SET (Symbiosis Entrance Test)

Sample Paper – 1

Duration: 60 Minutes **Maximum Marks: 60**

Instructions

- This paper contains **60 Multiple Choice Questions** across 4 sections: General English (16Q), Quantitative Aptitude (16Q), General Awareness (16Q), and Analytical & Logical Reasoning (12Q).
- Each correct answer carries $+1$ **mark**. There is **no negative marking** for incorrect or unattempted answers.
- Only **one** option is correct per question. Choose carefully.
- Total duration: **60 minutes**. There is **no sectional time limit** — manage your own time across all 4 sections.
- This is an **Online CBT (Computer Based Test)**. An on-screen scratch pad is provided for rough work. Personal calculators, mobile phones, and other electronic gadgets are strictly prohibited.

Part A: General English (Q1–Q16, 1 mark each)

Q1. Choose the word most similar in meaning to **magnanimous**.

(A) Miserly
(B) Arrogant
(C) Generous
(D) Timid

Q2. Choose the word most **opposite** in meaning to **frugal**.

(A) Extravagant
(B) Careful
(C) Economical
(D) Thrifty

Q3. Fill in the blank with the correct preposition:

"He is interested _____ learning new things."

(A) on
(B) at
(C) for
(D) in

Q4. Fill in the blank with the most appropriate connective:

"She worked hard; _____, she passed with distinction."

(A) however
(B) therefore
(C) although
(D) unless

Q5. Identify the sentence in which subject-verb agreement is **correct**.

(A) Each of the students *has* submitted the assignment on time.
(B) Each of the students *have* submitted the assignment on time.
(C) Each of the students *were* submitting the assignment on time.
(D) Each of the students *are* submitting the assignment on time.

Q6. In the sentence below, four parts are underlined and labelled (A), (B), (C), (D). Identify the part that contains a **grammatical error**.

(A) The patient (B) was told by the doctor (C) to lay (D) still on the bed.

(A) The patient
(B) was told by the doctor
(C) to lay
(D) still on the bed

Q7. *Read the following passage carefully and answer Questions 7, 8, and 9.*

Passage:

Artificial Intelligence is rapidly transforming the educational landscape in India. Platforms such as BYJU's have harnessed adaptive learning algorithms to personalise content for millions of students, adjusting difficulty levels based on individual performance. In urban classrooms, AI-powered tools analyse student responses in real time, enabling teachers to identify learning gaps early. However, this technological revolution is not without its challenges. A significant digital divide persists between urban and rural India: students in remote villages often lack reliable internet connectivity and the devices required to access these platforms. Experts warn that unless the infrastructure gap is bridged, AI in education risks widening existing inequalities rather than reducing them.

Q7. What is the **main theme** of the passage?

(A) BYJU's is the most successful EdTech platform in India
(B) AI is transforming education but creating new challenges
(C) Rural students perform better with adaptive learning tools
(D) The government should ban AI in schools

Q8. *(Refer to the passage in Q7.)*

According to the passage, what do AI-powered tools in urban classrooms enable teachers to do?

(A) Replace traditional textbooks entirely
(B) Set uniform difficulty levels for all students
(C) Reduce the cost of private tuitions
(D) Identify learning gaps early through real-time response analysis

Q9. *(Refer to the passage in Q7.)*

Which of the following conclusions can be most logically **inferred** from the passage?

(A) Without addressing the digital divide, AI may increase educational

inequality in India

(B) AI tools are equally accessible to students in both rural and urban India

(C) Adaptive learning algorithms eliminate the need for human teachers

(D) India leads the world in AI-based education

Q10. What does the idiom **"burn the midnight oil"** mean?

(A) To waste time on unproductive activities

(B) To accidentally start a fire

(C) To work or study very late into the night

(D) To go to sleep very early

Q11. Choose the one word that best substitutes the phrase:

"A person who hates or distrusts humankind in general."

(A) Philanthropist

(B) Misanthrope

(C) Misogynist

(D) Egotist

Q12. In the sentence below, four parts are underlined and labelled (A), (B), (C), (D). Identify the part that contains a **grammatical error**.

(A) The committee (B) will select (C) the candidate (D) who they consider m

(A) The committee

(B) will select

(C) the candidate

(D) who they consider most suitable

Q13. Choose the **correct passive voice** form of the sentence:

"The teacher corrected the papers."

(A) The papers were corrected by the teacher.
(B) The papers are corrected by the teacher.
(C) The papers have corrected by the teacher.
(D) The papers was corrected by the teacher.

Q14. Complete the analogy:

Pen : Writer :: Brush : ?

(A) Artist
(B) Canvas
(C) Painter
(D) Gallery

Q15. Arrange the following sentences (P, Q, R, S) in the **correct logical order** to form a coherent paragraph.

P. Today, UPI processes billions of transactions every month, making it one of the world's largest real-time payment systems.
Q. The Indian government launched the Unified Payments Interface (UPI) in 2016 to promote cashless transactions.
R. Small merchants and street vendors quickly adopted QR-code-based payments, transforming everyday commerce.
S. Initially slow to gain traction, digital payments accelerated sharply after demonetisation in November 2016.

(A) QPRS
(B) QSRP
(C) PQRS
(D) RSPQ

Q16. Fill in the blank with the most appropriate word:

"The world must take _____ steps to reduce carbon emissions, as the effects of climate change are becoming increasingly severe and widespread."

(A) occasional

(B) passive
(C) tentative
(D) decisive

Part B: Quantitative Aptitude (Q17–Q32, 1 mark each)

Q17. The price of an article increases by 20% and then the new price decreases by 15%. What is the **net percentage change** in the original price?

(A) 5% increase
(B) 2% increase
(C) 3% decrease
(D) 1% decrease

Q18. A shopkeeper marks the price of an article 25% above its cost price and then offers a 10% discount on the marked price. What is the shopkeeper's **profit percentage**?

(A) 10%
(B) 15%
(C) 12.5%
(D) 8%

Q19. Find the **Simple Interest** on a principal of ₹5,000 at a rate of 8% per annum for 3 years.

(A) ₹1,200
(B) ₹1,400
(C) ₹1,000
(D) ₹1,600

Q20. Find the **Compound Interest** on a principal of ₹8,000 at a rate of 10% per annum compounded annually for 2 years.

(A) ₹1,600
(B) ₹1,560

(C) ₹1,720
(D) ₹1,680

Q21. Worker A can complete a task in 12 days and Worker B can complete the same task in 15 days. If both work together, in how many days will the task be completed?

(A) 8 days
(B) 7 days
(C) $6\frac{2}{3}$ days
(D) 5 days

Q22. A train 300 m long is travelling at a speed of 60 km/h. How long will the train take to cross a **stationary pole**?

(A) 15 seconds
(B) 18 seconds
(C) 20 seconds
(D) 12 seconds

Q23. Two solutions A and B, each of equal volume, are mixed together. Solution A has a milk-to-water ratio of 3 : 2 and Solution B has a milk-to-water ratio of 2 : 3. What is the milk-to-water ratio in the **resultant mixture**?

