MAHCET Full-Length

Sample Paper – 3

Duration: 150 Minutes **Maximum Marks: 200**

Instructions

- This paper contains **200 Multiple Choice Questions** (Single Correct Answer), modelled on the **MAH-MBA CET** entrance examination.
- Each correct answer carries **+1 mark**. There is **no negative marking** for incorrect or unattempted answers.
- Only **one** option is correct. Choose carefully.
- Sections: Logical Reasoning (Q. 1–75), Abstract Reasoning (Q. 76–100), Quantitative Aptitude (Q. 101–150), Verbal Ability & Reading Comprehension (Q. 151–200).
- Use of mobile phones, calculators, or electronic gadgets is strictly prohibited.

Section 1: Logical Reasoning (Q. 1–75)

Q1. **Directions (Q1–Q5):** Read the following information carefully and answer the questions that follow.

Five friends — Alok, Bharti, Chetan, Durga, and Eshan — sit in a row of five seats numbered 1 (leftmost) to 5 (rightmost). All of them face **West**. Each person wears a shirt of a distinct colour: **Red, Blue, Green, Yellow,** or **White** (one each).

The following conditions apply:

- Alok sits at one of the extreme ends (seat 1 or seat 5).
- Chetan sits exactly in the middle (seat 3).
- Bharti is Alok's immediate right neighbour.

- Durga sits to the right of Chetan, with exactly one seat between them.
- The person in seat 1 wears Green, and the person in seat 5 wears Red.
- Bharti wears Yellow and Durga wears White.

What colour shirt does the person sitting in seat 3 wear?

(A) Yellow

(B) White

(C) Blue

(D) Green

Q2. Refer to the information in Q1 for this question.

Who sits at the rightmost seat (seat 5)?

(A) Alok

(B) Chetan

(C) Durga

(D) Eshan

Q3. Refer to the information in Q1 for this question.

How many people sit between Bharti and Eshan?

(A) One

(B) Two

(C) Three

(D) None

Q4. Refer to the information in Q1 for this question.

What colour shirt does Alok wear?

(A) Green

(B) Red

(C) Blue

(D) Yellow

Q5. Refer to the information in Q1 for this question.

Who is Durga's immediate left neighbour?

(A) Alok

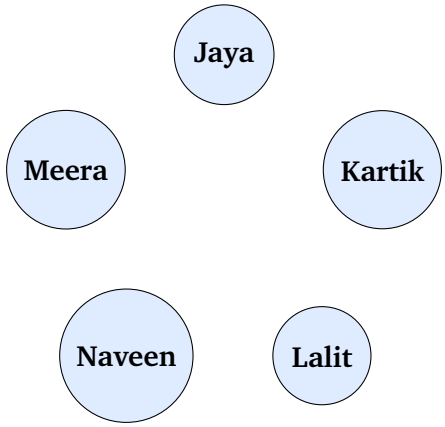
(B) Bharti

(C) Chetan

(D) Eshan

Q6. **Directions (Q6–Q10):** Read the following information carefully and answer the questions that follow.

Five people — Jaya, Kartik, Lalit, Meera, and Naveen — are seated around a circular table, all facing the **centre**.



The following conditions apply:

- Jaya and Lalit are **not** immediate neighbours.
- Kartik sits immediately to the right (clockwise) of Jaya.
- Naveen sits immediately to the right (clockwise) of Lalit.
- Meera and Kartik are **not** immediate neighbours.

Who sits two seats clockwise from Kartik?

(A) Jaya

(B) Lalit

(C) Meera

(D) Naveen

Q7. Refer to the information in Q6 for this question.

Who sits to the immediate left (anticlockwise) of Kartik?

(A) Jaya

(B) Meera

(C) Lalit

(D) Naveen

Q8. Refer to the information in Q6 for this question.

How many people sit between Jaya and Meera going clockwise (from Jaya to Meera)?

(A) One

(B) Two

(C) Three

(D) Four

Q9. Refer to the information in Q6 for this question.

Who is Lalit's immediate right (clockwise) neighbour?

(A) Kartik

(B) Naveen

(C) Jaya

(D) Meera

Q10. Refer to the information in Q6 for this question.

If Naveen and Meera swap their seats, who is now to the immediate left (anticlockwise) of Naveen?

(A) Lalit

(B) Meera

(C) Jaya

(D) Kartik

Q11. **Directions (Q11–Q15):** Read the following information carefully and answer the questions that follow.

Seven tasks — Audit (A), Budget (B), Compliance (C), Design (D), Evaluation (E), Forecast (F), and Governance (G) — are scheduled from Monday to Sunday, one task per day.

The following conditions apply:

- Audit is scheduled on Tuesday.
- Budget is scheduled exactly 2 days after Audit.
- Compliance is scheduled on the last day of the week (Sunday).
- Design is scheduled on the day immediately before Evaluation.
- Forecast is scheduled on Monday.
- Governance is scheduled on Wednesday, between Audit and Budget.

Which task is scheduled on Thursday?

(A) Governance

(B) Design

(C) Compliance

(D) Budget

Q12. Refer to the information in Q11 for this question.

Which task is scheduled on Wednesday?

(A) Audit

(B) Design

(C) Governance

(D) Compliance

Q13. Refer to the information in Q11 for this question.

Which task is scheduled on the day immediately before Design?

(A) Budget

(B) Forecast

(C) Governance

(D) Audit

Q14. Refer to the information in Q11 for this question.

How many tasks are scheduled between Forecast and Compliance?

(A) Four

(B) Five

(C) Six

(D) Three

Q15. Refer to the information in Q11 for this question.

Which pair of tasks is scheduled on consecutive days (in that order), where the first task comes alphabetically before the second?

(A) Audit and Budget

(B) Compliance and Governance

(C) Forecast and Audit

(D) Design and Evaluation

Q16. **Directions (Q16–Q20):** Read the following information carefully and answer the questions that follow.

A three-generation family has six members: **Ramesh, Savita, Tarun, Uma, Vikram,** and **Winnie**. Their occupations are Farmer, Teacher, Engineer, Doctor, Lawyer, and Banker (one each), and each keeps one pet: Turtle, Bird, Dog, Cat, Rabbit, or Fish (one each).

The following conditions apply:

- Ramesh is the father of Tarun and is married to Savita.

- Tarun is married to Uma; their children are Vikram (son) and Winnie (daughter).
- The Engineer has a Dog as a pet.
- The Doctor has a Cat as a pet.
- Ramesh is a Farmer and keeps a Turtle.
- Savita is a Teacher and keeps a Bird.
- The Banker has a Fish, and the Lawyer has a Rabbit.

Who in this family is a Doctor?

(A) Tarun

(B) Uma

(C) Winnie

(D) Vikram

Q17. Refer to the information in Q16 for this question.

Who is Vikram's paternal grandfather?

(A) Ramesh

(B) Tarun

(C) Vikram

(D) Uma

Q18. Refer to the information in Q16 for this question.

What is Savita's pet?

(A) Cat

(B) Turtle

(C) Bird

(D) Fish

Q19. Refer to the information in Q16 for this question.

What is Winnie's occupation?

(A) Lawyer

(B) Engineer

(C) Teacher

(D) Banker

Q20. Refer to the information in Q16 for this question.

Who has a Rabbit as a pet?

(A) Winnie

(B) Uma

(C) Vikram

(D) Tarun

Q21. **Directions (Q21–Q25):** Study the following information about product prices carefully and answer the questions that follow.

Five products — **Laptop, Phone, Tablet, Watch,** and **Camera** — were sold at different prices in 2022, 2023, and 2024. The base prices in 2022 were: Laptop = ₹50,000; Phone = ₹20,000; Tablet = ₹15,000; Watch = ₹8,000; Camera = ₹25,000.

The price changes are as follows:

- **2023:** Laptop's price is 20% more than its 2022 price (₹60,000). Phone's price is 10% less than its 2022 price (₹18,000). Tablet's price is ₹3,000 more than its 2022 price (₹18,000). Watch's price is 25% more than its 2022 price (₹10,000). Camera's price is 20% more than its 2022 price (₹30,000).
- **2024:** Phone's 2024 price equals Tablet's 2023 price (₹18,000). Laptop's 2024 price is ₹5,000 less than its 2023 price (₹55,000). Tablet's 2024 price is ₹2,000 more than its 2023 price (₹20,000). Watch's 2024 price is 20% more than its 2023 price (₹12,000). Camera's 2024 price is ₹5,000 more than its 2023 price (₹35,000).

Which product had the second highest price in 2022?

(A) Camera

(B) Phone

(C) Tablet

(D) Watch

Q22. Refer to the information in Q21 for this question.

Which product was the most expensive in 2023?

(A) Camera

(B) Laptop

(C) Tablet

(D) Phone

Q23. Refer to the information in Q21 for this question.

What is the ratio of Camera's 2024 price to Watch's 2024 price?

(A) 7:2

(B) 5:2

(C) 35:12

(D) 25:8

Q24. Refer to the information in Q21 for this question.

How did the Laptop's price change from 2022 to 2024?

(A) Decreased by ₹5,000

(B) Increased by ₹10,000

(C) No change

(D) Increased by ₹5,000

Q25. Refer to the information in Q21 for this question.

Which product had the same price in both 2023 and 2024?

(A) Phone

(B) Tablet

(C) Watch

(D) Camera

Q26. **Directions (Q26–Q30):** Read the following information carefully and answer the questions that follow.

Five artists — Uma, Vivek, Wren, Xavier, and Yolanda — are each from a different country: **France, Italy, Japan, Brazil,** and **India** (one each), and each specialises in a different art form: **Painting, Sculpture, Photography, Dance,** and **Music** (one each).

The following conditions apply:

- Uma is not from Europe (not from France or Italy).
- Vivek is from France and specialises in Painting.
- The artist from Japan specialises in Photography.
- Wren is from Brazil.
- Xavier specialises in Music and is from India.

Which country is Uma from?

(A) Brazil

(B) India

(C) Japan

(D) Italy

Q27. Refer to the information in Q26 for this question.

What art form does Yolanda specialise in?

(A) Painting

(B) Dance

(C) Photography

(D) Sculpture

Q28. Refer to the information in Q26 for this question.

Who is from Brazil?

(A) Uma

(B) Wren

(C) Vivek

(D) Xavier

Q29. Refer to the information in Q26 for this question.

Which country does the Painter come from?

(A) France

(B) Italy

(C) Brazil

(D) India

Q30. Refer to the information in Q26 for this question.

Who specialises in Dance?

(A) Yolanda

(B) Uma

(C) Wren

(D) Xavier

Q31. **Directions (Q31–Q35):** In a certain coding system, a word is coded in two steps: **Step 1** — Reverse the word; **Step 2** — Shift each letter forward by 2 positions in the English alphabet (A→C, B→D, . . . , Y→A, Z→B).

For example: **CAT** → TAC → **VCE**; **LAKE** → EKAL → **GMCN**.

Using the same coding rule, what is the code for the word RAMP?

(A) QOCT

(B) ROCT

(C) PMCT

(D) SOCT

Q32. Directions (Q32–Q35): Use the same coding rule as described in Q31 (reverse the word, then shift each letter forward by 2).

The code PCNR stands for which word?

(A) PLAN

(B) LANE

(C) PALE

(D) PEAL

Q33. Use the same coding rule as described in Q31.

What is the code for the word DOME?

(A) FOQG

(B) GOFQ

(C) GOQE

(D) GOQF

Q34. Use the same coding rule as described in Q31.

The code MUKT stands for which word?

(A) SILK

(B) RINK

(C) RISK

(D) SINK

Q35. Use the same coding rule as described in Q31.

What is the code for the word meaning "a flying mammal" (a three-letter word)?

(A) CVD

(B) VCD

(C) DCV

(D) CDA

Q36. **Directions (Q36–Q40):** In each question below, two statements are given followed by two conclusions. Assuming the statements to be true (even if they seem to differ from commonly known facts), decide which conclusion(s) **definitely follow(s)**.

Statements:

1. All Mangoes are Fruits.
2. All Fruits are Healthy.

Conclusions:

I. All Mangoes are Healthy.
II. Some Healthy things are Mangoes.

(A) Only Conclusion I definitely follows

(B) Only Conclusion II definitely follows

(C) Both Conclusions I and II definitely follow

(D) Neither Conclusion I nor II definitely follows

Q37. **Statements:**

1. Some Birds are Parrots.
2. All Parrots are Green.

Conclusions:

I. All Birds are Green.
II. Some Birds are Green.

(A) Only Conclusion I definitely follows

(B) Only Conclusion II definitely follows

(C) Both Conclusions I and II definitely follow

(D) Neither Conclusion I nor II definitely follows

Q38. Statements:

1. No Cats are Dogs.
2. All Dogs are Mammals.

Conclusions:

I. No Cats are Mammals.
II. Some Mammals are not Cats.

(A) Only Conclusion I definitely follows
(B) Only Conclusion II definitely follows
(C) Both Conclusions I and II definitely follow
(D) Neither Conclusion I nor II definitely follows

Q39. Statements:

1. Some Doctors are Engineers.
2. No Engineer is a Lawyer.

Conclusions:

I. Some Doctors are not Lawyers.
II. No Doctor is a Lawyer.

(A) Only Conclusion I definitely follows
(B) Only Conclusion II definitely follows
(C) Both Conclusions I and II definitely follow
(D) Neither Conclusion I nor II definitely follows

Q40. Statements:

1. All Squares are Rectangles.
2. All Rectangles are Parallelograms.

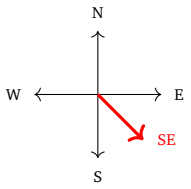
Conclusions:

I. All Squares are Parallelograms.
II. Some Parallelograms are Squares.

(A) Only Conclusion I definitely follows
(B) Only Conclusion II definitely follows
(C) Both Conclusions I and II definitely follow
(D) Neither Conclusion I nor II definitely follows

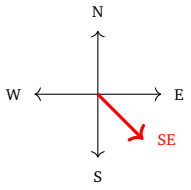
Q41. **Directions (Q41–Q45):** Each question describes a person's initial facing direction and a series of turns. Determine the final direction the person faces.

Ravi faces **North**. He turns **135° clockwise**. In which direction does he now face?



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

Q42. Priya faces **South-West**. She turns **90° anti-clockwise**. In which direction does she now face?



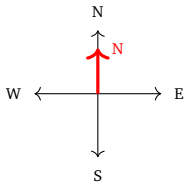
(A) South

(B) West

(C) North-West

(D) South-East

Q43. Amit faces **East**. He turns **270° clockwise**. In which direction does he now face?



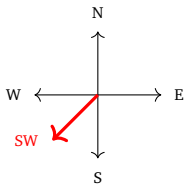
(A) North

(B) West

(C) South

(D) East

Q44. Neha faces **West**. She first turns **45° clockwise**, then turns **90° anti-clockwise**. In which direction does she finally face?



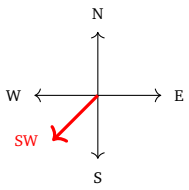
(A) West

(B) South-West

(C) South

(D) North-West

Q45. Suresh faces **North-East**. He turns **180° clockwise**. In which direction does he now face?



(A) North-West

(B) West

(C) South-West

(D) South

Q46. **Directions (Q46–Q50):** Find the missing term in each series.

3, 6, 12, 24, ?

(A) 36

(B) 48

(C) 30

(D) 42

Q47. **1, 4, 9, 16, 25, ?**

(A) 36

(B) 30

(C) 35

(D) 32

Q48. **2, 3, 5, 8, 13, 21, ?**

(A) 31

(B) 29

(C) 33

(D) 34

Q49. **AZ, BY, CX, DW, ?**

(A) EU

(B) FV

(C) EV

(D) FU

Q50. **1A, 4D, 9I, 16P, ?**

(A) 25Y

(B) 25X

(C) 24Y

(D) 25Z

Q51. **Directions (Q51–Q55):** A word-and-number processing machine follows this rule in each step:

- Every **word** is replaced by the **number of letters** it contains.
- Every **number** N is replaced by the N^{th} **letter** of the English alphabet (A=1, B=2, . . . , Z=26).

Input (Step 0): SMART 3 QUICK 7 BOLD 12

Step 1: ? **Step 2:** ? **Step 3:** ?

What is the output at Step 1?

(A) SMART 3 QUICK 7 BOLD 12

(B) 5 3 5 7 4 12

(C) C C G G L L

(D) 5 C 5 G 4 L

Q52. Refer to the input-output machine described in Q51.

What is the 3rd element in the output at Step 2?

(A) D

(B) E

(C) C

(D) G

Q53. Refer to the input-output machine described in Q51.

In the output at Step 2, what is the sum of all numbers present?

(A) 3

(B) 6

(C) 1

(D) 9

Q54. Refer to the input-output machine described in Q51.

At Step 3, how many times does the letter A appear?

(A) 1

(B) 2

(C) 3

(D) 6

Q55. Refer to the input-output machine described in Q51.

Which of the following is a letter (not a number) that appears in the output at Step 1?

(A) 5

(B) 4

(C) E

(D) L

Q56. **Directions (Q56–Q60):** In each question below, a statement is given followed by two conclusions. Assuming the statement to be true, decide which conclusion(s) **definitely follow(s)**.

Statement: "All students who passed the exam were awarded certificates."

Conclusions:

I. Some certificate holders are students.
II. No student failed the exam.

(A) Only Conclusion I follows
(B) Only Conclusion II follows
(C) Both Conclusions I and II follow
(D) Neither Conclusion I nor II follows

Q57. **Statement:** "Regular exercise improves cardiovascular health."

Conclusions:

I. People who do not exercise have poor cardiovascular health.
II. Regular exercise has some health benefits.

(A) Only Conclusion I follows
(B) Only Conclusion II follows
(C) Both Conclusions I and II follow
(D) Neither Conclusion I nor II follows

Q58. **Statement:** "The new policy bans single-use plastics in all government offices."

Conclusions:

I. Single-use plastics are harmful to the environment.
II. Government offices will have to find alternatives to single-use plastics.

(A) Only Conclusion I follows
(B) Only Conclusion II follows
(C) Both Conclusions I and II follow
(D) Neither Conclusion I nor II follows

Q59. **Statement:** "Every child who reads at least 10 books per year scores above average in the literacy test."

Conclusions:

I. Reading 10 books per year causes high literacy scores.
II. Some high scorers in the literacy test read at least 10 books per year.

(A) Only Conclusion I follows
(B) Only Conclusion II follows
(C) Both Conclusions I and II follow
(D) Neither Conclusion I nor II follows

Q60. **Statement:** "The factory that produces the most units also employs the most workers."

Conclusions:

I. The factory with the most workers produces the most units.
II. Producing more units always requires more workers.

(A) Only Conclusion I follows
(B) Only Conclusion II follows
(C) Both Conclusions I and II follow
(D) Neither Conclusion I nor II follows

Q61. **Directions (Q61–Q65):** Solve each age-based problem independently.

A is currently twice as old as B. Ten years ago, A was 3 times as old as B. **What is A's current age?**

(A) 30 years
(B) 40 years
(C) 50 years
(D) 60 years

Q62. The average age of 4 people in a group is 30 years. When a 40-year-old person replaces one member, the average age of the group becomes 32 years. **What was the age of the person who was replaced?**

(A) 32 years

(B) 28 years

(C) 30 years

(D) 24 years

Q63. The present age ratio of P to Q is 3 : 5. After 6 years, their age ratio will be 3 : 4. **What is P's current age?**

(A) 9 years

(B) 12 years

(C) 3 years

(D) 6 years

Q64. The sum of the present ages of a mother and her daughter is 50 years. Five years ago, the mother was 7 times as old as her daughter. **What is the mother's current age?**

(A) 35 years

(B) 45 years

(C) 40 years

(D) 30 years

Q65. Five years from now, Raj's age will be twice his sister's *current* age. Raj is currently 3 years older than his sister. **What is Raj's current age?**

(A) 11 years

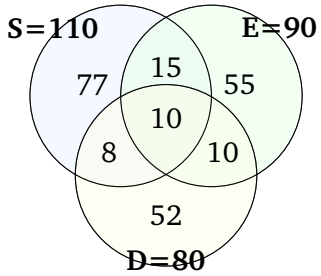
(B) 13 years

(C) 8 years

(D) 16 years

Q66. Directions (Q66–Q70): Study the following information and answer the questions.

A survey of **250 professionals** found that: 110 are Scientists (S), 90 are Engineers (E), and 80 are Doctors (D). Additionally: 25 are both Scientists and Engineers, 20 are both Engineers and Doctors, 18 are both Scientists and Doctors, and 10 belong to all three professions.



How many professionals are *only* Scientists (not Engineers or Doctors)?

(A) 85

(B) 65

(C) 70

(D) 77

Q67. Refer to the survey data in Q66.

How many professionals have exactly two of the three qualifications?

(A) 43

(B) 33

(C) 53

(D) 25

Q68. Refer to the survey data in Q66.

How many professionals have at least one of the three qualifications?

(A) 250

(B) 200

(C) 227

(D) 210

Q69. Refer to the survey data in Q66.

How many professionals have none of the three qualifications?

(A) 23

(B) 33

(C) 13

(D) 43

Q70. Refer to the survey data in Q66.

How many professionals are both Engineers and Doctors but *not* Scientists?

(A) 20

(B) 15

(C) 18

(D) 10

Q71. **Directions (Q71–Q75):** In each question, a pair of words is given that has a certain relationship. Choose the word from the options that best completes the analogous pair.

Barometer : Pressure :: Seismograph : ?

(A) Temperature

(B) Sound

(C) Earthquakes

(D) Humidity

Q72. **Chef : Kitchen :: Surgeon : ?**

(A) Operating Theatre

(B) Hospital Ward

(C) Laboratory

(D) Clinic

Q73. **Manuscript : Book :: Blueprint : ?**

(A) Paper

(B) Design

(C) Plan

(D) Building

Q74. **Herbivore : Plants :: Carnivore : ?**

(A) Grass

(B) Meat

(C) Fruits

(D) Insects

Q75. **Prologue : Beginning :: Epilogue : ?**

(A) Middle

(B) Story

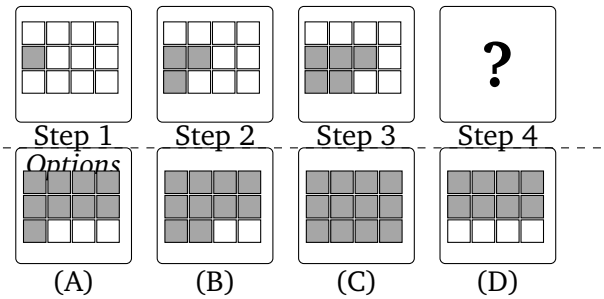
(C) End

(D) Chapter

Section 2: Abstract Reasoning (Q. 76–100)

Q76. **Directions (Q76–Q90):** Each question shows a series of figures. Identify the figure that should replace the question mark (?).

Series: A 4×3 grid has cells shaded in order: Step 1 = 1 cell, Step 2 = 3 cells, Step 3 = 6 cells. What is Step 4?



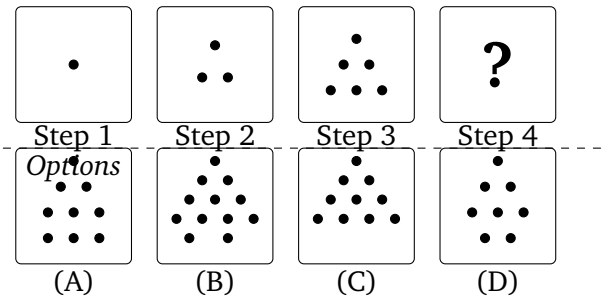
(A) 9 cells shaded

(B) 10 cells shaded

(C) All 12 cells shaded

(D) 8 cells shaded

Q77. **Series:** Each figure shows a triangular pattern of dots with each row having one more dot than the row above. Find the missing figure.



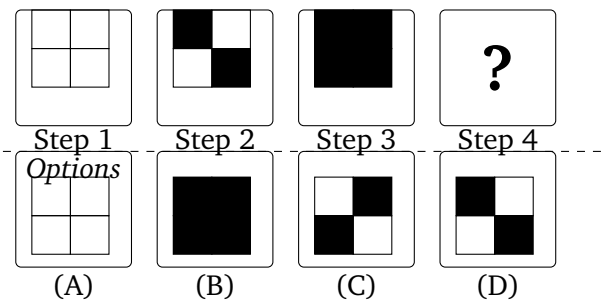
(A) 9 dots

(B) 12 dots

(C) 10 dots (4 rows: 1, 2, 3, 4)

(D) 8 dots

Q78. **Series:** A 2×2 checkerboard pattern cycles through states. Find the missing figure.



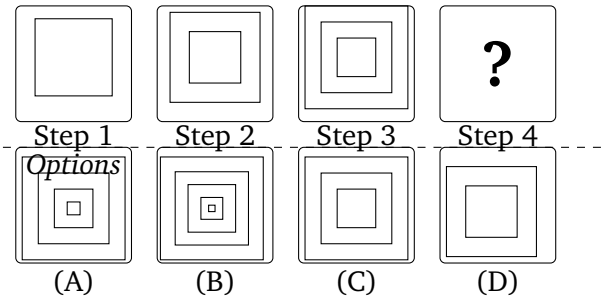
(A) All white (no fill)

(B) All black (fully filled)

(C) Reversed checker (top-right and bottom-left filled)

(D) Same checker as Step 2 (top-left and bottom-right filled)

Q79. **Series:** Each figure has one more concentric rectangle than the previous. Find the missing figure.



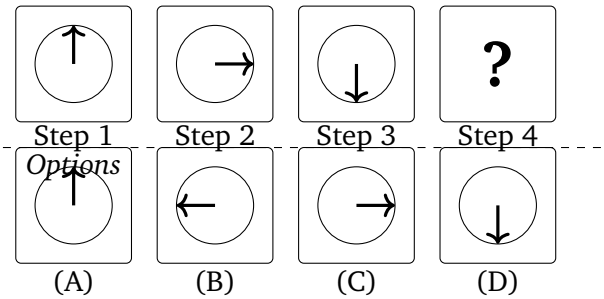
(A) 4 nested rectangles

(B) 5 nested rectangles

(C) 3 nested rectangles

(D) 2 nested rectangles

Q80. **Series:** An arrow inside a circle rotates 90° clockwise in each step. Find the missing figure.



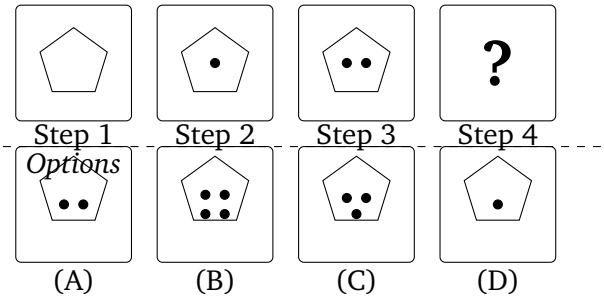
(A) Arrow pointing upward

(B) Arrow pointing left

(C) Arrow pointing right

(D) Arrow pointing downward

Q81. **Series:** A pentagon contains an increasing number of dots. Find the missing figure.



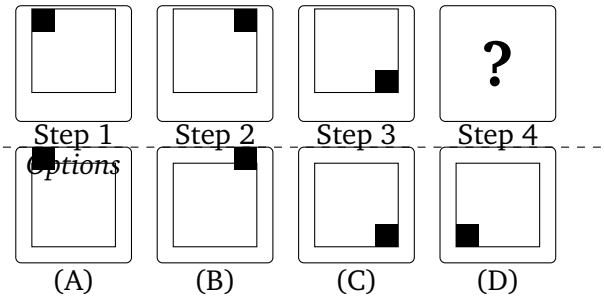
(A) 2 dots

(B) 4 dots

(C) 3 dots

(D) 1 dot

Q82. **Series:** One corner of a square is filled (highlighted), rotating clockwise each step. Find the missing figure.



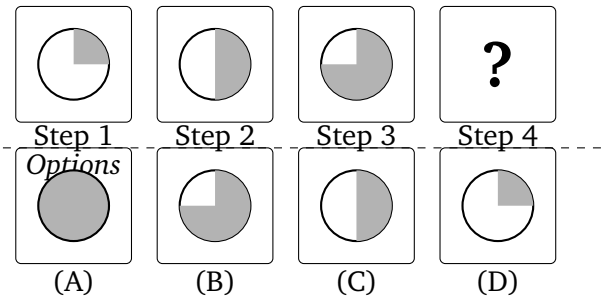
(A) Top-left corner filled

(B) Top-right corner filled

(C) Bottom-right corner filled

(D) Bottom-left corner filled

Q83. **Series:** A circular arc grows clockwise from the top, adding a quarter-circle each step. Find the missing figure.



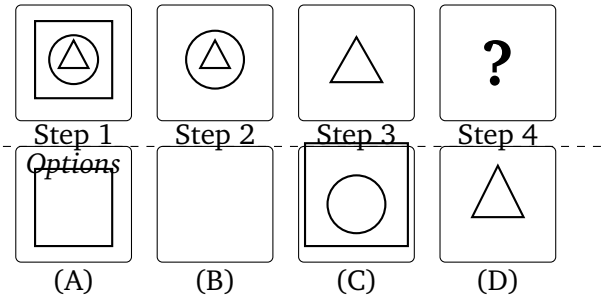
(A) Full circle (360° filled)

(B) Three-quarter circle

(C) Half circle

(D) Quarter circle

Q84. **Series:** Each step removes the outermost shape. Find the missing figure.



