

Answers

1. Answer: d

Explanation:

The correct answer is **option 4** i.e. **expected** .

★ Key Points

- **Projected to:** If something is projected means that thing is expected to happen.
 - **Example:** The oil shortage projected to get worse.
 - **Synonyms:** Expected, Anticipated, Probable.
 - **Antonyms:** Unlikely, Unexpected, Unintended.
- **Expected:** To anticipate that something will happen.
 - **Example:** The vacancies are expected to increase.
 - **Synonyms:** Projected, suppose, predicted.
 - **Antonyms:** Doubtful, uncertain, unsure.

★ Additional Information

- **decided:** Make a decision or choose something.
 - **Example:** India decided to launch new scholarship to promote sport culture.
 - **Synonyms:** Intended, Resolute, Determined.
 - **Antonyms:** Unsettled, Disputable, Uncertain.
- **quandary:** A difficult situation, not able to decide anything.
 - **Example:** She is in a quandary about whether to purchase the house or not.
 - **Synonyms:** Dilemma, puzzle, bewilderment.
 - **Antonyms:** Certain, sure, definite.
- **profuse:** In large quantity.
 - **Example:** Profuse sweating is a side-effect of amitriptyline.
 - **Synonyms:** Ample, Exuberant, Extensive.
 - **Antonyms:** Sparse, Inadequate, deficient.
- **dither:** unable to decide
 - **Example:** The committee is dithering over the decision.
 - **Synonyms:** Hesitate, confuse, uncertain.

- **Antonyms:** sure, certain, fixed.

2. Answer: c

Explanation:

The correct answer is **option 3** i.e. **leading factors**.

★ Key Points

- **drivers** (in the context of the passage): A thing responsible for development or progress of other things.
 - **Example:** Human resource is a key **driver** of economic growth.
 - **Synonyms:** Factors, Elements, Components.
- **leading factors**: Influencing elements, responsible things
 - **Example:** Deforestation and increasing numbers of vehicles are the leading factors for pollution.
 - **Synonyms:** key drivers, causes, stimulus.

★ Additional Information

- **motorist**: a person who drives a vehicle.
 - Example: Lewis Hamilton is a leading motorist.
- **features**: important or noticeable part of something.
 - Example: Smooth texture is an important feature of the cloth.
- **cupidinous**: having a great desire or greed.
 - Example: The kind invade the state with cupidinous intension.
- **fundamental factors**: basic elements of something.
 - Example: Impurity measurement, boiling point determination and chromatography are the fundamental factors for a drug analysis.

3. Answer: d

Explanation:

The correct answer is **option 4** i.e. **"Conjecture"**

★ Key Points

- Implication: effect of something.
 - **Example**: He was unaware of implications of his decision.
- Conjecture: inference form without any reliable proof or evidence.
 - **Example**: He Conjectured that he will pass the exam.
- Here, "Implication" is can be called as near antonym of "Conjecture" because **implication is a real and logical outcome of something** whereas **"conjecture" may or may not be logical or real.**

★ Additional Information

- conclusions: closing part of discussion or statement.
 - **Example**: Even after an exhaustive discussion they were unable to draw any conclusion.
- inference: opinion based on a known fact.
 - **Example**: His inference was based on the experiences he has.
- concoct: to make up an excuse.
 - **Example**: The student concocted a story for not submitting his homework.

4. Answer: e

Explanation:

The correct answer is **option 5** i.e. **"All of the above factors are responsible for growth in the pet food market."**

★ Key Points

- We can answer the question with the help of the following sentences:
 - *"the organizers of the China International Pet Show introduced an online trade show platform where buyers can search for pet products and communicate."* (**option 2**)

- "Over the long term, pet humanization(option 1), the increasing trend of e-commerce(option 2), and the rise in demand for natural pet food(option 3)are some of the major factors driving the market for pet food in the country."
- "As dogs and cats are treated as family members(option 4), Chinese pet owners are increasingly willing to spend lavishly on them"

Hence, the correct answer is **option 5** i.e. "All of the above factors are responsible for growth in the pet food market."

5. Answer: c

Explanation:

The correct answer is **option 3** i.e. "the owner adapted the new trend of the business."

★ Key Points

- It is mentioned in the passage that "Although major international pet shows got cancelled early in 2020 due to the travel bans and social distancing as a result of the pandemic, the organizers of the China International Pet Show **introduced an online trade show platform** where buyers can search for pet products and communicate."
- The word "introduced" indicates that **such online platform was not used earlier.**
- This is the new mode of business.

Hence, the correct answer is "**the owner adapted the new trend of the business.**"

6. Answer: e

Explanation:

The correct answer is **option 5** i.e. "Both 3 and 4"

★ Key Points

- It is given in the paragraph that:
 - "As ***dogs and cats are treated as family members***, Chinese pet owners are increasingly willing to spend lavishly on them"
 - "Over the long term, pet humanization, ***the increasing trend of e-commerce***, and the rise in demand for natural pet food are some of the major factors driving the market."
- The passage doesn't mention anything about PETA or relationship owing a pet and high standard hence, option 1 and 2 are not correct in the context of the passage.

Hence, the correct answer is "*people treat their pet as family members*" and "*Rise in e-commerce*", and the **correct option is the 5th**

7. Answer: d

Explanation:

The correct answer is **option 4** i.e. "Dogs have always been the prefer"

★ Key Points

- The italic sentence is: "***Dogs have always been the prefer*** pets globally and account for a large chunk of the Chinese pet food revenue."
- The word "prefer" is incorrect.
- It should be used as an adjective (modifier of pet)
- The adjective form is "preferred".

Hence, the correct sentence is "*Dogs have always been the **preferred** pets globally and account for a large chunk of the Chinese pet food revenue.*"

8. Answer: d

Explanation:

The correct answer is **option 4** i.e. **"III and V only"**

★ Key Points

- The passage contains:
 1. *"China ranks third in terms of **dog** ownership, with more than 27 million dogs as pets in 2018."*
 2. *"Cats and **birds** were the next category of pets, which accounted for significant revenue shares."*
 - As I, II and IV are mentioned in the passage it can't be the answer.
- The passage **doesn't mention** anything about **pigs and dragon**.
 - Hence, **III and V is the correct answer**.

9. Answer: d

Explanation:

The correct answer is **option 4** i.e. **"people prefer convenient mode of shopping"**

★ Key Points

- The passage states, *"Furthermore, pet **owners prefer online shopping due to the convenience** it provides in their busy lifestyles."*
 - Hence, option 4 is the correct answer.
- The passage **doesn't mention** anything about **"incentives by Bank of China"** or **"meat & milk"**
 - Hence, options 1 and 2 are incorrect.
- It is given that *"Among the product types, the **wet pet food segment** is estimated to **witness the fastest growth** during the forecast period."*
 - Hence, option 3 is incorrect (as it says **dry** pet food)

Hence, the correct answer is **"people prefer convenient mode of shopping"**

10. Answer: d

Explanation:

The correct answer is ' Both B and C . '

★ Key Points

- The word ' Series ' as a noun means **A number of events, objects, or people of a similar or related kind coming one after another.**
- The word ' Series ' as a noun means **A set or sequence of related television or radio programs.**
 - In sentence A, the word ' Series ' is inappropriately used and doesn't fit the context of the sentence.
 - In sentence B , the word ' Series ' has been correctly used as a noun as the sentence is talking about the government being shocked or stunned by one after another scandal.
 - In sentence C , the word ' Series ' has been correctly used as a noun as the sentence is talking about the complex plot of the sequence of related television programs .

Hence, the only possible answer is option 4 .

11. Answer: b

Explanation:

The correct answer is ' Both A and B . '

★ Key Points

- The word ' Appeal ' as a verb means **To make a serious, urgent, or heartfelt request .**
- The word ' Appeal ' as a verb means **To be attractive or interesting to somebody .**
 - In sentence A, the word ' Appeal ' has been correctly used as a verb as the sentence is talking about the mayor making an urgent request to the people of the city to stay calm .

- In sentence B , the word ' Appeal ' has been correctly used as a verb as the sentence is talking about the idea of living in the U.S. to be not attractive or interesting to somebody .
- In sentence C , the word ' Appeal ' is inappropriately used and doesn't fit the context of the sentence.

Hence, the only possible answer is option 2 .

12. Answer: b

Explanation:

The correct answer is '**Both A and C**'.

★ Key Points

- The meaning of the word '**Capture**' is 'take into one's possession or control by force or record accurately in words or pictures'. It is a verb.
- **Sentence A** has correctly used the given word. She **recorded** the image on film.
- In **sentence B** , the word '**capture**' is incorrectly used. We must **release** the parachute so that it ensures a safe landing when there's an emergency.
- **Sentence C** has correctly used the given word. It is stated that someone's paintings **expressed** the essence of France.

★ Additional Information

- Synonyms of 'capture' are: *Seize, arrest, apprehend* .
- Antonyms of 'capture' are: *Release, Discharge, expel*.

13. Answer: d

Explanation:

The correct answer is ' that has got the nation and the world ' .

★ Key Points

- In the given sentence, the use of 'gotten' (past participle of the verb 'get') in the phrase 'that gotten the nation and the world' is incorrect.
- The sentence mentions El Salvador as the first country to accept Bitcoin as legal tender. This move has made the nation and the world debate about the pros and cons of cryptocurrency.
- 'El Salvador **has** become' is indicative of the past perfect tense that is emphasized by the auxiliary verb '**has**'. The verb form 'debating' indicates the implication in the present scenario. Besides, we can infer- '**that has got the nation and the world**' is the most appropriate answer considering the 'tense' of the phrase. Thus, the correct answer is **Option 4**.
- Options 1 and 2 are incorrect as they consist of the plural auxiliary verb 'have'. The verb form 'getting' mentioned in option 4 is incorrect as it is in present continuous tense.

The correct sentence will be: *El Salvador has become the first country to accept Bitcoin as legal tender in a move that has got the nation and the world debating the opportunities and dangers of cryptocurrency.*

14. Answer: d

Explanation:

The correct answer is '**that is taking place in**'.

★ Key Points

- In the given sentence, the use of 'which' in the phrase 'which is taking place' is incorrect.
- The sentence mentions the revised list of the world's endangered plants and animals. It is also said that the list was released at the world's leading conservation congress. But, the use of the conjunction 'which' is incorrect. The clause mentioning the venue/location of the 'conservation congress' is an essential clause. It has an identification function i.e. narrows down the identification of the conservation congress by mentioning its location.

Here, the reference is to the conservation congress taking place in Marseille. Hence, **the correct conjunction to be used is 'that'**.

- Options 1 and 3 consist of the conjunction 'which'. Thus, they are incorrect. Though option 1 consists of the conjunction 'that', the preposition 'at' is incorrect. While 'at' is used to indicate a particular place or an exact location, 'in' is used to indicate a neighbourhood or a city/ country. As the reference is to Marseille (a French city), 'in' is the correct preposition.
- Thus, the correct answer is **Option 4**.

The correct sentence will be: *The revised list of the world's endangered plants and animals was released at the start of the world's leading conservation congress that is taking place in the French city of Marseille.*

★ Additional Information

- An **essential clause** is a clause that is an important part of a sentence. It can have an identifying function and thus cannot be removed from a sentence without changing its structure/meaning. It is not offset by commas.
- A **non-essential clause** provides superfluous information that, while interesting, is insignificant to the main point of a sentence. It can be removed from a sentence without altering its structure or meaning. It is usually offset by commas.

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15. Answer: b

Explanation:

The correct answer is '**the access of households to electricity and clean cooking fuel has been shown**.'

★ Key Points

- In the underlined segment, the use of the **noun 'excess'** with the context of the sentence is **incorrect**.
 - The noun 'excess' means **more of something than is necessary or usual; too much of something**.

- The noun 'access' should be used as that means **the right or opportunity to use or benefit from something**.
- Also, in the underlined segment of the sentence, the plural form of the verb 'have' is incorrect.
 - The subject of the sentence is composed of the singular noun 'cooking fuel'.
 - We know that a singular subject always takes a singular verb.
 - Therefore, the singular form of the verb 'has' should be used in place of the plural form of the verb 'have'.

Hence, the correct answer is option 2.

Correct sentence: *The campaign to improve the **access** of households to electricity and clean cooking fuel **has** been shown to be an important factor.*

16. Answer: d

Explanation:

The correct option is 4)

★ Key Points

- The sentence *I've probably drunk eight shots of vodka to stay awake, that why I've got a hangover today* is incorrect
- The use of 'that why' is incorrect as it would be better to use 'so' which established a relationship between action, here that action is 'having eight shots of' and the reaction is 'the hangover'.
- In this sentence *instead of 'that why'*, we should use 'so'
 - The correction will be - : *I've probably drunk eight shots of vodka to stay awake, so I've got a hangover today* (Correct)

Correct Answer : " *The assignment has been immeasurable, it's like everything needs to be done right now, last night I've probably drunk eight shots of vodka to stay awake, so I've got a hangover today and lots of body ache.*"

★ Additional Information

- If a sentence has no/not/never in it, then the clause used to connect the other part with it is 'or' instead of 'nor'.
 - Example: *Marry did not have bread nor butter.* (❌ Incorrect)
 - *Marry did not have bread or butter.* (Correct)

17. Answer: b

Explanation:

The correct answer is 'B'.

★ Key Points

- Let us explore the options :-
 - 'Endeavour' means **An attempt to achieve a goal**.
 - 'Progressive': There is no such word in English or we can say that there is some spelling mistake in this word.
 - The correct spelling is 'Progressive' means **Happening or developing steadily**.
 - 'Collaborate' means **To work jointly on an activity or project**.
 - 'Escalating' means **To make or become more intense or serious**.
 - 'Ideological' means **Based on or relating to a system of ideas and ideals, especially concerning economic or political theory and policy**.

Hence, the correct answer is option 2.

Correct Sentence: *But for this endeavor to be successful, all **progressive** forces need to collaborate and invest in escalating this ideological war we find ourselves in.*

★ Additional Information

- The synonyms of the word 'Progressive' are "**Continuous, Growing, Intensifying**".
- Example of 'Progressive' in a sentence :
 - *Education is a **progressive** discovery of our own ignorance.*

18. Answer: a

Explanation:

The correct answer is 'A'.

★ Key Points

- Let us explore the options :-
 - 'Greivous' : There is no such word in English or we can say that there is some spelling mistake in this word.
 - The correct spelling is 'Grievous' means Very severe or serious .
 - 'Millennia' means **A period of a thousand years** .
 - 'Annihilate' means **To destroy utterly; obliterate** .
 - 'Egregious' means **Outstandingly bad; shocking** .
 - 'Oppression' means **Prolonged cruel or unjust treatment or exercise of authority** .

Hence, the correct answer is option 1.

Correct Sentence: *There can be no justice to India's most **grievous** victims over millennia if the misdeeds of the millennia are not acknowledged and a move made to "annihilate" the system that fostered egregious social and economic oppression .*

★ Additional Information

- The synonyms of the word 'Grievous' are "**Serious, Severe, Grave**" .
- Example of 'Grievous' in a sentence :
 - *Her death was a **grievous** shock* .

19. Answer: d

Explanation:

The correct answer is 'D'.

★ Key Points

- Let us **explore** the options:
 - 'recommended' means **advised or suggested as good or suitable**.
 - 'surveillance' means **close observation, especially of a suspected spy or criminal**.
 - 'campaigns' means **an organized course of action to achieve a goal**.
 - 'stigmatising' means **described as worthy of disgrace**
 - But the word that contextually fits here is 'stigmatising' which means **regarded as great disapproval**.
 - 'diagnostic' means **characteristic of a particular species, genus, or phenomenon**.

Hence, the correct answer is **option 4**.

Correct sentence: *WHO has recommended that countries step up surveillance, amplify public awareness campaigns, governments work towards not **stigmatising** the disease and health infrastructure be primed towards producing diagnostic kits.*

★ Additional Information

- The synonyms of the word 'stigmatising' are "classify, designate, tag".
- **Example** of 'stigmatising' in a sentence :
 - *Asking for psychological help can be **stigmatising**, that is why people rarely opt for it.*

20. Answer: c

Explanation:

The correct answer is 'C'.

★ Key Points

- Let us **explore** the options :-
 - 'Overhaul' means **A thorough examination of machinery or a system, with repairs or changes made if necessary**.

