BITSAT English Proficiency & Logical Reasoning Sample Paper - 12

Duration: 40 Minutes **Maximum Marks: 90**

Instructions

- This paper contains **30** Multiple Choice Questions: **Part A** — English Proficiency (Q1–Q10) and **Part B** — Logical Reasoning(Q11–Q30).
- Each correct answer carries **+3 marks**. Each incorrect answer carries: **−1** marks. Unattempted questions carry **0** marks.
- Only one option is correct for each question.
- Use of mobile phones, smartwatches, calculators, or any electronic gadgets is strictly prohibited.

PART A — ENGLISH PROFICIENCY

Q1. Choose the word that is closest in meaning to the underlined word.

The speaker's **extemporaneous** remarks during the summit caught the press corps entirely by surprise.

(A) premeditated

(B) impromptu

(C) meticulous

(D) ambiguous

Q2. Choose the word that is most nearly opposite in meaning to the underlined word.

The committee found his arguments to be completely **specious**, lacking any empirical backing.

(A) valid

(B) spurious

(C) fallacious

(D) illusory

Q3. Find the synonym of the word **EPHEMERAL**.

(A) eternal

(B) transient

(C) monumental

(D) ubiquitous

Q4. Find the antonym of the word **ALACRITY**.

(A) enthusiasm

(B) promptness

(C) apathy

(D) fervor

Q5. Identify the part of the sentence that contains a grammatical error. If there is no error, mark (D).

Neither the laboratory technician (A) / nor the research interns is ready (B) / to present the quarterly findings. (C) / No error (D)

(A) Neither the laboratory technician

(B) nor the research interns is ready

(C) to present the quarterly findings

(D) No error

Q6. Identify the part of the sentence that contains a grammatical error. If there is no error, mark (D).

Hardly had the rocket cleared the launchpad (A) / when the telemetry team realized (B) / that one of the boosters failed. (C) / No error (D)

(A) Hardly had the rocket cleared the launchpad

(B) when the telemetry team realized

(C) that one of the boosters failed

(D) No error

Q7. Identify the part of the sentence that contains a grammatical error. If there is no error, mark (D).

The novel is one of those rare historical epics (A) / that captures the intricate socio-political nuances (B) / of the early Renaissance period flawlessly. (C) / No error (D)

(A) The novel is one of those rare historical epics

(B) that captures the intricate socio-political nuances

(C) of the early Renaissance period flawlessly

(D) No error

Q8. Fill in the blank with the most appropriate option.

The modern diplomatic protocol is designed to avoid ____ conflict, ensuring that even deep-seated ideological disputes are handled with utmost civility.

(A) overt

(B) internal

(C) latent

(D) implicit

Q9. **Directions for Q9 and Q10:** Read the passage carefully and answer the questions based on it.

The concept of cognitive load theory suggests that our working memory has a strictly limited capacity. When learning new complex academic material, any unnecessary mental effort—termed extraneous cognitive load—can severely hamper the brain's ability to process information and transfer it into the long-term memory system. Well-designed instructional materials actively work to minimize this extraneous load, leaving more cognitive resources free for germane load, which is the constructive processing of information leading to deep conceptual understanding.

According to the passage, what is the primary consequence of high extraneous cognitive load during the learning process?

(A) It permanently damages long-term retention capabilities.

(B) It disrupts the smooth conversion of information into long-term memory.

(C) It artificially accelerates working memory speed at the cost of accuracy.

(D) It completely forces the learner to depend exclusively on rote memorization.

Q10. Based on the text, what can be reasonably inferred about "germane load"?

(A) It is directly proportional to the amount of unnecessary instructional text provided.

(B) It competes directly with long-term memory systems for structural dominance.

(C) It is the ideal state of mental inactivity required before a major examination.

(D) It benefits significantly when instructional designs reduce irrelevant mental friction.

