IBSAT Data Adequacy & Data Interpretation

Sample Paper – 2

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 average marks (out of 100) scored by students in four subjects across the five schools of the Vidya Group in an annual examination. Study it and answer the questions.

School	Maths	Science	English	Social	Total
Rosewood	70	80	60	50	260
Hillcrest	85	75	65	55	280
Greenfield	90	65	70	45	270
Maplewood	60	85	55	60	260
Sunrise	75	70	80	65	290

Q1. What is the total average marks of the Greenfield school across all four subjects?

(A) 260

(B) 280

(C) 270

(D) 290

Q2. Which school recorded the highest total marks?

(A) Hillcrest

(B) Sunrise

(C) Greenfield

(D) Maplewood

Q3. What is the total Maths marks across all five schools?

(A) 380

(B) 375

(C) 330

(D) 275

Q4. What is the ratio of Maths marks in Greenfield to Social marks in Rosewood?

(A) 5 : 9

(B) 3 : 2

(C) 9 : 4

(D) 9 : 5

Q5. What is the average Social marks per school (across the five schools)?

(A) 50

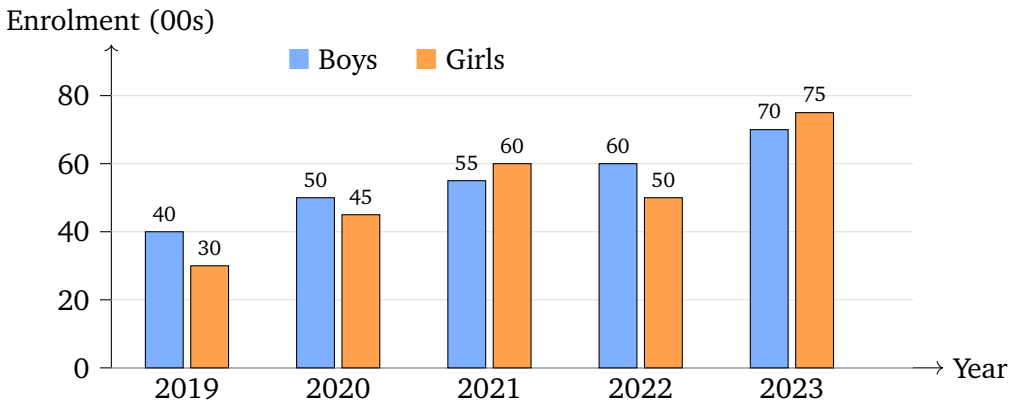
(B) 54

(C) 55

(D) 57

Part B: Bar Graph Interpretation

Directions (Q6–Q10): The bar graph shows the number of Boys and Girls enrolled (in hundreds) at the Vidya Group over five years. Study it and answer the questions.



Q6. What was the total enrolment (Boys + Girls) at the Vidya Group in 2021 (in hundreds)?

(A) 110

(B) 115

(C) 120

(D) 105

Q7. In which year did the Girls enrolment first exceed the Boys enrolment?

(A) 2020

(B) 2022

(C) 2021

(D) 2023

Q8. What is the percentage increase in Boys enrolment from 2019 to 2023?

(A) 80%

(B) 60%

(C) 70%

(D) 75%

Q9. What is the total Girls enrolment over the five years (in hundreds)?

(A) 260

(B) 250

(C) 270

(D) 240

Q10. What is the ratio of Boys to Girls enrolment in the year 2020?

(A) 9 : 10

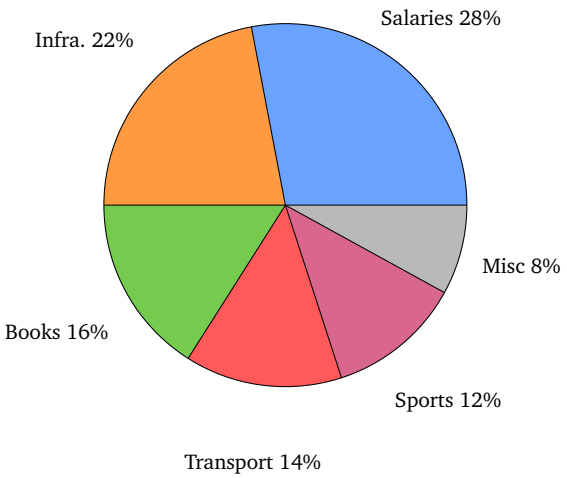
(B) 10 : 9

(C) 11 : 9

(D) 10 : 7

Part C: Pie Chart Interpretation

Directions (Q11–Q14): The pie chart shows the percentage distribution of the total annual budget of the Vidya Group, which is Rs. 500 lakh. Study it and answer the questions.