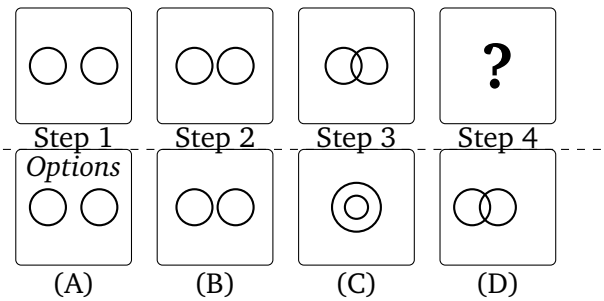
(A) Square only

(B) Empty box (no shapes)

(C) Square with circle inside

(D) Triangle only

Q85. **Series:** Two equal circles move progressively closer together. Find the missing figure.



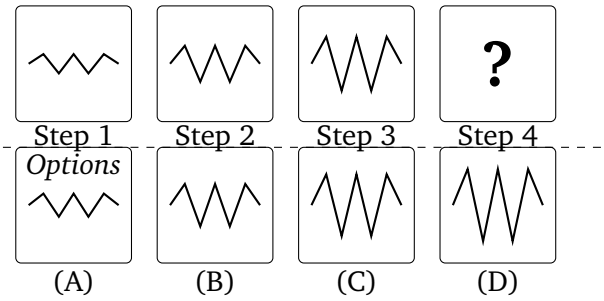
(A) Two circles far apart

(B) Two circles just touching

(C) Two concentric circles

(D) Two circles overlapping

Q86. **Series:** A horizontal zigzag line has increasing amplitude in each step. Find the missing figure.



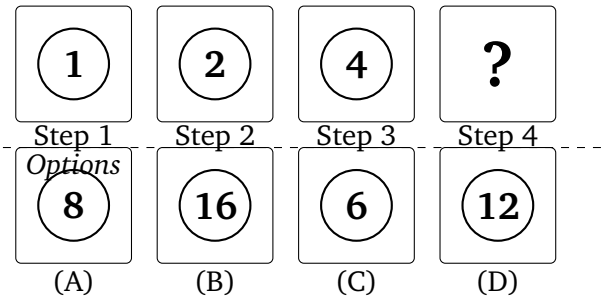
(A) Very small amplitude

(B) Medium amplitude

(C) Large amplitude

(D) Very large amplitude

Q87. **Series:** The number shown inside a circle doubles each step. Find the missing figure.



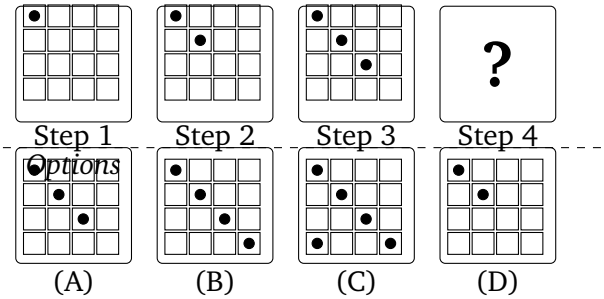
(A) Circle with 8

(B) Circle with 16

(C) Circle with 6

(D) Circle with 12

Q88. **Series:** In a 4×4 grid, dots are filled along the main diagonal one at a time. Find the missing figure.



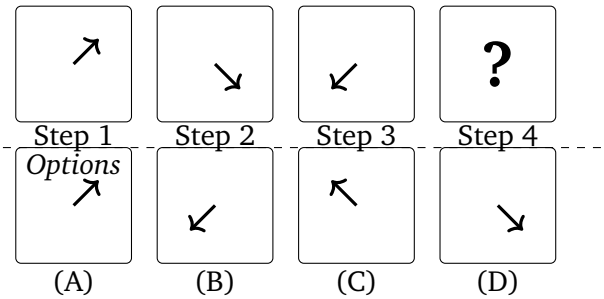
(A) 3 diagonal dots

(B) 4 diagonal dots

(C) 4 diagonal dots + 1 extra

(D) 2 diagonal dots

Q89. **Series:** An arrow rotates 90° clockwise each step: NE, SE, SW, NW. Find the missing figure.



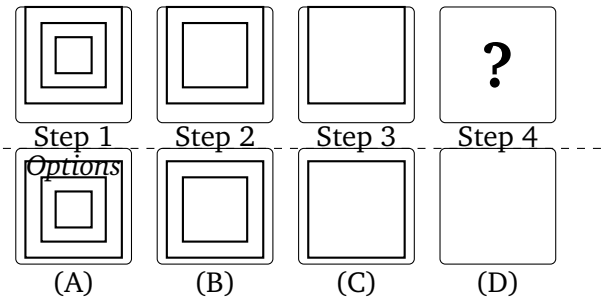
(A) Arrow pointing NE

(B) Arrow pointing SW

(C) Arrow pointing NW

(D) Arrow pointing SE

Q90. **Series:** The number of nested squares decreases by one each step. Find the missing figure.



(A) 3 nested squares

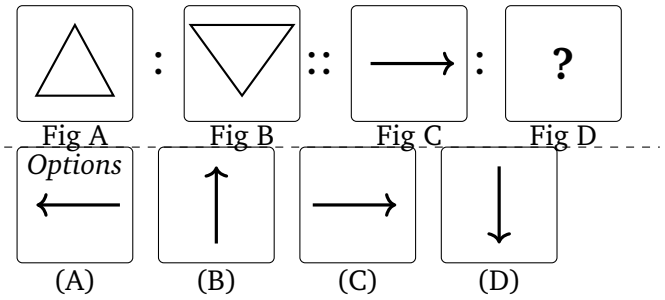
(B) 2 nested squares

(C) 1 square

(D) Empty (no squares)

Q91. **Directions (Q91–Q95):** The first pair of figures shares a relationship. Apply the same relationship to the third figure to find the fourth figure.

Upward triangle : Downward triangle :: Right arrow : ?



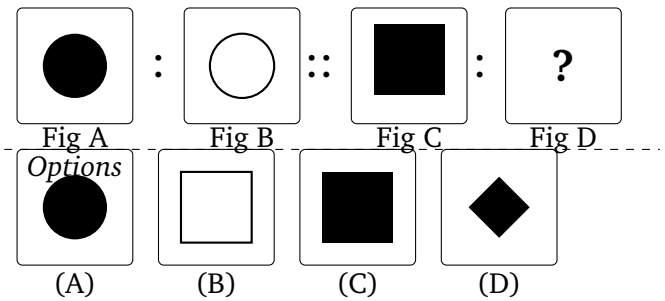
(A) Left-pointing arrow

(B) Upward arrow

(C) Right-pointing arrow

(D) Downward arrow

Q92. **Solid circle : Outline circle :: Solid square : ?**



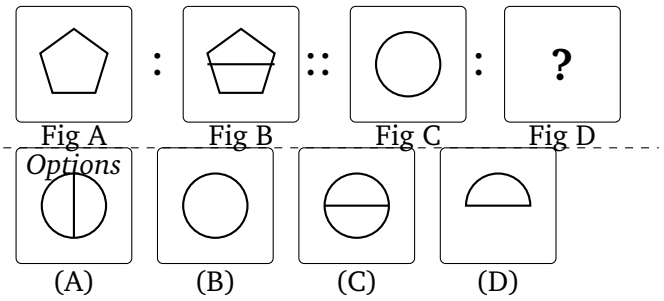
(A) Solid circle

(B) Outline square

(C) Solid square

(D) Solid diamond

Q93. Pentagon : Pentagon with horizontal midline :: Circle : ?



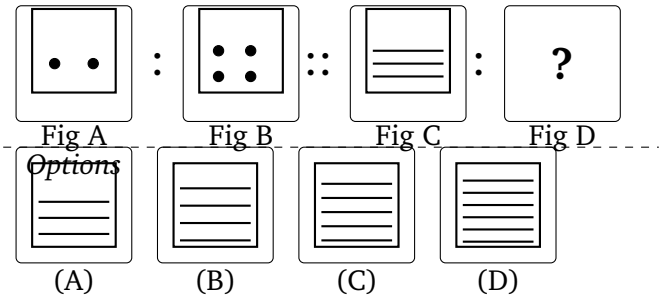
(A) Circle with vertical midline

(B) Plain circle (no line)

(C) Circle with horizontal midline

(D) Semicircle

Q94. Square with 2 dots : Square with 4 dots :: Square with 3 lines : ?



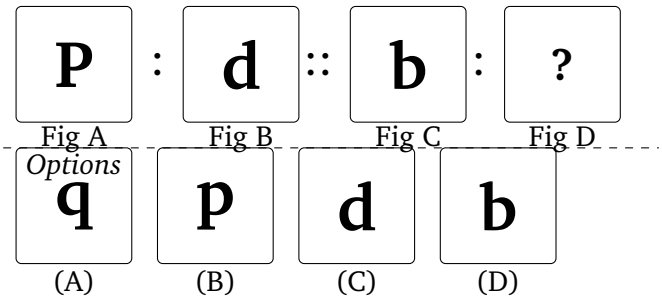
(A) Square with 3 lines

(B) Square with 4 lines

(C) Square with 5 lines

(D) Square with 6 lines

Q95. Letter P : Letter d :: Letter b : ?



(A) Letter q

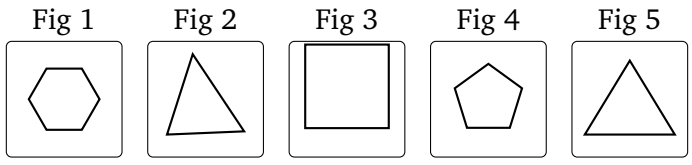
(B) Letter p

(C) Letter d

(D) Letter b

Q96. **Directions (Q96–Q100):** Five figures are shown. Four of them share a common property. Find the one that does NOT belong.

Which figure does NOT have a line of symmetry?



Which figure does NOT have a line of symmetry?

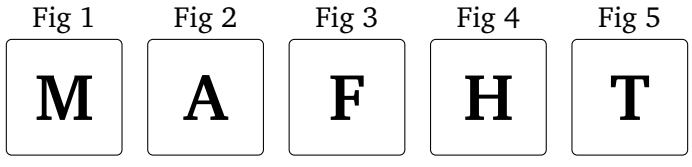
(A) Figure 1 (hexagon)

(B) Figure 2 (scalene triangle)

(C) Figure 3 (square)

(D) Figure 4 (pentagon)

Q97. **Four of the following capital letters have at least one line of symmetry. Which one does NOT?**



Which figure does NOT have a line of symmetry?

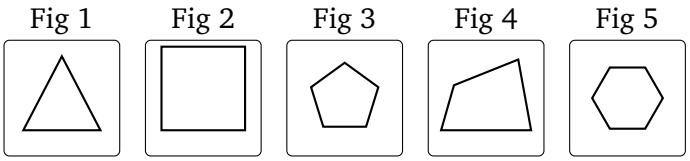
(A) Figure 1 (M)

(B) Figure 2 (A)

(C) Figure 3 (F)

(D) Figure 4 (H)

Q98. Four figures are regular polygons. Which figure is NOT a regular polygon?



Which figure is NOT a regular polygon?

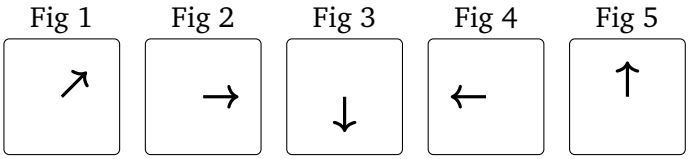
(A) Figure 1 (equilateral triangle)

(B) Figure 2 (square)

(C) Figure 3 (pentagon)

(D) Figure 4 (irregular quadrilateral)

Q99. Five arrows are shown. Four of them follow a clockwise rotation pattern of 90°. Which one does NOT fit the pattern?



Which figure does NOT fit the pattern?

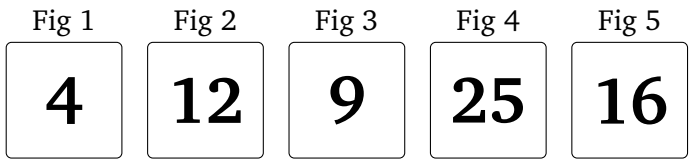
(A) Figure 1 (NE direction, 45°)

(B) Figure 2 (E direction)

(C) Figure 3 (S direction)

(D) Figure 4 (W direction)

Q100. Four of the following numbers are perfect squares. Which one is NOT?



Which number is NOT a perfect square?

(A) Figure 1 (4)

(B) Figure 2 (12)

(C) Figure 3 (9)

(D) Figure 4 (25)

Section 3: Quantitative Aptitude (Q. 101–150)

Q101. Study the following table showing the performance of five international cricket teams over three years (2022–2024) and answer questions **Q101–Q106**.

Team	Won	Lost	Drawn	Total Matches
India	22	8	5	35
Australia	20	10	5	35
England	18	12	5	35
New Zealand	15	15	5	35
South Africa	17	13	5	35

Which team won the **most** matches during this period?

(A) England

(B) South Africa

(C) Australia

(D) India

Q102. What is the **total number of matches won** by all five teams combined?

(A) 92

(B) 88

(C) 95

(D) 90

Q103. What is England's **win percentage** (to the nearest two decimal places)?

(A) 50.00%

(B) 51.43%

(C) 48.57%

(D) 55.00%

Q104. What is the **ratio** of India's wins to New Zealand's wins?

(A) 3 : 2

(B) 7 : 5

(C) 22 : 15

(D) 4 : 3

Q105. How many **more matches** did Australia win compared to South Africa?

(A) 1

(B) 2

(C) 4

(D) 3

Q106. What is the **average number of wins per team** across all five teams?

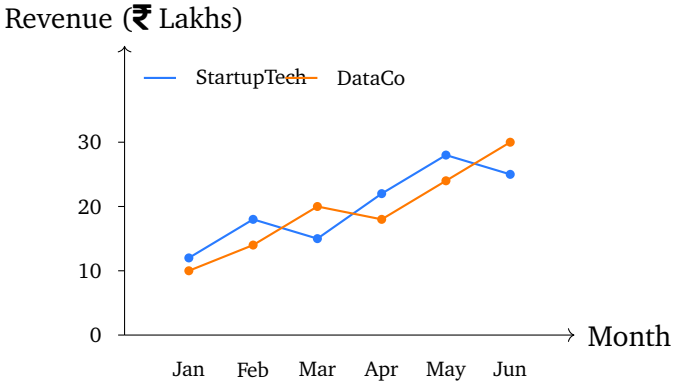
(A) 18.4

(B) 17.6

(C) 19.0

(D) 18.0

Q107. The line graph below shows the **monthly revenue (in ₹ Lakhs)** of two startups — StartupTech and DataCo — from January to June.



In **how many months** was StartupTech's revenue *greater than* DataCo's revenue?

(A) 2

(B) 3

(C) 4

(D) 5

Q108. What was DataCo's **total revenue** from January to June (in ₹ Lakhs)?

(A) 108

(B) 112

(C) 115

(D) 116

Q109. In which month was the **revenue gap** between StartupTech and DataCo the *smallest*?

(A) January

(B) March

(C) May

(D) June

Q110. What is the **percentage increase** in StartupTech's revenue from January to June?

(A) 100.0%

(B) 108.3%

(C) 112.0%

(D) 95.0%

Q111. By how many ₹ Lakhs did DataCo's **June revenue exceed** StartupTech's June revenue?

(A) 3

(B) 4

(C) 5

(D) 6

Q112. What was StartupTech's **average monthly revenue** (in ₹ Lakhs) over the six months?

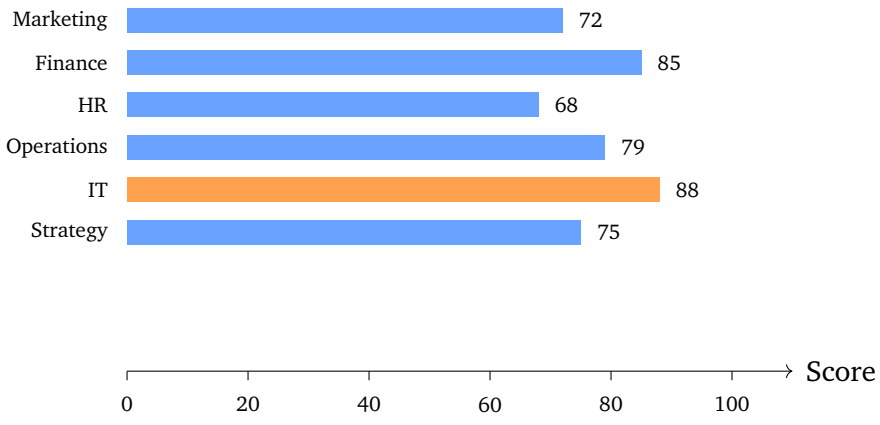
(A) 18

(B) 19

(C) 21

(D) 20

Q113. The horizontal bar chart below shows the **average examination scores (out of 100)** for six departments in a management college.



Which department achieved the **highest score**?

(A) Finance

(B) IT

(C) Operations

(D) Strategy

Q114. What is the **average score** of all six departments (rounded to two decimal places)?

(A) 75.50

(B) 76.80

(C) 77.83

(D) 79.00

Q115. What is the **difference** between the highest and lowest departmental scores?

(A) 15

(B) 18

(C) 22

(D) 20

Q116. How many departments scored **strictly above 75**?

(A) 3

(B) 4

(C) 2

(D) 5

Q117. What is the **ratio** of IT's score to HR's score (in its simplest form)?

(A) 4 : 3

(B) 22 : 17

(C) 13 : 10

(D) $7:6$

Q118. What is Marketing's score as a **percentage** of Finance's score (to one decimal place)?

(A) 80.0%

(B) 82.4%

(C) 84.7%

(D) 87.1%

Q119. Find the **largest 4-digit number** that is exactly divisible by 16.

(A) 9960

(B) 9976

(C) 9968

(D) 9984

Q120. A number, when divided by 7, leaves a remainder of 4; when divided by 11, it leaves a remainder of 9. What is the **smallest** such positive integer?

(A) 53

(B) 46

(C) 60

(D) 67

Q121. If N is a prime number **greater than 3**, which of the following expressions is *always* divisible by 24?

(A) $N^2 - 4$

(B) $N^2 - 1$

(C) $N^2 + 1$

(D) $N^2 - N$

Q122. In an examination, 40% of students failed in Mathematics, 30% failed in English, and 20% failed in **both** subjects. What percentage of students **passed in both** subjects?

(A) 40%

(B) 45%

(C) 50%

(D) 55%

Q123. A man spends 30% of his income on food, 25% on rent, and 15% on clothing. If his monthly **savings** are ₹ 9,000, what is his monthly income?

(A) ₹ 25,000

(B) ₹ 27,000

(C) ₹ 28,000

(D) ₹ 30,000

Q124. The price of an article increases by 25%. By what percentage must a consumer **reduce consumption** to keep the total expenditure unchanged?

(A) 20%

(B) 25%

(C) 15%

(D) 10%

Q125. A trader buys 80 kg of rice at ₹ 10 per kg and sells all of it at ₹ 8.50 per kg. What is his **loss percentage**?

(A) 12%

(B) 15%

(C) 18%

(D) 20%

Q126. After allowing a **15% discount** on the marked price, a shopkeeper still makes a **19% profit**. If the marked price is ₹ 340, what is the **cost price**?

(A) ₹ 230

(B) ₹ 238

(C) ₹ 243

(D) ₹ 250

Q127. Two articles are each sold for ₹ 3,600. One is sold at a **20% profit** and the other at a **20% loss**. What is the **net result** on the combined transaction?

(A) 4% profit

(B) No profit, no loss

(C) 2% loss

(D) 4% loss

Q128. Find the **amount** when ₹ 12,000 is invested at 8% per annum **compound interest** for 2 years (compounded annually). (Round to the nearest rupee.)

(A) ₹ 13,997

(B) ₹ 13,920

(C) ₹ 14,000

(D) ₹ 13,840

Q129. The **Simple Interest** on a sum at 6% per annum for 4 years amounts to ₹ 3,600. Find the **principal**.

(A) ₹ 12,000

(B) ₹ 15,000

(C) ₹ 18,000

(D) ₹ 20,000

Q130. In how many years will ₹ 8,000 **double** itself at 12.5% Simple Interest per annum?

(A) 6 years

(B) 7 years

(C) 8 years

(D) 10 years

Q131. A can complete a job in 20 days; B can do the same job in 30 days. They work together for **6 days**, after which A leaves. How many **more days** does B need to finish the remaining work?

(A) 10

(B) 12

(C) 14

(D) 15

Q132. Fifteen workers can build a wall in 8 days. How many workers are needed to complete the **same wall in 6 days**?

(A) 20

(B) 18

(C) 24

(D) 16

Q133. Pipe A fills a tank in 5 hours; Pipe B fills it in 8 hours. Pipe C (an outlet) drains the full tank in 10 hours. If all three are opened simultaneously, in how many hours will the tank be filled?

(A) $\frac{40}{11}$ hours

(B) $\frac{40}{9}$ hours

(C) $\frac{20}{3}$ hours

(D) $\frac{40}{7}$ hours

Q134. A train **180 m** long crosses a bridge **120 m** long in **15 seconds**. What is the speed of the train in km/h?

(A) 60

(B) 64

(C) 72

(D) 80

Q135. Two cyclists start from the same point and travel in **opposite directions** at 12 km/h and 16 km/h respectively. After how many hours will they be **70 km apart**?

(A) 2.00

(B) 3.00

(C) 2.25

(D) 2.50

Q136. The speed of sound is 330 m/s. A person standing 495 m from a cliff claps once. After how many seconds does the **echo return**?

(A) 3

(B) 1.5

(C) 4

(D) 6

Q137. If 15% of A is equal to 25% of B, what is the ratio $A : B$?

(A) 3 : 5

(B) 5 : 3

(C) 5 : 4

(D) 4 : 5

Q138. Divide 540 in the ratio $2 : 3 : 4$. What is the **middle (second) part**?

(A) 120

(B) 240

(C) 180

(D) 160

Q139. A 80-litre vessel contains milk and water in the ratio $5 : 3$. How many litres of **water** must be added to make the ratio $2 : 3$?

(A) 30

(B) 35

(C) 40

(D) 45

Q140. Two varieties of tea costing ₹ 40 per kg and ₹ 60 per kg are mixed to produce a blend costing ₹ 48 per kg. In what ratio should they be mixed?

(A) 3 : 2

(B) 2 : 3

(C) 5 : 3

(D) 3 : 5

Q141. The diagonals of a rhombus are **12 cm** and **16 cm**. Find its **area**.

(A) 84 sq cm

(B) 96 sq cm

(C) 108 sq cm

(D) 192 sq cm

Q142. A chord of a circle measures **24 cm**. The perpendicular distance from the centre to the chord is **5 cm**. Find the **radius** of the circle.

(A) 11 cm

(B) 12 cm

(C) 13 cm

(D) 15 cm

Q143. In a triangle, the **sum of two angles** is 110°. What is the **third angle**?

(A) 60°

(B) 65°

(C) 75°

(D) 70°

Q144. A median of a triangle divides it into two triangles of **equal area**. If the area of the original triangle is 48 sq cm, what is the area of **each** of the two smaller triangles?

(A) 24 sq cm

(B) 12 sq cm

(C) 36 sq cm

(D) 48 sq cm

Q145. A rectangular field is **80 m** long and **60 m** wide. What is the **cost of fencing** it at ₹ 15 per metre?

(A) ₹ 3,600

(B) ₹ 4,200

(C) ₹ 4,800

(D) ₹ 5,400

Q146. A hollow cylinder has an outer radius of **10 cm**, an inner radius of **8 cm**, and a height of **14 cm**. What is the **volume** of the material used?

(A) 462π cu cm

(B) 490π cu cm

(C) 504π cu cm

(D) 528π cu cm

Q147. A cuboid has length $= 6$ cm, width $= 4$ cm, and height $= 3$ cm. What is the length of its **space diagonal**?

(A) $\sqrt{50}$ cm

(B) $\sqrt{54}$ cm

(C) $\sqrt{58}$ cm

(D) $\sqrt{61}$ cm

Q148. Find the **area** of an equilateral triangle with side **6 cm**.

(A) $9\sqrt{3}$ sq cm

(B) $12\sqrt{3}$ sq cm

(C) $6\sqrt{3}$ sq cm

(D) $18\sqrt{3}$ sq cm

Q149. If $a + b = 10$ and $ab = 24$, find $a^2 + b^2$.

(A) 44

(B) 48

(C) 52

(D) 56

Q150. If $x - \frac{1}{x} = 3$, find $x^2 + \frac{1}{x^2}$.

(A) 7

(B) 9

(C) 10

(D) 11

Section 4: Verbal Ability & Reading Comprehension (Q. 151–200)

Reading Comprehension — Passage 1 (Q. 151–155)

Directions: Read the following passage carefully and answer the questions that follow.

Microfinance refers to the provision of small-scale financial services — credit, savings, and insurance — to individuals who lack access to conventional banking. Pioneered most famously by Muhammad Yunus and the Grameen Bank in Bangladesh, the model operates on the principle that even tiny loans can **catalyse** transformative economic activity among the rural poor, particularly women.

Grameen Bank's approach assigns loans to self-selected solidarity groups of five women, who collectively guarantee each other's repayments. This social collateral replaces the physical collateral that formal banks demand and that poor households simply cannot provide. Studies across South Asia and sub-Saharan Africa have shown that women who receive microloans invest disproportionately in their children's education, health, and household nutrition — returns that compound across generations.

Beyond credit, microfinance institutions (MFIs) have expanded into savings accounts and micro-insurance, giving rural women a buffer against crop failure or medical emergencies. Many borrowers reinvest profits to hire local workers, creating a multiplier effect in village economies.

Yet the model faces persistent criticism. Interest rates charged by MFIs regularly range from 25 to 40 per cent per annum, far exceeding those of commercial banks. Critics argue that such **predatory** pricing traps vulnerable households in spiralling debt, particularly when borrowers take fresh loans to repay older ones. The 2010 Andhra Pradesh microfinance crisis, during which over-indebted clients faced coercive recovery practices, exposed how quickly an empowerment tool can become an instrument of exploitation.

Despite these concerns, proponents maintain that MFIs' operational costs — reaching dispersed, illiterate, and uncollateralised clients — justify the premium. Regulatory frameworks in India, Kenya, and Peru have since introduced interest-rate caps and transparent pricing norms, seeking to preserve the sector's developmental mission while curtailing abusive practices.

Q150. Which of the following **best captures the central theme** of the passage?

(A) Microfinance empowers rural women economically but carries significant risks that require regulatory oversight.

(B) The Grameen Bank model has been adopted without modification across all developing countries.

(C) High interest rates make microfinance the least effective tool for poverty alleviation.

(D) Rural women prefer microfinance over savings accounts and insurance.

Q151. According to the passage, what **specific feature** of the Grameen Bank model replaces the physical collateral demanded by formal banks?

(A) Government guarantees on behalf of borrowers

(B) Collective guarantees by solidarity groups of five women

(C) Mandatory savings deposits held by the bank

(D) Co-signing agreements with local village headmen

Q152. In the context of the passage, the word **"predatory"** most nearly means:

(A) Fierce and aggressive in a physical sense

(B) Designed to attract large numbers of customers

(C) Exploitative and deliberately harmful to the borrower

(D) Innovative in its approach to risk management

Q153. What can be **inferred** from the passage about rural women's traditional access to formal credit?

(A) They had adequate access but chose not to use it.

(B) They were served well by commercial banks at affordable rates.

(C) Formal banks extended them credit with government subsidies.

(D) They were largely excluded from formal credit because they lacked acceptable physical collateral.

Q154. Which statement best describes the **author's overall stance** towards microfinance?

(A) Balanced — acknowledging both the developmental potential and the serious risks of the model.

(B) Strongly positive — the author believes microfinance is an unqualified success.

(C) Strongly negative — the author sees microfinance as inherently exploitative.

(D) Neutral — the author presents only facts without any implicit assessment.

Reading Comprehension — Passage 2 (Q. 156–160)

Directions: Read the following passage carefully and answer the questions that follow.

Classical computers encode information as binary bits — either 0 or 1. Quantum computers exploit the principles of quantum mechanics to use **qubits**, which can exist in a superposition of 0 and 1 simultaneously. Through superposition and a related phenomenon called entanglement, a quantum computer of modest qubit count can, in theory, process exponentially more information in parallel than any classical machine.

In 2019, Google claimed to have achieved **quantum supremacy** — the point at which a quantum computer solves a problem faster than any classical computer could in a practical timeframe. Google's 53-qubit Sycamore processor reportedly completed a specific calculation in 200 seconds that would take the world's most powerful supercomputer approximately 10,000 years. IBM disputed this claim, arguing that optimised classical algorithms could do the same in 2.5 days.

Despite the headline-grabbing milestone, practical quantum computing faces formidable obstacles. Qubits are extraordinarily fragile: even minor vibrations, electromagnetic interference, or temperature fluctuations cause **decoherence** — the collapse of the quantum state into classical noise. Current quantum processors must operate near absolute zero ($-273\,^{\circ}\text{C}$), requiring cryogenic equipment that is far too bulky and expensive for mainstream deployment. Error rates remain several orders of magnitude higher than those of classical transistors.