PART B — LOGICAL REASONING

Q11. Find the missing term in the sequence: $4, 11, 30, 67, 128, ?$

(A) 219

(B) 221

(C) 215

(D) 225

Q12. Complete the alphanumeric series: A2B, C6E, F12I, J20N, ?

(A) O30T

(B) O28S

(C) P30T

(D) P30S

Q13. Find the missing number in the following matrix pattern:

7	12	23
5	9	17
8	14	?

(A) 25

(B) 27

(C) 29

(D) 31

Q14. Find the missing term in the sequence: $2, 3, 7, 16, 32, ?$

(A) 49

(B) 57

(C) 64

(D) 68

Q15. Choose the correct alternative to complete the letter series:

_ b b c _ a a b _ c c _ a b b _ c

(A) a b c a a

(B) a c b a c

(C) a c b c a

(D) a b c b a

Q16. Choose the option that exhibits the same relationship as the given pair:

Meticulous : Careless :: ?

(A) Ephemeral : Transient

(B) Taciturn : Loquacious

(C) Audacious : Bold

(D) Obdurate : Stubborn

Q17. Choose the pair that is analytically analogous to the given core relationship:

Seismograph : Earthquake :: ?

(A) Thermometer : Fever

(B) Hygrometer : Humidity

(C) Barometer : Wind

(D) Altimeter : Distance

Q18. Three of the following four letter-clusters are alike in a certain way and so form a group. Which is the one that does not belong to that group?

(A) BDHF

(B) FHJL

(C) JLPN

(D) NPRT

Q19. Four pairs of numbers are given below. Three of them follow a specific rule while one is different. Find the odd one out.Lines

(A) 14 : 210

(B) 18 : 342

(C) 12 : 156

(D) 15 : 230

Q20. In a certain code language, if the word DEXTERITY is written as Fgzvgtkva, how will the word QUANTUM be written in that exact same code language?

(A) Sscpvwo

(B) Sscptwo

(C) Rrcpuvn

(D) Ttdqvxo

Q21. If GLUCOSE is coded as 53@21#7 and ROAST is coded as 914#8, then how will the word SUTRA be coded using that pattern?

(A) #3894

(B) #2891

(C) #3891

(D) @3891

Q22. In a specific operational code, 'green dynamic target' means 'la pa ta', 'target achieve fast' means 'pa ze xo', and 'dynamic fast runner' means 'la xo ki'. What is the code word for 'achieve'?

(A) pa

(B) ze

(C) xo

(D) la

Q23. Pointing to a photograph of a woman, Rohan says, "She is the only daughter-in-law of the grandfather of my son." How is the woman in the photograph related to Rohan?

(A) Sister

(B) Mother

(C) Wife

(D) Aunt

Q24. An explorer starts from camp and walks 8 km towards the North. He then turns 90° to his right and walks 5 km. Following this, he turns right again and walks 3 km. Finally, he takes a sharp left turn and walks 7 km. How far and in which direction is he now positioned with respect to his starting camp?

(A) 13 km, North-East

(B) 12 km, North-West

(C) 13 km, South-East

(D) 15 km, North-East

Q25. Choose the abstract option layout that correctly replaces the question mark to complete the structural pattern sequence:

Problem Figures: [Single line with a circle at top] → [Two intersecting lines with two circles] → [Three intersecting lines with three circles] → [?]

(A) Four perpendicular intersecting lines without circles

(B) Four intersecting lines arranged with four circles total

(C) Three parallel lines containing four alternate squares

(D) Five independent non-intersecting linear elements

Q26. Choose the option figure that is a mirror image of the given combination when the mirror is placed vertically to the right of the string: B 5 9 R t 2

(A) 2 t R 9 5 B

(B) *S ɿ R* 6 *S B*

(C) S t R Q H B

(D) S T R Q T B

Q27. Identify the alternative figure which contains the given figure embedded or hidden inside its complex structure:

Question Pattern: A right-angled triangle enclosed within a perfect circle.

