

## SEBI Grade-A Assistant Manager Phase-1 Paper-1 PYP (Held on 10 Jan 2026 S1)

**Directions (1-5):** Read the following passage and answer the given questions.

Scientists studying the possibility of settling on the planet Mars focus on both the promise of expansion beyond Earth and the severe constraints imposed by an alien environment. Mars attracts attention because it once had liquid water and still contains ice, making long-term habitation theoretically possible. However, survival there would demand carefully planned amenities and a realistic assessment of challenges.

The most critical requirement for human settlement is a reliable life-support system. Future habitats would need airtight structures to protect settlers from radiation, extreme cold, and dust storms. Oxygen must be produced artificially, likely through extracting it from carbon dioxide in the Martian atmosphere. Water, another essential resource, would be obtained by melting subsurface ice and recycling it efficiently. Food production would rely on controlled agriculture using hydroponics, artificial lighting, and nutrient-rich solutions.

Energy generation is another major necessity. Solar panels and small nuclear reactors are considered viable options, though both face limitations due to dust accumulation and maintenance difficulties. Medical facilities, communication systems, and psychological support mechanisms would also be indispensable, as settlers would live in isolation far from Earth. Scientists estimate that crews may be required to operate with limited external assistance for long durations, sometimes lasting around two years per mission cycle.

Despite technological planning, challenges remain formidable. Mars has low gravity, which could weaken human bones and muscles over time. High radiation exposure increases health risks, including cancer. Transporting equipment and people across vast interplanetary distances is expensive and risky, with limited opportunities for rescue. Moreover, ethical questions arise regarding planetary contamination and the long-term sustainability of such colonies.

The scientific study of settling on Mars is therefore not merely about engineering structures, but about understanding human adaptability in extreme conditions. While the vision of a Martian settlement is inspiring, researchers agree that success depends on balancing ambition with caution, innovation with responsibility, and exploration with survival.

**Q1.** Consider the following statements about challenges of Mars colonisation:

- (A) Transporting people and equipment to Mars is costly and risky.
- (B) Emergency rescue missions from Earth would be easily feasible.
- (C) Ethical concerns exist regarding planetary contamination.

Which of the statements given above can be inferred from the passage?

- (a) Only A
- (b) Only B
- (c) Both A and C
- (d) Both B and C
- (e) A, B and C

**Q2.** How is oxygen expected to be produced in future Martian habitats?

- (a) By transporting compressed oxygen supplies directly from Earth to Mars.
- (b) By extracting oxygen from carbon dioxide present in the Martian atmosphere.
- (c) By converting water molecules directly into breathable oxygen through processing.
- (d) By releasing previously stored oxygen reserves located beneath the Martian surface.
- (e) By cultivating oxygen-producing plant life within controlled habitat environments.

**Q3.** Why does Mars attract scientific interest as a potential site for human settlement?

- (a) Because it possesses an atmosphere broadly comparable to that of Earth in key respects.
- (b) Because it currently supports microbial life forms on its surface at present time today.
- (c) Because it is the closest planet to Earth among nearby worlds in our system.
- (d) Because it has a magnetic field shielding it from harmful radiation across the planet.
- (e) Because it once had liquid water and still contains subsurface ice deposits in abundance.

**Q4.** Choose the most appropriate synonym for the word “around” as used in the passage

- (a) Outside
- (b) Surrounding
- (c) Encircling
- (d) Approximately
- (e) Beyond

**Q5.** Consider the following statements regarding human settlement on Mars:

- (A) Missions to Mars are expected to last only a few months.
- (B) Future settlers may have to operate with limited assistance from Earth.
- (C) Psychological support is considered essential for long-term habitation.

Which of the statements given above are supported by the passage?

- (a) Only A
- (b) Only B
- (c) Both A and C
- (d) Both B and C
- (e) A, B and C

**Q6.** Given below are four sentences, out of which one sentence is grammatically incorrect. Choose the option which points out the grammatically incorrect sentence. If all the sentences are correct, then choose 'No error' as the answer.

- (a) If the alert had arrived earlier disruptions would reduce significantly.
- (b) Authorities issued clarifications after confusion spread across regions rapidly.
- (c) Public reaction intensified once official statements were shared widely.
- (d) Emergency protocols were reviewed following criticism from multiple quarters.
- (e) No error

**Q7.** Given below are four sentences, out of which one sentence is grammatically incorrect. Choose the option which points out the grammatically incorrect sentence. If all the sentences are correct, then choose 'No error' as the answer.

- (a) Observers noted a shift in tone during the negotiations.
- (b) Diplomatic channels remain open despite prolonged disagreements.
- (c) Officials described the ceasefire talks as remarkable successful given the tensions.
- (d) The agreement was reached after several rounds of discussion.
- (e) No error

**Q8.** Given below are four sentences, out of which one sentence is grammatically incorrect. Choose the option which points out the grammatically incorrect sentence. If all the sentences are correct, then choose 'No error' as the answer.

- (a) The report focuses on the economic impact of prolonged conflicts.
- (b) Analysts warned about disruptions to global supply chains.
- (c) The findings were presented in an international forum.
- (d) The discussion centered between long-term risks and immediate challenges.
- (e) No error

**Q9.** Given below are four sentences, out of which one sentence is grammatically incorrect. Choose the option which points out the grammatically incorrect sentence. If all the sentences are correct, then choose 'No error' as the answer.

- (a) Economists predict gradual stabilization over the next fiscal quarters.
- (b) Consumer prices increased sharply across essential commodity segments recently.
- (c) Supply chain disruptions contributed significantly to rising market pressures.
- (d) The latest inflation figures appear more alarming than those of previous years.
- (e) No error

**Q10.** In the sentence given below, two words are omitted and replaced with blanks. Choose the pair of words from the given options that can fill the blanks in the same order without changing the intended meaning.

Tiny \_\_\_\_\_ formed on the glass as moisture from the warm air \_\_\_\_\_ on its cool surface.

- (a) vitiated, remission
- (b) liquid, dismantled
- (c) form, divested
- (d) structure, concurred
- (e) droplets, condensed

**Q11.** In the sentence given below, two words are omitted and replaced with blanks. Choose the pair of words from the given options that can fill the blanks in the same order without changing the intended meaning.

The new policy aims to \_\_\_\_\_ economic growth while \_\_\_\_\_ the impact of inflation.

- (a) cripple, hinder
- (b) avert, augment
- (c) boost, mitigate
- (d) baffle, elevate
- (e) curtail, heave

**Q12.** In the sentence given below, two words are omitted and replaced with blanks. Choose the pair of words from the given options that can fill the blanks in the same order without changing the intended meaning.

The prolonged \_\_\_\_\_ soon turned into a serious \_\_\_\_\_ for the stability of the entire region.

- (a) conflict, menace
- (b) subsidy, stipend
- (c) rapture, bewitch
- (d) plenty, rebate
- (e) destiny, fortuity

**Q13.** In the sentence given below, two words are omitted and replaced with blanks. Choose the pair of words from the given options that can fill the blanks in the same order without changing the intended meaning.

The team \_\_\_\_\_ a new strategy that \_\_\_\_\_ the organization's long-term growth.

- (a) yielded, buttressed
- (b) evolved, hindered
- (c) altered, avouched
- (d) adapted, eroded
- (e) devised, bolstered

**Q14.** (A) The sudden storm caught the lone traveler off guard in the mountains.  
(B) By the end, perseverance proved more powerful than fear.  
(C) Exhausted but determined, she continued the journey despite the storm.  
(D) Each step forward strengthened her resolve to reach the shelter before nightfall.

Rearrange the following sentences to form a meaningful paragraph.

- (a) ACDB
- (b) BCDA
- (c) CDAB
- (d) DCBA
- (e) No rearrangement required

**Q15.** (A) One key reason for this popularity is their ability to cover short distances quickly.  
(B) Electric scooters are gaining popularity in urban areas.  
(C) Ultimately, urban travel becomes far more flexible.  
(D) This convenience enhances the ease of daily commuting in cities.

Rearrange the following sentences to form a meaningful paragraph.

- (a) BDAC
- (b) DABC
- (c) BADC
- (d) CBAD
- (e) No rearrangement required

**Q16.** (A) Therefore, consistent exposure improves fluency over time.  
(B) In addition, short lessons make learning manageable even on busy days.  
(C) Through interactive exercises, users are encouraged to practice regularly.  
(D) Language-learning apps have transformed how people acquire new languages.

Rearrange the following sentences to form a meaningful paragraph.

- (a) CDBA
- (b) DCBA
- (c) DABC
- (d) CBDA
- (e) No rearrangement required

**Q17.** (A) Hence, unexpected disruptions can often be avoided.  
(B) Based on these updates, users receive alerts about sudden changes in conditions.  
(C) Weather-forecasting apps provide real-time updates about changing weather conditions.  
(D) Such alerts and information help people plan daily activities more accurately.

Rearrange the following sentences to form a meaningful paragraph.

- (a) CDBA
- (b) DCBA
- (c) BADC
- (d) CBDA
- (e) No rearrangement required

**Q18.** The new app is so popular as its predecessor among young users.

In the given question a part of the sentence is given in bold, which may or may not be grammatically correct. Choose the correct alternative for the highlighted phrase to make the sentence grammatically and logically correct.

- (a) is so popular as
- (b) is as popular as
- (c) is so popular so
- (d) are so popular as
- (e) No improvement required

**Q19.** Despite of the low turnout, the event succeeded in generating meaningful discussion and valuable feedback from participants.

In the given question a part of the sentence is given in bold, which may or may not be grammatically correct. Choose the correct alternative for the highlighted phrase to make the sentence grammatically and logically correct.

- (a) Despite the lows
- (b) In spite low
- (c) Although the low
- (d) Despite the low
- (e) No improvement required

**Q20.** Please ensure that the report is completed and submitted on or before on Sunday so that it can be reviewed in time.

In the given question a part of the sentence is given in bold, which may or may not be grammatically correct. Choose the correct alternative for the highlighted phrase to make the sentence grammatically and logically correct.

- (a) on and before Sunday
- (b) at or before the Sunday
- (c) in or before the Sunday
- (d) on or before Sunday
- (e) No improvement required

**Q21.** What is the approximate value of (?) in the following questions?

$$\frac{369.004}{?} = \frac{?}{40.954}$$

- (a) 112
- (b) 141
- (c) 369
- (d) 41
- (e) 123

**Q22.** What is the approximate value of (?) in the following questions?

$$(6.99)^2 + (8.01)^2 - \sqrt{85} = ?$$

- (a) 95
- (b) 125
- (c) 110
- (d) 104

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(e) 145

**Q23.** What is the approximate value of (?) in the following questions?

$$24.9\% \text{ of } 5679 + 44.9\% \text{ of } 4301 = ?$$

- (a) 3545
- (b) 3355
- (c) 3155
- (d) 3500
- (e) 2255

**Q24.** What is the approximate value of (?) in the following questions?

$$(1041.84 + ?) \div 3.02 = 1816.05 \div 4.01$$

- (a) 442
- (b) 355
- (c) 320
- (d) 268
- (e) 227

**Q25.** Find the wrong number in the following number series.

29, 110, 620, 671, 887, 912, 976

- (a) 912
- (b) 671
- (c) 110
- (d) 620
- (e) 887

**Q26.** Find the wrong number in the following number series.

3, 3, 9, 45, 313, 2835, 31185

- (a) 31185
- (b) 9
- (c) 313
- (d) 2835
- (e) 45

**Q27.** There is one wrong term in each series given below. Find that wrong term.

4, 16, 32, 64, 128, 256, 512

- (a) 4
- (b) 64
- (c) 512
- (d) 128
- (e) 16

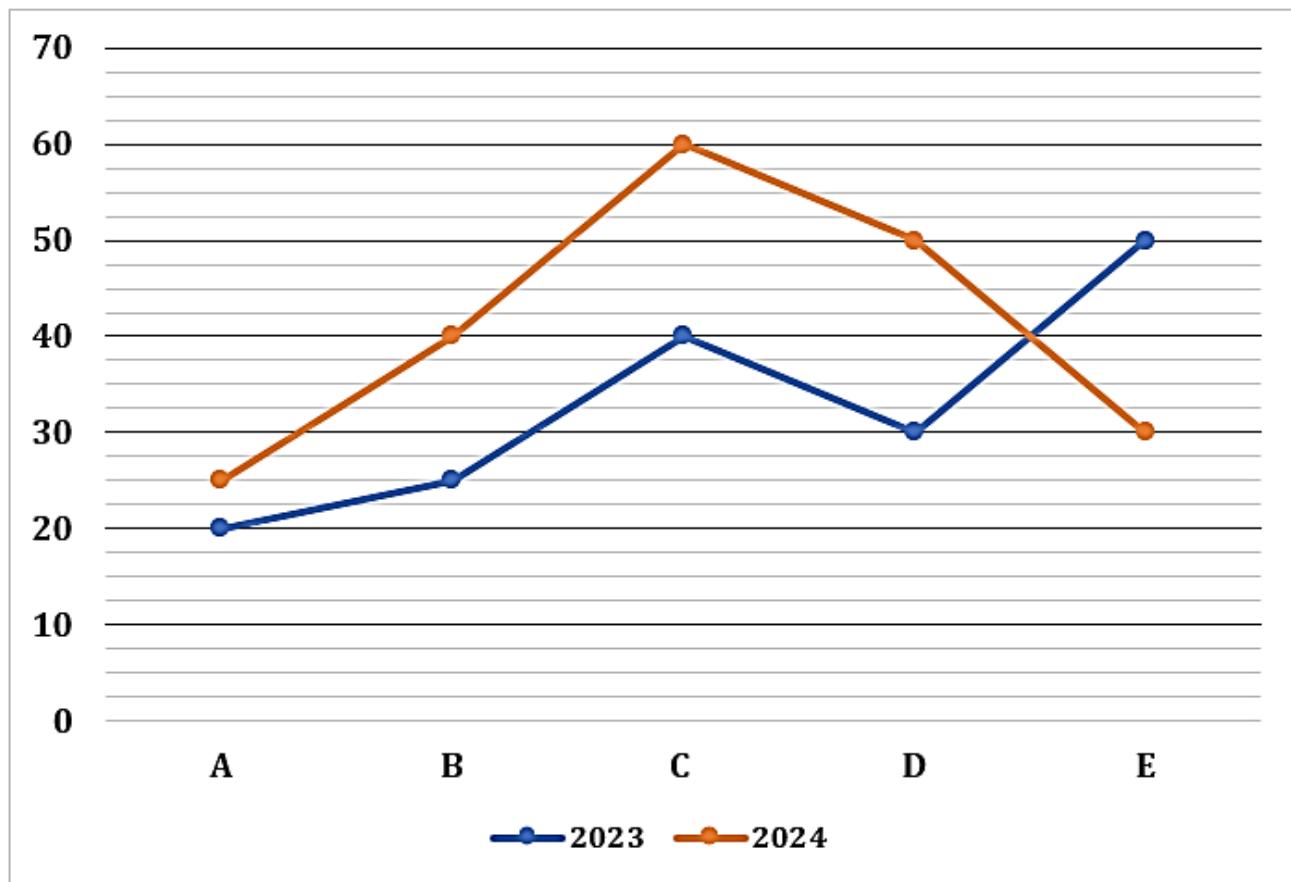
**Q28.** Find the wrong number in the following number series.

