IBSAT Data Adequacy & Data Interpretation

Sample Paper – 10

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 viewers (in lakhs) of five television channels across four programme genres in a week. Study it and answer the questions.

Channel	News	Drama	Sports	Movies	Total
StarZ	30	45	25	40	140
PrimeTV	25	40	35	30	130
MegaOne	40	30	50	35	155
VividHD	35	25	30	45	135
NovaPlus	20	50	40	30	140

Q1. What is the total number of viewers of MegaOne across all four genres (in lakhs)?

(A) 140

(B) 130

(C) 155

(D) 135

Q2. Which channel recorded the highest total viewership?

(A) StarZ

(B) MegaOne

(C) NovaPlus

(D) VividHD

Q3. What is the total number of Sports viewers across all five channels (in lakhs)?

(A) 150

(B) 190

(C) 180

(D) 200

Q4. What is the ratio of Sports viewers of MegaOne to News viewers of NovaPlus?

(A) 5 : 2

(B) 2 : 5

(C) 5 : 3

(D) 3 : 2

Q5. What is the average Movies viewership per channel (in lakhs)?

(A) 35

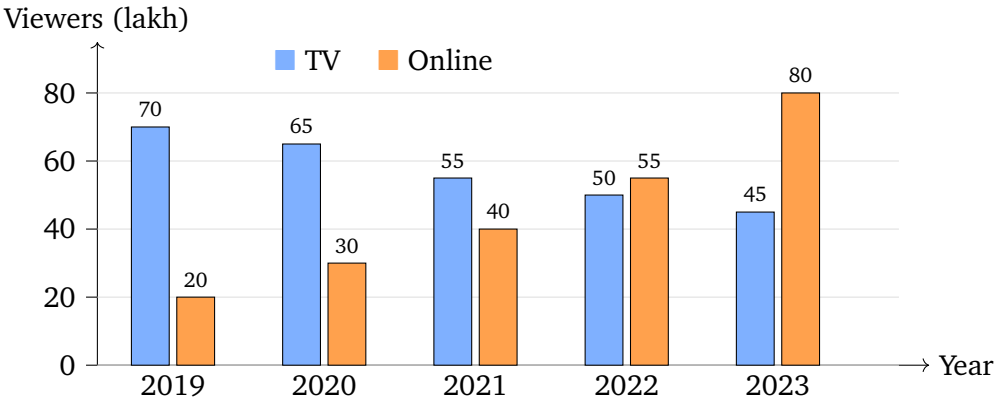
(B) 36

(C) 40

(D) 34

Part B: Bar Graph Interpretation

Directions (Q6–Q10): The bar graph shows the Television and Online viewership (in lakhs) of a news network over five years. Study it and answer the questions.



Q6. What was the total viewership (TV + Online) of the network in 2021 (in lakhs)?

(A) 95

(B) 90

(C) 100

(D) 105

Q7. In which year did Online viewership first exceed Television viewership?

(A) 2021

(B) 2023

(C) 2022

(D) 2020

Q8. What is the percentage increase in Online viewership from 2019 to 2023?

(A) 200%

(B) 250%

(C) 350%

(D) 300%

Q9. What is the total Television viewership over the five years (in lakhs)?

(A) 275

(B) 280

(C) 285

(D) 290

Q10. What is the ratio of Online to Television viewership in the year 2020?

(A) 5 : 13

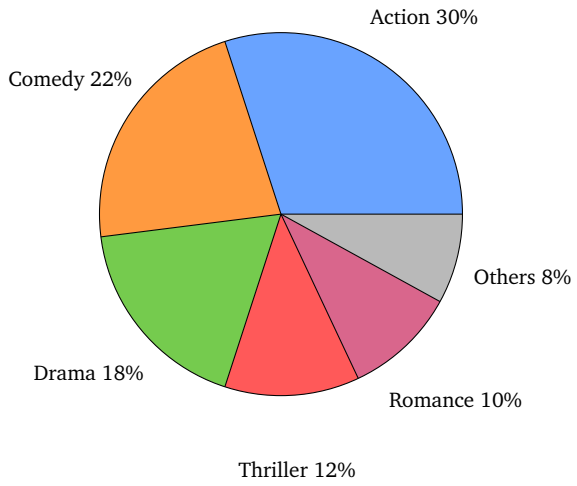
(B) 6 : 13

(C) 6 : 11

(D) 5 : 11

Part C: Pie Chart Interpretation

Directions (Q11–Q14): The pie chart shows the percentage distribution of the annual revenue of a film studio by genre, where the total revenue is Rs. 1500 crore. Study it and answer the questions.



