IBSAT Data Adequacy & Data Interpretation

Sample Paper – 3

Duration: 26 Minutes **Maximum Marks: 30**

Instructions

- This paper contains **30** Multiple Choice Questions (Single Correct Answer), modelled on the Data Adequacy and Data Interpretation section of **IBSAT** (ICFAI Business School Aptitude Test).
- Each correct answer carries **+1 mark**. There is **no negative marking** for incorrect or unattempted answers, so attempt every question.
- Only **one** option is correct. Choose the most appropriate answer.
- IBSAT is a computer-based test with no sectional time limit; attempt this practice paper in one timed sitting of about **26 minutes**.
- Use of mobile phones, calculators, log tables, or electronic gadgets is strictly prohibited.

Part A: Table Interpretation

Directions (Q1–Q5): The table below shows the number of units produced (in thousands) of four products at the five plants of Meridian Auto Components in a year. Study it and answer the questions.

Plant	Pistons	Gears	Bearings	Valves	Total
Alpha	60	40	30	20	150
Beta	50	55	25	30	160
Gamma	45	35	50	40	170
Delta	70	30	20	25	145
Epsilon	55	40	45	35	175

Q1. What is the total number of units produced at the Gamma plant across all four products (in thousands)?

(A) 150

(B) 160

(C) 170

(D) 145

Q2. Which plant recorded the highest total production?

(A) Epsilon

(B) Gamma

(C) Beta

(D) Delta

Q3. What is the total number of Pistons produced across all five plants (in thousands)?

(A) 200

(B) 170

(C) 150

(D) 280

Q4. What is the ratio of Bearings produced at the Gamma plant to Valves produced at the Alpha plant?

(A) 2 : 5

(B) 5 : 2

(C) 3 : 2

(D) 5 : 3

Q5. What is the average number of Gears produced per plant (in thousands)?

(A) 35

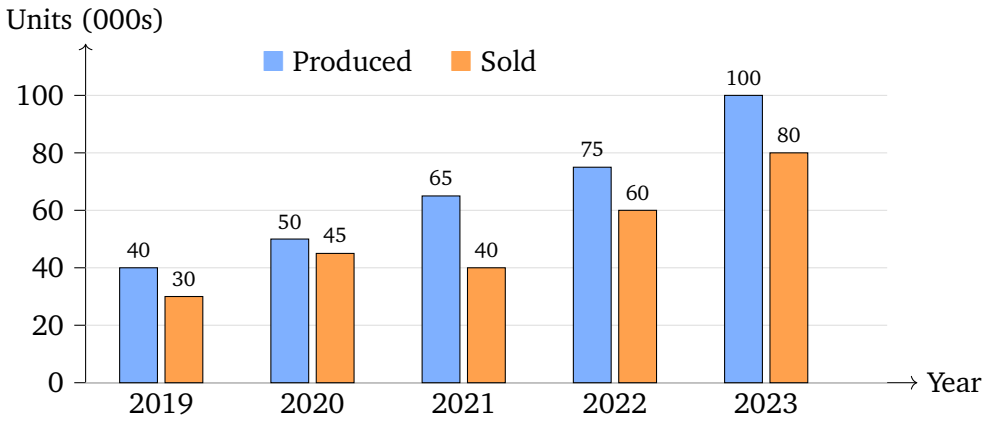
(B) 45

(C) 40

(D) 38

Part B: Bar Graph Interpretation

Directions (Q6–Q10): The bar graph shows the number of units Produced and units Sold (in thousands) by Meridian Auto Components over five years. Study it and answer the questions.



Q6. What is the total number of units produced over the five years (in thousands)?

(A) 330

(B) 320

(C) 340

(D) 310

Q7. In which year was the gap between units produced and units sold the largest?

(A) 2023

(B) 2021

(C) 2022

(D) 2019

Q8. What is the percentage increase in units produced from 2019 to 2023?

(A) 60%

(B) 100%

(C) 120%

(D) 150%

Q9. What is the total number of units sold over the five years (in thousands)?

(A) 245

(B) 265

(C) 255

(D) 250

Q10. What is the ratio of units produced to units sold in the year 2022?