- 'Surveillance' means **Close observation, especially of a suspected spy or criminal**.
- 'Necessary': There is no such word in English or we can say that there is some spelling mistake in this word.
 - The correct spelling is '**Necessary**' means **Needed to be done, achieved, or present; essential**.
- 'Indiscriminate' means **Done at random or without careful judgment**.
- 'Entities' means **Things with distinct and independent existence**.

Hence, the correct answer is option 3.

Correct Sentence: *An overhaul of surveillance laws is **necessary** to prevent the indiscriminate monitoring of people and entities by the state and private actors.*

★ Additional Information

- The synonyms of the word 'Necessary' are "**Obligatory, Requisite, Required**".
- Example of 'Necessary' in a sentence :
 - *Light and water are **necessary** for plants.*

21. Answer: d

Explanation:

The correct answer is '**Make sure your belongings are tagged with your name before you check them in**' i.e. this sentence is grammatically and contextually correct.

★ Key Points

- Let us explore the grammatical errors in the sentences:
 - In Option 1, the use of the plural form of the noun 'informations' is incorrect.
 - We know that **the noun 'information' is an uncountable noun and the uncountable nouns are used in the singular structure**.
 - Therefore, the singular form of the noun 'information' should be used in place of the plural form of the noun 'informations'.

- Correct Sentence: *Some companies have already voluntarily disclosed similar information .*
- In Option 2 , the use of the pronoun 'which' is incorrect .
 - The pronoun 'which' is used to refer to something previously mentioned when introducing a clause giving further information .
 - The pronoun 'who' is used to introduce a clause giving further information about a person or people previously mentioned .
 - Therefore, the pronoun 'who' should be used in place of the pronoun 'which' .
- Correct Sentence: *Trading involves only a handful of traders who make the markets .*
- In Option 3 , the use of the preposition 'in' is incorrect .
 - The preposition 'in' is used for **expressing a period of time during which an event happens or a situation remains the case .**
 - The preposition 'on' is used **for indicating the day or part of a day during which an event takes place .**
 - Therefore, the **preposition 'on' should have been placed before that day of the week ,instead of 'in' as used in the given sentence.**
- Correct Sentence: *An extraordinary general meeting to decide the company's fate will be held on Thursday .*

Hence, the correct answer is option 4 .

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22. Answer: d

Explanation:

The correct answer is '**In the case of the guinea pig, the number of offspring varies between two and five**' i.e. this sentence is grammatically and contextually correct .

★ Key Points

- Let us explore the grammatical errors in the sentences:
 - In Option 1 , the use of the plural form of the noun 'contents' is incorrect .

- The meaning of a few nouns in the plural form is different from their meaning in the singular form and 'Content' is such a word.
- In the given sentence, 'content' means "a state of satisfaction", however, 'contents' mean "the things that are held or included in something".
- Therefore, the singular form of the noun 'content' should be used in place of the plural form of the noun 'contents'.
- Correct Sentence: *Roosevelt towards the end of his life seemed content to make haste slowly.*
- In Option 2, the use of the plural form of the noun 'hairs' is incorrect.
 - Some nouns are generally uncountable nouns and 'Hair' is one of them so it is generally considered singular.
 - Therefore, the singular form of the noun 'hair' should be used in place of the plural form of the noun 'hairs'.
- Correct Sentence: *The emperor had already received soft cloth made of camel hair, brocades, sable furs, jade girdles, fifty camels, and one thousand ponies as her bride price.*
- In Option 3, the use of the singular form of the noun 'pain' is incorrect.
 - The meaning of a few nouns in the plural form is different from their meaning in the singular form and 'Pain' is such a word.
 - 'Pains' means "great care" while 'pain' means "highly unpleasant physical sensation caused by illness or injury".
 - Therefore, the plural form of the noun 'pains' should be used in place of the singular form of the noun 'pain'.
- Correct Sentence: *She went to great pains to see that all her guests were provided with whatever they needed.*

Hence, the correct answer is option 4.

23. Answer: c

Explanation:

The correct answer is 'He, along with his three brothers is very lively and is always running about and making plenty of noise outside my house' i.e. this sentence is

grammatically and contextually correct .

★ Key Points

- Let us explore the grammatical errors in the sentences:
 - In Option 1 , the use of the singular form of the verb 'follows' is incorrect .
 - We know that the pronoun "You" always takes the plural verb form, even when it refers to a single person .
 - Therefore, the plural form of the verb 'follow' should be used in place of the singular form of the verb 'follows' .
 - Correct Sentence: *If you follow my anti-inflammatory diet, you will get the vitamins, minerals, essential fatty acids, and dietary fiber you need for optimal health .*
 - In Option 2 , the use of the singular form of the noun 'concert' is incorrect .
 - We know that **"Either" must be followed by 'of' if we use it before "the, these, those, or possessives (my, your)" with a plural noun .**
 - Therefore, the plural form of the noun 'concerts' should be used in place of the singular form of the noun 'concert' .
 - Correct Sentence: *If you couldn't attend either of the concerts and are currently gnashing your teeth at having missed out, don't despair .*
 - In Option 4 , the use of the singular form of the verb 'is' is incorrect .
 - We know that **when the subject of the sentence is composed of two or more nouns or pronouns connected by and, use a plural verb .**
 - Therefore, the plural form of the verb 'are' should be used in place of the singular form of the verb 'is' .
 - Correct Sentence: *The percentage of employees who called in sick and the number of employees who left their jobs within 5 years are reflective of the level of job satisfaction .*

Hence, the correct answer is option 3 .

24. Answer: c

Explanation:

The correct answer is **ACBD**

★ Key Points

From the context, we can make out that the sentence is talking about people from Hong Kong feeling a certain way about their relationship with China.

- Let's look at the meaning of all the words:

Word	Meaning
<i>Apprehension</i>	anxiety or fear that something bad or unpleasant will happen
<i>Draconian</i>	(of laws or their application) excessively harsh and severe
<i>Foisted</i>	impose an unwelcome or unnecessary thing on a person
<i>Autocratic</i>	taking no account of other people's wishes or opinions

- Now let's assume that the emboldened words in the passage are replaced by blanks:
 - The people of Hong Kong have expressed their _____ over the _____ laws _____ on them by the _____ country of China.*
- The **second blank** requires an **adjective** that can be used to **describe the 'laws' that involve Hong Kong and China.**
 - '**Foisted**' is a **verb** and is thus **not a quality that can represent the characteristics of something**.
- The **third blank** requires a **verb** that can **represent the action taken by the laws 'on' Hong Kong by China.**
 - '**Draconian**' is an **adjective** and thus **cannot act on the country of Hong Kong.**
- Thus, the terms '**draconian**' and '**foisted**' need to be **interchanged** in order to make the sentence grammatically and contextually correct.

Hence, the correct sentence will be: *The people of Hong Kong have expressed their apprehension over the draconian laws foisted on them by the autocratic country of China.*

25. Answer: c

Explanation:

The correct answer is **No change required**.

★ Key Points

Reading the sentence we find that all the words are correctly placed.

- **accident**: an unfortunate incident that happens unexpectedly and unintentionally, typically resulting in damage or injury
- **crushed**: compressed or squeezed forcefully so as to break, damage, or distort in shape
- **depressed**: (of a person) in a state of unhappiness or despondency
- **agony**: extreme physical or mental suffering

Thus we can see that all the words have already been placed in the correct positions and the given sentence needs no rearrangement.

26. Answer: b

Explanation:

The correct answer is **option 2), i.e.S.**

- The given passage is about temperature in Europe.
- **We should go through the given sentences in the following way:**
 - The passage should **begin** with **T**. It mentions when Europe recorder its hottest year. So, it is introducing the topic.
 - The **next sentence** is **R**. It talks about the previous records.
 - The **third sentence** is **P**. It is the continuation of **R**. It keeps talking about the records and what is revealed from the findings.

- The **fourth sentence** is **S**. Here, the impact of the increased temperature is mentioned.
- The **last sentence** is **Q**. It is the continuation of **S** and mentions a situation which is contrasting with the one which is stated in the previous sentence.

Therefore, the correct chronological order of the passage is: TRPSQ

27. Answer: c

Explanation:

The correct answer is **option 3), i.e.Q**.

- The given passage is about temperature in Europe.
- We should go through the given sentences in the following way:
 - The passage should begin with **T**. It mentions when Europe recorder its hottest year. So, it is introducing the topic.
 - The next sentence is **R**. It talks about the previous records.
 - The third sentence is **P**. It is the continuation of **R**. It keeps talking about the records and what is revealed from the findings.
 - The fourth sentence is **S**. Here, the impact of the increased temperature is mentioned.
 - The last sentence is **Q**. It is the continuation of **S** and mentions a situation which is contrasting with the one which is stated in the previous sentence.

Therefore, the correct chronological order of the passage is: TRPSQ

28. Answer: c

Explanation:

The correct answer is **option 3), i.e.T**.

- The given passage is about temperature in Europe.
- We should go through the given sentences in the following way:
 - The passage should begin with T. It mentions when Europe recorder its hottest year. So, it is introducing the topic.
 - The next sentence is R. It talks about the previous records.
 - The third sentence is P. It is the continuation of R. It keeps talking about the records and what is revealed from the findings.
 - The fourth sentence is S. Here, the impact of the increased temperature is mentioned.
 - The last sentence is Q. It is the continuation of S and mentions a situation which is contrasting with the one which is stated in the previous sentence.

Therefore, the correct chronological order of the passage is: TRPSQ

29. Answer: b

Explanation:

The correct answer is **option 2), i.e.P.**

- The given passage is about temperature in Europe.
- We should go through the given sentences in the following way:
 - The passage should begin with T. It mentions when Europe recorder its hottest year. So, it is introducing the topic.
 - The next sentence is R. It talks about the previous records.
 - The third sentence is P. It is the continuation of R. It keeps talking about the records and what is revealed from the findings.
 - The fourth sentence is S. Here, the impact of the increased temperature is mentioned.
 - The last sentence is Q. It is the continuation of S and mentions a situation which is contrasting with the one which is stated in the previous sentence.

Therefore, the correct chronological order of the passage is: TRPSQ

30. Answer: c

Explanation:

The correct answer is **option 3), i.e.R.**

- The given passage is about temperature in Europe.
- We should go through the given sentences in the following way:
 - The passage should begin with T. It mentions when Europe recorder its hottest year. So, it is introducing the topic.
 - The next sentence is R. It talks about the previous records.
 - The third sentence is P. It is the continuation of R. It keeps talking about the records and what is revealed from the findings.
 - The fourth sentence is S. Here, the impact of the increased temperature is mentioned.
 - The last sentence is Q. It is the continuation of S and mentions a situation which is contrasting with the one which is stated in the previous sentence.

Therefore, the correct chronological order of the passage is: TRPSQ

31. Answer: b

Explanation:

Given line graph data are extract in tabular form.

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Name of institute	Total (boys + girl)	Boys	Girls
A	500	300	200
B	500	350	150
C	600	270	330
D	800	340	460
E	700	400	300
Total	3100	1660	1440

Total number of students in all five institutes : 3100

Then average of all student in all five institutes : $3100 / 5$

$\Rightarrow 3100 / 5$

$\Rightarrow 620$

Hence 620 is the correct answer.

32. Answer: b

Explanation:

Given |:

Name of institute	Total (boys + girl)	Boys	Girls
A	500	300	200
B	500	350	150
C	600	270	330
D	800	340	460
E	700	400	300
Total	3100	1660	1440

Total number of boy who enrolled in A,B and C institutes are

$$\Rightarrow 300+350+270 = 920$$

Total number of Students (boy + girl) who enrolled in C and D institutes are

$$\Rightarrow 600+800 = 1400$$

Then Required difference is

$$\Rightarrow 1400 - 920 = 480$$

Hence 480 is the correct answer.

33. Answer: b

Explanation:

Given |:

Name of institute	Total (boys + girl)	Boys	Girls
A	500	300	200
B	500	350	150
C	600	270	330
D	800	340	460
E	700	400	300
Total	3100	1660	1440

Total number of student (boy + girl) enrolled in A,C and E institutes together are

$$\Rightarrow 500+600+700 = 1800$$

Total number of girl enrolled in A,B and E institutes together are

$$\Rightarrow 200+150+300 = 650$$

Then required ratio are 1800 : 650

$$\Rightarrow 36 :13$$

Hence 36:13 is the correct answer.

34. Answer: d

Explanation:

Given |:

Name of institute	Total (boys + girl)	Boys	Girls
A	500	300	200
B	500	350	150
C	600	270	330
D	800	340	460
E	700	400	300
Total	3100	1660	1440

Total number of boy who enrolled in institute A are 300

50% of boys get scholarship

$$\Rightarrow 300 \times 50/100$$

$$\Rightarrow 150$$

Number of boy who are not get scholarship

$$\Rightarrow 300 - 150 = 150$$

Total number of girl who enrolled in Institute A are 200

40% of girls get scholarship

$$\Rightarrow 200 \times 40/100$$

$$\Rightarrow 80$$

Number of girls who are not get scholarship

$$\Rightarrow 200 - 80$$

$$\Rightarrow 120$$

Number of boys and girls in institute A who did not get scholarship

$$\Rightarrow 150 + 120 = 270$$

Then, required percentage

$$\Rightarrow (270 / 500) \times 100$$

$$\Rightarrow 54\%$$

Hence 54% is the correct answer.

35. Answer: e

Explanation:

Given |:

Name of institute	Total (boys + girl)	Boys	Girls
A	500	300	200
B	500	350	150
C	600	270	330
D	800	340	460
E	700	400	300
Total	3100	1660	1440

Number of Boys enrolled in institutted D is 340

Number of boys enrolled in institute F is 10% more than number of boys who enrolled in institute D

Then number of boys enrolled in institute F are

$$\Rightarrow (340 / 100) \times 110$$

$$\Rightarrow 374$$

Number of Girls enrolled in institute F is 50% more than the number of girls enrolled in institute E

Then number of girls enrolled in institute F are

$$\Rightarrow (300 / 100) \times 150$$

$$\Rightarrow 450$$

Then total number of students (boy+ girl) in institute F are

$$\Rightarrow 450 + 374$$

$$\Rightarrow 824$$

Hence 824 is the correct answer.

36. Answer: e

Explanation:

Series follow the following pattern

$$25, 31, 34, 37, 43, ?$$

$$\Rightarrow 25, 31, 34, 37, 43, ?$$

$$6 \quad 3 \quad 3 \quad 6 \quad (\text{difference between them})$$

$$\Rightarrow 6 \times 0.5 = 3$$

$$\Rightarrow 3 \times 1 = 3$$

$$\Rightarrow 3 \times 2 = 6$$

$$\Rightarrow 6 \times 4 = 24$$

Then next term is $43 + 24 = 67$

Hence 67 is the correct answer.

37. Answer: a

Explanation:

Series follow the following pattern

1000, ? , 500, 1000, 250, 1500

$$\Rightarrow 1000 \times 0.5 = 500$$

$$\Rightarrow 500 \div 1 = 500$$

$$\Rightarrow 500 \times 2 = 1000$$

$$\Rightarrow 1000 \div 4 = 250$$

$$\Rightarrow 250 \times 6 = 1500$$

Then next term is

$$\Rightarrow 1000 \times 0.5 = 500$$

Hence 500 is the correct answer.

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38. Answer: b

Explanation:

Series follow the following pattern

9, 10, 22, 69, 280, ?

$$\Rightarrow 9 \times 1 + 1 = 10$$

$$\Rightarrow 10 \times 2 + 2 = 22$$

$$\Rightarrow 22 \times 3 + 3 = 69$$

$$\Rightarrow 69 \times 4 + 4 = 280$$

Then next term is

$$\Rightarrow 280 \times 5 + 5 = 1405$$

Hence 1405 is the correct answer.

39. Answer: e

Explanation:

Series follow the following pattern

2, ?, 197, 287, 368, 437

$$\Rightarrow 2, ?, 197, 287, 368, 437$$

90 81 69

9 12

It means there is double difference gap of 3

Then previous difference is 6

$$\Rightarrow 90 + 6 = 96$$

$$\Rightarrow 197 - 96 = 101$$

next term is 101

Hence 101 is the correct answer.

40. Answer: a

Explanation:

Series follow the following pattern

80, 87, 61, 124, 0, ?

