direction of Point T with respect to Point G?

North South South-west West East

Solution:



Clearly, point T is to the west of point G.

(86-90) **Direction:** Study the following data carefully and answer the questions accordingly.

Twelve persons are sitting in two parallel rows such that G, H, I, J, K and L are seated in the first row and facing towards South and V, W, X, Y, Z and M are seated in the second row, facing towards North but not necessarily in the same order. G sits four places away from I. Y sits three places away from Z. H sits three places away from J at one of the extreme ends. V sits at one of the extreme ends but doesn't sit opposite to both H and J. Same number of persons is sitting to the left of both J and W. X sits opposite to the one, who sits third to the left of K.

86. Who among the following faces the one, who sits immediate left of K?

Z W X Y Cannot be determined

Solution:

1) V sits at one of the extreme ends but doesn't sit opposite to both H and J.

2) H sits three places away from J.

3) Same number of persons is sitting to the left of both J and W.

4) G sits four places away from I.

5) X sits opposite to the one, who sits third to the left of K.

G/I	к	J	L	G/I	Н
Ļ	Ļ	Ļ	ļ	ļ	ļ
Ť	t	Ì	Ť	Ť	Ť
v	1	I	Ŵ	x	

6) Y sits three places away from Z.

G/I	К	J	L	G/I	H
Ļ	Ļ	Ļ	Ļ	Ļ	ļ
Ť	Ť	Ť	Ť	Ť	t
v	м́	Y/Z	w	х	Y/Z

Therefore, option E is correct.

87. Which of the following sits at extreme ends?

Y and the one, who sits fifth to the left of X Z and the one, who sits third to the right of J H and the one, who sits third to the left of W V and the one, who sits just right of G None of these

Solution:

- 1) V sits at one of the extreme ends but doesn't sit opposite to both H and J.
- 2) H sits three places away from J.
- 3) Same number of persons is sitting to the left of both J and W.
- 4) G sits four places away from I.
- 5) X sits opposite to the one, who sits third to the left of K.

Ļ
t
I

6) Y sits three places away from Z.

G/I	K	J	L	G/I	н
+	+	÷	÷	*	+
t	Ť	Ť	t	t	t
V	M	Y/Z	W	х	Y/Z

Therefore, option C is the correct answer.

88. How many persons are sitting to the right of the one, who sits opposite to Y?

Three Five Four Two Cannot be determined

Solution:

- 1) V sits at one of the extreme ends but doesn't sit opposite to both H and J.
- 2) H sits three places away from J.
- 3) Same number of persons is sitting to the left of both J and W.
- 4) G sits four places away from I.
- 5) X sits opposite to the one, who sits third to the left of K.



6) Y sits three places away from Z.

G/I	К	J	L	G/I	н
Ļ	Ļ	Ļ	Ļ	Ţ	ļ
Ť	Ť	Ť	1	Ť	Ť
v	м́	Y/Z	w	X	Y/Z

The position of Y is not fixed, and hence the answer cannot be determined.

89. d the odd one.

Y, W Z, V L, K G, J

I, H

Solution:

1) V sits at one of the extreme ends but doesn't sit opposite to both H and J.

2) H sits three places away from J.

3) Same number of persons is sitting to the left of both J and W.

4) G sits four places away from I.

5) X sits opposite to the one, who sits third to the left of K.

G/I	К	J	L	G/I	Ĥ
Ļ	Ļ	Ļ	Ļ	Ļ	Ļ
1	1	Ť	Ť	Ť	t
v	1	I	ŵ	x	

6) Y sits three places away from Z.

G/I	К	J	L	G/I	H
Ļ	Ļ	Ļ	Ļ	Ļ	Ļ
1	t	Ť	Ť	t	t
v	м́	Υ/̈́Z	ŵ	×	Y/Z

Therefore, option C is the correct answer as both L and K's position is fixed.

90. Find the correct statement or statements from the following.

I. Three persons are sitting to the right of the one, who sits opposite to W.

II. M sits three places away from X.

III. K sits opposite to the one, who sits second from the left end.

Only I Both II and III Only II Both I and II All are correct

Solution:

1) V sits at one of the extreme ends but doesn't sit opposite to both H and J.