(A) 5 : 4

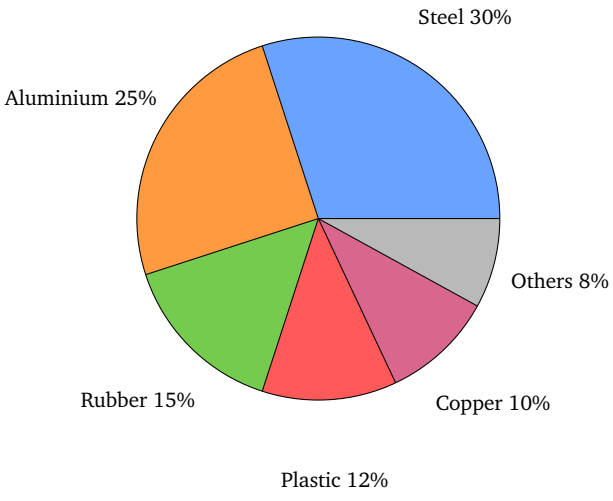
(B) 4 : 5

(C) 5 : 3

(D) 3 : 2

Part C: Pie Chart Interpretation

Directions (Q11–Q14): The pie chart shows the percentage split of the total annual raw-material cost of Meridian Auto Components, which is Rs. 600 crore, by component. Study it and answer the questions.



Q11. How much does Meridian spend on Aluminium (in Rs. crore)?

(A) 144

(B) 150

(C) 120

(D) 180

Q12. Which component has the second highest share of the total raw-material cost?

(A) Aluminium

(B) Steel

(C) Rubber

(D) Copper

Q13. By how much does the Steel cost exceed the Rubber cost (in Rs. crore)?

(A) 72

(B) 108

(C) 90

(D) 60

Q14. What is the central angle of the Plastic slice in the pie chart?

(A) 36°

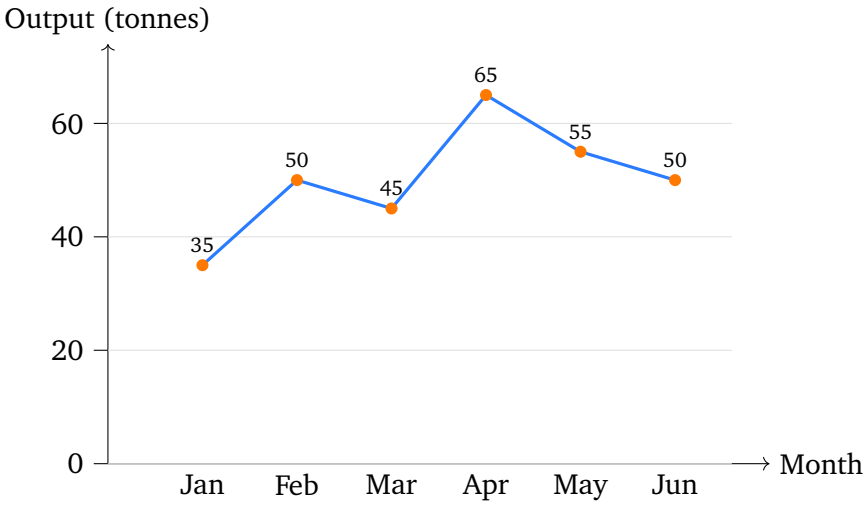
(B) 40°

(C) 48°

(D) 43.2°

Part D: Line Graph Interpretation

Directions (Q15–Q18): The line graph shows the monthly output (in tonnes) of a Meridian foundry from January to June. Study it and answer the questions.



Q15. What is the total output over the six months (in tonnes)?

(A) 290

(B) 300

(C) 310

(D) 280

Q16. In which month was the increase in output over the previous month the highest?

(A) February

(B) May

(C) April

(D) June

Q17. What is the percentage drop in output from February to March?

(A) 10%

(B) 5%

(C) 8%

(D) 12%

Q18. What is the average monthly output over the six months (in tonnes)?

(A) 48

(B) 55

(C) 45

(D) 50

Part E: Caselet Interpretation

Directions (Q19–Q22): Read the caselet and answer the questions.