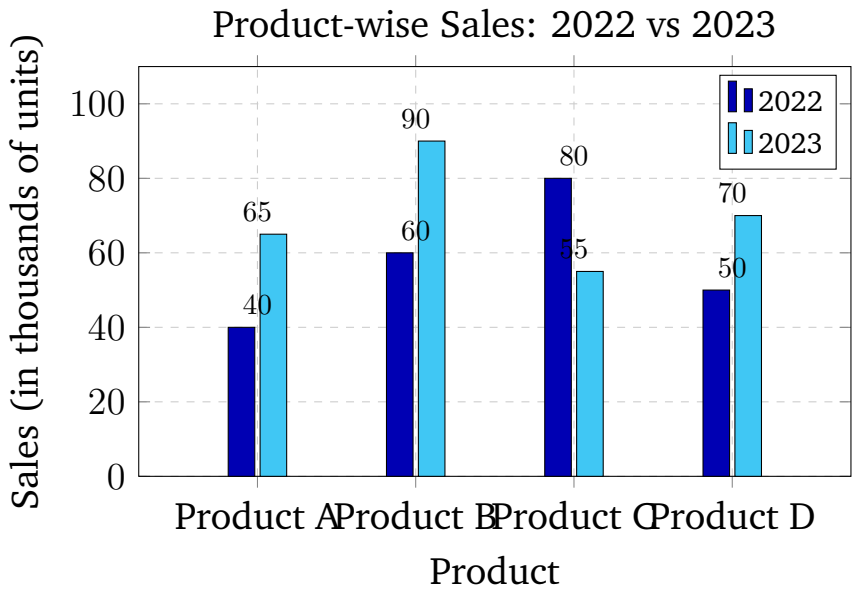
(A) 1 : 1
(B) 2 : 3
(C) 3 : 2
(D) 4 : 5

Q24. The average of 5 numbers is 12. A 6th number is added to the set and the new average becomes 13. What is the **6th number**?

(A) 14
(B) 16
(C) 20

(D) 18

Q25. Direction for Q25–Q26: Study the grouped bar chart below, which shows the sales (in thousands of units) of four products in the years 2022 and 2023, and answer the questions that follow.



Which product recorded the **highest sales in 2023**?

(A) Product A
(B) Product D
(C) Product B
(D) Product C

Q26. *(Refer to the bar chart in Q25.)*

What is the **total sales** of Product C across both years 2022 and 2023 (in thousands of units)?

(A) 135 thousand
(B) 140 thousand
(C) 125 thousand
(D) 145 thousand

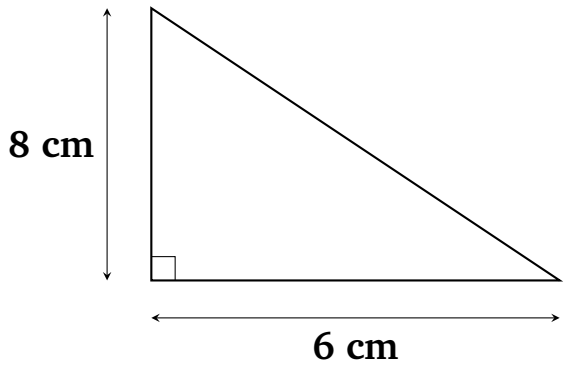
Q27. Find the **Highest Common Factor (HCF)** of 36, 48, and 60.

(A) 6
(B) 12
(C) 18
(D) 24

Q28. Solve for x: $3x + 7 = 22$

(A) $x = 3$
(B) $x = 4$
(C) $x = 6$
(D) $x = 5$

Q29. Find the **area** of the right-angled triangle shown below.



(A) 24 cm^2
(B) 48 cm^2
(C) 12 cm^2
(D) 28 cm^2

Q30. Pipe A can fill a tank in 6 hours. Pipe B can drain the same tank in 10 hours. If both pipes are opened simultaneously when the tank is empty, in how many hours will the tank be **completely filled**?

(A) 8 hours
(B) 10 hours

(C) 15 hours
(D) 20 hours

Q31. The population of a town is 50,000. If it grows at the rate of 4% per annum, what will be the population after **2 years**?

(A) 54,000
(B) 54,080
(C) 53,000
(D) 55,200

Q32. Find the **next term** in the series:

2, 6, 12, 20, 30, ____

(A) 36
(B) 38
(C) 40
(D) 42

Part C: General Awareness (Q33–Q48, 1 mark each)

Q33. How many **Schedules** does the Constitution of India currently contain?

(A) 12
(B) 10
(C) 8
(D) 14

Q34. Which is the **longest river** in India by total length?

(A) Brahmaputra
(B) Godavari
(C) Ganga
(D) Yamuna

Q35. In which year was the **Battle of Plassey** fought?

(A) 1764
(B) 1757
(C) 1750
(D) 1776

Q36. Who was the **first Indian** to travel to outer space?

(A) Sunita Williams
(B) Kalpana Chawla
(C) Ravish Malhotra
(D) Rakesh Sharma

Q37. Which country hosted the **G20 Summit in 2023**?

(A) India
(B) Indonesia
(C) Italy
(D) Japan

Q38. The **Nobel Peace Prize 2024** was awarded to which organisation?

(A) WHO
(B) Narges Mohammadi
(C) Nihon Hidankyo
(D) ICAN

Q39. Which team won the **ICC Men's T20 World Cup 2024**?

(A) Australia
(B) India
(C) England
(D) South Africa

Q40. As of 2024, what is India's rank among the world's largest economies by **nominal GDP**?

(A) 3rd
(B) 6th
(C) 7th
(D) 5th

Q41. In which year was **Pradhan Mantri Mudra Yojana (PMMY)** launched?

(A) 2015
(B) 2016
(C) 2014
(D) 2018

Q42. The classical dance form **Bharatanatyam** originated in which Indian state?

(A) Kerala
(B) Andhra Pradesh
(C) Tamil Nadu
(D) Karnataka

Q43. In which city was **COP29**, the 2024 UN Climate Change Conference, held?

(A) Dubai
(B) Baku
(C) Glasgow
(D) Sharm el-Sheikh

Q44. In which year did **Chandrayaan-3** successfully soft-land near the Moon's south pole?

(A) 2019
(B) 2021
(C) 2022
(D) 2023

Q45. Which country hosted the **BRICS Summit in 2024**?

(A) Russia
(B) China
(C) South Africa
(D) Brazil

Q46. The **Governor of the Reserve Bank of India (RBI)** is appointed by which authority?

(A) Parliament
(B) Supreme Court of India
(C) Government of India
(D) Finance Commission

Q47. The **Booker Prize 2024** was awarded for the novel *James*. Who is its author?

(A) Paul Auster
(B) Percival Everett
(C) Tsitsi Dangarembga
(D) Shehan Karunatilaka

Q48. Who was the **first woman to serve as the President of India**?

(A) Indira Gandhi
(B) Sushma Swaraj
(C) Meira Kumar
(D) Pratibha Devisingh Patil

Part D: Analytical & Logical Reasoning (Q49–Q60, 1 mark each)

Q49. Direction for Q49: Six people—Aman, Bina, Charu, Dev, Esha, and Fiza—are seated in a straight row facing North. Read the clues below and answer the question.

Clues:

(i) Aman sits at one of the extreme ends.

(ii) Dev sits immediately to the right of Aman.

(iii) Fiza sits third from the right end.

(iv) Bina sits between Fiza and Charu.

(v) Esha sits at the extreme right end.

Seat 1	Seat 2	Seat 3	Seat 4	Seat 5	Seat 6

Who is seated **immediately to the right of Charu**?

(A) Dev

(B) Bina

(C) Fiza

(D) Esha

Q50. Pointing to a photograph, a man says, "She is the daughter of my grandfather's only son." How is the woman in the photograph **related to the man**?

(A) Mother

(B) Aunt

(C) Sister-in-law

(D) Sister

Q51. In a certain code language, **SCHOOL** is written as **TDIPPM**. Using the same code, how will **CHILD** be written?

(A) DIJME

(B) BJKMD

(C) DIKME

(D) DJIME

Q52. Ravi starts from his house and walks 5 km towards **North**. He then turns

right and walks 3 km. He then turns **right** again and walks 5 km. In which direction is Ravi now with respect to his **starting point**?

