CLAT Quantitative Techniques

Sample Paper – 7

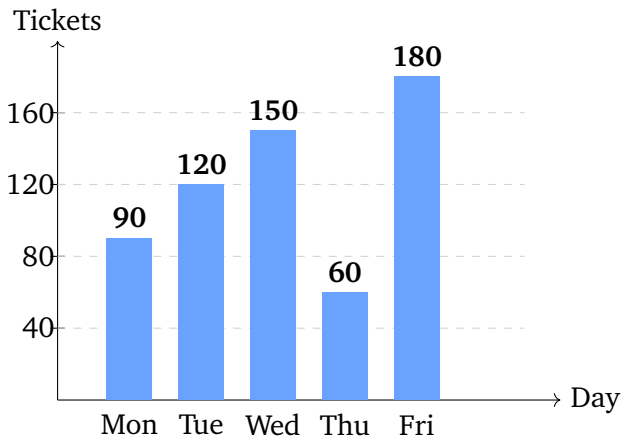
Duration: 12 Minutes **Maximum Marks: 12**

Instructions

- This paper contains **12** Multiple Choice Questions (Single Correct Answer), modelled on the Quantitative Techniques section of **CLAT** (Common Law Admission Test).
- Each correct answer carries **+1 mark**. There is **a negative marking of 0.25 marks** for every incorrect answer; unattempted questions carry no penalty.
- The paper has **three data sets**, each giving information as a graph, table, or short passage, followed by **four** questions. Derive the figures from the set and apply elementary mathematics (up to **Class 10** level) to answer.
- CLAT is an offline pen-and-paper (OMR) test with no sectional time limit; attempt this practice paper in one timed sitting of about **12 minutes**.
- Use of calculators, mobile phones, and other electronic gadgets is strictly prohibited; do the arithmetic by hand.

Data Set I

Directions (Q1–Q4): The bar chart below shows the number of movie tickets sold at a cinema over five days. Study it and answer the questions that follow.



Q1. What is the total number of movie tickets sold over the five days?

(A) 560

(B) 640

(C) 580

(D) 600

Q2. What is the average number of tickets sold per day over the five days?

(A) 120

(B) 110

(C) 130

(D) 125

Q3. The number of tickets sold on Friday is what percent more than the number sold on Wednesday?

(A) 30%

(B) 25%

(C) 20%

(D) 15%

Q4. What is the ratio of the tickets sold on Tuesday to the tickets sold on Friday?

(A) 2 : 3

(B) 3 : 2

(C) 1 : 2

(D) 4 : 5

Data Set II

Directions (Q5–Q8): The table below shows the quantity (in kg) of four kinds of fruit sold by a vendor over two days. Study it and answer the questions that follow.

Fruit	Day 1	Day 2	Total
Apple	30	20	50
Banana	25	35	60
Mango	40	30	70
Orange	20	20	40

Q5. What is the total quantity of fruit (in kg) sold over the two days taken together?

(A) 210

(B) 220

(C) 230

(D) 200

Q6. Which kind of fruit was sold in the largest quantity over the two days?

(A) Apple

(B) Orange

(C) Banana

(D) Mango

Q7. What is the ratio of the total quantity of mango sold to the total quantity of orange sold?

(A) 4 : 7

(B) 6 : 5

(C) 7 : 4

(D) 2 : 1

Q8. What is the average quantity (in kg) sold per kind of fruit over the two days?

(A) 50

(B) 55

(C) 60

(D) 45

Data Set III

Directions (Q9–Q12): Read the following information carefully and answer the questions that follow.

A baker named Meera runs a small bakery. She deposited **Rs 6000** in a bank that pays **simple interest at 5% per annum** and left it there for **2 years**. Over four days last week she baked **40, 55, 60 and 45** cakes. Out of a batch of **250 loaves**, **50** were whole-wheat loaves. To prepare one large order she used **8 kg of flour** and **2 kg of sugar**.

Q9. How much simple interest will she earn on her deposit at the end of two years?

(A) Rs 600

(B) Rs 500

(C) Rs 700

(D) Rs 300

Q10. What is the average number of cakes she baked per day over the four days?

(A) 45

(B) 55

(C) 50

(D) 60

Q11. What percent of the batch of loaves was whole-wheat?

(A) 25%

(B) 15%

(C) 10%

(D) 20%

Q12. What is the ratio of the flour used to the sugar used for the large order?

(A) 3 : 1

(B) 4 : 1

(C) 2 : 1

(D) 5 : 2

Detailed Solutions

Q1.

Solution

Concept – reading a bar chart and adding values: Read the height of each bar and add them.

Step 1 – list the daily ticket sales: Mon $= 90$, Tue $= 120$, Wed $= 150$, Thu $= 60$, Fri $= 180$.

Step 2 – add them: $90 + 120 = 210$. $210 + 150 = 360$. $360 + 60 = 420$. $420 + 180 = 600$.

Why the other options are wrong:

- Options A, B, C: 560, 640 and 580 each drop or mis-add one bar; the correct sum is 600.

Final Answer: Total $= 600$ tickets $\Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q1

Q2.

Solution

Concept – average: Average $= \dfrac{\text{total}}{\text{number of items}}$.

Step 1 – total sales: From Q1, the total over the five days $= 600$ tickets.

Step 2 – divide by the number of days: Average $= \dfrac{600}{5} = 120$ tickets.

Why the other options are wrong:

- Options B, C, D: 110, 130 and 125 do not equal $600 \div 5$; only 120 does.

Final Answer: Average $= 120$ tickets per day $\Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q2

Q3.

Solution

Concept – percentage increase: Percent increase $= \dfrac{\text{increase}}{\text{original}} \times 100$, with Wednesday as the original.