13, 104, 197, 292, 380, 488

- (a) 13
- (b) 104
- (c) 380
- (d) 112
- (e) 488

**Directions (29-32):** Read the following line graph carefully and answer the questions given below. The line graph shows the number of appliances sold by five different stores (A, B, C, D, and E) in two different years (2023 and 2024).

Note: The number of appliances sold by each store in each year (in the graph) is one-fourth of the total number of appliances sold by that store in that year.



**Q29.** The total number of appliances sold by C in 2023 is what percentage of the total number of appliances sold by D in 2024?

- (a) 80%
- (b) 75%
- (c) 60%
- (d) 55%
- (e) 45%

**Q30.** Find the difference between the total number of appliances sold by D and E together in 2024 and the total number of appliances sold by A, C and B together in 2023.

- (a) 15
- (b) 10
- (c) 20
- (d) 40
- (e) 45

**Q31.** Find the ratio of the total number of appliances sold by A and E together in 2023 to the total number of appliances sold by B, C and D together in 2024.

- (a) 6:13
- (b) 5:11
- (c) 9:13
- (d) 8:11
- (e) 7:15

**Q32.** The total number of appliances sold by A in 2024 is how many more or less than the average number of appliances sold by B and C together in 2023?

- (a) 20
- (b) 30
- (c) 10
- (d) 40
- (e) 50

**Q33.** A man invests Rs 4,000 in scheme P offering simple interest at 10% per annum for 'X' years, and he invests the same amount at 20% for 3 years in scheme B. The interest received from scheme B is 2.4 times the interest received from scheme A. Find X. (Scheme B offering Simple interest)

- (a) 2.5
- (b) 3
- (c) 5.5
- (d) 4.5
- (e) 2

**Q34.** A bought two bicycles. He sold the first bicycle at a profit of 40% and the second bicycle at a loss of 15%. If the selling price of both the bicycles is equal, i.e., Rs.7140, find his overall profit or loss percentage.

- (a)  $5\frac{7}{9}\%$
- (b)  $4\frac{7}{9}\%$
- (c)  $1\frac{7}{9}\%$
- (d)  $2\frac{7}{9}\%$
- (e)  $7\frac{7}{9}\%$

**Q35.** In Jar A, the ratio of Milk to Water is 3: X. In Jar B, the ratio of Milk to Water is 7 : 5. Equal quantities of the mixtures from both jars are mixed together to form a new mixture in Jar C. If the ratio of Milk to Water in Jar C is 13 : 11, find the value of X.

- (a) 5
- (b) 3
- (c) 1
- (d) 4
- (e) 2

**Q36.** The ratio of length to breadth of a rectangle is 7 : 4 respectively and the area of the rectangle is 1792 cm<sup>2</sup>. If the side of a square is 50% of the breadth of the rectangle, find the area of the square.

- (a) 64 cm<sup>2</sup>
- (b) 256 cm<sup>2</sup>
- (c) 100 cm<sup>2</sup>
- (d) 144 cm<sup>2</sup>
- (e) 121 cm<sup>2</sup>

**Q37.** Speed of a boat in still water is 2.5 times the upstream speed of the boat. The boat takes 6 hours less to cover D km distance in downstream than in upstream. Find the total time taken by the boat to cover D km distance in upstream and downstream.

- (a) 10
- (b) 12
- (c) 8
- (d) 20
- (e) 6

**Directions (38-40):** Read the following information carefully and answer the questions given below. The information about boys and girls in three salons.

The total boys and girls together in salon C is 175. The boys in salon B are 60% more than that of A, and boys in salon C are 15 less than that of B. The ratio of boys to girls in salon B is 4:1, respectively. The girls in salon A are 50% more than those of B. The total girls in all three salons together are 130.

**Q38.** Find the ratio of total girls in C to the total boys in A.

- (a) 1:10
- (b) 2:9
- (c) 3:10
- (d) 3:5
- (e) 5:9

**Q39.** The total girls in B are what percentage of the total boys in A?

- (a) 35%
- (b) 25%

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- (c) 40%
- (d) 50%
- (e) 75%

**Q40.** Find the difference between the total boys in B and the total girls in C and A together.

- (a) 20
- (b) 70
- (c) 50
- (d) 45
- (e) 30

**Directions (41-44):** Study the following information carefully and answer the questions given below. Six persons – A, B, C, D, E and F – were born in three different months – July, August and September – on two different dates, i.e., 6th and 19th of the same year. Each person likes a different subject – Chemistry, Physics, Maths, Biology, Zoology and English.

All the information is not necessarily given in the same order.

F was born on an even date in the month have odd number of days. Two persons were born between F and the one who likes Zoology. As many persons were born after the one who likes Zoology as before the one who likes English. A was born three persons after the one who likes English. The one who likes Physics was born immediately after A. The one who likes Chemistry was born immediately after C but not in the same month as C. Two persons were born between the ones who like Chemistry and E. D was born three persons before the one who likes Maths.

**Q41.** Who among the following was born on 19th August?

- (a) B
- (b) D
- (c) The one who likes Biology
- (d) The one who likes Maths
- (e) E

**Q42.** Which of the following pair(s) is/are correct?

- (a) C – Chemistry, 19th July
- (b) B – Physics, 6th September
- (c) F – Physics, 19th September
- (d) E – English, 6th August
- (e) D – Zoology, 6th September

**Q43.** How many persons were born after the one who likes English?

- (a) Five
- (b) One
- (c) None
- (d) Three
- (e) Four

**Q44.** Who among the following likes Zoology?

- (a) A
- (b) The one born immediately after B
- (c) D
- (d) The one born on 6th July
- (e) None of these

**Q45.** If the second, sixth, ninth and tenth letters from left end of the word “MULTILATERAL” are combined to form a meaningful word, then what is the second letter from right end of the meaningful word formed? If more than one such word can be formed, mark the answer as # and if no word is formed, mark your answer as @.

- (a) R
- (b) L
- (c) U
- (d) @
- (e) #

**Directions (46-48):** Read the given information carefully and answer the questions that follow.

Five boxes A, B, C, D, and E are stacked one above the other, but not necessarily in the same order. Each box is of different colour among Red, Blue, Green, Purple, and Yellow.

Two boxes are kept between the box which is green colour and box C. One box is kept between C and the box which is of red colour. Box A is kept three boxes away the box which is of red colour. Purple colour box is kept three boxes above box D. Box A is not of purple colour. No box is kept between yellow colour box and box B.

**Q46.** Which colour is of box E?

- (a) Red
- (b) Blue
- (c) Green
- (d) Yellow
- (e) Purple

**Q47.** As many boxes are kept above the box which is purple colour as below \_\_\_\_.

- (a) Box D
- (b) The box which is of red colour.
- (c) The box which is of yellow colour.
- (d) Box A
- (e) Can't be determined

**Q48.** Which of the following statements is/are true?

- I. Box A is of Purple.
- II. Box C is kept at second position from the bottom

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III. Equal number of boxes are kept above and below yellow colour box.

- (a) Only II
- (b) Only I and II
- (c) Only II and III
- (d) Only III
- (e) All I, II and III

**Directions (49-51):** Study the following information carefully and answer the questions given below.

Six persons A, B, C, D, E, and F have different heights, but not necessarily in the same order.

Not more than three persons are taller than D. As many persons are taller than D as shorter than B. C is three persons taller than B. The height of third tallest person is 165 cm. F is taller than A. E is taller than F but shorter than C.

**Q49.** Who is the second tallest among the six persons?

- (a) A
- (b) B
- (c) E
- (d) D
- (e) F

**Q50.** If the height of A is 160cm then what is the possible height of F?

- (a) 159cm
- (b) 166cm
- (c) 168cm
- (d) 162cm
- (e) 158cm

**Q51.** How many persons are taller than B?

- (a) Four
- (b) Three
- (c) Five
- (d) Two
- (e) One

**Directions (52-56):** Read the information carefully and answer the questions:

Eight persons sit in two parallel rows such that J, K, L and M sit in row 1 and face north while W, X, Y and Z sit in row 2 and face south. Each person likes different movie: Inception, Titanic, Frozen, Heat, Fargo, Seven, Clerks, or Zodiac.

The one who sits opposite to L sits two places away from the one who likes Titanic. X sits immediate right of the one who likes Titanic. The one who likes Seven sits immediate right of L. J sits second to the right of the one who likes Fargo but doesn't sit at the extreme ends of the row. Y sits opposite to the one who likes Clerks. Neither J nor L likes Clerks. W sits opposite to the one who sits second to the left of M.

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The one who likes Frozen sits opposite to K but is not immediate neighbour of the one who likes Heat. X doesn't like Heat and Zodiac.

**Q52.** Who among the following sits immediate left of the one who sits at extreme right end in Row 1?

- (a) L
- (b) M
- (c) The one who likes Fargo
- (d) The one who likes Seven
- (e) K

**Q53.** Which movie does W like?

- (a) Heat
- (b) Clerks
- (c) Zodiac
- (d) Fargo
- (e) Inception

**Q54.** Who among the following sits immediate right of the one who sits opposite to Z?

- (a) The one who likes Fargo
- (b) L
- (c) K
- (d) M
- (e) Both [a] and [c]

**Q55.** Four of the following five are alike in a certain way. Which one does not belong to the group?

- (a) Y - Clerks
- (b) L - Heat
- (c) Z - Fargo
- (d) W - Heat
- (e) K - Frozen

**Q56.** What is the position of X with respect to the one who likes Titanic?

- (a) Immediate left
- (b) Second to the left
- (c) Opposite
- (d) Second to the right
- (e) Immediate right

**Q57.** Several metropolitan cities have introduced no-pollution zones after air quality reports showed consistently high levels of particulate matter in certain areas. Early observations indicate a noticeable improvement in air quality within these restricted zones.

Which of the following conclusions is implicitly supported by the statement?

- (a) Air quality problems exist only in restricted zones.

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- (b) Restricting polluting activities can help improve air quality.
- (c) No-pollution zones completely eliminate traffic congestion.
- (d) Citizens unanimously support all air quality regulations.
- (e) Industrial pollution is the sole cause of poor air quality.

**Q58.** Statement: Quick commerce platforms have recently launched "10-minute delivery" services for groceries and household essentials in metropolitan cities. These companies claim that by utilizing a dense network of "dark stores" (small local warehouses), they can fulfill orders much faster than traditional e-commerce models.

Which of the following is an assumption that is implicit in the statement above?

- (a) Customers in metropolitan cities prioritize delivery speed over the price of the products.
- (b) Most traditional e-commerce models take more than an hour to deliver household essentials.
- (c) The proximity of "dark stores" to the customer's location is a primary factor in reducing delivery time.
- (d) 10-minute delivery services are more profitable than traditional grocery delivery models.
- (e) Traffic congestion in metropolitan cities does not affect the delivery speed of quick commerce platforms.

**Q59.** In the word "PRESUMPTION", all the letters which come after 'M' in the given word are changed to their immediately succeeding letter and all the letters which come before the second 'P' from left end in the word are changed to their immediately preceding letter then all the letters are arranged in English alphabetical order from left to right. Then, which letter will be the 7th letter from the left end in the final arrangement?

- (a) P
- (b) O
- (c) Q
- (d) R
- (e) M



**Q60.** Find the odd one out.

- (a) P
- (b) V
- (c) T
- (d) L
- (e) W

## Solutions

### S1. Ans.(c)

**Sol.** Correct Answer: (c) Both A and C

Statement (A): Transporting people and equipment to Mars is costly and risky.  
This statement is correct.

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Line reference from the passage:

“Transporting equipment and people across vast interplanetary distances is expensive and risky, with limited opportunities for rescue.”

Explanation:

The passage explicitly states that transport to Mars involves high cost and significant risk. Hence, Statement (A) is directly supported.

Statement (B): Emergency rescue missions from Earth would be easily feasible.

This statement is incorrect.

Line reference from the passage:

“...with limited opportunities for rescue.”

“Scientists estimate that crews may be required to operate with limited external assistance for long durations...”

Explanation:

The passage clearly indicates that rescue opportunities are limited and external assistance is minimal, which directly contradicts the idea that emergency rescues would be easily feasible.

Statement (C): Ethical concerns exist regarding planetary contamination.

This statement is correct.

Line reference from the passage:

“Moreover, ethical questions arise regarding planetary contamination and the long-term sustainability of such colonies.”

Explanation:

The passage explicitly mentions ethical concerns related to contaminating Mars, making Statement (C) valid.

Final Conclusion

Statements A and C can be inferred from the passage, while Statement B is contradicted.

Correct Answer: (c) Both A and C

## S2. Ans.(b)

**Sol.** Correct Answer: (b) By extracting oxygen from carbon dioxide present in the Martian atmosphere.

Line reference from the passage:

“Oxygen must be produced artificially, likely through extracting it from carbon dioxide in the Martian atmosphere.”

Explanation:

The passage clearly explains that future Martian habitats cannot rely on naturally available oxygen. Instead, oxygen would need to be artificially produced, and the method suggested is extracting oxygen from carbon dioxide, which is abundant in Mars's atmosphere. This directly supports option (b).