Q11. How much does the Vidya Group spend on Books (in Rs. lakh)?

(A) 70

(B) 80

(C) 110

(D) 60

Q12. Which budget head has the second highest share of the total budget?

(A) Salaries

(B) Books

(C) Infrastructure

(D) Transport

Q13. By how much does the Salaries budget exceed the Infrastructure budget (in Rs. lakh)?

(A) 30

(B) 40

(C) 20

(D) 50

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

(A) 43.2°

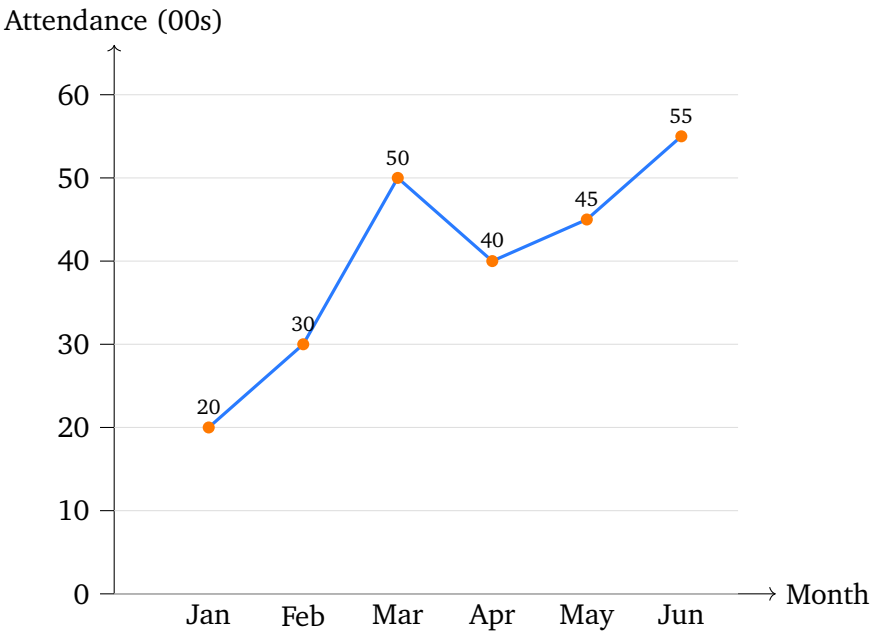
(B) 50.4°

(C) 48°

(D) 45°

Part D: Line Graph Interpretation

Directions (Q15–Q18): The line graph shows the average daily attendance (in hundreds of students) at a Vidya Group school from January to June. Study it and answer the questions.



Q15. What is the total attendance over the six months (in hundreds)?

(A) 230

(B) 250

(C) 235

(D) 240

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

(A) February

(B) March

(C) June

(D) May

Q17. What is the percentage drop in attendance from March to April?

(A) 20%

(B) 10%

(C) 25%

(D) 15%

Q18. What is the average monthly attendance over the six months (in hundreds)?

(A) 38

(B) 42

(C) 40

(D) 45

Part E: Caselet Interpretation

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

A senior school has **1500** students. Of these, **60%** are in the Science stream and the rest are in the Commerce stream. Among the Science students, **45%** are girls and the rest are boys. Among the Commerce students, **30%** are girls and the rest are boys.

Q19. How many students are in the Commerce stream?

(A) 900

(B) 600

(C) 540

(D) 405

Q20. How many boys are there in the Science stream?

(A) 495

(B) 405

(C) 420

(D) 900

Q21. What is the total number of girls in the school?

(A) 540

(B) 600

(C) 585

(D) 630

Q22. What is the ratio of girls in the Science stream to girls in the Commerce stream?

(A) 4 : 9

(B) 9 : 5

(C) 5 : 4

(D) 9 : 4

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. $2y + 4 = 16$. **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. How many students passed the examination in a class?

I. 80% of the students passed. **II.** There are 50 students in the class.

(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. Is the integer M odd?

I. M is divisible by 5. **II.** M is divisible by 2.

(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. What is the two-digit number?

I. The sum of its digits is 10. **II.** The tens digit is greater than the units digit.

(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 perimeter of a rectangle?

I. Its length is 12 cm. **II.** Its breadth is 5 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.

Q28. What is the value of n?