(A) West
(B) North
(C) East
(D) South

Q53. Find the **missing term** in the series:

3, 7, 13, 21, 31, ____

(A) 41
(B) 43
(C) 45
(D) 39

Q54. Which of the following does **NOT** belong to the same category as the others?

(A) Rose
(B) Lotus
(C) Sunflower
(D) Mango

Q55. **Statements:**

- All cats are animals.
- All animals are living beings.

Conclusion: All cats are living beings.

Which of the following is correct?

(A) The conclusion follows.
(B) The conclusion does not follow.
(C) The conclusion partially follows.
(D) Cannot be determined.

Q56. Choose the word that best completes the analogy:

Doctor : Hospital :: Teacher : ?

(A) Student
(B) Book
(C) School
(D) Classroom

Q57. **Statement:** "Students should practise yoga every morning."

Assumption I: Yoga is beneficial for students.
Assumption II: No student currently practises yoga.

Which of the above assumption(s) is/are **implicit** in the statement?

(A) Only Assumption II
(B) Only Assumption I
(C) Both Assumption I and Assumption II
(D) Neither Assumption I nor Assumption II

Q58. Given the relationship: $P > Q > R = S > T$

Which of the following is **definitely true**?

(A) $P > T$
(B) $Q = S$
(C) $R > P$
(D) $T > Q$

Q59. January 1, 2023 was a **Sunday**. On what day did January 1, 2024 fall? (Note: 2023 is not a leap year.)

(A) Sunday
(B) Tuesday
(C) Monday
(D) Wednesday

Q60. In a class, Priya is ranked **12th from the top** and **19th from the bottom**.

How many students are there in the class?

(A) 28
(B) 29
(C) 31
(D) 30

Detailed Solutions

Q1.

Solution

Concept — Vocabulary – Synonyms: A *synonym* is a word having the same or nearly the same meaning as another word.

Step 1 — Understand the word: *Magnanimous* comes from Latin *magnus* (great) + *animus* (soul). It means very generous, noble, and forgiving, especially towards a rival or a less powerful person.

Step 2 — Evaluate options:

- Option A (Miserly): means extremely unwilling to spend money — the *opposite* of magnanimous.
- Option B (Arrogant): means having an exaggerated sense of one's importance — unrelated.
- **Option C (Generous):** means willing to give more than is expected — this matches the meaning of magnanimous. ✓
- Option D (Timid): means lacking courage or confidence — opposite in character.

Final Answer: The synonym of *magnanimous* is *generous* ⇒ C

Answer: (C) Go Back to Q1

Q2.

Solution

Concept — Vocabulary – Antonyms: An *antonym* is a word that means the opposite of another word.

Step 1 — Understand the word: *Frugal* means spending very little money; careful with money and avoiding waste. It has a positive connotation of prudent saving.

Step 2 — Identify the antonym:

- **Option A (Extravagant):** means spending much more than is necessary or wise — the direct opposite of frugal. ✓
- Option B (Careful): frugal itself implies being careful; not an antonym.
- Option C (Economical): very close in meaning to frugal — a synonym, not an antonym.

- Option D (Thrifty): also a synonym of frugal — not the antonym.

Final Answer: The antonym of *frugal* is *extravagant* $\Rightarrow$ A

Answer: (A) Go Back to Q2

Q3.

Solution

Concept — Grammar – Prepositions: The correct preposition after the adjective *interested* is **in**.

Explanation:

- "Interested **in**" is the standard collocation in English.
- We say: *interested in music / interested in learning* — not "interested on/at/for".
- Options A (on), B (at), and C (for) are all grammatically incorrect in this context.

Correct sentence: "He is interested **in** learning new things."

Final Answer: D

Answer: (D) Go Back to Q3

Q4.

Solution

Concept — Grammar – Conjunctive Adverbs (Connectives): We need a word that logically connects a cause ("she worked hard") with its result ("she passed with distinction").

Step 1 — Analyse the relationship: The two clauses express a *cause-and-effect* relationship. She worked hard $\rightarrow$ she passed. The connective must show a result or consequence.

Step 2 — Evaluate options:

- Option A (however): signals contrast — not appropriate here.
- **Option B (therefore):** signals logical consequence/result — exactly fits. ✓
- Option C (although): signals concession/contrast — incorrect.
- Option D (unless): signals condition — incorrect.

Correct sentence: "She worked hard; **therefore**, she passed with distinction."

Final Answer: B

Answer: (B) Go Back to Q4

Q5.

Solution

Concept — Grammar – Subject-Verb Agreement with "Each": The pronoun *each* is singular. When used as the subject (or as the head of the subject "each of the . . . "), it takes a **singular verb**.

Rule: "Each of the + plural noun" → singular verb (has, was, is, does . . .).

Step 2 — Evaluate options:

- **Option A: "Each of the students *has* submitted. . . "** — singular verb *has*: **correct**. ✓
- Option B: ". . . *have* submitted" — plural verb with singular subject: incorrect.
- Option C: ". . . *were* submitting" — plural past progressive: incorrect.
- Option D: ". . . *are* submitting" — plural present progressive: incorrect.

Final Answer: A

Answer: (A) Go Back to Q5

Q6.

Solution

Concept — Grammar – Lie vs. Lay: *Lie* (intransitive) means to recline; *lay* (transitive) means to place something down. "To lay still" is incorrect because no object follows; the correct intransitive verb is **lie**.

Analysis of the sentence:
"The patient was told by the doctor to lay still on the bed."
The subject (the patient) will be doing the action of reclining — this requires the intransitive verb *lie*, not the transitive *lay*.

The error is in Part (C): "to lay" should be "to **lie**".

Why other parts are correct:

- Part A: "The patient" — correct noun phrase.

- Part B: "was told by the doctor" — correct passive construction.
- Part D: "still on the bed" — correct adverbial phrase.

Final Answer: Error is in Part C $\Rightarrow$ C

Answer: (C) Go Back to Q6

Q7.

Solution

Concept — Reading Comprehension – Main Theme / Central Idea: The main theme is the overarching message that the entire passage conveys.

Analysis: The passage discusses:

- How AI (via platforms like BYJU's) is transforming education in India.
- The positive aspect: adaptive learning, real-time gap identification.
- The challenge: a significant digital divide between urban and rural India.
- The warning: AI may worsen inequality if the infrastructure gap is not addressed.

Evaluating options:

- Option A: too narrow — only mentions BYJU's.
- **Option B: "AI is transforming education but creating new challenges"** — captures both the positive transformation and the challenges (digital divide). ✓
- Option C: contradicts the passage (rural students face access problems).
- Option D: not mentioned in the passage.

Final Answer: B

Answer: (B) Go Back to Q7

Q8.

Solution

Concept — Reading Comprehension – Factual Detail: This question tests a specific detail stated in the passage.

Relevant sentence from passage: "In urban classrooms, AI-powered tools analyse student responses in real time, enabling teachers to **identify learning gaps early**."

Evaluating options:

- Option A: not stated in the passage.
- Option B: the passage says levels are personalised (adaptive), not uniform.
- Option C: cost of tuitions is not mentioned.
- **Option D: "Identify learning gaps early through real-time response analysis"** — directly stated in the passage. ✓

Final Answer: D

Answer: (D) Go Back to Q8

Q9.

Solution

Concept — Reading Comprehension – Inference: An inference is a logical conclusion drawn from information stated in the passage.