(A) A figure featuring overlapping concentric squares only

(B) A complex grid layout composed entirely of intersecting horizontal parallel lines

(C) A structural schematic layout featuring a circumscribed right-angle triangle design

(D) A continuous spiral wireframe design lacking any internal polygonal geometric boundaries

Q28. A square sheet of transparent paper with a distinct pattern is folded along a dotted center line. Choose the correct option indicating how the pattern looks when unfolded.

Pattern: A diagonal line slanting upward from the bottom left corner to top right corner.

(A) An asymmetric parallel horizontal layout orientation

(B) A clean symmetrical "V" shape or inverted "V" shape configuration depending on fold axis

(C) A single static horizontal cross line structure

(D) A series of completely randomized non-intersecting dots

Q29. Directions for Q29 and Q30: Read the information sequence below to solve the two questions.

Five research students—A, B, C, D, and E—are seated in a straight horizontal row facing North. A is sitting adjacent to, and immediately to the left of B. C is sitting at one of the extreme ends of the row. E is sitting exactly midway between C and D.

Who is sitting at the absolute center position of the row?

(A) A

(B) B

(C) E

(D) D

Q30. Who is sitting at the opposite extreme end to student C?

(A) A

(B) B

(C) D

(D) E

Detailed Solutions

Q1.

Solution

Concept: Vocabulary tracking relies on establishing context clues. Extemporaneous refers to spoken remarks delivered with little to no preparation, making impromptu the most accurate synonym.

Solution:

(a) The context mentions that the remarks caught the press entirely by surprise, indicating they were unplanned.

(b) Premeditated means planned in advance, which is the direct opposite.

(c) Impromptu means done without being planned, organized, or rehearsed, aligning perfectly with extemporaneous.

(d) Meticulous means showing great attention to detail, while ambiguous means open to more than one interpretation.

Final Answer: (B) impromptu

Answer: (B)

Go Back to Question 1

Q2.

Solution

Concept: Antonym identification requires analyzing the contextual critique. Specious arguments seem superficially plausible, but are actually incorrect or misleading.

Solution:

(a) The clue lacking any empirical backing proves that the arguments are fundamentally flawed despite looking authentic.

(b) Spurious, fallacious, and illusory are all close synonyms meaning deceptive or false.

(c) Valid means legally or logically binding, structurally sound, and truthful, making it the perfect antonym.

Final Answer: (A) valid

Answer: (A)

Go Back to Question 2

Q3.

Solution

Concept: Core vocabulary knowledge. Ephemeral denotes things that exist for a very short duration of time.

Solution:

(a) Eternal implies lasting forever, which is an antonym.

(b) Transient means lasting only for a short time or impermanent, perfectly matching ephemeral.

(c) Monumental means massive or highly significant, and ubiquitous means present everywhere.

Final Answer: (B) transient

Answer: (B)

Go Back to Question 3

Q4.

Solution

Concept: Antonym determination through behavioral traits. Alacrity represents a lively, cheerful readiness or promptness to perform an action.

Solution:

(a) Enthusiasm, promptness, and fervor are closely related synonymous terms denoting eager readiness.

(b) Apathy denotes a complete lack of interest, enthusiasm, or concern, rendering it the exact opposite of alacrity.

Final Answer: (C) apathy

Answer: (C)

Go Back to Question 4

Q5.

Solution

Concept: Subject-verb agreement using correlative conjunctions like neither...nor. When connecting subjects, the verb must agree with the closer subject.

Solution:

(a) The two subjects are the laboratory technician (singular) and the research interns (plural).

(b) The plural subject research interns sits closest to the verb.

(c) Therefore, the singular verb is must be replaced with the plural form are to achieve grammatical accuracy.

Final Answer: (B) nor the research interns is ready

Answer: (B)

Go Back to Question 5

Q6.

Solution

Concept: Tense consistency within complex temporal clauses. Actions that finished before another explicit past action require the past perfect tense.

Solution:

(a) The structural adverbial phrase hardly...when sets up sequential events in the past.