Nevertheless, researchers identify several domains where quantum advantage could be transformative. In **drug discovery**, quantum simulation of molecular interactions could slash the time and cost of identifying viable compounds. In **cryptography**, quantum computers could break widely used public-key encryption schemes, compelling a global migration to quantum-resistant algorithms. In **logistics and finance**, combinatorial optimisation problems that are intractable classically could be solved in real time.

The consensus among experts is cautious: fault-tolerant, large-scale quantum computers remain at least a decade away, but the foundational science is sound. Governments and corporations are investing heavily, aware that early movers in quantum capability may gain decisive strategic advantages.

Q154. Which of the following **best states the main idea** of the passage?

(A) Quantum computers have already replaced classical computers in most commercial applications.

(B) Quantum computing holds immense potential but currently faces

substantial technical challenges that delay practical deployment.

(C) The IBM–Google dispute proves that quantum supremacy is a meaningless marketing concept.

(D) Cryogenic cooling is the only obstacle preventing the widespread adoption of quantum computers.

Q155. Which **limitation** of current quantum processors does the author *explicitly* highlight?

(A) Inability to perform basic arithmetic operations

(B) Insufficient funding from governments and corporations

(C) The need for near-absolute-zero temperatures and high error rates

(D) Lack of programming languages suitable for quantum algorithms

Q156. As used in the passage, **"quantum supremacy"** refers to:

(A) The theoretical proof that quantum mechanics is superior to classical physics in all domains.

(B) Google's assertion that its quantum chip is immune to errors.

(C) The point at which a qubit can hold more than two values simultaneously.

(D) The point at which a quantum computer solves a problem faster than any classical computer could in a practical timeframe.

Q157. According to the passage, in which field does the author suggest quantum computing could be **most immediately transformative** by simulating molecular interactions?

(A) Drug discovery

(B) Social media analytics

(C) Classical encryption

(D) Consumer electronics design

Q158. The **author's tone** throughout the passage is best described as:

(A) Enthusiastically promotional of quantum technology

(B) Cautiously optimistic, acknowledging both promise and present limitations

(C) Deeply pessimistic about the future of quantum computing

(D) Dismissive of corporate investment in quantum research

Reading Comprehension — Passage 3 (Q. 161–165)

Directions: Read the following passage carefully and answer the questions that follow.

The digitisation of cultural heritage — from the scanning of ancient manuscripts to the 3D modelling of crumbling temples — has transformed how humanity stores, accesses, and interacts with its past. Platforms such as Google Arts & Culture now allow a student in a remote village to virtually walk through the Louvre or examine the brushwork of a Renaissance master at pixel-level precision. The Virtual Angkor project has reconstructed Cambodia's ancient Khmer temples in immersive three-dimensional detail, offering a **simulacrum** of a world that no longer physically exists in its original form.

Advocates argue that digital preservation performs a vital protective function. When natural disasters, armed conflict, or simple neglect destroy irreplaceable artefacts, a high-resolution digital copy ensures that the knowledge encoded in those objects survives. The 2001 Taliban destruction of the Bamiyan Buddhas and the 2018 fire at Brazil's National Museum underscore how catastrophically physical heritage can disappear in moments.

Yet critics raise concerns that the passage to digital is neither neutral nor complete. **Digital decay** — the obsolescence of file formats and storage media — means that today's archive may be unreadable in fifty years. Unequal internet access ensures that the communities most closely connected to particular heritage sites are often those least able to benefit from digital collections. Furthermore, scholars of authenticity contend that a digital copy, however faithful, cannot reproduce the **aura** — the unique presence and material history — that the philosopher Walter Benjamin attributed to original works of art.

Institutions are responding with strategies such as format migration, redundant server storage across geographies, and offline digital kiosks in low-connectivity regions. The debate ultimately turns on whether digital representation is a supplement to physical preservation or an acceptable substitute for it — a question that heritage professionals, governments, and communities must resolve together.

Q158. The **primary concern** of the passage as a whole is:

(A) Arguing that physical museums should be closed and replaced by digital platforms.

(B) Celebrating the technological achievements of Google Arts & Culture.

(C) Examining the opportunities and challenges of digitising cultural

heritage.

(D) Criticising governments for failing to fund heritage preservation.

Q159. Which **advantage** of digitalisation does the author explicitly mention?

(A) It reduces the cost of maintaining physical museum buildings.

(B) It eliminates the need for expert conservators and archaeologists.

(C) It generates revenue that can fund on-site restoration work.

(D) It preserves knowledge when physical artefacts are destroyed by disasters or conflict.

Q160. The passage mentions several risks of digital preservation. Which of the following is **NOT** cited as a risk?

(A) Cybersecurity attacks destroying digital archives

(B) Digital decay due to obsolete file formats and storage media

(C) Unequal internet access limiting community benefit

(D) The inability of digital copies to reproduce the "aura" of originals

Q161. As used in the passage, the word **"simulacrum"** most closely means:

(A) An original artefact preserved under controlled conditions

(B) A representation or copy of something, especially one that lacks the substance of the original

(C) A three-dimensional measuring instrument used in archaeology

(D) A government policy for cultural preservation

Q162. The author concludes that the debate over digital heritage preservation:

(A) Has been definitively resolved in favour of digital formats.

(B) Should be left entirely to technology companies to decide.

(C) Requires collaborative resolution by heritage professionals, governments, and communities.

(D) Is irrelevant because physical originals will always take precedence.

Reading Comprehension — Passage 4 (Q. 166–170)

Directions: Read the following passage carefully and answer the questions that follow.

The COVID-19 pandemic exposed the extraordinary fragility of global supply chains built on decades of efficiency-first thinking. The dominant philosophy had been **just-in-time** (JIT) manufacturing — minimising inventory to reduce warehousing costs, assuming that inputs could be sourced from anywhere in the world at any moment. When factories in China shut down in early 2020 and shipping containers piled up in the wrong ports, JIT revealed its fundamental vulnerability: resilience had been sacrificed for efficiency.

The semiconductor shortage illustrated the danger most acutely. Automotive companies, accustomed to ordering chips weeks in advance, found themselves unable to complete vehicles sitting on assembly lines, costing the industry an estimated $210 billion in 2021 alone. Consumer electronics, medical devices, and industrial equipment suffered similarly. A single point of failure in Taiwan — which produces more than 60 per cent of the world's advanced semiconductors — could have cascading consequences across dozens of industries.

Corporations and governments responded by championing **reshoring** — the return of manufacturing capacity to domestic soil — and **nearshoring**, which relocates production to geographically closer allied nations. The United States' CHIPS and Science Act of 2022 committed over $52 billion to domestic semiconductor fabrication. The European Union's Chips Act targets doubling its share of global semiconductor production by 2030.

Simultaneously, supply chain strategists are promoting a shift from just-in-time to **just-in-case** (JIC) inventory management — maintaining larger strategic stockpiles of critical components even at higher carrying costs. While JIC reduces the risk of sudden shortages, critics note that excess inventory ties up capital, can become obsolete, and increases waste.

The emerging consensus favours a **hybrid** approach: JIT where supply is reliable and diversified, JIC where single-source dependency or geopolitical risk is high. Global trade will not retreat into autarky, but the era of uncritical globalisation is giving way to "friend-shoring" — trading primarily within networks of trusted partners.

Q162. What is the **main argument** of the passage?

(A) Global supply chains should be completely dismantled and replaced with local production.

(B) The semiconductor industry alone caused the global supply chain crisis.

(C) Just-in-time manufacturing is always superior to just-in-case inventory management.

(D) The COVID-19 pandemic revealed the fragility of efficiency-driven supply chains, prompting a strategic rethink towards resilience.

Q163. What **change in inventory management** does the author discuss as a response to supply chain disruptions?

(A) A shift from just-in-time to just-in-case inventory management

(B) Eliminating all domestic manufacturing in favour of imports

(C) Replacing human workers with fully automated logistics systems

(D) Concentrating all semiconductor production in a single country

Q164. As used in the passage, **"reshoring"** most closely means:

(A) Expanding production to new overseas markets

(B) Returning manufacturing capacity to a company's home country

(C) Digitising warehouse management systems

(D) Building larger ocean-going cargo vessels

Q165. What can be **inferred** about the likely shape of future global supply chains, based on the passage?

(A) Countries will abandon international trade completely.

(B) Just-in-time manufacturing will remain the unchallenged dominant model.

(C) Supply chains will become more regionally concentrated and strategically selective rather than purely efficiency-driven.

(D) Semiconductor production will shift entirely to the United States by 2030.

Q166. Which of the following **best describes the author's viewpoint**?

(A) Uncritically pro-globalisation, arguing that free trade solves all supply chain problems.

(B) Strongly nationalist, advocating for total economic self-sufficiency.

(C) Dismissive of government intervention in industrial policy.

(D) Pragmatic, supporting a hybrid model that balances efficiency with resilience depending on risk.

Q167. The sentences **P** to **T** below, when properly arranged, form a coherent paragraph on *Sports Psychology and Peak Performance*. Choose the **correct sequence**.

P. Visualisation, in which athletes mentally rehearse their performance before competing, has been shown in multiple studies to activate the same neural pathways as physical practice.

Q. At the elite level, the physical capabilities of competitors are so closely matched that psychological factors — focus, composure under pressure, and belief — often determine the final outcome.

R. Sports psychologists therefore work with athletes not only to sharpen these mental skills but also to build resilience against the inevitable setbacks that accompany any competitive career.

S. One of the most powerful tools in a sports psychologist's toolkit is mental imagery.

T. This "mental rehearsal effect" means that an archer who vividly imagines a perfect release, or a sprinter who pictures crossing the finish line first, is genuinely reinforcing the motor patterns needed for success.

(A) Q – R – S – P – T

(B) Q – S – P – T – R

(C) S – P – T – Q – R

(D) P – T – S – Q – R

Q168. The sentences **P** to **T** below, when properly arranged, form a coherent paragraph on *Artificial Intelligence and Ethics*. Choose the **correct sequence**.

P. Because these systems learn from historical data, they can inadvertently encode and amplify the biases present in that data — a process researchers call "algorithmic bias."

Q. Artificial intelligence systems are increasingly used to make consequential decisions in hiring, lending, healthcare, and criminal justice.

R. Addressing this requires not only technical fixes such as fairness constraints in model training but also institutional accountability mechanisms and clear legal frameworks.

S. The result can be systematic discrimination against groups that were already marginalised by the historical practices the data reflects.

T. This is particularly troubling in domains such as facial recognition, where error rates have been found to be significantly higher for darker-skinned individuals.

(A) P – Q – S – T – R

(B) Q – R – P – T – S

(C) Q – P – S – T – R

(D) P – S – T – Q – R

Q169. The sentences **P** to **T** below, when properly arranged, form a coherent paragraph on *Urban Mobility and Public Transport*. Choose the **correct sequence**.

P. When commuters perceive public transport as unreliable, uncomfortable, or unsafe, they default to private vehicles, exacerbating the very congestion the system was designed to relieve.

Q. Cities around the world are grappling with the paradox that building more roads often worsens traffic by inducing additional demand, a

phenomenon known as “induced traffic.”

R. Successful urban mobility therefore depends less on expanding road capacity and more on making mass transit so attractive, frequent, and affordable that private car use becomes the less convenient option.

S. The solution lies in investing in high-quality, integrated public transport networks that connect all parts of a city seamlessly.

T. Yet investment in public transport alone is insufficient if the quality of the passenger experience is neglected.

(A) S – T – P – Q – R

(B) Q – S – R – T – P

(C) R – Q – P – T – S

(D) Q – R – S – T – P

Q170. The sentences **P** to **T** below, when properly arranged, form a coherent paragraph on *Nutrition Science and Dietary Myths*. Choose the **correct sequence**.

P. For decades, dietary fat was cast as the chief villain in the global obesity and heart disease epidemic, leading to an explosion of low-fat processed foods.

Q. To restore palatability, manufacturers replaced fat with sugar and refined carbohydrates — substitutions that nutritional science now recognises as potentially more harmful.

R. The lesson for consumers is that nutritional advice must be evaluated critically, as consensus positions can shift dramatically when new evidence accumulates.

S. Subsequent research has rehabilitated many dietary fats, finding that unsaturated fats from nuts, olive oil, and fish are actively protective against cardiovascular disease.

T. These products were marketed as healthier alternatives, but obesity rates continued to rise throughout the low-fat era.

(A) P – Q – T – S – R

(B) Q – P – T – S – R

(C) S – T – Q – P – R

(D) P – T – Q – S – R

Q171. The sentences **P** to **T** below, when properly arranged, form a coherent paragraph on *Corporate Governance and Transparency*. Choose the **correct sequence**.

P. Transparency — the timely and accurate disclosure of a company's financial position, ownership structure, and strategic risks — is the foundation on which investor trust is built.

Q. When that trust erodes, as it did spectacularly in the Enron and Satyam scandals, the consequences extend beyond individual companies to rattle entire capital markets.

R. Strong independent boards, robust audit committees, and whistleblower protection laws have therefore become central pillars of modern corporate governance frameworks.

S. Regulators have responded to such failures by mandating greater disclosure, stricter auditing standards, and stronger penalties for fraudulent reporting.

T. Yet regulation alone cannot substitute for a corporate culture in which honesty and accountability are genuinely valued at every level of the organisation.

(A) Q – P – S – R – T

(B) P – Q – S – R – T

(C) S – P – Q – T – R

(D) R – Q – P – S – T

Q172. "The politician's speech was full of _____ that appealed to emotions but contained little factual information."

(A) data

(B) analysis

(C) rhetoric

(D) evidence

Q173. "After years of _____ negotiations, both countries finally signed the peace accord."

(A) brief

(B) productive

(C) one-sided

(D) protracted

Q174. "The scientist refused to _____ her findings despite intense pressure from her superiors."

(A) retract

(B) publicise

(C) expand

(D) validate

Q175. "His _____ remarks at the press conference sparked immediate public controversy."

(A) diplomatic

(B) inflammatory

(C) measured

(D) conciliatory

Q176. "The new technology was initially met with _____ but gradually gained widespread acceptance."

(A) enthusiasm

(B) indifference

(C) scepticism

(D) approval

Q177. Choose the word **closest in meaning** to AUDACIOUS.

(A) Timid

(B) Cautious

(C) Modest

(D) Bold

Q178. Choose the word **most opposite in meaning** to LUCID.

(A) Obscure

(B) Clear

(C) Vivid

(D) Bright

Q179. Choose the word **closest in meaning** to CIRCUMSPECT.

(A) Reckless

(B) Cautious

(C) Hasty

(D) Bold

Q180. Choose the word **most opposite in meaning** to OBSOLETE.

(A) Outdated

(B) Ancient

(C) Modern

(D) Historic

Q181. Choose the word **closest in meaning** to CORROBORATE.

(A) Contradict

(B) Dispute

(C) Ignore

(D) Confirm

Q182. Identify the **error** in the sentence below and select the correction.

"The team have worked hard to meet the deadline." (The underlined part may contain an error.)

(A) has worked

(B) were working

(C) had been working

(D) No correction required

Q183. Identify the **error** in the sentence below and select the correction.

"She informed that the meeting is postponed."

(A) has been postponed

(B) had been postponed

(C) was postponing

(D) No correction required

Q184. Identify the **error** in the sentence below and select the correction.

"The price of all commodities have risen sharply."

(A) prices of all commodities has

(B) the prices have

(C) has risen

(D) No correction required

Q185. Identify the **error** in the sentence below and select the correction.

"He is one of those managers who is always on time."

(A) managers who has

(B) managers whose

(C) managers which

(D) managers who are

Q186. Identify the **error** in the sentence below and select the correction.

"Inspite of his illness, he attended the conference."

(A) Despite his illness

(B) Because of his illness

(C) In spite with his illness

(D) No correction required

Q187. Select the option that **best improves** the underlined portion of the sentence.

"No sooner the film started, the lights went off."

(A) Once the film started

(B) As soon as the film started

(C) No sooner did the film start than the lights went off

(D) When the film started

Q188. Select the option that **best improves** the underlined portion of the sentence.

"He got the work done from a contractor."

(A) through

(B) with

(C) under

(D) by

Q189. Select the option that **best improves** the underlined portion of the sentence.

"Scarcely I had sat down when the phone rang."

(A) Scarcely had I sat down when

(B) Scarcely I had been sitting when

(C) Hardly I sat down when

(D) No improvement required

Q190. Select the option that **best improves** the underlined portion of the sentence.

"He is too honest for taking bribes."

(A) too honest in taking

(B) too honest to take

(C) very honest for not taking

(D) No correction required

Q191. Select the option that **best improves** the underlined portion of the sentence.

"The harder he tried, the worst he fared."

(A) worser

(B) more worse

(C) worse

(D) most worst

Cloze Test — The Importance of Critical Thinking (Q. 196–200)

Directions: Read the following passage and fill in each blank (numbered 1–5) with the most appropriate word from the options given.

Critical thinking is the ability to **(1)** information objectively and make a **(2)** judgement. It involves questioning assumptions rather than accepting ideas at **(3)** value. People who think critically are less likely to be **(4)** by misinformation or emotional arguments. In today's world, where we are **(5)** with data from multiple sources, the skill of critical thinking has never been more essential.

Q191. Choose the **best word for Blank (1)**:

"Critical thinking is the ability to _____ information objectively..."

(A) ignore

(B) memorise

(C) copy

(D) analyse

Q192. Choose the **best word for Blank (2)**:

"...and make a _____ judgement."

(A) reasoned

(B) hasty

(C) biased

(D) uninformed

Q193. Choose the **best word for Blank (3)**:

"...accepting ideas at _____ value."

(A) market

(B) face

(C) great

(D) par

Q194. Choose the **best word for Blank (4)**:

"People who think critically are less likely to be _____ by misinformation..."

(A) positively influenced

(B) helped

(C) misled

(D) supported

Q195. Choose the **best word for Blank (5)**:

"...where we are _____ with data from multiple sources..."

(A) deprived

(B) shielded

(C) isolated

(D) bombarded

Detailed Solutions

Q1.

Solution

Concept — Linear Seating Arrangement: Build the complete seating map from the given clues, then answer each sub-question directly.

Identify the rule: The clues yield the unique arrangement (seats 1–5, left to right, all facing West):

Seat	Person	Shirt Colour
1	Alok	Green
2	Bharti	Yellow
3	Chetan	Blue
4	Durga	White
5	Eshan	Red

Apply the rule: Question asks: what colour shirt does the person at **Seat 3** wear? Seat 3 = **Chetan** $\Rightarrow$ Chetan's shirt colour = **Blue**.

Why other options are wrong:

- Option A: Red is worn by Eshan (Seat 5), not Seat 3.
- Option B: Yellow is worn by Bharti (Seat 2), not Seat 3.
- Option C: Blue is worn by Chetan (Seat 3) — **correct**.
- Option D: White is worn by Durga (Seat 4), not Seat 3.

Final Answer: Seat 3 (Chetan) wears Blue $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q1

Q2.

Solution

Concept — Linear Seating Arrangement: Identify the person at the rightmost seat.

Identify the rule: In a 5-seat row the rightmost position is Seat 5.

Apply the rule: From the arrangement: Seat 5 = **Eshan**.

Why other options are wrong:

- Option A: Alok sits at Seat 1 (leftmost end), not the right end.
- Option B: Bharti sits at Seat 2 (second from left).
- Option C: Chetan sits at Seat 3 (centre).
- Option D: Eshan sits at Seat 5 (rightmost) — **correct**.

Final Answer: Eshan is at the rightmost seat (Seat 5) $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q2

Q3.

Solution

Concept — Linear Seating Arrangement: Count people sitting between two specified persons.

Identify the rule: "Between" means persons occupying seats strictly between the two reference seats, excluding the endpoints.

Apply the rule: Bharti = Seat 2; Eshan = Seat 5.
Seats strictly between 2 and 5 = Seat 3 (Chetan) and Seat 4 (Durga) $\Rightarrow$ **2 people**.

Why other options are wrong:

- Option A: One person is incorrect; two seats lie between Seats 2 and 5.
- Option B: Two people (Chetan + Durga) — **correct**.
- Option C: Four people is impossible in a 5-seat row when endpoints are Seats 2 and 5.
- Option D: Three people would require Seats 1–5 with endpoints at Seats 1 and 5.

Final Answer: 2 people (Chetan and Durga) sit between Bharti and Eshan $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q3

Q4.

Solution

Concept — Linear Seating Arrangement: Identify the shirt colour of a named person.

Identify the rule: Each person has exactly one shirt colour as assigned by the constraints. Alok is at Seat 1 and the constraint explicitly assigns Green to Seat 1.

Apply the rule: Alok (Seat 1) $\Rightarrow$ shirt colour = **Green**.

Why other options are wrong:

- Option A: Green belongs to Alok — **correct**.
- Option B: Yellow belongs to Bharti (Seat 2).
- Option C: Blue belongs to Chetan (Seat 3).
- Option D: White belongs to Durga (Seat 4).

Final Answer: Alok wears a Green shirt $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q4

Q5.

Solution

Concept — Linear Seating Arrangement (Direction): Determine the immediate left neighbour when all persons face West.

Identify the rule: All five persons face **West**. When a person faces West, their **left hand** points toward the South (higher seat numbers in this North-to-South row). Therefore the *immediate left neighbour* of Seat n is the person at Seat $n+1$.

Apply the rule: Durga is at Seat 4. Facing West, Durga's immediate left = Seat $4+1$ = Seat 5 = **Eshan**.

Why other options are wrong:

- Option A: Alok is at Seat 1, far from Durga.
- Option B: Eshan (Seat 5) is Durga's immediate left neighbour — **correct**.
- Option C: Bharti is at Seat 2, also not adjacent to Durga.
- Option D: Chetan (Seat 3) is Durga's immediate *right* neighbour (Seat $4-1$), not left.

Final Answer: Eshan is Durga's immediate left neighbour $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q5

Q6.

Solution

Concept — Circular Seating Arrangement: Count seats in the clockwise direction from a given person.

Identify the rule: Clockwise (CW) order: Jaya → Kartik → Lalit → Naveen → Meera → Jaya (cyclic). "Two seats clockwise from Kartik" means moving 2 steps CW from Kartik's position.

Apply the rule: From Kartik: 1 step CW = Lalit; 2 steps CW = **Naveen**.

Why other options are wrong:

- Option A: Jaya is 1 step *anti-clockwise* (ACW) from Kartik.
- Option B: Lalit is only 1 step CW from Kartik.
- Option C: Meera is 2 steps *ACW* from Kartik (or 3 steps CW).
- Option D: Naveen is exactly 2 steps CW from Kartik — **correct**.

Final Answer: Naveen sits two seats clockwise from Kartik ⇒ $\boxed{\text{D}}$

Answer: (D) Go Back to Q6

Q7.

Solution

Concept — Circular Seating Arrangement: Identify the immediate left (anti-clockwise) neighbour.

Identify the rule: In a circular arrangement where persons face the *centre*, "left" corresponds to the *anti-clockwise* (ACW) direction.

Apply the rule: CW order: . . . Jaya → Kartik → Lalit . . .
One step ACW from Kartik = **Jaya**.

Why other options are wrong:

- Option A: Jaya is immediately ACW (left) of Kartik — **correct**.
- Option B: Meera is the person immediately left of Jaya, not of Kartik.
- Option C: Lalit is immediately *right* (CW) of Kartik.
- Option D: Naveen is 2 steps right (CW) of Kartik.

Final Answer: Jaya is Kartik's immediate left neighbour ⇒ $\boxed{\text{A}}$

Answer: (A) Go Back to Q7

Q8.

Solution

Concept — Circular Seating Arrangement: Count people sitting between two persons in the shorter arc going clockwise.

Identify the rule: CW order: Jaya(1) → Kartik(2) → Lalit(3) → Naveen(4) → Meera(5).
Going CW from Jaya to Meera, the people in between (excluding both endpoints) are at positions 2, 3, 4.

Apply the rule: Between Jaya and Meera (CW): Kartik, Lalit, Naveen = **3 people**.

Why other options are wrong:

- Option A: One person is too few; three seats separate Jaya and Meera in the CW arc.
- Option B: Two people is also short of the actual count.
- Option C: Three people (Kartik, Lalit, Naveen) — **correct**.
- Option D: Four people would leave nobody between them in the short arc (only 5 total in circle).

Final Answer: 3 people sit between Jaya and Meera (CW) ⇒ $\boxed{\text{C}}$

Answer: (C) Go Back to Q8

Q9.

Solution

Concept — Circular Seating Arrangement: Identify the immediate right (clockwise) neighbour.

Identify the rule: CW order: . . . Lalit(3) → Naveen(4) → Meera(5) . . .
Immediate right (CW) of Lalit = next seat CW = **Naveen**.

Apply the rule: From Lalit, one step clockwise = **Naveen**.

Why other options are wrong:

- Option A: Kartik is Lalit's immediate *left* (ACW) neighbour.
- Option B: Naveen is Lalit's immediate right (CW) neighbour — **correct**.
- Option C: Jaya is not adjacent to Lalit in the right direction.
- Option D: Meera is two seats CW of Lalit (Naveen is first, then Meera).

Final Answer: Naveen is Lalit's immediate right neighbour ⇒ $\boxed{\text{B}}$

Answer: (B) Go Back to Q9

Q10.

Solution

Concept — Circular Seating Arrangement (Swap): Determine new neighbours after two persons interchange positions.

Identify the rule: Original CW order: Jaya(1) → Kartik(2) → Lalit(3) → Naveen(4) → Meera(5).
Naveen and Meera swap seats. New CW order: Jaya(1) → Kartik(2) → Lalit(3) → **Meera**(4) → **Naveen**(5).

Apply the rule: After the swap, Naveen is at position 5. One step ACW (left) from Naveen(5) = position 4 = **Meera**.

Why other options are wrong:

- Option A: Lalit is now 2 steps left (ACW) of Naveen, not immediately adjacent.
- Option B: Meera is now Naveen's immediate left neighbour — **correct**.
- Option C: Jaya is far from Naveen's new position.
- Option D: Kartik is 3 steps left of Naveen's new position.

Final Answer: After the swap, Meera is Naveen's immediate left neighbour ⇒ B

Answer: (B) Go Back to Q10

Q11.

Solution

Concept — Day-Task Scheduling: Map each task to its assigned day, then answer the query.

Identify the rule: The complete schedule is:

Day	Task
Monday	Forecast
Tuesday	Audit
Wednesday	Governance
Thursday	Budget
Friday	Design
Saturday	Evaluation
Sunday	Compliance

Apply the rule: Question: Which task is scheduled on **Thursday**? $\Rightarrow$ **Budget**.

Why other options are wrong:

- Option A: Compliance is scheduled on Sunday, not Thursday.
- Option B: Design is scheduled on Friday.
- Option C: Evaluation is scheduled on Saturday.
- Option D: Budget is scheduled on Thursday — **correct**.

Final Answer: Thursday's task is Budget $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q11

Q12.

Solution

Concept — Day-Task Scheduling: Identify the task assigned to Wednesday.

Identify the rule: From the established schedule: Wednesday $\rightarrow$ Governance.

Apply the rule: Wednesday = **Governance**.

Why other options are wrong:

- Option A: Audit is scheduled on Tuesday.
- Option B: Design is scheduled on Friday.
- Option C: Governance is on Wednesday — **correct**.
- Option D: Compliance is on Sunday.

Final Answer: Wednesday's task is Governance $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q12

Q13.

Solution

Concept — Day-Task Scheduling: Identify the task that immediately precedes Design.

Identify the rule: Design is on **Friday**. The day immediately before Friday is **Thursday**. Thursday's task is Budget.

Apply the rule: One day before Friday (Design) = Thursday = **Budget**.

Why other options are wrong:

- Option A: Budget is scheduled on Thursday, the day directly before Design (Friday) — **correct**.
- Option B: Forecast is on Monday, which is 4 days before Design.
- Option C: Governance is on Wednesday, 2 days before Design.
- Option D: Audit is on Tuesday, 3 days before Design.

Final Answer: Budget (Thursday) is the task immediately before Design (Friday) $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q13

Q14.

Solution

Concept — Day-Task Scheduling: Count the tasks scheduled between two specified tasks.

Identify the rule: Forecast = Monday; Compliance = Sunday.
Tasks between them (excluding both endpoints): Tuesday through Saturday = 5 tasks (Audit, Governance, Budget, Design, Evaluation).

Apply the rule: Mon(Forecast) $\rightarrow$ Tue(Audit) $\rightarrow$ Wed(Governance) $\rightarrow$ Thu(Budget) $\rightarrow$ Fri(Design) $\rightarrow$ Sat(Evaluation) $\rightarrow$ Sun(Compliance).
Between Monday and Sunday: 5 tasks.

Why other options are wrong:

- Option A: Four tasks is one fewer than the actual count.
- Option B: Five tasks (Audit, Governance, Budget, Design, Evaluation) — **correct**.
- Option C: Six tasks would include one of the endpoints.
- Option D: Three tasks is too few.

Final Answer: 5 tasks lie between Forecast and Compliance $\Rightarrow$ B

Answer: (B) Go Back to Q14

Q15.

Solution

Concept — Day-Task Scheduling: Identify the pair of tasks that are scheduled on *consecutive* days *and* whose names are in alphabetical order (first task alphabetically earlier).