Step 1 – find the increase: Fri $= 180$, Wed $= 150$, so the increase $= 180 - 150 = 30$.

Step 2 – divide by the Wednesday value and convert to percent: $\dfrac{30}{150} \times 100 = 20\%$.

Why the other options are wrong:

- Option A (30%): that is the raw increase in tickets, not a percentage.
- Option B (25%): uses a wrong base.
- Option D (15%): divides by the wrong value; dividing by Wednesday (150) gives 20%.

Final Answer: Increase $= 20\% \Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q3

Q4.

Solution

Concept – ratio: Write the two quantities and reduce to lowest terms.

Step 1 – write the ratio: Tue $= 120$, Fri $= 180$, so the ratio is $120 : 180$.

Step 2 – reduce: Divide both by 60: $120 : 180 = 2 : 3$.

Why the other options are wrong:

- Option B (3:2): reverses the order.
- Options C, D: 1:2 and 4:5 do not match $120 : 180$.

Final Answer: Ratio $= 2 : 3 \Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q4

Q5.

Solution

Concept – reading a table total: Add the "Total" column, or add all Day 1 and all Day 2 values.

Step 1 – add the fruit totals: $50 + 60 + 70 + 40$.

Step 2 – compute: $50 + 60 = 110$; $110 + 70 = 180$; $180 + 40 = 220$.

Why the other options are wrong:

- Options A, C, D: 210, 230 and 200 each miss part of a row; the four totals sum to 220.

Final Answer: Total $= 220$ kg $\Rightarrow$ B

Answer: (B) Go Back to Q5

Q6.

Solution

Concept – comparing a column: Compare the "Total" entries and pick the largest.

Step 1 – list the totals: Apple $= 50$, Banana $= 60$, Mango $= 70$, Orange $= 40$.

Step 2 – pick the highest: The largest is 70, which is Mango.

Why the other options are wrong:

- Option A (Apple $= 50$), Option B (Orange $= 40$), Option C (Banana $= 60$): all are less than 70.

Final Answer: Mango was sold in the largest quantity $\Rightarrow$ D

Answer: (D) Go Back to Q6

Q7.

Solution

Concept – ratio of two totals: Take the mango and orange totals and reduce.

Step 1 – read the totals: Mango $= 70$, Orange $= 40$.

Step 2 – form and reduce the ratio: $70 : 40$; divide both by 10 to get $7 : 4$.

Why the other options are wrong:

- Option A (4:7): reverses the order.
- Options B, D: 6:5 and 2:1 do not match $70 : 40$.

Final Answer: Mango : Orange $= 7 : 4 \Rightarrow$ C

Answer: (C) Go Back to Q7

Q8.

Solution

Concept – average: Average per fruit $= \dfrac{\text{total quantity}}{\text{number of fruits}}$.

Step 1 – use the total: Total $= 220$ kg (from Q5) across 4 kinds of fruit.

Step 2 – divide: $\dfrac{220}{4} = 55$.

Why the other options are wrong:

- Options A, C, D: 50, 60 and 45 do not equal $220 \div 4$; only 55 does.

Final Answer: Average $= 55$ kg per kind of fruit $\Rightarrow$ B

Answer: (B) Go Back to Q8

Q9.

Solution

Concept – simple interest: SI $= \dfrac{P \times R \times T}{100}$.

Step 1 – put in the values: $P = 6000$, $R = 5$, $T = 2$.

Step 2 – compute: $\dfrac{6000 \times 5 \times 2}{100} = \dfrac{60000}{100} = 600$.

Why the other options are wrong:

- Option D (Rs 300): that is the interest for one year, not two.
- Options B, C: Rs 500 and Rs 700 do not match the formula.

Final Answer: Interest $=$ Rs 600 $\Rightarrow$ A

Answer: (A) Go Back to Q9

Q10.

Solution

Concept – average: Average $= \dfrac{\text{total}}{\text{number of days}}$.

Step 1 – add the daily counts: $40 + 55 = 95$; $95 + 60 = 155$; $155 + 45 = 200$.

Step 2 – divide by the number of days: $\dfrac{200}{4} = 50$.

Why the other options are wrong:

- Options A, B, D: 45, 55 and 60 do not equal $200 \div 4$; only 50 does.

Final Answer: Average $= 50$ cakes per day $\Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q10

Q11.

Solution

Concept – percentage of a total: Percent $= \dfrac{\text{part}}{\text{whole}} \times 100$.

Step 1 – identify part and whole: Whole-wheat $= 50$, batch $= 250$.

Step 2 – compute: $\dfrac{50}{250} \times 100 = 20\%$.

Why the other options are wrong:

- Options A, B, C: 25%, 15% and 10% do not equal $50/250 \times 100$; the whole-wheat share is 20%.

Final Answer: Whole-wheat $= 20\% \Rightarrow \boxed{\text{D}}$

Answer: (D) Go Back to Q11

Q12.

Solution

Concept – ratio: Write the two quantities and reduce to lowest terms.

Step 1 – write the ratio: Flour $= 8$ kg, sugar $= 2$ kg, so the ratio is $8 : 2$.

Step 2 – reduce: Divide both by 2: $8 : 2 = 4 : 1$.

Why the other options are wrong:

- Options A, C, D: 3:1, 2:1 and 5:2 do not match $8 : 2$; the reduced ratio is 4:1.

Final Answer: Flour : Sugar $= 4 : 1 \Rightarrow$ B

Answer: (B) Go Back to Q12

Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	D	2	A	3	C	4	A	5	B
6	D	7	C	8	B	9	A	10	C
11	D	12	B						