

# IBSAT Data Adequacy & Data Interpretation

## Sample Paper – 4

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 tourists (in thousands) who visited five popular cities across the four seasons of a year. Study it and answer the questions.

City	Spring	Summer	Autumn	Winter	Total
Jaipur	60	40	50	70	220
Goa	30	55	45	80	210
Shimla	45	90	40	25	200
Kochi	50	60	55	45	210
Agra	65	50	60	55	230

**Q1.** What is the total number of tourists (in thousands) who visited Agra across all four seasons?

- (A) 220  
(B) 230



(C) 210

(D) 200

**Q2.** Which city received the highest number of tourists in the Summer season?

(A) Shimla

(B) Kochi

(C) Goa

(D) Agra

**Q3.** What is the total number of tourists (in thousands) who visited in the Winter season across all five cities?

(A) 250

(B) 295

(C) 275

(D) 260

**Q4.** What is the ratio of tourists visiting Shimla in Summer to those visiting Jaipur in Spring?

(A) 2 : 3

(B) 4 : 3

(C) 3 : 2

(D) 5 : 3

**Q5.** What is the average number of tourists (in thousands) per city in the Autumn season?

(A) 50

(B) 55

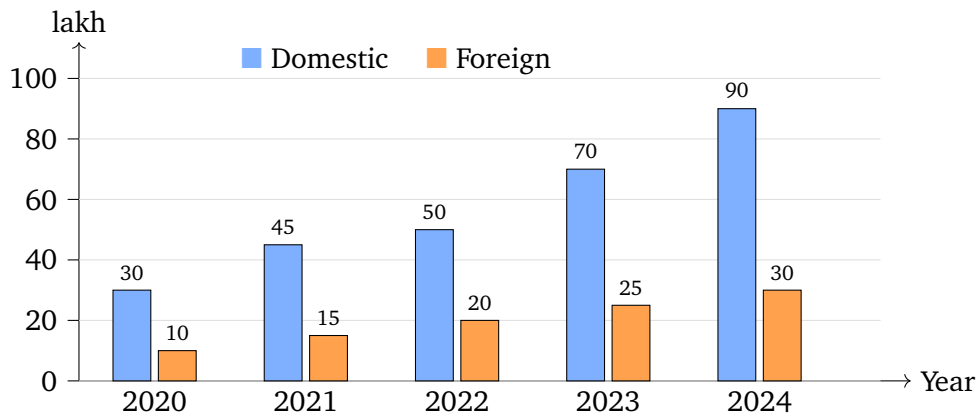
(C) 45

(D) 48



**Part B: Bar Graph Interpretation**

**Directions (Q6–Q10):** The bar graph shows the Domestic and Foreign visitors (in lakh) to a coastal state over five years. Study it and answer the questions.



- Q6.** What was the total number of visitors (Domestic + Foreign) to the state in 2022 (in lakh)?
- (A) 65  
(B) 75  
(C) 60  
(D) 70
- Q7.** What is the percentage increase in Domestic visitors from 2020 to 2024?
- (A) 150%  
(B) 200%  
(C) 250%  
(D) 300%
- Q8.** What is the total number of Foreign visitors over the five years (in lakh)?
- (A) 100  
(B) 90  
(C) 110  
(D) 95



**Q9.** What is the ratio of Domestic to Foreign visitors in the year 2021?

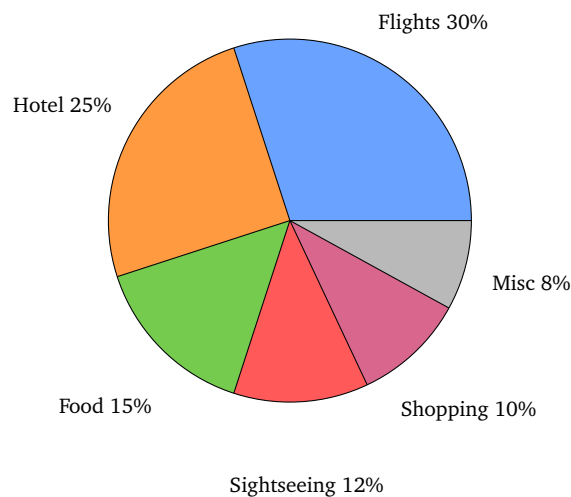
- (A) 2 : 1
- (B) 4 : 1
- (C) 3 : 1
- (D) 3 : 2

**Q10.** What is the difference between Domestic and Foreign visitors in the year 2024 (in lakh)?

- (A) 45
- (B) 55
- (C) 50
- (D) 60

### Part C: Pie Chart Interpretation

**Directions (Q11–Q14):** The pie chart shows the percentage break-up of a family's total trip budget of Rs. 60,000. Study it and answer the questions.



