

CLAT Quantitative Techniques

Sample Paper – 3

Duration: 12 Minutes

Maximum Marks: 12

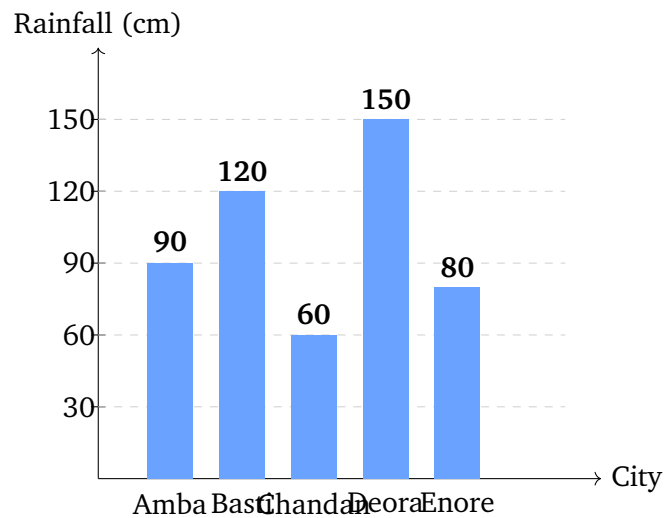
Instructions

- 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 annual rainfall (in cm) recorded in five different cities in a year. Study it and answer the questions that follow.





- Q1.** What is the total rainfall (in cm) recorded across the five cities?
- (A) 480
(B) 520
(C) 460
(D) 500
- Q2.** What is the average rainfall (in cm) per city over the five cities?
- (A) 90
(B) 110
(C) 100
(D) 120
- Q3.** The rainfall in Basti is what percent more than the rainfall in Enore?
- (A) 40%
(B) 50%
(C) 60%
(D) $33\frac{1}{3}\%$
- Q4.** What is the ratio of the rainfall in Chandan to the rainfall in Basti?
- (A) 1 : 2



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

Data Set II

Directions (Q5–Q8): The table below shows the marks obtained by four students in three subjects. Study it and answer the questions that follow.

Student	Maths	Science	English	Total
Ravi	80	70	60	210
Sita	60	80	40	180
Tarun	90	60	90	240
Uma	70	50	60	180

Q5. What is Ravi's average marks across the three subjects?

- (A) 60
- (B) 65
- (C) 70
- (D) 75

Q6. Which student obtained the highest total marks?

- (A) Ravi
- (B) Sita
- (C) Uma
- (D) Tarun

Q7. What is the ratio of Sita's total marks to Tarun's total marks?

- (A) 3 : 4
- (B) 4 : 3
- (C) 2 : 3
- (D) 3 : 5



Q8. Tarun's Science marks are what percent of his total marks?

- (A) 20%
- (B) 25%
- (C) 30%
- (D) 37.5%

Data Set III

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

A farmer named Gopal manages a small farm. He borrowed **Rs 6000** from a bank that charges **simple interest at 10% per annum**, and kept the loan for **2 years**. To sell his produce, he drove to a market **90 km** away, covering the distance in **2 hours**. During the season he harvested **400 kg** of wheat, of which he sold **300 kg**. On his farm he keeps **40 goats** and **24 cows**.

Q9. How much simple interest will Gopal pay on his loan over the two years?

- (A) Rs 600
- (B) Rs 1000
- (C) Rs 1200
- (D) Rs 1500

Q10. What was his average speed on the trip to the market?

- (A) 45 km/h
- (B) 40 km/h
- (C) 30 km/h
- (D) 60 km/h

Q11. What percent of the harvested wheat did he sell?

- (A) 60%
- (B) 70%
- (C) 80%



(D) 75%

Q12. What is the ratio of the number of goats to the number of cows on his farm?

(A) 3 : 5

(B) 5 : 3

(C) 8 : 5

(D) 5 : 8



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 rainfall of each city: Amba = 90, Basti = 120, Chandan = 60, Deora = 150, Enore = 80.

Step 2 – add them: $90+120 = 210$. $210+60 = 270$. $270+150 = 420$. $420+80 = 500$.

Why the other options are wrong:

- Options A, B, C: 480, 520 and 460 each drop or mis-add one bar; the correct sum is 500.

Final Answer: Total = 500 cm \Rightarrow

Answer: (D) [Go Back to Q1](#)

Q2.

Solution

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

Step 1 – total rainfall: From Q1, the total over the five cities = 500 cm.

Step 2 – divide by the number of cities: $\text{Average} = \frac{500}{5} = 100$ cm.

Why the other options are wrong:

- Options A, B, D: 90, 110 and 120 do not equal $500 \div 5$; only 100 does.

Final Answer: Average = 100 cm per city \Rightarrow

Answer: (C) [Go Back to Q2](#)



Q3.

Solution

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

Step 1 – find the increase: Basti = 120, Enore = 80, so the increase = $120 - 80 = 40$.