Why the other options are incorrect?

(a) Transporting compressed oxygen from Earth

The passage does not mention transporting oxygen supplies from Earth. In fact, the emphasis is on self-sufficiency and artificial production on Mars.

(c) Converting water molecules into oxygen

Although water is mentioned as an essential resource, the passage specifies that water would be used for consumption and recycling, not primarily for oxygen extraction.

(d) Using stored oxygen beneath the Martian surface

There is no mention of existing oxygen reserves under the Martian surface.

(e) Cultivating oxygen-producing plants

Food production through controlled agriculture is discussed, but plant-based oxygen generation is not stated as the method for producing breathable oxygen.

Final Conclusion

The passage explicitly states that oxygen would be generated by extracting it from carbon dioxide in the Martian atmosphere.

Correct Answer: (b)

### S3. Ans.(e)

**Sol.** Correct Answer: (e) Because it once had liquid water and still contains subsurface ice deposits in abundance.

Line-based Explanation

Line reference from the passage:

“ Mars attracts attention because it once had liquid water and still contains ice, making long-term habitation theoretically possible.”

Explanation:

The passage explicitly states that Mars draws scientific interest because of its past presence of liquid water and the current availability of ice. These factors suggest the possibility of sustaining human life in the long term, which makes Mars a viable candidate for future settlement.

Why the other options are incorrect?

(a) Comparable atmosphere to Earth

Incorrect. The passage describes Mars as having an *alien environment* with severe constraints, not an Earth-like atmosphere.

(b) Currently supports microbial life

Incorrect. The passage makes no claim that Mars currently supports any form of life.

(c) Closest planet to Earth

Incorrect. Proximity is not mentioned as a reason for interest.

(d) Magnetic field shielding from radiation

Incorrect. The passage actually highlights high radiation exposure as a major challenge, which implies the absence of adequate shielding.

Final Conclusion

Mars attracts scientific interest because evidence of past water and present ice makes human habitation theoretically possible.

Correct Answer: (e)

### S4. Ans.(d)

**Sol.** Correct Answer: (d) Approximately

Word in the passage: around

Sentence from the passage:

“...sometimes lasting around two years per mission cycle.”

Meanings, Examples and Analysis

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Around (as used in the passage)

English Meaning:

About; nearly; close to a particular number or amount.

Hindi Meaning:

लगभग, करीब

Example (English):

The project will take around six months to complete.

Why this meaning fits here:

The sentence refers to an estimated duration, not an exact figure. Hence, “around” means *approximately*.

Option (a): Outside – Incorrect

English Meaning:

On the outer side of something; not inside.

Hindi Meaning:

बाहर

Example (English):

The children are playing outside the house.

Why incorrect:

Outside refers to location or position, not numerical approximation.

It does not fit the context of time duration.

Option (b): Surrounding – Incorrect

English Meaning:

All around something; enclosing it.

Hindi Meaning:

चारों ओर स्थित

Example (English):

The village is surrounded by hills.

Why incorrect:

Surrounding describes physical placement, not an estimate of time or quantity.

Option (c): Encircling – Incorrect

English Meaning:

Forming a circle around something.

Hindi Meaning:

घेरना, चारों ओर घुमावदार रूप में होना

Example (English):

A fence is encircling the park.

Why incorrect:

Encircling is a spatial term and has no relevance to duration or numerical estimation.

Option (d): Approximately – Correct

English Meaning:

Close to a particular number or time, but not exact.

Hindi Meaning:

लगभग, अनुमानतः

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Example (English):

The journey will take approximately three hours.

Why correct:

Approximately perfectly matches the meaning of “around” in the passage, which refers to an estimated time span.

Option (e): Beyond – Incorrect

English Meaning:

Further than; more than a certain limit.

Hindi Meaning:

से आगे, से परे

Example (English):

The cost went beyond our budget.

Why incorrect:

Beyond suggests exceeding a limit, whereas the passage simply gives an estimate, not an excess.

Final Conclusion

In the passage, around is used to express an approximate duration.

Among the options, approximately conveys this meaning most accurately.

Correct Answer: (d) Approximately

## **S5. Ans.(d)**

**Sol.** Correct Answer: (d) Both B and C

Statement (A): Missions to Mars are expected to last only a few months.

This statement is not supported.

Line reference from the passage:

“ ...operate with limited external assistance for long durations, sometimes lasting around two years per mission cycle.”

Explanation:

The passage clearly states that missions may last around two years, not just a few months. Hence, Statement (A) is incorrect.

Statement (B): Future settlers may have to operate with limited assistance from Earth.

This statement is supported.

Line reference from the passage:

“ Scientists estimate that crews may be required to operate with limited external assistance for long durations...”

Explanation:

The passage explicitly mentions that Mars crews would need to function with minimal help from Earth, directly supporting Statement (B).

Statement (C): Psychological support is considered essential for long-term habitation.

This statement is supported.

Line reference from the passage:

“ Medical facilities, communication systems, and psychological support mechanisms would also be indispensable, as settlers would live in isolation far from Earth.”

**Explanation:**

The passage clearly identifies psychological support as indispensable, confirming Statement (C).

**Final Conclusion**

Statements B and C are supported by the passage, while Statement A is contradicted.

Correct Answer: (d) Both B and C

**S6. Ans.(a)**

**Sol.** Correct Answer: (a)

**Sentence-wise Grammatical Analysis**

Option (a): If the alert had arrived earlier disruptions would reduce significantly.

Status: Grammatically incorrect

Strict Grammatical Rule Involved

Rule: Third Conditional Structure

When a sentence talks about a hypothetical situation in the past and its unreal result, it must follow the third conditional pattern.

Correct structure:

If + past perfect, subject + would have + past participle

Why option (a) is incorrect

- “If the alert had arrived earlier” → past perfect (correct)
- Main clause: “disruptions would reduce” → incorrect verb form

It should be “would have reduced”, not “would reduce”.

Also, a comma is required after the conditional clause.

Corrected version (for understanding):

If the alert had arrived earlier, disruptions would have reduced significantly.

Example (Correct Third Conditional):

If the warning had been issued on time, losses would have been minimised.

Option (b): Authorities issued clarifications after confusion spread across regions rapidly.

Status: Grammatically correct

Sentence structure:

Subject + verb + object + adverbial clause of time

Explanation:

- “issued” is correctly used in the simple past
- “after confusion spread” is a valid time clause
- Word order is acceptable in formal writing

Example:

The government intervened after protests spread nationwide.

Option (c): Public reaction intensified once official statements were shared widely.

Status: Grammatically correct

Sentence structure:

Main clause + subordinate time clause (once)

Explanation:

- “once” correctly introduces a time condition

- Passive construction “were shared” is grammatically sound
- Tense consistency is maintained

Example:

Market volatility increased once new data were released.

Option (d): Emergency protocols were reviewed following criticism from multiple quarters.

Status: Grammatically correct

Sentence structure:

Passive voice + participial phrase

Explanation:

- Passive form “were reviewed” is correct
- “following criticism” correctly shows cause
- “multiple quarters” is an idiomatic expression

Example:

Safety norms were revised following public backlash.

Option (e): No error

Status: Incorrect

Because option (a) contains a grammatical error.

Final Conclusion

Only option (a) violates a strict grammatical rule related to third conditional verb structure.

Correct Answer: (a)

### S7. Ans.(c)

Sol. Correct Answer: (c)

Option-wise Detailed Analysis

Option (a): Observers noted a shift in tone during the negotiations.

Status: Grammatically correct

Sentence Structure:

Subject + verb + object + prepositional phrase

Observers (S) + noted (V) + a shift in tone (O) + during the negotiations (PP)

Grammatical Rule Applied:

Simple past tense is used correctly to describe a completed action.

The preposition “during” is correctly followed by a noun phrase.

Example:

Journalists observed a change in attitude during the meeting.

Option (b): Diplomatic channels remain open despite prolonged disagreements.

Status: Grammatically correct

Sentence Structure:

Subject + linking verb + complement + concessive prepositional phrase

Diplomatic channels (S) + remain (LV) + open (Adj) + despite prolonged disagreements (PP)

Grammatical Rule Applied:

“Despite” must be followed by a noun or noun phrase, not a clause.

Here, “prolonged disagreements” is a valid noun phrase.

Example:

Trade talks continued despite political tensions.

Option (c): Officials described the ceasefire talks as remarkable successful given the tensions.

Status: Grammatically incorrect

Sentence Structure:

Subject + verb + object + object complement

Officials (S) + described (V) + the ceasefire talks (O) + as remarkable successful (OC)

Strict Grammatical Rule Violated

Rule: Adjective vs Adverb Usage

An adverb is required to modify an adjective.

- Remarkable → adjective
- Successful → adjective

An adjective cannot modify another adjective directly.

Correct form:

remarkably successful

Corrected sentence (for understanding):

Officials described the ceasefire talks as remarkably successful given the tensions.

Example:

The mission was exceptionally successful under difficult conditions.

Option (d): The agreement was reached after several rounds of discussion.

Status: Grammatically correct

Sentence Structure:

Subject + passive verb + prepositional phrase

The agreement (S) + was reached (Passive V) + after several rounds of discussion (PP)

Grammatical Rule Applied:

Passive voice is correctly formed using *was + past participle*.

The time-sequence phrase “after” is correctly used.

Example:

The deal was finalised after lengthy negotiations.

Final Summary Table

Option	Status	Reason
(a)	Correct	Proper tense and structure
(b)	Correct	Correct use of “despite”
(c)	Incorrect	Adjective wrongly used instead of adverb
(d)	Correct	Correct passive construction

Final Answer

(c)

### 8. Ans.(d)

Sol. Identification of the Grammatically Incorrect Sentence

Correct Answer: (d)

Option-wise Detailed Analysis

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Option (a): The report focuses on the economic impact of prolonged conflicts.

Status: Grammatically correct

Sentence Structure:

Subject + verb + preposition + object

The report (S) + focuses (V) + on (Prep) + the economic impact of prolonged conflicts (Obj)

Grammatical Rule Applied:

The verb focus is correctly followed by the preposition on when indicating the subject of attention.

Example:

The lecture focuses on environmental sustainability.

Option (b): Analysts warned about disruptions to global supply chains.

Status: Grammatically correct

Sentence Structure:

Subject + verb + prepositional object

Analysts (S) + warned (V) + about disruptions to global supply chains (Obj)

Grammatical Rule Applied:

The verb warn can be followed by about when referring to possible dangers or problems.

Example:

Scientists warned about rising sea levels.

Option (c): The findings were presented in an international forum.

Status: Grammatically correct

Sentence Structure:

Subject + passive verb + prepositional phrase

The findings (S) + were presented (Passive V) + in an international forum (PP)

Grammatical Rule Applied:

Passive voice is correctly formed using be + past participle, and in correctly indicates location or context.

Example:

The results were published in a reputed journal.

Option (d): The discussion centered between long-term risks and immediate challenges.

Status: Grammatically incorrect

Sentence Structure:

Subject + verb + incorrect prepositional phrase

The discussion (S) + centered (V) + between long-term risks and immediate challenges (Incorrect PP)

Strict Grammatical Rule Violated

Rule: Verb-Preposition Collocation with *center*

The verb center must be followed by on or around, not between.

• Correct: center on / around a topic

• Incorrect: center between topics

Corrected form (for understanding):

The discussion centered on long-term risks and immediate challenges.

Example:

The debate centered around economic reforms.

Option (e): No error

Status: Incorrect

Because option (d) contains a grammatical error.

Final Summary Table

Option	Status	Rule Involved
(a)	Correct	Verb-preposition ( <i>focus on</i> )
(b)	Correct	Verb-preposition ( <i>warn about</i> )
(c)	Correct	Passive voice construction
(d)	Incorrect	Wrong preposition with <i>center</i>

Final Answer

(d)

### S9. Ans.(e)

**Sol.** Correct Answer: (e) No error

All four sentences are grammatically correct.

Option-wise Detailed Analysis

Option (a): Economists predict gradual stabilization over the next fiscal quarters.

Status: Grammatically correct

Sentence Structure:

Subject + verb + object + prepositional phrase

Economists (S) + predict (V) + gradual stabilization (O) + over the next fiscal quarters (PP)

Strict Grammatical Rule Applied:

- A plural subject (“Economists”) correctly takes a plural verb (“predict”).
- Abstract nouns like *stabilization* are correctly used without an article when spoken of generally.
- “Over” is correctly used to indicate a time span.

Example:

Analysts expect steady recovery over the coming years.

Option (b): Consumer prices increased sharply across essential commodity segments recently.

Status: Grammatically correct

Sentence Structure:

Subject + verb + adverb + prepositional phrase + time adverb

Consumer prices (S) + increased (V) + sharply (Adv) + across essential commodity segments (PP) + recently (Adv)

Strict Grammatical Rule Applied:

- Adverbs of manner (“sharply”) correctly modify verbs.
- Time adverbs like “recently” can appear at the end of the sentence.
- “Across” correctly indicates distribution over categories.

Example:

Fuel costs rose sharply across urban markets recently.

Option (c): Supply chain disruptions contributed significantly to rising market pressures.

Status: Grammatically correct

Sentence Structure:

Compound noun subject + verb + adverb + prepositional object

Supply chain disruptions (S) + contributed (V) + significantly (Adv) + to rising market pressures (PP)  
 Strict Grammatical Rule Applied:

- The verb contribute is correctly followed by the preposition to.
- “Rising” functions correctly as a present participle adjective modifying “pressures”.

Example:

Policy delays contributed substantially to economic instability.

Option (d): The latest inflation figures appear more alarming than those of previous years.

Status: Grammatically correct

Sentence Structure:

Subject + linking verb + comparative adjective phrase

The latest inflation figures (S) + appear (LV) + more alarming than those of previous years (Complement)

Strict Grammatical Rule Applied:

- Plural subject (“figures”) correctly takes the verb “appear”.
- Comparative adjectives must be followed by than.
- “Those of previous years” correctly replaces “figures” to avoid repetition and ambiguity.

Example:

Current sales numbers seem higher than those of last year.

Option (e): No error

Status: Correct choice

Since none of the sentences violate any grammatical rule, “No error” is the correct answer.