**Q11.** How much does the family spend on Hotel (in Rs.)?

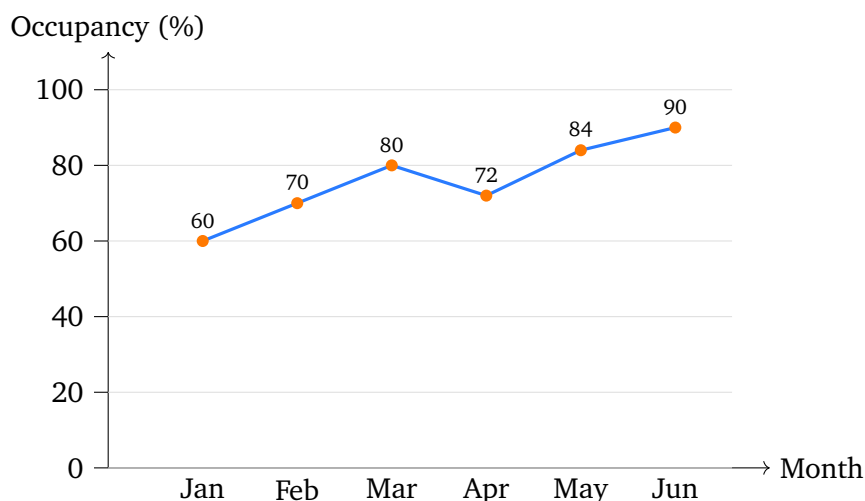
- (A) 18,000
- (B) 15,000
- (C) 12,000
- (D) 9,000



- Q12.** Which category has the second highest share of the total trip budget?
- (A) Hotel  
(B) Food  
(C) Flights  
(D) Sightseeing
- Q13.** By how much does the Flights expense exceed the Food expense (in Rs.)?
- (A) 6,000  
(B) 12,000  
(C) 7,500  
(D) 9,000
- Q14.** What is the central angle of the Sightseeing slice in the pie chart?
- (A)  $36^\circ$   
(B)  $40^\circ$   
(C)  $43.2^\circ$   
(D)  $48^\circ$

### Part D: Line Graph Interpretation

**Directions (Q15–Q18):** The line graph shows the monthly hotel occupancy (in %) at a beach resort from January to June. Study it and answer the questions.



- Q15.** What is the average monthly hotel occupancy (in %) over the six months?
- (A) 76
  - (B) 74
  - (C) 78
  - (D) 80
- Q16.** In which month was the increase in occupancy over the previous month the highest?
- (A) March
  - (B) May
  - (C) June
  - (D) February
- Q17.** What is the percentage drop in occupancy from March to April?
- (A) 8%
  - (B) 12%
  - (C) 6%
  - (D) 10%
- Q18.** In how many of the six months was the occupancy above the six-month average?
- (A) 2
  - (B) 4
  - (C) 3
  - (D) 5

### Part E: Caselet Interpretation

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



A travel agency arranged trips for **1500** tourists last month. Of these, **60%** travelled by flight and the rest travelled by train. Among the flight travellers, **40%** booked a premium package and the remaining booked a standard package. Among the train travellers, **30%** booked a premium package and the remaining booked a standard package.

**Q19.** How many tourists travelled by train?

- (A) 600
- (B) 900
- (C) 750
- (D) 500

**Q20.** How many flight travellers booked a standard package?

- (A) 360
- (B) 540
- (C) 420
- (D) 450

**Q21.** What is the total number of tourists who booked a premium package?

- (A) 500
- (B) 600
- (C) 520
- (D) 540

**Q22.** What is the ratio of flight travellers who booked premium to train travellers who booked premium?

- (A) 3 : 2
- (B) 1 : 2
- (C) 2 : 1



(D) 5 : 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 distance between the hill station and the nearest airport?