$\Rightarrow 80, 87, 61, 124, 0, ?$

+7 -26 +63 -124

$\Rightarrow 2^3 - 1 = 7$

$\Rightarrow 3^3 - 1 = 26$

$\Rightarrow 4^3 - 1 = 63$

$\Rightarrow 5^3 - 1 = 124$

$\Rightarrow 6^3 - 1 = 215$

Then next term is $0 + 215 = 215$

Hence 215 is the correct answer.

41. Answer: b

Explanation:

Given:

$P = \text{Rs } 8000$

$r = 10\%$

$t = 0.5$

$n = 2$

Formula used:

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$$A = P \times \left(1 + \left(\frac{r}{n}\right)\right)^{nt}$$

Where, A = Amount, P = Principal amount, r = Rate of interest, n = number of times its getting compounded, t = time

Calculation:

$$A = 8000 \times \left(1 + \left(\frac{10/2}{100}\right)\right)^{2 \times 0.5}$$

$$\Rightarrow A = 8000 \times 1.05$$

$$\Rightarrow A = 8000 \times \frac{21}{20}$$

$$\Rightarrow A = 400 \times 21$$

$$\Rightarrow A = 8400$$

$$\text{C.I.} = 8400 - 8000$$

$$\therefore \text{Compound interest} = \text{Rs } 400$$

★ **Hint**

Compound rate of interest for 6 months = $10/2$

$\Rightarrow$ Compound rate of interest = 5% (For 6 months)

42. Answer: a

Explanation:

Given :

Time taken by pipe A to fill the tank = 16 minutes

Time taken by pipe B to empty the tank = 24 minutes

Calculation :

Efficiency of pipe A = $1/16$

Efficiency of pipe B = $1/24$

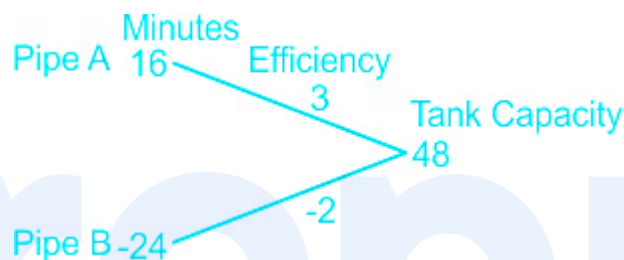
Filling of tank by pipe A in 30 minutes = $30 \times 1/16 = 15/8$

Amount of water filled by pipe A which is in excess after filling the tank = $15/8 - 1 = 7/8$

This excess water is emptied by pipe B when they open together.

Time taken by pipe B to empty excess water = $(7/8) / (1/24) = 21$ minutes

Alternate Solution :



Amount of water filled by pipe A in 30 minutes = $3 \times 30 = 90$

Excess water filled by pipe A = $90 - 48 = 42$

This excess water is emptied by pipe B when they open together.

Time taken by pipe B to empty excess water = $42/2 = 21$ minutes

43. Answer: c

Explanation:

Given:

Length of platform = 500 m

Time required by train A to cross a pole = 20 seconds

Speed of train A = 36km/hr

Speed of train B = 18km/hr

Length of train B = Length of Train A + 100 m

Formula used:

$$S = D/T$$

(where, S = speed, D = Distance, T = Time taken)

Calculation:

Speed of Train A and train B in m/s

$$\text{Train A} = 36 \times (5/18) = 10 \text{ m/s}$$

$$\text{Train B} = 18 \times (5/18) = 5 \text{ m/s}$$

$$\text{The length of the train A} = 10 \times 20 = 200 \text{ m}$$

$$\text{The length of the train B} = 200 + 100 = 300 \text{ m}$$

$$\text{Time taken by train B to cross-platform} = (500 + 300)/5 \Rightarrow 160 \text{ seconds}$$

$\therefore$ The time taken by train B to cross a platform of length 500 metres is 160 seconds

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44. Answer: e

Explanation:

Speed of boat in still water is V km/hr

Speed of current in still water is U km/hr

$$\Rightarrow V + U = 20 \text{ km/hr}$$

Boat takes 8hrs to cover 96km in upstream

$$\Rightarrow 96/8$$

$$\Rightarrow 12 \text{ km/hr}$$

$V - U$ is 12 km/hr is equal to difference of speed of boat and speed of current

Hence 12 km/hr is the correct answer.

45. Answer: a

Explanation:

GIVEN :

Perimeter of the field = 248 m.

Length = Breadth + 4 m.

FORMULA USED :

Perimeter of the field = $2(L + B)$

ASSUMPTION :

Let the length and breadth of the field are L and B respectively.

CALCULATION :

According to the question,

$$L = B + 4$$

$$\Rightarrow 248 = 2(L + B)$$

$$\Rightarrow 124 = B + 4 + B$$

$$\Rightarrow 2B = 120$$

$$\Rightarrow B = 60 \text{ meter}$$

$$\text{So, } L = B + 4 = 60 + 4 = 64 \text{ meter}$$

Area of the path = Area of the field including path - Area of the field

$$\Rightarrow \text{Area of the path} = (L + 10) \times (B + 10) - L \times B = (64 + 10) \times (60 + 10) - 64 \times 60$$

$$\Rightarrow \text{Area of the path} = 74 \times 70 - 64 \times 60 = 5180 - 3840$$

$$\therefore \text{Area of the path} = 1340 \text{ m}^2$$

46. Answer: d

Explanation:

Given:

Mixture of milk and water in the ratio = 17 : 7

Total mixture of milk and water = 120 liter

Mixture poured out into vessel X = 40 %

X is a mixture of equal milk and water = 100 liter

Calculation:

Quantity of milk and water in 120 liter of mixture:

$$\text{Mixture of milk} = \frac{17}{24} \times 120$$

$$\Rightarrow 85 \text{ liter}$$

$$\text{Mixture of water} = 120 - 85$$

$$\Rightarrow 35 \text{ liter}$$

Now, according to question

Quantity of mixture taken out and poured in vessel X:

$$\text{Mixture of milk poured out} = 85 \times \frac{2}{5}$$

⇒ 34 liter

Mixture of water poured out = $35 \times \frac{2}{5}$

⇒ 14 liter

Again, from the question

X is a 100 liter mixture of equal milk and water means 50% milk and 50% water

Then,

New ratio of milk and water after addition

$$= (50 + 34) : (50 + 14)$$

$$\Rightarrow 84 : 64$$

$$\Rightarrow 21 : 16$$

∴ New ratio of milk and water is 21 : 16

47. Answer: e

Explanation:

The correct answer is: **3**

Given:

final savings = Rs 9520

rent expense = 20%

education expense = 15%

clothing expense = 30%

Formula used:

$$A = p \left[1 + \frac{x}{100} \right] \left[1 + \frac{y}{100} \right] \left[1 + \frac{z}{100} \right]$$

Calculation:

Let his monthly income = Rs P

then $x = -20$, $y = -15$, $z = -30$

$$\therefore P \left[1 + \frac{x}{100} \right] \left[1 + \frac{y}{100} \right] \left[1 + \frac{z}{100} \right] = 9520$$

$$\text{then } P \left[\frac{80}{100} \right] \left[\frac{85}{100} \right] \left[\frac{70}{100} \right] = 9520$$

$$\Rightarrow 4760P/10000 = 9520$$

$$\Rightarrow P = 9520 \times 10000 / 4760$$

$$\text{or } P = 20000$$

$\therefore$ His monthly income is Rs 20000

48. Answer: e

Explanation:

$$\text{I. } x^2 + 10x - 264 = 0$$

$$\Rightarrow x^2 + 22x - 12x - 264 = 0$$

$$\Rightarrow x(x + 22) - 12(x + 22) = 0$$

$$\Rightarrow (x + 22)(x - 12) = 0$$

$$\text{Then, } x = +12 \text{ or } x = -22$$

$$\text{II. } y^2 + 6y - 187 = 0$$

$$\Rightarrow y^2 + 17y - 11y - 187 = 0$$

$$\Rightarrow y(y + 17) - 11(y + 17) = 0$$

$$\Rightarrow (y - 11)(y + 17) = 0$$

Then, $y = -17$ or $y = +11$

So, when $x = +12$, $x > y$ for $y = -17$ and $x > y$ for $y = +11$

And when $x = -22$, $y > x$ for $y = -17$ and $y > x$ for $y = +11$

$\therefore$ So, we can observe that no relationship can be determined.

49. Answer: b

Explanation:

$$\text{I. } x^2 - 3x - 180 = 0$$

$$\Rightarrow x^2 + 12x - 15x - 180 = 0$$

$$\Rightarrow x(x + 12) - 15(x + 12) = 0$$

$$\Rightarrow (x + 12)(x - 15) = 0$$

Then, $x = -12$ or $x = +15$

$$\text{II. } y^2 + 34y + 288 = 0$$

$$\Rightarrow y^2 + 18y + 16y + 288 = 0$$

$$\Rightarrow y(y + 18) + 16(y + 18) = 0$$

$$\Rightarrow (y + 16)(y + 18) = 0$$

Then, $y = -16$ or $y = -18$

So, when $x = -12$, $x > y$ for $y = -16$ and $x > y$ for $y = -18$

And when $x = +15$, $x > y$ for $y = -16$ and $x > y$ for $y = -18$

$\therefore$ So, we can observe that $x > y$.

50. Answer: e

Explanation:

$$x^2 - 19x + 84 = 0$$

$$\Rightarrow x^2 - 12x - 7x + 84 = 0$$

$$\Rightarrow x(x - 12) - 7(x - 12) = 0$$

$$\Rightarrow (x - 12)(x - 7) = 0$$

$$\Rightarrow x = 12 \text{ or } x = 7$$

$$y^2 - 3y - 108 = 0$$

$$\Rightarrow y^2 - 12y + 9y - 108 = 0$$

$$\Rightarrow y(y - 12) + 9(y - 12) = 0$$

$$\Rightarrow (y - 12)(y + 9) = 0$$

$$\Rightarrow y = 12 \text{ or } y = -9$$

$\therefore$ No relationship can be established

51. Answer: e

Explanation:

Here,

$$\Rightarrow P(x) = x^2 - 7x + 12 = 0$$

$$\Rightarrow P(y) = 2y^2 - 19y + 44 = 0$$

Factorization of $P(x)$ and $P(y)$;

$$\Rightarrow P(x) = x^2 - 3x - 4x + 12 = 0$$

$$\Rightarrow x(x - 3) - 4(x - 3) = 0$$

$$\Rightarrow (x - 3)(x - 4) = 0$$

$$\Rightarrow x = 3 \text{ or } x = 4$$

$$\Rightarrow P(y) = 2y^2 - 8y - 11y + 44 = 0$$

$$\Rightarrow 2y(y - 4) - 11(y - 4) = 0$$

$$\Rightarrow (y - 4)(2y - 11) = 0$$

$$\Rightarrow y = 4 \text{ or } y = 11/2$$

$$\Rightarrow x \leq y$$

52. Answer: a

Explanation:

Here,

$$P(x) = 3x^2 - 13x + 12 = 0$$

$$P(y) = 2y^2 - 15y + 28 = 0$$

Factorization of $P(x)$ and $P(y)$;

$$\Rightarrow P(x) = 3x^2 - 9x - 4x + 12 = 0$$

$$\Rightarrow 3x(x - 3) - 4(x - 3) = 0$$

$$\Rightarrow (x - 3)(3x - 4) = 0$$

$$\Rightarrow x = 3 \text{ or } x = 4/3$$

$$\Rightarrow P(y) = 2y^2 - 8y - 7y + 28 = 0$$

$$\Rightarrow 2y(y - 4) - 7(y - 4) = 0$$

$$\Rightarrow (y - 4)(2y - 7) = 0$$

$$\Rightarrow y = 4 \text{ or } y = 7/2$$

Here, $x < y$

$\therefore$ Option 1 is the answer

53. Answer: c

Explanation:

From the data given in the pie chart, we have:

Disk	Total storage in the disc (500 GB)	Total used space in the disc (200 GB)	Total available space in the disc
A	25% of 500 = 125	25% of 200 = 50	125 - 50 = 75
B	20% of 500 = 100	15% of 200 = 30	100 - 30 = 70
C	25% of 500 = 125	35% of 200 = 70	125 - 70 = 55
D	30% of 500 = 150	25% of 200 = 50	150 - 50 = 100
Total	500	200	300

Required ratio = 50: 100

$$\Rightarrow 1:2$$

$\therefore$ The correct answer is 1:2.

54. Answer: a

Explanation:

From the data given in the pie chart, we have:

Disk	Total storage in the disc (500 GB)	Total used space in the disc (200 GB)	Total available space in the disc
A	25% of 500 = 125	25% of 200 = 50	125 - 50 = 75
B	20% of 500 = 100	15% of 200 = 30	100 - 30 = 70
C	25% of 500 = 125	35% of 200 = 70	125 - 70 = 55
D	30% of 500 = 150	25% of 200 = 50	150 - 50 = 100
Total	500	200	300

$$\text{Required \%} = [(100 - 75)/100] \times 100$$

⇒ 25% less

∴ The correct answer is 25% less.

55. Answer: c

Explanation:

From the data given in the pie chart, we have:

Disk	Total storage in the disc (500 GB)	Total used space in the disc (200 GB)	Total available space in the disc
A	25% of 500 = 125	25% of 200 = 50	125 - 50 = 75
B	20% of 500 = 100	15% of 200 = 30	100 - 30 = 70
C	25% of 500 = 125	35% of 200 = 70	125 - 70 = 55
D	30% of 500 = 150	25% of 200 = 50	150 - 50 = 100
Total	500	200	300

Total storage in the disc E = 120% of 125

⇒ 150 GB

Total used space in the disc E = 70 GB

Total available space in the disc E = 150 - 70 = 80 GB

∴ The correct answer is 80 GB.

56. Answer: d

Explanation:

From the data given in the pie chart, we have:

Disk	Total storage in the disc (500 GB)	Total used space in the disc (200 GB)	Total available space in the disc
A	25% of 500 = 125	25% of 200 = 50	125 - 50 = 75
B	20% of 500 = 100	15% of 200 = 30	100 - 30 = 70
C	25% of 500 = 125	35% of 200 = 70	125 - 70 = 55
D	30% of 500 = 150	25% of 200 = 50	150 - 50 = 100
Total	500	200	300

Available space in Disk (A+C) = 75 + 55 = 130

Available space in Disk (A+B) = 75 + 70 = 145

Available space in Disk (D+C) = 100 + 55 = 155

Available space in Disk (B+D) = 70 + 100 = 170

Available space in Disk (B+C) = 70 + 55 = 125

Here, Disk (B+D) has maximum available space

∴ The correct answer is Disk (B+D).

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57. Answer: b

Explanation:

From the data given in the pie chart, we have:

Disk	Total storage in the disc (500 GB)	Total used space in the disc (200 GB)	Total available space in the disc
A	25% of 500 = 125	25% of 200 = 50	125 - 50 = 75
B	20% of 500 = 100	15% of 200 = 30	100 - 30 = 70
C	25% of 500 = 125	35% of 200 = 70	125 - 70 = 55
D	30% of 500 = 150	25% of 200 = 50	150 - 50 = 100
Total	500	200	300

$$\text{Required \%} = [30 / (50 + 50)] \times 100$$

$$\Rightarrow 30\%$$

$\therefore$ The correct answer is 30%.

58. Answer: a

Explanation:

From the data given in the pie chart, we have:

Disk	Total storage in the disc (500 GB)	Total used space in the disc (200 GB)	Total available space in the disc
A	25% of 500 = 125	25% of 200 = 50	125 - 50 = 75
B	20% of 500 = 100	15% of 200 = 30	100 - 30 = 70
C	25% of 500 = 125	35% of 200 = 70	125 - 70 = 55
D	30% of 500 = 150	25% of 200 = 50	150 - 50 = 100
Total	500	200	300

$$\text{Required \%} = [70 / 55] \times 100$$

⇒ 127.27%

∴ The correct answer is 127.27%.

59. Answer: e

Explanation:

From the data given in the pie chart, we have:

Disk	Total storage in the disc (500 GB)	Total used space in the disc (200 GB)	Total available space in the disc
A	25% of 500 = 125	25% of 200 = 50	125 - 50 = 75
B	20% of 500 = 100	15% of 200 = 30	100 - 30 = 70
C	25% of 500 = 125	35% of 200 = 70	125 - 70 = 55
D	30% of 500 = 150	25% of 200 = 50	150 - 50 = 100
Total	500	200	300

Required difference = (100 + 150) - (125 + 125) = 0 GB

∴ The correct answer is 0 GB.