Q11. What is the central angle of the Drama slice in the pie chart?

(A) 72°

(B) 43.2°

(C) 54°

(D) 64.8°

Q12. How much revenue does the studio earn from Action films (in Rs. crore)?

(A) 450

(B) 330

(C) 270

(D) 300

Q13. Which genre has the second highest share of the studio's revenue?

(A) Drama

(B) Comedy

(C) Action

(D) Thriller

Q14. By how much does the Comedy revenue exceed the Romance revenue (in Rs. crore)?

(A) 150

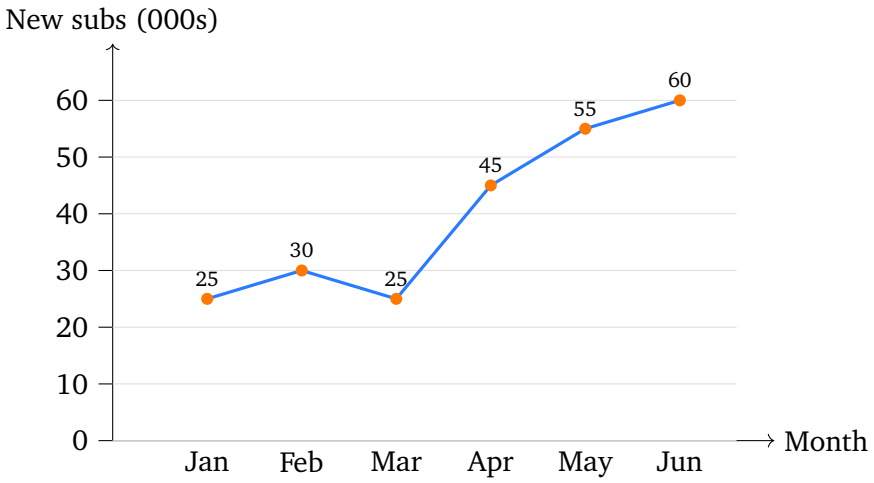
(B) 120

(C) 180

(D) 165

Part D: Line Graph Interpretation

Directions (Q15–Q18): The line graph shows the number of new subscriptions (in thousands) added by a streaming platform from January to June. Study it and answer the questions.



Q15. What is the total number of new subscriptions over the six months (in thousands)?

(A) 220

(B) 230

(C) 250

(D) 240

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

(A) May

(B) April

(C) June

(D) February

Q17. What is the percentage increase in new subscriptions from January to February?

(A) 20%

(B) 15%

(C) 25%

(D) 10%

Q18. What is the average number of new subscriptions per month over the six months (in thousands)?

(A) 38

(B) 42

(C) 40

(D) 45

Part E: Caselet Interpretation

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

A streaming service has **2000** subscribers. Of these, **55%** are on the Premium plan and the rest are on the Basic plan. Among Premium subscribers, **60%** are from urban regions and the rest are from rural regions. Among Basic subscribers, **40%** are from urban regions and the rest are from rural regions.

Q19. How many subscribers are on the Basic plan?

(A) 1100

(B) 660

(C) 1020

(D) 900

Q20. How many Premium subscribers are from urban regions?

(A) 660

(B) 440

(C) 360

(D) 540

Q21. What is the total number of rural subscribers?

(A) 1020

(B) 900

(C) 980

(D) 1080

Q22. What is the ratio of Premium rural subscribers to Basic rural subscribers?

(A) 27 : 22

(B) 22 : 27

(C) 11 : 12

(D) 12 : 11

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. Is the integer M even?

I. M is divisible by 5. **II.** M is divisible by 10.

(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 total cost of 4 movie tickets and 2 popcorn tubs?

I. Each movie ticket costs Rs. 150. **II.** Each popcorn tub costs Rs. 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.

Q26. What is the two-digit number?