- I. A taxi covers it in 3 hours at a steady speed of 50 km per hour.      II. A shuttle bus covers the same route at 40 km per hour.

- (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 tourists are there in the trekking group?

- I. When the guide arranges them in rows of 6, none are left over.      II. The group has more than 30 but fewer than 40 members.

- (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 average age of the tourists in a group above 30 years?

- I. The youngest tourist in the group is 25 years old.      II. The oldest tourist in the group is 45 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.

**Q26.** What is the price of one deluxe room per night at the resort?

- I. Three deluxe rooms and two meals together cost Rs. 9000 for a night.
- II. One deluxe room costs Rs. 2500 per night.

- (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 entry fee  $f$  (in Rs.) for the heritage fort?

- I. Twice the fee plus Rs. 50 equals Rs. 150.
- II. The fee is a multiple of 25.

- (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 rooms does the beach resort have?

- I. The resort has more than 40 rooms.
- II. The resort has exactly 8 floors with 6 rooms on each floor.

- (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 was the total revenue from entry tickets at the fair on Sunday?

**I.** Exactly 1200 entry tickets were sold on Sunday.      **II.** Each entry ticket cost Rs. 150.

(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 age of the tour guide?

**I.** The guide is older than 30 years.      **II.** The guide's age is a multiple of 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.



**Detailed Solutions**

Q1.

**Solution**

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

**Step 1 — Locate the Agra row:**

$$\text{Spring} = 65, \text{ Summer} = 50, \text{ Autumn} = 60, \text{ Winter} = 55.$$

**Step 2 — Add the first two values:**

$$65 + 50 = 115.$$

**Step 3 — Continue the addition:**

$$115 + 60 = 175, \quad 175 + 55 = 230.$$

**Why other options are wrong:**

- Option A: 220 is the Jaipur total.
- Option C: 210 is the Goa (and Kochi) total.
- Option D: 200 is the Shimla total.

**Final Answer:** Agra total = 230 thousand  $\Rightarrow$  **B**

**Answer: (B)** [Go Back to Q1](#)

Q2.

**Solution**

**Concept — Comparing a Column:** Read the Summer column and pick the largest value.

**Step 1 — List the Summer values:**

$$\text{Jaipur} = 40, \text{ Goa} = 55, \text{ Shimla} = 90, \text{ Kochi} = 60, \text{ Agra} = 50.$$



**Step 2 — Compare the values:**

$$90 > 60 > 55 > 50 > 40.$$

**Step 3 — Identify the highest:**

Shimla = 90 is the maximum.

**Why other options are wrong:**

- Option B: Kochi is second at 60.
- Option C: Goa is 55.
- Option D: Agra is 50.

**Final Answer:** Shimla had the most Summer tourists  $\Rightarrow$

[Go Back to Q2](#)

**Q3.**

### Solution

**Concept — Column Sum:** Add the Winter value down every city row.

**Step 1 — List the Winter values:**

$$70, 80, 25, 45, 55.$$

**Step 2 — Add in pairs:**

$$70 + 80 = 150, \quad 25 + 45 = 70.$$

**Step 3 — Combine the running totals:**

$$150 + 70 = 220, \quad 220 + 55 = 275.$$

**Why other options are wrong:**

- Option A: 250 is the Spring (and Autumn) column total.
- Option B: 295 is the Summer column total.
- Option D: 260 miscounts the sum.

**Final Answer:** Total Winter tourists = 275 thousand  $\Rightarrow$



**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:**

$$\text{Shimla Summer} = 90, \quad \text{Jaipur Spring} = 60.$$

**Step 2 — Form the ratio:**

$$90 : 60.$$

**Step 3 — Divide both parts by 30:**

$$90 : 60 = 3 : 2.$$

**Why other options are wrong:**

- Option A: 2 : 3 inverts the ratio.
- Option B: 4 : 3 uses the wrong values.
- Option D: 5 : 3 misreads the Spring value.