(b) The failure of the booster happened prior to the realization by the telemetry team.

(c) Hence, the simple past failed must be converted to the past perfect had failed to show the correct sequence.

Final Answer: (C) that one of the boosters failed

Answer: (C)

Go Back to Question 6

Q7.

Solution

Concept: Relative pronoun antecedent agreement rules. A relative pronoun (that) refers to its antecedent noun and determines the following verb form.

Solution:

(a) In the phrase one of those rare historical epics that, the relative pronoun that refers directly to the plural noun epics.

(b) Because the antecedent epics is plural, the relative clause requires a plural verb.

(c) The singular verb captures must be changed to the plural form capture to fix the structural error.

Final Answer: (B) that captures the intricate socio-political nuances

Answer: (B)

Go Back to Question 7

Q8.

Solution

Concept: Contextual sentence completion based on vocabulary contrast. The missing word must contrast logically with disputes being handled with utmost civility.

Solution:

(a) The sentence describes a system designed to avoid clear, open, and aggressive confrontations.

(b) Overt means done or shown openly, making it the perfect descriptor for public clashes that protocols seek to avoid.

(c) Internal, latent, and implicit refer to hidden or underlying states, which do not fit the context.

Final Answer: (A) overt

Answer: (A)

Go Back to Question 8

Q9.

Solution

Concept: Literal comprehension of textual assertions. Reading strategies require finding explicit cause-and-effect links highlighted by the author.

Solution:

(a) The text states that extraneous cognitive load can severely hamper the brain's ability to process and transfer information.

(b) This matches option B, which notes it disrupts the smooth conversion of data into long-term memory.

(c) Options A, C, and D state extreme modifications not supported by the passage.

Final Answer: (B) It disrupts the smooth conversion of information into long-term memory.

Answer: (B)

Go Back to Question 9

Q10.

Solution

Concept: Critical textual inference. Readers must combine separate statements within the passage to reach a logical baseline conclusion.

Solution:

(a) The text mentions well-designed materials minimize extraneous load, leaving more cognitive resources free for germane load.

(b) This shows minimizing irrelevant mental effort directly creates room to expand germane processing.

(c) Therefore, reducing irrelevant mental friction significantly benefits germane load, as stated in option D.

Final Answer: Benefits significantly when instructional designs reduce irrelevant mental friction.

Answer: (D)

Go Back to Question 10

Q11.

Solution

Concept: Number sequence analysis involves calculating the differences between successive terms to identify an underlying polynomial or cubic progression pattern.

Solution:

(a) Calculate the first differences: $11 - 4 = 7$, $30 - 11 = 19$, $67 - 30 = 37$, $128 - 67 = 61$.

(b) Calculate the second differences: $19 - 7 = 12$, $37 - 19 = 18$, $61 - 37 = 24$.

(c) The second differences increase by 6 each time $(12, 18, 24)$. The next second difference is $24 + 6 = 30$.

(d) The next first difference is $61 + 30 = 91$. The missing term is $128 + 91 = 219$. Alternatively, each term follows the pattern $n^3 + 3$ starting from $n = 1$: $1^3 + 3 = 4$, $2^3 + 3 = 11$, $3^3 + 3 = 30$, $4^3 + 3 = 67$, $5^3 + 3 = 128$. The next term is $6^3 + 3 = 216 + 3 = 219$.

Final Answer: (A) 219

Answer: (A)

Go Back to Question 11

Q12.

Solution

Concept: Alphanumeric tracking demands breaking down the terms into three independent layers: the first letter, the central number, and the concluding letter.

Solution:

(a) First letter progression: A to C (+2), C to F (+3), F to J (+4). The next step must be +5 from J, which yields O.

(b) Central number progression: $2, 6, 12, 20$. The differences are $+4, +6, +8$. The next difference is $+10$, so $20 + 10 = 30$.

(c) Final letter progression: B to E (+3), E to I (+4), I to N (+5). The next step must be +6 from N, which yields T.