Final Summary Table

Option	Status	Key Rule
(a)	Correct	Subject-verb agreement, time phrase
(b)	Correct	Adverb placement, tense
(c)	Correct	Verb-preposition collocation
(d)	Correct	Comparative structure

Final Answer: (e) No error

## S10. Ans.(e)

**Sol.** Correct Answer: (e) droplets, condensed

Filled Sentence (Correct)

Tiny droplets formed on the glass as moisture from the warm air condensed on its cool surface.

This sentence describes a natural physical process (condensation), and the chosen words must match both scientific accuracy and contextual meaning.

Meanings, Examples & Option-wise Analysis

Option (a): vitiated, remission — Incorrect

Vitiating

English Meaning:

Spoiled or impaired in quality.

Hindi Meaning:

दूषित, खराब किया हुआ

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Remission

English Meaning:

A reduction or disappearance of symptoms; forgiveness of a debt.

Hindi Meaning:

दूष्ट, रोग में कमी

Example (English):

The contract was vitiated by fraud.

Why incorrect:

Neither word relates to moisture, glass, or physical processes.

They are abstract and contextually irrelevant.

Option (b): liquid, dismantled — Incorrect

Liquid

English Meaning:

A substance that flows freely.

Hindi Meaning:

द्रव

Dismantled

English Meaning:

Taken apart or destroyed.

Hindi Meaning:

तोड़ा गया

Example (English):

The machine was dismantled for repair.

Why incorrect:

- “Tiny liquid” is incomplete and vague.
- Moisture does not *dismantle* on a surface.

Option (c): form, divested — Incorrect

Form

English Meaning:

Shape or structure; also a verb meaning to create.

Hindi Meaning:

आकार / बनाना

Divested

English Meaning:

Stripped of possessions or authority.

Hindi Meaning:

वंचित करना

Example (English):

He was divested of his powers.

Why incorrect:

- “Tiny form” is unclear and unscientific.
- Divested has no relevance to condensation.

---

Option (d): structure, concurred — Incorrect

Structure

English Meaning:

Arrangement or framework.

Hindi Meaning:

संरचना

Concurred

English Meaning:

Agreed.

Hindi Meaning:

सहमत होना

Example (English):

All members concurred with the proposal.

Why incorrect:

Agreement has no connection to moisture behavior or physical change.

Option (e): droplets, condensed — Correct

Droplets

English Meaning:

Very small drops of liquid.

Hindi Meaning:

बूँदें

Condensed

English Meaning:

Changed from a gas to a liquid due to cooling.

Hindi Meaning:

संघनित होना

Example (English):

Water vapor condensed on the cold window.

Why correct:

- Moisture from warm air condenses on a cool surface.
- This process forms tiny droplets on glass.
- Both words are scientifically accurate and contextually perfect.

Final Conclusion

The sentence describes condensation, and only option (e) correctly completes both blanks with precise and appropriate words.

Correct Answer: (e) droplets, condensed

### S11. Ans.(c)

**Sol.** Correct Answer: (c) boost, mitigate

Filled Sentence (Correct)

The new policy aims to boost economic growth while mitigate the impact of inflation.

(Grammatically understood as: *aims to boost ... while mitigating ...*)

---

The sentence clearly requires:

- a positive action toward economic growth, and
- a reducing or controlling action toward inflation.

Meanings, Examples & Option-wise Analysis

Option (a): cripple, hinder — Incorrect

Cripple

English Meaning:

To severely damage or disable.

Hindi Meaning:

अपंग कर देना, बुरी तरह नुकसान पहुँचाना

Hinder

English Meaning:

To obstruct or slow progress.

Hindi Meaning:

बाधा डालना

Example (English):

Sanctions crippled the economy.

Why incorrect:

Both words indicate negative effects.

A policy does not aim to *cripple* growth.

Option (b): avert, augment — Incorrect

Avert

English Meaning:

To prevent or turn away.

Hindi Meaning:

टालना, रोकना

Augment

English Meaning:

To increase or enhance.

Hindi Meaning:

बढ़ाना

Example (English):

Steps were taken to avert a crisis.

Why incorrect:

- Growth is not something to be *averted*.
- Inflation impact should be reduced, not *augmented*.

Option (c): boost, mitigate — Correct

Boost

English Meaning:

To increase or improve.

Hindi Meaning:

बढ़ावा देना

**Mitigate**

**English Meaning:**

To reduce the severity or impact of something harmful.

**Hindi Meaning:**

कम करना, प्रभाव घटाना

**Example (English):**

The reforms boosted productivity and mitigated risks.

**Why correct:**

- Governments aim to boost economic growth.
- They also seek to mitigate the impact of inflation.
- Both verbs align perfectly with policy objectives and sentence logic.

**Option (d): baffle, elevate — Incorrect**

**Baffle**

**English Meaning:**

To confuse completely.

**Hindi Meaning:**

हैरान करना, उलझन में डालना

**Elevate**

**English Meaning:**

To raise or lift.

**Hindi Meaning:**

ऊँचा उठाना

**Example (English):**

The decision baffled experts.

**Why incorrect:**

A policy does not aim to *baffle* growth, nor to *elevate* inflation impact.

**Option (e): curtail, heave — Incorrect**

**Curtail**

**English Meaning:**

To reduce or limit.

**Hindi Meaning:**

कम करना

**Heave**

**English Meaning:**

To lift with effort; to rise heavily.

**Hindi Meaning:**

जोर से उठाना

**Example (English):**

They curtailed spending.

**Why incorrect:**

- Growth is not something policies aim to curtail.

- “Heave the impact of inflation” is contextually meaningless.

---

### Final Conclusion

The sentence requires promotion of growth and reduction of inflationary impact.

Only option (c) satisfies both conditions logically and grammatically.

Correct Answer: (c) boost, mitigate

### S12. Ans.(a)

**Sol.** Correct Answer: (a) conflict, menace

Filled Sentence (Correct)

The prolonged conflict soon turned into a serious menace for the stability of the entire region.

This sentence clearly conveys a cause-effect relationship involving instability and threat, which fits the context best.

Meanings, Examples & Option-wise Analysis

Option (a): conflict, menace — Correct

Conflict

English Meaning:

A prolonged state of disagreement, hostility, or armed struggle.

Hindi Meaning:

संघर्ष, टकराव, युद्ध

Example (English):

The border conflict continued for several years.

Menace

English Meaning:

A serious threat or danger.

Hindi Meaning:

खतरा, गंभीर संकट

Example (English):

Terrorism poses a major menace to global peace.

Why correct:

- A conflict can logically last for a long time ("prolonged").
- Such a conflict can realistically become a menace to regional stability.
- Both words are semantically aligned with *political instability and threat*, which suits the sentence perfectly.

Option (b): subsidy, stipend — Incorrect

Subsidy

English Meaning:

Financial assistance given by the government.

Hindi Meaning:

सरकारी अनुदान

Stipend

English Meaning:

A fixed regular payment, often for students or trainees.

Hindi Meaning:

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वजीफ़ा, मानदेय

Example (English):

Students receive a stipend during training.

Why incorrect:

- Neither word relates to instability or threat.
- A subsidy cannot “turn into” a stipend, nor threaten regional stability.

Option (c): rapture, bewitch — Incorrect

Rapture

English Meaning:

A feeling of extreme joy or pleasure.

Hindi Meaning:

अत्यंत आनंद

Bewitch

English Meaning:

To enchant or charm.

Hindi Meaning:

मोहित करना

Example (English):

The audience was bewitched by the performance.

Why incorrect:

- Both words carry positive or emotional meanings, completely unsuitable for a sentence about regional instability.

Option (d): plenty, rebate — Incorrect

Plenty

English Meaning:

A large or sufficient amount.

Hindi Meaning:

प्रचुरता

Rebate

English Meaning:

A partial refund or discount.

Hindi Meaning:

छूट, रियायत

Example (English):

Customers received a tax rebate.

Why incorrect:

- No logical or contextual connection to “serious threat” or “stability of the region.”

Option (e): destiny, fortuity — Incorrect

Destiny

English Meaning:

Events that are believed to be predetermined.

Hindi Meaning:

भाग्य, नियति

Fortuity

English Meaning:

Chance occurrence; accident.

Hindi Meaning:

संयोग

Example (English):

Their meeting was a fortuity.

Why incorrect:

- Abstract and philosophical terms.
- Do not convey cause–effect threat dynamics implied in the sentence.

Final Conclusion

Only option (a) provides a logically coherent, contextually appropriate, and grammatically correct pair of words.

Correct Answer: (a) conflict, menace

### S13. Ans.(e)

**Sol.** Correct Answer: (e) devised, bolstered

Filled Sentence (Correct)

The team devised a new strategy that bolstered the organization's long-term growth.

This sentence conveys intentional planning followed by a positive impact, which best fits the context.

Meanings, Examples & Option-wise Analysis

Option (a): yielded, buttressed — Incorrect

Yielded

English Meaning:

Produced or generated a result; also means to give way.

Hindi Meaning:

उत्पन्न करना / समर्पण करना

Example (English):

The experiment yielded positive results.

Buttressed

English Meaning:

Supported or strengthened something.

Hindi Meaning:

मजबूत करना, सहारा देना

Example (English):

The evidence buttressed the argument.

Why incorrect:

- *Yielded a strategy* is contextually wrong. One devises or formulates a strategy; it is not “yielded.”
- Though *buttressed* is acceptable in meaning, the first verb breaks the sentence.

Option (b): evolved, hindered — Incorrect

Evolved

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English Meaning:

Developed gradually over time.

Hindi Meaning:

विकसित होना

Hindered

English Meaning:

Obstructed or slowed progress.

Hindi Meaning:

बाधा डालना

Example (English):

Poor planning hindered growth.

Why incorrect:

- A strategy may evolve, but
- “hindered long-term growth” contradicts the positive tone implied in the sentence.

Option (c): altered, avouched — Incorrect

Altered

English Meaning:

Changed or modified.

Hindi Meaning:

बदलना

Avouched

English Meaning:

Asserted or declared confidently.

Hindi Meaning:

दृढ़तापूर्वक कहना

Example (English):

He avouched his innocence.

Why incorrect:

- *Avouched growth* is grammatically and contextually inappropriate.
- “Avouch” is used with statements or claims, not abstract outcomes like growth.

Option (d): adapted, eroded — Incorrect

Adapted

English Meaning:

Adjusted to suit new conditions.

Hindi Meaning:

अनुकूलित करना

Eroded

English Meaning:

Gradually weakened or diminished.

Hindi Meaning:

क्षीण करना

Example (English):

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Trust was eroded over time.

Why incorrect:

- “Eroded long-term growth” conveys a negative effect, which conflicts with the sentence’s implied success.

Option (e): devised, bolstered — Correct

Devised

English Meaning:

Planned or invented carefully.

Hindi Meaning:

योजना बनाना, तैयार करना

Example (English):

The committee devised a comprehensive policy.

Bolstered

English Meaning:

Strengthened or supported.

Hindi Meaning:

मजबूत करना, सुदृढ़ करना

Example (English):

New investments bolstered economic growth.

Why correct:

- A team can logically devise a strategy.
- Such a strategy can bolster long-term growth.
- Both words maintain a positive, strategic, and cause-effect relationship, perfectly matching the sentence.

Final Conclusion

Only option (e) fits grammatically, contextually, and semantically in both blanks.

Correct Answer: (e) devised, bolstered

#### S14. Ans.(a)

Sol. Correct Order

A → C → D → B

Explanation of the Sequence

1) A comes first

“The sudden storm caught the lone traveler off guard...”

This sets the scene and conflict (storm + traveler). It works as the opening.

2) C follows A

“Exhausted but determined, she continued...”

C naturally comes after A because it shows the traveler’s reaction to the storm.

3) D follows C

“Each step forward strengthened her resolve...”

D continues the action from C and shows the progression (step-by-step effort toward shelter).

4) B comes last

“By the end, perseverance proved...”

“By the end” clearly signals a conclusion, so it must be the closing line.

Final Answer: (a) ACDB

### S15. Ans.(c)

**Sol.** Correct Order

B → A → D → C

Explanation of the Sequence:

1) B comes first

B introduces the topic: electric scooters and their increasing popularity.

2) A follows B

A uses “this popularity”, which must refer to the popularity mentioned in B.

3) D follows A

D begins with “This convenience”, which refers to the benefit stated in A (covering short distances quickly). So A must come before D.

4) C comes last

C begins with “Ultimately”, which signals a concluding outcome, so it fits best at the end.

Why other orders are incorrect (quick check)

- (a) BDAC: D cannot come before A because “This convenience” needs the reason in A first.
- (b) DABC: D cannot open the paragraph; “This convenience” has no previous reference.
- (d) CBAD: C cannot start because “As a result” needs a cause before it.
- (e) No rearrangement: Given order is not coherent because D repeats the idea and must follow A.

Final Answer: (c) BADC

### S16. Ans.(b)

**Sol.** Correct Order

D → C → B → A

Explanation of the Sequence

1) D comes first

“Language-learning apps have transformed how people acquire new languages.”

This is the introductory sentence. It introduces the topic clearly and broadly.

2) C follows D

“Through interactive exercises, users are encouraged to practice regularly.”

This explains how these apps bring about the transformation mentioned in D (mechanism).

3) B follows C

“In addition, short lessons make learning manageable even on busy days.”

The connector “In addition” signals an extra supporting point, so it must follow an earlier explanation.

4) A comes last

“Therefore, consistent exposure improves fluency over time.”

“Therefore” indicates a final conclusion/result, which logically comes at the end.

Why other options are incorrect (briefly)?

- (a) CDBA: Cannot start with C; it lacks context.

- (c) DABC: A ("Therefore") appears too early without sufficient buildup.
- (d) CBDA: C cannot precede the topic sentence D.
- (e) No rearrangement: The given order is not logically coherent.

Final Answer: (b) DCBA

### S17. Ans.(d)

**Sol.** Correct Order

C → B → D → A

Explanation of the Sequence

1) C comes first

C introduces the topic and provides the base idea: apps give real-time updates.

2) B follows C

B begins with "Based on these updates", so it must come after the sentence that introduces the updates (C).

3) D follows B

D begins with "Such alerts and information", which directly refers to the alerts mentioned in B, so B must come before D.