I. The sum of its digits is 9. **II.** The difference of its digits is 3.

(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 cost price of a DVD?

I. It was sold for Rs. 240 at a profit of 25%. **II.** The profit earned was Rs. 48.

(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. How many girls are there in the film club?

I. There are 64 members in the club. **II.** The ratio of girls to boys is $3 : 5$.

(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 area of a rectangular screen?

I. Its length is 16 m. **II.** Its length is twice its breadth and the breadth is 8 m.

(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 value of the positive integer n?

I. n is a factor of 12. **II.** n is even.

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

Step 1 — Locate the MegaOne row:

$$\text{News} = 40,\ \text{Drama} = 30,\ \text{Sports} = 50,\ \text{Movies} = 35.$$

Step 2 — Add the first two values:

$$40 + 30 = 70.$$

Step 3 — Continue the addition:

$$70 + 50 = 120, \qquad 120 + 35 = 155.$$

Why other options are wrong:

- Option A: 140 is the StarZ (and NovaPlus) total, not MegaOne.
- Option B: 130 is the PrimeTV total.
- Option D: 135 is the VividHD total.

Final Answer: MegaOne total $= 155$ lakh $\Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q1

Q2.

Solution

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

Step 1 — List the channel totals:

$$\text{StarZ} = 140,\ \text{PrimeTV} = 130,\ \text{MegaOne} = 155,\ \text{VividHD} = 135,\ \text{NovaPlus} = 140.$$

Step 2 — Compare the values:

$$155 > 140 = 140 > 135 > 130.$$

Step 3 — Identify the highest:

$$\text{MegaOne} = 155 \text{ is the maximum.}$$

Why other options are wrong:

- Option A: StarZ is 140.
- Option C: NovaPlus is 140.
- Option D: VividHD is 135.

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

Answer: (B) Go Back to Q2

Q3.

Solution

Concept — Column Sum: Add the Sports value down every channel row.

Step 1 — List the Sports values:

$$25,\ 35,\ 50,\ 30,\ 40.$$

Step 2 — Add in pairs:

$$25 + 35 = 60, \qquad 50 + 30 = 80.$$

Step 3 — Combine the running totals:

$$60 + 80 = 140, \qquad 140 + 40 = 180.$$

Why other options are wrong:

- Option A: 150 is the News column total.
- Option B: 190 is the Drama column total.
- Option D: 200 has no valid basis here.

Final Answer: Total Sports viewers $= 180$ lakh $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) 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:

$$\text{MegaOne Sports} = 50, \qquad \text{NovaPlus News} = 20.$$

Step 2 — Form the ratio:

$$50 : 20.$$

Step 3 — Divide both parts by 10:

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

Why other options are wrong:

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

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

Answer: (A) Go Back to Q4

Q5.

Solution

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

Step 1 — List the Movies values:

$$40,\ 30,\ 35,\ 45,\ 30.$$

Step 2 — Add them:

$$40 + 30 + 35 + 45 + 30 = 180.$$

Step 3 — Divide by the 5 channels:

$$\frac{180}{5} = 36.$$

Why other options are wrong:

- Option A: 35 undercounts the sum.
- Option C: 40 divides a wrong total.
- Option D: 34 rounds incorrectly.

Final Answer: Average Movies viewers $= \frac{180}{5} = 36$ lakh $\Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q5

Q6.

Solution

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

Step 1 — Read the 2021 bars:

$$\text{TV} = 55, \qquad \text{Online} = 40.$$

Step 2 — Add the two:

$$55 + 40 = 95.$$

Why other options are wrong:

- Option B: 90 reads one bar too low.
- Option C: 100 rounds both bars up.
- Option D: 105 uses the 2022 values.

Final Answer: Total 2021 viewership $= 55 + 40 = 95$ lakh $\Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q6

Q7.

Solution

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

Step 1 — Compare each year:

$$2019: \ 20 < 70, \quad 2020: \ 30 < 65, \quad 2021: \ 40 < 55.$$

Step 2 — Continue to the next year:

$$2022: \ 55 > 50.$$

Step 3 — Identify the first crossing:

$$\text{Online first exceeds TV in } 2022.$$

Why other options are wrong:

- Option A: In 2021 Online (40) is still below TV (55).
- Option B: 2023 is a later year; the crossing already happened in 2022.
- Option D: In 2020 Online is well below TV.