I. n is a prime number less than 6. **II.** n is an even prime 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.

Q29. What is the total number of pages in the book?

I. Ravi read 90 pages, which is 30% of the book. **II.** Ravi read 30% of the book.

(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 is the two-digit number?

I. The number is a multiple of 9. **II.** The number lies between 20 and 40.

(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 school is the sum of its four subject values, which is already given in the last column.

Step 1 — Locate the Greenfield row:

$$\text{Maths} = 90,\ \text{Science} = 65,\ \text{English} = 70,\ \text{Social} = 45.$$

Step 2 — Add the first two values:

$$90 + 65 = 155.$$

Step 3 — Continue the addition:

$$155 + 70 = 225, \qquad 225 + 45 = 270.$$

Why other options are wrong:

- Option A: 260 is the Rosewood (and Maplewood) total.
- Option B: 280 is the Hillcrest total.
- Option D: 290 is the Sunrise total.

Final Answer: Greenfield total $= 270 \Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q1

Q2.

Solution

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

Step 1 — List the school totals:

$$\text{Rosewood} = 260,\ \text{Hillcrest} = 280,\ \text{Greenfield} = 270,\ \text{Maplewood} = 260,\ \text{Sunrise} = 290.$$

Step 2 — Compare the values:

$$290 > 280 > 270 > 260 = 260.$$

Step 3 — Identify the highest:

$$\text{Sunrise} = 290 \text{ is the maximum.}$$

Why other options are wrong:

- Option A: Hillcrest is second at 280.
- Option C: Greenfield is 270.
- Option D: Maplewood is 260.

Final Answer: Sunrise has the highest total $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q2

Q3.

Solution

Concept — Column Sum: Add the Maths value down every school row.

Step 1 — List the Maths values:

$$70,\ 85,\ 90,\ 60,\ 75.$$

Step 2 — Add in pairs:

$$70 + 85 = 155, \qquad 90 + 60 = 150.$$

Step 3 — Combine the running totals:

$$155 + 150 = 305, \qquad 305 + 75 = 380.$$

Why other options are wrong:

- Option B: 375 is the Science column total.
- Option C: 330 is the English column total.
- Option D: 275 is the Social column total.

Final Answer: Total Maths marks $= 380 \Rightarrow$ $\boxed{\text{A}}$

Answer: (A) 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:

$$\text{Greenfield Maths} = 90, \qquad \text{Rosewood Social} = 50.$$

Step 2 — Form the ratio:

$$90 : 50.$$

Step 3 — Divide both parts by 10:

$$90 : 50 = 9 : 5.$$

Why other options are wrong:

- Option A: $5 : 9$ inverts the ratio.
- Option B: $3 : 2$ uses the wrong values.
- Option C: $9 : 4$ misreads the Social value as 40.

Final Answer: Ratio $= 90 : 50 = 9 : 5 \Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q4

Q5.

Solution

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

Step 1 — List the Social values:

$$50,\ 55,\ 45,\ 60,\ 65.$$

Step 2 — Add them:

$$50 + 55 + 45 + 60 + 65 = 275.$$

Step 3 — Divide by the 5 schools:

$$\frac{275}{5} = 55.$$

Why other options are wrong:

- Option A: 50 undercounts the sum.
- Option B: 54 rounds incorrectly.
- Option D: 57 overcounts the sum.

Final Answer: Average Social marks $= \frac{275}{5} = 55 \Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q5

Q6.

Solution

Concept — Reading Grouped Bars: For a single year, add the Boys bar and the Girls bar.

Step 1 — Read the 2021 bars:

$$\text{Boys} = 55, \qquad \text{Girls} = 60.$$

Step 2 — Add the two:

$$55 + 60 = 115.$$

Why other options are wrong:

- Option A: 110 reads one bar too low.
- Option C: 120 rounds both bars up.
- Option D: 105 uses the 2022 values.

Final Answer: Total 2021 enrolment $= 55 + 60 = 115$ hundred $\Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q6

Q7.

Solution

Concept — Trend Comparison: Find the first year in which the Girls bar is taller than the Boys bar.

Step 1 — Compare the early years:

$$2019: \ 30 < 40, \qquad 2020: \ 45 < 50.$$

Step 2 — Continue to the next year:

$$2021: \ 60 > 55.$$

Step 3 — Identify the first crossing:

$$\text{Girls first exceed Boys in } 2021.$$

Why other options are wrong:

- Option A: In 2020 Girls (45) are still below Boys (50).
- Option B: In 2022 Boys (60) again exceed Girls (50); the first crossing was earlier.
- Option D: 2023 is a later year; the crossing already happened in 2021.