2) H sits three places away from J.

3) Same number of persons is sitting to the left of both J and W.

4) G sits four places away from I.

5) X sits opposite to the one, who sits third to the left of K.

G/I ↓	κ ↓	L ↓	L ↓	G/I ↓	н ↓
Ì	1	Î	t	ţ	Î
V			w	Х	

6) Y sits three places away from Z.

G/I	К	J	L	G/I	н
Ļ	Ļ	Ļ	ļ	ļ	ļ
1	t	Ť	Ť	t	t
v	м́	Υ/Z	ŵ	×	Y/Z

Therefore, option E is the correct answer.

(91-95) **Direction:** These questions are based on the following arrangement.

J Y 2 = S * & E G M ! 7 \$ H P 9 K L % @ W Q 1 3 # C D ^

91.How many such symbols are there in the above arrangement each of which is either immediately followed by a number or immediately preceded by a letter, but not both? None One Two Three

More than three

Solution:

J Y 2 = S $\underline{*}$ & E G M ! 7 \$ H P 9 K L $\underline{\%}$ @ W Q 1 3 # C D $\underline{^{}}$ There are such three symbols i.e., * , % and ^.

92. How many such letters are there in the above arrangement each of which is either immediately followed by a number or immediately preceded by a symbol, but not both?

None
Two
Four
Six
More than six

Solution:

J<u>Y</u>2 =<u>S</u>* &<u>E</u>G M ! 7 \$<u>HP</u>9 K L % @<u>WQ</u>1 3 #<u>C</u>D ^ There are such eight letters i.e. Y , S, E, H, P, W, Q and C.

93. How many such numbers are there each of which Is either immediately followed by a symbol or immediately preceded by a letter, but not both?

Five Four Three Two None of these

Solution:

J Y 2 = S * & E G M !<u>7</u>\$ H P<u>9</u>K L % @ W Q<u>13</u># C D ^ There are four such numbers i.e. 7, 9, 1 and 3.

94. Four of the following five are alike in a certain way based on the positions of the elements in the above arrangement and hence from a group. Which one does not belong to the group?

2 Y C D * S 1 3 J S ^ 3 * E 1 W = # 2 C

Solution:

In all groups , the third and fourth elements occupy the same positions from the right in the given arrangement as the first and second elements respectively occupy from the left end.

95. 2 Y S is to E G * in the same way as P H K is to?

W Q % @ W L @ % Q @ W K None of these

Solution:

In each pair, the first , second and third elements of the first term move 5, 7 and 1 steps forward respectively to give the corresponding elements of the second term.

(96-100) **Direction**: Study the following information carefully and answer the questions given below.

P, Q, R, S, T, U and V are seven friends belongs to different cities viz, Chennai, Delhi, Pune, Goa, Ranchi, Indore and Jaipur and also like different colours viz, Red, Green, Blue and Pink but not necessarily in the same order. At least one person likes one colour but not more than two persons like the same colour. U belongs to Pune and likes Blue. The one who belongs to Goa does not like Green. S likes Pink. T belongs to Jaipur and likes Pink. R likes Red. The one who belongs to Chennai and Goa likes the same colour. The one who belongs to Ranchi likes Pink. P likes Green. Q does not belong to Delhi or Chennai. The one who belongs to Indore likes Green. The one who belongs to Delhi likes the same colour as liked by P. R does not belong to Ranchi.

Q likes which of the following colour?

Green Red Blue Pink Cannot be determined

Solution:

- 1) U belongs to Pune and likes Blue.
- 2) S likes Pink.
- 3) R likes Red.
- 4) T belongs to Jaipur and likes Pink.
- 5) P likes Green.

Person	Colour	City
Р	Green	
Q		
R	Red	
S	Pink	
Т	Pink	Jaipur
U	Blue	Pune
V		

6) The one who belongs to Ranchi likes Pink.

7) The one who belongs to Chennai and Goa likes the same colour.

8) The one who belongs to Goa does not like Green.

9) Q does not belong to Delhi or Chennai.

10) The one who belongs to Indore likes Green.