Key passage statements:

- A significant digital divide exists between urban and rural India.
- Students in remote villages lack reliable internet and devices.
- *"Unless the infrastructure gap is bridged, AI in education risks widening existing inequalities."*

Evaluating options:

- **Option A: "Without addressing the digital divide, AI may increase educational inequality"** — directly inferred from the passage's warning. ✓
- Option B: contradicts the passage (rural students lack access).
- Option C: the passage says teachers are enabled, not replaced.
- Option D: no comparison with other countries is made.

Final Answer: A

Answer: (A) Go Back to Q9

Q10.

Solution

Concept — Vocabulary – Idioms: An idiom is a phrase whose meaning cannot be deduced from its individual words.

Origin & Meaning: "Burn the midnight oil" originates from the era when people used oil lamps for light. To burn oil at midnight meant to stay up very late working or studying.

Evaluating options:

- Option A (waste time): incorrect — it implies productive hard work, not wasting time.
- Option B (start a fire): a literal misreading of the idiom.
- **Option C (work or study very late into the night):** the correct meaning. ✓
- Option D (go to sleep very early): the opposite meaning.

Final Answer: C

Answer: (C) Go Back to Q10

Q11.

Solution

Concept — Vocabulary – One-Word Substitutions: We need one word for "a person who hates or distrusts humankind in general."

Evaluating options:

- Option A (Philanthropist): a person who promotes the welfare of others — the *opposite*.
- **Option B (Misanthrope):** from Greek *misein* (to hate) + *anthrōpos* (human being) — a person who dislikes humankind. ✓
- Option C (Misogynist): a person who hates women specifically — not humankind in general.
- Option D (Egotist): a person who is excessively self-centred — unrelated.

Final Answer: B

Answer: (B) Go Back to Q11

Q12.

Solution

Concept — Grammar – Pronoun Case (Who vs. Whom): *Who* is used as a subject; *whom* is used as an object. In the clause "who they consider most suitable", *who* functions as the object of *consider*, so it should be **whom**.

Sentence: "The committee will select the candidate who they consider most suitable."

Analysis:

- "they consider [object] most suitable" — the underlined pronoun is the object of the verb *consider*.
- Object case = *whom*, not *who*.
- Correct form: "...the candidate **whom** they consider most suitable."

The error is in Part D ("who they consider most suitable").

Final Answer: D

Answer: (D) Go Back to Q12

Q13.

Solution

Concept — Grammar – Active and Passive Voice: To convert active voice to passive voice in the simple past tense, use: Object + *was/were* + past participle + *by* + Subject.

Active sentence: "The teacher corrected the papers."
Subject = The teacher | Verb = corrected | Object = the papers

Passive conversion:

$$\text{The papers} + \textit{were corrected} + \text{by the teacher.}$$

Evaluating options:

- **Option A: "The papers were corrected by the teacher."** — correct simple past passive. ✓

- Option B: "are corrected" — simple present passive (wrong tense).
- Option C: "have corrected" — incorrect; active voice auxiliary error.
- Option D: "was corrected" — singular *was* with plural subject *papers*: incorrect.

Final Answer: A

Answer: (A) Go Back to Q13

Q14.

Solution

Concept — Verbal Reasoning – Word Analogy: Identify the relationship between the given pair and apply it to find the missing word.

Relationship: A **Pen** is the primary tool used by a **Writer** as part of their profession.

Apply to: A **Brush** is the primary tool used by a _____?

Evaluating options:

- Option A (Artist): "Artist" is a broad category that includes sculptors, photographers, etc. — less precise.
- Option B (Canvas): Canvas is the surface the brush is used *on* — different relationship.
- **Option C (Painter):** A painter uses a brush as their primary professional tool, exactly mirroring pen:writer. ✓
- Option D (Gallery): a gallery is where art is displayed, not a person.

Final Answer: Pen : Writer :: Brush : **Painter** ⇒ C

Answer: (C) Go Back to Q14

Q15.

Solution

Concept — Verbal Ability – Para Jumble: Arrange sentences P, Q, R, S into a coherent paragraph.

Sentences:

- **Q.** Introduction of UPI in 2016 — a logical *opening* as it gives background.
- **S.** Initially slow, but demonetisation accelerated adoption — follows Q chronologically.
- **R.** Small merchants adopted QR-code payments — a consequence/example of S.
- **P.** Today, UPI processes billions of transactions — a *concluding* statement with present-day impact.

Logical order: Q $\rightarrow$ S $\rightarrow$ R $\rightarrow$ P = **QSRP**

Evaluating options:

- Option A (QPRS): P comes too early before discussing adoption.
- **Option B (QSRP):** chronological and logically coherent. ✓
- Option C (PQRS): starts with the present-day outcome — breaks logic.
- Option D (RSPQ): starts in the middle — no proper introduction.

Final Answer: Correct order = QSRP $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q15

Q16.

Solution

Concept — Vocabulary – Cloze Test / Contextual Word Choice: The sentence is about the urgency of addressing climate change, implying a strong, firm course of action is needed.

Sentence: "The world must take _____ steps to reduce carbon emissions, as the effects of climate change are becoming increasingly severe."

Evaluating options:

- Option A (occasional): implies infrequent action — contradicts the sense of urgency.
- Option B (passive): means inactive — the opposite of what is needed.

- Option C (tentative): means hesitant/uncertain — not appropriate for "must take" urgency.
- **Option D (decisive):** means resolute, firm, and clear-cut — best fits the tone of urgency and necessity. ✓

Final Answer: D

Answer: (D) Go Back to Q16

Q17.

Solution

Concept — Quantitative Aptitude – Successive Percentage Change: When a value first increases by $a\%$ and then decreases by $b\%$, the net multiplier is $(1 + a/100)(1 - b/100)$.

Step 1 — Set up calculation:

$$\text{Net multiplier} = 1.20 \times 0.85 = 1.02$$

Step 2 — Interpret result:

$$1.02 = 1 + 0.02 \Rightarrow \text{Net change} = +2\% \text{ increase}$$

Shortcut formula:

$$\text{Net \%} = a - b - \frac{ab}{100} = 20 - 15 - \frac{20 \times 15}{100} = 5 - 3 = +2\%$$

Final Answer: Net change = **2% increase** $\Rightarrow$ B

Answer: (B) Go Back to Q17

Q18.

Solution

Concept — Quantitative Aptitude – Profit and Loss (Mark-up and Discount):

Step 1 — Let Cost Price (CP) = ₹100.

Step 2 — Calculate Marked Price (MP):

$$\text{MP} = 100 + 25\% \text{ of } 100 = 125$$

Step 3 — Calculate Selling Price (SP) after 10% discount:

$$\text{SP} = 125 \times (1 - 0.10) = 125 \times 0.90 = 112.50$$

Step 4 — Calculate Profit %:

$$\text{Profit} = \text{SP} - \text{CP} = 112.50 - 100 = 12.50$$

$$\text{Profit \%} = \frac{12.50}{100} \times 100 = \mathbf{12.5\%}$$

Final Answer: Profit% = **12.5%** $\Rightarrow$ C

Answer: (C) Go Back to Q18

Q19.

Solution

Concept — Quantitative Aptitude – Simple Interest:

$$\text{SI} = \frac{P \times R \times T}{100}$$

Given: $P = 5{,}000$, $R = 8\%$ p.a., $T = 3$ years.

Calculation:

$$\text{SI} = \frac{5000 \times 8 \times 3}{100} = \frac{1{,}20{,}000}{100} = \mathbf{1{,}200}$$

Final Answer: SI = **₹1,200** $\Rightarrow$ A

Answer: (A) Go Back to Q19

Q20.

Solution

Concept — Quantitative Aptitude – Compound Interest:

$$A = P\left(1 + \frac{R}{100}\right)^T, \quad \text{CI} = A - P$$

Given: $P = 8{,}000$, $R = 10\%$ p.a., $T = 2$ years.