**Final Answer:** Ratio =  $90 : 60 = 3 : 2 \Rightarrow$

**Answer: (C)** [Go Back to Q4](#)

Q5.

### Solution

**Concept — Average:**  $\text{Average} = \frac{\text{sum of the values}}{\text{number of values}}$

**Step 1 — List the Autumn values:**

$$50, 45, 40, 55, 60.$$

**Step 2 — Add them:**

$$50 + 45 + 40 + 55 + 60 = 250.$$



**Step 3 — Divide by the 5 cities:**

$$\frac{250}{5} = 50.$$

**Why other options are wrong:**

- Option B: 55 divides a wrong total.
- Option C: 45 undercounts the sum.
- Option D: 48 rounds incorrectly.

**Final Answer:** Average Autumn tourists =  $\frac{250}{5} = 50$  thousand  $\Rightarrow$  **A**

**Answer: (A)** [Go Back to Q5](#)

**Q6.**

### Solution

**Concept — Reading Grouped Bars:** For a single year, add the Domestic bar and the Foreign bar.

**Step 1 — Read the 2022 bars:**

$$\text{Domestic} = 50, \quad \text{Foreign} = 20.$$

**Step 2 — Add the two:**

$$50 + 20 = 70.$$

**Why other options are wrong:**

- Option A: 65 reads one bar too low.
- Option B: 75 rounds a bar up.
- Option C: 60 drops 10 from the total.

**Final Answer:** Total 2022 visitors =  $50 + 20 = 70$  lakh  $\Rightarrow$  **D**

**Answer: (D)** [Go Back to Q6](#)



Q7.

**Solution**

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

**Step 1 — Read the two Domestic values:**

$$2020 = 30, \quad 2024 = 90.$$

**Step 2 — Find the increase:**

$$90 - 30 = 60.$$

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

$$\frac{60}{30} \times 100 = 200\%.$$

**Why other options are wrong:**

- Option A: 150% uses an increase of 45.
- Option C: 250% has no valid basis here.
- Option D: 300% divides by 20 instead of 30.

**Final Answer:** Increase =  $\frac{60}{30} \times 100 = 200\% \Rightarrow \boxed{\text{B}}$

**Answer: (B)** [Go Back to Q7](#)

Q8.

**Solution**

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

**Step 1 — List the Foreign values:**

$$10, 15, 20, 25, 30.$$

**Step 2 — Add in convenient pairs:**

$$10 + 30 = 40, \quad 15 + 25 = 40.$$

**Step 3 — Add the middle term:**

$$40 + 40 + 20 = 100.$$



**Why other options are wrong:**

- Option B: 90 drops 10 somewhere.
- Option C: 110 adds an extra 10.
- Option D: 95 miscounts the series.

**Final Answer:** Total Foreign visitors = 100 lakh  $\Rightarrow$  **A**

**Answer: (A)** [Go Back to Q8](#)

**Q9.**

### Solution

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

**Step 1 — Read the 2021 bars:**

$$\text{Domestic} = 45, \quad \text{Foreign} = 15.$$

**Step 2 — Form the ratio:**

$$45 : 15.$$

**Step 3 — Divide both parts by 15:**

$$45 : 15 = 3 : 1.$$

**Why other options are wrong:**

- Option A: 2 : 1 misreads the Domestic bar.
- Option B: 4 : 1 misreads the Foreign bar.
- Option D: 3 : 2 does not reduce from 45 : 15.

**Final Answer:** Ratio = 45 : 15 = 3 : 1  $\Rightarrow$  **C**

**Answer: (C)** [Go Back to Q9](#)



Q10.

**Solution**

**Concept — Difference of Two Bars:** Subtract the shorter bar from the taller bar for the same year.

**Step 1 — Read the 2024 bars:**

$$\text{Domestic} = 90, \quad \text{Foreign} = 30.$$

**Step 2 — Subtract:**

$$90 - 30 = 60.$$

**Why other options are wrong:**

- Option A: 45 is the 2023 difference ( $70 - 25$ ).
- Option B: 55 misreads a bar.
- Option C: 50 drops 10 from the gap.