Identify the rule: Check each option for (i) consecutive days and (ii) alphabetical first-then-second order:
— Audit (Tue) & Budget (Thu): not consecutive days.
— Compliance (Sun) & Governance (Wed): not consecutive days.
— Forecast (Mon) & Audit (Tue): consecutive days, but F $>$ A alphabetically, so Forecast comes *after* Audit alphabetically though scheduled first chronologically.
— Design (Fri) & Evaluation (Sat): consecutive days; D $<$ E alphabetically, so Design precedes Evaluation both chronologically and alphabetically.

Apply the rule: Design (Friday) and Evaluation (Saturday) are on consecutive days *and* in alphabetical order. $\Rightarrow$ **Design and Evaluation**.

Why other options are wrong:

- Option A: Audit (Tue) and Budget (Thu) are not on consecutive days.
- Option B: Compliance (Sun) and Governance (Wed) are not on consecutive days.
- Option C: Forecast (Mon) and Audit (Tue) are consecutive but not in alphabetical order (F $>$ A).
- Option D: Design (Fri) and Evaluation (Sat) satisfy both conditions — **correct**.

Final Answer: Design and Evaluation are on consecutive days and in alphabetical order $\Rightarrow$ D

Answer: (D) Go Back to Q15

Q16.

Solution

Concept — Family + Profession + Pet Mapping: Identify the Doctor in the family.

Identify the rule: The complete assignment is:

Name	Relation	Profession	Pet
Ramesh	Grandfather	Farmer	Turtle
Savita	Grandmother	Teacher	Bird
Tarun	Father	Engineer	Dog
Uma	Mother	Doctor	Cat
Vikram	Son	Lawyer	Rabbit
Winnie	Daughter	Banker	Fish

Apply the rule: Doctor $\Rightarrow$ **Uma** (Mother).

Why other options are wrong:

- Option A: Ramesh is a Farmer.
- Option B: Uma is the Doctor — **correct**.
- Option C: Vikram is a Lawyer.
- Option D: Winnie is a Banker.

Final Answer: Uma is the Doctor $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q16

Q17.

Solution

Concept — Family Relationship: Determine the relationship of Ramesh to Vikram.

Identify the rule: Family tree: Ramesh (Grandfather) $\rightarrow$ Tarun (Father/Son of Ramesh) $\rightarrow$ Vikram (Son/Grandson of Ramesh).
Ramesh is Tarun's father, and Tarun is Vikram's father. Therefore Ramesh is Vikram's *paternal grandfather*.

Apply the rule: Ramesh $\xrightarrow{\text{son}}$ Tarun $\xrightarrow{\text{son}}$ Vikram.
Ramesh is Vikram's **Grandfather**.

Why other options are wrong:

- Option A: Grandfather is the correct relationship — **correct**.
- Option B: Tarun is Vikram's Father, not Ramesh.
- Option C: Vikram is the person in question (the grandson), not the relationship holder.
- Option D: Uma is Vikram's Mother; Savita is the Grandmother (not directly Ramesh's relationship to Vikram).

Final Answer: Ramesh is Vikram's Grandfather $\Rightarrow$ A

Answer: (A) Go Back to Q17

Q18.

Solution

Concept — Family + Pet Mapping: Identify the pet owned by Savita.

Identify the rule: From the arrangement, Savita (Grandmother, Teacher) keeps a **Bird** as her pet.

Apply the rule: Savita $\Rightarrow$ **Bird**.

Why other options are wrong:

- Option A: Cat belongs to Uma (Mother/Doctor).
- Option B: Turtle belongs to Ramesh (Grandfather/Farmer).
- Option C: Bird belongs to Savita — **correct**.
- Option D: Fish belongs to Winnie (Daughter/Banker).

Final Answer: Savita keeps a Bird $\Rightarrow$ C

Answer: (C) Go Back to Q18

Q19.

Solution

Concept — Family + Profession Mapping: Identify the Banker in the family.

Identify the rule: From the arrangement, the Banker is **Winnie** (Daughter), who also keeps a Fish as her pet.

Apply the rule: Banker $\Rightarrow$ **Winnie**.

Why other options are wrong:

- Option A: Vikram is a Lawyer.

- Option B: Tarun is an Engineer.
- Option C: Savita is a Teacher.
- Option D: Winnie is the Banker — **correct**.

Final Answer: Winnie is the Banker $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q19

Q20.

Solution

Concept — Family + Profession + Pet Mapping: Identify the pet kept by the Lawyer.

Identify the rule: Lawyer = Vikram. Vikram's pet = **Rabbit**.

Apply the rule: Vikram (Lawyer) $\Rightarrow$ Rabbit.

Why other options are wrong:

- Option A: Winnie (Banker) keeps a Fish.
- Option B: Uma (Doctor) keeps a Cat.
- Option C: Vikram (Lawyer) keeps a Rabbit — **correct**.
- Option D: Tarun (Engineer) keeps a Dog.

Final Answer: The Lawyer (Vikram) keeps a Rabbit $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q20

Q21.

Solution

Concept — Data Interpretation (Price Table): Rank products by price in a given year.

Identify the rule: 2022 prices (descending): Laptop ₹50,000 > Camera ₹25,000 > Phone ₹20,000 > Tablet ₹15,000 > Watch ₹8,000.

Apply the rule: 2nd highest in 2022 = **Camera** at ₹25,000.

Why other options are wrong:

- Option A: Camera (₹25,000) is the second highest in 2022 — **correct**.
- Option B: Phone (₹20,000) is the third highest.

- Option C: Tablet (₹15,000) is the fourth highest.
- Option D: Watch (₹8,000) is the cheapest.

Final Answer: Camera (₹25,000) is the second highest priced item in 2022 $\Rightarrow$ $\boxed{A}$

Answer: (A) Go Back to Q21

Q22.

Solution

Concept — Data Interpretation (Price Table): Identify the highest priced item in 2023.

Identify the rule: 2023 prices: Laptop=₹60,000, Camera=₹30,000, Phone=₹18,000, Tablet=₹18,000, Watch=₹10,000.

Apply the rule: Highest in 2023 = ₹60,000 = **Laptop**.

Why other options are wrong:

- Option A: Camera (₹30,000) is 2nd highest in 2023.
- Option B: Laptop (₹60,000) is the highest — **correct**.
- Option C: Tablet (₹18,000) is tied 3rd.
- Option D: Phone (₹18,000) is tied 3rd.

Final Answer: Laptop (₹60,000) is the highest priced item in 2023 $\Rightarrow$ $\boxed{B}$

Answer: (B) Go Back to Q22

Q23.

Solution

Concept — Data Interpretation (Ratio): Calculate the ratio of Camera price to Watch price in 2024.

Identify the rule: 2024 prices: Camera = ₹35,000; Watch = ₹12,000.
Ratio $= \frac{35000}{12000} = \frac{35}{12}$.

Apply the rule: $35000 : 12000 = 35 : 12$.

Why other options are wrong:

- Option A: 7:2 = 42:12 $\neq$ 35:12.
- Option B: 5:2 = 30:12 $\neq$ 35:12.

- Option C: 35:12 is the correct simplified ratio — **correct**.
- Option D: 25:8 = 37.5:12 $\neq$ 35:12.

Final Answer: Camera : Watch in 2024 = 35 : 12 $\Rightarrow$ C

Answer: (C) Go Back to Q23

Q24.

Solution

Concept — Data Interpretation (Change over Years): Determine how the Laptop price changed from 2022 to 2024.

Identify the rule: Laptop 2022 = ₹50,000; Laptop 2024 = ₹55,000.
Change = ₹55,000 − ₹50,000 = +₹5,000 (net *increase*).

Apply the rule: 2022 → 2023: ₹50,000 → ₹60,000 (+₹10,000 increase).
2023 → 2024: ₹60,000 → ₹55,000 (−₹5,000 decrease).
Net change (2022–2024): +₹5,000 (overall increase).

Why other options are wrong:

- Option A: The Laptop price did *not* decrease from 2022 to 2024.
- Option B: It did not increase by ₹10,000; the ₹10,000 rise was 2022→2023 only.
- Option C: The price did change; it increased by ₹5,000.
- Option D: Increased by ₹5,000 from 2022 to 2024 — **correct**.

Final Answer: Laptop price increased by ₹5,000 from 2022 to 2024 $\Rightarrow$ D

Answer: (D) Go Back to Q24

Q25.

Solution

Concept — Data Interpretation (Price Stability): Identify the item whose price remained unchanged across two consecutive years.

Identify the rule: Compare 2023 and 2024 prices for each product:
Laptop: 60,000 → 55,000 (changed). Camera: 30,000 → 35,000 (changed).
Watch: 10,000 → 12,000 (changed). Tablet: 18,000 → 20,000 (changed).
Phone: 18,000 → 18,000 (**unchanged**).

Apply the rule: Phone price = ₹18,000 in both 2023 and 2024 $\Rightarrow$ Phone price

was **unchanged**.

Why other options are wrong:

- Option A: Phone price stayed at ₹18,000 in 2023 and 2024 — **correct**.
- Option B: Tablet price changed (₹18,000 to ₹20,000).
- Option C: Watch price changed (₹10,000 to ₹12,000).
- Option D: Camera price changed (₹30,000 to ₹35,000).

Final Answer: Phone price was unchanged between 2023 and 2024 ⇒ A

Answer: (A) Go Back to Q25

Q26.

Solution

Concept — Matrix Arrangement (Person-Country-Hobby): Identify the country associated with Uma.

Identify the rule: The complete arrangement:

Person	Country	Hobby
Uma	Japan	Photography
Vivek	France	Painting
Wren	Brazil	Dance
Xavier	India	Music
Yolanda	Italy	Sculpture

Apply the rule: Uma ⇒ **Japan**.

Why other options are wrong:

- Option A: France is associated with Vivek.
- Option B: Brazil is associated with Wren.
- Option C: Japan is associated with Uma — **correct**.
- Option D: India is associated with Xavier.

Final Answer: Uma is from Japan ⇒ C

Answer: (C) Go Back to Q26

Q27.

Solution

Concept — Matrix Arrangement: Identify Yolanda's hobby.

Identify the rule: By elimination: Painting → Vivek; Photography → Uma; Dance → Wren; Music → Xavier. The remaining hobby for Yolanda (Italy) = **Sculpture**.

Apply the rule: Yolanda ⇒ **Sculpture**.

Why other options are wrong:

- Option A: Painting is Vivek's hobby.
- Option B: Dance is Wren's hobby.
- Option C: Photography is Uma's hobby.
- Option D: Sculpture belongs to Yolanda — **correct**.

Final Answer: Yolanda's hobby is Sculpture ⇒ $\boxed{\text{D}}$

Answer: (D) Go Back to Q27

Q28.

Solution

Concept — Matrix Arrangement: Identify Wren's country.

Identify the rule: From the arrangement: Wren → Brazil → Dance.

Apply the rule: Wren ⇒ **Brazil**.

Why other options are wrong:

- Option A: Uma is from Japan.
- Option B: Wren is from Brazil — **correct**.
- Option C: Vivek is from France.
- Option D: Xavier is from India.

Final Answer: Wren is from Brazil ⇒ $\boxed{\text{B}}$

Answer: (B) Go Back to Q28

Q29.

Solution

Concept — Matrix Arrangement: Identify the Painter's country.

Identify the rule: Painter = Vivek. Vivek's country = **France**.

Apply the rule: Vivek (Painter) ⇒ France.

Why other options are wrong:

- Option A: France is Vivek's country — **correct**.
- Option B: Italy is Yolanda's country.
- Option C: Brazil is Wren's country.
- Option D: India is Xavier's country.

Final Answer: The Painter (Vivek) is from France ⇒ A

Answer: (A) Go Back to Q29

Q30.

Solution

Concept — Matrix Arrangement: Identify the hobby of the person from Brazil.

Identify the rule: Country Brazil → Wren → Hobby = **Dance**.

Apply the rule: Brazil ⇒ Wren ⇒ **Dance**.

Why other options are wrong:

- Option A: Sculpture is Yolanda's (Italy) hobby.
- Option B: Photography is Uma's (Japan) hobby.
- Option C: Dance is Wren's (Brazil) hobby — **correct**.
- Option D: Music is Xavier's (India) hobby.

Final Answer: The person from Brazil (Wren) pursues Dance ⇒ C

Answer: (C) Go Back to Q30

Q31.

Solution

Concept — Coding-Decoding (Reverse + Shift): Apply the two-step encoding rule.

Identify the rule: Step 1: Reverse the word.
Step 2: Shift each letter forward by $+2$ positions in the alphabet (A→C, B→D, . . . , Z→B).

Apply the rule: Word = **RAMP**
Step 1 (reverse): R-A-M-P → P-M-A-R
Step 2 (shift +2): P→R, M→O, A→C, R→T ⇒ **ROCT**

Why other options are wrong:

- Option A: QOCT — the first letter should be R (P+2), not Q.
- Option B: ROCT is the correct code — **correct**.
- Option C: PMCT — Step 2 was not applied to the first two letters.
- Option D: SOCT — P+2 = R, not S.

Final Answer: Code for RAMP = ROCT ⇒ $\boxed{\text{B}}$

Answer: (B) Go Back to Q31

Q32.

Solution

Concept — Coding-Decoding (Reverse + Shift): Decode a given code back to the original word.

Identify the rule: To decode: **Step 1:** Shift each letter *backward* by -2. **Step 2:** Reverse the result.

Apply the rule: Code = **PCNR**
Step 1 (shift -2): P→N, C→A, N→L, R→P ⇒ NALP
Step 2 (reverse): N-A-L-P → **PLAN**

Why other options are wrong:

- Option A: PLAN is the decoded word — **correct**.
- Option B: LANE would encode as ENAL → shift +2 → GPCN, not PCNR.
- Option C: PALE would encode as ELAP → shift +2 → GNCR, not PCNR.
- Option D: PEAL would encode as LAEP → shift +2 → NCGR, not PCNR.

Final Answer: PCNR decodes to PLAN $\Rightarrow$ A

Answer: (A) Go Back to Q32

Q33.

Solution

Concept — Coding-Decoding (Reverse + Shift): Encode the word DOME.

Identify the rule: Step 1: Reverse. Step 2: Shift +2.

Apply the rule: Word = **DOME**
Step 1 (reverse): D-O-M-E $\rightarrow$ E-M-O-D
Step 2 (shift +2): E$\rightarrow$G, M$\rightarrow$O, O$\rightarrow$Q, D$\rightarrow$F $\Rightarrow$ **GOQF**

Why other options are wrong:

- Option A: FOQG — letters are in the wrong order (F and G swapped).
- Option B: GOFQ — O and F are transposed.
- Option C: GOQE — last letter should be F (D+2), not E.
- Option D: GOQF is the correct code — **correct**.

Final Answer: Code for DOME = GOQF $\Rightarrow$ D

Answer: (D) Go Back to Q33

Q34.

Solution

Concept — Coding-Decoding (Reverse + Shift): Decode the code MUKT.

Identify the rule: Decode: Step 1 shift -2; Step 2 reverse.

Apply the rule: Code = **MUKT**
Step 1 (shift -2): M$\rightarrow$K, U$\rightarrow$S, K$\rightarrow$I, T$\rightarrow$R $\Rightarrow$ KSIR
Step 2 (reverse): K-S-I-R $\rightarrow$ **RISK**

Why other options are wrong:

- Option A: SILK encodes as KLIS $\rightarrow$ +2 $\rightarrow$ MNJT, not MUKT.
- Option B: RINK encodes as KNIR $\rightarrow$ +2 $\rightarrow$ MPKT, not MUKT.
- Option C: RISK is the correct decoded word — **correct**.
- Option D: SINK encodes as KNIS $\rightarrow$ +2 $\rightarrow$ MPKU, not MUKT.

Final Answer: MUKT decodes to RISK $\Rightarrow$ C

Answer: (C) Go Back to Q34

Q35.

Solution

Concept — Coding-Decoding (Reverse + Shift): Encode the word for "flying mammal."

Identify the rule: The flying mammal = **BAT**. Apply: Step 1 reverse, Step 2 shift +2.

Apply the rule: Word = **BAT**
Step 1 (reverse): B-A-T → T-A-B
Step 2 (shift +2): T→V, A→C, B→D ⇒ **VCD**

Why other options are wrong:

- Option A: CVD — letters are in wrong order (C and V swapped).
- Option B: VCD is the correct code — **correct**.
- Option C: DCV — this is the reverse of the correct answer.
- Option D: CDA — the first letter should be V (T+2), not C.

Final Answer: Code for BAT (flying mammal) = VCD ⇒ B

Answer: (B) Go Back to Q35

Q36.

Solution

Concept — Syllogism (Universal Affirmative): Apply the transitive property of universal statements.

Identify the rule: Premise 1: *All Mangoes are Fruits.*
Premise 2: *All Fruits are Healthy.*
Transitivity: If All A are B, and All B are C, then All A are C.

Apply the rule: Conclusion I: "All Mangoes are Healthy" — follows directly by transitivity ($A \subseteq B \subseteq C \Rightarrow A \subseteq C$). ✓
Conclusion II: "Some Healthy things are Mangoes" — follows by *partial conversion* of Conclusion I (All Mangoes are Healthy ⇒ Some Healthy are Mangoes). ✓

Why other options are wrong:

- Option A: Only Conclusion I — but II also follows.

- Option B: Only Conclusion II — but I also follows.
- Option C: Both conclusions follow — **correct**.
- Option D: Neither follows — incorrect, as both are valid.

Final Answer: Both Conclusion I and Conclusion II follow $\Rightarrow$ C

Answer: (C) Go Back to Q36

Q37.

Solution

Concept — Syllogism (Particular + Universal): Determine which conclusions necessarily follow.

Identify the rule: Premise 1: *Some Birds are Parrots.*
Premise 2: *All Parrots are Green.*
The Parrots (a subset of Birds) are all Green. Therefore those Birds-that-are-Parrots are Green $\Rightarrow$ "Some Birds are Green" is certain.

Apply the rule: Conclusion I: "All Birds are Green" — requires ALL Birds to be Parrots, but only SOME Birds are Parrots. **Does NOT follow.**
Conclusion II: "Some Birds are Green" — the Parrot-birds are green, so at least some birds are green. **Follows.** ✓

Why other options are wrong:

- Option A: Only Conclusion I follows — I is too strong and does not follow.
- Option B: Only Conclusion II follows — **correct**.
- Option C: Both follow — I cannot be established.
- Option D: Neither follows — II definitely follows.

Final Answer: Only Conclusion II (Some Birds are Green) follows $\Rightarrow$ B

Answer: (B) Go Back to Q37

Q38.

Solution

Concept — Syllogism (Universal Negative + Universal Affirmative): Analyse conclusions involving a negative premise.

Identify the rule: Premise 1: *No Cats are Dogs.*
Premise 2: *All Dogs are Mammals.*
The Dogs form a subset of Mammals. Since no Cats are Dogs, the Dog-Mammals are definitely non-cats ⇒ Some Mammals are not Cats.

Apply the rule: Conclusion I: "No Cats are Mammals" — Cats can be Mammals through other mechanisms (e.g., directly); this is not established. **Does NOT follow.**
Conclusion II: "Some Mammals are not Cats" — Dogs are Mammals and Dogs are not Cats, so at least those Mammals are not Cats. **Follows.** ✓

Why other options are wrong:

- Option A: Only Conclusion I follows — I is too strong; Cats are in fact Mammals in the real sense, and even logically it is not entailed.
- Option B: Only Conclusion II follows — **correct**.
- Option C: Both follow — I does not follow.
- Option D: Neither follows — II definitely follows.

Final Answer: Only Conclusion II (Some Mammals are not Cats) follows ⇒ $\boxed{\text{B}}$

Answer: (B) Go Back to Q38

Q39.

Solution

Concept — Syllogism (Particular + Universal Negative): Analyse a partial intersection with a negative universal.

Identify the rule: Premise 1: *Some Doctors are Engineers.*
Premise 2: *No Engineer is a Lawyer.*
The Doctors who are Engineers cannot be Lawyers (from P2). So those Doctors are not Lawyers ⇒ "Some Doctors are not Lawyers."

Apply the rule: Conclusion I: "Some Doctors are not Lawyers" — the Doctor-Engineers are definitely not Lawyers. **Follows.** ✓
Conclusion II: "No Doctor is a Lawyer" — Doctors who are NOT Engineers could still be Lawyers. This is too strong. **Does NOT follow.**

Why other options are wrong:

- Option A: Only Conclusion I follows — **correct**.
- Option B: Only Conclusion II follows — II is overstated and does not follow.
- Option C: Both follow — II does not follow.
- Option D: Neither follows — I definitely follows.

Final Answer: Only Conclusion I (Some Doctors are not Lawyers) follows $\Rightarrow$ A

Answer: (A) Go Back to Q39

Q40.

Solution

Concept — Syllogism (Double Universal Affirmative): Apply transitivity for geometric hierarchy.

Identify the rule: Premise 1: *All Squares are Rectangles.*
Premise 2: *All Rectangles are Parallelograms.*
By transitivity: All Squares are Parallelograms.

Apply the rule: Conclusion I: "All Squares are Parallelograms" — follows by transitivity. ✓
Conclusion II: "Some Parallelograms are Squares" — follows by partial conversion of Conclusion I (All Squares are Parallelograms $\Rightarrow$ Some Parallelograms are Squares). ✓

Why other options are wrong:

- Option A: Only Conclusion I — but II also follows by conversion.
- Option B: Only Conclusion II — but I also follows directly.
- Option C: Both conclusions follow — **correct**.
- Option D: Neither follows — both are valid inferences.

Final Answer: Both Conclusion I and Conclusion II follow $\Rightarrow$ C

Answer: (C) Go Back to Q40

Q41.

Solution

Concept — Direction Sense (CW Rotation): Find the resulting direction after rotating clockwise.

Identify the rule: Compass directions CW: North → East → South → West → North. Each 90° CW step advances one position. Starting direction: **North**. Rotation: **135° CW**.
$135° = 90° + 45°$. After 90° CW from North = East; an additional 45° CW from East = South-East.

Apply the rule: North $\xrightarrow{+135°\text{ CW}}$ South-East (SE).

Why other options are wrong:

- Option A: South would require only 180° CW from North.
- Option B: East would require exactly 90° CW from North.
- Option C: South-East (SE) is the correct result — **correct**.
- Option D: South-West (SW) would require 225° CW from North.

Final Answer: After rotating 135° CW from North, the direction is South-East ⇒ C

Answer: (C) Go Back to Q41

Q42.

Solution

Concept — Direction Sense (ACW Rotation): Find direction after rotating anticlockwise from South-West.

Identify the rule: Starting direction: **South-West (SW = 225° from North CW)**. Rotation: **90° anti-clockwise (ACW)**.
ACW rotation subtracts from CW position: $225° - 90° = 135°$ CW from North = **South-East (SE)**.

Apply the rule: SW $\xrightarrow{-90°\text{ (ACW)}}$ SE.

Why other options are wrong:

- Option A: South (180°) would result from 45° ACW from SW.
- Option B: West (270°) would result from 45° CW from SW.
- Option C: North-West would require a larger rotation.
- Option D: South-East is the correct result — **correct**.

Final Answer: After 90° ACW from South-West, the direction is South-East ⇒ D

Answer: (D) Go Back to Q42

Q43.

Solution

Concept — Direction Sense (CW Rotation from East): Find direction after 270° CW rotation.

Identify the rule: Starting direction: **East (90° CW from North)**. Rotation: **270° CW**.
$90° + 270° = 360° = 0°$ = **North**.
Alternatively: 270° CW = 90° ACW. 90° ACW from East = North.

Apply the rule: East $\xrightarrow{+270°\ \text{CW}}$ North.

Why other options are wrong:

- Option A: North is the correct result — **correct**.
- Option B: West would be 90° CW from South, or 270° ACW from East.
- Option C: South would result from 90° CW from East.
- Option D: East is the starting direction (0° rotation).

Final Answer: After 270° CW from East, the direction is North ⇒ A

Answer: (A) Go Back to Q43

Q44.

Solution

Concept — Direction Sense (Two-Step Rotation): Apply two consecutive rotations.

Identify the rule: Starting direction: **West (270° CW from North)**.
Step 1: $+45°$ CW ⇒ $270 + 45 = 315°$ = **North-West (NW)**.
Step 2: $-90°$ (ACW) from NW ⇒ $315 - 90 = 225°$ = **South-West (SW)**.

Apply the rule: West $\xrightarrow{+45°\ \text{CW}}$ NW $\xrightarrow{-90°\ \text{ACW}}$ SW.

Why other options are wrong:

- Option A: West is the starting direction before any rotation.
- Option B: South-West is the final direction — **correct**.

- Option C: South (180°) is not reached by these two rotations.
- Option D: North-West is the intermediate direction (after Step 1 only).

Final Answer: After the two-step rotation, the final direction is South-West ⇒ B

Answer: (B) Go Back to Q44

Q45.

Solution

Concept — Direction Sense (Opposite Direction): Find the direction directly opposite to NE.

Identify the rule: The direction exactly opposite to any bearing is obtained by rotating **180°**.
NE (North-East) = 45° CW from North.
$45° + 180° = 225°$ = **South-West (SW)**.

Apply the rule: Opposite of NE = SW.

Why other options are wrong:

- Option A: NW (315°) is the mirror of NE about the N-S axis, not the opposite.
- Option B: West (270°) is 90° from SW.
- Option C: South-West (SW) is the exact opposite of NE — **correct**.
- Option D: South (180°) is opposite North, not NE.

Final Answer: The direction opposite to NE is SW ⇒ C

Answer: (C) Go Back to Q45

Q46.

Solution

Concept — Number Series (Geometric Progression): Identify the doubling pattern.

Identify the rule: Series: 3, 6, 12, 24, **?**
Each term is obtained by multiplying the previous term by **2** (common ratio = 2).

Apply the rule: $3 \times 2 = 6$; $6 \times 2 = 12$; $12 \times 2 = 24$; $24 \times 2 = \mathbf{48}$.

Why other options are wrong:

- Option A: 48 is the correct next term — **correct**.

- Option B: 36 = 24 + 12 (adding 12 is not the pattern).
- Option C: 30 = 24 + 6 (adding 6 is not the pattern).
- Option D: 42 = 24 + 18 (adding 18 has no basis in the series).

Final Answer: Next term = 48 $\Rightarrow$ B

Answer: (B) Go Back to Q46

Q47.

Solution

Concept — Number Series (Perfect Squares): Identify the series of n^2.

Identify the rule: Series: 1, 4, 9, 16, 25, ?
$1 = 1^2$, $4 = 2^2$, $9 = 3^2$, $16 = 4^2$, $25 = 5^2$. Next = 6^2.

Apply the rule: $6^2 = 36$.

Why other options are wrong:

- Option A: 36 ($= 6^2$) is the correct next term — **correct**.
- Option B: 30 is not a perfect square.
- Option C: 35 is not a perfect square.
- Option D: 32 is not a perfect square.

Final Answer: Next term = 36 (6^2) $\Rightarrow$ A

Answer: (A) Go Back to Q47

Q48.

Solution

Concept — Number Series (Fibonacci): Each term is the sum of the two preceding terms.

Identify the rule: Series: 1, 1, 2, 3, 5, 8, 13, 21, ?
Fibonacci rule: $T_n = T_{n-1} + T_{n-2}$.

Apply the rule: $T_{\text{next}} = 13 + 21 = 34$.

Why other options are wrong:

- Option A: 31 $\neq$ 13 + 21.
- Option B: 29 $\neq$ 13 + 21.

- Option C: $33 \neq 13 + 21$.
- Option D: $34 = 13 + 21$ — **correct**.

Final Answer: Next Fibonacci number $= 34 \Rightarrow \boxed{D}$

Answer: (D) Go Back to Q48

Q49.

Solution

Concept — Letter Series (Dual Pattern): Identify the pattern in letter pairs.

Identify the rule: Series: AZ, BY, CX, DW, **?**
First letter: A, B, C, D $\rightarrow$ moves forward by 1 each step. Next = **E**.
Second letter: Z, Y, X, W $\rightarrow$ moves backward by 1 each step. Next = **V**.

Apply the rule: Next pair = **EV**.

Why other options are wrong:

- Option A: EU — second letter should be V (W$-$1), not U.
- Option B: FV — first letter should be E (D$+$1), not F.
- Option C: EV is correct — **correct**.
- Option D: FU — both letters are wrong.

Final Answer: Next term = EV $\Rightarrow \boxed{C}$

Answer: (C) Go Back to Q49

Q50.

Solution

Concept — Alphanumeric Series (Number + Letter Position): Identify the dual pattern.

Identify the rule: Series: 1A, 4D, 9I, 16P, **?**
Numbers: $1, 4, 9, 16 = 1^2, 2^2, 3^2, 4^2 \rightarrow 5^2 = \mathbf{25}$.
Letters: A(1st), D(4th), I(9th), P(16th) — each letter is at the position equal to the square number. 25^{th} letter = **Y**.

Apply the rule: Next term $= 5^2$ + 25th letter = **25Y**.

Why other options are wrong:

- Option A: 25Y is correct — **correct**.

- Option B: 25X — X is the 24th letter, one too early.
- Option C: 24Y — 24 is not a perfect square.
- Option D: 25Z — Z is the 26th letter, one too late.