A manufacturing unit employs **1500** workers. Of these, **40%** work the day shift and the rest work the night shift. Among the day-shift workers, **60%** are skilled and the remaining are trainees. Among the night-shift workers, **25%** are skilled and the remaining are trainees.

Q19. How many workers are on the night shift?

(A) 600

(B) 750

(C) 900

(D) 840

Q20. How many of the day-shift workers are trainees?

(A) 360

(B) 240

(C) 225

(D) 600

Q21. What is the total number of skilled workers in the unit?

(A) 600

(B) 540

(C) 510

(D) 585

Q22. What is the ratio of day-shift skilled workers to night-shift skilled workers?

(A) 8 : 5

(B) 5 : 8

(C) 3 : 2

(D) 8 : 3

Part F: Data Sufficiency

Directions (Q23–Q30): Each question is followed by two statements, I and II. Decide whether the data given in the statements are sufficient to answer the question, and mark:

(A) if Statement I alone is sufficient, but Statement II alone is not;

(B) if Statement II alone is sufficient, but Statement I alone is not;

(C) if both statements together are sufficient, but neither alone is sufficient;

(D) if even both statements together are not sufficient.

Q23. What is the value of y?

I. $2y + 7 = 19$. **II.** y is a positive even number.

(A) Statement I alone is sufficient, but Statement II alone is not.

(B) Statement II alone is sufficient, but Statement I alone is not.

(C) Both statements together are sufficient, but neither alone is sufficient.

(D) Even both statements together are not sufficient.

Q24. What is the total cost of 4 chairs and 6 tables?

I. Each chair costs Rs. 250. **II.** Each table costs Rs. 800.

(A) Statement I alone is sufficient, but Statement II alone is not.

(B) Statement II alone is sufficient, but Statement I alone is not.

(C) Both statements together are sufficient, but neither alone is sufficient.

(D) Even both statements together are not sufficient.

Q25. What is the area of the rectangle?

I. Its perimeter is 36 cm. **II.** Its length is 12 cm and its breadth is 6 cm.

(A) Statement I alone is sufficient, but Statement II alone is not.

(B) Statement II alone is sufficient, but Statement I alone is not.

(C) Both statements together are sufficient, but neither alone is sufficient.

(D) Even both statements together are not sufficient.

Q26. How old is Rahul?

I. Rahul is older than his sister. **II.** Rahul's sister is 15 years old.

(A) Statement I alone is sufficient, but Statement II alone is not.

(B) Statement II alone is sufficient, but Statement I alone is not.

(C) Both statements together are sufficient, but neither alone is sufficient.

(D) Even both statements together are not sufficient.

Q27. What is the speed of the train?

I. It covers the journey in 5 hours. **II.** The length of the journey is 300 km.

(A) Statement I alone is sufficient, but Statement II alone is not.

(B) Statement II alone is sufficient, but Statement I alone is not.

(C) Both statements together are sufficient, but neither alone is sufficient.

(D) Even both statements together are not sufficient.

Q28. What is the selling price of the article?

I. The cost price is Rs. 400 and the article is sold at a profit of 25%.
II. The profit earned is Rs. 100.

(A) Statement I alone is sufficient, but Statement II alone is not.

(B) Statement II alone is sufficient, but Statement I alone is not.

(C) Both statements together are sufficient, but neither alone is sufficient.

(D) Even both statements together are not sufficient.

Q29. Is the positive integer n divisible by 6?

I. n is divisible by 2. **II.** n is divisible by 12.

(A) Statement I alone is sufficient, but Statement II alone is not.

(B) Statement II alone is sufficient, but Statement I alone is not.

(C) Both statements together are sufficient, but neither alone is sufficient.

(D) Even both statements together are not sufficient.

Q30. What are the marks scored by Priya?

I. Her marks are more than 60. **II.** Her marks are less than 90.

(A) Statement I alone is sufficient, but Statement II alone is not.

(B) Statement II alone is sufficient, but Statement I alone is not.

(C) Both statements together are sufficient, but neither alone is sufficient.

(D) Even both statements together are not sufficient.

Detailed Solutions

Q1.