(d) Combining these three independent elements gives the term O30T.

Final Answer: (A) O30T

Answer: (A)

Go Back to Question 12

Q13.

Solution

Concept: Matrix puzzles require discovering a reliable mathematical operations link that maps row values or column elements consistently.

Solution:

(a) Examine the columns to find a mathematical link: Column 3 = (2 × Column 1) + Column 2.

(b) Verify using row one elements: $(2 \times 7) + 12 = 14 + 12 = 26$. This does not match 23.

(c) Test a horizontal row-wise relationship instead: Row 1 + Row 2 = Row 3. Let us check: $7 + 5 = 12$ (not 8).

(d) Try the valid logic: Column 1 + Column 2 + 4 = Column 3. Row one: $7 + 12 + 4 = 23$. Row two: $5 + 9 + 4 = 17$. Row three: $8 + 14 + 4 = 26$.

Final Answer: (C) 29

Answer: (C)

Go Back to Question 13

Q14.

Solution

Concept: Difference analysis evaluates patterns formed by subtracting consecutive numbers to identify sequences like squares, primes, or cubes.

Solution:

(a) Calculate differences between consecutive terms: $3 - 2 = 1$, $7 - 3 = 4$, $16 - 7 = 9$, $32 - 16 = 16$.

(b) The differences are perfect consecutive squares: $1^2, 2^2, 3^2, 4^2$.

(c) The next difference in the sequence must be $5^2 = 25$.

(d) Add this value to the last term to find the answer: $32 + 25 = 57$.

Final Answer: (B) 57

Answer: (B)

Go Back to Question 14

Q15.

Solution

Concept: Continuous letter series are solved by counting total characters and breaking them down into equal, repeating blocks.

Solution:

(a) The total number of character spaces including blanks is 17. Let us look for a repeating structural pattern.

(b) Grouping the characters reveals a repeating triplet or quadruplet structure. The core block is a a b b c c.

(c) Filling the blanks to match this pattern yields: a b b c c a a b b c c a a b b c c.

(d) The letters placed in the blanks from left to right are a, c, b, a, c.

Final Answer: (B) a c b a c

Answer: (B)

Go Back to Question 15

Q16.

Solution

Concept: Analogy evaluation depends on identifying the exact semantic or logical relationship between the initial pair of words.

Solution:

(a) Meticulous means showing great care, while careless means lacking care. They are direct antonyms.

(b) Ephemeral and transient are synonyms. Audacious and bold are synonyms. Obdurate and stubborn are synonyms.

(c) Taciturn means reserved in speech, whereas loquacious means extremely talkative. This is the only pair of antonyms.

Final Answer: (B) Taciturn : Loquacious

Answer: (B)

Go Back to Question 16

Q17.

Solution

Concept: Tool-to-measurement analogies pair a scientific instrument with the physical phenomenon or property it is designed to measure.

Solution:

(a) A seismograph is a scientific instrument specifically designed to measure the intensity of an earthquake.

(b) A hygrometer measures humidity directly. This matches the instrument-to-phenomenon relationship perfectly.

(c) A thermometer measures temperature (fever is a medical symptom). A barometer measures atmospheric pressure, not wind.

Final Answer: (B) Hygrometer : Humidity

Answer: (B)

Go Back to Question 17

Q18.

Solution

Concept: Classification odd-one-out requires verifying alphabetical positions and numerical gaps between letters in each cluster.

Solution:

(a) Cluster A: B(+2)D(+4)H(-2)F $\rightarrow$ Positions: $2, 4, 8, 6$. Gaps are $+2, +4, -2$.

(b) Cluster B: F(+2)H(+2)J(+2)L $\rightarrow$ Positions: $6, 8, 10, 12$. Gaps are all $+2$.

(c) Cluster C: J(+2)L(+4)P(-2)N $\rightarrow$ Positions: $10, 12, 16, 14$. Gaps are $+2, +4, -2$.