60. Answer: c

Explanation:

Given:

Pipe C can fill a tank = 20 hours

Pipe A fills twice as fast as pipe B and pipe B fills twice as fast as pipe C

Concept Used:

The capacity of tank = Efficiency $\times$ time

Calculations:

Let the capacity of the tank is 120 liters.

$\Rightarrow$ Efficiency of Pipes C = $120/20 = 6$ litre/hr

$\Rightarrow$ Efficiency of pipes B = $2 \times 6 = 12$ litre/hr

$\Rightarrow$ Efficiency of pipes A = $2 \times 12 = 24$ litre/hr

$\Rightarrow$ If all the pipes are opened time taken to filled the tank = $120 / (6 + 12 + 24)$

$\Rightarrow$ If all the pipes are opened time taken to fill the tank = $20/7 = 2\frac{6}{7}$ hr

$\therefore$ The required time is $2(6/7)$ hr

★ Alternate Method

Efficiency is inversely proportional to time taken

Pipe A fills twice as fast as pipe B, So ratio of Efficiency of A and B is 4 : 2

Pipe B fills twice as fast as pipe C, So ratio of Efficiency of B and C is 2 : 1

So, the Efficiency ratio of A, B and C = 4 : 2 : 1

So time ratio of A, B and C = 1 : 2 : 4

Time taken by Pipe C = 20 hours

So, time taken by Pipe A and B is 5 hours and 10 hours respectively.

Time taken by A, B and C together = $1/(1/5 + 1/10 + 1/20) = 20/7 = 2\frac{6}{7}$ hr

61. **Answer: e**

Explanation:

Given that:

Anu and Daskh are equal investments and Taru invested $\frac{1}{6}$ of the total money.

Total profit = Rs. 7200

Formula:

Profit = time $\times$ money

The investment ratio is equal to profit ratio

Calculation:

Let the total investment was Rs. $12x$

According to the question,

Investment of Taru = $\frac{1}{6}$ of $12x$ = Rs. $2x$

Investment of Anu and Daksh are equal i.e. $(12x - 2x) / 2 = 10x / 2 = 5x$

Ratio of their money = $5x : 5x : 2x = 5 : 5 : 2$

Ratio of profit = Anu : Daksh : Taru = $5 : 5 : 2 \rightarrow 12$ unit

Now, profit = Rs. 7200

Difference between the profits of Taru and Daksh = $7200 \times (5 - 2) / 12$

$\Rightarrow 7200 \times 3 / 12$

$\Rightarrow$ Rs.1800

$\therefore$ Difference between the profits of Taru and Daksh is Rs. 1800

62. Answer: e

Explanation:

Given:

Present age of Ranjan and Sanjay in the ratio = 3 : 2

Sanjay's age 8 year hence = Ranjan's age 8 years ago

Irfan age = 12 years older than Sanjay

Calculation:

Let the present age of Ranjan and Sanjay be $3x$ and $2x$ respectively

$$\Rightarrow 3x - 8 = 2x + 8$$

$$\Rightarrow x = 16$$

Now, Ranjan age = 3×16

$$\Rightarrow 48 \text{ years}$$

Sanjay age = 2×16

$$\Rightarrow 32 \text{ years}$$

Now, according to question

Present age of Irfan = 12 years older than Sanjay

$$\Rightarrow (12 + 32) \text{ years}$$

$$\Rightarrow 44 \text{ years}$$

$\therefore$ The present age of Irfan is 44

63. Answer: e

Explanation:

Given:

Let salary of P and Q be Rs.20a and Rs.21a respectively.

Calculation:

$$\Rightarrow 21a - 20a = 2000$$

$$\Rightarrow a = 2000$$

The monthly salary of P and Q is Rs.40000 and Rs.42000 respectively.

$$\Rightarrow \text{Expenditure of Q} = 42000 - 14000 = \text{Rs.}28000$$

Then,

$$\Rightarrow (\text{Expenditure of P}) : 28000 = 5 : 7$$

$$\Rightarrow \text{Expenditure of P} = 28000 \times \frac{5}{7} = \text{Rs.}20000$$

$$\Rightarrow \text{Savings of P} = 40000 - 20000 = \text{Rs.}20000$$

$$\text{Required ratio} = 20000 : 14000 = 10 : 7$$

$\therefore$ the correct answer is 10 : 7

64. Answer: b

Explanation:

Given:

Amount to be distributed among A, B and C in the ratio = 3 : 4 : 5

Erroneous distribution ratio = 9 : 4 : 7

Due to the error, B got = Rs. 60 less

Concept used:

The amount to be distributed amongst A, B and C is the same as the erroneous distribution amount

Calculations:

Let the amount to be distributed among A, B and C be $3x$, $4x$ and $5x$ respectively and the erroneous distribution among A, B and C be $9y$, $4y$ and $7y$

$$\Rightarrow 3x + 4x + 5x = 9y + 4y + 7y$$

$$\Rightarrow 12x = 20y$$

$$\Rightarrow x = \left(\frac{5}{3}\right)y$$

Difference between the amount received by B = $4x - 4y$

$$\Rightarrow 4 \times (x - y) = 60$$

$$\Rightarrow 4 \times \left[\left(\frac{5}{3}\right)y - y\right] = 60$$

$$\Rightarrow \left(\frac{2}{3}\right)y = 15$$

$$\Rightarrow y = 7.5 \times 3$$

$$\Rightarrow y = 22.5$$

Total amount distributed = $20y$

$$\Rightarrow 22.5 \times 20$$

$$\Rightarrow \text{Rs. } 450$$

$\therefore$ The total amount distributed is Rs. 450

65. Answer: a

Explanation:

Calculation:

According to the question, we get

Let CP be 100

then MP = 140

Discount of 10% = $\{1 - (1/10)\} \times 140$

$$\Rightarrow 9 \times 14 = 126$$

Discount of 15% = $\{1 - (15/100)\} \times 140$

$$\Rightarrow 17 \times 7 = 119$$

Difference of profit = 21

$$\Rightarrow 126 - 119 \rightarrow 21$$

$$\Rightarrow 7 \rightarrow 21$$

$$\Rightarrow 1 \rightarrow 3$$

According to the question, we get

$$CP = 100$$

$$\Rightarrow 100 \rightarrow 300$$

Then, MP = 140% of 300 = 420

Now, after 20% discount on MP

$$\Rightarrow \{1 - (1/5)\} \times 420$$

$$\Rightarrow \{4/5\} \text{ of } 420$$

$$\Rightarrow 4 \times 84 = 336$$

$$\text{Profit} = 336 - 300 = 36$$

$\therefore$ The profit earned when shopkeeper gives 20% discount on MP is 36.

66. Answer: e

Explanation:

Six people P, Q, R, S, T, and U

six different places Jaipur, Nagpur, Bangalore, Mumbai, Agra, and Delhi

1- P visited to Agra on 3rd February and Only one person visited between P and the one who visited to Nagpur.

3- T visited immediately after the one who visited to Nagpur.

4- One person visited between T and U, who doesn't visited to Mumbai.

5- The one who visited Bangalore visited immediately after the one who visited to Mumbai.

		Case-1		Case-2	
Month	Date	Person	City	Person	City
January	3rd		Nagpur		Mumbai
	7th	T			Bangalore
February	3rd	P	Aga	P	Agra
	7th	U		U	
March	3rd		Mumbai		Nagpur
	7th		Bangalore	T	

6- S visited in a month of having 31 days but not in january and S doesn't visited on date 7 of any month.

7- Three people visited between S and R.

8- Only one person visited between the one who visited to Bangalore and the one who visited to Delhi.

		Case-1		Case-2	
Month	Date	Person	City	Person	City
January	3rd	R	Nagpur	R	Mumbai
	7th	T			Bangalore
February	3rd	P	Aga	P	Agra
	7th	U	Delhi	U	Delhi
March	3rd	S	Mumbai	S	Nagpur
	7th		Bangalore	T	

9- Q doesn't visited immediate after R. So case-2 gets eliminated.

So, Final arrangement is;

Month	Date	Person	City
January	3rd	R	Nagpur
	7th	T	Jaipur
February	3rd	P	Agra
	7th	U	Delhi
March	3rd	S	Mumbai
	7th	Q	Bangalore

Hence, S visited Mumbai.

67. Answer: a

Explanation:

Six people P, Q, R, S, T, and U

six different places Jaipur, Nagpur, Bangalore, Mumbai, Agra, and Delhi

1- P visited to Agra on 3rd February and Only one person visited between P and the one who visited to Nagpur.

3- T visited immediately after the one who visited to Nagpur.

4- One person visited between T and U, who doesn't visited to Mumbai.

5- The one who visited Bangalore visited immediately after the one who visited to Mumbai.

		Case-1		Case-2	
Month	Date	Person	City	Person	City
January	3rd		Nagpur		Mumbai
	7th	T			Bangalore
February	3rd	P	Aga	P	Agra
	7th	U		U	
March	3rd		Mumbai		Nagpur
	7th		Bangalore	T	

6- S visited in a month of having 31 days but not in january and S doesn't visited on date 7 of any month.

7- Three people visited between S and R.

8- Only one person visited between the one who visited to Bangalore and the one who visited to Delhi.

		Case-1		Case-2	
Month	Date	Person	City	Person	City
January	3rd	R	Nagpur	R	Mumbai
	7th	T			Bangalore
February	3rd	P	Aga	P	Agra
	7th	U	Delhi	U	Delhi
March	3rd	S	Mumbai	S	Nagpur
	7th		Bangalore	T	

9- Q doesn't visited immediate after R. So case-2 gets eliminated.

So, Final arrangement is;

Month	Date	Person	City
January	3rd	R	Nagpur
	7th	T	Jaipur
February	3rd	P	Agra
	7th	U	Delhi
March	3rd	S	Mumbai
	7th	Q	Bangalore

Hence , T who visited to Jaipur visited on 7th January.

68. Answer: d

Explanation:

Six people P, Q, R, S, T, and U

six different places Jaipur, Nagpur, Bangalore, Mumbai, Agra, and Delhi

1- P visited to Agra on 3rd February and Only one person visited between P and the one who visited to Nagpur.

3- T visited immediately after the one who visited to Nagpur.

4- One person visited between T and U, who doesn't visited to Mumbai.

5- The one who visited Bangalore visited immediately after the one who visited to Mumbai.

		Case-1		Case-2	
Month	Date	Person	City	Person	City
January	3rd		Nagpur		Mumbai
	7th	T			Bangalore
February	3rd	P	Aga	P	Agra
	7th	U		U	
March	3rd		Mumbai		Nagpur
	7th		Bangalore	T	

6- S visited in a month of having 31 days but not in january and S doesn't visited on date 7 of any month.

7- Three people visited between S and R.

8- Only one person visited between the one who visited to Bangalore and the one who visited to Delhi.

		Case-1		Case-2	
Month	Date	Person	City	Person	City
January	3rd	R	Nagpur	R	Mumbai
	7th	T			Bangalore
February	3rd	P	Aga	P	Agra
	7th	U	Delhi	U	Delhi
March	3rd	S	Mumbai	S	Nagpur
	7th		Bangalore	T	

9- Q doesn't visited immediate after R. So case-2 gets eliminated.

So, Final arrangement is;

Month	Date	Person	City
January	3rd	R	Nagpur
	7th	T	Jaipur
February	3rd	P	Agra
	7th	U	Delhi
March	3rd	S	Mumbai
	7th	Q	Bangalore

Hence, Two people visited between the one who visited to Agra and Q.

69. Answer: a

Explanation:

Six people P, Q, R, S, T, and U

six different places Jaipur, Nagpur, Bangalore, Mumbai, Agra, and Delhi

1- P visited to Agra on 3rd February and Only one person visited between P and the one who visited to Nagpur.

3- T visited immediately after the one who visited to Nagpur.

4- One person visited between T and U, who doesn't visited to Mumbai.

5- The one who visited Bangalore visited immediately after the one who visited to Mumbai.

		Case-1		Case-2	
Month	Date	Person	City	Person	City
January	3rd		Nagpur		Mumbai
	7th	T			Bangalore
February	3rd	P	Aga	P	Agra
	7th	U		U	
March	3rd		Mumbai		Nagpur
	7th		Bangalore	T	

6- S visited in a month of having 31 days but not in january and S doesn't visited on date 7 of any month.

7- Three people visited between S and R.

8- Only one person visited between the one who visited to Bangalore and the one who visited to Delhi.

		Case-1		Case-2	
Month	Date	Person	City	Person	City
January	3rd	R	Nagpur	R	Mumbai
	7th	T			Bangalore
February	3rd	P	Aga	P	Agra
	7th	U	Delhi	U	Delhi
March	3rd	S	Mumbai	S	Nagpur
	7th		Bangalore	T	

9- Q doesn't visited immediate after R. So case-2 gets eliminated.

So, Final arrangement is;

Month	Date	Person	City
January	3rd	R	Nagpur
	7th	T	Jaipur
February	3rd	P	Agra
	7th	U	Delhi
March	3rd	S	Mumbai
	7th	Q	Bangalore

Hence, **U visited to Delhi.**

70. **Answer: d**

Explanation:

Six people P, Q, R, S, T, and U

six different places Jaipur, Nagpur, Bangalore, Mumbai, Agra, and Delhi

1- P visited to Agra on 3rd February and Only one person visited between P and the one who visited to Nagpur.

3- T visited immediately after the one who visited to Nagpur.

4- One person visited between T and U, who doesn't visited to Mumbai.

5- The one who visited Bangalore visited immediately after the one who visited to Mumbai.

		Case-1		Case-2	
Month	Date	Person	City	Person	City
January	3rd		Nagpur		Mumbai
	7th	T			Bangalore
February	3rd	P	Aga	P	Agra
	7th	U		U	
March	3rd		Mumbai		Nagpur
	7th		Bangalore	T	

6- S visited in a month of having 31 days but not in january and S doesn't visited on date 7 of any month.

7- Three people visited between S and R.

8- Only one person visited between the one who visited to Bangalore and the one who visited to Delhi.

		Case-1		Case-2	
Month	Date	Person	City	Person	City
January	3rd	R	Nagpur	R	Mumbai
	7th	T			Bangalore
February	3rd	P	Aga	P	Agra
	7th	U	Delhi	U	Delhi
March	3rd	S	Mumbai	S	Nagpur
	7th		Bangalore	T	

9- Q doesn't visited immediate after R. So case-2 gets eliminated.

So, Final arrangement is;

Month	Date	Person	City
January	3rd	R	Nagpur
	7th	T	Jaipur
February	3rd	P	Agra
	7th	U	Delhi
March	3rd	S	Mumbai
	7th	Q	Bangalore

Hence, Q visited in the last.

71. Answer: d

Explanation:

Given:

Word: SHIPBOARD

each consonant is replaced by the previous alphabet and each vowel is replaced by the next alphabet of the english alphabetical series then;

Given Word	S	H	I	P	B	O	A	R	D
Shifting	-1	-1	+1	-1	-1	+1	+1	-1	-1
New word	R	G	J	O	A	P	B	Q	C

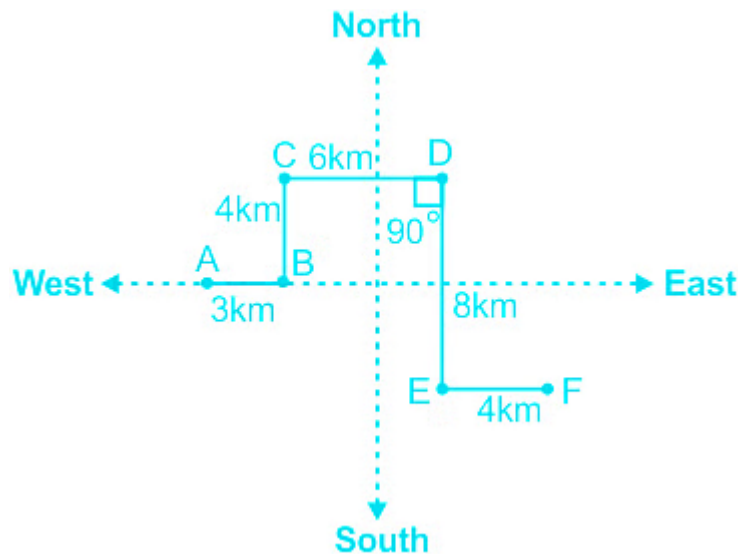
Thus, the **fourth** from the right is P .