Solution

Concept — Table Reading: The total for a plant is the sum of its four product values, which is already given in the last column.

Step 1 — Locate the Gamma row:

$$\text{Pistons} = 45,\ \text{Gears} = 35,\ \text{Bearings} = 50,\ \text{Valves} = 40.$$

Step 2 — Add the first two values:

$$45 + 35 = 80.$$

Step 3 — Continue the addition:

$$80 + 50 = 130, \qquad 130 + 40 = 170.$$

Why other options are wrong:

- Option A: 150 is the Alpha total.
- Option B: 160 is the Beta total.
- Option D: 145 is the Delta total.

Final Answer: Gamma total $= 170$ thousand units $\Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q1

Q2.

Solution

Concept — Comparing Totals: Read the Total column and pick the largest value.

Step 1 — List the plant totals:

$$\text{Alpha} = 150,\ \text{Beta} = 160,\ \text{Gamma} = 170,\ \text{Delta} = 145,\ \text{Epsilon} = 175.$$

Step 2 — Compare the values:

$$175 > 170 > 160 > 150 > 145.$$

Step 3 — Identify the highest:

$$\text{Epsilon} = 175 \text{ is the maximum.}$$

Why other options are wrong:

- Option B: Gamma is second at 170.
- Option C: Beta is 160.
- Option D: Delta is the lowest at 145.

Final Answer: Epsilon has the highest total $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q2

Q3.

Solution

Concept — Column Sum: Add the Pistons value down every plant row.

Step 1 — List the Pistons values:

$$60,\ 50,\ 45,\ 70,\ 55.$$

Step 2 — Add in pairs:

$$60 + 50 = 110, \qquad 45 + 70 = 115.$$

Step 3 — Combine the running totals:

$$110 + 115 = 225, \qquad 225 + 55 = 280.$$

Why other options are wrong:

- Option A: 200 is the Gears column total.
- Option B: 170 is the Bearings column total.
- Option C: 150 is the Valves column total.

Final Answer: Total Pistons produced $= 280$ thousand units $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q3

Q4.

Solution

Concept — Ratio: Write the two required values as a ratio, then divide both by their common factor.

Step 1 — Read the two values:

$$\text{Gamma Bearings} = 50, \qquad \text{Alpha Valves} = 20.$$

Step 2 — Form the ratio:

$$50 : 20.$$

Step 3 — Divide both parts by 10:

$$50 : 20 = 5 : 2.$$

Why other options are wrong:

- Option A: $2 : 5$ inverts the ratio.
- Option C: $3 : 2$ uses wrong values.
- Option D: $5 : 3$ misreads the Valves value.

Final Answer: Ratio $= 50 : 20 = 5 : 2 \Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q4

Q5.

Solution

Concept — Average: Average $= \dfrac{\text{sum of the values}}{\text{number of values}}$.

Step 1 — List the Gears values:

$$40,\ 55,\ 35,\ 30,\ 40.$$

Step 2 — Add them:

$$40 + 55 + 35 + 30 + 40 = 200.$$

Step 3 — Divide by the 5 plants:

$$\frac{200}{5} = 40.$$

Why other options are wrong:

- Option A: 35 undercounts the sum.
- Option B: 45 overcounts the sum.
- Option D: 38 does not divide 200 evenly.

Final Answer: Average Gears $= \frac{200}{5} = 40$ thousand $\Rightarrow$ C

Answer: (C) Go Back to Q5

Q6.

Solution

Concept — Reading Grouped Bars: Add the Produced bar of each year.

Step 1 — List the Produced values:

$$40,\ 50,\ 65,\ 75,\ 100.$$

Step 2 — Add the first four:

$$40 + 50 = 90, \qquad 65 + 75 = 140, \qquad 90 + 140 = 230.$$

Step 3 — Add the last term:

$$230 + 100 = 330.$$

Why other options are wrong:

- Option B: 320 drops 10 somewhere.
- Option C: 340 adds an extra 10.
- Option D: 310 undercounts the series.

Final Answer: Total produced $= 330$ thousand units $\Rightarrow$ A

Answer: (A) Go Back to Q6

Q7.