Final Answer: Girls first exceed Boys in 2021 $\Rightarrow \boxed{\text{C}}$

Answer: (C) 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 Boys values:

$$2019 = 40, \qquad 2023 = 70.$$

Step 2 — Find the increase:

$$70 - 40 = 30.$$

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

$$\frac{30}{40} \times 100 = 75\%.$$

Why other options are wrong:

- Option A: 80% uses an increase of 32.
- Option B: 60% divides by 50 instead of 40.
- Option C: 70% has no valid basis here.

Final Answer: Increase $= \frac{30}{40} \times 100 = 75\% \Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q8

Q9.

Solution

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

Step 1 — List the Girls values:

$$30,\ 45,\ 60,\ 50,\ 75.$$

Step 2 — Add in convenient groups:

$$30 + 45 = 75, \qquad 60 + 50 = 110.$$

Step 3 — Combine the partial sums:

$$75 + 110 = 185, \qquad 185 + 75 = 260.$$

Why other options are wrong:

- Option B: 250 drops 10 somewhere.
- Option C: 270 adds an extra 10.
- Option D: 240 undercounts the series.

Final Answer: Total Girls enrolment $= 260$ hundred $\Rightarrow \boxed{\text{A}}$

Answer: (A) 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 2020 bars:

$$\text{Boys} = 50, \qquad \text{Girls} = 45.$$

Step 2 — Form the ratio:

$$50 : 45.$$

Step 3 — Divide both parts by 5:

$$50 : 45 = 10 : 9.$$

Why other options are wrong:

- Option A: $9 : 10$ inverts the ratio.
- Option C: $11 : 9$ misreads the Boys bar as 55.
- Option D: $10 : 7$ misreads the Girls bar.

Final Answer: Ratio $= 50 : 45 = 10 : 9 \Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q10

Q11.

Solution

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

Step 1 — Read the Books share:

$$\text{Books} = 16\%.$$

Step 2 — Apply it to the total budget Rs. 500 lakh:

$$\frac{16}{100} \times 500.$$

Step 3 — Compute:

$$0.16 \times 500 = 80.$$

Why other options are wrong:

- Option A: 70 uses a 14% share.
- Option C: 110 uses the 22% Infrastructure share.
- Option D: 60 uses a 12% share.

Final Answer: Books spend $= 16\%$ of $500 = 80$ Rs. lakh $\Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q11

Q12.

Solution

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

Step 1 — List the shares:

$$\text{Salaries} = 28,\ \text{Infrastructure} = 22,\ \text{Books} = 16,\ \text{Transport} = 14,\ \text{Sports} = 12,\ \text{Misc} = 8.$$

Step 2 — Identify the top two:

$$\text{Largest} = \text{Salaries } 28\%, \qquad \text{Second} = \text{Infrastructure } 22\%.$$

Why other options are wrong:

- Option A: Salaries is the largest, not the second.
- Option B: Books (16%) is third.
- Option D: Transport (14%) is fourth.

Final Answer: Infrastructure (22%) is the second highest $\Rightarrow \boxed{\text{C}}$

Answer: (C) 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:

$$28\% - 22\% = 6\%.$$

Step 2 — Apply the gap to Rs. 500 lakh:

$$\frac{6}{100} \times 500.$$

Step 3 — Compute:

$$0.06 \times 500 = 30.$$

Why other options are wrong:

- Option B: 40 uses an 8% gap.
- Option C: 20 uses a 4% gap.
- Option D: 50 uses a 10% gap.

Final Answer: Salaries exceed Infrastructure by 6% of $500 = 30$ Rs. lakh $\Rightarrow \boxed{\text{A}}$

Answer: (A) 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 Transport share:

$$\text{Transport} = 14\%.$$

Step 2 — Multiply by $360°$:

$$\frac{14}{100} \times 360.$$

Step 3 — Compute:

$$0.14 \times 360 = 50.4°.$$

Why other options are wrong:

- Option A: $43.2°$ is the Sports (12%) angle.
- Option C: $48°$ uses a 13.33% share.
- Option D: $45°$ uses a 12.5% share.

Final Answer: Transport angle $= 14\%$ of $360° = 50.4° \Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q14

Q15.