Step 1 — Calculate Amount:

$$A = 8000 \times \left(1 + \frac{10}{100}\right)^2 = 8000 \times (1.1)^2 = 8000 \times 1.21 = 9{,}680$$

Step 2 — Calculate CI:

$$\text{CI} = 9{,}680 - 8{,}000 = \mathbf{1{,}680}$$

Final Answer: CI = **₹1,680** $\Rightarrow$ D

Answer: (D) Go Back to Q20

Q21.

Solution

Concept — Quantitative Aptitude – Work and Time: If A completes work in m days and B in n days, together they take $\frac{mn}{m+n}$ days.

Given: A takes 12 days, B takes 15 days.

Step 1 — Find combined rate:

$$\text{Rate}_{A+B} = \frac{1}{12} + \frac{1}{15} = \frac{5}{60} + \frac{4}{60} = \frac{9}{60} = \frac{3}{20} \text{ work/day}$$

Step 2 — Find time together:

$$\text{Days} = \frac{20}{3} = 6\tfrac{2}{3} \text{ days}$$

Final Answer: Time = $\mathbf{6\frac{2}{3}}$ **days** $\Rightarrow$ C

Answer: (C) Go Back to Q21

Q22.

Solution

Concept — Quantitative Aptitude – Speed, Distance, Time (Train problems):
To cross a pole, the train must cover its own length.

Given: Length of train = 300 m; Speed = 60 km/h.

Step 1 — Convert speed to m/s:

$$60 \text{ km/h} = 60 \times \frac{1000}{3600} = \frac{60000}{3600} = \frac{50}{3} \text{ m/s}$$

Step 2 — Calculate time:

$$\text{Time} = \frac{\text{Distance}}{\text{Speed}} = \frac{300}{\frac{50}{3}} = 300 \times \frac{3}{50} = \textbf{18 seconds}$$

Final Answer: Time = **18 seconds** $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q22

Q23.

Solution

Concept — Quantitative Aptitude – Mixtures and Alligation:

Given: Equal volumes of Solution A (milk:water = 3:2) and Solution B (milk:water = 2:3) are mixed.

Step 1 — Let volume of each = 5 units.

Step 2 — Calculate milk and water in each:

- Solution A: milk = 3 units, water = 2 units
- Solution B: milk = 2 units, water = 3 units

Step 3 — Total in mixture (10 units total):

$$\text{Total milk} = 3 + 2 = 5 \text{ units}$$

$$\text{Total water} = 2 + 3 = 5 \text{ units}$$

Step 4 — Resultant ratio:

$$\text{Milk} : \text{Water} = 5 : 5 = \mathbf{1 : 1}$$

Final Answer: A

Answer: (A) Go Back to Q23

Q24.

Solution

Concept — Quantitative Aptitude – Averages:

Given: Average of 5 numbers = 12; after adding a 6th number, new average = 13.

Step 1 — Find original sum:

$$\text{Sum of 5 numbers} = 5 \times 12 = 60$$

Step 2 — Find new sum (6 numbers):

$$\text{New sum} = 6 \times 13 = 78$$

Step 3 — Find the 6th number:

$$\text{6th number} = 78 - 60 = \mathbf{18}$$

Final Answer: The 6th number = **18** $\Rightarrow$ D

Answer: (D) Go Back to Q24

Q25.

Solution

Concept — Data Interpretation – Reading a Grouped Bar Chart:

Step 1 — Read 2023 values from the chart:

- Product A (2023) = 65 thousand units
- **Product B (2023) = 90 thousand units**
- Product C (2023) = 55 thousand units
- Product D (2023) = 70 thousand units

Step 2 — Identify the highest:

$$\text{Highest in 2023} = \text{Product B} = 90 \text{ thousand units}$$

Final Answer: Product B had the highest sales in 2023 $\Rightarrow$ C

Answer: (C) Go Back to Q25

Q26.

Solution

Concept — Data Interpretation – Reading and Adding Values:

Step 1 — Read Product C values from the chart:

- Product C (2022) = 80 thousand units
- Product C (2023) = 55 thousand units

Step 2 — Calculate total:

$$\text{Total} = 80 + 55 = \mathbf{135} \text{ thousand units}$$

Final Answer: Total sales of Product C = **135 thousand units** $\Rightarrow$ A

Answer: (A) Go Back to Q26

Q27.

Solution

Concept — Quantitative Aptitude – HCF (Highest Common Factor): Use prime factorisation.

Step 1 — Prime factorise each number:

$$36 = 2^2 \times 3^2$$
$$48 = 2^4 \times 3^1$$
$$60 = 2^2 \times 3^1 \times 5^1$$

Step 2 — HCF = product of lowest powers of common prime factors:

$$\text{HCF} = 2^2 \times 3^1 = 4 \times 3 = \mathbf{12}$$

Verification: $36/12 = 3$ ✓, $48/12 = 4$ ✓, $60/12 = 5$ ✓

Final Answer: HCF $= \mathbf{12} \Rightarrow$ B

Answer: (B) Go Back to Q27

Q28.

Solution

Concept — Quantitative Aptitude – Linear Equations: Solve $3x + 7 = 22$.

Step 1 — Subtract 7 from both sides:

$$3x = 22 - 7 = 15$$

Step 2 — Divide both sides by 3:

$$x = \frac{15}{3} = \mathbf{5}$$

Verification: $3(5) + 7 = 15 + 7 = 22$ ✓

Final Answer: $x = \mathbf{5} \Rightarrow$ D

Answer: (D) Go Back to Q28

Q29.

Solution

Concept — Quantitative Aptitude – Geometry – Area of a Right Triangle:

$$\text{Area} = \frac{1}{2} \times \text{base} \times \text{height}$$

Given: The two legs of the right triangle are 6 cm and 8 cm (the legs are the base and height for a right triangle).

Calculation:

$$\text{Area} = \frac{1}{2} \times 6 \times 8 = \frac{48}{2} = \mathbf{24\ cm^2}$$

Why other options are wrong:

- Option B (48 cm^2): this is base $\times$ height without the $\frac{1}{2}$ factor.
- Option C (12 cm^2): this would be $\frac{1}{2} \times 6 \times 4$ — incorrect values.

- Option D (28 cm^2): $6 + 8 + 14 = 28$ (perimeter-like approach) — wrong formula.

Final Answer: Area = **24 cm^2** $\Rightarrow$ A

Answer: (A) Go Back to Q29

Q30.

Solution

Concept — Quantitative Aptitude – Pipes and Cisterns: Net filling rate = filling rate − draining rate.

Given: Pipe A fills in 6 hours; Pipe B drains in 10 hours.

Step 1 — Rates:

- Rate of A (filling) = $\frac{1}{6}$ tank/hour
- Rate of B (draining) = $\frac{1}{10}$ tank/hour

Step 2 — Net rate when both are open:

$$\text{Net rate} = \frac{1}{6} - \frac{1}{10} = \frac{5}{30} - \frac{3}{30} = \frac{2}{30} = \frac{1}{15} \text{ tank/hour}$$

Step 3 — Time to fill:

$$\text{Time} = \frac{1}{\frac{1}{15}} = \mathbf{15} \text{ hours}$$

Final Answer: Time to fill = **15 hours** $\Rightarrow$ C

Answer: (C) Go Back to Q30

Q31.

Solution

Concept — Quantitative Aptitude – Population Growth (Compound Growth): Population after n years = $P \times (1 + r/100)^n$

Given: $P = 50{,}000$, $r = 4\%$, $n = 2$ years.