11) One who belongs to Delhi likes the same colour as liked by P.

Person	Colour	City
Р	Green	Indore
Q	Red	Goa
R	Red	C hennai
S	Pink	Ranchi
Т	Pink	Jaipur
U	Blue	Pune
V	Green	Delhi

97. Who belongs to Goa?

R Q P V None of these

Solution:

1) U belongs to Pune and likes Blue.

2) S likes Pink.

3) R likes Red.

4) T belongs to Jaipur and likes Pink.

5) P likes Green.

Person	Colour	City
Р	Green	
Q		
R	Red	
S	Pink	
Т	Pink	Jaipur
U	Blue	Pune
V		

6) The one who belongs to Ranchi likes Pink.

7) The one who belongs to Chennai and Goa likes the same colour.

8) The one who belongs to Goa does not like Green.

9) Q does not belong to Delhi or Chennai.

10) The one who belongs to Indore likes Green.

Person	Colour	City
Р	Green	Indore
Q	Red	Goa
R	Red	C hennai
S	Pink	Ranchi
Т	Pink	Jaipur
U	Blue	Pune
V	Green	Delhi

11) One who belongs to Delhi likes the same colour as liked by P.

98. Which of the following pairs of the persons like Pink?

R, P

V, P S, T

s, q

None of these

Solution:

1) U belongs to Pune and likes Blue.

2) S likes Pink.

3) R likes Red.

4) T belongs to Jaipur and likes Pink.

5) P likes Green.

Person	Colour	City
Р	Green	
Q		
R	Red	
S	Pink	
Т	Pink	Jaipur
U	Blue	Pune
V		

6) The one who belongs to Ranchi likes Pink.

7) The one who belongs to Chennai and Goa likes the same colour.

8) The one who belongs to Goa does not like Green.

- 9) Q does not belong to Delhi or Chennai.
- 10) The one who belongs to Indore likes Green.
- 11) One who belongs to Delhi likes the same colour as liked by P.

Person	Colour	City
Р	Green	Indore
Q	Red	Goa
R	Red	C hennai
S	Pink	Ranchi
Т	Pink	Jaipur
U	Blue	Pune
V	Green	Delhi

99. Which of the following statement is/are NOT true?

T belongs to Jaipur and likes Pink P belongs to Indore and likes Green V belongs to Delhi and likes Pink All are true None of these

Solution:

- 1) U belongs to Pune and likes Blue.
- 2) S likes Pink.
- 3) R likes Red.
- 4) T belongs to Jaipur and likes Pink.
- 5) P likes Green.

Person	Colour	City
Р	Green	
Q		
R	Red	
S	Pink	
Т	Pink	Jaipur
U	Blue	Pune
V		

6) The one who belongs to Ranchi likes Pink.

7) The one who belongs to Chennai and Goa likes the same colour.

8) The one who belongs to Goa does not like Green.

9) Q does not belong to Delhi or Chennai.

10) The one who belongs to Indore likes Green.

11) One who belongs to Delhi likes the same colour as liked by P.

Person	Colour	City
Р	Green	Indore
Q	Red	Goa
R	Red	Chennai
S	Pink	Ranchi
т	Pink	Jaipur
U	Blue	Pune
V	Green	Delhi

100. Who belongs to Ranchi?

Q R S Cannot be determined None of these

Solution:

1) U belongs to Pune and likes Blue.

2) S likes Pink.

3) R likes Red.

4) T belongs to Jaipur and likes Pink.

5) P likes Green.

Person	Colour	City
Р	Green	
Q		
R	Red	
S	Pink	
Т	Pink	Jaipur
U	Blue	Pune
V		

6) The one who belongs to Ranchi likes Pink.

7) The one who belongs to Chennai and Goa likes the same colour.

8) The one who belongs to Goa does not like Green.

9) Q does not belong to Delhi or Chennai.

10) The one who belongs to Indore likes Green.

11) One who belongs to Delhi likes the same colour as liked by P.

Person	Colour	City
Р	Green	Indore
Q	Red	Goa
R	Red	Chennai
S	Pink	Ranchi
Т	Pink	Jaipur
U	Blue	Pune
V	Green	Delhi