Hence, **P** is the right answer.

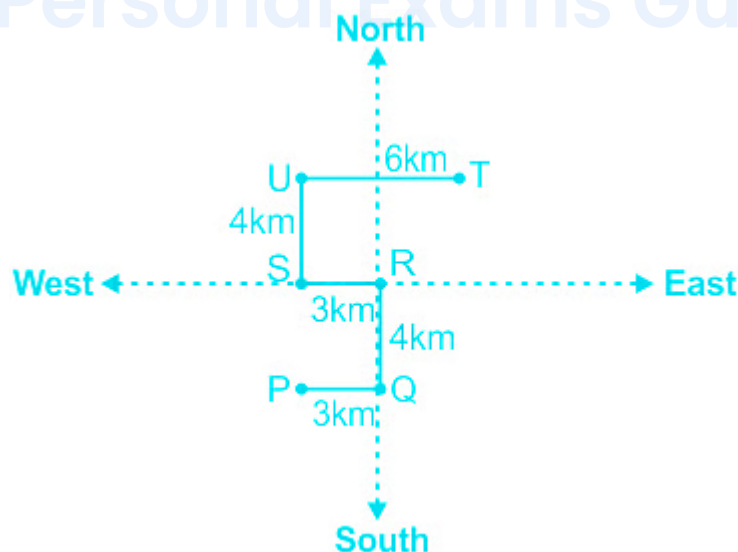
72. Answer: c

Explanation:

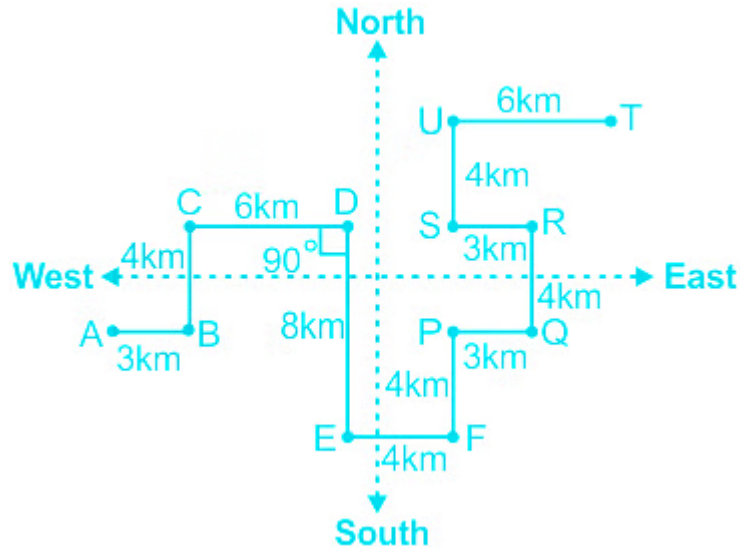
- 1- Pankaj starts walking in the east direction from point A. After walking for 3km he reached point B.
- 2- He turned to his left and walked for 4km and reached point C.
- 3- He turned to his right and walked for 6km and reached point D.
- 4- He turned to his 90 degree clockwise and walked for 8km and reached point E.
- 5- Point F is 4 km east to point E.



1. Anuj started walking from point T towards the west and walked for 6km and reached point U.
2. From point U he turned to his left and walked for 4 km and reached point S.
3. From point S he turned to his left and walked for 3 km to reach point R.
4. From point R he turned to his right and walked for 4 km to reach point Q.
5. From point Q he turned to his right direction and walked for 3 km to reach point P.
6. From point P he turned to the left, walked for 4 km, and reached point F.



final diagram;

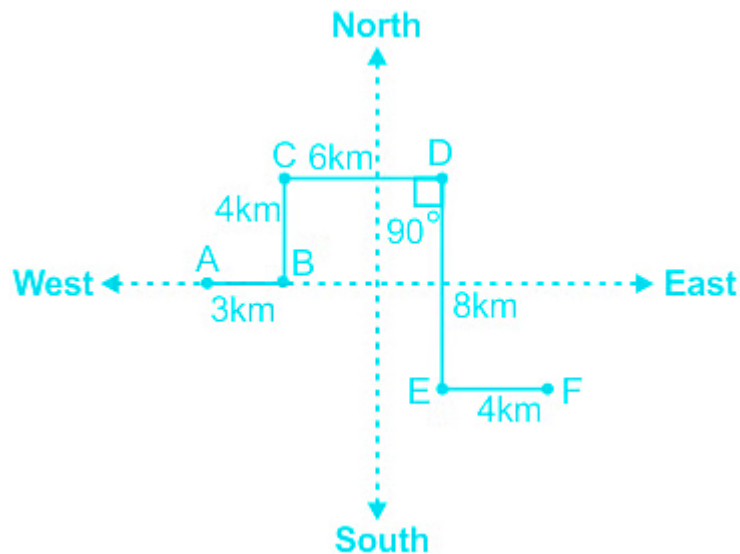


Hence, Anuj stands South-West with respect to his starting point.

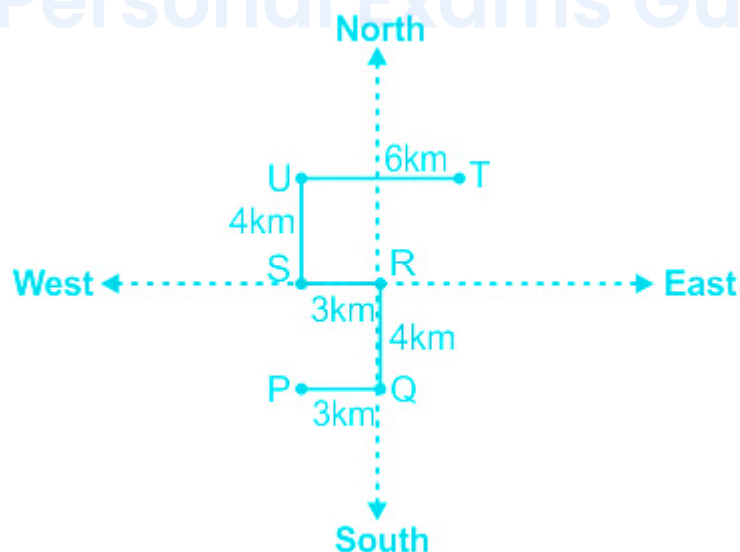
73. Answer: b

Explanation:

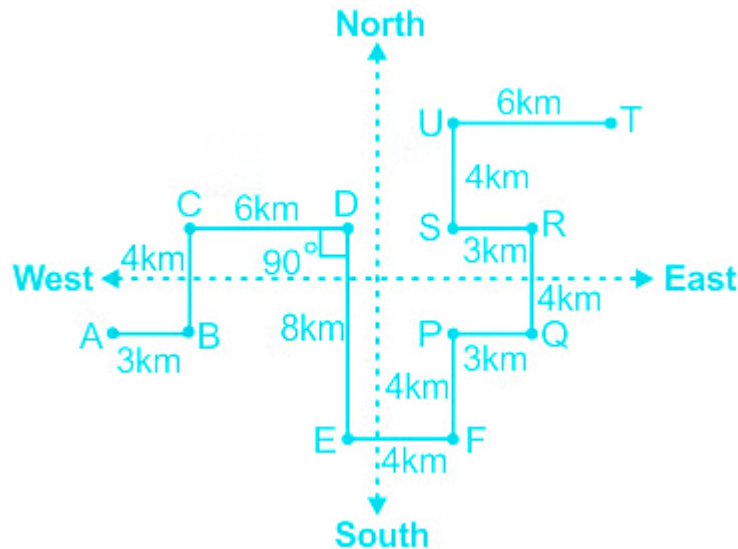
- 1- Pankaj starts walking in the east direction from point A. After walking for 3km he reached point B.
- 2- He turned to his left and walked for 4km and reached point C.
- 3- He turned to his right and walked for 6km and reached point D.
- 4- He turned to his 90 degree clockwise and walked for 8km and reached point E.
- 5- Point F is 4 km east to point E.



1. Anuj started walking from point T towards the west and walked for 6km and reached point U.
2. From point U he turned to his left and walked for 4 km and reached point S.
3. From point S he turned to his left and walked for 3 km to reach point R.
4. From point R he turned to his right and walked for 4 km to reach point Q.
5. From point Q he turned to his right direction and walked for 3 km to reach point P.
6. From point P he turned to his left and walked for 4 km and reached point F.



final diagram;

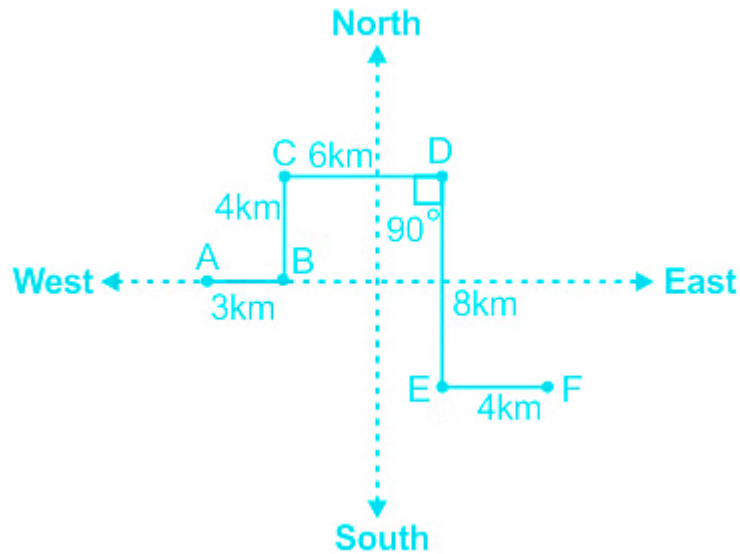


Hence, 16km is the shortest distance between point A and point Q.

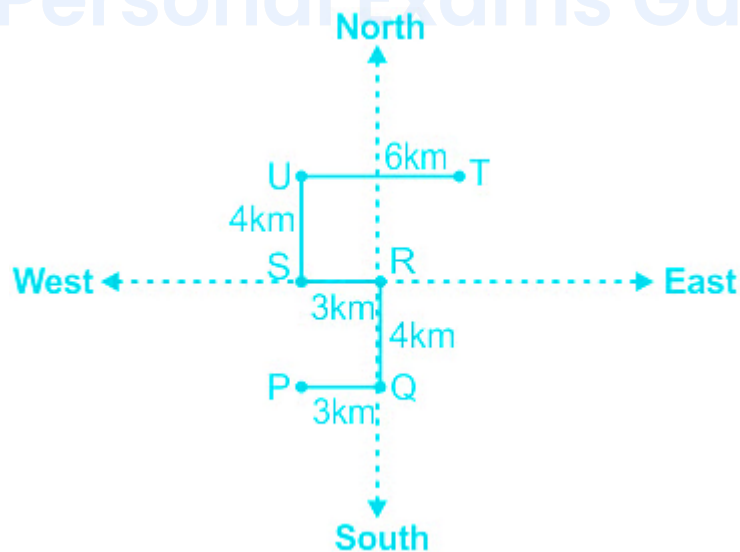
74. Answer: a

Explanation:

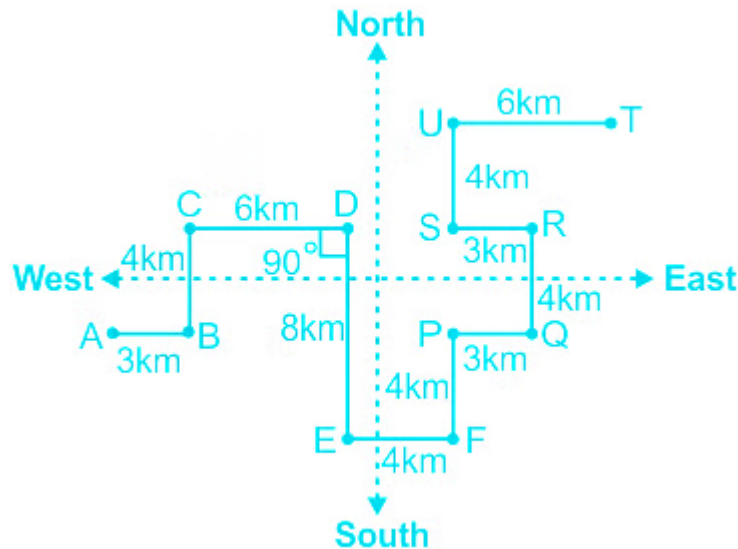
- 1- Pankaj starts walking in the east direction from point A. After walking for 3km he reached point B.
- 2- He turned to his left and walked for 4km and reached point C.
- 3- He turned to his right and walked for 6km and reached point D.
- 4- He turned to his 90 degree clockwise and walked for 8km and reached point E.
- 5- Point F is 4 km east to point E.



1. Anuj started walking from point T towards the west and walked for 6km and reached point U.
2. From point U he turned to his left and walked for 4 km and reached point S.
3. From point S he turned to his left and walked for 3 km to reach point R.
4. From point R he turned to his right and walked for 4 km to reach point Q.
5. From point Q he turned to his right direction and walked for 3 km to reach point P.
6. From point P he turned to his left and walked for 4 km and reached point F.



final diagram;



Hence, Point U is in North-East direction of Point D.

75. Answer: d

Explanation:

From the given informations,

1) S sits at the extreme end of the row. Here we get 2 possible cases- Case 1 and Case 2. Three persons sit between S and T. In case 1, S sits on the left end, So T sits on the right of S but in Case 2, S sits on the right end, So T sits on the left of S.

Case -1



Case -2



2) L is seated exactly between S and V. In case 1, V sits on the left of T while in case 2, V sits on the right of T.

3) V sits left of T. L does not sit right of T. Here Case 2 is ruled out now.



4) X is the only immediate neighbour of Q, Which means Q sits on the right end of the row.



5) More than one person sits between J and O, who does not sit near T. Hence J sits on the left of O. So, the final arrangement is-



Hence, O is fourth to the right of V.

76. Answer: a

Explanation:

From the given informations,

1) S sits at the extreme end of the row. Here we get 2 possible cases- Case 1 and Case 2. Three persons sit between S and T. In case 1, S sits on the left end, So T sits on the right of S but in Case 2, S sits on the right end, So T sits on the left of S.

Case -1





2) L is seated exactly between S and V. In case 1, V sits on the left of T while in case 2, V sits on the right of T.

3) V sits left of T. L does not sit right of T. Here Case 2 is ruled out now.



4) X is the only immediate neighbour of Q, Which means Q sits on the right end of the row.



5) More than one person sits between J and O, who does not sit near T. Hence J sits on the left of O. So, the final arrangement is-



Hence, **J sits second to the left of M.**

77. Answer: c

Explanation:

From the given informations,

1) S sits at the extreme end of the row. Here we get 2 possible cases- Case 1 and Case 2. Three persons sit between S and T. In case 1, S sits on the left end, So T sits on the right of S but in Case 2, S sits on the right end, So T sits on the left of S.

Case -1



Case -2



2) L is seated exactly between S and V. In case 1, V sits on the left of T while in case 2, V sits on the right of T.

3) V sits left of T. L does not sit right of T. Here Case 2 is ruled out now.



4) X is the only immediate neighbour of Q, which means Q sits on the right end of the row.



5) More than one person sits between J and O, who does not sit near T. Hence J sits on the left of O. So, the final arrangement is-



Hence, **Four persons** are sitting between L and O.

78. Answer: c

Explanation:

From the given informations,

1) S sits at the extreme end of the row. Here we get 2 possible cases- Case 1 and Case 2. Three persons sit between S and T. In case 1, S sits on the left end, So T sits on the right of S but in Case 2, S sits on the right end, So T sits on the left of S.

Case -1



Case -2



2) L is seated exactly between S and V. In case 1, V sits on the left of T while in case 2, V sits on the right of T.

3) V sits left of T. L does not sit right of T. Here Case 2 is ruled out now.



4) X is the only immediate neighbour of Q, Which means Q sits on the right end of the row.



5) More than one person sits between J and O, who does not sit near T. Hence J sits on the left of O. So, the final arrangement is-



Hence, **M** sits immediate right of T .

79. Answer: e

Explanation:

From the given informations,

1) S sits at the extreme end of the row. Here we get 2 possible cases- Case 1 and Case 2. Three persons sit between S and T. In case 1, S sits on the left end, So T sits on the right of S but in Case 2, S sits on the right end, So T sits on the left of S.