Solution

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

Step 1 — List the monthly values:

$$20,\ 30,\ 50,\ 40,\ 45,\ 55.$$

Step 2 — Add in convenient pairs:

$$20 + 40 = 60, \qquad 30 + 50 = 80, \qquad 45 + 55 = 100.$$

Step 3 — Combine the partial sums:

$$60 + 80 + 100 = 240.$$

Why other options are wrong:

- Option A: 230 drops 10 from the total.
- Option B: 250 adds an extra 10.
- Option C: 235 undercounts.

Final Answer: Total attendance $= 240$ hundred $\Rightarrow \boxed{\text{D}}$

Answer: (D) 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:

$$\text{Feb} : 30 - 20 = +10, \quad \text{Mar} : 50 - 30 = +20, \quad \text{Apr} : 40 - 50 = -10.$$

Step 2 — Continue for the last two months:

$$\text{May} : 45 - 40 = +5, \qquad \text{Jun} : 55 - 45 = +10.$$

Step 3 — Pick the largest rise:

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

Why other options are wrong:

- Option A: February rose only 10.
- Option C: June rose 10.
- Option D: May rose only 5.

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

Answer: (B) 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 March and April:

$$\text{March} = 50, \qquad \text{April} = 40.$$

Step 2 — Find the fall:

$$50 - 40 = 10.$$

Step 3 — Divide by March and multiply by 100:

$$\frac{10}{50} \times 100 = 20\%.$$

Why other options are wrong:

- Option B: 10% divides by 100 instead of 50.
- Option C: 25% divides by 40 instead of 50.
- Option D: 15% has no valid basis.

Final Answer: Drop $= \frac{10}{50} \times 100 = 20\% \Rightarrow \boxed{\text{A}}$

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:

$$\text{Total} = 240.$$

Step 2 — Divide by the 6 months:

$$\frac{240}{6} = 40.$$

Why other options are wrong:

- Option A: 38 divides a smaller total.
- Option B: 42 divides a larger total.
- Option D: 45 rounds incorrectly.

Final Answer: Average attendance $= \frac{240}{6} = 40$ hundred $\Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q18

Q19.

Solution

Concept — Percentage of a Whole: The Commerce students are the part of the school left after removing the Science share.

Step 1 — Commerce is $100\% - 60\% = 40\%$ of the students:

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

Step 2 — Compute the value:

$$\frac{40}{100} \times 1500 = 600.$$

Why other options are wrong:

- Option A: 900 is the number of Science students (60%).
- Option C: 540 has no valid basis here.
- Option D: 405 is the number of Science girls.

Final Answer: Commerce students $= 40\%$ of $1500 = 600 \Rightarrow \boxed{B}$

Answer: (B) Go Back to Q19

Q20.

Solution

Concept — Successive Percentages: First find the Science students, then the share of them who are boys.

Step 1 — Number of Science students:

$$60\% \text{ of } 1500 = 900.$$

Step 2 — Science boys are the $100\% - 45\% = 55\%$ who are not girls:

$$55\% \text{ of } 900.$$

Step 3 — Compute:

$$\frac{55}{100} \times 900 = 495.$$

Why other options are wrong:

- Option B: 405 is the Science girls (45%).
- Option C: 420 is the Commerce boys.
- Option D: 900 is all Science students, not just the boys.

Final Answer: Science boys $= 55\%$ of $900 = 495 \Rightarrow \boxed{A}$

Answer: (A) Go Back to Q20

Q21.

Solution

Concept — Combining Two Groups: Add the Science girls and the Commerce girls.

Step 1 — Science girls:

$$45\% \text{ of } 900 = 405.$$

Step 2 — Commerce girls:

$$30\% \text{ of } 600 = 180.$$

Step 3 — Add the two:

$$405 + 180 = 585.$$

Why other options are wrong:

- Option A: 540 uses a wrong Science share.
- Option B: 600 is the number of Commerce students.
- Option D: 630 overcounts one group.

Final Answer: Total girls $= 405 + 180 = 585 \Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q21

Q22.

Solution

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

Step 1 — Recall the two counts:

$$\text{Science girls} = 405, \qquad \text{Commerce girls} = 180.$$

Step 2 — Form the ratio:

$$405 : 180.$$

Step 3 — Divide both parts by 45:

$$405 : 180 = 9 : 4.$$

Why other options are wrong:

- Option A: $4 : 9$ inverts the ratio.
- Option B: $9 : 5$ misreads the Commerce girls count.
- Option C: $5 : 4$ uses the wrong Science figure.