Final Answer: Online first exceeds TV in 2022 $\Rightarrow$ $\boxed{\text{C}}$

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 Online values:

$$2019 = 20, \qquad 2023 = 80.$$

Step 2 — Find the increase:

$$80 - 20 = 60.$$

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

$$\frac{60}{20} \times 100 = 300\%.$$

Why other options are wrong:

- Option A: 200% uses an increase of 40.
- Option B: 250% has no valid basis here.
- Option C: 350% overstates the increase.

Final Answer: Increase $= \frac{60}{20} \times 100 = 300\% \Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q8

Q9.

Solution

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

Step 1 — List the TV values:

$$70,\ 65,\ 55,\ 50,\ 45.$$

Step 2 — Add in convenient pairs:

$$70 + 50 = 120, \qquad 65 + 45 = 110.$$

Step 3 — Combine with the remaining term:

$$120 + 110 = 230, \qquad 230 + 55 = 285.$$

Why other options are wrong:

- Option A: 275 undercounts the series.
- Option B: 280 drops 5 somewhere.
- Option D: 290 adds an extra 5.

Final Answer: Total TV viewership $= 285$ lakh $\Rightarrow \boxed{\text{C}}$

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 2020 bars:

$$\text{Online} = 30, \qquad \text{TV} = 65.$$

Step 2 — Form the ratio:

$$30 : 65.$$

Step 3 — Divide both parts by 5:

$$30 : 65 = 6 : 13.$$

Why other options are wrong:

- Option A: $5 : 13$ misreads the Online bar as 25.
- Option C: $6 : 11$ misreads the TV bar.
- Option D: $5 : 11$ misreads both bars.

Final Answer: Ratio $= 30 : 65 = 6 : 13 \Rightarrow \boxed{\text{B}}$

Answer: (B) Go Back to Q10

Q11.

Solution

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

Step 1 — Read the Drama share:

$$\text{Drama} = 18\%.$$

Step 2 — Multiply by $360°$:

$$\frac{18}{100} \times 360.$$

Step 3 — Compute:

$$0.18 \times 360 = 64.8°.$$

Why other options are wrong:

- Option A: 72° is the angle of a 20% share.
- Option B: 43.2° is the Thriller (12%) angle.
- Option C: 54° is the angle of a 15% share.

Final Answer: Drama angle $= 18\%$ of $360^\circ = 64.8^\circ \Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q11

Q12.

Solution

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

Step 1 — Read the Action share:

$$\text{Action} = 30\%.$$

Step 2 — Apply it to the total revenue Rs. 1500 crore:

$$\frac{30}{100} \times 1500.$$

Step 3 — Compute:

$$0.30 \times 1500 = 450.$$

Why other options are wrong:

- Option B: 330 uses the 22% Comedy share.
- Option C: 270 uses the 18% Drama share.
- Option D: 300 uses a 20% share.

Final Answer: Action revenue $= 30\%$ of $1500 = 450$ Rs. crore $\Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q12

Q13.

Solution

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

Step 1 — List the shares:

$$\text{Action} = 30,\ \text{Comedy} = 22,\ \text{Drama} = 18,\ \text{Thriller} = 12,\ \text{Romance} = 10,\ \text{Others} = 8.$$

Step 2 — Identify the top two:

$$\text{Largest} = \text{Action } 30\%, \qquad \text{Second} = \text{Comedy } 22\%.$$

Why other options are wrong:

- Option A: Drama (18%) is third.
- Option C: Action is the largest, not the second.
- Option D: Thriller (12%) is fourth.

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

Answer: (B) Go Back to Q13

Q14.

Solution

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

Step 1 — Find the gap in percentage:

$$22\% - 10\% = 12\%.$$

Step 2 — Apply the gap to Rs. 1500 crore:

$$\frac{12}{100} \times 1500.$$

Step 3 — Compute:

$$0.12 \times 1500 = 180.$$

Why other options are wrong:

- Option A: 150 uses a 10% gap.
- Option B: 120 uses an 8% gap.
- Option D: 165 uses an 11% gap.