Case -1



Case -2



2) L is seated exactly between S and V. In case 1, V sits on the left of T while in case 2, V sits on the right of T.

3) V sits left of T. L does not sit right of T. Here Case 2 is ruled out now.



4) X is the only immediate neighbour of Q, Which means Q sits on the right end of the row.



5) More than one person sits between J and O, who does not sit near T. Hence J sits on the left of O. So, the final arrangement is-



Except SV, in all the options each pair's person are immediate neighbour of each other.

Hence, SV is the correct answer.

80. Answer: a

Explanation:

Given statements: $V > D = E > W < Q$; $V = I < O > P$

On combination: $P < O > I = V > D = E > W < Q$

Conclusion

I. $O > W \rightarrow$ True (as $O > I = V > D = E > W$)

II. $E < P \rightarrow$ False (as $P < O > I = V > D = E$)

Hence, only conclusion I follows.

81. Answer: a

Explanation:

Given statements: $T < V \leq R$; $S > E \geq Q$; $V = Q$

On combining: $T < V = Q \leq R$; $V = Q \leq E < S$

Conclusions:

I. $T < S \rightarrow$ True ($T < V = Q$ and $V = Q \leq E < S \rightarrow T < S$)

II. $S \geq V \rightarrow \text{False}$ ($V = Q \leq E < S \rightarrow V < S$)

Thus, the only conclusion I is true.

82. Answer: a

Explanation:

Given statements: $V \geq D \geq F$; $E < S \leq W$; $F > K = W$

On combining: $V \geq D \geq F > K = W \geq S > E$

Conclusions:

I. $F > S \rightarrow \text{True}$ ($F > K = W \geq S \rightarrow F > S$)

II. $E \leq V \rightarrow \text{False}$ ($V \geq D \geq F > K = W \geq S > E \rightarrow V > E$)

Thus, only conclusion I is true.

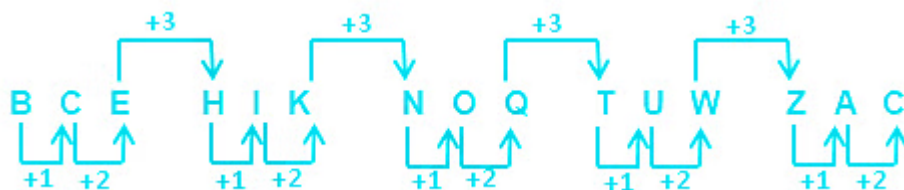
83. Answer: a

Explanation:

Table show alphabet serial number –

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

The logic is shown below –



Hence, **"ZAC"** is the missing term that completes the series.

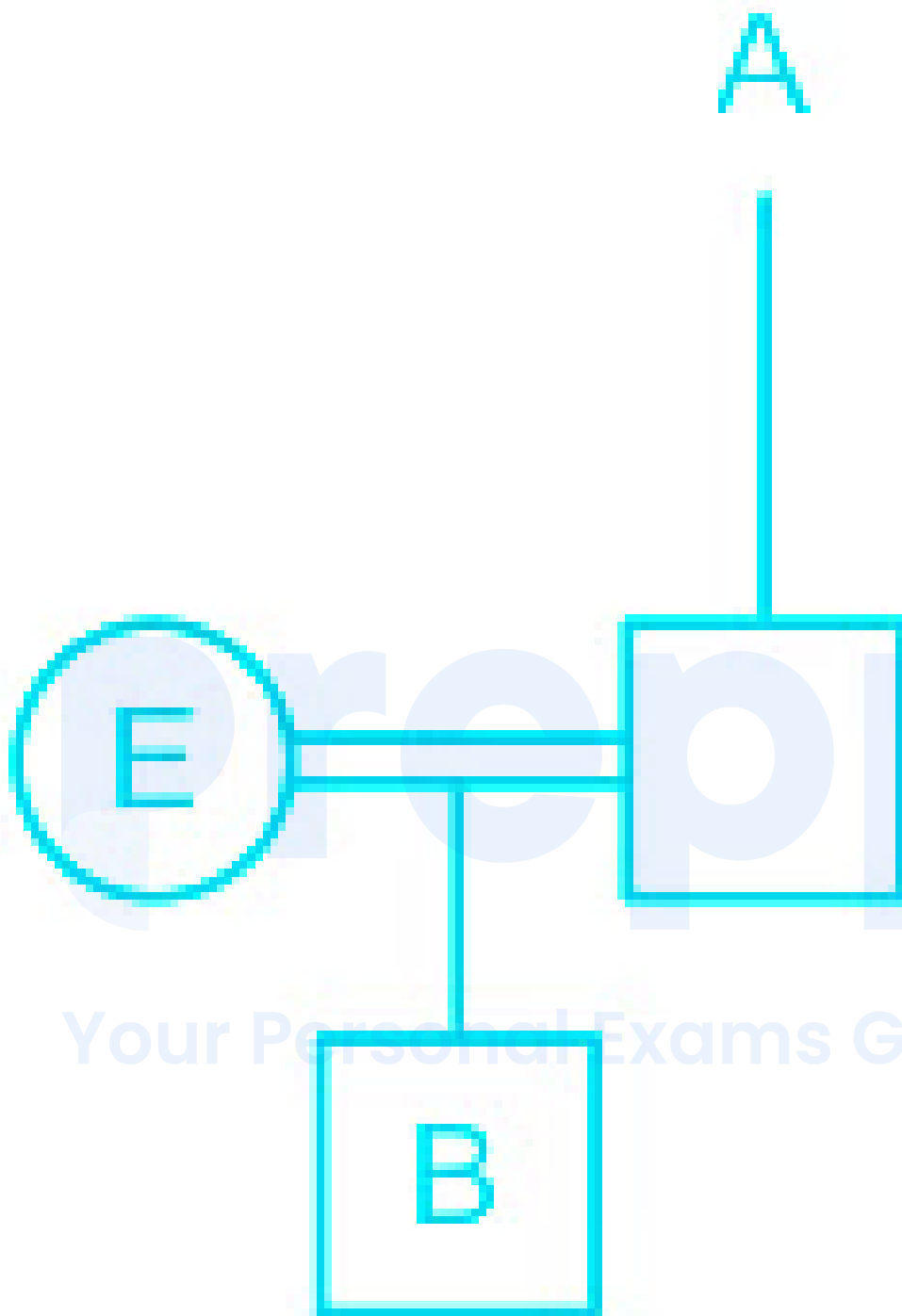
84. Answer: d

Explanation:

The table is drawn describing symbols and their meanings,

Symbol in Diagram	Meaning
○	Female
□	Male
=	Married Couple
—	Siblings
	Difference of A Generation

1- B is the son of E who is the daughter-in-law of A.



2- I is the father of G.



3- C is the mother of D who is the father of F.

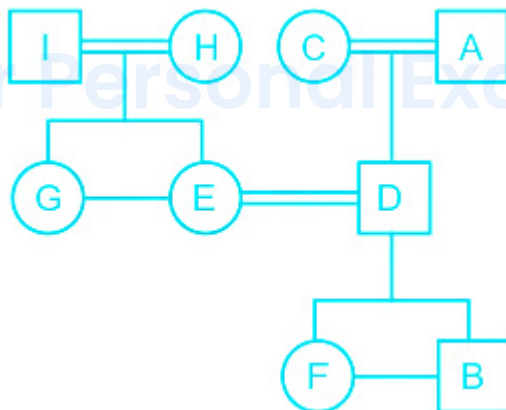


4- D is the son-in-law of H.



5- G is unmarried and the aunt of F.

6- I is not married to C. So A is married to C and H is married to I.
Final Arrangement:



Hence, B is the grandson of A.

85. Answer: b

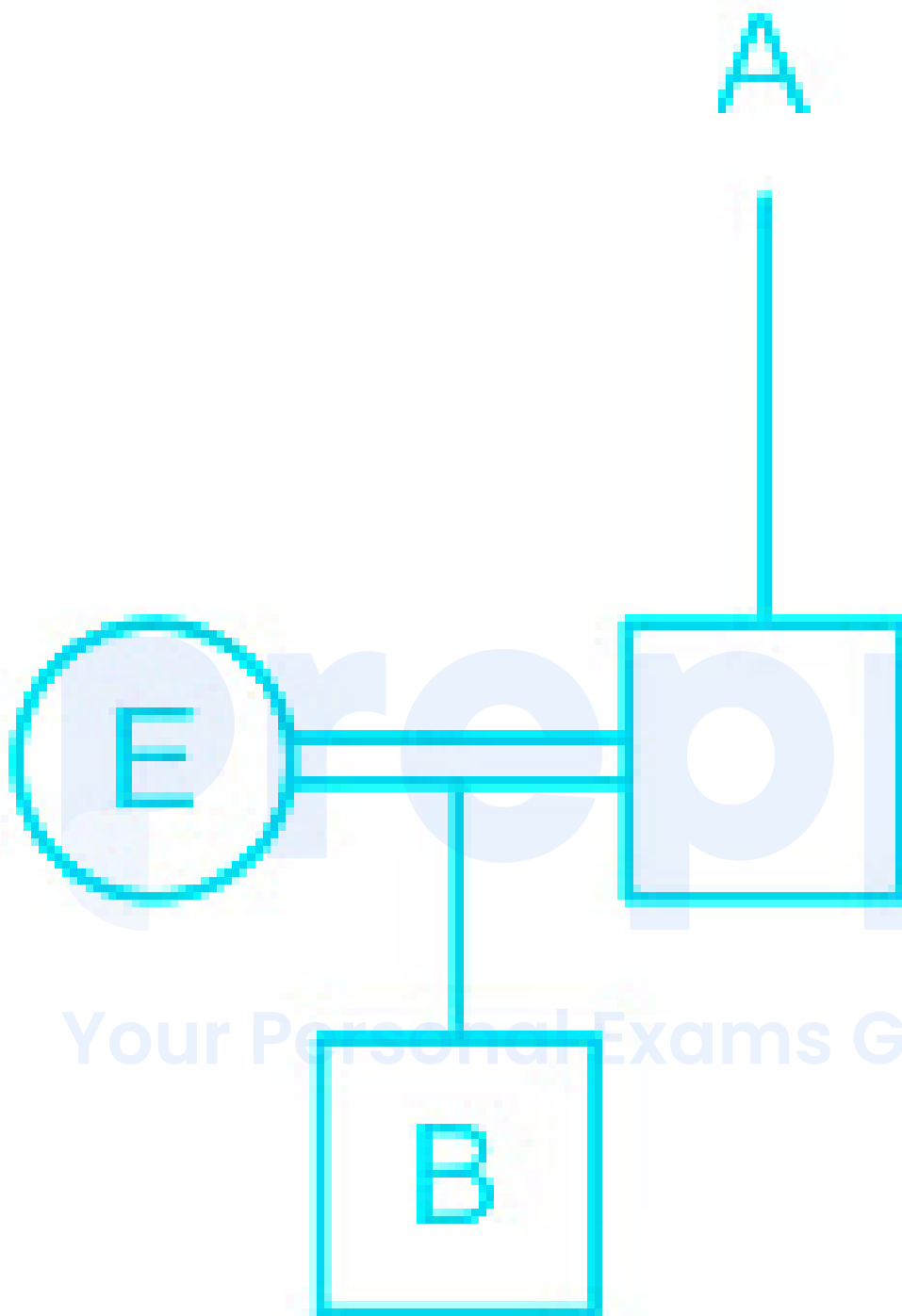
Explanation:

The table is drawn describing symbols and their meanings,

Symbol in Diagram	Meaning
○	Female
□	Male
==	Married Couple
—	Siblings
	Difference of A Generation

1- B is the son of E who is the daughter-in-law of A.

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2- I is the father of G.



3- C is the mother of D who is the father of F.

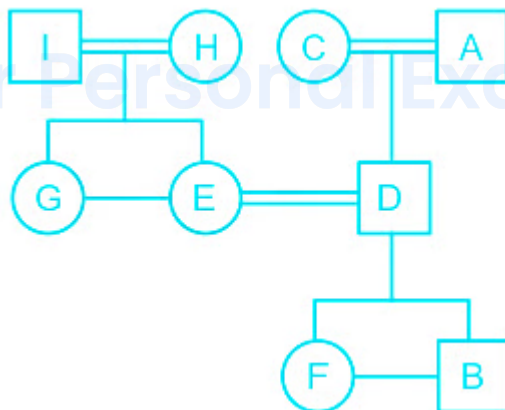


4- D is the son-in-law of H.



5- G is unmarried and the aunt of F.

6- I is not married to C. So A is married to C and H is married to I.
Final Arrangement:



Hence, **G** is the sister in law of D.

86. Answer: c

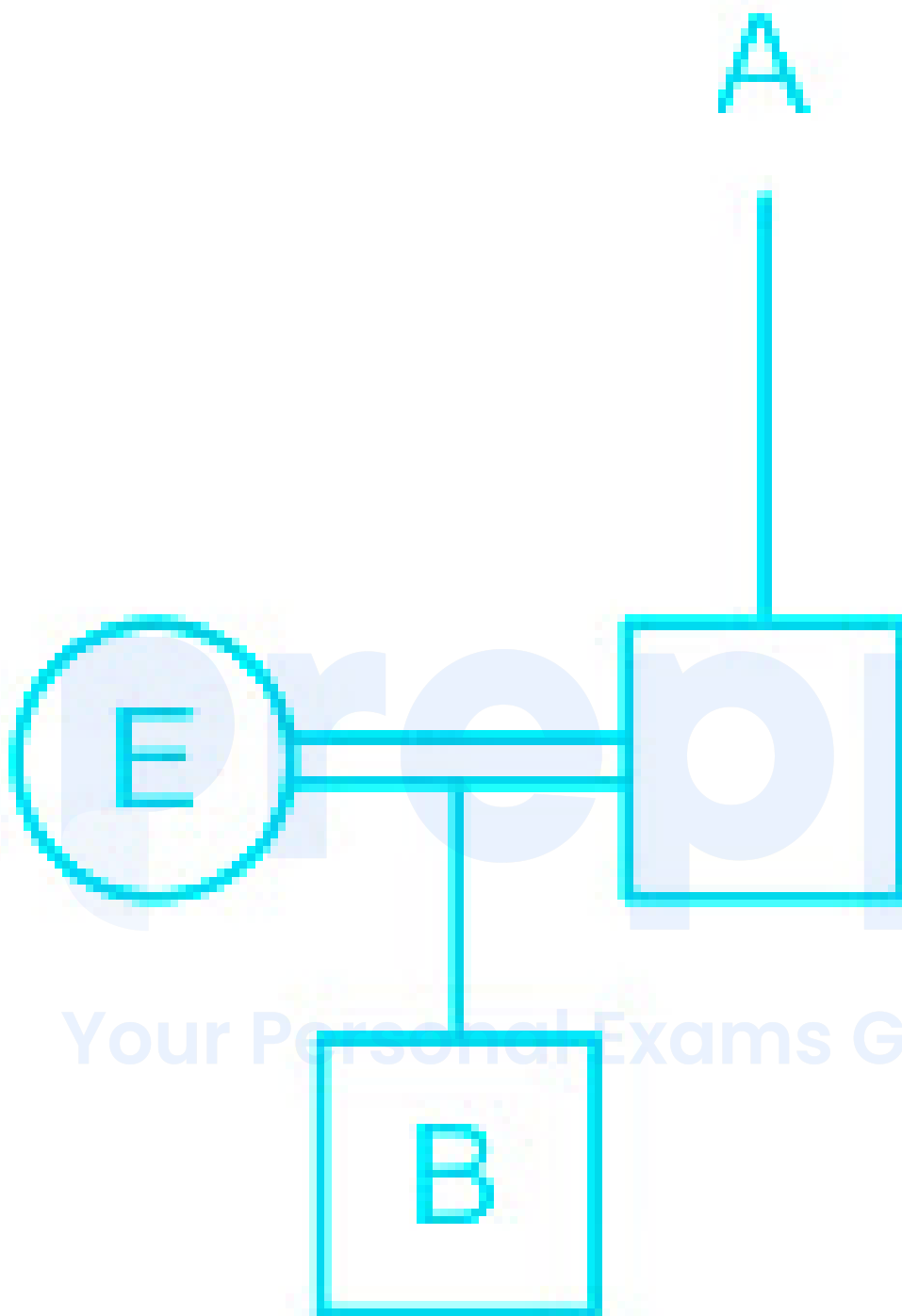
Explanation:

The table is drawn describing symbols and their meanings,

Symbol in Diagram	Meaning
○	Female
□	Male
==	Married Couple
—	Siblings
	Difference of A Generation

1- B is the son of E who is the daughter-in-law of A.