Solution

Concept — Difference of Two Bars: For each year subtract Sold from Produced and pick the largest gap.

Step 1 — Compute the first three gaps:

$$2019: \ 40-30=10, \quad 2020: \ 50-45=5, \quad 2021: \ 65-40=25.$$

Step 2 — Compute the last two gaps:

$$2022: \ 75-60=15, \qquad 2023: \ 100-80=20.$$

Step 3 — Pick the largest:

$$25 \text{ in } 2021 \text{ is the maximum gap.}$$

Why other options are wrong:

- Option A: 2023 has a gap of only 20.
- Option C: 2022 has a gap of 15.
- Option D: 2019 has a gap of 10.

Final Answer: The largest gap (25) occurs in 2021 $\Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q7

Q8.

Solution

Concept — Percentage Increase: Percentage increase $= \dfrac{\text{final} - \text{initial}}{\text{initial}} \times 100.$

Step 1 — Read the two Produced values:

$$2019 = 40, \qquad 2023 = 100.$$

Step 2 — Find the increase:

$$100 - 40 = 60.$$

Step 3 — Divide by the initial value and multiply by 100:

$$\frac{60}{40} \times 100 = 150\%.$$

Why other options are wrong:

- Option A: 60% uses an increase of 24.
- Option B: 100% would need a rise to 80.
- Option C: 120% has no valid basis here.

Final Answer: Increase $= \frac{60}{40} \times 100 = 150\% \Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q8

Q9.

Solution

Concept — Series Sum: Add the Sold value across all five years.

Step 1 — List the Sold values:

$$30,\ 45,\ 40,\ 60,\ 80.$$

Step 2 — Add in pairs:

$$30 + 40 = 70, \qquad 45 + 60 = 105.$$

Step 3 — Combine the running totals:

$$70 + 105 = 175, \qquad 175 + 80 = 255.$$

Why other options are wrong:

- Option A: 245 undercounts the series.
- Option B: 265 adds an extra 10.
- Option D: 250 drops 5 somewhere.

Final Answer: Total sold $= 255$ thousand units $\Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q9

Q10.

Solution

Concept — Ratio from a Bar Graph: Read both bars for the year and reduce the ratio.

Step 1 — Read the 2022 bars:

$$\text{Produced} = 75, \qquad \text{Sold} = 60.$$

Step 2 — Form the ratio:

$$75 : 60.$$

Step 3 — Divide both parts by 15:

$$75 : 60 = 5 : 4.$$

Why other options are wrong:

- Option B: $4 : 5$ inverts the ratio.
- Option C: $5 : 3$ misreads the Sold bar as 45.
- Option D: $3 : 2$ does not reduce from $75 : 60$.

Final Answer: Ratio $= 75 : 60 = 5 : 4 \Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q10

Q11.

Solution

Concept — Percentage of a Total: A slice value = slice percent $\times$ total.

Step 1 — Read the Aluminium share:

$$\text{Aluminium} = 25\%.$$

Step 2 — Apply it to the total cost Rs. 600 crore:

$$\frac{25}{100} \times 600.$$

Step 3 — Compute:

$$0.25 \times 600 = 150.$$

Why other options are wrong:

- Option A: 144 uses a 24% share.
- Option C: 120 uses a 20% share.
- Option D: 180 is the Steel (30%) cost.

Final Answer: Aluminium cost $= 25\%$ of $600 = 150$ Rs. crore $\Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q11

Q12.

Solution

Concept — Ranking Shares: Order the percentages and pick the second largest.

Step 1 — List the shares:

$$\text{Steel} = 30,\ \text{Aluminium} = 25,\ \text{Rubber} = 15,\ \text{Plastic} = 12,\ \text{Copper} = 10,\ \text{Others} = 8.$$

Step 2 — Identify the top two:

$$\text{Largest} = \text{Steel } 30\%, \qquad \text{Second} = \text{Aluminium } 25\%.$$

Why other options are wrong:

- Option B: Steel is the largest, not the second.
- Option C: Rubber (15%) is third.
- Option D: Copper (10%) is fifth.

Final Answer: Aluminium (25%) is the second highest $\Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q12

Q13.