Final Answer: Comedy exceeds Romance by 12% of $1500 = 180$ Rs. crore $\Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q14

Q15.

Solution

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

Step 1 — List the monthly values:

$$25,\ 30,\ 25,\ 45,\ 55,\ 60.$$

Step 2 — Add in convenient pairs:

$$25 + 25 = 50, \qquad 30 + 60 = 90, \qquad 45 + 55 = 100.$$

Step 3 — Combine the partial sums:

$$50 + 90 + 100 = 240.$$

Why other options are wrong:

- Option A: 220 drops 20 from the total.
- Option B: 230 undercounts.
- Option C: 250 adds an extra 10.

Final Answer: Total new subscriptions $= 240$ thousand $\Rightarrow \boxed{\text{D}}$

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 changes:

$$\text{Feb} : 30 - 25 = +5, \quad \text{Mar} : 25 - 30 = -5, \quad \text{Apr} : 45 - 25 = +20.$$

Step 2 — Continue for the last two months:

$$\text{May} : 55 - 45 = +10, \qquad \text{Jun} : 60 - 55 = +5.$$

Step 3 — Pick the largest rise:

$+20$ in April is the highest.

Why other options are wrong:

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

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

Answer: (B) Go Back to Q16

Q17.

Solution

Concept — Percentage Increase: Percentage increase $= \dfrac{\text{rise}}{\text{original}} \times 100$, where the original is the earlier value.

Step 1 — Read January and February:

$$\text{January} = 25, \qquad \text{February} = 30.$$

Step 2 — Find the rise:

$$30 - 25 = 5.$$

Step 3 — Divide by January and multiply by 100:

$$\frac{5}{25} \times 100 = 20\%.$$

Why other options are wrong:

- Option B: 15% understates the rise.
- Option C: 25% divides by 20 instead of 25.
- Option D: 10% halves the true rise.

Final Answer: Increase $= \frac{5}{25} \times 100 = 20\% \Rightarrow \boxed{A}$

Answer: (A) Go Back to Q17

Q18.

Solution

Concept — Average of a Series: 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 new subscriptions $= \frac{240}{6} = 40$ thousand $\Rightarrow \boxed{C}$

Answer: (C) Go Back to Q18

Q19.

Solution

Concept — Percentage of a Whole: The Basic subscribers are the part left after removing the Premium share.

Step 1 — Basic is $100\% - 55\% = 45\%$ of the subscribers:

$$\text{Basic} = 45\% \text{ of } 2000.$$

Step 2 — Compute the value:

$$\frac{45}{100} \times 2000 = 900.$$

Why other options are wrong:

- Option A: 1100 is the number of Premium subscribers (55%).
- Option B: 660 is the Premium urban count.
- Option C: 1020 is the total urban count.

Final Answer: Basic subscribers $= 45\%$ of $2000 = 900 \Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q19

Q20.

Solution

Concept — Successive Percentages: First find the Premium subscribers, then the urban share among them.

Step 1 — Number of Premium subscribers:

$$55\% \text{ of } 2000 = 1100.$$

Step 2 — Urban Premium subscribers are 60% of the Premium group:

$$60\% \text{ of } 1100.$$

Step 3 — Compute:

$$\frac{60}{100} \times 1100 = 660.$$

Why other options are wrong:

- Option B: 440 is the Premium rural count (40%).
- Option C: 360 is the Basic urban count.
- Option D: 540 is the Basic rural count.

Final Answer: Premium urban $= 60\%$ of $1100 = 660 \Rightarrow \boxed{A}$

Answer: (A) Go Back to Q20

Q21.

Solution

Concept — Combining Two Groups: Add the Premium rural subscribers and the Basic rural subscribers.

Step 1 — Premium rural subscribers:

$$40\% \text{ of } 1100 = 440.$$

Step 2 — Basic rural subscribers:

$$60\% \text{ of } 900 = 540.$$

Step 3 — Add the two:

$$440 + 540 = 980.$$

Why other options are wrong:

- Option A: 1020 is the total urban count.
- Option B: 900 is the whole Basic plan, not the rural total.
- Option D: 1080 uses a wrong share.

Final Answer: Rural subscribers $= 440 + 540 = 980 \Rightarrow \boxed{C}$

Answer: (C) Go Back to Q21

Q22.