4) A comes last

A starts with "Hence", which shows a concluding result. Therefore, it must be the final sentence.

Why other options are incorrect?

- (a) CDBA: D comes before B, but B is a more direct extension of C (updates → alerts).
- (b) DCBA: D cannot start; it needs the context of weather apps first.
- (c) BADC: B cannot start because "Users receive alerts..." needs the subject (apps) introduced first.
- (e) No rearrangement: The given order is not provided as a coherent paragraph; rearrangement is needed.

Final Answer: (d) CBDA

### S18. Ans.(b)

**Sol.** Correct Answer: (b) is as popular as

Given Sentence

The new app is so popular as its predecessor among young users.

Identification of the Error

The highlighted phrase "is so popular as" is grammatically incorrect.

Strict Grammatical Rule Involved

Rule: Use of Comparatives with "as ... as"

When we compare equal degree or similarity, the correct structure is:

as + adjective + as

- so ... as is generally used in negative sentences or restrictive contexts.

- In affirmative comparisons, as ... as is mandatory.

Correct Structure

is as + adjective + as

Example:

---

This phone is as efficient as the older model.

Option-wise Analysis

Option (a): is so popular as

Status: Incorrect

Why:

- “So … as” is not used in affirmative comparative sentences.
- It violates standard comparison rules.

Example (Incorrect):

She is so tall as her sister.

Option (b): is as popular as

Status: Correct

Why:

- Follows the correct comparative structure for equality.
- Logically and grammatically sound.

Corrected sentence:

The new app is as popular as its predecessor among young users.

Example (Correct):

This movie is as popular as the original.

Option (c): is so popular so

Status: Incorrect

Why:

- Repetition of “so” makes the structure meaningless and ungrammatical.

Option (d): are so popular as

Status: Incorrect

Why:

- Subject “app” is singular → verb must be is, not are.
- Also repeats the incorrect “so … as” structure.

Option (e): No improvement required

Status: Incorrect

Why:

- The original sentence contains a clear grammatical error.

Final Conclusion

To express equality in popularity, the correct comparative form must be used.

Correct Answer: (b) is as popular as

### S19. Ans.(d)

**Sol.** Correct Answer: (d) Despite the low

Given Sentence

Despite of the low turnout, the event succeeded in generating meaningful discussion and valuable feedback from participants.

Identification of the Error

The error lies in the phrase “Despite of the low turnout”.

---

### Strict Grammatical Rule Involved

Rule: Usage of *despite* vs *in spite of*

- Despite is a preposition and is not followed by “of”.
- In spite of is the correct form where “of” is required.

Correct forms:

- Despite + noun / noun phrase
- In spite of + noun / noun phrase

Incorrect form:

- Despite of + noun

Correct Structure

Despite the low turnout, ...

Example:

Despite the rain, the match continued.

Option-wise Analysis

Option (a): Despite the lows

Status: Incorrect

Why:

- “Lows” (plural) does not fit the context.
- The sentence refers specifically to low turnout, not multiple “lows”.

Example:

Despite the lows in sales, the company survived.

(This has a different meaning.)

Option (b): In spite low

Status: Incorrect

Why:

- Grammatically incomplete.
- “In spite” must be followed by of.

Correct form:

In spite of the low turnout

Option (c): Although the low

Status: Incorrect

Why:

- “Although” is a conjunction, not a preposition.
- It must introduce a full clause, not just a noun phrase.

Correct usage:

Although the turnout was low, the event succeeded.

Option (d): Despite the low

Status: Correct

Why:

- Removes the incorrect “of”.
- “Despite the low turnout” is grammatically and contextually correct.

Corrected sentence:

---

Despite the low turnout, the event succeeded in generating meaningful discussion and valuable feedback from participants.

Option (e): No improvement required

Status: Incorrect

Why:

- The original phrase “Despite of” is grammatically incorrect.

Final Conclusion

The sentence requires the correct prepositional structure using despite without “of”.

Correct Answer: (d) Despite the low

## S20. Ans.(d)

**Sol.** Correct Answer: (d) on or before Sunday

Given Sentence

Please ensure that the report is completed and submitted on or before on Sunday so that it can be reviewed in time.

Identification of the Error

The highlighted phrase contains redundant and incorrect preposition usage.

- The phrase uses “on” twice: *on or before on Sunday*
- This repetition is grammatically incorrect.

Strict Grammatical Rule Involved

Rule: Use of Correlative Prepositional Phrases

The fixed and standard expression is:

on or before + specific day/date

- Only one preposition (“on”) is used.
- Adding another “on” after “before” is incorrect.

Correct Structure

on or before + day/date

Example:

Please submit the form on or before Friday.

Option-wise Analysis

Option (a): on and before Sunday

Status: Incorrect

Why:

- “On and before” suggests two simultaneous conditions, which is illogical.
- The standard idiomatic phrase is *on or before*, not *on and before*.

Example (Incorrect):

Submit the assignment on and before Monday.

Option (b): at or before the Sunday

Status: Incorrect

Why:

- “At” is not used with days.
- The definite article “the” is unnecessary before days of the week.

Example (Incorrect):

The meeting is scheduled at Sunday.

Option (c): in or before the Sunday

Status: Incorrect

Why:

- “In” is used with months or longer periods, not specific days.
- “The Sunday” is contextually awkward.

Example (Incorrect):

The report is due in Sunday.

Option (d): on or before Sunday

Status: Correct

Why:

- It is a standard, idiomatic, and grammatically correct expression.
- It clearly means the task may be completed any time up to and including Sunday.

Example (Correct):

Applications must be submitted on or before Sunday.

Option (e): No improvement required

Status: Incorrect

Why:

- The original sentence has a clear grammatical error (extra “on”).

Final Conclusion

The correct and grammatically sound replacement is:

(d) on or before Sunday

This removes redundancy and follows standard English usage.

**S21. Ans.(e)**

**Sol.**

$$(?)^2 = 369 \times 41$$

$$(?)^2 = 9 \times 41 \times 41$$

$$? = 3 \times 41$$

$$? = 123$$



**S22. Ans.(d)**

**Sol.**

$$? \approx 7^2 + 8^2 - \sqrt{81}$$

$$\approx 49 + 64 - 9 \approx 104$$

**S23. Ans.(b)**

**Sol.**

$$? \approx \frac{25}{100} \times 5680 + \frac{45}{100} \times 4300 \approx 1420 + 1935 \approx 3355$$

**S24. Ans.(c)**

**Sol.**

$$\frac{(1041.84+?)}{3.02} = \frac{1816}{4}$$

$$(1042+?) = 454 \times 3$$

$$? = 1362 - 1042 = 320$$

**S25. Ans.(d)**

**Sol.**

Wrong number = 620

Pattern of series —

29	110	622	671	887	912	976
+81	+512	+49	+216	+25	+64	
$\uparrow$ $(9)^2$	$\uparrow$ $(8)^3$	$\uparrow$ $(7)^2$	$\uparrow$ $(6)^3$	$\uparrow$ $(5)^2$	$\uparrow$ $(4)^3$	

**S26. Ans.(c)**

**Sol.**

Wrong number = 313

Pattern of series —

3	3	9	45	315	2835	31185
$\times 1$	$\times 3$	$\times 5$	$\times 7$	$\times 9$	$\times 11$	

**S27. Ans.(a)**

**Sol.** Explanation:

Wrong term = 4

Pattern of series —

$$8 \times 2 = 16$$

$$16 \times 2 = 32$$

$$32 \times 2 = 64$$

$$64 \times 2 = 128$$

$$128 \times 2 = 256$$

$$256 \times 2 = 512$$

**S28. Ans.(c)**

**Sol.** Wrong number- 380

The pattern of the series-

$$13 + 91 = 104$$

$$104 + 93 = 197$$

$$197+95=292$$

$$292+97= 389$$

$$389+99=488$$

**S29. Ans.(a)****Sol.** Store A

$$\text{Total number of appliances sold in 2023} = 20 \times 4 = 80$$

$$\text{Total number of appliances sold in 2024} = 25 \times 4 = 100$$

Store B

$$\text{Total number of appliances sold in 2023} = 25 \times 4 = 100$$

$$\text{Total number of appliances sold in 2024} = 40 \times 4 = 160$$

Store C

$$\text{Total number of appliances sold in 2023} = 40 \times 4 = 160$$

$$\text{Total number of appliances sold in 2024} = 60 \times 4 = 240$$

Store D

$$\text{Total number of appliances sold in 2023} = 30 \times 4 = 120$$

$$\text{Total number of appliances sold in 2024} = 50 \times 4 = 200$$

Store E

$$\text{Total number of appliances sold in 2023} = 50 \times 4 = 200$$

$$\text{Total number of appliances sold in 2024} = 30 \times 4 = 120$$

Required percentage =

$$\frac{160}{200} \times 100 = 80\%$$

**S30. Ans.(c)****Sol.** Store A

$$\text{Total number of appliances sold in 2023} = 20 \times 4 = 80$$

$$\text{Total number of appliances sold in 2024} = 25 \times 4 = 100$$

Store B

$$\text{Total number of appliances sold in 2023} = 25 \times 4 = 100$$

$$\text{Total number of appliances sold in 2024} = 40 \times 4 = 160$$

Store C

$$\text{Total number of appliances sold in 2023} = 40 \times 4 = 160$$

$$\text{Total number of appliances sold in 2024} = 60 \times 4 = 240$$

Store D

$$\text{Total number of appliances sold in 2023} = 30 \times 4 = 120$$

$$\text{Total number of appliances sold in 2024} = 50 \times 4 = 200$$

Store E

$$\text{Total number of appliances sold in 2023} = 50 \times 4 = 200$$

$$\text{Total number of appliances sold in 2024} = 30 \times 4 = 120$$

$$\text{Total number of appliances sold by D and E together in 2024} = 200 + 120 = 320$$

$$\text{Total number of appliances sold by A, C and B together in 2023} = 80 + 160 + 100 = 340$$

Required difference =  $340 - 320 = 20$

**S31. Ans.(e)**

**Sol.** Store A

Total number of appliances sold in 2023 =  $20 \times 4 = 80$

Total number of appliances sold in 2024 =  $25 \times 4 = 100$

Store B

Total number of appliances sold in 2023 =  $25 \times 4 = 100$

Total number of appliances sold in 2024 =  $40 \times 4 = 160$

Store C

Total number of appliances sold in 2023 =  $40 \times 4 = 160$

Total number of appliances sold in 2024 =  $60 \times 4 = 240$

Store D

Total number of appliances sold in 2023 =  $30 \times 4 = 120$

Total number of appliances sold in 2024 =  $50 \times 4 = 200$

Store E

Total number of appliances sold in 2023 =  $50 \times 4 = 200$

Total number of appliances sold in 2024 =  $30 \times 4 = 120$

Required ratio =  $(80 + 200) : (160 + 240 + 200)$

=  $280 : 600$

=  $7 : 15$

**S32. Ans.(b)**

**Sol.** Store A

Total number of appliances sold in 2023 =  $20 \times 4 = 80$

Total number of appliances sold in 2024 =  $25 \times 4 = 100$

Store B

Total number of appliances sold in 2023 =  $25 \times 4 = 100$

Total number of appliances sold in 2024 =  $40 \times 4 = 160$

Store C

Total number of appliances sold in 2023 =  $40 \times 4 = 160$

Total number of appliances sold in 2024 =  $60 \times 4 = 240$

Store D

Total number of appliances sold in 2023 =  $30 \times 4 = 120$

Total number of appliances sold in 2024 =  $50 \times 4 = 200$

Store E

Total number of appliances sold in 2023 =  $50 \times 4 = 200$

Total number of appliances sold in 2024 =  $30 \times 4 = 120$

Required difference =

$$\frac{100+160}{2} - 100 = 130 - 100 = 30$$

**S33. Ans.(a)**

**Sol.** Given:

Principal invested in both schemes: Rs 4000

Scheme P: Simple interest rate = 10% per annum for 'X' years.

Scheme B: Simple interest rate = 20% per annum for 3 years.

The interest received from Scheme B is 2.4 times the interest received from Scheme P

Formulas Used:

Simple Interest =

$$\frac{P \times R \times T}{100}$$

Basic Explanation:

Scheme P

$$\text{Simple Interest} = 4000 \times \frac{10}{100} \times X = 400X$$

Scheme B

$$\text{Simple Interest} = 4000 \times \frac{20}{100} \times 3 = \text{Rs } 2400$$

ATQ,

$$2400 = 400X \times 2.4$$

$$X = 2.5$$

**S34. Ans.(a)**

**Sol.**

Given Selling price of first bicycle = 7140 Selling price of second bicycle = 7140 Profit on first bicycle = 40% Loss on second bicycle =

15% Concept Used Profit and loss with equal selling prices Formula Used Selling Price =

$$\text{Cost Price} \left(1 + \frac{\text{Profit \%}}{100}\right) \text{Selling Price} = \text{Cost Price} \left(1 - \frac{\text{Loss \%}}{100}\right) \text{Solution} 7140 = CP_1 \times 1.40 \quad CP_1 = \frac{7140}{1.4} =$$

$$5100 \quad 7140 = CP_2 \times 0.85 \quad CP_2 = \frac{7140}{0.85} = 8400 \quad \text{Total Cost Price} = 5100 + 8400 =$$

$$13500 \quad \text{Total Selling Price} = 7140 + 7140 = 14280 \quad \text{Profit} = 14280 - 13500 = 780 \quad \text{Overall Profit \%} = \frac{780}{13500} \times 100 = \frac{52}{9} \% \quad \text{Final Answer} 5 \frac{7}{9} \%$$

Exam Hall Method:

<p><u>The Cost Prices:</u>  <math>SP = 7140</math>  <math>CP_1 = 7140 / 1.4 = 5100</math>  <math>CP_2 = 7140 / 0.85 = 8400</math></p> <p><u>The Totals:</u>  <math>Total CP = 5100 + 8400 = 13500</math>  <math>Total SP = 7140 \times 2 = 14280</math></p> <p><u>The Final %:</u>  <math>Profit = 14280 - 13500 = 780</math>  <math>\% = (780 / 13500) \times 100</math></p> <p><b>= 5.78% Profit</b></p>
--

### S35. Ans.(b)

**Sol.** Information Given in the Question:

Jar A: Milk : Water = 3 : X

Jar B: Milk : Water = 7 : 5

Equal quantities from both jars are mixed → i.e., take same volume from both

Resultant Jar C: Milk : Water = 13 : 11

Need to find the value of X

Concept/Formula Used in the Question:

When equal quantities of two mixtures are mixed:

The average of individual milk and water parts gives the overall ratio.