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2- I is the father of G.



3- C is the mother of D who is the father of F.

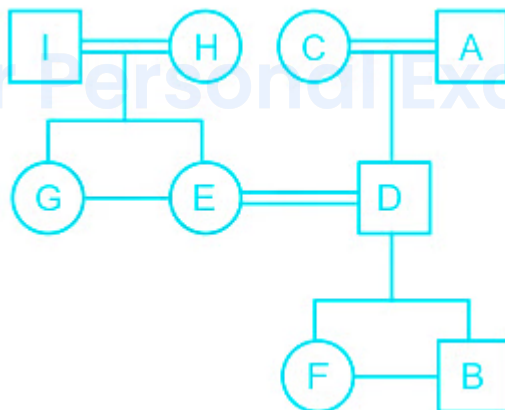


4- D is the son-in-law of H.



5- G is unmarried and the aunt of F.

6- I is not married to C. So A is married to C and H is married to I.
Final Arrangement:



Hence, I is the father of E .

87. Answer: a

Explanation:

Given : MERCHANT

Alphabets	A	B	C	D	E	F	G	H	I	J	K	L	M
Positional value	1	2	3	4	5	6	7	8	9	10	11	12	13
Positional value	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabets	Z	Y	X	W	V	U	T	S	R	Q	P	O	N

Letters	M	E	R	C	H	A	N	T
Position	13	5	18	3	8	1	14	20

hence, ' **More than Four**' pairs of letters are there in the word 'MERCHANT', each of which has as many letters between them in the word (both forward and backward direction) as they have between them in the English Alphabet.

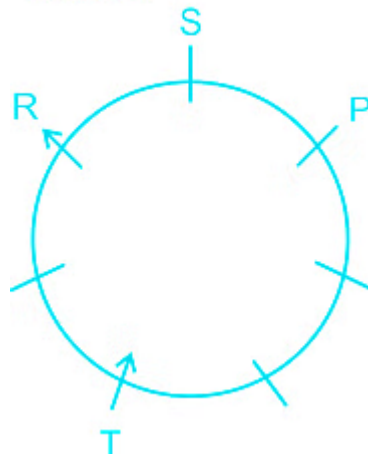
88. Answer: e

Explanation:

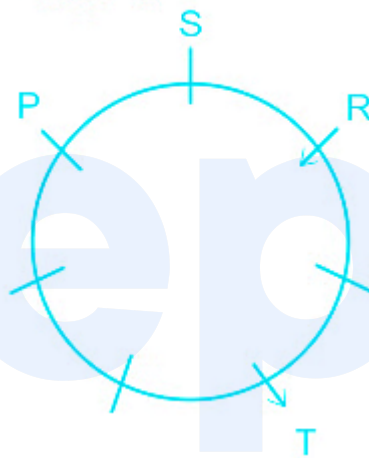
Seven friends – P, Q, R, S, T, U, and V.

- (1) R is sitting second to the left of T.
- (2) Only three people are sitting between S and T when counted from the right of T.
- (3) P sits second to the right of R.

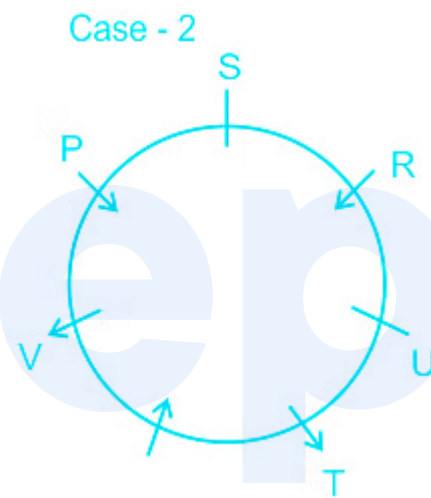
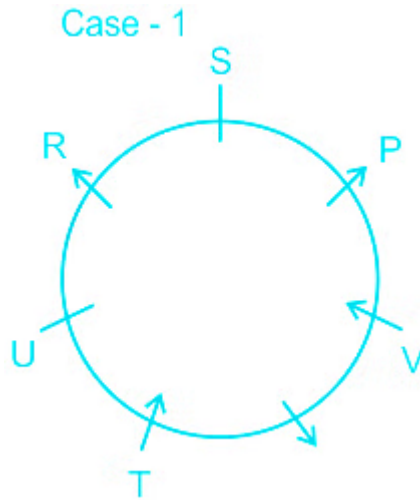
Case - 1



Case - 2

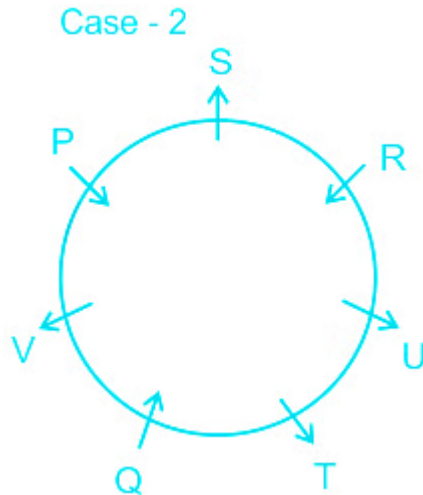


- (4) T is not an immediate neighbor of V.
- (5) U sits third to the left of V.
- (6) Immediate neighbors of V are facing in the opposite of V.



(7) S and U are facing in the same direction and it is given that three of the friends are facing inside and the rest are facing outside. Therefore case I eliminates here.

Thus, the final seating arrangement is as follows:



Hence, U sits second to the right of S.

89. Answer: d

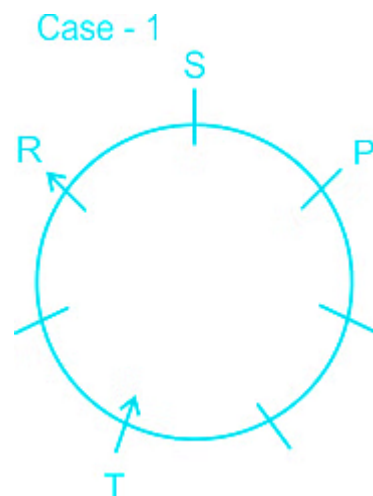
Explanation:

Seven friends – P, Q, R, S, T, U, and V.

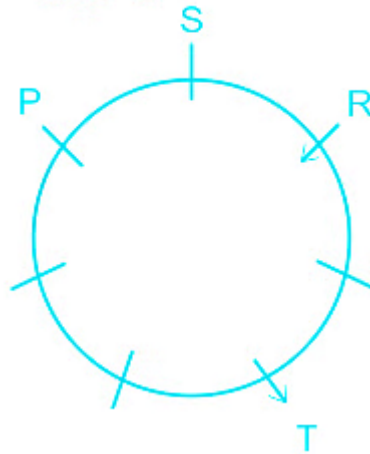
(1) R is sitting second to the left of T.

(2) Only three people are sitting between S and T when counted from the right of T.

(3) P sits second to the right of R.

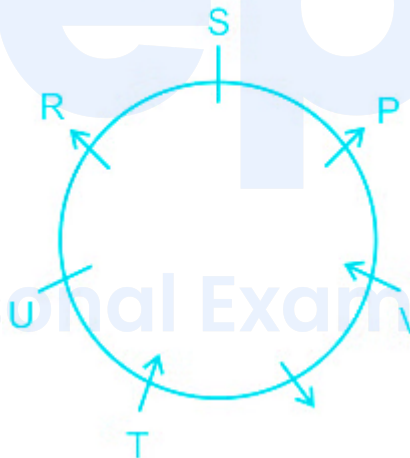


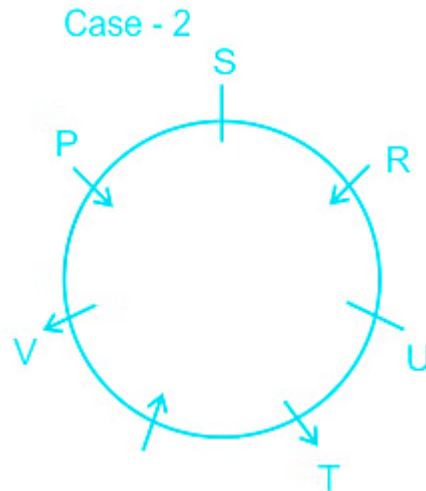
Case - 2



- (4) T is not an immediate neighbor of V.
- (5) U sits third to the left of V.
- (6) Immediate neighbors of V are facing in the opposite of V.

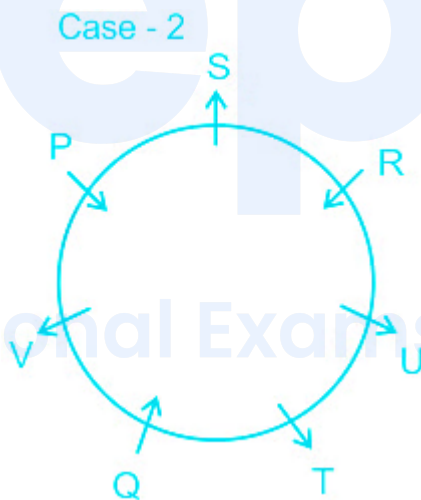
Case - 1





(7) S and U are facing in the same direction and it is given that three of the friends are facing inside and the rest are facing outside. Therefore case I eliminates here.

Thus, the final seating arrangement is as follows:



We can see that all the persons are facing outside the table thus form a group except Q.

Hence, Q does not belong to that group.

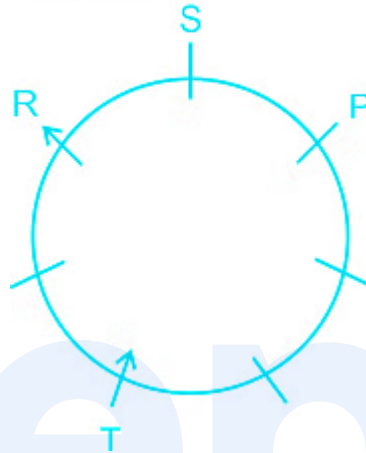
90. Answer: c

Explanation:

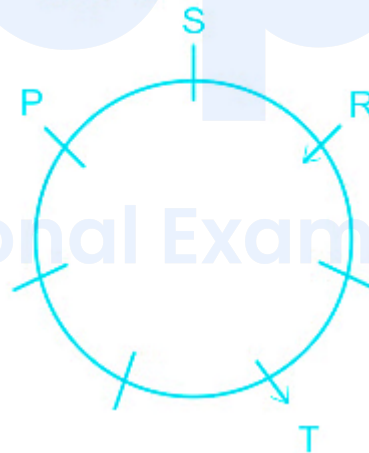
Seven friends – P, Q, R, S, T, U, and V.

- (1) R is sitting second to the left of T.
- (2) Only three people are sitting between S and T when counted from the right of T.
- (3) P sits second to the right of R.

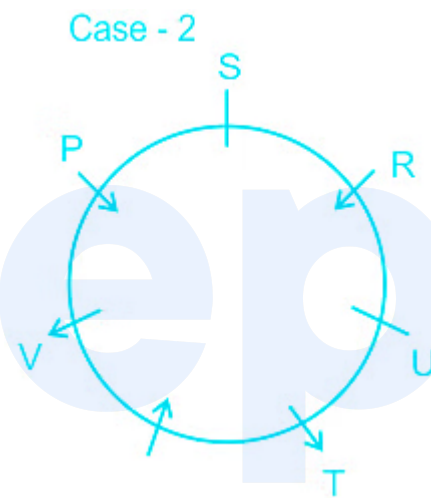
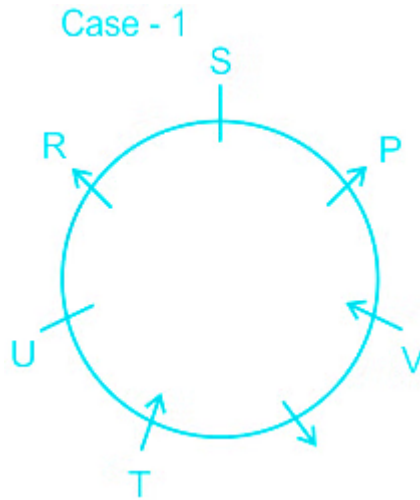
Case - 1



Case - 2

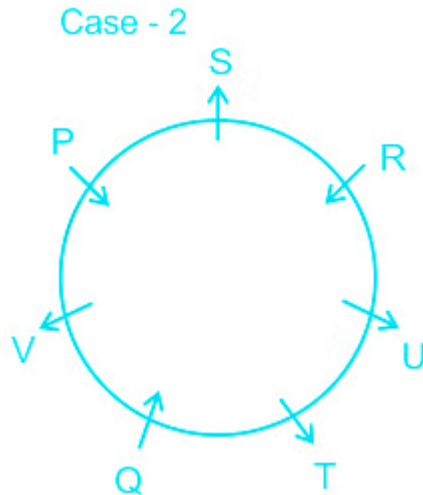


- (4) T is not an immediate neighbor of V.
- (5) U sits third to the left of V.
- (6) Immediate neighbors of V are facing in the opposite of V.



(7) S and U are facing in the same direction and it is given that three of the friends are facing inside and the rest are facing outside. Therefore case I eliminates here.

Thus, the final seating arrangement is as follows:



Hence, **three** people sit between R and V when counted from the left of R.

91. Answer: e

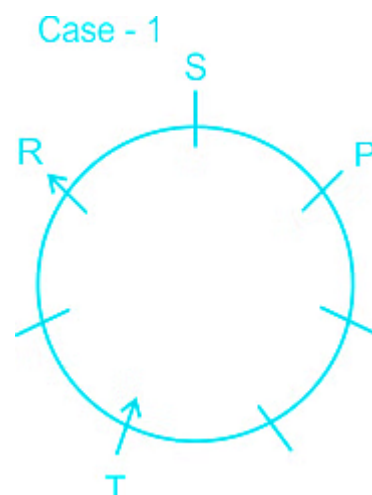
Explanation:

Seven friends – P, Q, R, S, T, U, and V.

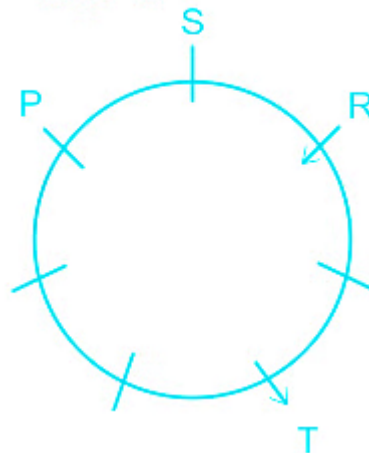
(1) R is sitting second to the left of T.

(2) Only three people are sitting between S and T when counted from the right of T.

(3) P sits second to the right of R.

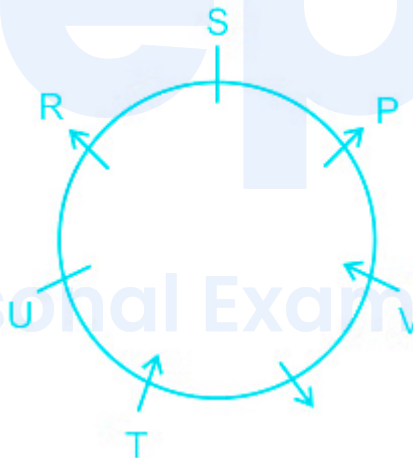


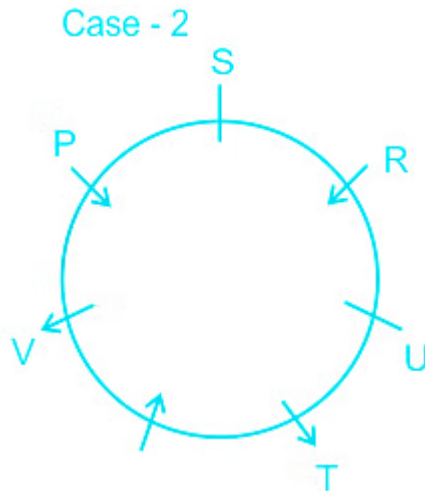
Case - 2



- (4) T is not an immediate neighbor of V.
- (5) U sits third to the left of V.
- (6) Immediate neighbors of V are facing in the opposite of V.