Solution

Concept — Difference of Two Shares: Convert the percentage gap into a value using the total.

Step 1 — Find the gap in percentage:

$$30\% - 15\% = 15\%.$$

Step 2 — Apply the gap to Rs. 600 crore:

$$\frac{15}{100} \times 600.$$

Step 3 — Compute:

$$0.15 \times 600 = 90.$$

Why other options are wrong:

- Option A: 72 uses a 12% gap.
- Option B: 108 uses an 18% gap.
- Option D: 60 uses a 10% gap.

Final Answer: Steel exceeds Rubber by 15% of $600 = 90$ Rs. crore $\Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q13

Q14.

Solution

Concept — Percentage to Angle: A full circle is $360°$, so a slice angle $=$ slice percent $\times 360°$.

Step 1 — Read the Plastic share:

$$\text{Plastic} = 12\%.$$

Step 2 — Multiply by $360°$:

$$\frac{12}{100} \times 360.$$

Step 3 — Compute:

$$0.12 \times 360 = 43.2°.$$

Why other options are wrong:

- Option A: $36°$ is the Copper (10%) angle.
- Option B: $40°$ uses an 11.1% share.
- Option C: $48°$ uses a 13.33% share.

Final Answer: Plastic angle $= 12\%$ of $360° = 43.2° \Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q14

Q15.

Solution

Concept — Series Sum: Add the output value read at each of the six points.

Step 1 — List the monthly values:

$$35,\ 50,\ 45,\ 65,\ 55,\ 50.$$

Step 2 — Add in convenient pairs:

$$35 + 65 = 100, \qquad 50 + 50 = 100, \qquad 45 + 55 = 100.$$

Step 3 — Combine the partial sums:

$$100 + 100 + 100 = 300.$$

Why other options are wrong:

- Option A: 290 drops 10 from the total.
- Option C: 310 adds an extra 10.
- Option D: 280 undercounts.

Final Answer: Total output $= 300$ tonnes $\Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q15

Q16.

Solution

Concept — Month-on-Month Change: Subtract each month's value from the previous month and find the largest positive jump.

Step 1 — Compute the first three changes:

$$\text{Feb} : 50 - 35 = +15, \quad \text{Mar} : 45 - 50 = -5, \quad \text{Apr} : 65 - 45 = +20.$$

Step 2 — Compute the last two changes:

$$\text{May} : 55 - 65 = -10, \qquad \text{Jun} : 50 - 55 = -5.$$

Step 3 — Pick the largest rise:

$$+20 \text{ in April is the highest.}$$

Why other options are wrong:

- Option A: February rose only 15.
- Option B: May actually fell by 10.
- Option D: June fell by 5.

Final Answer: The largest rise ($+20$) occurs in April $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q16

Q17.

Solution

Concept — Percentage Drop: Percentage drop $= \dfrac{\text{fall}}{\text{original}} \times 100$, where the original is the earlier value.

Step 1 — Read February and March:

$$\text{February} = 50, \qquad \text{March} = 45.$$

Step 2 — Find the fall:

$$50 - 45 = 5.$$

Step 3 — Divide by February and multiply by 100:

$$\frac{5}{50} \times 100 = 10\%.$$

Why other options are wrong:

- Option B: 5% halves the true drop.
- Option C: 8% has no valid basis.
- Option D: 12% overstates the fall.

Final Answer: Drop $= \frac{5}{50} \times 100 = 10\% \Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q17

Q18.

Solution

Concept — Average of a Series: $\text{Average} = \dfrac{\text{total}}{\text{number of months}}$.

Step 1 — Use the total from Q15:

$$\text{Total} = 300.$$

Step 2 — Divide by the 6 months:

$$\frac{300}{6} = 50.$$

Why other options are wrong:

- Option A: 48 divides a smaller total.
- Option B: 55 divides a larger total.
- Option C: 45 undercounts the average.

Final Answer: Average output $= \frac{300}{6} = 50$ tonnes $\Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q18

Q19.

Solution

Concept — Percentage of a Whole: The night shift is the part of the workforce left after removing the day shift.