Let's assume we take LCM of all parts → easiest is to assume total of each jar = sum of ratio parts.

Let's use  $3 + X$  litres from Jar A, and  $7 + 5 = 12$  litres from Jar B

So take LCM = L =  $(3 + X)(12)$  for equal quantities

Instead, assume 1 litre from each jar

Then use milk fraction and water fraction from each jar:

From Jar A:

Milk fraction =  $3 / (3 + X)$

Water fraction =  $X / (3 + X)$

From Jar B:

Milk fraction =  $7 / 12$

Water fraction =  $5 / 12$

Since equal quantities are taken:

Average milk fraction in Jar C =  $(3 / (3 + X) + 7 / 12) / 2$

Average water fraction in Jar C =  $(X / (3 + X) + 5 / 12) / 2$

We are told:

Milk : Water = 13 : 11

$\Rightarrow$  Milk fraction =  $13 / 24$

$\Rightarrow$  Water fraction =  $11 / 24$

So,

$$\frac{1}{2} \left( \frac{3}{3+X} + \frac{7}{12} \right) = \frac{13}{24} \quad (1)$$

Multiply both sides by 2:

$$\frac{3}{3+X} + \frac{7}{12} = \frac{13}{12}$$

Subtract  $7 / 12$  from both sides,

$$\frac{3}{3+X} = \frac{13-7}{12} = \frac{1}{2}$$

$$\frac{3}{3+X} = \frac{1}{2}$$

$$X=3$$

Exam Hall Method:

The Fractions:  
 Milk A =  $\frac{3}{(3+x)}$   
 Milk B =  $\frac{7}{12}$   
 Final =  $\frac{13}{24}$

The Equation:  
 $\frac{A+B}{2} = \text{Final}$   
 $\frac{3}{3+x} + \frac{7}{12} = \frac{13}{12}$   
 $\frac{3}{3+x} = \frac{6}{12} = \frac{1}{2}$

The Solution:  
 $3+x = 6$

$X = 3$

### S36. Ans.(b)

**Sol.**

Given: Length : Breadth = 7 : 4  
 Area of rectangle = 1792  
 Side of square = 50% of breadth  
 Concept Used: Area relations using ratio  
 Formula Used: Area of rectangle =  $L \times B$   
 Area of square = (Side)<sup>2</sup>  
 Solution:  $L = 7x, B = 4x$   
 $7x \times 4x = 28x^2 = 1792$   
 $x^2 = 64$   
 $x = 8$   
 Breadth =  $4x = 32$   
 Side of square =  $50\% \text{ of } 32 = 16$   
 Area of square =  $16^2 = 256 \text{ cm}^2$

Exam Hall Approach

Rect L:B = 7:4

Area ratio product =  $7 \times 4 = \underline{\underline{28}}$

Actual Area = 1792

Multiplier ( $x^2$ ) =  $\frac{1792}{28} = \underline{\underline{64}} \Rightarrow x = \sqrt{64} = \underline{\underline{8}}$

Breadth = 4 units  $\times 8 = \underline{\underline{32 \text{ cm}}}$

$\Rightarrow$  Square Side = 50% of 32 = 16

Sq Area =  $16^2 = \underline{\underline{256 \text{ cm}^2}}$

### S37. Ans.(a)

**Sol.** Information Given in the Question:

Speed of boat in still water =  $2.5 \times$  Upstream speed

Time difference between upstream and downstream for distance D = 6 hours

Need to find total time = upstream time + downstream time for distance D

Concept/Formulas Used in the Question:

Let upstream speed = x km/hr  $\rightarrow$  then still water speed =  $2.5x$

Downstream speed =  $(2.5x + (2.5x - x)) = 4x - x = 3x$  (since stream speed =  $2.5x - x = 1.5x$ )

Time = Distance / Speed

Time difference = Upstream Time - Downstream Time = 6 hours

Explanation:

Let upstream speed =  $x \rightarrow$  so still water =  $2.5x$

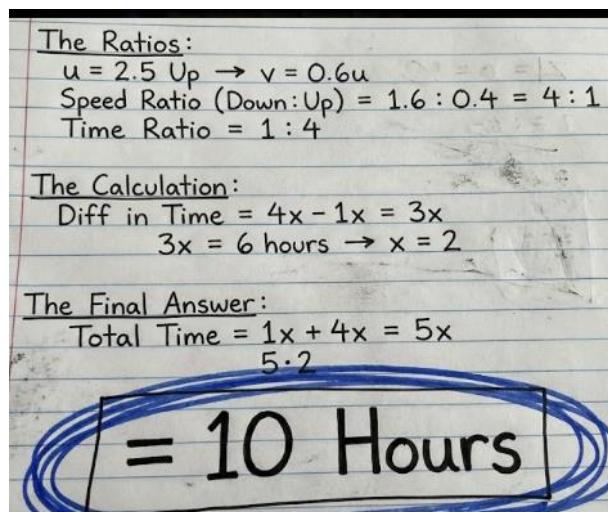
Stream speed =  $2.5x - x = 1.5x \rightarrow$  downstream =  $2.5x + 1.5x = 4x$

Set up equation:  $D/x - D/4x = 6$

Solve to find  $D = 8x$

Total time =  $D/x + D/4x = 8 + 2 = 10$  hours

Exam Hall Method:



### S38. Ans.(c)

**Sol.** Let boys in A be  $5x$

And boys in B =  $5x \times 160/100 = 8x$

Boys in C =  $8x - 15$

Girls in B =  $8x/4 \times 1 = 2x$

Girls in A =  $2x \times 1.5 = 3x$

Girls in C =  $130 - 5x$

Given,  $8x - 15 + 130 - 5x = 175$

$3x = 60$

$x = 20$

Salons	Boys	Girls
A	100	60
B	160	40
C	145	30

Required ratio =  $30 : 100 = 3:10$

### S39. Ans.(c)

**Sol.** Let boys in A be  $5x$

And boys in B =  $5x \times 160/100 = 8x$

Boys in C =  $8x - 15$

Girls in B =  $8x/4 \times 1 = 2x$

Girls in A =  $2x \times 1.5 = 3x$

Girls in C =  $130 - 5x$

Given,  $8x - 15 + 130 - 5x = 175$

$$3x = 60$$

$$x = 20$$

Salons	Boys	Girls
A	100	60
B	160	40
C	145	30

$$\text{Required percentage} = \frac{40}{100} \times 100 = 40\%$$

#### S40. Ans.(b)

**Sol.** Let boys in A be  $5x$

And boys in B =  $5x \times 160/100 = 8x$

Boys in C =  $8x - 15$

Girls in B =  $8x/4 \times 1 = 2x$

Girls in A =  $2x \times 1.5 = 3x$

Girls in C =  $130 - 5x$

Given,  $8x - 15 + 130 - 5x = 175$

$$3x = 60$$

$$x = 20$$

Salons	Boys	Girls
A	100	60
B	160	40
C	145	30

$$\text{Required difference} = 160 - (60+30) = 70$$

#### S41. Ans.(d)

**Sol.** Final Arrangement is here:

Months	Dates	Persons - Subjects
July	6	D - English
	19	C - Biology
August	6	F - Chemistry
	19	A - Maths
September	6	B - Physics
	19	E - Zoology

Clues: F was born on an even date in the month have odd number of days. Two persons were born between F and the one who likes Zoology.

Inference: Here we get two possible cases:

Months	Dates	Persons - Subjects	
		Case 1	Case 2
July	6	F	
	19		
August	6		F
	19	Zoology	
September	6		
	19		Zoology

Clues: As many persons were born after the one who likes Zoology as before the one who likes English. A was born three persons after the one who likes English. The one who likes Physics was born immediately after A.

Inference: Case 1 gets cancelled here as there is no place for the one who likes Physics.

Months	Dates	Persons - Subjects	
		Case 1	Case 2
July	6	F	English
	19		
August	6	English	F
	19	Zoology	A
September	6		Physics
	19	A	Zoology

Clues: The one who likes Chemistry was born immediately after C but not in the same month as C. Two persons were born between the ones who like Chemistry and E. D was born three persons before the one who likes Maths.

Inference:

Months	Dates	Persons - Subjects
July	6	D- English
	19	C
August	6	F- Chemistry
	19	A - Maths
September	6	Physics
	19	E- Zoology

Inference: Only place for B and Biology is left. Final Arrangement is here:

Months	Dates	Persons - Subjects
July	6	D- English
	19	C - Biology
August	6	F- Chemistry
	19	A - Maths
September	6	B - Physics
	19	E- Zoology

The one who likes Maths was born on 19th August.

**S42. Ans.(b)**

**Sol.** Final Arrangement is here:

Months	Dates	Persons - Subjects
July	6	D- English
	19	C - Biology
August	6	F- Chemistry
	19	A - Maths
September	6	B - Physics
	19	E- Zoology

Clues: F was born on an even date in the month have odd number of days. Two persons were born between F and the one who likes Zoology.

Inference: Here we get two possible cases:

Months	Dates	Persons - Subjects	Persons - Subjects
		Case 1	Case 2
July	6	F	
	19		
August	6		F
	19	Zoology	
September	6		
	19		Zoology

Clues: As many persons were born after the one who likes Zoology as before the one who likes English. A was born three persons after the one who likes English. The one who likes Physics was born immediately after A.

Inference: Case 1 gets cancelled here as there is no place for the one who likes Physics.

Months	Dates	Persons - Subjects	Persons - Subjects
		Case 1	Case 2
July	6	F	English
	19		
August	6	English	F
	19	Zoology	A
September	6		Physics
	19	A	Zoology

Clues: The one who likes Chemistry was born immediately after C but not in the same month as C. Two persons were born between the ones who like Chemistry and E. D was born three persons before the one who likes Maths.

Inference:

Months	Dates	Persons - Subjects
July	6	D- English
	19	C
August	6	F- Chemistry
	19	A - Maths
September	6	Physics
	19	E- Zoology

Inference: Only place for B and Biology is left. Final Arrangement is here:

Months	Dates	Persons - Subjects
July	6	D- English
	19	C - Biology
August	6	F- Chemistry
	19	A - Maths
September	6	B - Physics
	19	E- Zoology

B - Physics, 6th September

#### S43. Ans.(a)

Sol. Final Arrangement is here:

Months	Dates	Persons - Subjects
July	6	D- English
	19	C - Biology
August	6	F- Chemistry
	19	A - Maths
September	6	B - Physics
	19	E- Zoology

Clues: F was born on an even date in the month have odd number of days. Two persons were born between F and the one who likes Zoology.

Inference: Here we get two possible cases:

Months	Dates	Persons - Subjects	
		Case 1	Case 2
July	6	F	
	19		
August	6		F
	19	Zoology	
September	6		
	19		Zoology

Clues: As many persons were born after the one who likes Zoology as before the one who likes English. A was born three persons after the one who likes English. The one who likes Physics was born immediately after A.

Inference: Case 1 gets cancelled here as there is no place for the one who likes Physics.

Months	Dates	Persons - Subjects	
		Case 1	Case 2
July	6	F	English
	19		
August	6	English	F
	19	Zoology	A
September	6		Physics
	19	A	Zoology

Clues: The one who likes Chemistry was born immediately after C but not in the same month as C. Two persons were born between the ones who like Chemistry and E. D was born three persons before the one who likes Maths.

Inference:

Months	Dates	Persons - Subjects
July	6	D- English
	19	C
August	6	F- Chemistry
	19	A - Maths
September	6	Physics
	19	E- Zoology

Inference: Only place for B and Biology is left. Final Arrangement is here:

Months	Dates	Persons - Subjects
July	6	D- English
	19	C - Biology
August	6	F- Chemistry
	19	A - Maths
September	6	B - Physics
	19	E- Zoology

Five persons were born after the one who likes English.

**S44. Ans.(b)**

**Sol.** Final Arrangement is here:

Months	Dates	Persons - Subjects
July	6	D- English
	19	C - Biology
August	6	F- Chemistry
	19	A - Maths
September	6	B - Physics
	19	E- Zoology

Clues: F was born on an even date in the month have odd number of days. Two persons were born between F and the one who likes Zoology.

Inference: Here we get two possible cases:

Months	Dates	Persons - Subjects	Persons - Subjects
		Case 1	Case 2
July	6	F	
	19		
August	6		F
	19	Zoology	
September	6		
	19		Zoology

Clues: As many persons were born after the one who likes Zoology as before the one who likes English. A was born three persons after the one who likes English. The one who likes Physics was born immediately after A.

Inference: Case 1 gets cancelled here as there is no place for the one who likes Physics.

Months	Dates	Persons-Subjects	Persons - Subjects
		Case 1	Case 2
July	6	F	English
	19		
August	6	English	F
	19	Zoology	A
September	6		Physics
	19	A	Zoology

Clues: The one who likes Chemistry was born immediately after C but not in the same month as C. Two persons were born between the ones who like Chemistry and E. D was born three persons before the one who likes Maths.

Inference:

Months	Dates	Persons - Subjects
July	6	D- English
	19	C
August	6	F- Chemistry
	19	A - Maths
September	6	Physics
	19	E- Zoology

Inference: Only place for B and Biology is left. Final Arrangement is here:

Months	Dates	Persons - Subjects
July	6	D- English
	19	C - Biology
August	6	F- Chemistry
	19	A - Maths
September	6	B - Physics
	19	E- Zoology

The one born immediately after B i.e. E likes Zoology.

**S45. Ans.(e)**

**Sol.** Meaningful word formed from second, sixth, ninth and tenth letters from left end of the word "MULTI LAT ERAL": RULE, LURE

**S46. Ans.(d)**

**Sol.** Final Arrangement is here:

Boxes
A - Blue
C - Purple
E - Yellow
B - Red
D - Green

Clues: Two boxes are kept between the box which is green colour and box C. One box is kept between C and the box which is of red colour. Box A is kept three boxes away the box which is of red colour.