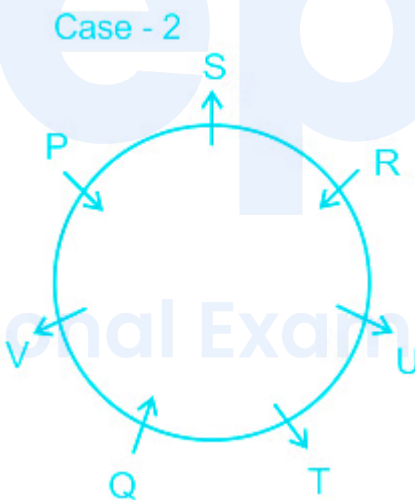
Case - 1





(7) S and U are facing in the same direction and it is given that three of the friends are facing inside and the rest are facing outside. Therefore case I eliminates here.

Thus, the final seating arrangement is as follows:



We can see that R sits second to the left of T and S sits to the immediate right of R.

Hence, S sits to the immediate right of the person who sits second to the left of T.

92. Answer: c

Explanation:

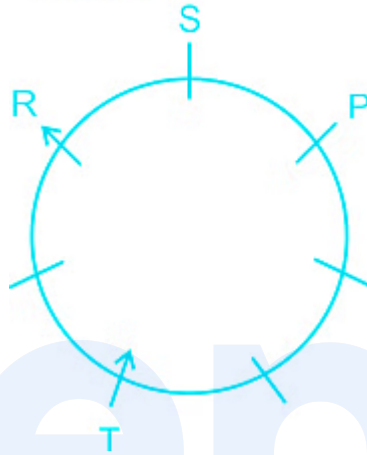
Seven friends – P, Q, R, S, T, U, and V.

(1) R is sitting second to the left of T.

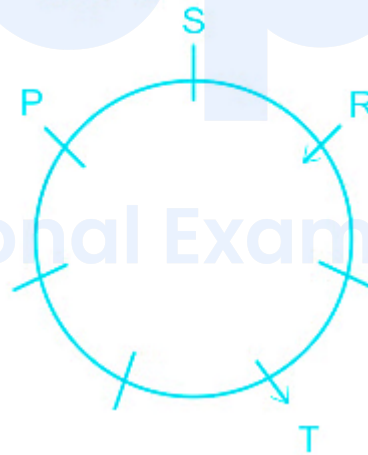
(2) Only three people are sitting between S and T when counted from the right of T.

(3) P sits second to the right of R.

Case - 1



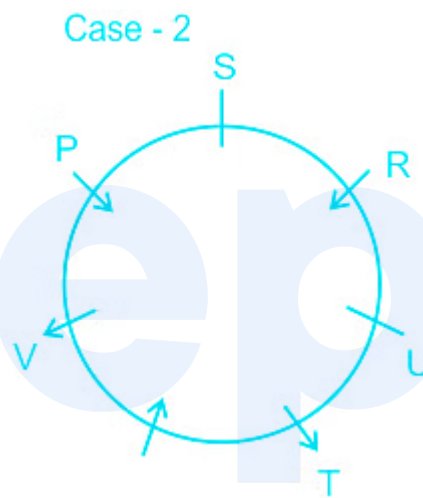
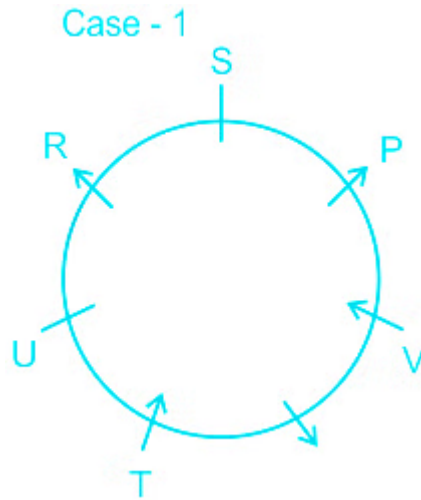
Case - 2



(4) T is not an immediate neighbor of V.

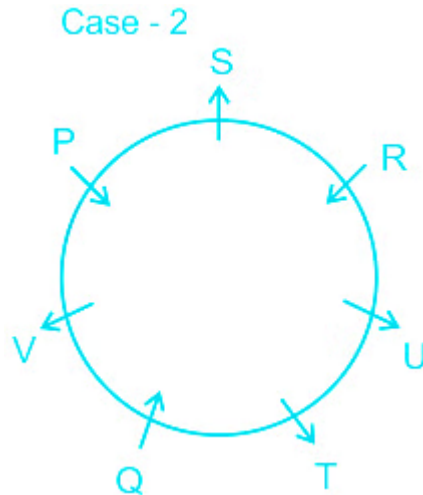
(5) U sits third to the left of V.

(6) Immediate neighbors of V are facing in the opposite of V.

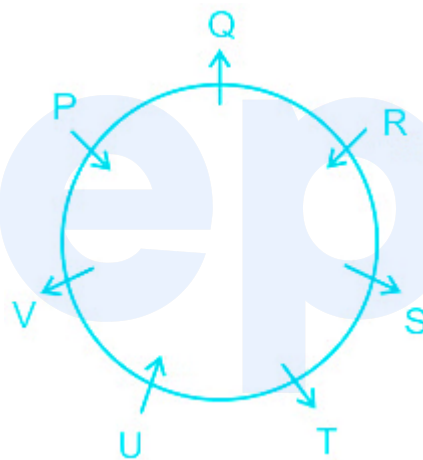


(7) S and U are facing in the same direction and it is given that three of the friends are facing inside and the rest are facing outside. Therefore case I eliminates here.

Thus, the final seating arrangement is as follows:



After rearrangement:



Hence, the position of the **three** persons will remain unchanged.

93. Answer: a

Explanation:

The least possible Venn diagram for the given statements is as follows:



Conclusions:

I. Some buttons are not keyboards $\rightarrow$ True (as it is clearly given that only a few buttons are keyboard which means some buttons are keyboard and some buttons are not keyboard)

II. Some keyboard can be white is a possibility $\rightarrow$ False (as it is clearly given that all keyboards are black and no black is white. So, no keyboard can be white.)

Thus, only conclusion II follow.

94. Answer: e

Explanation:

The least possible Venn diagram for the given statements is as follows:



Conclusion:

I. All fruits can be trees is a possibility $\rightarrow$ True (Possibility is true as shown below)



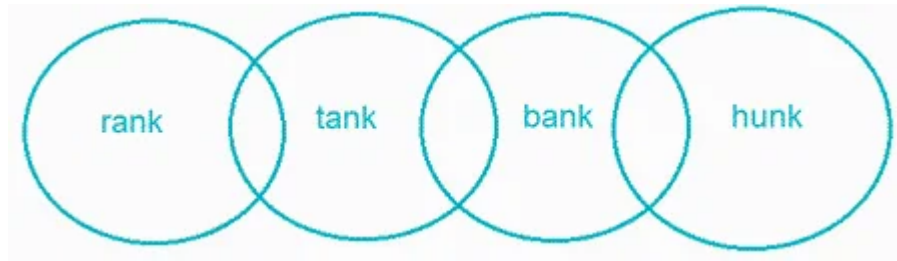
II. Some bright are not fruits $\rightarrow$ True (As some yellow are bright and No fruits are yellow. So, some bright are not fruits)

Thus, both conclusions I and II follow.

95. Answer: d

Explanation:

The least possible Venn diagram for the given statements is as follows,



Conclusion:

I. Some tank are hunk → False (It is possible but not definite)

II. Some rank are bank → False (It is possible but not definite)

Hence, neither conclusion I nor II follows.

96. Answer: b

Explanation:

10 people

different professions – Chef, Businessman, Doctor, Accountant, Engineer, Teacher, Advocate, Actor, Dentist, Baker.

1- P who lives on the 4th floor lives to the West of W, who is an Accountant.

2- V who is Advocate lives on the bottommost floor.

3- No lives to the West of the one who is Advocate.

4- T and the one who is an Engineer live on floor number 3 and T does not a Engineer.

	Case-1		Case-2	
Floor	Flat-B	Flat-A	Flat-B	Flat-A
5				
4	P	W(Accountant)	P	W(accountant)
3	T	(Engineer)	(Engineer)	T
2				
1	V(Advocate)		V(Advocate)	

5- The one who is Engineer lives below the one who is Doctor, who lives below the one who is Chef and all of them live in the same flat. So case-1 gets eliminated.

6- U lives beside the one who is a Businessman on the top floor.

7- One floor between T and Q.

8- Q is not a Businessman .

	Case-2	
Floor	Flat-B	Flat-A
5	U(Chef)	(Businessman)
4	P(Doctor)	W(accountant)
3	(Engineer)	T
2		
1	V(Advocate)	Q

9- The one who is Baker lives to the East of the one who is Dentist.

10- X lives beside the one who is a Teacher but not on the top floor.

11- S lives on an odd numbered floor in Flat A.

12- R lives immediately below X in the same flat.

13- Z lives above the one who is an Actor.

So, Final arrangement is;

	Final arrangement	
Floor	Flat-B	Flat-A
5	U(Chef)	S(Businessman)
4	P(Doctor)	W(Accountant)
3	X(Engineer)	T(Teacher)
2	R(Dentist)	Z(Baker)
1	V(Advocate)	Q(Actor)

Hence, **Three floors between U and V.**

97. Answer: d

Explanation:

10 people

different professions – Chef, Businessman, Doctor, Accountant, Engineer, Teacher, Advocate, Actor, Dentist, Baker.

1- P who lives on the 4th floor lives to the West of W, who is an Accountant.

2- V who is Advocate lives on the bottommost floor.

3- No lives to the West of the one who is Advocate.

4- T and the one who is an Engineer live on floor number 3 and T does not a Engineer.

	Case-1		Case-2	
Floor	Flat-B	Flat-A	Flat-B	Flat-A
5				
4	P	W(Accountant)	P	W(accountant)
3	T	(Engineer)	(Engineer)	T
2				
1	V(Advocate)		V(Advocate)	

5- The one who is Engineer lives below the one who is Doctor, who lives below the one who is Chef and all of them live in the same flat. So case-1 gets eliminated.

6- U lives beside the one who is a Businessman on the top floor.

7- One floor between T and Q.

8- Q is not a Businessman .

	Case-2	
Floor	Flat-B	Flat-A
5	U(Chef)	(Businessman)
4	P(Doctor)	W(accountant)
3	(Engineer)	T
2		
1	V(Advocate)	Q

9- The one who is Baker lives to the East of the one who is Dentist.

10- X lives beside the one who is a Teacher but not on the top floor.

11- S lives on an odd numbered floor in Flat A.

12- R lives immediately below X in the same flat.

13- Z lives above the one who is an Actor.

So, Final arrangement is;

	Final arrangement	
Floor	Flat-B	Flat-A
5	U(Chef)	S(Businessman)
4	P(Doctor)	W(Accountant)
3	X(Engineer)	T(Teacher)
2	R(Dentist)	Z(Baker)
1	V(Advocate)	Q(Actor)

Hence, **S is a Businessman.**

98. Answer: d

Explanation:

10 people

different professions – Chef, Businessman, Doctor, Accountant, Engineer, Teacher, Advocate, Actor, Dentist, Baker.

1- P who lives on the 4th floor lives to the West of W, who is an Accountant.

2- V who is Advocate lives on the bottommost floor.

3- No lives to the West of the one who is Advocate.

4- T and the one who is an Engineer live on floor number 3 and T does not a Engineer.

	Case-1		Case-2	
Floor	Flat-B	Flat-A	Flat-B	Flat-A
5				
4	P	W(Accountant)	P	W(accountant)
3	T	(Engineer)	(Engineer)	T
2				
1	V(Advocate)		V(Advocate)	

5- The one who is Engineer lives below the one who is Doctor, who lives below the one who is Chef and all of them live in the same flat. So case-1 gets eliminated.

6- U lives beside the one who is a Businessman on the top floor.

7- One floor between T and Q.

8- Q is not a Businessman .

	Case-2	
Floor	Flat-B	Flat-A
5	U(Chef)	(Businessman)
4	P(Doctor)	W(accountant)
3	(Engineer)	T
2		
1	V(Advocate)	Q

9- The one who is Baker lives to the East of the one who is Dentist.

10- X lives beside the one who is a Teacher but not on the top floor.

11- S lives on an odd numbered floor in Flat A.

12- R lives immediately below X in the same flat.

13- Z lives above the one who is an Actor.

So, Final arrangement is;

	Final arrangement	
Floor	Flat-B	Flat-A
5	U(Chef)	S(Businessman)
4	P(Doctor)	W(accountant)
3	X(Engineer)	T(Teacher)
2	R(Dentist)	Z(Baker)
1	V(Advocate)	Q(Actor)

Hence, **Accountant lives on floor - 4.**

99. Answer: a

Explanation:

10 people

different professions - Chef, Businessman, Doctor, Accountant, Engineer, Teacher, Advocate, Actor, Dentist, Baker.

1- P who lives on the 4th floor lives to the West of W, who is an Accountant.

2- V who is Advocate lives on the bottommost floor.

3- No lives to the West of the one who is Advocate.

4- T and the one who is an Engineer live on floor number 3 and T does not a Engineer.

	Case-1		Case-2	
Floor	Flat-B	Flat-A	Flat-B	Flat-A
5				
4	P	W(Accountant)	P	W(accountant)
3	T	(Engineer)	(Engineer)	T
2				
1	V(Advocate)		V(Advocate)	

5- The one who is Engineer lives below the one who is Doctor, who lives below the one who is Chef and all of them live in the same flat. So case-1 gets eliminated.

6- U lives beside the one who is a Businessman on the top floor.

7- One floor between T and Q.

8- Q is not a Businessman .

	Case-2	
Floor	Flat-B	Flat-A
5	U(Chef)	(Businessman)
4	P(Doctor)	W(accountant)
3	(Engineer)	T
2		
1	V(Advocate)	Q

9- The one who is Baker lives to the East of the one who is Dentist.

10- X lives beside the one who is a Teacher but not on the top floor.

11- S lives on an odd numbered floor in Flat A.

12- R lives immediately below X in the same flat.

13- Z lives above the one who is an Actor.

So, Final arrangement is;

	Final arrangement	
Floor	Flat-B	Flat-A
5	U(Chef)	S(Businessman)
4	P(Doctor)	W(accountant)
3	X(Engineer)	T(Teacher)
2	R(Dentist)	Z(Baker)
1	V(Advocate)	Q(Actor)

Hence, **S and W live on Flat – A.**

100. **Answer: c**

Explanation:

10 people

different professions – Chef, Businessman, Doctor, Accountant, Engineer, Teacher, Advocate, Actor, Dentist, Baker.

1- P who lives on the 4th floor lives to the West of W, who is an Accountant.

2- V who is Advocate lives on the bottommost floor.

3- No lives to the West of the one who is Advocate.

4- T and the one who is an Engineer live on floor number 3 and T does not a Engineer.

	Case-1		Case-2	
Floor	Flat-B	Flat-A	Flat-B	Flat-A
5				
4	P	W(Accountant)	P	W(accountant)
3	T	(Engineer)	(Engineer)	T
2				
1	V(Advocate)		V(Advocate)	

5- The one who is Engineer lives below the one who is Doctor, who lives below the one who is Chef and all of them live in the same flat. So case-1 gets eliminated.

6- U lives beside the one who is a Businessman on the top floor.

7- One floor between T and Q.

8- Q is not a Businessman .

	Case-2	
Floor	Flat-B	Flat-A
5	U(Chef)	(Businessman)
4	P(Doctor)	W(accountant)
3	(Engineer)	T
2		
1	V(Advocate)	Q

9- The one who is Baker lives to the East of the one who is Dentist.

10- X lives beside the one who is a Teacher but not on the top floor.

11- S lives on an odd numbered floor in Flat A.

12- R lives immediately below X in the same flat.

13- Z lives above the one who is an Actor.

So, Final arrangement is;

	Final arrangement	
Floor	Flat-B	Flat-A
5	U(Chef)	S(Businessman)
4	P(Doctor)	W(accountant)
3	X(Engineer)	T(Teacher)
2	R(Dentist)	Z(Baker)
1	V(Advocate)	Q(Actor)

Hence, **R and Z live on floor numbered 2.**

Your Personal Exams Guide