Solution

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

Step 1 — Recall the two counts:

$$\text{Premium rural} = 440, \qquad \text{Basic rural} = 540.$$

Step 2 — Form the ratio:

$$440 : 540.$$

Step 3 — Divide both parts by 20:

$$440 : 540 = 22 : 27.$$

Why other options are wrong:

- Option A: $27 : 22$ inverts the ratio.
- Option C: $11 : 12$ does not reduce from $440 : 540$.
- Option D: $12 : 11$ inverts and misreads the counts.

Final Answer: Ratio $= 440 : 540 = 22 : 27 \Rightarrow$ B

Answer: (B) 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:

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

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 — Divisibility and Sufficiency: Check whether each statement forces M to be even.

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:

$$M \text{ divisible by } 10 \Rightarrow M \text{ is a multiple of } 10, \text{ hence even.}$$

So II alone is sufficient.

Step 3 — Conclusion:

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

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

Answer: (B) Go Back to Q24

Q25.

Solution

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

Step 1 — Test Statement I:

$$\text{Ticket} = 150 \text{ only; popcorn price unknown} \Rightarrow \text{not sufficient.}$$

Step 2 — Test Statement II:

$$\text{Popcorn} = 90 \text{ only; ticket price unknown} \Rightarrow \text{not sufficient.}$$

Step 3 — Combine I and II:

$$4 \times 150 + 2 \times 90 = 600 + 180 = 780.$$

Together they give a unique total.

Step 4 — Conclusion:

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

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

Answer: (C) 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:

Digit sum $= 9$: many numbers $(18, 27, 36, \ldots)$.

Step 2 — Test Statement II:

Digit difference $= 3$: many numbers $(14, 25, 36, \ldots)$.

Step 3 — Combine I and II:

Digits with sum 9 and difference 3 are $\{6, 3\}$.

The number could be **63** or **36**, so it is still not unique.

Step 4 — Conclusion:

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

Final Answer: Even both statements together are not sufficient $\Rightarrow$ D

Answer: (D) Go Back to Q26

Q27.

Solution

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

Step 1 — Test Statement I:

$$\text{SP} = 240 \text{ at } 25\% \text{ profit} \Rightarrow \text{CP} = \frac{240}{1.25} = 192.$$

So I alone is sufficient.

Step 2 — Test Statement II:

$$\text{Profit} = \text{Rs. } 48 \text{ only; no SP or percent} \Rightarrow \text{CP unknown.}$$

So II alone is not sufficient.

Step 3 — Conclusion:

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

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

Answer: (A) Go Back to Q27

Q28.

Solution

Concept — Ratio Needs a Total: A ratio gives the number of girls only when the club total is also known.

Step 1 — Test Statement I:

$$\text{Total} = 64 \text{ only; girl–boy split unknown} \Rightarrow \text{not sufficient.}$$

Step 2 — Test Statement II:

$$\text{Girls} : \text{Boys} = 3 : 5 \text{ only; total unknown} \Rightarrow \text{not sufficient.}$$

Step 3 — Combine I and II:

$$\text{Girls} = \frac{3}{3+5} \times 64 = \frac{3}{8} \times 64 = 24.$$

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 $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q28

Q29.

Solution

Concept — Fixing an Area: The area of a rectangle needs both the length and the breadth.

Step 1 — Test Statement I:

$$\text{Length} = 16 \text{ only; breadth unknown} \Rightarrow \text{not sufficient}.$$

Step 2 — Test Statement II:

$$\text{Breadth} = 8, \ \text{Length} = 2 \times 8 = 16 \Rightarrow \text{Area} = 16 \times 8 = 128 \ \text{m}^2.$$

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 $\Rightarrow$ $\boxed{\text{B}}$

Answer: (B) Go Back to Q29

Q30.

Solution

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

Step 1 — Test Statement I:

$$n \text{ a factor of } 12 : \{1, 2, 3, 4, 6, 12\} \text{ (many values)}.$$

Step 2 — Test Statement II:

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

Step 3 — Combine I and II:

$$n \in \{2, 4, 6, 12\} \text{ — still not unique.}$$

Step 4 — Conclusion:

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

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