Final Answer: Next term = 25Y $\Rightarrow$ A

Answer: (A) Go Back to Q50

Q51.

Solution

Concept — Input-Output Machine: Apply the transformation rule to the input to get Step 1 output.

Identify the rule: Machine rule: **Words $\rightarrow$ their letter count (a number); Numbers $\rightarrow$ the letter at that alphabetical position.**

Apply the rule: Input: SMART 3 QUICK 7 BOLD 12
SMART = 5 letters $\rightarrow$ **5**; 3 $\rightarrow$ 3rd letter = **C**;
QUICK = 5 letters $\rightarrow$ **5**; 7 $\rightarrow$ 7th letter = **G**;
BOLD = 4 letters $\rightarrow$ **4**; 12 $\rightarrow$ 12th letter = **L**.
Step 1 output: 5 C 5 G 4 L

Why other options are wrong:

- Option A: Original input is not the Step 1 output.
- Option B: Showing only numbers ignores the letter conversions.
- Option C: Showing only letters ignores the word-count conversions.
- Option D: 5 C 5 G 4 L is the correct Step 1 output — **correct**.

Final Answer: Step 1 output = 5 C 5 G 4 L $\Rightarrow$ D

Answer: (D) Go Back to Q51

Q52.

Solution

Concept — Input-Output Machine: Apply the rule a second time to Step 1 output.

Identify the rule: Apply the same machine rule to Step 1 output: "5 C 5 G 4 L."

Apply the rule: Step 1: 5 C 5 G 4 L
5 $\rightarrow$ 5th letter = **E**; C = 1 letter $\rightarrow$ **1**;

$5 \rightarrow$ 5th letter = **E**; G = 1 letter $\rightarrow$ **1**;
$4 \rightarrow$ 4th letter = **D**; L = 1 letter $\rightarrow$ **1**.
Step 2 output: E 1 E 1 D 1
The 3rd element (position 3) = **E**.

Why other options are wrong:

- Option A: D is the 5th element of Step 2, not the 3rd.
- Option B: E (3rd element) is the correct answer — **correct**.
- Option C: C was in Step 1, not Step 2.
- Option D: G was in Step 1, not Step 2.

Final Answer: 3rd element of Step 2 = E $\Rightarrow$ B

Answer: (B) Go Back to Q52

Q53.

Solution

Concept — Input-Output Machine: Sum all numbers appearing in Step 2.

Identify the rule: Step 2 output: E 1 E 1 D 1.
Numbers in Step 2 = 1, 1, 1.

Apply the rule: Sum = $1 + 1 + 1 = 3$.

Why other options are wrong:

- Option A: 3 is the correct sum — **correct**.
- Option B: 6 would be the count of total elements, not the sum of numbers.
- Option C: 1 is just one individual element, not the total sum.
- Option D: 9 has no basis in the Step 2 output.

Final Answer: Sum of numbers in Step 2 = 3 $\Rightarrow$ A

Answer: (A) Go Back to Q53

Q54.

Solution

Concept — Input-Output Machine: Apply the rule a third time and count occurrences of a letter.

Identify the rule: Apply the machine rule to Step 2 output: "E 1 E 1 D 1."

Apply the rule: Step 2: E 1 E 1 D 1
E = 1 letter → **1**; 1 → 1st letter = **A**;
E = 1 letter → **1**; 1 → 1st letter = **A**;
D = 1 letter → **1**; 1 → 1st letter = **A**.
Step 3 output: 1 A 1 A 1 A
Letter **A** appears **3** times.

Why other options are wrong:

- Option A: 1 is the value assigned to each single-letter word, not the count of A.
- Option B: 2 is too few; A appears three times.
- Option C: 3 is the correct count of A in Step 3 — **correct**.
- Option D: 6 is the total number of elements in Step 3.

Final Answer: Letter A appears 3 times in Step 3 ⇒ C

Answer: (C) Go Back to Q54

Q55.

Solution

Concept — Input-Output Machine: Identify which of the given elements appears in Step 1 output as a letter.

Identify the rule: Step 1 output: **5 C 5 G 4 L**.
Letters present in Step 1: C, G, L.

Apply the rule: Check each option against the letters C, G, L:
Option A: 5 is a *number* in Step 1, not a letter.
Option B: 4 is a *number* in Step 1, not a letter.
Option C: E appears in *Step 2*, not Step 1.
Option D: L is a *letter* present in Step 1 — **correct**.

Why other options are wrong:

- Option A: 5 is a number element, not a letter.

- Option B: 4 is a number element, not a letter.
- Option C: E first appears in Step 2 (as $5 \rightarrow$ E).
- Option D: L is indeed a letter in Step 1 output — **correct**.

Final Answer: L is a letter that appears in Step 1 $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q55

Q56.

Solution

Concept — Statement-Conclusion: Evaluate which conclusions are directly supported by the statement.

Identify the rule: Statement: *"All students who passed the examination received certificates."*
This tells us about *passers* getting certificates. It says nothing about those who did not pass.

Apply the rule: Conclusion I: "Some certificate holders are students" — direct logical implication; passers are students, and passers got certificates $\Rightarrow$ some certificate holders are students. **Follows.** ✓
Conclusion II: "No student failed the examination" — the statement says nothing about failure; failure is possible but unaddressed. **Does NOT follow.**

Why other options are wrong:

- Option A: Only Conclusion I follows — **correct**.
- Option B: Only Conclusion II follows — II is an unjustified leap.
- Option C: Both follow — II cannot be inferred.
- Option D: Neither follows — I follows directly.

Final Answer: Only Conclusion I follows $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q56

Q57.

Solution

Concept — Statement-Conclusion: Distinguish between what is directly stated and what is an overextension.

Identify the rule: Statement: *"Regular exercise improves cardiovascular health."* This is a positive claim about exercise and one specific health benefit.

Apply the rule: Conclusion I: "People who do not exercise have poor cardiovascular health" — an *inverse* inference that is not logically guaranteed; absence of a benefit-cause does not necessarily imply poor outcomes. **Does NOT follow.**
Conclusion II: "Exercise has health benefits" — a direct and mild restatement; cardiovascular health improvement is a health benefit. **Follows.** ✓

Why other options are wrong:

- Option A: Only Conclusion I follows — I is an unwarranted inverse.
- Option B: Only Conclusion II follows — **correct**.
- Option C: Both follow — I is too extreme to be logically valid.
- Option D: Neither follows — II is a clear inference.

Final Answer: Only Conclusion II follows $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q57

Q58.

Solution

Concept — Statement-Conclusion: Evaluate policy implications.

Identify the rule: Statement: *"A new policy bans the use of single-use plastics in all government offices."*

Apply the rule: Conclusion I: "Plastics are harmful to the environment" — a possible reason *behind* the policy, but the statement does not explicitly say plastics are harmful; this is an *assumed cause*, not a stated conclusion. **Does NOT follow directly.**
Conclusion II: "Government offices will need to find alternatives to single-use plastics" — a *direct and necessary consequence* of the ban; if single-use plastics are banned, alternatives must be used. **Follows.** ✓

Why other options are wrong:

- Option A: Only Conclusion I follows — I is an assumed cause, not a stated

conclusion.

- Option B: Only Conclusion II follows — **correct**.
- Option C: Both follow — I is not directly supported.
- Option D: Neither follows — II is an obvious direct consequence.

Final Answer: Only Conclusion II follows $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q58

Q59.

Solution

Concept — Statement-Conclusion: Distinguish correlation from causation.

Identify the rule: Statement: *"Children who read more than 10 books a year score above average in reading tests."*

Apply the rule: Conclusion I: "Reading 10 books a year causes high reading test scores" — the statement shows *correlation*; claiming *causation* is an overreach not supported by the statement alone. **Does NOT follow.**
Conclusion II: "Some children who score above average in reading tests read more than 10 books a year" — a direct restatement (those children who read 10+ books score above average, so some above-average scorers are 10+ book readers). **Follows.** ✓

Why other options are wrong:

- Option A: Only Conclusion I follows — I incorrectly asserts causation.
- Option B: Only Conclusion II follows — **correct**.
- Option C: Both follow — I is an overstatement.
- Option D: Neither follows — II is a valid direct inference.

Final Answer: Only Conclusion II follows $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q59

Q60.

Solution

Concept — Statement-Conclusion: Evaluate a comparative factual statement.

Identify the rule: Statement: *"The factory that produces the most units employs the most workers."*
This establishes a direct association between the highest-producing factory and the largest workforce.

Apply the rule: Conclusion I: "The factory with the most workers produces the most units" — the statement is a biconditional association between being the *most productive* and having the *most workers*. If production-max implies worker-max, it is logically equivalent to say worker-max implies production-max (in this specific context where both superlatives coincide). **Follows.** ✓
Conclusion II: "Producing more units always requires more workers" — a *general principle* cannot be derived from a single comparative observation; this may or may not hold universally. **Does NOT necessarily follow.**

Why other options are wrong:

- Option A: Only Conclusion I follows — **correct**.
- Option B: Only Conclusion II follows — II is a generalisation beyond the single observation.
- Option C: Both follow — II goes beyond what the statement supports.
- Option D: Neither follows — I is a valid inference from the stated equivalence.

Final Answer: Only Conclusion I follows $\Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q60

Q61.

Solution

Concept — Age Problem (Present vs. Past): Set up algebraic equations from age-ratio conditions.

Identify the rule: Let B's present age $= x$. Then A's present age $= 2x$ (A is twice B).
10 years ago: A was $2x - 10$, B was $x - 10$.
Condition: $(2x - 10) = 3(x - 10)$.

Apply the rule:

$$2x - 10 = 3x - 30 \Rightarrow 30 - 10 = 3x - 2x \Rightarrow x = 20.$$

B's present age $= 20$. A's present age $= 2 \times 20 = \mathbf{40}$.

Why other options are wrong:

- Option A: 30 — if A were 30, B would be 15; 10 years ago A=20, B=5; ratio 20:5=4:1, not 3:1.
- Option B: 40 is the correct present age of A — **correct**.
- Option C: 50 — if A=50, B=25; 10 years ago A=40, B=15; ratio 40:15$\neq$3:1.
- Option D: 60 — if A=60, B=30; 10 years ago A=50, B=20; ratio 50:20=5:2$\neq$3:1.

Final Answer: A's present age is 40 years $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q61

Q62.

Solution

Concept — Age Problem (Average Age and Replacement): Find the age of the replaced person.

Identify the rule: Original average of 4 persons = 30 years $\Rightarrow$ total age $= 4 \times 30 = 120$.
New average after replacement = 32 years $\Rightarrow$ new total $= 4 \times 32 = 128$.
The new person's age = 40 years.
Increase in total $= 128 - 120 = 8$.
Age removed (replaced person) = New person's age − increase $= 40 - 8 = \mathbf{32}$.

Apply the rule: Age of replaced person $= 40 - 8 = \mathbf{32}$ years.

Why other options are wrong:

- Option A: 32 is the correct age of the replaced person — **correct**.
- Option B: 28 — this would give average increase of $(40 - 28)/4 = 3$, making new average 33, not 32.
- Option C: 30 — replacing a 30-year-old with a 40-year-old increases average by $10/4 = 2.5$, new average = 32.5, not 32.
- Option D: 24 — replacing 24-year-old: increase $(40-24)/4 = 4$, new average = 34, not 32.

Final Answer: The replaced person was 32 years old $\Rightarrow$ A

Answer: (A) Go Back to Q62

Q63.

Solution

Concept — Age Problem (Future Ratio): Solve for current age using a future age ratio.

Identify the rule: P : Q = 3 : 5 now. Let $P = 3k$, $Q = 5k$.
After 6 years: $\frac{3k+6}{5k+6} = \frac{3}{4}$.

Apply the rule:

$$4(3k+6) = 3(5k+6) \Rightarrow 12k + 24 = 15k + 18 \Rightarrow 3k = 6 \Rightarrow k = 2.$$

P's current age = $3k = 3 \times 2 =$ **6** years.

Why other options are wrong:

- Option A: 9 — if P=9, Q=15; after 6 years: 15/21=5/7≠3/4.
- Option B: 12 — if P=12, Q=20; after 6 years: 18/26=9/13≠3/4.
- Option C: 3 — if P=3, Q=5; after 6 years: 9/11≠3/4.
- Option D: P = 6 years — **correct**. (Q=10; after 6 years: 12/16=3/4 ✓)

Final Answer: P's current age is 6 years $\Rightarrow$ D

Answer: (D) Go Back to Q63

Q64.

Solution

Concept — Age Problem (Mother-Daughter Age): Use present sum and past ratio to find current ages.

Identify the rule: Let Mother's age = M, Daughter's age = D.
Condition 1: $M + D = 50$.
Condition 2: 5 years ago, M was 7 times D's age: $(M - 5) = 7(D - 5)$.

Apply the rule: $M - 5 = 7D - 35 \Rightarrow M = 7D - 30$.
Substituting into Condition 1: $7D - 30 + D = 50 \Rightarrow 8D = 80 \Rightarrow D = 10$.
$M = 50 - 10 =$ **40**.

Why other options are wrong:

- Option A: 35 — if M=35, D=15; 5 years ago M=30, D=10; $30 \neq 7 \times 10 = 70$.
- Option B: 45 — if M=45, D=5; 5 years ago M=40, D=0; division undefined/inapplicable.
- Option C: Mother's age = 40 — **correct**. (5 years ago: M=35, D=5; $35 = 7 \times 5$ ✓)
- Option D: 30 — if M=30, D=20; 5 years ago M=25, D=15; $25 \neq 7 \times 15$.

Final Answer: Mother's present age is 40 years $\Rightarrow$ C

Answer: (C) Go Back to Q64

Q65.

Solution

Concept — Age Problem (Sibling Ages): Find present age from future relationship.

Identify the rule: Let sister's current age = s. Raj's current age = $s + 3$ (Raj is 3 years older).
5 years from now, Raj's age = $(s + 3) + 5 = s + 8$. At that time, Raj is twice his sister's age: $s + 8 = 2(s + 5)$.

Apply the rule:

$$s + 8 = 2s + 10 \Rightarrow 8 - 10 = 2s - s \Rightarrow s = -2.$$

Wait — let us re-read: "5 years from now, Raj will be twice his *current* sister's age." So: $s + 8 = 2s \Rightarrow s = 8$, Raj = 11.

Why other options are wrong:

- Option A: Raj's current age = 11 — **correct**. (Sister=8; in 5 years Raj=16=2×8 ✓)
- Option B: 13 — if Raj=13, sister=10; in 5 years Raj=18≠2×10=20.
- Option C: 8 is the sister's current age, not Raj's.
- Option D: 16 — if Raj=16, sister=13; in 5 years Raj=21≠2×13=26.

Final Answer: Raj's current age is 11 years $\Rightarrow$ A

Answer: (A) Go Back to Q65

Q66.

Solution

Concept — Venn Diagram (Only One Set): Calculate the number of elements in exactly one set (only S).

Identify the rule: Only S $= |S| -$ (S∩E only) $-$ (S∩D only) $-$ (S∩E∩D) $= 110 - 15 - 8 - 10$.

Apply the rule: Only S $= 110 - 15 - 8 - 10 =$ **77**.

Why other options are wrong:

- Option A: 85 — incorrectly subtracts only the pairwise intersections without the triple.
- Option B: 65 — subtracts 45 from 110, which has no valid basis.
- Option C: 70 — subtracts 40 from 110, not matching the correct calculation.
- Option D: 77 is the correct count — **correct**.

Final Answer: Number of students in only S $= 77 \Rightarrow$ D

Answer: (D) Go Back to Q66

Q67.

Solution

Concept — Venn Diagram (Exactly Two Sets): Count members belonging to exactly two sets.

Identify the rule: Exactly two sets = (S∩E only) + (E∩D only) + (S∩D only) $= 15 + 10 + 8$.

Apply the rule: Exactly two $= 15 + 10 + 8 =$ **33**.

Why other options are wrong:

- Option A: 43 — incorrectly adds the triple-intersection region as well.
- Option B: 33 is the correct count — **correct**.
- Option C: 53 — includes all pairwise intersections without subtracting the triple.
- Option D: 25 — uses incorrect subset of the pairwise regions.

Final Answer: 33 students belong to exactly two subjects $\Rightarrow$ C

Answer: (C) Go Back to Q67

Q68.

Solution

Concept — Venn Diagram (At Least One Set): Count members in the union of all three sets.

Identify the rule: At least one = Only S + Only E + Only D + (S∩E only) + (E∩D only) + (S∩D only) + (S∩E∩D)
$= 77 + 55 + 52 + 15 + 10 + 8 + 10$.

Apply the rule: At least one $= 77 + 55 + 52 + 15 + 10 + 8 + 10 =$ **227**.

Why other options are wrong:

- Option A: 250 is the total sample, including those who belong to none.
- Option B: 200 is too low; actual union is 227.
- Option C: 227 is the correct union count — **correct**.
- Option D: 210 does not match the correct addition.

Final Answer: 227 students like at least one subject $\Rightarrow$ C

Answer: (C) Go Back to Q68

Q69.

Solution

Concept — Venn Diagram (None): Count members outside all three sets.

Identify the rule: None = Total − At least one $= 250 - 227$.

Apply the rule: None $= 250 - 227 =$ **23**.

Why other options are wrong:

- Option A: 23 is the correct count of students who like none of the subjects — **correct**.
- Option B: 33 is the count who like exactly two subjects, not none.
- Option C: 13 — subtracts 237 from 250, which is incorrect.
- Option D: 43 — subtracts 207 from 250, which is incorrect.

Final Answer: 23 students like none of the three subjects $\Rightarrow$ A

Answer: (A) Go Back to Q69

Q70.

Solution

Concept — Venn Diagram (Exactly One Pairwise Intersection): Find students in E∩D but NOT in S.

Identify the rule: E∩D but not S = (E∩D only) = given directly as **10**.
(This is distinct from the total E∩D which includes the triple intersection: $10+10=20$.)

Apply the rule: E∩D only (not S) = **10**.

Why other options are wrong:

- Option A: 20 is the total E∩D (includes those also in S, i.e., the triple-intersection).
- Option B: 15 is the S∩E only count, not E∩D.
- Option C: 18 is S∩D total (wrong subject pair and includes triple).
- Option D: 10 is the correct count of E∩D only (excluding S) — **correct**.

Final Answer: 10 students like both E and D but not S ⇒ $\boxed{\text{D}}$

Answer: (D) Go Back to Q70

Q71.

Solution

Concept — Analogy (Instrument : Measurement): Identify the instrument paired with its measurement domain.

Identify the rule: Barometer measures atmospheric *Pressure*. Apply the same relationship: Seismograph is an instrument that measures . . .

Apply the rule: Barometer : Pressure ⇒ Seismograph : **Earthquakes** (seismic activity/ground motion).

Why other options are wrong:

- Option A: Temperature is measured by a Thermometer, not a Seismograph.
- Option B: Sound intensity is measured by a Decibel meter.
- Option C: Earthquakes (seismic waves) are what a Seismograph records — **correct**.
- Option D: Humidity is measured by a Hygrometer.

Final Answer: Seismograph : Earthquakes ⇒ $\boxed{\text{C}}$

Answer: (C) Go Back to Q71

Q72.

Solution

Concept — Analogy (Person : Workplace): Identify the primary workspace of a professional.

Identify the rule: Chef works in a *Kitchen*. Apply: Surgeon works in . . .

Apply the rule: Chef : Kitchen ⇒ Surgeon : **Operating Theatre** (the dedicated surgical workspace).

Why other options are wrong:

- Option A: Operating Theatre is the surgeon's primary workplace — **correct**.
- Option B: Hospital Ward is where patients stay for recovery, not where surgeons perform operations.
- Option C: Laboratory is for research scientists and pathologists.
- Option D: Clinic is an outpatient consultation setting, not a surgical one.

Final Answer: Surgeon : Operating Theatre ⇒ A

Answer: (A) Go Back to Q72

Q73.

Solution

Concept — Analogy (Draft : Final Product): Identify what a blueprint is to a building.

Identify the rule: Manuscript : Book — a Manuscript is the written draft that becomes a Book (final published product). Apply: Blueprint : . . .

Apply the rule: Blueprint is the technical plan/drawing that guides the construction of a **Building**.

Why other options are wrong:

- Option A: Paper is the raw material, not the final product created from a Blueprint.
- Option B: Design is the process or concept, not the final physical product.
- Option C: Plan is essentially a synonym of Blueprint itself, not the outcome.
- Option D: Building is what is constructed from a Blueprint — **correct**.

Final Answer: Blueprint : Building ⇒ D

Answer: (D) Go Back to Q73

Q74.

Solution

Concept — Analogy (Diet Category : Food Type): Match feeding habit to food source.

Identify the rule: Herbivore eats *Plants*. Apply: Carnivore eats . . .

Apply the rule: Carnivore : **Meat** (flesh of other animals).

Why other options are wrong:

- Option A: Grass is what herbivores (especially grazers) eat, not carnivores.
- Option B: Meat is what carnivores consume — **correct**.
- Option C: Fruits are consumed by frugivores, a subset of herbivores.
- Option D: Insects are eaten by insectivores, a specialised sub-category.

Final Answer: Carnivore : Meat ⇒ B

Answer: (B) Go Back to Q74

Q75.

Solution

Concept — Analogy (Position in a Narrative): Match opening and closing structural elements.

Identify the rule: Prologue : Beginning — a Prologue appears at the *beginning* of a literary work. Apply: Epilogue : . . .

Apply the rule: An Epilogue is a closing section that appears at the **End** of a literary work.

Why other options are wrong:

- Option A: Middle is where the main narrative or body of the story unfolds.
- Option B: Story is the entire work; Epilogue is a *part* of it, not the whole.
- Option C: End is where the Epilogue is located — **correct**.
- Option D: Chapter is a section of the main story body, not equivalent to an Epilogue.

Final Answer: Epilogue : End $\Rightarrow$ C

Answer: (C) Go Back to Q75

Q76.

Solution

Concept — Abstract Reasoning (Triangular Numbers): Identify the pattern of cells filled in successive frames.

Identify the rule: The frames follow triangular numbers: $T(n) = \frac{n(n+1)}{2}$.
Frame 1 = 1 cell, Frame 2 = 3 cells, Frame 3 = 6 cells, Frame 4 = 10 cells.
Each new frame adds one more cell than the previous increment.

Apply the rule: Increments: $+2, +3, +4 \Rightarrow$ Frame 4 adds 4 cells to Frame 3's 6 = **10 cells total**.

Why other options are wrong:

- Option A: Shows fewer than 10 filled cells, matching Frame 3's pattern.
- Option B: Shows exactly 10 filled cells in the triangular arrangement — **correct**.
- Option C: Shows a different fill pattern inconsistent with the triangular rule.
- Option D: Shows all cells filled (more than 10), overshooting the triangular count.

Final Answer: Frame 4 has 10 filled cells (4th triangular number) $\Rightarrow$ B

Answer: (B) Go Back to Q76

Q77.

Solution

Concept — Abstract Reasoning (Growing Dot Array): Each frame adds a row at the base.

Identify the rule: Frame 1: 1 row (1 dot); Frame 2: 2 rows (1+2=3 dots); Frame 3: 3 rows (1+2+3=6 dots); Frame 4: 4 rows (1+2+3+4=10 dots).
The arrangement forms a downward-growing triangular array.

Apply the rule: Frame 4 should show **4 rows** with a total of 10 dots arranged in a triangle (1 at top, 2 in 2nd row, 3 in 3rd row, 4 at the base).

Why other options are wrong:

- Option A: Shows only 3 rows (matches Frame 3).
- Option B: Shows a non-triangular arrangement.
- Option C: Shows 4 rows with 10 dots in a proper triangular arrangement — **correct**.
- Option D: Shows the dots arranged horizontally, breaking the triangular pattern.

Final Answer: Frame 4 = 4-row triangular dot array (10 dots) $\Rightarrow$ C

Answer: (C) Go Back to Q77

Q78.

Solution

Concept — Abstract Reasoning (Cyclic Pattern): Checkerboard follows a 2-step repeating cycle.

Identify the rule: The 2×2 checkerboard pattern alternates in a cycle:
Frame 1: All white $\rightarrow$ Frame 2: Checkerboard (diagonal fill) $\rightarrow$ Frame 3: All black $\rightarrow$ Frame 4: Checkerboard (same as Frame 2).
The cycle repeats every 2 steps after Frame 1.

Apply the rule: Frame 4 replicates Frame 2: **Checkerboard pattern** (alternating black and white cells).

Why other options are wrong:

- Option A: All-white matches Frame 1, not Frame 4.
- Option B: Inverted checker (opposite diagonals filled) does not match the cycle.
- Option C: All-black matches Frame 3, not Frame 4.
- Option D: Checkerboard pattern (same as Frame 2) is correct for Frame 4 — **correct**.

Final Answer: Frame 4 = Checkerboard pattern (repeats Frame 2) $\Rightarrow$ D

Answer: (D) Go Back to Q78

Q79.

Solution

Concept — Abstract Reasoning (Concentric Rectangles): Each frame adds one more outer rectangle.

Identify the rule: Frame 1: 1 rectangle; Frame 2: 2 nested rectangles; Frame 3: 3 nested rectangles; Frame 4: 4 nested rectangles.

Apply the rule: Frame 4 should show **4 concentric (nested) rectangles**, each progressively larger.

Why other options are wrong:

- Option A: Shows 4 nested rectangles — **correct**.
- Option B: Shows only 3 nested rectangles (matches Frame 3).
- Option C: Shows rectangles arranged side-by-side, not nested.
- Option D: Shows only the outermost rectangle without nesting.

Final Answer: Frame 4 = 4 concentric nested rectangles $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q79

Q80.

Solution

Concept — Abstract Reasoning (Arrow Rotation): Arrow rotates 90° clockwise each frame.

Identify the rule: Frame 1: Arrow points Up (North/12-o'clock); Frame 2: Arrow points Right (East/3-o'clock); Frame 3: Arrow points Down (South/6-o'clock); Frame 4: Arrow points **Left** (West/9-o'clock).

Apply the rule: Each frame: $+90°$ CW. After 3 rotations from Up: Up $\rightarrow$ Right $\rightarrow$ Down $\rightarrow$ **Left**.

Why other options are wrong:

- Option A: Upward arrow would require 360° rotation (Frame 5 pattern).
- Option B: Leftward arrow is the correct direction for Frame 4 — **correct**.
- Option C: Diagonal arrow breaks the 90° rotation rule.
- Option D: Downward arrow matches Frame 3, not Frame 4.

Final Answer: Frame 4 arrow points Left (West) $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q80

Q81.

Solution

Concept — Abstract Reasoning (Dots Inside Shape): Pentagon remains fixed; dots inside increase by one per frame.

Identify the rule: Frame 1: Pentagon with 0 dots; Frame 2: Pentagon with 1 dot; Frame 3: Pentagon with 2 dots; Frame 4: Pentagon with **3 dots**.

Apply the rule: Each frame adds 1 dot inside the fixed pentagon: $0 \to 1 \to 2 \to$ **3**.

Why other options are wrong:

- Option A: 1 dot matches Frame 2.
- Option B: 2 dots matches Frame 3.
- Option C: 3 dots inside the pentagon — **correct**.
- Option D: 4 dots would be Frame 5.

Final Answer: Frame 4 = Pentagon with 3 dots inside $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q81

Q82.

Solution

Concept — Abstract Reasoning (Rotating Highlighted Corner): The highlighted corner of a square rotates clockwise each frame.

Identify the rule: Frame 1: Top-left corner highlighted; Frame 2: Top-right corner highlighted; Frame 3: Bottom-right corner highlighted; Frame 4: **Bottom-left** corner highlighted.
Rotation: CW through the four corners.

Apply the rule: Top-left $\to$ Top-right $\to$ Bottom-right $\to$ **Bottom-left** $\to$ (back to Top-left).

Why other options are wrong:

- Option A: Top-left matches Frame 1 (not Frame 4).
- Option B: Top-right matches Frame 2.
- Option C: Bottom-right matches Frame 3.
- Option D: Bottom-left is the correct highlighted corner for Frame 4 — **correct**.

Final Answer: Frame 4 = Bottom-left corner highlighted $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q82

Q83.

Solution

Concept — Abstract Reasoning (Growing Arc): An arc/sector grows by 90° each frame.

Identify the rule: Frame 1: Quarter circle (90° arc); Frame 2: Semicircle (180°); Frame 3: Three-quarter circle (270°); Frame 4: Full circle (360°).

Apply the rule: Each frame adds 90° to the arc: $90^\circ \rightarrow 180^\circ \rightarrow 270^\circ \rightarrow$ **360° = full circle**.

Why other options are wrong:

- Option A: Full circle (360°) is the correct Frame 4 figure — **correct**.
- Option B: Three-quarter circle (270°) matches Frame 3.
- Option C: Semicircle (180°) matches Frame 2.
- Option D: Quarter circle (90°) matches Frame 1.

Final Answer: Frame 4 = Full circle (360° arc) $\Rightarrow$ A

Answer: (A) Go Back to Q83

Q84.

Solution

Concept — Abstract Reasoning (Peeling Layers): The outermost shape is removed each frame.

Identify the rule: Frame 1: Square + Circle + Triangle (3 shapes nested); Frame 2: Circle + Triangle (outermost square removed); Frame 3: Triangle only; Frame 4: **Empty frame** (triangle also removed).