Step 2 – divide by the Enore value and convert to percent: $\frac{40}{80} \times 100 = 50\%$.

Why the other options are wrong:

- Option A (40%): that is the raw increase in cm, not a percentage.
- Option C (60%): uses a wrong base.
- Option D ($33\frac{1}{3}\%$): divides by Basti (120) instead of the original Enore (80).

Final Answer: Increase = 50% \Rightarrow **B**

Answer: (B) [Go Back to Q3](#)

Q4.

Solution

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

Step 1 – write the ratio: Chandan = 60, Basti = 120, so the ratio is 60 : 120.

Step 2 – reduce: Divide both by 60: 60 : 120 = 1 : 2.

Why the other options are wrong:

- Option B (2:1): reverses the order.
- Options C, D: 1:3 and 3:4 do not match 60 : 120.

Final Answer: Ratio = 1 : 2 \Rightarrow **A**

Answer: (A) [Go Back to Q4](#)



Q5.

Solution

Concept – average: $\text{Average} = \frac{\text{total marks}}{\text{number of subjects}}$

Step 1 – total Ravi’s marks: $80 + 70 + 60 = 210$.

Step 2 – divide by the number of subjects: $\frac{210}{3} = 70$.

Why the other options are wrong:

- Options A, B, D: 60, 65 and 75 do not equal $210 \div 3$; only 70 does.

Final Answer: Average = 70 marks \Rightarrow

Answer: (C) [Go Back to Q5](#)

Q6.

Solution

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

Step 1 – list the totals: Ravi = 210, Sita = 180, Tarun = 240, Uma = 180.

Step 2 – pick the highest: The largest is 240, which belongs to Tarun.

Why the other options are wrong:

- Option A (Ravi = 210), Option B (Sita = 180), Option C (Uma = 180): all are less than Tarun’s 240.

Final Answer: Tarun has the highest total \Rightarrow

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

Q7.

Solution

Concept – ratio of two totals: Write the two totals and reduce.

Step 1 – read the totals: Sita = 180, Tarun = 240, so the ratio is 180 : 240.

Step 2 – reduce: Divide both by 60: 180 : 240 = 3 : 4.

Why the other options are wrong:

- Option B (4:3): reverses the order.



- Options C, D: 2:3 and 3:5 do not match 180 : 240.

Final Answer: Sita : Tarun = 3 : 4 \Rightarrow

Answer: (A) [Go Back to Q7](#)

Q8.

Solution

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

Step 1 – identify part and whole: Tarun's Science marks = 60, his total = 240.

Step 2 – compute: $\frac{60}{240} \times 100 = 25\%$.

Why the other options are wrong:

- Options A, C, D: 20%, 30% and 37.5% do not equal $60/240 \times 100$; the share is exactly 25%.

Final Answer: Science share = 25% \Rightarrow

Answer: (B) [Go Back to Q8](#)

Q9.

Solution

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

Step 1 – put in the values: $P = 6000, R = 10, T = 2$.

Step 2 – compute: $\frac{6000 \times 10 \times 2}{100} = \frac{120000}{100} = 1200$.

Why the other options are wrong:

- Option A (Rs 600): that is the interest for one year, not two.
- Options B, D: Rs 1000 and Rs 1500 do not match the formula.

Final Answer: Interest = Rs 1200 \Rightarrow

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



Q10.

Solution

Concept – average speed: $\text{Speed} = \frac{\text{distance}}{\text{time}}$.

Step 1 – put in the values: Distance = 90 km, time = 2 hours.

Step 2 – divide: $\frac{90}{2} = 45$ km/h.

Why the other options are wrong:

- Options B, C, D: 40, 30 and 60 km/h do not equal $90 \div 2$; the speed is 45 km/h.

Final Answer: Speed = 45 km/h \Rightarrow

Answer: (A) [Go Back to Q10](#)

Q11.

Solution

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

Step 1 – identify part and whole: Wheat sold = 300 kg, wheat harvested = 400 kg.

Step 2 – compute: $\frac{300}{400} \times 100 = 75\%$.

Why the other options are wrong:

- Options A, B, C: 60%, 70% and 80% do not equal $300/400 \times 100$; the sold share is 75%.

Final Answer: Sold = 75% \Rightarrow

Answer: (D) [Go Back to Q11](#)

Q12.

Solution

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

Step 1 – write the ratio: Goats = 40, cows = 24, so the ratio is 40 : 24.

Step 2 – reduce: Divide both by 8: 40 : 24 = 5 : 3.

Why the other options are wrong:



- Option A (3:5) and Option D (5:8): mis-reduce or reverse the terms.
- Option C (8:5): comes from dividing by 5 instead of the correct common factor 8.

Final Answer: Goats : Cows = 5 : 3 \Rightarrow **B**

Answer: (B) [Go Back to Q12](#)



Answer Key

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