Step 1 — Night shift is $100\% - 40\% = 60\%$ of the workers:

$$\text{Night} = 60\% \text{ of } 1500.$$

Step 2 — Compute the value:

$$\frac{60}{100} \times 1500 = 900.$$

Why other options are wrong:

- Option A: 600 is the day-shift count (40%).
- Option B: 750 is half the workforce, not 60%.
- Option D: 840 uses a 56% share.

Final Answer: Night shift $= 60\%$ of $1500 = 900 \Rightarrow$ C

Answer: (C) Go Back to Q19

Q20.

Solution

Concept — Successive Percentages: First find the day-shift workers, then the share of them who are trainees.

Step 1 — Number of day-shift workers:

$$40\% \text{ of } 1500 = 600.$$

Step 2 — Trainees are the $100\% - 60\% = 40\%$ who are not skilled:

$$40\% \text{ of } 600.$$

Step 3 — Compute:

$$\frac{40}{100} \times 600 = 240.$$

Why other options are wrong:

- Option A: 360 is the day-shift skilled workers (60%).
- Option C: 225 is the night-shift skilled workers.
- Option D: 600 is all day-shift workers, not just trainees.

Final Answer: Day trainees $= 40\%$ of $600 = 240 \Rightarrow$ B

Answer: (B) Go Back to Q20

Q21.

Solution

Concept — Combining Two Groups: Add the day-shift skilled and the night-shift skilled workers.

Step 1 — Day-shift skilled:

$$60\% \text{ of } 600 = 360.$$

Step 2 — Night-shift skilled:

$$25\% \text{ of } 900 = 225.$$

Step 3 — Add the two:

$$360 + 225 = 585.$$

Why other options are wrong:

- Option A: 600 rounds both figures up.
- Option B: 540 uses a wrong night-shift share.
- Option C: 510 undercounts the skilled workers.

Final Answer: Skilled workers $= 360 + 225 = 585 \Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q21

Q22.

Solution

Concept — Ratio of Two Counts: Form the ratio of the two skilled figures and reduce it.

Step 1 — Recall the two counts:

$$\text{Day skilled} = 360, \qquad \text{Night skilled} = 225.$$

Step 2 — Form the ratio:

$$360 : 225.$$

Step 3 — Divide both parts by 45:

$$360 : 225 = 8 : 5.$$

Why other options are wrong:

- Option B: $5 : 8$ inverts the ratio.
- Option C: $3 : 2$ does not reduce from $360 : 225$.
- Option D: $8 : 3$ misreads the night figure.

Final Answer: Ratio $= 360 : 225 = 8 : 5 \Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q22

Q23.

Solution

Concept — Data Sufficiency: A statement is sufficient if it fixes a single value of y.

Step 1 — Test Statement I:

$$2y + 7 = 19 \Rightarrow 2y = 12 \Rightarrow y = 6.$$

This gives one value, so I alone is sufficient.

Step 2 — Test Statement II:

$$y \text{ positive even: } 2, 4, 6, \ldots \text{ (many values)}.$$

So II alone is not sufficient.

Step 3 — Conclusion:

$$\text{I alone works, II alone does not} \Rightarrow \text{answer (A)}.$$

Final Answer: Statement I alone is sufficient $\Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q23

Q24.

Solution

Concept — Combining Statements: The total cost needs both unit prices; check if either alone can give it.

Step 1 — Test Statement I:

$$\text{Chair} = 250 \text{ only; table price unknown} \Rightarrow \text{not sufficient.}$$

Step 2 — Test Statement II:

$$\text{Table} = 800 \text{ only; chair price unknown} \Rightarrow \text{not sufficient.}$$

Step 3 — Combine I and II:

$$4 \times 250 + 6 \times 800 = 1000 + 4800 = 5800.$$

Together they give a unique total.

Step 4 — Conclusion:

$$\text{Both needed, neither alone} \Rightarrow \text{answer (C)}.$$

Final Answer: Both statements together are needed $\Rightarrow$ C

Answer: (C) Go Back to Q24

Q25.

Solution

Concept — Fixing a Measurement: The area of a rectangle is fixed only when both the length and breadth are known.