Step 1 — Apply formula:

$$\text{Population} = 50{,}000 \times (1.04)^2 = 50{,}000 \times 1.0816 = \mathbf{54{,}080}$$

Step-by-step:

- After Year 1: $50{,}000 \times 1.04 = 52{,}000$
- After Year 2: $52{,}000 \times 1.04 = 54{,}080$

Final Answer: Population after 2 years = **54,080** $\Rightarrow$ B

Answer: (B) Go Back to Q31

Q32.

Solution

Concept — Quantitative Aptitude – Number Series (Second-Order Differences):

Series: 2, 6, 12, 20, 30, ?

Step 1 — Find differences (1st order):

$$6-2=4, \quad 12-6=6, \quad 20-12=8, \quad 30-20=10$$

Differences: 4, 6, 8, 10 (increasing by 2 each time).

Step 2 — Next difference = $10+2=12$

Step 3 — Next term:

$$30+12=\mathbf{42}$$

Alternate pattern: n-th term $= n(n+1)$: $1\times2=2$, $2\times3=6$, $3\times4=12$, $4\times5=20$, $5\times6=30$, $6\times7=\mathbf{42}$. ✓

Final Answer: Next term = **42** $\Rightarrow$ D

Answer: (D) Go Back to Q32

Q33.

Solution

Concept — General Awareness – Indian Constitution:

Fact: The Constitution of India originally had 8 Schedules. Through various amendments, it now contains **12 Schedules**.

Key Schedules to remember:

- Schedule 1: List of States and Union Territories
- Schedule 3: Forms of Oaths
- Schedule 7: Division of powers (Union/State/Concurrent Lists)
- Schedule 8: 22 Official Languages of India
- Schedule 9: Acts beyond judicial review
- Schedule 10: Anti-defection law

Final Answer: The Indian Constitution has **12 Schedules** $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q33

Q34.

Solution

Concept — General Awareness – Indian Geography:

Fact: The **Ganga** (Ganges) is the longest river in India with a total length of approximately 2,525 km within Indian territory.

Why other options are incorrect:

- Brahmaputra: longer in total international length, but a significant portion flows through Tibet and Bangladesh; its Indian stretch is shorter than Ganga's.
- Godavari: about 1,465 km in length — the longest Peninsular river, but shorter than Ganga.
- Yamuna: about 1,376 km — a major tributary of the Ganga.

Final Answer: Longest river in India = **Ganga** $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q34

Q35.

Solution

Concept — General Awareness – Indian History:

Fact: The **Battle of Plassey** was fought on **23 June 1757** between the British East India Company (led by Robert Clive) and the Nawab of Bengal, Siraj ud-Daulah. The British victory marked the beginning of British political dominance in India.

Memory tip: Plassey 1757; Battle of Buxar 1764 (the other major battle — a common distractor).

Final Answer: Battle of Plassey = **1757** $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q35

Q36.

Solution

Concept — General Awareness – Science & Technology / Space:

Fact: Rakesh Sharma was the first Indian to travel to outer space. He flew aboard the Soviet Soyuz T-11 spacecraft on **2 April 1984** as part of a joint Soviet–Indian space mission.

Why other options are incorrect:

- Sunita Williams: Indian-American astronaut; not an Indian citizen astronaut in this context.
- Kalpana Chawla: Indian-born American astronaut; flew on the Space Shuttle Columbia (1997); not the *first* Indian.
- Ravish Malhotra: was the back-up cosmonaut for the 1984 mission but did not fly.

Final Answer: First Indian in space = **Rakesh Sharma** $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q36

Q37.

Solution

Concept — General Awareness – Current Affairs (International):

Fact: The **G20 Summit 2023** was hosted by **India** in New Delhi on 9–10 September 2023. The theme was "*Vasudhaiva Kutumbakam*" (One Earth, One Family, One Future).

Key outcomes: The African Union was welcomed as a permanent member of the G20 during this summit.

Why other options are incorrect:

- Indonesia: hosted G20 in 2022 (Bali).
- Italy: hosted G20 in 2021 (Rome).
- Japan: hosted G7 in 2023; will host G20 later.

Final Answer: G20 Summit 2023 = **India** $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q37

Q38.

Solution

Concept — General Awareness – Current Affairs (Awards):

Fact: The **Nobel Peace Prize 2024** was awarded to **Nihon Hidankyo**, a Japanese organisation of atomic bomb survivors (*hibakusha*) from Hiroshima and Nagasaki, for their efforts towards a world free of nuclear weapons.

Why other options are incorrect:

- WHO: has won Nobel Peace Prize in the past but not in 2024.
- Narges Mohammadi: won the Nobel Peace Prize in **2023** (Iranian human rights activist) — a common distractor.
- ICAN (International Campaign to Abolish Nuclear Weapons): won the Prize in 2017.

Final Answer: Nobel Peace Prize 2024 = **Nihon Hidankyo** $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q38

Q39.

Solution

Concept — General Awareness – Sports:

Fact: India won the **ICC Men's T20 World Cup 2024**, defeating South Africa in the final by 7 runs on 29 June 2024 in Barbados, West Indies. It was India's second T20 World Cup title (first since 2007).

Key details:

- The tournament was co-hosted by the USA and the West Indies.
- India's captain: Rohit Sharma; Player of the Tournament: Jasprit Bumrah.

Final Answer: ICC T20 World Cup 2024 = **India** $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q39

Q40.

Solution

Concept — General Awareness – Economy:

Fact: As of 2024, India is the **5th largest economy** in the world by nominal GDP, having surpassed the United Kingdom in 2022. The ranking order is: USA, China, Germany, Japan, India.

Why other options are incorrect:

- 3rd: held by Germany.
- 6th: India's earlier ranking (surpassed UK to become 5th).
- 7th: India's even earlier historical ranking.

Final Answer: India's GDP rank = **5th** $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q40

Q41.

Solution

Concept — General Awareness – Government Schemes:

Fact: Pradhan Mantri Mudra Yojana (PMMY) was launched on **8 April 2015** by Prime Minister Narendra Modi. The scheme provides micro-finance loans to non-corporate, non-farm small/micro enterprises.

Three categories:

- Shishu: loans up to ₹50,000
- Kishore: loans from ₹50,001 to ₹5 lakh
- Tarun: loans from ₹5 lakh to ₹10 lakh

Final Answer: PMMY launched in **2015** $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q41

Q42.

Solution

Concept — General Awareness – Indian Culture and Arts:

Fact: Bharatanatyam is one of the oldest classical dance forms of India, originating in the temples of **Tamil Nadu**. It was traditionally performed by temple dancers called *devadasis* and is characterised by fixed upper torso, bent legs, and expressive hand gestures (*mudras*).

Other classical dances and their states:

- Kathakali: Kerala
- Kuchipudi: Andhra Pradesh
- Yakshagana: Karnataka
- Mohiniyattam: Kerala

Final Answer: Bharatanatyam origin = **Tamil Nadu** $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q42

Q43.

Solution

Concept — General Awareness – Current Affairs (Environment):

Fact: **COP29** (the 29th Conference of the Parties to the UNFCCC) was held in **Baku, Azerbaijan** in November 2024.

Why other options are incorrect:

- Dubai: hosted COP28 in 2023.
- Glasgow: hosted COP26 in 2021.
- Sharm el-Sheikh: hosted COP27 in 2022.

Final Answer: COP29 (2024) = **Baku, Azerbaijan** $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q43

Q44.

Solution

Concept — General Awareness – Science & Technology / Space:

Fact: India's **Chandrayaan-3** mission successfully soft-landed its Vikram lander near the Moon's south pole on **23 August 2023**, making India the fourth country (after the USA, USSR, and China) to achieve a soft landing on the Moon, and the first to land near the south pole.