(d) Cluster D: N(+2)P(+4)R(-2)T $\rightarrow$ This also matches the $+2, +4, -2$ rule layout pattern. Cluster B is the only group with a uniform $+2$ step spacing.

Final Answer: (B) FHJL

Answer: (B)

Go Back to Question 18

Q19.

Solution

Concept: Number pair classification searches for uniform properties like squares, factors, or functions of the form $n^2 + n$.

Solution:

(a) Pair A: $14 \rightarrow 14^2 + 14 = 196 + 14 = 210$.

(b) Pair B: $18 \rightarrow 18^2 + 18 = 324 + 18 = 342$.

(c) Pair C: $12 \rightarrow 12^2 + 12 = 144 + 12 = 156$.

(d) Pair D: $15 \rightarrow 15^2 + 15 = 225 + 15 = 240$. The option lists 230, breaking the rule.

Final Answer: (D) 15 : 230

Answer: (D)

Go Back to Question 19

Q20.

Solution

Concept: Coding-decoding patterns are mapped by finding the directional shift in alphabetical positioning for each letter.

Solution:

(a) Analyze DEXTERITY to Fgzvgtkva: D to F (+2), E to g (+2), X to z (+2), T to v (+2).

(b) The rule applies a shift of +2 steps forward to every letter in the word.

(c) Apply this rule to QUANTUM: Q+2=S, U+2=W, A+2=C, N+2=P, T+2=V, U+2=W, M+2=O.

(d) Combining these results produces the output word Sscpvwo.

Final Answer: (A) Sscpvwo

Answer: (A)

Go Back to Question 20

Q21.

Solution

Concept: Direct substitution coding assigns unique symbols or digits to specific letters based on their positions in given reference pairs.

Solution:

(a) From GLUCOSE coded as 53@21#7, we map: G=5, L=3, U=@, C=2, O=1, S=, E=7.

(b) From ROAST coded as 914#8, we map: R=9, O=1, A=4, S=, T=8.

(c) Extract the required symbols for SUTRA: S=, U=@, T=8, R=9, A=4.

(d) Combining these specific characters in order gives the final coded output string #@894.

Final Answer: (A) @894

Answer: (A)

Go Back to Question 21

Q22.

Solution

Concept: Fictional language decoding isolates unique terms by systematically comparing sentences and canceling out common words.

Solution:

(a) Sentence 1 (green dynamic target = la pa ta) and Sentence 2 (target achieve fast = pa ze xo) share 'target', so 'target' must be 'pa'.

(b) Sentence 2 (target achieve fast = pa ze xo) and Sentence 3 (dynamic fast runner = la xo ki) share 'fast', so 'fast' must be 'xo'.

(c) Looking at Sentence 2, the remaining word is 'achieve', and its corresponding remaining code is 'ze'.

Final Answer: (B) ze

Answer: (B)

Go Back to Question 22

Q23.

Solution

Concept: Blood relation problems map family trees by identifying generations and breaking down relative descriptive phrases step-by-step.

Solution:

(a) Break down the phrase: grandfather of my son refers directly to Rohan's own father.

(b) The text states the woman is the only daughter-in-law of Rohan's father.

(c) Since she is the only daughter-in-law, she must be married to Rohan himself, making her Rohan's wife.

Final Answer: (C) Wife

Answer: (C)

Go Back to Question 23

Q24.

Solution

Concept: Direction sense tracking plots movements on a standard Cartesian plane to calculate final displacement using coordinates or the Pythagorean theorem.

Solution:

(a) Start at $(0, 0)$. Walk 8 km North to $(0, 8)$. Turn right (East) and walk 5 km to $(5, 8)$.

(b) Turn right (South) and walk 3 km to reach $(5, 5)$. Turn left (East) and walk 7 km to reach $(12, 5)$.

(c) The final position coordinates are $(12, 5)$. Total displacement is $\sqrt{12^2 + 5^2} = \sqrt{144 + 25} = 13$ km.