**Final Answer:** Difference =  $90 - 30 = 60$  lakh  $\Rightarrow$  **D**

**Answer: (D)** [Go Back to Q10](#)

Q11.

**Solution**

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

**Step 1 — Read the Hotel share:**

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

**Step 2 — Apply it to the total budget Rs. 60,000:**

$$\frac{25}{100} \times 60000.$$

**Step 3 — Compute:**

$$0.25 \times 60000 = 15000.$$

**Why other options are wrong:**

- Option A: 18,000 uses the 30% Flights share.



- Option C: 12,000 uses a 20% share.
- Option D: 9,000 uses the 15% Food share.

**Final Answer:** Hotel spend = 25% of 60000 = 15000 ⇒ **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:**

Flights = 30, Hotel = 25, Food = 15, Sightseeing = 12, Shopping = 10, Misc = 8.

**Step 2 — Identify the top two:**

Largest = Flights 30%,      Second = Hotel 25%.

**Why other options are wrong:**

- Option B: Food (15%) is third.
- Option C: Flights is the largest, not the second.
- Option D: Sightseeing (12%) is fourth.

**Final Answer:** Hotel (25%) is the second highest ⇒ **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. 60,000:**

$$\frac{15}{100} \times 60000.$$

**Step 3 — Compute:**

$$0.15 \times 60000 = 9000.$$

**Why other options are wrong:**

- Option A: 6,000 uses a 10% gap.
- Option B: 12,000 uses a 20% gap.
- Option C: 7,500 uses a 12.5% gap.

**Final Answer:** Flights exceed Food by 15% of 60000 = 9000 ⇒ **D**

**Answer: (D)** [Go Back to Q13](#)

**Q14.**

### Solution

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

**Step 1 — Read the Sightseeing share:**

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

**Step 2 — Multiply by  $360^\circ$ :**

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

**Step 3 — Compute:**

$$0.12 \times 360 = 43.2^\circ.$$

**Why other options are wrong:**

- Option A:  $36^\circ$  is the Shopping (10%) angle.
- Option B:  $40^\circ$  uses an 11.1% share.
- Option D:  $48^\circ$  uses a 13.33% share.

**Final Answer:** Sightseeing angle = 12% of  $360^\circ = 43.2^\circ \Rightarrow$  **C**

**Answer: (C)** [Go Back to Q14](#)



Q15.

**Solution**

**Concept — Average of a Series:**  $\text{Average} = \frac{\text{sum of the values}}{\text{number of months}}$ .

**Step 1 — List the monthly values:**

$$60, 70, 80, 72, 84, 90.$$

**Step 2 — Add in convenient pairs:**

$$60 + 90 = 150, \quad 70 + 80 = 150, \quad 72 + 84 = 156.$$

**Step 3 — Combine and divide by the 6 months:**

$$150 + 150 + 156 = 456, \quad \frac{456}{6} = 76.$$

**Why other options are wrong:**

- Option B: 74 divides a smaller total.
- Option C: 78 divides a larger total.
- Option D: 80 rounds incorrectly.

**Final Answer:** Average occupancy =  $\frac{456}{6} = 76\% \Rightarrow \boxed{A}$

**Answer: (A)** [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:**

$$\text{Feb} : 70 - 60 = +10, \quad \text{Mar} : 80 - 70 = +10, \quad \text{Apr} : 72 - 80 = -8.$$

**Step 2 — Continue for the last two months:**

$$\text{May} : 84 - 72 = +12, \quad \text{Jun} : 90 - 84 = +6.$$



**Step 3 — Pick the largest rise:**

+12 in May is the highest.

**Why other options are wrong:**

- Option A: March rose only 10.
- Option C: June rose 6.
- Option D: February rose 10.

**Final Answer:** The largest rise (+12) occurs in May  $\Rightarrow$  **B**

**Answer: (B)** [Go Back to Q16](#)

**Q17.**

### Solution

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

**Step 1 — Read March and April:**

March = 80,      April = 72.

**Step 2 — Find the fall:**

$$80 - 72 = 8.$$

**Step 3 — Divide by March and multiply by 100:**

$$\frac{8}{80} \times 100 = 10\%.$$

**Why other options are wrong:**

- Option A: 8% divides by 100 instead of 80.
- Option B: 12% overstates the fall.
- Option C: 6% uses a wrong base.