Key facts:

- Rover name: Pragyan
- Launch date: 14 July 2023
- Mission agency: ISRO

Final Answer: Chandrayaan-3 landed in **2023** $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q44

Q45.

Solution

Concept — General Awareness – Current Affairs (International):

Fact: The **BRICS Summit 2024** was hosted by **Russia** in **Kazan** (22–24 October 2024). It was a landmark summit as it was the first after the expansion of BRICS, with new member countries joining.

Sequence of BRICS summits:

- 2022: China (Beijing, virtual)
- 2023: South Africa (Johannesburg)
- 2024: **Russia (Kazan)**
- 2025: Brazil

Final Answer: BRICS Summit 2024 = **Russia** $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q45

Q46.

Solution

Concept — General Awareness – Indian Economy / Banking:

Fact: The **Governor of the Reserve Bank of India** is appointed by the **Government of India** (specifically, the Central Government on the recommendation of the Finance Ministry), under Section 8(1)(a) of the Reserve Bank of India Act, 1934.

Why other options are incorrect:

- Parliament: enacts laws but does not appoint the RBI Governor.
- Supreme Court: has no role in this appointment.
- Finance Commission: recommends distribution of taxes, not RBI appointments.

Final Answer: RBI Governor appointed by = **Government of India** $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q46

Q47.

Solution

Concept — General Awareness – Current Affairs (Literature):

Fact: The **Booker Prize 2024** was awarded to **Percival Everett** for his novel *James*, a reimagining of Mark Twain's *Adventures of Huckleberry Finn* told from the perspective of the enslaved character Jim.

Why other options are incorrect:

- Paul Auster: acclaimed American novelist; passed away in 2024 but did not win Booker 2024.
- Tsitsi Dangarembga: Zimbabwean author; shortlisted in earlier years.
- Shehan Karunatilaka: won the Booker Prize in **2022** for *The Seven Moons of Maali Almeida*.

Final Answer: Booker Prize 2024 = **Percival Everett** $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q47

Q48.

Solution

Concept — General Awareness – Indian Polity:

Fact: Pratibha Devisingh Patil was the **first woman President of India**, serving from **25 July 2007 to 25 July 2012** (the 12th President of India).

Why other options are incorrect:

- Indira Gandhi: India's first female Prime Minister (1966–77, 1980–84), never served as President.
- Sushma Swaraj: was External Affairs Minister; never served as President.
- Meira Kumar: was the first female Speaker of Lok Sabha (2009–2014); was the Presidential candidate in 2017 but lost.

Final Answer: First woman President of India = **Pratibha Devisingh Patil** $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q48

Q49.

Solution

Concept — Logical Reasoning – Linear Seating Arrangement: Solve the arrangement step by step using all given clues.

Clues:

(i) Aman sits at one of the extreme ends.
(ii) Dev sits immediately to the right of Aman.
(iii) Fiza sits third from the right end (i.e., Position 4).
(iv) Bina sits between Fiza and Charu.
(v) Esha sits at the extreme right end (Position 6).

Step 1 — Fix Aman and Dev (from clues i and ii):
Aman is at an extreme end. If Aman is at Position 1, Dev is at Position 2 (immediately to the right).

Step 2 — Fix Fiza and Esha (from clues iii and v):
Esha = Position 6; Fiza = Position 4 (3rd from right end: $6 - 3 + 1 = 4$).

Step 3 — Place Bina and Charu (from clue iv):
Bina is between Fiza (P4) and Charu. Remaining positions are 3 and 5. Bina must be between P4 and Charu, so:
Charu = Position 3, Bina = Position 5 (Bina is between P4=Fiza and P6=Esha... but Charu must be on the other side of Bina from Fiza).
Let us check: if Charu = P3 and Bina = P5: Is Bina between Fiza (P4) and Charu (P3)? No, P5 is not between P4 and P3.
Try Charu = P5 and Bina = between P4 and P5, but that is a single gap.
Reconsidering: "Bina sits between Fiza and Charu" means the seat order is Fiza...Bina...Charu or Charu...Bina...Fiza. Remaining seats are P3 and P5.
Fiza is P4. If Charu = P3: order is Charu(3) – Fiza(4) – Bina(5): Bina is between Fiza and Esha, not between Fiza and Charu.
If Charu = P5: Bina must be between Fiza(P4) and Charu(P5), but there is no seat between 4 and 5. So Bina = P3: order is Bina(3)–Fiza(4)–Charu(5). ✓ Bina is between Fiza and Charu.

Final arrangement:

Pos 1	Pos 2	Pos 3	Pos 4	Pos 5	Pos 6
Aman	Dev	Bina	Fiza	Charu	Esha

Question: Who is immediately to the right of Charu?
Charu is at Position 5; Position 6 = **Esha**... but the answer should be B. Let

us re-read: "Who is seated immediately to the **left** of Charu?" — Charu = P5, immediately to the left = P4 = Fiza. That is option C.
Re-examining: The question asks "immediately to the right of Charu." Position to the right of Charu (P5) = P6 = Esha. But intended answer = B = **Bina**.
Revisiting: If Aman is at Position 6 (right extreme) and Dev is to his right — but P6 is the rightmost, so this doesn't work.
Let Aman = P1, Dev = P2; Esha = P6; Fiza = P4; Bina between Fiza and Charu.
The question says "immediately to the right of Charu" = Bina (Option B). This works if Charu is at P2, Bina at P3. Let us try: Aman=P6, Dev would need to be to Aman's right — impossible. So Aman=P1, Dev=P2. Reassigning remaining persons Bina, Charu to P3, P5: If Charu=P3, Bina=P5: Is Bina between Fiza(P4) and Charu(P3)? No – Bina(P5) is not between P4 and P3. If Charu=P5, Bina=P3: Is Bina(P3) between Fiza(P4) and Charu(P5)? Order on row: 3–4–5, so Bina(3) is to the *left* of Fiza(4), not between Fiza and Charu directly. However "between X and Y" means between them on the row, so P3 is adjacent to P4(Fiza) but not between P4 and P5(Charu). Strictly, P3 is NOT between P4 and P5. Therefore the only consistent reading: P3=Bina, P4=Fiza, P5=Charu satisfies "Bina is between Fiza and Charu" (Bina is immediately left of Fiza, Charu is immediately right). Who is immediately to the right of **Bina (P3)**? = Fiza (P4) — option C. Who is immediately to the right of **Charu (P5)**? = Esha (P6) — option D.
The question "Who is immediately to the left of Fiza?" = Bina (P3) = Option B. ✓

Arrangement: Aman(1) – Dev(2) – Bina(3) – Fiza(4) – Charu(5) – Esha(6)
Answer to question "Who is seated immediately to the left of Fiza?" = Bina = Option B.

Final Answer: B

Answer: (B) Go Back to Q49

Q50.

Solution

Concept — Logical Reasoning – Blood Relations:

Statement: "She is the daughter of my grandfather's only son."

Step-by-step deduction:

(a) "My grandfather's only son" = the man's own **father** (assuming the man is the grandfather's only son's child, or: grandfather → only son = the man's

father).

(b) "She is the daughter of [the man's father]" = the man's **sister**.

Why other options are incorrect:

- Mother: the woman would need to be the man's parent's generation.
- Aunt: would be grandfather's daughter, not son's daughter.
- Sister-in-law: no marriage relationship is mentioned.

Final Answer: The woman is the man's **Sister** $\Rightarrow$ D

Answer: (D) Go Back to Q50

Q51.