(d) Relative to the starting origin $(0, 0)$, position $(12, 5)$ points toward the North-East quadrant.

Final Answer: (A) 13 km, North-East

Answer: (A)

Go Back to Question 24

Q25.

Solution

Concept: Non-verbal geometric sequences track properties like element count, line intersections, and perimeter shapes across steps.

Solution:

(a) Step 1 has 1 line and 1 circle. Step 2 has 2 intersecting lines and 2 circles. Step 3 has 3 intersecting lines and 3 circles.

(b) Following this pattern, Step 4 must consist of exactly 4 intersecting lines and 4 total circles.

(c) Option B matches this clear progression rule perfectly.

Final Answer: (B) Four intersecting lines arranged with four circles total

Answer: (B)

Go Back to Question 25

Q26.

Solution

Concept: Lateral inversion in vertical mirrors reverses character order left-to-right and flips each individual character's orientation horizontally.

Solution:

(a) A vertical mirror placed on the right means the last character 2 moves to the front, and the first character B moves to the rear.

(b) Reversing the sequence order gives 2, t, R, 9, 5, B.

(c) Inverting each individual character horizontally transforms them into a sans-serif mirrored profile, matching option C.

Final Answer: (C) S t R Q H B

Answer: (C)

Go Back to Question 26

Q27.

Solution

Concept: Embedded figure testing involves scanning complex structural patterns to locate the exact shape given in the question prompt.

Solution:

(a) The targeted compound figure consists of a right-angled triangle bounded inside a perfect circle.

(b) Option C explicitly notes a structural schematic featuring a circumscribed right-angle triangle design.

(c) Circumscribed means a circle drawn around a polygon, perfectly embedding the target figure.

Final Answer: Structural schematic layout featuring a circumscribed right-angle triangle design

Answer: (C)

Go Back to Question 27

Q28.

Solution

Concept: Paper folding analysis uses reflection mechanics across a specified fold axis line to determine the final combined design.

Solution:

(a) Folding a diagonal line along a vertical or horizontal centerline creates a mirrored counterpart line.

(b) The original line and its reflection meet to form a symmetrical V or inverted V configuration.

(c) Option B correctly identifies this resulting geometry based on standard reflection properties.

Final Answer: Clean symmetrical "V" shape or inverted "V" configuration depending on fold axis

Answer: (B)

Go Back to Question 28

Q29.

Solution

Concept: Linear arrangement puzzles require plotting relative positions on a grid using explicit boundary constraints.

Solution:

(a) Five slots: 1, 2, 3, 4, 5. C is at an extreme end, so C is either at slot 1 or slot 5.

(b) E is midway between C and D. If C is at slot 1, E must be at slot 3 and D at slot 5.

(c) A is immediately left of B, which means they need two adjacent empty slots: slots 2 and 4 are separated, making this invalid.

(d) Therefore, C must be at slot 5. E sits at slot 3, and D sits at slot 1.

(e) This leaves slots 2 and 4. A is immediately left of B, so A is at slot 2 and B is at slot 4. The complete sequence is D-A-E-B-C.

(f) Student E occupies the absolute center position (slot 3).

Final Answer: (C) E

Answer: (C)

Go Back to Question 29

Q30.

Solution

Concept: Linear arrangement evaluation reads the completed position sequence to determine specific end boundaries.

Solution:

(a) Based on the step-by-step logic solved in the previous question, the final sitting sequence is D-A-E-B-C.

(b) Student C occupies the rightmost extreme end of the row (slot 5).

(c) Looking at the opposite end (slot 1), student D occupies the leftmost extreme position.

Final Answer: (C) D

Answer: (C)

Go Back to Question 30

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	B	2	A	3	B	4	C	5	B
6	C	7	B	8	A	9	B	10	D
11	A	12	A	13	C	14	B	15	B
16	B	17	B	18	B	19	D	20	A
21	A	22	B	23	C	24	A	25	B
26	C	27	C	28	B	29	C	30	C