Step 1 — Test Statement I:

$$\text{Perimeter} = 36 \Rightarrow \text{length} + \text{breadth} = 18, \text{ many } (L, B) \text{ pairs}.$$

So I alone is not sufficient.

Step 2 — Test Statement II:

$$L = 12,\ B = 6 \Rightarrow \text{Area} = 12 \times 6 = 72 \text{ cm}^2.$$

So II alone is sufficient.

Step 3 — Conclusion:

$$\text{Only II fixes the area} \Rightarrow \text{answer (B)}.$$

Final Answer: Statement II alone is sufficient $\Rightarrow$ B

Answer: (B) Go Back to Q25

Q26.

Solution

Concept — Insufficient Data: A unique value is needed; a range of possibilities means insufficiency.

Step 1 — Test Statement I:

$$\text{Rahul} > \text{sister; sister's age unknown} \Rightarrow \text{not sufficient.}$$

Step 2 — Test Statement II:

$$\text{Sister} = 15 \text{ only; nothing about Rahul} \Rightarrow \text{not sufficient.}$$

Step 3 — Combine I and II:

$$\text{Rahul} > 15\text{: could be } 16, 17, 18, \ldots \text{ (still many).}$$

Step 4 — Conclusion:

$$\text{Even together, no single age} \Rightarrow \text{answer (D).}$$

Final Answer: Even both statements together are not sufficient $\Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q26

Q27.

Solution

Concept — Speed Needs Distance and Time: Speed $= \dfrac{\text{distance}}{\text{time}}$, so both are required.

Step 1 — Test Statement I:

$$\text{Time} = 5 \text{ h only; distance unknown} \Rightarrow \text{not sufficient.}$$

Step 2 — Test Statement II:

$$\text{Distance} = 300 \text{ km only; time unknown} \Rightarrow \text{not sufficient.}$$

Step 3 — Combine I and II:

$$\text{Speed} = \frac{300}{5} = 60 \text{ km/h}.$$

Together they give a unique speed.

Step 4 — Conclusion:

$$\text{Both needed, neither alone} \Rightarrow \text{answer (C)}.$$

Final Answer: Both statements together are needed $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q27

Q28.

Solution

Concept — Selling Price from Cost and Profit: If the cost price and the profit percent are both known, the selling price is fixed.

Step 1 — Test Statement I:

$$\text{CP} = 400 \text{ at } 25\% \text{ profit} \Rightarrow \text{SP} = 400 \times 1.25 = 500.$$

So I alone is sufficient.

Step 2 — Test Statement II:

$$\text{Profit} = \text{Rs. } 100 \text{ only; cost price unknown} \Rightarrow \text{SP unknown}.$$

So II alone is not sufficient.

Step 3 — Conclusion:

$$\text{Only I fixes the selling price} \Rightarrow \text{answer (A)}.$$

Final Answer: Statement I alone is sufficient $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q28

Q29.

Solution

Concept — Divisibility and Sufficiency: Check whether each statement forces n to be a multiple of 6.

Step 1 — Test Statement I:

$$n \text{ divisible by } 2\text{: e.g. } 4 \text{ (not by 6) or } 6 \text{ (by 6)}.$$

So I alone does not decide it.

Step 2 — Test Statement II:

$$n \text{ divisible by } 12 \Rightarrow n \text{ is a multiple of } 6 \text{ as well.}$$

So II alone is sufficient (the answer is always "yes").

Step 3 — Conclusion:

$$\text{Only II settles it} \Rightarrow \text{answer (B)}.$$

Final Answer: Statement II alone is sufficient $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q29

Q30.

Solution

Concept — Range Instead of a Value: Bounds on the marks give a range, not a single figure.

Step 1 — Test Statement I:

$$\text{Marks} > 60\text{: many values } (61, 62, \ldots).$$

Step 2 — Test Statement II:

$$\text{Marks} < 90\text{: many values } (\ldots, 88, 89).$$

Step 3 — Combine I and II:

$$60 < \text{Marks} < 90\text{: still } 61, 62, \ldots, 89 \text{ — not unique.}$$

Step 4 — Conclusion:

Even together, no single value $\Rightarrow$ answer (D).

Final Answer: Even both statements together are not sufficient $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q30

Answer Key

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