Apply the rule: Each frame removes the outermost shape: $3 \rightarrow 2 \rightarrow 1 \rightarrow$ **0** shapes.

Why other options are wrong:

- Option A: Showing a single shape would match Frame 3.
- Option B: Empty frame (no shapes inside) is correct for Frame 4 — **correct**.
- Option C: Two shapes matches Frame 2.
- Option D: Three shapes matches Frame 1 (original).

Final Answer: Frame 4 = Empty frame (all shapes removed) ⇒ B

Answer: (B) Go Back to Q84

Q85.

Solution

Concept — Abstract Reasoning (Converging Circles): Two circles move progressively closer together.

Identify the rule: Frame 1: Two circles far apart (no overlap); Frame 2: Two circles touching (tangential); Frame 3: Two circles overlapping (partial intersection); Frame 4: Two circles **concentric** (one fully inside the other).

Apply the rule: The circles converge: Far → Touching → Overlapping → **Concentric**.

Why other options are wrong:

- Option A: Far-apart circles match Frame 1.
- Option B: Touching circles match Frame 2.
- Option C: Concentric circles (one inside the other) is correct for Frame 4 — **correct**.
- Option D: Partially overlapping circles match Frame 3.

Final Answer: Frame 4 = Concentric circles ⇒ C

Answer: (C) Go Back to Q85

Q86.

Solution

Concept — Abstract Reasoning (Increasing Amplitude): A zigzag wave grows in amplitude each frame.

Identify the rule: Frame 1: Zigzag with small amplitude (flat peaks); Frame 2: Slightly larger peaks; Frame 3: Moderate amplitude; Frame 4: **Largest amplitude** (tallest peaks and deepest troughs).

Apply the rule: Amplitude increases steadily with each frame. Frame 4 should show the largest zigzag peaks and troughs.

Why other options are wrong:

- Option A: Smallest amplitude matches Frame 1.
- Option B: Medium amplitude matches an intermediate frame.
- Option C: Slightly-large amplitude matches Frame 3.
- Option D: Largest amplitude (tallest zigzag peaks) is correct for Frame 4 — **correct**.

Final Answer: Frame 4 = Zigzag with maximum amplitude $\Rightarrow$ D

Answer: (D) Go Back to Q86

Q87.

Solution

Concept — Abstract Reasoning (Doubling Number): The number inside a circle doubles each frame.

Identify the rule: Frame 1: Circle with 1; Frame 2: Circle with 2; Frame 3: Circle with 4; Frame 4: Circle with **8**.
Pattern: $1 \to 2 \to 4 \to 8$ (each term $\times 2$).

Apply the rule: $4 \times 2 = 8$.

Why other options are wrong:

- Option A: Circle with 8 — **correct**.
- Option B: 6 = 4 + 2 (additive, not multiplicative pattern).
- Option C: 16 would be Frame 5 (8×2).
- Option D: 5 = 4 + 1 (no basis in the doubling pattern).

Final Answer: Frame 4 = Circle with the number 8 $\Rightarrow$ A

Answer: (A) Go Back to Q87

Q88.

Solution

Concept — Abstract Reasoning (Diagonal Fill): One diagonal cell of a 4×4 grid is added per frame.

Identify the rule: Frame 1: 1 diagonal cell filled (top-left); Frame 2: 2 diagonal cells (top-left + next diagonal); Frame 3: 3 diagonal cells; Frame 4: **4 diagonal cells** (entire main diagonal filled).

Apply the rule: Each frame fills one more cell along the main diagonal: $1 \to 2 \to$

$3 \to 4$.

Why other options are wrong:

- Option A: 3 diagonal cells filled matches Frame 3.
- Option B: All 4 diagonal cells filled is correct for Frame 4 — **correct**.
- Option C: Shows non-diagonal cells filled.
- Option D: Shows only 1 diagonal cell (Frame 1).

Final Answer: Frame 4 = All 4 main diagonal cells filled $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q88

Q89.

Solution

Concept — Abstract Reasoning (Diagonal Arrow Rotation): Arrow rotates 90° CW each frame through diagonal directions.

Identify the rule: Frame 1: NE (45°); Frame 2: SE (135°); Frame 3: SW (225°); Frame 4: **NW** (315°).
Each step: $+90°$ CW from the previous diagonal direction.

Apply the rule: NE $\xrightarrow{+90° \text{ CW}}$ SE $\xrightarrow{+90° \text{ CW}}$ SW $\xrightarrow{+90° \text{ CW}}$ **NW**.

Why other options are wrong:

- Option A: NE is Frame 1's direction.
- Option B: SE is Frame 2's direction.
- Option C: NW is the correct direction for Frame 4 — **correct**.
- Option D: SW is Frame 3's direction.

Final Answer: Frame 4 arrow points NW $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q89

Q90.

Solution

Concept — Abstract Reasoning (Decreasing Nested Squares): The number of nested squares decreases by one per frame.

Identify the rule: Frame 1: 3 nested squares inside outer frame; Frame 2: 2 nested squares; Frame 3: 1 inner square; Frame 4: **0 inner squares** (only the outer frame remains, interior is empty).

Apply the rule: $3 \to 2 \to 1 \to$ **0** nested squares.

Why other options are wrong:

- Option A: 1 inner square matches Frame 3.
- Option B: 2 inner squares matches Frame 2.
- Option C: 3 inner squares matches Frame 1.
- Option D: Only the outer frame with empty interior (0 inner squares) is correct for Frame 4 — **correct**.

Final Answer: Frame 4 = Outer frame only, no inner squares $\Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q90

Q91.

Solution

Concept — Figure Analogy (Vertical Mirror / 180° Rotation): Identify the transformation applied in the first pair, then apply it to the second.

Identify the rule: First pair: Upward-pointing triangle $\to$ Downward-pointing triangle (180° rotation / vertical flip).
Apply the same transformation to the second figure: Right-pointing arrow $\to$ **Left-pointing arrow**.

Apply the rule: A rightward arrow rotated 180° (or horizontally mirrored) points **left**.

Why other options are wrong:

- Option A: Leftward arrow is the correct result — **correct**.
- Option B: Upward arrow would result from a 90° ACW rotation, not 180°.
- Option C: Downward arrow would result from a 90° CW rotation.
- Option D: Rightward arrow is the original (no transformation applied).

Final Answer: Right arrow $\xrightarrow{180^\circ}$ Left arrow $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q91

Q92.

Solution

Concept — Figure Analogy (Fill Inversion): Solid shape transforms to outline shape.

Identify the rule: First pair: Solid (filled) circle $\rightarrow$ Outline (hollow) circle. Transformation = **fill inversion** (solid $\rightarrow$ outline).
Apply to: Solid square $\rightarrow$ **Outline square**.

Apply the rule: Filled black square $\xrightarrow{\text{fill inversion}}$ **Hollow (outline) square**.

Why other options are wrong:

- Option A: A filled square is the original, with no transformation.
- Option B: Outline square is the correct result of fill inversion — **correct**.
- Option C: A circle (wrong shape) does not maintain the square analogy.
- Option D: A shaded/grey square does not match the binary solid/outline inversion.

Final Answer: Solid square $\rightarrow$ Outline square $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q92

Q93.

Solution

Concept — Figure Analogy (Adding Midline): A horizontal midline is added to the shape.

Identify the rule: First pair: Pentagon (plain) $\rightarrow$ Pentagon with a horizontal line through its centre. Transformation = **adding a horizontal midline/diameter**.
Apply to: Circle (plain) $\rightarrow$ **Circle with a horizontal diameter**.

Apply the rule: Plain circle $\xrightarrow{\text{+ horizontal line}}$ **Circle bisected by a horizontal diameter**.

Why other options are wrong:

- Option A: Circle with a vertical line uses a different axis; the pattern specifies

horizontal.

- Option B: Circle with a cross (both vertical and horizontal) adds two lines, not one.
- Option C: Circle with a horizontal diameter is the correct transformation — **correct**.
- Option D: Filled circle applies a fill change, not a line addition.

Final Answer: Circle + horizontal midline $\Rightarrow$ C

Answer: (C) Go Back to Q93

Q94.

Solution

Concept — Figure Analogy (Count Doubling): The count of elements inside a shape doubles.

Identify the rule: First pair: Shape with 2 dots $\rightarrow$ Shape with 4 dots (count doubles: $2 \times 2 = 4$).
Apply to: Square with 3 horizontal lines $\rightarrow$ Square with **6 horizontal lines** ($3 \times 2 = 6$).

Apply the rule: 3 lines $\xrightarrow{\times 2}$ **6 lines**.

Why other options are wrong:

- Option A: 4 lines (3 + 1 additive) does not match the doubling rule.
- Option B: 5 lines is neither double nor a simple increment.
- Option C: 3 lines is the original (no transformation).
- Option D: 6 lines in a square is the correct result of doubling — **correct**.

Final Answer: 3 lines $\xrightarrow{\times 2}$ 6 lines in the square $\Rightarrow$ D

Answer: (D) Go Back to Q94

Q95.

Solution

Concept — Figure Analogy (Letter 180° Rotation): Letters are rotated 180°.

Identify the rule: First pair: Letter 'P' rotated 180° → Letter 'd' (the bowl of P flips to the bottom).
Apply to: Letter 'b' rotated 180° → **'q'** (the bowl of b flips to the bottom-right).

Apply the rule: 'b' (180° rotation) → **'q'**.
(Alternatively: 'b' $\xrightarrow{\text{vertical flip}}$ 'p'; 'p' $\xrightarrow{\text{horizontal flip}}$ 'q'.)

Why other options are wrong:

- Option A: 'q' is the correct 180° rotation of 'b' — **correct**.
- Option B: 'p' is a vertical mirror of 'b', not a 180° rotation.
- Option C: 'd' is a horizontal mirror of 'b', not a 180° rotation.
- Option D: 'b' itself is the original.

Final Answer: 'b' rotated 180° = 'q' ⇒ $\boxed{\text{A}}$

Answer: (A) Go Back to Q95

Q96.

Solution

Concept — Odd One Out (Lines of Symmetry): Identify the figure that lacks a line of symmetry.

Identify the rule: A figure has a line of symmetry if it can be folded so both halves coincide exactly.
Figures 1 (hexagon), 3 (square), 4 (regular pentagon), 5 (equilateral triangle) all have at least one line of symmetry.
Figure 2 (scalene triangle) has **no** line of symmetry (all three sides are different lengths).

Apply the rule: Odd one out = **Figure 2** (scalene triangle).

Why other options are wrong:

- Option A: Figure 1 (regular hexagon) has 6 lines of symmetry.
- Option B: Figure 2 (scalene triangle) has no line of symmetry — **correct**.
- Option C: Figure 3 (square) has 4 lines of symmetry.
- Option D: Figure 4 (regular pentagon) has 5 lines of symmetry.

Final Answer: Figure 2 (scalene triangle) has no line of symmetry $\Rightarrow$ B

Answer: (B) Go Back to Q96

Q97.

Solution

Concept — Odd One Out (Letter Symmetry): Identify the letter that has no line of symmetry.

Identify the rule: Letters M, A, H, K each have at least one axis of symmetry (M and A have a vertical axis; H and K have a horizontal or vertical axis).
Letter **F** has *no* line of symmetry; its horizontal arms extend only to the right, so no folding produces two identical halves.

Apply the rule: Figure 3 = Letter **F** = no line of symmetry $\Rightarrow$ odd one out.

Why other options are wrong:

- Option A: M has a vertical line of symmetry.
- Option B: A has a vertical line of symmetry.
- Option C: F has no line of symmetry — **correct**.
- Option D: H has both vertical and horizontal lines of symmetry.

Final Answer: Figure 3 (F) is the odd one out (no symmetry) $\Rightarrow$ C

Answer: (C) Go Back to Q97

Q98.

Solution

Concept — Odd One Out (Regular Polygons): Identify the non-regular polygon among the group.

Identify the rule: A *regular polygon* has all sides equal and all interior angles equal.
Figures 1 (equilateral triangle), 2 (square), 3 (regular pentagon), 5 (regular hexagon) are all regular polygons.
Figure 4 is an **irregular quadrilateral** (sides and angles are unequal).

Apply the rule: Odd one out = **Figure 4** (irregular quadrilateral).

Why other options are wrong:

- Option A: Figure 1 (equilateral triangle) is a regular polygon.
- Option B: Figure 2 (square) is a regular polygon.
- Option C: Figure 3 (regular pentagon) is a regular polygon.
- Option D: Figure 4 (irregular quadrilateral) is not a regular polygon — **correct**.

Final Answer: Figure 4 (irregular quadrilateral) is the odd one out $\Rightarrow$ $\boxed{D}$

Answer: (D) Go Back to Q98

Q99.

Solution

Concept — Odd One Out (Arrow Sequence): Identify the arrow that breaks a clockwise rotational sequence.

Identify the rule: Figures 2, 3, 4, 5 show arrows that rotate **90° clockwise** from one figure to the next (e.g., Right $\rightarrow$ Down $\rightarrow$ Left $\rightarrow$ Up).
Figure 1 shows an arrow at 45° (NE direction), which does not fit the 90° CW sequence of the other four.

Apply the rule: Odd one out = **Figure 1** (diagonal NE arrow that disrupts the 90° CW sequence).

Why other options are wrong:

- Option A: Figure 1 (diagonal arrow) breaks the sequence — **correct**.
- Option B: Figure 2 is part of the 90° CW sequence.
- Option C: Figure 3 is part of the 90° CW sequence.
- Option D: Figure 4 is part of the 90° CW sequence.

Final Answer: Figure 1 (diagonal NE arrow) is the odd one out $\Rightarrow$ $\boxed{A}$

Answer: (A) Go Back to Q99

Q100.

Solution

Concept — Odd One Out (Perfect Squares): Identify the number that is not a perfect square.

Identify the rule: Perfect squares in the group: $4 = 2^2$, $9 = 3^2$, $25 = 5^2$, $16 = 4^2$. **12** is *not* a perfect square ($\sqrt{12} \approx 3.46$, not an integer).

Apply the rule: Odd one out = **12** (not a perfect square). This is Figure 2.

Why other options are wrong:

- Option A: $4 = 2^2$ is a perfect square.
- Option B: Figure 2 contains 12, which is NOT a perfect square — **correct**.
- Option C: $16 = 4^2$ is a perfect square.
- Option D: $25 = 5^2$ is a perfect square.

Final Answer: 12 (Figure 2) is the odd one out — not a perfect square $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q100

Q101.

Solution

Concept — Data Interpretation (Table): Read off the "Won" column directly and identify the maximum value. **Step 1 — Read the Won column:** India 22, Australia 20, England 18, New Zealand 15, South Africa 17. **Step 2 — Identify the maximum:** 22 belongs to India. **Why other options are wrong:**

- Option A: England won only 18 matches, not the highest.
- Option B: South Africa won only 17 matches.
- Option C: Australia won 20 matches, second-highest but not the most.
- Option D: India's 22 wins is the highest — correct.

Final Answer: India won the most matches with 22 wins $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q101

Q102.

Solution

Concept — Data Interpretation (Table Summation): Add all values in the "Won" column. **Step 1 — Sum the wins:** $22 + 20 + 18 + 15 + 17 = 92$. **Step 2 — Verify:** $22 + 20 = 42$; $42 + 18 = 60$; $60 + 15 = 75$; $75 + 17 = 92$. ✓**Why other options are wrong:**

- Option A: 92 is correct.
- Option B: 88 — under-counts by 4.
- Option C: 95 — over-counts by 3.
- Option D: 90 — under-counts by 2.

Final Answer: Total wins by all teams = 92 $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q102

Q103.

Solution

Concept — Percentage Calculation from Table: Win% = (Wins / Total Matches) $\times$ 100. **Step 1 — Identify England's data:** Wins = 18, Total Matches = 35. **Step 2 — Calculate:** $\frac{18}{35} \times 100 = \frac{1800}{35} = 51.43\%$ (to 2 d.p.). **Why other options are wrong:**

- Option A: 50% would require 17.5 wins, not 18.
- Option B: 51.43% — correct.
- Option C: 48.57% is England's *loss* percentage (17 losses/35), not win%.
- Option D: 55% would require 19.25 wins.

Final Answer: England's win percentage = 51.43% $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q103

Q104.

Solution

Concept — Ratio from Table: Express wins of two teams as a ratio in its simplest form. **Step 1 — Read values:** India wins = 22, New Zealand wins = 15. **Step 2 — Simplify:** $\gcd(22, 15) = 1$, so the ratio remains $22 : 15$. **Why other options are wrong:**

- Option A: $3 : 2 = 15 : 10 \neq 22 : 15$.
- Option B: $7 : 5 = 21 : 15 \neq 22 : 15$.
- Option C: $22 : 15$ — correct.
- Option D: $4 : 3 = 20 : 15 \neq 22 : 15$.

Final Answer: India's wins to New Zealand's wins = $22 : 15 \Rightarrow \boxed{C}$

Answer: (C) Go Back to Q104

Q105.

Solution

Concept — Difference from Table: Subtract to find how many more matches one team won. **Step 1 — Read values:** Australia wins = 20; South Africa wins = 17. **Step 2 — Calculate difference:** $20 - 17 = 3$. **Why other options are wrong:**

- Option A: 1 — incorrect subtraction.
- Option B: 2 — incorrect subtraction.
- Option C: 4 — over-estimates by 1.
- Option D: 3 — correct.

Final Answer: Australia won 3 more matches than South Africa $\Rightarrow \boxed{D}$

Answer: (D) Go Back to Q105

Q106.

Solution

Concept — Average from Table: Average = Total wins ÷ Number of teams. **Step 1 — Total wins:** $22 + 20 + 18 + 15 + 17 = 92$ (established in Q102). **Step 2 — Divide by 5:** $\frac{92}{5} = 18.4$. **Why other options are wrong:**

- Option A: 18.4 — correct.
- Option B: 17.6 — would require total = 88, which is wrong.
- Option C: 19.0 — would require total = 95, which is wrong.
- Option D: 18.0 — would require total = 90, which is wrong.

Final Answer: Average wins per team = 18.4 ⇒ A

Answer: (A) Go Back to Q106

Q107.

Solution

Concept — Line Graph Comparison: Compare the two lines month by month. **Step 1 — Monthly comparison (StartupTech vs DataCo):** Jan: $12 > 10$ (✓); Feb: $18 > 14$ (✓); Mar: $15 < 20$ (×); Apr: $22 > 18$ (✓); May: $28 > 24$ (✓); Jun: $25 < 30$ (×). **Step 2 — Count months where StartupTech > DataCo:** Jan, Feb, Apr, May = **4 months**. **Why other options are wrong:**

- Option A: 2 — misses Feb and Apr.
- Option B: 3 — misses one qualifying month.
- Option C: 4 — correct.
- Option D: 5 — includes Mar or Jun where DataCo leads.

Final Answer: StartupTech exceeded DataCo in 4 months ⇒ C

Answer: (C) Go Back to Q107

Q108.

Solution

Concept — Line Graph Summation: Add all monthly values for DataCo. **Step 1 — DataCo monthly revenues:** Jan 10, Feb 14, Mar 20, Apr 18, May 24, Jun 30. **Step 2 — Sum:** $10 + 14 + 20 + 18 + 24 + 30 = 116$ ₹ Lakhs. **Why other options are wrong:**

- Option A: 108 — excludes June's value or mis-adds.
- Option B: 112 — under-counts by 4.
- Option C: 115 — under-counts by 1.
- Option D: 116 — correct.

Final Answer: DataCo's total revenue Jan–Jun = ₹ 116 Lakhs $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q108

Q109.

Solution

Concept — Line Graph: Minimum Absolute Difference: Compute $|ST - DC|$ for each month. **Step 1 — Absolute gaps:** Jan: $|12 - 10| = 2$; Feb: $|18 - 14| = 4$; Mar: $|15 - 20| = 5$; Apr: $|22 - 18| = 4$; May: $|28 - 24| = 4$; Jun: $|25 - 30| = 5$. **Step 2 — Minimum gap:** January with a gap of **2**. **Why other options are wrong:**

- Option A: January (gap = 2) — correct.
- Option B: March (gap = 5) — not the smallest.
- Option C: May (gap = 4) — not the smallest.
- Option D: June (gap = 5) — not the smallest.

Final Answer: Smallest revenue gap was in January $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q109

Q110.

Solution

Concept — Percentage Increase: $\%\text{ increase} = \dfrac{\text{New} - \text{Old}}{\text{Old}} \times 100$. **Step 1 — Identify values:** StartupTech Jan = 12, Jun = 25. **Step 2 — Calculate:** $\dfrac{25-12}{12} \times 100 = \dfrac{13}{12} \times 100 = 108.3\%$. **Why other options are wrong:**

- Option A: 100% would require the value to double to 24, not 25.
- Option B: 108.3% — correct.
- Option C: 112% would require Jan value of approximately 11.79.
- Option D: 95% — less than 100%, implying a *decrease*.

Final Answer: Percentage increase in StartupTech Jan to Jun = 108.3% $\Rightarrow$ B

Answer: (B) Go Back to Q110

Q111.

Solution

Concept — Line Graph Difference at a Single Month: Subtract June values. **Step 1 — June values:** DataCo = 30; StartupTech = 25. **Step 2 — Difference:** $30 - 25 = 5$ ₹ Lakhs. **Why other options are wrong:**

- Option A: 3 — incorrect.
- Option B: 4 — incorrect.
- Option C: 5 — correct.
- Option D: 6 — over-estimates by 1.

Final Answer: DataCo's June revenue exceeded StartupTech's by ₹ 5 Lakhs $\Rightarrow$ C

Answer: (C) Go Back to Q111

Q112.

Solution

Concept — Arithmetic Mean from Line Graph: Average $= \frac{\text{Sum of all monthly values}}{\text{Number of months}}$. **Step 1 — StartupTech revenues:** 12, 18, 15, 22, 28, 25. **Step 2 — Sum and divide:** $12 + 18 + 15 + 22 + 28 + 25 = 120$; $120 \div 6 = 20$. **Why other options are wrong:**

- Option A: 18 — would require sum = 108.
- Option B: 19 — would require sum = 114.
- Option C: 21 — would require sum = 126.
- Option D: 20 — correct.

Final Answer: StartupTech's average monthly revenue = ₹ 20 Lakhs $\Rightarrow$ D

Answer: (D) Go Back to Q112

Q113.

Solution

Concept — Bar Chart Reading: Identify the longest/highest bar and its label. **Step 1 — Scores from chart:** Marketing 72, Finance 85, HR 68, Operations 79, IT 88, Strategy 75. **Step 2 — Maximum:** IT with score 88. **Why other options are wrong:**

- Option A: Finance (85) is second-highest, not the highest.
- Option B: IT (88) — correct.
- Option C: Operations (79) is mid-range.
- Option D: Strategy (75) is below average.

Final Answer: IT department scored highest with 88 $\Rightarrow$ B

Answer: (B) Go Back to Q113

Q114.

Solution

Concept — Arithmetic Mean from Bar Chart: Sum all scores and divide by 6. **Step 1 — Sum:** $72+85+68+79+88+75=467$. **Step 2 — Average:** $\frac{467}{6}=77.83$ (to 2 d.p.). **Why other options are wrong:**

- Option A: 75.50 — under-estimates.
- Option B: 76.80 — under-estimates.
- Option C: 77.83 — correct.
- Option D: 79.00 — over-estimates (would require total = 474).

Final Answer: Average score of all 6 departments = 77.83 $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q114

Q115.

Solution

Concept — Range from Bar Chart: Range = Highest score − Lowest score. **Step 1 — Extremes:** Highest = IT (88); Lowest = HR (68). **Step 2 — Range:** $88-68=20$. **Why other options are wrong:**

- Option A: 15 — incorrect.
- Option B: 18 — incorrect; perhaps confuses Finance–HR difference ($85-68=17$).
- Option C: 22 — over-estimates by 2.
- Option D: 20 — correct.

Final Answer: Difference between highest and lowest scores = 20 $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q115

Q116.

Solution

Concept — Counting from Bar Chart (Condition): Count departments with score > 75. **Step 1 — Check each department:** Marketing (72): No. Finance (85): Yes. HR (68): No. Operations (79): Yes. IT (88): Yes. Strategy (75): No (not strictly above 75). **Step 2 — Count:** Finance, Operations, IT $=$ **3 departments**.

Why other options are wrong:

- Option A: 3 — correct.
- Option B: 4 — incorrectly includes Strategy (75 is not above 75).
- Option C: 2 — misses one qualifying department.
- Option D: 5 — counts too many departments.

Final Answer: 3 departments scored strictly above 75 $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q116

Q117.

Solution

Concept — Ratio from Bar Chart: Express IT score : HR score and simplify. **Step 1 — Values:** IT $= 88$; HR $= 68$. **Step 2 — Simplify:** $\gcd(88, 68) = 4$; $88 \div 4 = 22$; $68 \div 4 = 17$. Ratio $= 22 : 17$. **Why other options are wrong:**

- Option A: $4 : 3 = 68 : 51$ — not equivalent to $88 : 68$.
- Option B: $22 : 17$ — correct.
- Option C: $13 : 10 = 130 : 100$ — not equivalent.
- Option D: $7 : 6 = 84 : 72$ — not equivalent to $88 : 68$.

Final Answer: IT : HR score ratio $= 22 : 17 \Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q117

Q118.

Solution

Concept — Percentage of One Value relative to Another: $\% = \dfrac{\text{Marketing}}{\text{Finance}} \times 100$. **Step 1 — Values:** Marketing = 72; Finance = 85. **Step 2 — Calculate:** $\dfrac{72}{85} \times 100 = 84.7\%$ (to 1 d.p.). **Why other options are wrong:**

- Option A: 80.0% would require Marketing = 68 (which is HR's score).
- Option B: 82.4% — incorrect calculation.
- Option C: 84.7% — correct.
- Option D: 87.1% — over-estimates (would require Marketing ≈ 74).

Final Answer: Marketing's score as % of Finance's = 84.7% $\Rightarrow$ C

Answer: (C) Go Back to Q118

Q119.

Solution

Concept — Number System: Largest Divisible Number: Divide 9999 by 16; subtract the remainder. **Step 1 — Divide:** $9999 \div 16 = 624.9375$; integer quotient = 624. **Step 2 — Largest 4-digit multiple:** $624 \times 16 = 9984$. Verify: $9984/16 = 624$.

✓**Why other options are wrong:**

- Option A: $9960 = 622.5 \times 16$ — not an integer multiple; $9960/16 = 622.5$.
- Option B: $9976 = 623.5 \times 16$ — not divisible.
- Option C: $9968/16 = 623$ — is divisible but is *smaller* than 9984.
- Option D: $9984/16 = 624$ — correct, largest such number.

Final Answer: Largest 4-digit number divisible by 16 is 9984 $\Rightarrow$ D

Answer: (D) Go Back to Q119

Q120.

Solution

Concept — Number System (Chinese Remainder Theorem): Find the smallest n satisfying two simultaneous congruences. **Step 1 — Set up:** $n \equiv 4 \pmod 7$ means $n = 7k+4$ for non-negative integer k. **Step 2 — Test values:** $k = 0 \Rightarrow n = 4$ ($4 \bmod 11 = 4 \neq 9$). $k = 1 \Rightarrow 11$ ($0 \neq 9$). $k = 2 \Rightarrow 18$ ($7 \neq 9$). $k = 3 \Rightarrow 25$ ($3 \neq 9$). $k = 4 \Rightarrow 32$ ($10 \neq 9$). $k = 5 \Rightarrow 39$ ($6 \neq 9$). $k = 6 \Rightarrow 46$ ($2 \neq 9$). $k = 7 \Rightarrow 53$: $53 \bmod 11 = 53 - 4 \times 11 = 53 - 44 = 9$. ✓**Why other options are wrong:**

- Option A: 53 — satisfies both conditions; correct.
- Option B: $46 \bmod 7 = 4$ (✓) but $46 \bmod 11 = 2$ ($\neq 9$).
- Option C: $60 \bmod 7 = 4$ (✓) but $60 \bmod 11 = 5$ ($\neq 9$).
- Option D: $67 \bmod 7 = 4$ (✓) but $67 \bmod 11 = 1$ ($\neq 9$).

Final Answer: Smallest such number = 53 $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q120

Q121.

Solution

Concept — Number Theory: Divisibility by 24: Show that $(N-1)(N+1)$ is divisible by both 8 and 3 for any prime $N > 3$. **Step 1 — Divisibility by 8:** Since N is an odd prime, $N-1$ and $N+1$ are consecutive even integers. One of any two consecutive even integers is divisible by 4. So $(N-1)(N+1)$ is divisible by $2 \times 4 = 8$. **Step 2 — Divisibility by 3:** Among three consecutive integers $N-1,\ N,\ N+1$, one must be divisible by 3. Since N is prime and $N > 3$, N itself is not divisible by 3. Hence either $N-1$ or $N+1$ is divisible by 3, making $(N-1)(N+1)$ divisible by 3. Combined: $(N-1)(N+1) = N^2 - 1$ is divisible by $8 \times 3 = 24$. **Why other options are wrong:**

- Option A: $N^2 - 4 = (N-2)(N+2)$ — not always divisible by 24 (e.g. $N = 5$: 21, not divisible by 8).
- Option B: $N^2 - 1$ — always divisible by 24. Correct.
- Option C: $N^2 + 1$ — not divisible by 3 (e.g. $N = 5$: 26 not divisible by 3).
- Option D: $N^2 - N = N(N-1)$ — N is prime; $(N-1)$ is even but the product isn't always divisible by 3.