**Final Answer:** Drop =  $\frac{8}{80} \times 100 = 10\% \Rightarrow$  **D**

**Answer: (D)** [Go Back to Q17](#)



Q18.

**Solution**

**Concept — Comparing with the Average:** Count how many monthly values exceed the six-month average.

**Step 1 — Recall the average from Q15:**

$$\text{Average} = 76\%.$$

**Step 2 — Compare each month with 76:**

$$60 < 76, 70 < 76, 80 > 76, 72 < 76, 84 > 76, 90 > 76.$$

**Step 3 — Count the months above the average:**

$$\text{March, May, June} \Rightarrow 3 \text{ months.}$$

**Why other options are wrong:**

- Option A: 2 misses one month above the average.
- Option B: 4 counts one month too many.
- Option D: 5 overcounts badly.

**Final Answer:** 3 months are above the average  $\Rightarrow$

**Answer: (C)** [Go Back to Q18](#)

Q19.

**Solution**

**Concept — Percentage of a Whole:** The train travellers are the part of the group left after removing the flight share.

**Step 1 — Train travellers are  $100\% - 60\% = 40\%$  of the tourists:**

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

**Step 2 — Compute the value:**

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



**Why other options are wrong:**

- Option B: 900 is the number of flight travellers (60%).
- Option C: 750 is half of the tourists, not 40%.
- Option D: 500 has no valid basis.

**Final Answer:** Train travellers = 40% of 1500 = 600  $\Rightarrow$  **A**

**Answer: (A)** [Go Back to Q19](#)

**Q20.**

### Solution

**Concept — Successive Percentages:** First find the flight travellers, then the share of them who booked standard.

**Step 1 — Number of flight travellers:**

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

**Step 2 — Standard is the  $100\% - 40\% = 60\%$  who did not book premium:**

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

**Step 3 — Compute:**

$$\frac{60}{100} \times 900 = 540.$$

**Why other options are wrong:**

- Option A: 360 is the flight premium bookings (40%).
- Option C: 420 is the train standard bookings.
- Option D: 450 is half the flight travellers.

**Final Answer:** Flight standard = 60% of 900 = 540  $\Rightarrow$  **B**

**Answer: (B)** [Go Back to Q20](#)



Q21.

**Solution**

**Concept — Combining Two Groups:** Add the flight premium bookings and the train premium bookings.

**Step 1 — Flight premium bookings:**

$$40\% \text{ of } 900 = 360.$$

**Step 2 — Train premium bookings:**

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

**Step 3 — Add the two:**

$$360 + 180 = 540.$$

**Why other options are wrong:**

- Option A: 500 undercounts the sum.
- Option B: 600 rounds both figures up.
- Option C: 520 uses a wrong share.

**Final Answer:** Premium bookings =  $360 + 180 = 540 \Rightarrow$  D

Answer: (D) [Go Back to Q21](#)

Q22.

**Solution**

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

**Step 1 — Recall the two counts:**

$$\text{Flight premium} = 360, \quad \text{Train premium} = 180.$$

**Step 2 — Form the ratio:**

$$360 : 180.$$

**Step 3 — Divide both parts by 180:**

$$360 : 180 = 2 : 1.$$



Why other options are wrong:

- Option A: 3 : 2 uses wrong values.
- Option B: 1 : 2 inverts the ratio.
- Option D: 5 : 3 does not reduce from 360 : 180.

**Final Answer:** Ratio =  $360 : 180 = 2 : 1 \Rightarrow$

[Go Back to Q22](#)

Q23.

### Solution

**Concept — Data Sufficiency:** Distance = speed  $\times$  time; a statement is sufficient if it fixes both.

**Step 1 — Test Statement I:**

$$\text{Distance} = 50 \times 3 = 150 \text{ km, a single value.}$$

So I alone is sufficient.

**Step 2 — Test Statement II:**

$$\text{Speed} = 40 \text{ only; no time given} \Rightarrow \text{distance unknown.}$$

So II alone is not sufficient.