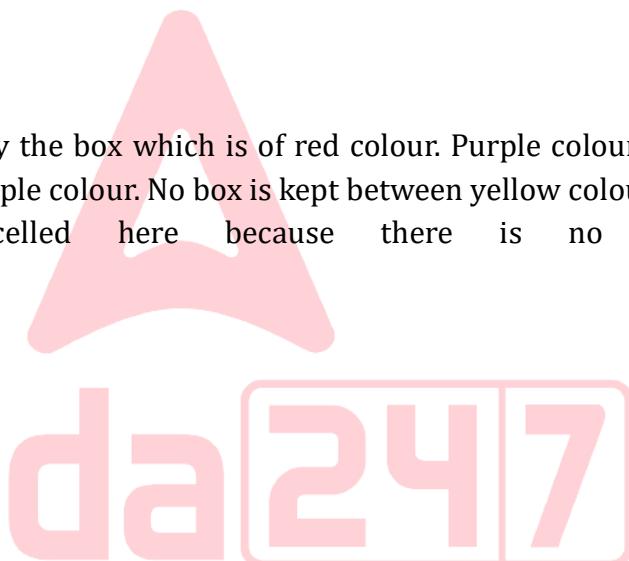
Inference: Here we get two possible cases:

Boxes	Boxes
<b>Case 1</b>	<b>Case 2</b>
A	Green
C	Red
Red	C
Green	A

Clues: Box A is kept three boxes away the box which is of red colour. Purple colour box is kept three boxes above box D. Box A is not of purple colour. No box is kept between yellow colour box and box B.

Inference: Case 2 gets cancelled here because there is no place for A:

Boxes	Boxes
<b>Case 1</b>	<b>Case 2</b>
A	Green
C - Purple	Red
Yellow	
B - Red	G
D - Green	A



Inference: Only place for E and blue colour is left. Final Arrangement is here:

Boxes
A - Blue
C - Purple
E - Yellow
B - Red
D - Green

Box E is of yellow colour.

**S47. Ans.(b)**

**Sol.** Final Arrangement is here:

Boxes
A - Blue
C - Purple
E - Yellow
B - Red
D - Green

Clues: Two boxes are kept between the box which is green colour and box C. One box is kept between C and the box which is of red colour. Box A is kept three boxes away the box which is of red colour.

Inference: Here we get two possible cases:

Boxes	Boxes
<b>Case 1</b>	<b>Case 2</b>
A	Green
C	Red
Red	C
Green	A

Clues: Box A is kept three boxes away the box which is of red colour. Purple colour box is kept three boxes above box D. Box A is not of purple colour. No box is kept between yellow colour box and box B.

Inference: Case 2 gets cancelled here because there is no place for A:

Boxes	Boxes
<b>Case 1</b>	<b>Case 2</b>
A	Green
C - Purple	Red
Yellow	
B - Red	G
D - Green	A

Inference: Only place for E and blue colour is left. Final Arrangement is here:

Boxes
A - Blue
C - Purple
E - Yellow
B - Red
D - Green

The box which is of red colour.

**S48. Ans.(d)**

**Sol.** Final Arrangement is here:

Boxes
A - Blue
C - Purple
E - Yellow
B - Red
D - Green

Clues: Two boxes are kept between the box which is green colour and box C. One box is kept between C and the box which is of red colour. Box A is kept three boxes away the box which is of red colour.

Inference: Here we get two possible cases:

Boxes	Boxes
Case 1	Case 2
A	Green
C	Red
Red	C
Green	A

Clues: Box A is kept three boxes away the box which is of red colour. Purple colour box is kept three boxes above box D. Box A is not of purple colour. No box is kept between yellow colour box and box B.

Inference: Case 2 gets cancelled here because there is no place for A:

Boxes	Boxes
Case 1	Case 2
A	Green
C - Purple	Red
Yellow	
B - Red	G
D - Green	A

Inference: Only place for E and blue colour is left. Final Arrangement is here:

Boxes
A - Blue
C - Purple
E - Yellow
B - Red
D - Green

Only III

**S49. Ans.(c)**

**Sol.** Sol.

**C > E > D > B > F > A**  
165cm

E is the second tallest person.

**S50. Ans.(d)**

**Sol.** Sol.

**C > E > D > B > F > A**  
165cm

The possible height of F is 162cm

**S51. Ans.(b)**

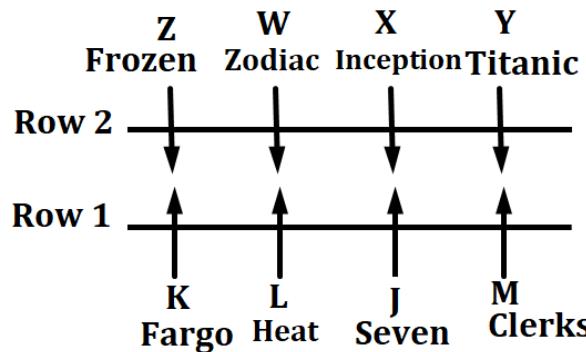
**Sol.** Sol.

**C > E > D > B > F > A**  
165cm

Three persons are taller than B.

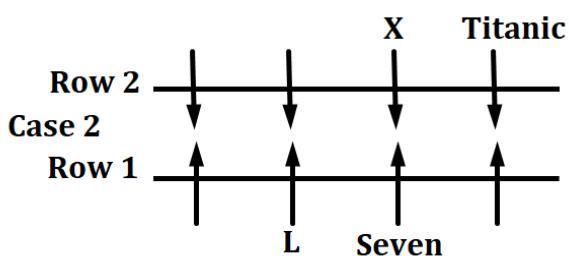
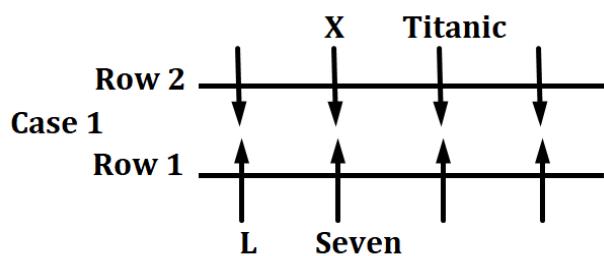
**S52. Ans.(d)**

**Sol.** Final Arrangement is here:



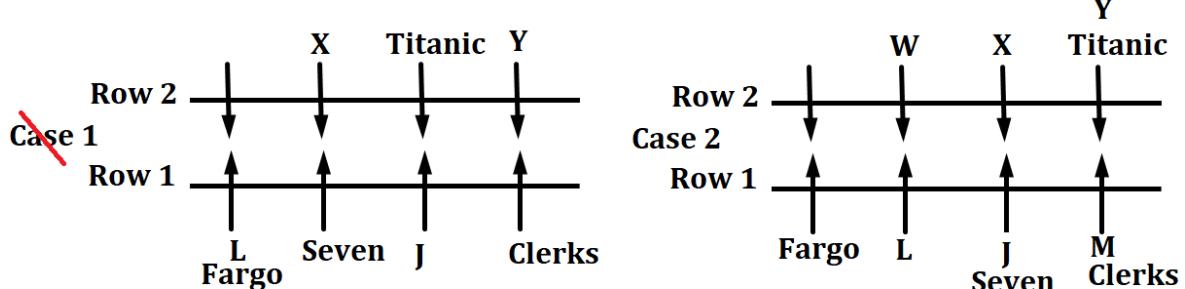
Clues: The one who sits opposite to L sits two places away from the one who likes Titanic. X sits immediate right of the one who likes Titanic. The one who likes Seven sits immediate right of L.

Inference: Here we get two possible cases:



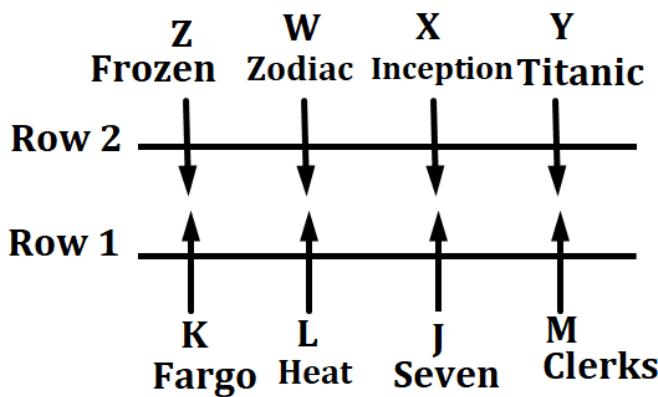
Clues: J sits second to the right of the one who likes Fargo but doesn't sit at the extreme ends of the row. Y sits opposite to the one who likes Clerks. Neither J nor L likes Clerks. W sits opposite to the one who sits second to the left of M.

Inference: Case 1 gets cancelled here as there is no place for W and M:



Clues: The one who likes Frozen sits opposite to K but is not immediate neighbour of the one who likes Heat. X doesn't like Heat and Zodiac.

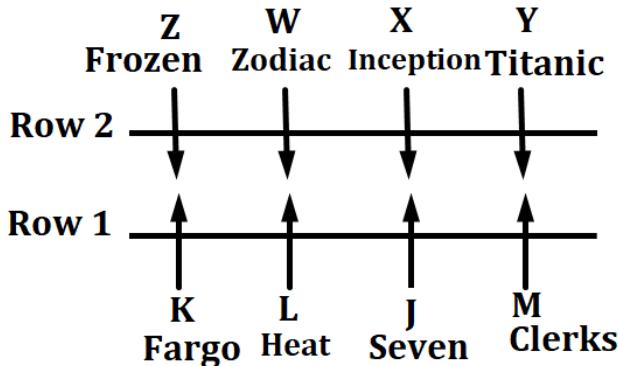
Inference: Only place for Z is left. Final Arrangement is here:



The one who likes Seven sits immediate left of the one who sits at extreme right end in Row 1

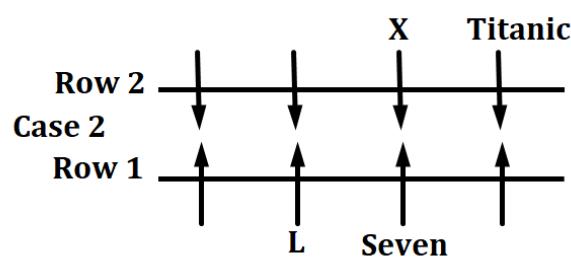
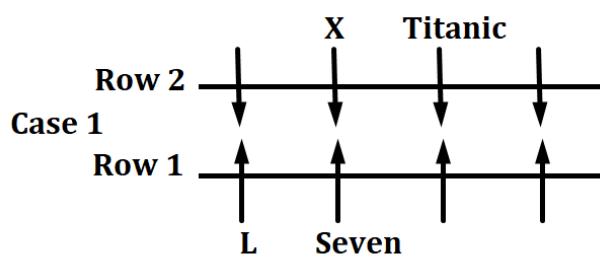
**S53. Ans.(c)**

**Sol.** Final Arrangement is here:



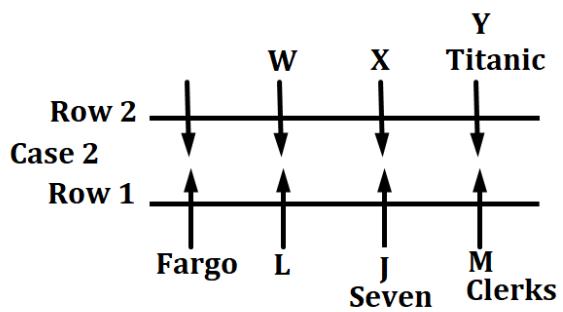
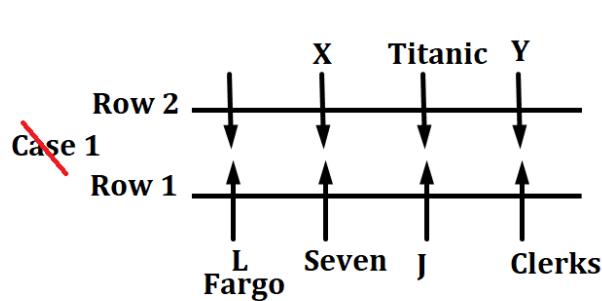
Clues: The one who sits opposite to L sits two places away from the one who likes Titanic. X sits immediate right of the one who likes Titanic. The one who likes Seven sits immediate right of L.

Inference: Here we get two possible cases:



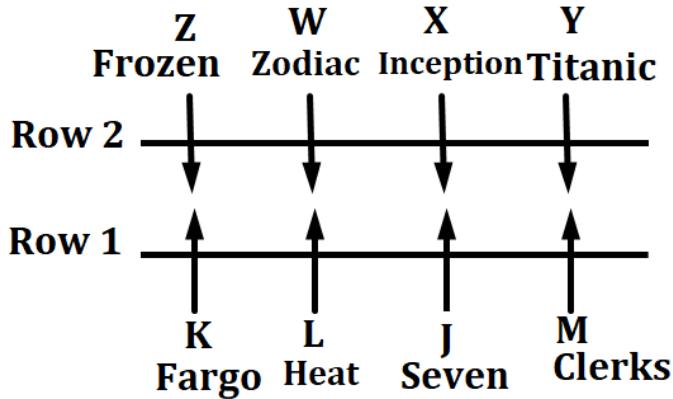
Clues: J sits second to the right of the one who likes Fargo but doesn't sit at the extreme ends of the row. Y sits opposite to the one who likes Clerks. Neither J nor L likes Clerks. W sits opposite to the one who sits second to the left of M.

Inference: Case 1 gets cancelled here as there is no place for W and M:



Clues: The one who likes Frozen sits opposite to K but is not immediate neighbour of the one who likes Heat. X doesn't like Heat and Zodiac.

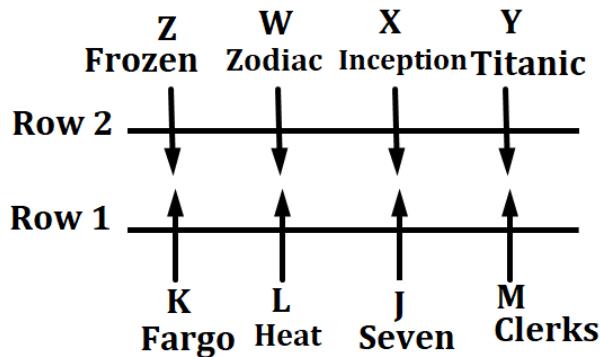
Inference: Only place for Z is left. Final Arrangement is here:



W likes Zodiac.