Final Answer: $N^2 - 1$ is always divisible by 24 for any prime $N > 3$ $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q121

Q122.

Solution

Concept — Percentage: Set Union Formula: $P(A \cup B) = P(A) + P(B) - P(A \cap B)$. **Step 1 — Students who failed in at least one subject:** $40 + 30 - 20 = 50\%$. **Step 2 — Students who passed both:** $100 - 50 = 50\%$. **Why other options are wrong:**

- Option A: 40% — fails to subtract those who failed in both.
- Option B: 45% — arithmetic error in union calculation.
- Option C: 50% — correct.
- Option D: 55% — under-counts those who failed.

Final Answer: 50% of students passed in both subjects $\Rightarrow$ C

Answer: (C) Go Back to Q122

Q123.

Solution

Concept — Percentage: Finding Income from Savings: Savings fraction $= 1 - (0.30 + 0.25 + 0.15) = 0.30$ (30% of income). **Step 1 — Saving rate:** Expenditure $= 30 + 25 + 15 = 70\%$; Savings $= 30\%$. **Step 2 — Income:** $0.30 \times \text{Income} = 9000 \Rightarrow \text{Income} = \dfrac{9000}{0.30} = 30{,}000$. **Why other options are wrong:**

- Option A: ₹ 25,000 — gives savings of only ₹ 7,500.
- Option B: ₹ 27,000 — savings would be ₹ 8,100.
- Option C: ₹ 28,000 — savings would be ₹ 8,400.
- Option D: ₹ 30,000 — savings = ₹ 9,000. Correct.

Final Answer: Monthly income = ₹ 30,000 $\Rightarrow$ D

Answer: (D) Go Back to Q123

Q124.

Solution

Concept — Percentage: Price–Consumption Trade-off: If price rises by $r\%$, consumption must fall by $\frac{r}{100+r} \times 100\%$ to keep expenditure constant. **Step 1 — Apply formula:** $r = 25$; Reduction $= \frac{25}{125} \times 100 = 20\%$. **Step 2 — Verify:** New price factor = 1.25; new consumption factor = 0.80; product $= 1.25 \times 0.80 = 1.00$. ✓**Why other options are wrong:**

- Option A: 20% — correct.
- Option B: 25% — this is the price increase, not the required consumption cut.
- Option C: 15% — insufficient; expenditure would still rise.
- Option D: 10% — far too small.

Final Answer: Consumption must be reduced by 20% $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q124

Q125.

Solution

Concept — Profit & Loss: Loss Percentage: Loss% $= \frac{\text{CP} - \text{SP}}{\text{CP}} \times 100$. **Step 1 — Values per kg:** CP = ₹ 10; SP = ₹ 8.50; Loss = ₹ 1.50. **Step 2 — Loss%:** $\frac{1.50}{10} \times 100 = 15\%$. **Why other options are wrong:**

- Option A: 12% — would imply loss of ₹ 1.20/kg (SP = ₹ 8.80).
- Option B: 15% — correct.
- Option C: 18% — would imply SP = ₹ 8.20.
- Option D: 20% — would imply SP = ₹ 8.00.

Final Answer: Trader's loss percentage = 15% $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q125

Q126.

Solution

Concept — Profit & Loss: Marked Price, Discount, Profit: $\text{SP} = \text{MP} \times (1 - d)$; $\text{CP} = \dfrac{\text{SP}}{1 + p}$. **Step 1 — Selling Price:** $\text{SP} = 340 \times 0.85 = 289$. **Step 2 — Cost Price:** $\text{CP} = \dfrac{289}{1.19} = 242.86 \approx 243$. **Why other options are wrong:**

- Option A: ₹ 230 — too low; profit would exceed 19%.
- Option B: ₹ 238 — gives profit $\approx 21.4\%$, not 19%.
- Option C: ₹ 243 — correct.
- Option D: ₹ 250 — gives profit $\approx 15.6\%$, not 19%.

Final Answer: Cost price = ₹ 243 $\Rightarrow$ C

Answer: (C) Go Back to Q126

Q127.

Solution

Concept — Profit & Loss: Equal Selling Price at Equal % Gain and Loss: When two articles are sold at the same SP, one at $r\%$ profit and one at $r\%$ loss, the net result is always a loss of $\dfrac{r^2}{100}\%$. **Step 1 — Apply formula:** $r = 20$; Net loss% $= \dfrac{20^2}{100} = \dfrac{400}{100} = 4\%$. **Step 2 — Verify numerically:** Profit article: CP $= \dfrac{3600}{1.20} = 3000$. Loss article: CP $= \dfrac{3600}{0.80} = 4500$. Total CP $= 7500$; Total SP $= 7200$; Loss $= 300$; Loss% $= \dfrac{300}{7500} \times 100 = 4\%$. ✓**Why other options are wrong:**

- Option A: 4% profit — incorrect; the formula always gives a loss.
- Option B: No profit/no loss — would require the loss article's higher CP to be offset, which it is not.
- Option C: 2% loss — correct only if $r = \sqrt{200} \approx 14.1\%$.
- Option D: 4% loss — correct.

Final Answer: Net result is a 4% loss $\Rightarrow$ D

Answer: (D) Go Back to Q127

Q128.

Solution

Concept — Compound Interest: Amount Formula: $A = P\left(1+\frac{r}{100}\right)^n$. **Step 1 — Values:** $P = 12000,\ r = 8,\ n = 2$. **Step 2 — Calculate:** $A = 12000 \times (1.08)^2 = 12000 \times 1.1664 = 13996.80 \approx 13{,}997$. **Why other options are wrong:**

- Option A: ₹ 13,997 — correct.
- Option B: ₹ 13,920 — corresponds to SI of ₹ 1,920 ($12000 \times 0.08 \times 2 = 1920$), not CI.
- Option C: ₹ 14,000 — slight overestimate.
- Option D: ₹ 13,840 — underestimates.

Final Answer: Amount after 2 years CI = ₹ 13,997 $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q128

Q129.

Solution

Concept — Simple Interest: Finding Principal: $P = \frac{SI \times 100}{R \times T}$. **Step 1 — Substitute:** $P = \frac{3600 \times 100}{6 \times 4} = \frac{360000}{24} = 15{,}000$. **Step 2 — Verify:** $SI = \frac{15000 \times 6 \times 4}{100} = 3600$. ✓**Why other options are wrong:**

- Option A: ₹ 12,000 — gives SI = ₹ 2,880, not ₹ 3,600.
- Option B: ₹ 15,000 — correct.
- Option C: ₹ 18,000 — gives SI = ₹ 4,320.
- Option D: ₹ 20,000 — gives SI = ₹ 4,800.

Final Answer: Principal = ₹ 15,000 $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q129

Q130.

Solution

Concept — Simple Interest: Time to Double: For a sum to double, $SI = P$, so $T = \frac{100}{R}$. **Step 1 — Apply formula:** $T = \frac{100}{12.5} = 8$ years. **Step 2 — Verify:** $SI = \frac{8000 \times 12.5 \times 8}{100} = 8000$; Amount $= 8000 + 8000 = 16000 = 2 \times 8000$. ✓**Why other options are wrong:**

- Option A: 6 years — gives SI = ₹ 6,000, not ₹ 8,000.
- Option B: 7 years — gives SI = ₹ 7,000.
- Option C: 8 years — correct.
- Option D: 10 years — gives SI = ₹ 10,000 (sum more than doubles).

Final Answer: ₹ 8,000 doubles in 8 years at 12.5% SI $\Rightarrow$ C

Answer: (C) Go Back to Q130

Q131.

Solution

Concept — Time & Work: Remaining Work after Partial Collaboration. Step 1 — Combined rate: A's rate $= \frac{1}{20}$; B's rate $= \frac{1}{30}$; Together $= \frac{1}{20} + \frac{1}{30} = \frac{3+2}{60} = \frac{5}{60} = \frac{1}{12}$ work/day. **Step 2 — Work done in 6 days together:** $6 \times \frac{1}{12} = \frac{1}{2}$. Remaining work $= 1 - \frac{1}{2} = \frac{1}{2}$. **Step 3 — Days for B alone to finish remaining $\frac{1}{2}$:** $\frac{\frac{1}{2}}{\frac{1}{30}} = 15$ days.

Why other options are wrong:

- Option A: 10 days — insufficient for B to finish half the work.
- Option B: 12 days — applies B's rate incorrectly.
- Option C: 14 days — arithmetic error.
- Option D: 15 days — correct.

Final Answer: B needs 15 more days $\Rightarrow$ D

Answer: (D) Go Back to Q131

Q132.

Solution

Concept — Time & Work: Worker–Day Equivalence (Inverse Proportion). Step 1 — Total work: $15 \times 8 = 120$ worker-days. **Step 2 — Workers for 6 days:** $\frac{120}{6} = 20$ workers. **Why other options are wrong:**

- Option A: 20 — correct.
- Option B: 18 — gives only $18 \times 6 = 108$ worker-days, insufficient.
- Option C: 24 — over-provides; $24 \times 6 = 144$ worker-days.
- Option D: 16 — gives only $16 \times 6 = 96$ worker-days.

Final Answer: 20 workers are needed $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q132

Q133.

Solution

Concept — Pipes & Cistern: Net Filling Rate. Step 1 — Individual rates (fraction of tank per hour): A fills: $\frac{1}{5}$; B fills: $\frac{1}{8}$; C drains: $\frac{1}{10}$. **Step 2 — Net rate:** $\frac{1}{5} + \frac{1}{8} - \frac{1}{10} = \frac{8+5-4}{40} = \frac{9}{40}$ tank/hour. **Step 3 — Time to fill:** $\frac{1}{\frac{9}{40}} = \frac{40}{9}$ hours. **Why other options are wrong:**

- Option A: $\frac{40}{11}$ — corresponds to net rate $\frac{11}{40}$ (incorrect).
- Option B: $\frac{40}{9}$ — correct.
- Option C: $\frac{20}{3}$ — corresponds to net rate $\frac{3}{20}$ (incorrect).
- Option D: $\frac{40}{7}$ — corresponds to net rate $\frac{7}{40}$ (incorrect).

Final Answer: Tank fills in $\frac{40}{9}$ hours $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q133

Q134.

Solution

Concept — Speed & Distance: Train Crossing a Bridge: Distance covered = Length of train + Length of bridge. **Step 1 — Total distance:** $180 + 120 = 300$ m. **Step 2 — Speed in m/s:** $\frac{300}{15} = 20$ m/s. **Step 3 — Convert to km/h:** $20 \times \frac{18}{5} = 72$ km/h. **Why other options are wrong:**

- Option A: 60 km/h $= \frac{50}{3}$ m/s; would cover only 250 m in 15 s.
- Option B: 64 km/h ≈ 17.8 m/s; covers ≈ 267 m in 15 s.
- Option C: 72 km/h — correct.
- Option D: 80 km/h ≈ 22.2 m/s; covers ≈ 333 m in 15 s.

Final Answer: Speed of train = 72 km/h $\Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q134

Q135.

Solution

Concept — Speed & Distance: Relative Speed (Opposite Directions): Relative speed = sum of individual speeds. **Step 1 — Relative speed:** $12 + 16 = 28$ km/h. **Step 2 — Time for 70 km separation:** $t = \frac{70}{28} = 2.5$ hours. **Why other options are wrong:**

- Option A: 2 hours — gives separation of only 56 km.
- Option B: 3 hours — gives separation of 84 km, too far.
- Option C: 2.25 hours — gives separation of 63 km.
- Option D: 2.5 hours — correct.

Final Answer: They are 70 km apart after 2.5 hours $\Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q135

Q136.

Solution

Concept — Speed & Distance: Echo (Round Trip): Echo time $= \dfrac{2 \times \text{Distance}}{\text{Speed of sound}}$. **Step 1 — Total distance for echo:** $2 \times 495 = 990$ m. **Step 2 — Time:** $\dfrac{990}{330} = 3$ seconds. **Why other options are wrong:**

- Option A: 3 seconds — correct.
- Option B: 1.5 seconds — uses only one-way distance ($\frac{495}{330} = 1.5$).
- Option C: 4 seconds — incorrect.
- Option D: 6 seconds — corresponds to a wall 990 m away.

Final Answer: Echo returns in 3 seconds $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q136

Q137.

Solution

Concept — Ratio & Proportion: Finding Ratio from Percentage Equality. Step 1 — Set up equation: $\dfrac{15A}{100} = \dfrac{25B}{100} \Rightarrow 15A = 25B \Rightarrow \dfrac{A}{B} = \dfrac{25}{15} = \dfrac{5}{3}$. **Step 2 — Ratio:** $A : B = 5 : 3$. **Why other options are wrong:**

- Option A: $3 : 5$ — inverted ratio ($B : A$, not $A : B$).
- Option B: $5 : 3$ — correct.
- Option C: $5 : 4$ — would require $15A = 20B$, implying 20% of B.
- Option D: $4 : 5$ — incorrect.

Final Answer: $A : B = 5 : 3 \Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q137

Q138.

Solution

Concept — Ratio & Proportion: Division in a Given Ratio. Step 1 — Total parts: $2+3+4=9$ parts. **Step 2 — Value of one part:** $\frac{540}{9}=60$. **Step 3 — Middle (second) part:** $3\times 60=180$. **Why other options are wrong:**

- Option A: 120 = first part (2×60), not the middle.
- Option B: 240 = last part (4×60), not the middle.
- Option C: 180 = middle part. Correct.
- Option D: 160 — does not correspond to any part.

Final Answer: The middle part = 180 $\Rightarrow$ C

Answer: (C) Go Back to Q138

Q139.

Solution

Concept — Mixtures: Adding Water to Change Ratio. Step 1 — Initial quantities: Total = 80 L; ratio $5:3\Rightarrow$ Milk = 50 L; Water = 30 L. **Step 2 — Required ratio** $2:3$**:** Milk remains 50 L. Let water added = x. $\frac{50}{30+x}=\frac{2}{3}\Rightarrow 150=2(30+x)=60+2x\Rightarrow 2x=90\Rightarrow x=45$ L. **Why other options are wrong:**

- Option A: 30 L — gives ratio $50:60=5:6\neq 2:3$.
- Option B: 35 L — gives ratio $50:65=10:13\neq 2:3$.
- Option C: 40 L — gives ratio $50:70=5:7\neq 2:3$.
- Option D: 45 L — gives ratio $50:75=2:3$. Correct.

Final Answer: 45 litres of water must be added $\Rightarrow$ D

Answer: (D) Go Back to Q139

Q140.

Solution

Concept — Alligation (Rule of Alligation): Cheaper ← (Dearer price − Mean price) : (Mean price − Cheaper price) → Dearer. **Step 1 — Apply alligation:** Cheaper (₹ 40): $(60 - 48) = 12$. Dearer (₹ 60): $(48 - 40) = 8$. **Step 2 — Ratio of cheaper to dearer:** $12 : 8 = 3 : 2$. **Why other options are wrong:**

- Option A: $3 : 2$ — correct (₹ 40 variety : ₹ 60 variety).
- Option B: $2 : 3$ — inverts the ratio.
- Option C: $5 : 3$ — incorrect.
- Option D: $3 : 5$ — incorrect.

Final Answer: Mix in the ratio $3 : 2$ (₹ 40 : ₹ 60 variety) $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q140

Q141.

Solution

Concept — Geometry: Area of a Rhombus: Area $= \dfrac{d_1 \times d_2}{2}$, where d_1 and d_2 are the diagonals. **Step 1 — Substitute:** Area $= \dfrac{12 \times 16}{2} = \dfrac{192}{2} = 96$ sq cm. **Why other options are wrong:**

- Option A: 84 sq cm — incorrect; perhaps using wrong formula.
- Option B: 96 sq cm — correct.
- Option C: 108 sq cm — incorrect.
- Option D: 192 sq cm — forgot to divide by 2.

Final Answer: Area of rhombus = 96 sq cm $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q141

Q142.

Solution

Concept — Geometry: Chord and Radius of a Circle: The perpendicular from the centre bisects the chord. Use the right triangle: $r^2 = \left(\frac{\text{chord}}{2}\right)^2 + d^2$. **Step 1 — Half-chord:** $24 \div 2 = 12$ cm. **Step 2 — Radius:** $r = \sqrt{12^2 + 5^2} = \sqrt{144 + 25} = \sqrt{169} = 13$ cm. **Why other options are wrong:**

- Option A: 11 cm — $11^2 = 121 \neq 144 + 25$.
- Option B: 12 cm — ignores the perpendicular distance (5 cm).
- Option C: 13 cm — correct.
- Option D: 15 cm — over-estimates; $15^2 = 225 \neq 169$.

Final Answer: Radius = 13 cm $\Rightarrow$ C

Answer: (C) Go Back to Q142

Q143.

Solution

Concept — Geometry: Angle Sum Property of a Triangle: Sum of all angles = $180°$. **Step 1 — Third angle:** $180° - 110° = 70°$. **Why other options are wrong:**

- Option A: 60°— implies other two sum to 120°, not 110°.
- Option B: 65°— implies other two sum to 115°.
- Option C: 75°— implies other two sum to 105°.
- Option D: 70°— correct.

Final Answer: Third angle = 70°$\Rightarrow$ D

Answer: (D) Go Back to Q143

Q144.

Solution

Concept — Geometry: Median and Equal Area Division: A median divides a triangle into two triangles of exactly equal area. **Step 1 — Apply property:** Each smaller triangle $= \frac{48}{2} = 24$ sq cm. **Why other options are wrong:**

- Option A: 24 sq cm — correct.
- Option B: 12 sq cm — would be quarter of original, not half.

- Option C: 36 sq cm — three-quarters of original, incorrect.
- Option D: 48 sq cm — entire original area, not halved.

Final Answer: Each half-triangle has area = 24 sq cm $\Rightarrow$ A

Answer: (A) Go Back to Q144

Q145.

Solution

Concept — Mensuration: Perimeter and Fencing Cost: Perimeter of rectangle $= 2(L+W)$; Cost = Perimeter $\times$ rate. **Step 1 — Perimeter:** $2(80+60) = 2\times 140 = 280$ m. **Step 2 — Cost:** $280 \times 15 = 4{,}200$. **Why other options are wrong:**

- Option A: ₹ 3,600 — uses perimeter of 240 m (only 2×120).
- Option B: ₹ 4,200 — correct.
- Option C: ₹ 4,800 — uses perimeter of 320 m.
- Option D: ₹ 5,400 — uses perimeter of 360 m.

Final Answer: Cost of fencing = ₹ 4,200 $\Rightarrow$ B

Answer: (B) Go Back to Q145

Q146.

Solution

Concept — Mensuration: Volume of Hollow Cylinder: $V = \pi(R^2 - r^2)h$, where R = outer radius, r = inner radius. **Step 1 — Substitution:** $V = \pi(10^2-8^2)\times 14 = \pi(100-64)\times 14 = \pi \times 36 \times 14 = 504\pi$ cu cm. **Why other options are wrong:**

- Option A: 462π — uses incorrect radii difference.
- Option B: 490π — uses $R^2 - r^2 = 35$; incorrect.
- Option C: 504π — correct.
- Option D: 528π — uses incorrect dimensions.

Final Answer: Volume of material = 504π cu cm $\Rightarrow$ C

Answer: (C) Go Back to Q146

Q147.

Solution

Concept — Mensuration: Space Diagonal of a Cuboid: $d = \sqrt{L^2 + W^2 + H^2}$. **Step 1 — Substitute:** $d = \sqrt{6^2 + 4^2 + 3^2} = \sqrt{36 + 16 + 9} = \sqrt{61}$ cm. **Why other options are wrong:**

- Option A: $\sqrt{50}$ — uses $L^2 + W^2$ only (face diagonal, not space diagonal).
- Option B: $\sqrt{54}$ — incorrect combination of squares.
- Option C: $\sqrt{58}$ — perhaps uses $36 + 16 + 6$ or similar error.
- Option D: $\sqrt{61}$ — correct.

Final Answer: Space diagonal = $\sqrt{61}$ cm $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q147

Q148.

Solution

Concept — Mensuration: Area of Equilateral Triangle: Area $= \frac{\sqrt{3}}{4}a^2$, where a is the side length. **Step 1 — Substitute:** Area $= \frac{\sqrt{3}}{4} \times 6^2 = \frac{\sqrt{3}}{4} \times 36 = 9\sqrt{3}$ sq cm. **Why other options are wrong:**

- Option A: $9\sqrt{3}$ — correct.
- Option B: $12\sqrt{3}$ — corresponds to $a^2 = 48$, i.e. $a \approx 6.93$ cm.
- Option C: $6\sqrt{3}$ — corresponds to $a^2 = 24$, i.e. $a \approx 4.9$ cm.
- Option D: $18\sqrt{3}$ — double the correct answer; forgot the $\frac{1}{4}$ factor.

Final Answer: Area of equilateral triangle = $9\sqrt{3}$ sq cm $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q148

Q149.

Solution

Concept — Algebra: Symmetric Functions: $a^2+b^2=(a+b)^2-2ab$. **Step 1 — Substitute:** $a^2+b^2=10^2-2\times24=100-48=52$. **Why other options are wrong:**

- Option A: 44 — subtracts $2ab=56$ instead of 48.
- Option B: 48 — value of $2ab$, not a^2+b^2.
- Option C: 52 — correct.
- Option D: 56 — adds $2ab$ instead of subtracting.

Final Answer: $a^2+b^2=52\Rightarrow$ C

Answer: (C) Go Back to Q149

Q150.

Solution

Concept — Algebra: Reciprocal Square Identity: $x^2+\dfrac{1}{x^2}=\left(x-\dfrac{1}{x}\right)^2+2$. **Step 1 — Substitute:** $x^2+\dfrac{1}{x^2}=3^2+2=9+2=11$. **Why other options are wrong:**

- Option A: 7 — uses $(x-1/x)^2-2$, which gives x^2+1/x^2 only when adding, not subtracting.
- Option B: 9 — value of $(x-1/x)^2$, missing the $+2$.
- Option C: 10 — arithmetic error.
- Option D: 11 — correct.

Final Answer: $x^2+\dfrac{1}{x^2}=11\Rightarrow$ D

Answer: (D) Go Back to Q150

Q151.

Solution

Concept — Reading Comprehension: Central Theme Identification. Step 1 — Analyse the passage structure: The passage opens with microfinance's empowerment role (Grameen Bank, solidarity groups), then explores positive social outcomes, and finally dedicates nearly half the passage to risks: high interest rates, debt traps, and the Andhra Pradesh crisis. **Step 2 — Match to options:** Option

A captures the dual nature — empowerment *and* regulatory need. **Why other options are wrong:**

- Option A: Correct — balanced view.
- Option B: The author does *not* claim the Grameen model was adopted without modification.
- Option C: High interest rates are cited as a problem, but the passage does *not* conclude microfinance is the *least* effective tool.
- Option D: The passage emphasises credit as primary, with savings and insurance as additions.

Final Answer: Central theme = empowerment potential with significant risks requiring regulation $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q151

Q152.

Solution

Concept — RC: Specific Textual Reference. Step 1 — Locate relevant sentence: "This social collateral replaces the physical collateral that formal banks demand..." — collective guarantees by solidarity groups. **Step 2 — Match:** Option B directly restates the passage. **Why other options are wrong:**

- Option A: Government guarantees are not mentioned.
- Option B: Correct.
- Option C: Mandatory savings deposits are not mentioned as the collateral substitute.
- Option D: Village headmen are not mentioned.

Final Answer: Physical collateral is replaced by collective solidarity-group guarantees $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q152

Q153.

Solution

Concept — RC: Vocabulary in Context. Step 1 — Context of "predatory": Used to describe interest rates of 25–40% and associated with debt traps and the Andhra Pradesh crisis — clearly a negative term implying exploitation of vulnerable borrowers. **Step 2 — Best match:** "Exploitative and deliberately harmful to the borrower" (Option C). **Why other options are wrong:**

- Option A: Physical aggression is irrelevant to this financial context.
- Option B: Attracting customers is the opposite of the critical tone used.
- Option C: Correct.
- Option D: The passage uses "predatory" as a criticism, not to praise risk management.

Final Answer: "Predatory" means exploitative and harmful to borrowers $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q153

Q154.

Solution

Concept — RC: Inference from Implicit Information. Step 1 — Key passage evidence: "Social collateral replaces the physical collateral that formal banks demand and that poor households simply cannot provide." **Step 2 — Inference:** If microfinance had to invent social collateral to reach women, formal banks were not serving them — due to lack of physical collateral. **Why other options are wrong:**

- Option A: Passage implies exclusion, not choice.
- Option B: Passage says formal banks *demand* collateral poor women cannot provide.
- Option C: Government subsidies are not mentioned.
- Option D: Correct — excluded due to lack of physical collateral.

Final Answer: Rural women were largely excluded from formal credit due to lack of physical collateral $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q154

Q155.

Solution

Concept — RC: Author's Stance / Tone. Step 1 — Evidence of balance: The author presents both positives (empowerment, social returns, multiplier effect) and negatives (high rates, debt traps, Andhra Pradesh crisis) without dismissing either side. The final paragraph notes regulatory responses, suggesting a balanced pragmatic view. **Step 2 — Match:** Option A (balanced). **Why other options are wrong:**

- Option A: Correct.
- Option B: Not unqualifiedly positive — significant space given to criticisms.
- Option C: Not strongly negative — the author acknowledges genuine empowerment benefits.
- Option D: The author's word choice ("vital", "predatory", "exposed") carries implicit assessment.

Final Answer: Author's stance is balanced — developmental potential with serious risks $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q155

Q156.

Solution

Concept — RC: Main Idea of a Technical Passage. Step 1 — Structure: The passage opens with the promise of qubits/superposition, then discusses the quantum supremacy claim, then devotes substantial space to limitations (decoherence, cooling, error rates), and closes with optimistic but cautious consensus. **Step 2 — Best summary:** Option B — "immense potential but substantial challenges." **Why other options are wrong:**

- Option A: Not replaced classical computers — passage says practical deployment is years away.
- Option B: Correct.
- Option C: The IBM–Google dispute is an example, not the main idea.
- Option D: Cooling is one of *several* obstacles, not the only one.

Final Answer: Main idea = immense potential hampered by substantial technical challenges $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q156

Q157.

Solution

Concept — RC: Explicit Textual Detail (Limitation). Step 1 — Locate limitation paragraph: "Current quantum processors must operate near absolute zero ($-273\,^\circ$C)" and "Error rates remain several orders of magnitude higher than those of classical transistors." **Step 2 — Match to option:** Option C directly captures both points. **Why other options are wrong:**

- Option A: Basic arithmetic — not mentioned as a limitation.
- Option B: Funding — passage says governments and corporations are *investing heavily*.
- Option C: Correct.
- Option D: Programming languages — not mentioned.

Final Answer: Explicit limitations = near-absolute-zero cooling requirement and high error rates $\Rightarrow$ C

Answer: (C) Go Back to Q157

Q158.

Solution

Concept — RC: Definition of a Technical Term as Used in Passage. Step 1 — Locate definition: "In 2019, Google claimed to have achieved quantum supremacy — the point at which a quantum computer solves a problem faster than any classical computer could in a practical timeframe." **Step 2 — Match:** Option D reproduces this definition. **Why other options are wrong:**

- Option A: About physics theory, not a computational milestone.
- Option B: Immunity to errors — passage says error rates are very high.
- Option C: Qubits holding more than two values — confused with superposition.
- Option D: Correct.

Final Answer: Quantum supremacy = solving a problem faster than any classical computer in practical timeframe $\Rightarrow$ D

Answer: (D) Go Back to Q158

Q159.

Solution

Concept — RC: Identifying Field Cited for Specific Benefit. Step 1 — Passage text: "In drug discovery, quantum simulation of molecular interactions could slash the time and cost of identifying viable compounds." **Step 2 — Match:** Option A = Drug discovery. **Why other options are wrong:**

- Option A: Drug discovery — correct; molecular simulation is the specific benefit.
- Option B: Social media analytics — not mentioned.
- Option C: Classical encryption — quantum computing *threatens* classical encryption; it doesn't benefit it.
- Option D: Consumer electronics design — not mentioned.

Final Answer: Drug discovery benefits most via molecular simulation $\Rightarrow$ A

Answer: (A) Go Back to Q159

Q160.

Solution

Concept — RC: Identifying Author's Tone. Step 1 — Tone indicators: The author uses phrases like "headline-grabbing milestone" (critical distance), "formidable obstacles" (acknowledges challenges), and "the consensus among experts is cautious" (measured view). Yet the passage ends noting "foundational science is sound" (optimism). **Step 2 — Best match:** Option B — cautiously optimistic. **Why other options are wrong:**

- Option A: Not promotional — "formidable obstacles" and "at least a decade away" counter enthusiasm.
- Option B: Correct.
- Option C: Not deeply pessimistic — "foundational science is sound."
- Option D: Not dismissive of investment — "Governments and corporations are investing heavily."

Final Answer: Author's tone = cautiously optimistic $\Rightarrow$ B

Answer: (B) Go Back to Q160

Q161.