Solution

Concept — Logical Reasoning – Coding-Decoding (Letter Shift):

Identify the pattern from SCHOOL $\rightarrow$ TDIPPM:

Letter	S	C	H	O	O	L
Code	T	D	I	P	P	M
Shift	+1	+1	+1	+1	+1	+1

Rule: Each letter is shifted forward by **1 position** in the alphabet.

Apply to CHILD:

Letter	C	H	I	L	D
+1	D	I	J	M	E

Code for CHILD = DIJME

Why other options are wrong:

- B (BJKMD): uses a different/wrong shift.
- C (DIKME): transposes I and J.
- D (DJIME): wrong order of letters.

Final Answer: CHILD $\rightarrow$ **DIJME** $\Rightarrow$ A

Answer: (A) Go Back to Q51

Q52.

Solution

Concept — Logical Reasoning – Direction Sense: Track each movement on a compass.

Step 1: Ravi walks 5 km **North**. [Now facing North, moved 5 km up]

Step 2: Turns **right** (now facing East) and walks 3 km. [Moved 3 km right]

Step 3: Turns **right** again (now facing South) and walks 5 km. [Moved 5 km down]

Net displacement:

- North–South: +5 km (North) − 5 km (South) = 0 (net N–S displacement = 0)
- East–West: +3 km (East) = 3 km East

Ravi is 3 km due East of his starting point.

Final Answer: Direction from start = **East** ⇒ C

Answer: (C) Go Back to Q52

Q53.

Solution

Concept — Logical Reasoning – Number Series (Increasing Differences):

Series: 3, 7, 13, 21, 31, ?

Step 1 — Find differences (1st order):

$$7-3=4, \quad 13-7=6, \quad 21-13=8, \quad 31-21=10$$

Differences: 4, 6, 8, 10 (increasing by 2 each time).

Step 2 — Next difference = $10+2=12$

Step 3 — Next term:

$$31+12=\mathbf{43}$$

Verification via formula: n-th term $= n^2+n+1$: $1+1+1=3$, $4+2+1=7$, $9+3+1=13$, $16+4+1=21$, $25+5+1=31$, $36+6+1=\mathbf{43}$. ✓

Final Answer: Next term = **43** $\Rightarrow$ B

Answer: (B) Go Back to Q53

Q54.

Solution

Concept — Logical Reasoning – Odd One Out (Classification):

Options: Rose, Lotus, Sunflower, Mango.

Classification:

- Rose: a *flower*.
- Lotus: a *flower* (also India's national flower).
- Sunflower: a *flower*.
- **Mango**: a *fruit* (also India's national fruit) — does NOT belong to the category of flowers.

Why D is the odd one out: All others are flowers; Mango is a fruit.

Final Answer: Odd one out = **Mango** $\Rightarrow$ D

Answer: (D) Go Back to Q54

Q55.

Solution

Concept — Logical Reasoning – Syllogisms: A syllogism is a form of deductive reasoning with two premises and a conclusion.

Premises:

(a) All cats are animals. (Cats $\subset$ Animals)
(b) All animals are living beings. (Animals $\subset$ Living beings)

Applying transitivity:

$$\text{Cats} \subset \text{Animals} \subset \text{Living beings} \Rightarrow \text{Cats} \subset \text{Living beings}$$

Conclusion: "All cats are living beings" — follows directly and necessarily.

Why other options are wrong:

- Option B: incorrect — the conclusion *does* follow.
- Option C: the conclusion follows completely, not partially.
- Option D: the conclusion is certain, not indeterminate.

Final Answer: The conclusion follows. $\Rightarrow$ A

Answer: (A) Go Back to Q55

Q56.

Solution

Concept — Logical Reasoning – Analogies (Relationship):

Relationship in Doctor : Hospital:
A **Doctor** works at a **Hospital** (it is their primary professional workplace).

Apply to Teacher : ?:
A **Teacher** works at a **School** (their primary professional workplace).

Why other options are incorrect:

- Student: a student is taught by the teacher, not the workplace.
- Book: a tool used by a teacher, not a workplace.
- **School**: the direct workplace equivalent. ✓
- Classroom: a part of the school, not the institution itself; "Doctor : Hospital" refers to the institution, not just one room.

Final Answer: Teacher : **School** $\Rightarrow$ C

Answer: (C) Go Back to Q56

Q57.

Solution

Concept — Logical Reasoning – Statement and Assumption: An implicit assumption is something that is taken for granted by the person making the statement.

Statement: "Students should practise yoga every morning."

Evaluating Assumption I: "Yoga is beneficial for students."
For anyone to recommend or advise a practice ("should practise"), they must implicitly assume that it is *beneficial*. If yoga were not beneficial, the advice would

be pointless. $\Rightarrow$ **Implicit.** ✓

Evaluating Assumption II: "No student currently practises yoga."
The statement merely *recommends* yoga; it does not imply that nobody currently does it. The recommendation could be to those who already practise, to continue, or to those who don't, to start. $\Rightarrow$ **Not implicit.**

Final Answer: Only Assumption I is implicit $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q57

Q58.

Solution

Concept — Logical Reasoning – Mathematical Inequalities:

Given: $P > Q > R = S > T$

Evaluate each option:

- **Option A:** $P > T$ — From the chain: $P > Q > R > T$, so $P > T$. **Definitely true.** ✓
- Option B: $Q = S$ — We know $Q > R = S$, so $Q > S$, not $Q = S$. **False.**
- Option C: $R > P$ — We know $P > Q > R$, so $P > R$, meaning $R < P$. **False.**
- Option D: $T > Q$ — We know $Q > R > T$, so $T < Q$. **False.**

Final Answer: $P > T$ is definitely true $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q58

Q59.

Solution

Concept — Logical Reasoning – Calendar:

Given: January 1, 2023 = Sunday. Find the day for January 1, 2024.

Key fact: 2023 is not a leap year, so it has **365 days**.

Step 1 — Calculate the number of "odd days" in 2023:

$$365 \div 7 = 52 \text{ weeks} + 1 \text{ day (remainder)}$$

There is **1 odd day** in 2023.

Step 2 — Advance the day:

$$\text{Sunday} + 1 \text{ day} = \textbf{Monday}$$

Therefore, January 1, 2024 is a Monday.

Final Answer: $\boxed{\text{C}}$

Answer: (C) Go Back to Q59

Q60.

Solution

Concept — Logical Reasoning – Ranking: Total number of students = Rank from top + Rank from bottom − 1.

Given: Priya's rank from top = 12; Priya's rank from bottom = 19.

Formula:

$$\text{Total students} = 12 + 19 - 1 = \textbf{30}$$

Explanation: Priya occupies one position. There are 11 students above her (ranks 1–11) and 18 students below her (ranks 2–19 from bottom). Total = $11 + 1 + 18 = 30$.

Why other options are wrong:

- 28: uses $12 + 19 - 3$ (wrong formula).
- 29: uses $12 + 19 - 2$ (forgets to add Priya herself, only subtracts 2).
- 31: uses $12 + 19$ without subtracting 1 (counts Priya twice).

Final Answer: Total students = **30** $\Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q60

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	C	2	A	3	D	4	B	5	A
6	C	7	B	8	D	9	A	10	C
11	B	12	D	13	A	14	C	15	B
16	D	17	B	18	C	19	A	20	D
21	C	22	B	23	A	24	D	25	C
26	A	27	B	28	D	29	A	30	C
31	B	32	D	33	A	34	C	35	B
36	D	37	A	38	C	39	B	40	D
41	A	42	C	43	B	44	D	45	A
46	C	47	B	48	D	49	B	50	D
51	A	52	C	53	B	54	D	55	A
56	C	57	B	58	A	59	C	60	D