Final Answer: Ratio $= 405 : 180 = 9 : 4 \Rightarrow \boxed{\text{D}}$

Answer: (D) 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:

$$2y + 4 = 16 \Rightarrow 2y = 12 \Rightarrow y = 6.$$

This gives one value, so I alone is sufficient.

Step 2 — Test Statement II:

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

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: A count of students who passed needs both the percentage and the class total.

Step 1 — Test Statement I:

$$80\% \text{ passed, but the class size is unknown} \Rightarrow \text{not sufficient.}$$

Step 2 — Test Statement II:

$$\text{Total} = 50, \text{ but the pass percentage is unknown} \Rightarrow \text{not sufficient.}$$

Step 3 — Combine I and II:

$$80\% \text{ of } 50 = \frac{80}{100} \times 50 = 40.$$

Together they give a unique count.

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 — Divisibility and Parity: Check whether each statement decides if M is odd.

Step 1 — Test Statement I:

$$M \text{ divisible by } 5\text{: e.g. } 5 \text{ (odd) or } 10 \text{ (even)}.$$

So I alone does not decide parity.

Step 2 — Test Statement II:

$$M \text{ divisible by } 2 \Rightarrow M \text{ is even, hence not odd.}$$

This answers the question definitely ("No"), so II alone is sufficient.

Step 3 — Conclusion:

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

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

Answer: (B) Go Back to Q25

Q26.

Solution

Concept — Multiple Solutions: If the two conditions allow more than one number, the data is not sufficient.

Step 1 — Test Statement I:

$$\text{Digit sum} = 10: \text{ many numbers } (19, 28, 37, 46, \ldots).$$

Step 2 — Test Statement II:

$$\text{Tens digit} > \text{units digit}: \text{ many numbers } (21, 31, 32, \ldots).$$

Step 3 — Combine I and II:

$$\text{Sum } 10 \text{ with tens} > \text{units}: \ 82, \ 73, \ 64.$$

Several numbers still qualify, so the value is not unique.

Step 4 — Conclusion:

$$\text{Even together, many possible numbers} \Rightarrow \text{answer (D)}.$$

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

Answer: (D) Go Back to Q26

Q27.

Solution

Concept — Combining Statements: The perimeter of a rectangle needs both the length and the breadth.

Step 1 — Test Statement I:

$$\text{Length} = 12 \text{ only; breadth unknown} \Rightarrow \text{not sufficient}.$$

Step 2 — Test Statement II:

$$\text{Breadth} = 5 \text{ only; length unknown} \Rightarrow \text{not sufficient}.$$

Step 3 — Combine I and II:

$$\text{Perimeter} = 2(12 + 5) = 2 \times 17 = 34 \text{ cm}.$$

Together they give a unique perimeter.

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 Q27

Q28.

Solution

Concept — Fixing a Single Value: A statement is sufficient only if it pins n to one number.

Step 1 — Test Statement I:

$$n \text{ prime and } n < 6: \ n \in \{2, 3, 5\} \text{ — three values.}$$

So I alone is not sufficient.

Step 2 — Test Statement II:

$$n \text{ an even prime} \Rightarrow n = 2 \text{ (the only even prime)}.$$

So II alone is sufficient.

Step 3 — Conclusion:

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

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

Answer: (B) Go Back to Q28

Q29.

Solution

Concept — Percentage to Whole: If a part and the percentage it represents are both known, the whole is fixed.

Step 1 — Test Statement I:

$$90 \text{ pages} = 30\% \text{ of the book} \Rightarrow \text{Total} = \frac{90}{0.30} = 300.$$

So I alone is sufficient.

Step 2 — Test Statement II:

$$30\% \text{ read, but no page count} \Rightarrow \text{total unknown.}$$

So II alone is not sufficient.

Step 3 — Conclusion:

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

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

Answer: (A) Go Back to Q29

Q30.

Solution

Concept — Multiple Solutions: If the two conditions leave more than one candidate, the data is not sufficient.

Step 1 — Test Statement I:

$$\text{Two-digit multiples of } 9: \ 18, 27, 36, 45, \ldots \text{ (many).}$$

Step 2 — Test Statement II:

$$\text{Numbers between } 20 \text{ and } 40: \text{ many values.}$$

Step 3 — Combine I and II:

$$\text{Multiples of } 9 \text{ between } 20 \text{ and } 40: \ 27 \text{ and } 36.$$

Two numbers still qualify, so the value is not unique.

Step 4 — Conclusion:

$$\text{Even together, two possible numbers} \Rightarrow \text{answer (D)}.$$

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