Solution

Concept — RC: Identifying Primary Concern of a Passage. Step 1 — Scope check: The passage discusses both advantages (protective function, global access) and challenges (digital decay, unequal access, loss of "aura") of digitising heritage — a balanced examination. **Step 2 — Match:** Option C — "examining the opportunities and challenges." **Why other options are wrong:**

- Option A: Closing museums — the passage does not advocate this.
- Option B: Celebrating Google Arts & Culture — merely an example; not the focus.
- Option C: Correct.
- Option D: Criticising governments — not a primary concern; governments are mentioned neutrally.

Final Answer: Primary concern = examining opportunities and challenges of digital heritage $\Rightarrow$ C

Answer: (C) Go Back to Q161

Q162.

Solution

Concept — RC: Explicit Advantage Cited. Step 1 — Passage quote: "When natural disasters, armed conflict, or simple neglect destroy irreplaceable artefacts, a high-resolution digital copy ensures that the knowledge encoded in those objects survives." **Step 2 — Match:** Option D directly restates this advantage. **Why other options are wrong:**

- Option A: Reducing building maintenance costs — not mentioned.
- Option B: Eliminating expert conservators — not mentioned.
- Option C: Revenue generation — not mentioned.
- Option D: Correct.

Final Answer: Advantage = digital copies preserve knowledge when physical artefacts are destroyed $\Rightarrow$ D

Answer: (D) Go Back to Q162

Q163.

Solution

Concept — RC: EXCEPT / NOT type question. Step 1 — Risks mentioned in passage: (i) Digital decay (file format obsolescence); (ii) Unequal internet access; (iii) Inability of copies to reproduce "aura." **Step 2 — Risk NOT mentioned:** Cybersecurity attacks (Option A) — never referenced in the passage. **Why other options are wrong:**

- Option A: Cybersecurity attacks — not cited; correct answer to EXCEPT question.
- Option B: Digital decay — explicitly mentioned.
- Option C: Unequal internet access — explicitly mentioned.
- Option D: Loss of "aura" — explicitly discussed via Walter Benjamin.

Final Answer: Cybersecurity attacks are NOT cited as a risk $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q163

Q164.

Solution

Concept — RC: Meaning of a Specialised Term in Context. Step 1 — Context of "simulacrum": "The Virtual Angkor project has reconstructed Cambodia's ancient Khmer temples in... three-dimensional detail, offering a simulacrum of a world that no longer physically exists." — a digital reconstruction of something destroyed. **Step 2 — Best match:** A representation or copy lacking the substance of the original (Option B). **Why other options are wrong:**

- Option A: An original artefact — opposite; simulacrum is a copy.
- Option B: Correct.
- Option C: A measuring instrument — unrelated.
- Option D: A government policy — unrelated.

Final Answer: "Simulacrum" = a representation or copy lacking the substance of the original $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q164

Q165.

Solution

Concept — RC: Author's Conclusion. Step 1 — Final paragraph: "The debate ultimately turns on whether digital representation is a supplement to physical preservation or an acceptable substitute for it — a question that heritage professionals, governments, and communities must resolve together." **Step 2 — Match:** Option C captures this collaborative resolution. **Why other options are wrong:**

- Option A: Definitively resolved — the passage says it must *still* be resolved.
- Option B: Left to technology companies — the passage includes governments and communities.
- Option C: Correct.
- Option D: Physical originals always take precedence — not the author's conclusion.

Final Answer: Debate requires collaborative resolution by heritage professionals, governments, and communities $\Rightarrow \boxed{C}$

Answer: (C) Go Back to Q165

Q166.

Solution

Concept — RC: Main Argument Identification. Step 1 — Passage arc: COVID-19 exposed JIT fragility $\rightarrow$ semiconductor crisis $\rightarrow$ reshoring / JIC response $\rightarrow$ hybrid model emerging. **Step 2 — Best summary:** Option D. **Why other options are wrong:**

- Option A: Complete dismantlement — the author advocates a *hybrid*, not autarky.
- Option B: Semiconductors alone caused crisis — presented as the most acute example, not the sole cause.
- Option C: JIT always superior — the passage argues the opposite.
- Option D: Correct.

Final Answer: Main argument = pandemic revealed JIT fragility, prompting a shift toward resilience $\Rightarrow \boxed{D}$

Answer: (D) Go Back to Q166

Q167.

Solution

Concept — RC: Identifying Specific Change Discussed. Step 1 — Passage text:

"Supply chain strategists are promoting a shift from just-in-time to just-in-case (JIC) inventory management." **Step 2 — Match:** Option A. **Why other options are wrong:**

- Option A: JIT to JIC shift — correct.
- Option B: Eliminating domestic manufacturing — opposite of reshoring trend discussed.
- Option C: Replacing workers with automation — not mentioned.
- Option D: Concentrating in one country — passage advocates diversification.

Final Answer: Change discussed = shift from just-in-time to just-in-case inventory $\Rightarrow$ A

Answer: (A) Go Back to Q167

Q168.

Solution

Concept — RC: Contextual Meaning of a Business Term. Step 1 — Passage context: "Reshoring — the return of manufacturing capacity to domestic soil." (Explicitly defined.) **Step 2 — Match:** Option B. **Why other options are wrong:**

- Option A: Expanding to new overseas markets — opposite direction.
- Option B: Returning manufacturing to home country — correct; matches passage definition.
- Option C: Digitising warehouses — unrelated.
- Option D: Larger cargo vessels — unrelated.

Final Answer: "Reshoring" = returning manufacturing to the home country $\Rightarrow$ B

Answer: (B) Go Back to Q168

Q169.

Solution

Concept — RC: Inference about Future Trends. Step 1 — Passage signals: Reshoring, nearshoring, friend-shoring, hybrid JIT/JIC — all suggest *strategic selectivity* rather than either full globalisation or full autarky. **Step 2 — Best inference:** Option C. **Why other options are wrong:**

- Option A: Abandoning trade — passage says "Global trade will not retreat into autarky."
- Option B: JIT remains unchallenged — passage explicitly counters this.
- Option C: Regionally concentrated and strategically selective — correct.
- Option D: All semiconductor production to US by 2030 — far too extreme; passage mentions targets, not monopoly.

Final Answer: Future supply chains will be more regionally concentrated and strategically selective $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q169

Q170.

Solution

Concept — RC: Author's Viewpoint. Step 1 — Evidence of pragmatism: The author supports *both* government intervention (CHIPS Act) *and* market-based restructuring (nearshoring, hybrid models) depending on context. Final paragraph explicitly endorses the hybrid approach. **Step 2 — Match:** Option D. **Why other options are wrong:**

- Option A: Uncritically pro-globalisation — passage critiques uncritical globalisation.
- Option B: Strongly nationalist — author endorses friend-shoring (multinational cooperation).
- Option C: Dismissive of government intervention — passage praises CHIPS Act and EU Chips Act.
- Option D: Pragmatic hybrid — correct.

Final Answer: Author's viewpoint = pragmatic, supporting a hybrid model balancing efficiency with resilience $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q170

Q171.

Solution

Concept — Para-Jumble: Logical Flow of Ideas. Step 1 — Identify the opening sentence: Q introduces the broad claim (psychological factors determine outcomes at the elite level) — natural opening. **Step 2 — Build the chain:** Q (elite competition decided by psychology) → S (introduces mental imagery as a key tool) → P (visualisation activates same neural pathways as physical practice) → T (the "mental rehearsal effect" — gives examples) → R (therefore sports psychologists build mental skills and resilience). Sequence: **Q – S – P – T – R. Why other options are wrong:**

- Option A: Q–R–S–P–T places the conclusion (R) second, before the evidence.
- Option B: Q–S–P–T–R — correct.
- Option C: S–P–T–Q–R — starts with the tool before establishing why psychology matters.
- Option D: P–T–S–Q–R — starts with a detail before the broad claim.

Final Answer: Correct sequence = Q – S – P – T – R ⇒ B

Answer: (B) Go Back to Q171

Q172.

Solution

Concept — Para-Jumble: Logical Flow of Ideas. Step 1 — Opening: Q establishes that AI is used in consequential decisions — the broadest statement. **Step 2 — Chain:** Q (AI in high-stakes decisions) → P (historical data encodes bias — "algorithmic bias") → S (result: systematic discrimination against marginalised groups) → T (particularly troubling in facial recognition with higher error for darker skin) → R (addressing this needs technical and institutional solutions). Sequence: **Q – P – S – T – R. Why other options are wrong:**

- Option A: P–Q–S–T–R — P before Q; but Q is the broader scene-setter.
- Option B: Q–R–P–T–S — solution (R) before the problem is established.
- Option C: Q–P–S–T–R — correct.
- Option D: P–S–T–Q–R — skips the introduction (Q).

Final Answer: Correct sequence = Q – P – S – T – R ⇒ C

Answer: (C) Go Back to Q172

Q173.

Solution

Concept — Para-Jumble: Logical Flow of Ideas. Step 1 — Opening: Q introduces the paradox of building more roads worsening traffic (induced traffic) — broad, scene-setting statement. **Step 2 — Chain:** Q (road-building paradox) → R (solution = high-quality mass transit making cars less convenient) → S (investing in integrated public transport networks) → T (yet investment alone is insufficient — quality matters) → P (when commuters perceive transport as poor, they use cars, worsening congestion). Sequence: **Q – R – S – T – P. Why other options are wrong:**

- Option A: S–T–P–Q–R — begins with solution before stating the problem.
- Option B: Q–S–R–T–P — solution (S) before rationale (R).
- Option C: R–Q–P–T–S — solution before problem.
- Option D: Q–R–S–T–P — correct.

Final Answer: Correct sequence = Q – R – S – T – P ⇒ D

Answer: (D) Go Back to Q173

Q174.

Solution

Concept — Para-Jumble: Logical Flow of Ideas. Step 1 — Opening: P establishes the premise: dietary fat was cast as the villain, leading to low-fat products. **Step 2 — Chain:** P (fat demonised; low-fat explosion) → Q (to restore taste, manufacturers added sugar/refined carbs) → T (these products marketed as healthier, but obesity still rose) → S (subsequent research rehabilitated healthy fats) → R (lesson: nutritional consensus can reverse; be critical). Sequence: **P – Q – T – S – R. Why other options are wrong:**

- Option A: P–Q–T–S–R — correct.
- Option B: Q–P–T–S–R — Q before P; but P establishes context for why manufacturers had to replace fat.
- Option C: S–T–Q–P–R — rehab (S) before the initial demonisation (P).
- Option D: P–T–Q–S–R — T before Q; but Q explains *why* (manufacturers replaced fat with sugar) before T (the observed outcome).

Final Answer: Correct sequence = P – Q – T – S – R ⇒ A

Answer: (A) Go Back to Q174

Q175.

Solution

Concept — Para-Jumble: Logical Flow of Ideas. Step 1 — Opening: P defines transparency as the foundation of investor trust — the broadest definitional statement. **Step 2 — Chain:** P (transparency = foundation of trust) → Q (when trust erodes, as in Enron/Satyam, entire markets rattle) → S (regulators responded with mandates for disclosure and audit) → R (strong boards, audit committees, whistleblower laws became central pillars) → T (yet regulation alone cannot substitute for genuine cultural accountability). Sequence: **P – Q – S – R – T. Why other options are wrong:**

- Option A: Q–P–S–R–T — Q (failure) before P (foundation), loses logical build-up.
- Option B: P–Q–S–R–T — correct.
- Option C: S–P–Q–T–R — regulatory response (S) before problem is framed.
- Option D: R–Q–P–S–T — conclusion (R: pillars) before the problem.

Final Answer: Correct sequence = P – Q – S – R – T ⇒ B

Answer: (B) Go Back to Q175

Q176.

Solution

Concept — Fill in the Blank: Contextual Vocabulary. Step 1 — Context clue: "appealed to emotions but contained little factual information" — describes language designed to persuade emotionally, not logically. **Step 2 — Best fit:** "Rhetoric" (language used for persuasion, often without substantive content) — Option C. **Why other options are wrong:**

- Option A: Data — contradicts the clause "little factual information."
- Option B: Analysis — implies logical, systematic thinking; opposite of the context.
- Option C: Rhetoric — correct.
- Option D: Evidence — again contradicts "little factual information."

Final Answer: Blank = *rhetoric* ⇒ C

Answer: (C) Go Back to Q176

Q177.

Solution

Concept — Fill in the Blank: Contextual Vocabulary. Step 1 — Context clue: "After years of ___ negotiations. . . finally signed" — the word must convey that the negotiations took a very long time. **Step 2 — Best fit:** "Protracted" means prolonged or drawn out — Option D. **Why other options are wrong:**

- Option A: Brief — contradicts "years of."
- Option B: Productive — doesn't explain why signing took years.
- Option C: One-sided — about fairness, not duration.
- Option D: Protracted — correct.

Final Answer: Blank = *protracted* $\Rightarrow$ D

Answer: (D) Go Back to Q177

Q178.

Solution

Concept — Fill in the Blank: Contextual Vocabulary. Step 1 — Context clue: "refused to ___ her findings despite pressure" — she stood by her findings; the verb must mean to withdraw/take back. **Step 2 — Best fit:** "Retract" means to formally withdraw a statement or claim — Option A. **Why other options are wrong:**

- Option A: Retract — correct; refusing to retract = standing by findings.
- Option B: Publicise — would mean she refused to share them (unlikely "despite pressure" from superiors).
- Option C: Expand — to expand findings under pressure makes less sense contextually.
- Option D: Validate — superiors would want her to retract, not validate.

Final Answer: Blank = *retract* $\Rightarrow$ A

Answer: (A) Go Back to Q178

Q179.

Solution

Concept — Fill in the Blank: Contextual Vocabulary. Step 1 — Context clue: "sparked immediate controversy" — the remarks provoked strong negative reaction. **Step 2 — Best fit:** "Inflammatory" means tending to arouse strong, often angry emotion — Option B. **Why other options are wrong:**

- Option A: Diplomatic — diplomatic remarks rarely spark controversy.
- Option B: Inflammatory — correct.
- Option C: Measured — careful, considered remarks do not typically cause immediate controversy.
- Option D: Conciliatory — peace-making remarks would not spark controversy.

Final Answer: Blank = *inflammatory* $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q179

Q180.

Solution

Concept — Fill in the Blank: Contextual Vocabulary. Step 1 — Context clue: "initially met with ___ but gradually gained acceptance" — contrasts initial resistance with eventual acceptance. **Step 2 — Best fit:** "Scepticism" — doubt or disbelief that is overcome over time — Option C. **Why other options are wrong:**

- Option A: Enthusiasm — positive reception; does not contrast with "gradually gained acceptance."
- Option B: Indifference — neutral; would not need to be "overcome."
- Option C: Scepticism — correct; initial doubt giving way to acceptance is a natural arc.
- Option D: Approval — already positive; no need to "gradually gain" it.

Final Answer: Blank = *scepticism* $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q180

Q181.

Solution

Concept — Synonym: AUDACIOUS. Step 1 — Definition: Audacious = showing a willingness to take surprisingly bold risks; daring. **Step 2 — Closest synonym:** Bold (Option D). **Why other options are wrong:**

- Option A: Timid — antonym of audacious.
- Option B: Cautious — antonym.
- Option C: Modest — relates to humility, not boldness.
- Option D: Bold — correct synonym.

Final Answer: Synonym of AUDACIOUS = Bold $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q181

Q182.

Solution

Concept — Antonym: LUCID. Step 1 — Definition: Lucid = expressed clearly; easy to understand; mentally clear. **Step 2 — Antonym:** Obscure = not clear or easily understood — Option A. **Why other options are wrong:**

- Option A: Obscure — correct antonym.
- Option B: Clear — synonym of lucid.
- Option C: Vivid — means intensely bright/clear, a near-synonym.
- Option D: Bright — relates to intelligence/light, closer to a synonym.

Final Answer: Antonym of LUCID = Obscure $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q182

Q183.

Solution

Concept — Synonym: CIRCUMSPECT. Step 1 — Definition: Circumspect = wary and unwilling to take risks; careful to consider all circumstances. **Step 2 — Closest synonym:** Cautious — Option B. **Why other options are wrong:**

- Option A: Reckless — antonym of circumspect.

- Option B: Cautious — correct synonym.
- Option C: Hasty — antonym (acting without care).
- Option D: Bold — antonym (taking risks).

Final Answer: Synonym of CIRCUMSPECT = Cautious ⇒ B

Answer: (B) Go Back to Q183

Q184.

Solution

Concept — Antonym: OBSOLETE. Step 1 — Definition: Obsolete = no longer produced or used; out of date. **Step 2 — Antonym:** Modern = relating to the present or recent times; current and in use — Option C. **Why other options are wrong:**

- Option A: Outdated — synonym of obsolete.
- Option B: Ancient — implies very old; closer to a synonym.
- Option C: Modern — correct antonym.
- Option D: Historic — refers to significant past events; not opposite of obsolete.

Final Answer: Antonym of OBSOLETE = Modern ⇒ C

Answer: (C) Go Back to Q184

Q185.

Solution

Concept — Synonym: CORROBORATE. Step 1 — Definition: Corroborate = to confirm or support a statement, theory, or finding with evidence. **Step 2 — Closest synonym:** Confirm — Option D. **Why other options are wrong:**

- Option A: Contradict — antonym of corroborate.
- Option B: Dispute — antonym.
- Option C: Ignore — unrelated; implies inaction, not opposition.
- Option D: Confirm — correct synonym.

Final Answer: Synonym of CORROBORATE = Confirm ⇒ D

Answer: (D) Go Back to Q185

Q186.

Solution

Concept — Sentence Correction: Subject–Verb Agreement with Collective Noun. Step 1 — Identify the error: "team have worked" — in standard Indian English (and British English in formal contexts), a collective noun like "team" functioning as a single unit takes a singular verb. **Step 2 — Correct form:** "The team **has worked** hard to meet the deadline." **Why other options are wrong:**

- Option A: "has worked" — correct.
- Option B: "were working" — past continuous with "were" (plural) for a singular collective noun is incorrect.
- Option C: "had been working" — tense change is unnecessary and does not correct the number error.
- Option D: No correction — incorrect; the error exists.

Final Answer: Correction = "has worked" $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q186

Q187.

Solution

Concept — Sentence Correction: Reported Speech Tense Shift. Step 1 —

Rule: In reported speech, the reporting verb "informed" (simple past) requires back-shifting the tense of the reported clause: present $\rightarrow$ past, past $\rightarrow$ past perfect. **Step 2 — Correction:** "is postponed" (present passive) $\rightarrow$ "had been postponed" (past perfect passive). "She informed that the meeting **had been postponed**." **Why other options are wrong:**

- Option A: "has been postponed" — present perfect, still does not fully backshift.
- Option B: "had been postponed" — correct.
- Option C: "was postponing" — past continuous active, changes meaning.
- Option D: No correction — the original "is postponed" violates reported speech rules.

Final Answer: Correction = "had been postponed" $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q187

Q188.

Solution

Concept — Sentence Correction: Subject–Verb Agreement (Intervening Phrase). Step 1 — Identify subject: "The price" (singular) is the subject; "of all commodities" is an intervening prepositional phrase and does not change the number of the subject. **Step 2 — Correct verb:** "The price of all commodities **has risen** sharply." Option C provides the correct verb form: "has risen." **Why other options are wrong:**

- Option A: Changes "price" to "prices" and uses "has" — alters subject unnecessarily.
- Option B: "the prices have" — changes subject to plural, altering the sentence's intended meaning.
- Option C: "has risen" — correct; replaces "have risen" keeping the singular subject.
- Option D: No correction — "have" is wrong for singular subject "price."

Final Answer: Correction = "has risen" $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q188

Q189.

Solution

Concept — Sentence Correction: Pronoun Relative Clause Agreement. Step 1 — Rule: "He is one of those managers *who*..." — the relative clause modifies "those managers" (plural), so the verb must be plural: "who **are**." **Step 2 — Corrected sentence:** "He is one of those managers **who are** always on time." **Why other options are wrong:**

- Option A: "managers who has" — "has" is singular, still wrong.
- Option B: "managers whose" — changes the relative pronoun, altering meaning.
- Option C: "managers which" — "which" cannot refer to persons.
- Option D: "managers who are" — correct.

Final Answer: Correction = "managers who are" $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q189

Q190.

Solution

Concept — Sentence Correction: Correct Spelling/Form of a Preposition. Step 1 — Identify error: "Inspite of" is incorrect spelling; it must be written as two separate words "In spite of" or replaced with the single preposition "Despite." **Step 2 — Best correction:** "**Despite** his illness, he attended the conference." (Option A.) **Why other options are wrong:**

- Option A: "Despite his illness" — correct; standard single preposition.
- Option B: "Because of his illness" — changes meaning (causes, not concession).
- Option C: "In spite **with** his illness" — incorrect preposition; should be "In spite *of*."
- Option D: No correction — the original "Inspite of" is an error.

Final Answer: Correction = "Despite his illness" $\Rightarrow$ A

Answer: (A) Go Back to Q190

Q191.

Solution

Concept — Sentence Improvement: "No sooner. . . than" Construction. Step 1 — Rule: "No sooner" triggers subject–auxiliary inversion and requires "than" (not a comma) for the consequent clause: "No sooner **did** [subject] [verb] **than**. . . " **Step 2 — Corrected sentence:** "**No sooner did the film start than** the lights went off." (Option C.) **Why other options are wrong:**

- Option A: "Once the film started" — grammatically correct but loses the "no sooner" correlative.
- Option B: "As soon as the film started" — acceptable alternative but the question asks for the best improvement of the given structure.
- Option C: "No sooner did the film start than. . . " — correct application of the correlative conjunction.
- Option D: "When the film started" — simple temporal clause, not the best improvement.

Final Answer: "No sooner did the film start than the lights went off" $\Rightarrow$ C

Answer: (C) Go Back to Q191

Q192.

Solution

Concept — Sentence Improvement: Correct Preposition after "get... done." **Step 1 — Rule:** The causative construction "get something done" uses the preposition "**by**" to indicate the agent: "He got the work done **by** a contractor." "From" (in the original) implies sourcing, not agency. **Step 2 — Correct preposition:** "by" (Option D). **Why other options are wrong:**

- Option A: through — implies a channel/intermediary; less precise than "by" for agent.
- Option B: with — implies accompaniment, not agency.
- Option C: under — means under the supervision of; changes meaning.
- Option D: by — correct; specifies the agent who performed the work.

Final Answer: Correct preposition = "by" $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q192

Q193.

Solution

Concept — Sentence Improvement: Inversion after Negative Adverb "Scarcely." **Step 1 — Rule:** When a sentence begins with a negative or restrictive adverb ("scarcely," "hardly," "barely"), subject–auxiliary inversion is required: "**Scarcely had I...**" not "Scarcely I had..." **Step 2 — Corrected sentence:** "**Scarcely had I sat down** when the phone rang." (Option A.) **Why other options are wrong:**

- Option A: "Scarcely had I sat down when" — correct inversion.
- Option B: "Scarcely I had been sitting when" — no inversion; incorrect.
- Option C: "Hardly I sat down when" — no inversion; incorrect.
- Option D: No improvement — the original lacks mandatory inversion.

Final Answer: "Scarcely had I sat down when..." $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q193

Q194.

Solution

Concept — Sentence Improvement: "Too. . . to" Construction. Step 1 — Rule:

The correct structure is "too + adjective + **to** + infinitive" (without "for + gerund"): "He is too honest **to take** bribes." **Step 2 — Correction:** "for taking" → "to take" (Option B). **Why other options are wrong:**

- Option A: "too honest in taking" — incorrect preposition.
- Option B: "too honest to take" — correct.
- Option C: "very honest for not taking" — "very. . . for not" is non-standard.
- Option D: No correction — "for taking" is incorrect.

Final Answer: "too honest to take" ⇒ $\boxed{\text{B}}$

Answer: (B) Go Back to Q194

Q195.

Solution

Concept — Sentence Improvement: Comparative vs Superlative. Step 1 — Rule: The construction "the harder. . . the ___" uses correlative comparatives; both blanks require the *comparative* degree: "the harder. . . the **worse**." "Worst" is the superlative (not the comparative); only the comparative is grammatically correct here. **Step 2 — Correction:** "worst" → "worse" (Option C). **Why other options are wrong:**

- Option A: "worser" — not a standard English form.
- Option B: "more worse" — double comparative; non-standard.
- Option C: "worse" — correct comparative.
- Option D: "most worst" — double superlative; non-standard.

Final Answer: Correction = "worse" ⇒ $\boxed{\text{C}}$

Answer: (C) Go Back to Q195

Q196.

Solution

Concept — Cloze Test: Logical Blank Fill (Blank 1). Step 1 — Context: "Critical thinking is the ability to ___ information *objectively*." The word must be a cognitive verb compatible with "objectively." **Step 2 — Best fit:** "Analyse" — to examine methodically and objectively — Option D. **Why other options are wrong:**

- Option A: Ignore — the opposite of engaging with information.
- Option B: Memorise — passive storage, not objective evaluation.
- Option C: Copy — no evaluative element.
- Option D: Analyse — correct.

Final Answer: Blank (1) = *analyse* $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q196

Q197.

Solution

Concept — Cloze Test: Logical Blank Fill (Blank 2). Step 1 — Context: "make a ___ judgement" — the blank modifies the quality of the judgement produced by critical thinking. **Step 2 — Best fit:** "Reasoned" = based on logic and evidence — Option A. This is consistent with the definition of critical thinking. **Why other options are wrong:**

- Option A: Reasoned — correct.
- Option B: Hasty — contradicts critical thinking (which is deliberate).
- Option C: Biased — contradicts "objectively."
- Option D: Uninformed — contradicts the purpose of analysing information.

Final Answer: Blank (2) = *reasoned* $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q197

Q198.

Solution

Concept — Cloze Test: Logical Blank Fill (Blank 3). Step 1 — Context: "accepting ideas at ___ value" — this is a fixed idiomatic expression. **Step 2 — Idiom:** "Take something at **face** value" means to accept it as it appears without questioning — Option B. **Why other options are wrong:**

- Option A: market value — economic term, not this idiom.
- Option B: face value — correct idiom.
- Option C: great value — not idiomatic.
- Option D: par value — financial term (bonds), not this idiom.

Final Answer: Blank (3) = *face* $\Rightarrow$ B

Answer: (B) Go Back to Q198

Q199.

Solution

Concept — Cloze Test: Logical Blank Fill (Blank 4). Step 1 — Context: "less likely to be ___ by misinformation or emotional arguments" — critical thinkers resist being deceived or led astray. **Step 2 — Best fit:** "Misled" = given a false impression; deceived — Option C. **Why other options are wrong:**

- Option A: Positively influenced — the opposite of what misinformation does.
- Option B: Helped — misinformation does not help; contradicts the context.
- Option C: Misled — correct.
- Option D: Supported — positive; misinformation does not support.

Final Answer: Blank (4) = *misled* $\Rightarrow$ C

Answer: (C) Go Back to Q199

Q200.

Solution

Concept — Cloze Test: Logical Blank Fill (Blank 5). Step 1 — Context: "where we are ___ with data from multiple sources" — describes the overwhelming quantity of information in today's world. **Step 2 — Best fit:** "Bombarded" = subjected to a continuous and overwhelming stream — Option D. **Why other options are wrong:**

- Option A: Deprived — opposite; we have too much data, not too little.
- Option B: Shielded — suggests protection from data; opposite of the scenario described.
- Option C: Isolated — implies disconnection; contradicts "multiple sources."
- Option D: Bombarded — correct; captures information overload.

Final Answer: Blank (5) = *bombarded* $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q200

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	C	2	D	3	B	4	A	5	B
6	D	7	A	8	C	9	B	10	B
11	D	12	C	13	A	14	B	15	D
16	B	17	A	18	C	19	D	20	C
21	A	22	B	23	C	24	D	25	A
26	C	27	D	28	B	29	A	30	C
31	B	32	A	33	D	34	C	35	B
36	C	37	B	38	B	39	A	40	C
41	C	42	D	43	A	44	B	45	C
46	B	47	A	48	D	49	C	50	A
51	D	52	B	53	A	54	C	55	D
56	A	57	B	58	B	59	B	60	A
61	B	62	A	63	D	64	C	65	A
66	D	67	C	68	C	69	A	70	D
71	C	72	A	73	D	74	B	75	C
76	B	77	C	78	D	79	A	80	B
81	C	82	D	83	A	84	B	85	C
86	D	87	A	88	B	89	C	90	D
91	A	92	B	93	C	94	D	95	A
96	B	97	C	98	D	99	A	100	B
101	D	102	A	103	B	104	C	105	D
106	A	107	C	108	D	109	A	110	B
111	C	112	D	113	B	114	C	115	D
116	A	117	B	118	C	119	D	120	A
121	B	122	C	123	D	124	A	125	B
126	C	127	D	128	A	129	B	130	C
131	D	132	A	133	B	134	C	135	D
136	A	137	B	138	C	139	D	140	A
141	B	142	C	143	D	144	A	145	B
146	C	147	D	148	A	149	C	150	D
151	A	152	B	153	C	154	D	155	A
156	B	157	C	158	D	159	A	160	B
161	C	162	D	163	A	164	B	165	C
166	D	167	A	168	B	169	C	170	D
171	B	172	C	173	D	174	A	175	B
176	C	177	D	178	A	179	B	180	C
181	D	182	A	183	B	184	C	185	D
186	A	187	B	188	C	189	D	190	A
191	C	192	D	193	A	194	B	195	C
196	D	197	A	198	B	199	C	200	D