**Step 3 — Conclusion:**

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

**Final Answer:** Statement I alone is sufficient  $\Rightarrow$

[Go Back to Q23](#)

Q24.

### Solution

**Concept — Combining Statements:** Each statement gives a range; check whether together they pin down one value.



**Step 1 — Test Statement I:**

$N$  is a multiple of 6 : 6, 12, 18, ... (many values).

So I alone is not sufficient.

**Step 2 — Test Statement II:**

$30 < N < 40$  : 31, 32, ..., 39 (many values).

So II alone is not sufficient.

**Step 3 — Combine I and II:**

Multiple of 6 in (30, 40) = 36 only.

Together they give a unique value.

**Step 4 — Conclusion:**

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

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

[Go Back to Q24](#)

Q25.

**Solution**

**Concept — Insufficient Data:** The extremes of a data set do not fix the average.

**Step 1 — Test Statement I:**

Youngest = 25; the average could be anything  $\geq 25$ .

So I alone is not sufficient.

**Step 2 — Test Statement II:**

Oldest = 45; the average could be anything  $\leq 45$ .

So II alone is not sufficient.

**Step 3 — Combine I and II:**

Average lies between 25 and 45, so it may be below or above 30.



**Step 4 — Conclusion:**

Even together, no definite yes/no  $\Rightarrow$  answer (D).

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

**Answer: (D)** [Go Back to Q25](#)

**Q26.**

**Solution**

**Concept — Two Unknowns vs One:** A single equation in two unknowns cannot fix a price, but a direct value can.

**Step 1 — Test Statement I:**

$$3(\text{room}) + 2(\text{meal}) = 9000 : \text{two unknowns} \Rightarrow \text{not sufficient.}$$

**Step 2 — Test Statement II:**

Room = Rs. 2500 directly  $\Rightarrow$  sufficient alone.

**Step 3 — Conclusion:**

Only II fixes the room price  $\Rightarrow$  answer (B).

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

**Answer: (B)** [Go Back to Q26](#)

**Q27.**

**Solution**

**Concept — Solving an Equation:** A linear equation in one unknown fixes a single value.

**Step 1 — Test Statement I:**

$$2f + 50 = 150 \Rightarrow 2f = 100 \Rightarrow f = 50.$$

This gives one value, so I alone is sufficient.



**Step 2 — Test Statement II:**

$f$  a multiple of 25 : 25, 50, 75, ... (many values).

So II alone is not sufficient.

**Step 3 — Conclusion:**

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

**Final Answer:** Statement I alone is sufficient  $\Rightarrow$

[Go Back to Q27](#)

**Q28.**

**Solution**

**Concept — Range vs Exact Count:** An inequality only gives a range, while a product gives a definite total.

**Step 1 — Test Statement I:**

Rooms  $>$  40 : 41, 42, ... (a range).

So I alone is not sufficient.

**Step 2 — Test Statement II:**

8 floors  $\times$  6 rooms = 48 rooms.

So II alone is sufficient.

**Step 3 — Conclusion:**

Only II fixes the count  $\Rightarrow$  answer (B).

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

[Go Back to Q28](#)



Q29.

**Solution**

**Concept — Revenue Needs Count and Price:** Total revenue = number of tickets  $\times$  price per ticket.

**Step 1 — Test Statement I:**

Tickets = 1200 only; price unknown  $\Rightarrow$  not sufficient.

**Step 2 — Test Statement II:**

Price = Rs. 150 only; count unknown  $\Rightarrow$  not sufficient.

**Step 3 — Combine I and II:**

$$1200 \times 150 = 180000.$$

Together they give a unique revenue.

**Step 4 — Conclusion:**

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

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

[Go Back to Q29](#)

Q30.

**Solution**

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

**Step 1 — Test Statement I:**

Age  $>$  30 : 31, 32, 33, ... (many values).

**Step 2 — Test Statement II:**

Age a multiple of 5 : 5, 10, 15, ... (many values).



**Step 3 — Combine I and II:**

Multiples of 5 above 30 = 35, 40, 45, ... — still not unique.

**Step 4 — Conclusion:**

Even together, many possible ages  $\Rightarrow$  answer (D).

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

[Go Back to Q30](#)



**Answer Key**

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