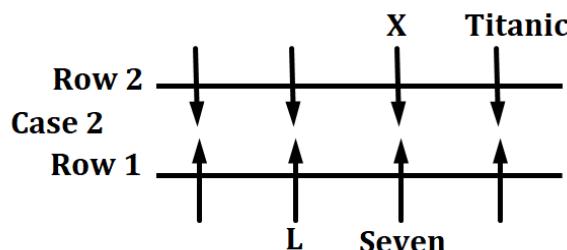
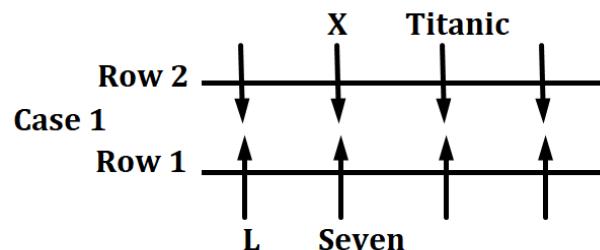
**S54. Ans.(b)**

**Sol.** Final Arrangement is here:



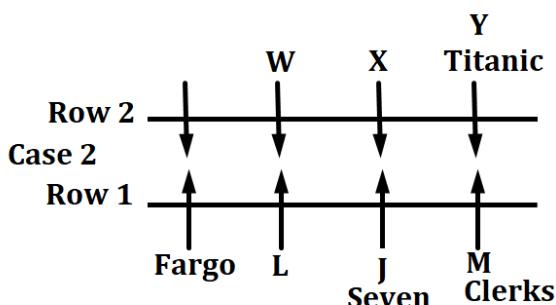
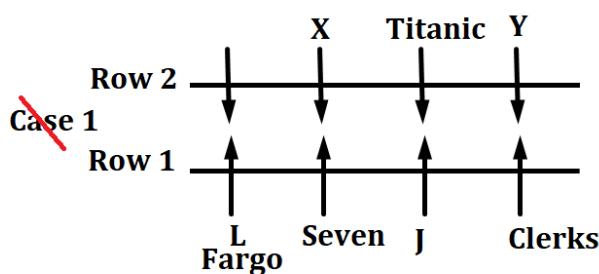
Clues: The one who sits opposite to L sits two places away from the one who likes Titanic. X sits immediate right of the one who likes Titanic. The one who likes Seven sits immediate right of L.

Inference: Here we get two possible cases:



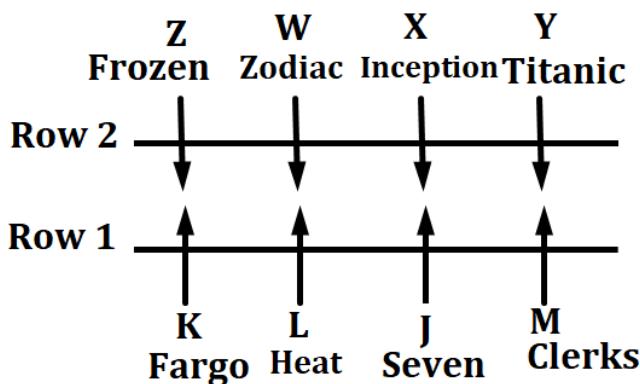
Clues: J sits second to the right of the one who likes Fargo but doesn't sit at the extreme ends of the row. Y sits opposite to the one who likes Clerks. Neither J nor L likes Clerks. W sits opposite to the one who sits second to the left of M.

Inference: Case 1 gets cancelled here as there is no place for W and M:



Clues: The one who likes Frozen sits opposite to K but is not immediate neighbour of the one who likes Heat and Zodiac.

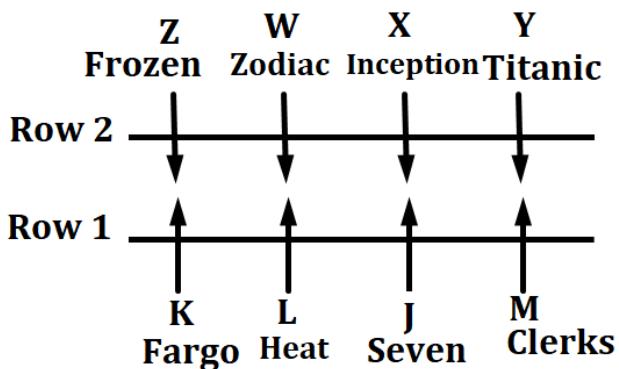
Inference: Only place for Z is left. Final Arrangement is here:



L sits immediate right of the one who sits opposite to Z

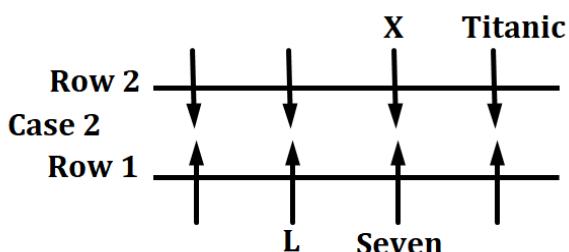
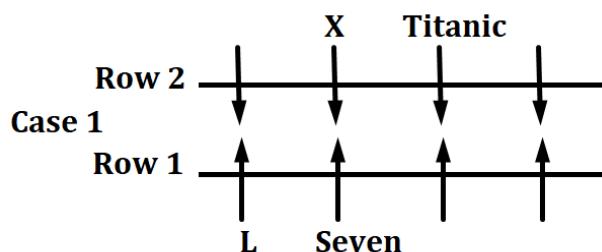
**S55. Ans.(b)**

**Sol.** Final Arrangement is here:



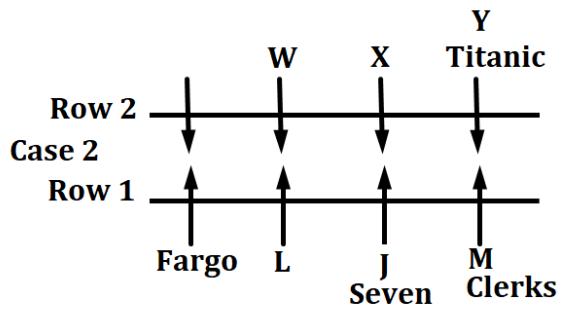
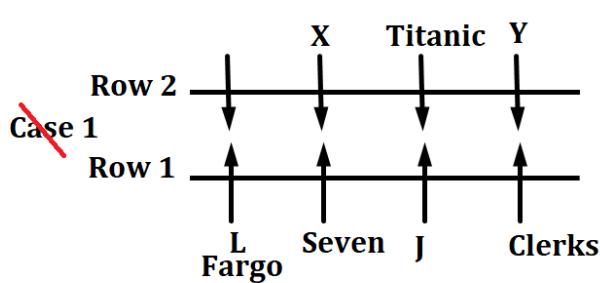
Clues: The one who sits opposite to L sits two places away from the one who likes Titanic. X sits immediate right of the one who likes Titanic. The one who likes Seven sits immediate right of L.

Inference: Here we get two possible cases:



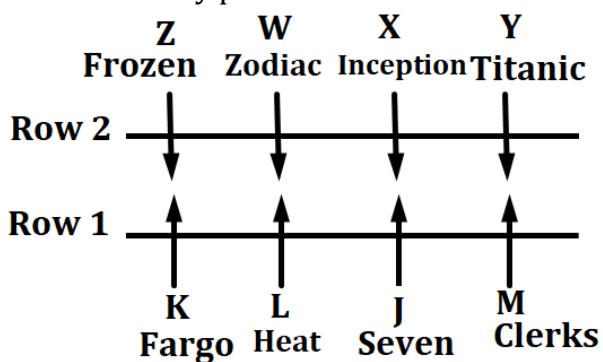
Clues: J sits second to the right of the one who likes Fargo but doesn't sit at the extreme ends of the row. Y sits opposite to the one who likes Clerks. Neither J nor L likes Clerks. W sits opposite to the one who sits second to the left of M.

Inference: Case 1 gets cancelled here as there is no place for W and M:



Clues: The one who likes Frozen sits opposite to K but is not immediate neighbour of the one who likes Heat. X doesn't like Heat and Zodiac.

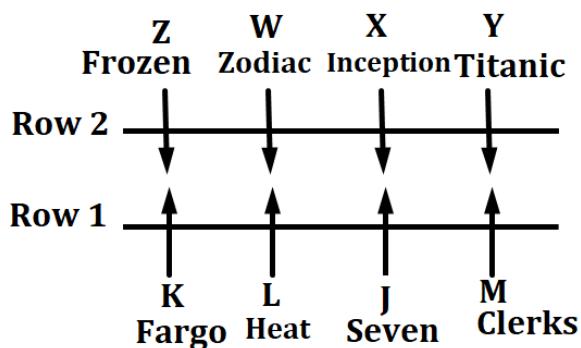
Inference: Only place for Z is left. Final Arrangement is here:



Except L- Heat, the other sit opposite to each other.

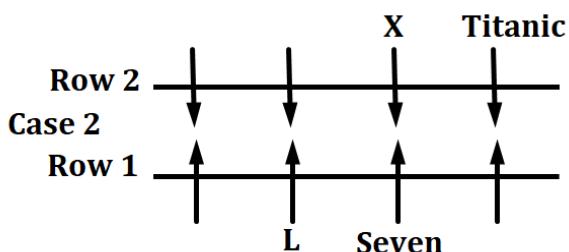
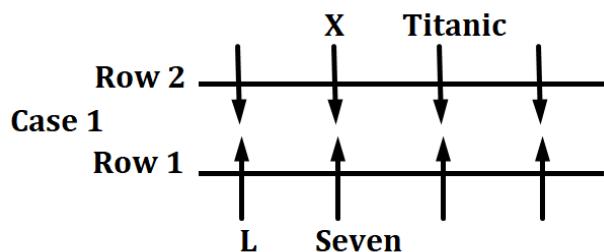
### 556. Ans.(e)

Sol. Final Arrangement is here:



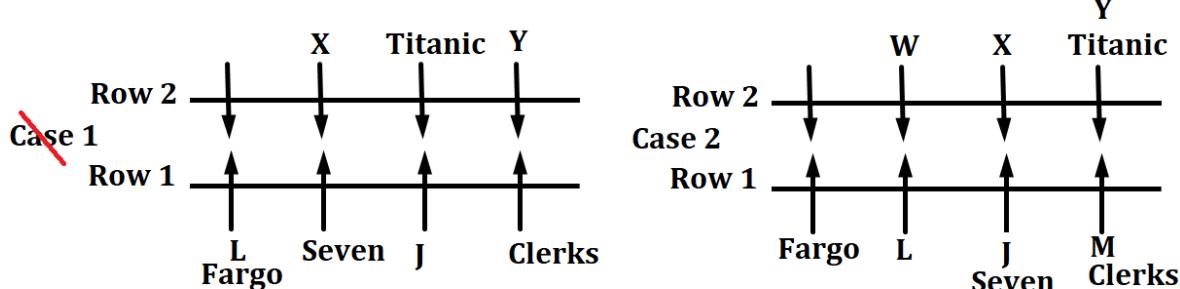
Clues: The one who sits opposite to L sits two places away from the one who likes Titanic. X sits immediate right of the one who likes Titanic. The one who likes Seven sits immediate right of L.

Inference: Here we get two possible cases:



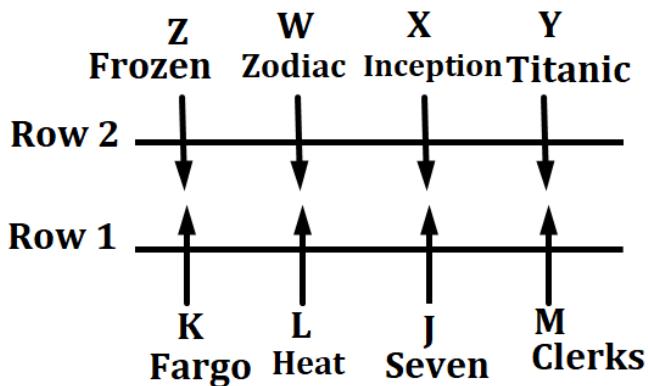
Clues: J sits second to the right of the one who likes Fargo but doesn't sit at the extreme ends of the row. Y sits opposite to the one who likes Clerks. Neither J nor L likes Clerks. W sits opposite to the one who sits second to the left of M.

Inference: Case 1 gets cancelled here as there is no place for W and M:



Clues: The one who likes Frozen sits opposite to K but is not immediate neighbour of the one who likes Heat. X doesn't like Heat and Zodiac.

Inference: Only place for Z is left. Final Arrangement is here:



Immediate right

### 557. Ans.(b)

**Sol.** The statement links the introduction of no-pollution zones with a noticeable improvement in air quality, implying that limiting polluting activities can positively impact air quality. The remaining options either overstate the outcome or introduce assumptions not supported by the given information.

### 558. Ans.(c)

**Sol.** The statement specifically mentions that the companies claim to fulfill orders faster by utilizing a dense network of dark stores. For this logic to hold, one must implicitly assume that having these stores close to the customer (proximity) is what actually allows for the reduction in time.

Option (a) discusses customer preference (speed vs. price), which is not mentioned or required for the claim about how they achieve speed.

Option (b) compares it to a specific time ("more than an hour"), which isn't necessary; it just needs to be "faster" than the traditional model, whatever that time may be.

Option (d) is about profitability, while the statement is strictly about delivery logistics.

Option (e) is a potential challenge to the model, but the core assumption behind the company's claim is focused on the warehouse network, not the traffic conditions.

**S59. Ans.(c)**

**Sol.** Given word: P R E S U M P T I O N

After applying the operation: O Q D R T L Q U J P O

Arrangement in English Alphabet order: D J L O O P Q Q R T U

Q is 7th from left end

**S60. Ans.(e)**

**Sol.** Except W, the place value of all the other letters is an even number according to English Alphabet order.

- P → 16
- V → 22
- T → 20
- L → 12
- W → 23

