TANCET Data Analysis & Sufficiency

Sample Paper – 4

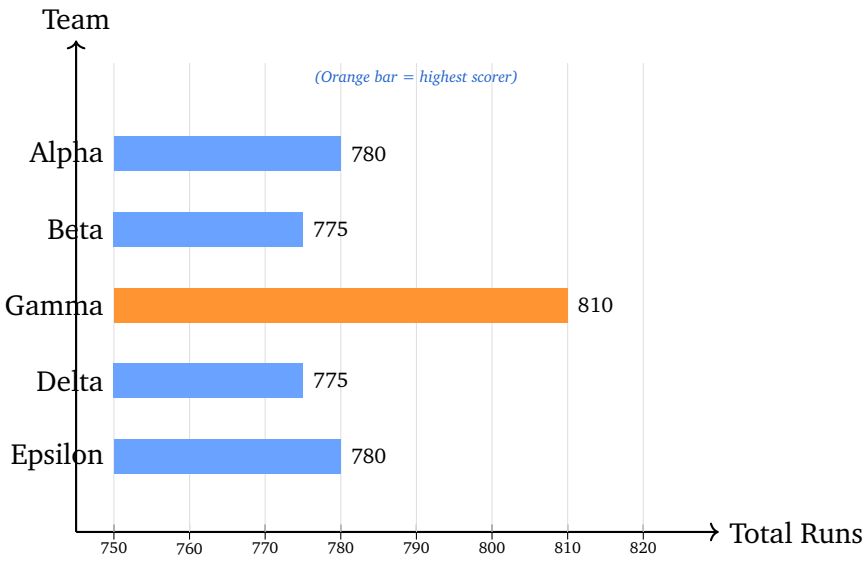
Duration: 24 Minutes **Maximum Marks: 20**

Instructions

1. This paper contains **20 questions** modelled on the **Data Analysis & Sufficiency** section of **TANCET MBA**.
2. **Questions 1–10** are Data Interpretation questions with **4 options (A–D)**.
3. **Questions 11–20** are Data Sufficiency questions with **5 options (A–E)**.
4. For Data Sufficiency questions, the options are:
   (A) Statement I alone is sufficient but Statement II alone is not sufficient.
   (B) Statement II alone is sufficient but Statement I alone is not sufficient.
   (C) Each statement alone is sufficient.
   (D) Both statements together are not sufficient to answer the question.
   (E) Both statements together are sufficient, but neither statement alone is sufficient.
5. Each correct answer carries **+1 mark**. Each wrong answer carries a penalty of $-\frac{1}{3}$ **mark**.
6. Use of mobile phones, calculators, or electronic gadgets is strictly prohibited.

Part A: Data Interpretation

The bar chart below shows total runs scored by five cricket teams across 4 matches in a tournament. Answer questions 1–5.



Note: The detailed match-wise scores are given below for reference.

Team	Match 1	Match 2	Match 3	Match 4	Total
Alpha	185	210	165	220	780
Beta	200	175	195	205	775
Gamma	165	220	240	185	810
Delta	190	195	180	210	775
Epsilon	175	190	200	215	780

Q1. Which team scored the highest total runs across all four matches?

(A) Alpha

(B) Beta

(C) Gamma

(D) Delta

Q2. What is the average total runs scored per team across all five teams?

(A) 784

(B) 790

(C) 786

(D) 780

Q3. By how many runs did Gamma outscore Beta in total over the four matches?

(A) 25

(B) 30

(C) 40

(D) 35

Q4. In Match 2, which team scored the highest runs?

(A) Alpha

(B) Gamma

(C) Epsilon

(D) Delta

Q5. The ratio of Alpha's total runs to Epsilon's total runs is:

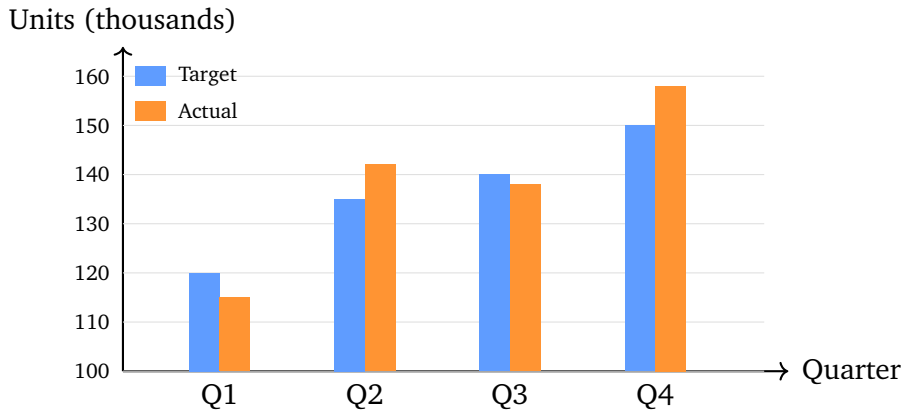
(A) 13 : 12

(B) 39 : 37

(C) 1 : 1

(D) 26 : 25

The bar chart shows quarterly production target versus actual production (in thousand units) for a manufacturing company. Answer questions 6–10.



Quarter	Target (000 units)	Actual (000 units)
Q1 (Jan–Mar)	120	115
Q2 (Apr–Jun)	135	142
Q3 (Jul–Sep)	140	138
Q4 (Oct–Dec)	150	158
Annual	**545**	**553**

Q6. In which quarter(s) did actual production fall **short of** the target?

(A) Q2 only

(B) Q4 only

(C) Q2 and Q4

(D) Q1 and Q3

Q7. What is the total actual production for the year (in thousand units)?

(A) 553

(B) 545

(C) 563

(D) 535

Q8. By approximately what percentage did Q4 actual production exceed Q4 target?

(A) 5.0%

(B) 5.3%

(C) 6.0%

(D) 4.8%

Q9. The quarter with the highest actual production was:

(A) Q2

(B) Q3

(C) Q4

(D) Q1

Q10. The ratio of total target to total actual production for the year is:

(A) 545 : 553

(B) 109 : 111

(C) 5 : 6

(D) 109 : 110

Part B: Data Sufficiency

Directions (Q11–Q20): Each question is followed by two statements, labelled **Statement I** and **Statement II**. Decide whether the data given in the statements is sufficient to answer the question. Select from the options below:

(A) Statement I alone is sufficient but Statement II alone is not sufficient.
(B) Statement II alone is sufficient but Statement I alone is not sufficient.
(C) Each statement alone is sufficient.
(D) Both statements together are not sufficient to answer the question.
(E) Both statements together are sufficient, but neither statement alone is sufficient.

Q11. What is the **exact** number of students in a class?

Statement I: If 10 more students join, the class will have at least 45 students.

Statement II: If 5 students leave, the class will have fewer than 35 students.

(A) Statement I alone is sufficient but Statement II alone is not sufficient.
(B) Statement II alone is sufficient but Statement I alone is not sufficient.
(C) Each statement alone is sufficient.
(D) Both statements together are not sufficient to answer the question.
(E) Both statements together are sufficient, but neither statement alone is sufficient.

Q12. What is the simple interest earned in 4 years?

Statement I: The principal is ₹8,000 and the rate is 6% per annum.

Statement II: The total amount after 4 years is ₹9,920.

(A) Statement I alone is sufficient but Statement II alone is not sufficient.
(B) Statement II alone is sufficient but Statement I alone is not sufficient.
(C) Each statement alone is sufficient.
(D) Both statements together are not sufficient to answer the question.

(E) Both statements together are sufficient, but neither statement alone is sufficient.

Q13. What is the area of a circle?

Statement I: The diameter is twice the radius of the circle.

Statement II: The radius of the circle is 14 cm.

(A) Statement I alone is sufficient but Statement II alone is not sufficient.

(B) Statement II alone is sufficient but Statement I alone is not sufficient.

(C) Each statement alone is sufficient.

(D) Both statements together are not sufficient to answer the question.

(E) Both statements together are sufficient, but neither statement alone is sufficient.

Q14. What is the amount after 3 years at compound interest?

Statement I: The rate of interest is 10% per annum compounded annually.

Statement II: The principal invested is ₹12,000.

(A) Statement I alone is sufficient but Statement II alone is not sufficient.

(B) Statement II alone is sufficient but Statement I alone is not sufficient.

(C) Each statement alone is sufficient.

(D) Both statements together are not sufficient to answer the question.

(E) Both statements together are sufficient, but neither statement alone is sufficient.

Q15. Is $x^2 > y^2$?

Statement I: $x > y > 0$.

Statement II: $x > 0$, $y > 0$, and $x - y > 0$.

(A) Statement I alone is sufficient but Statement II alone is not sufficient.

(B) Statement II alone is sufficient but Statement I alone is not sufficient.

(C) Each statement alone is sufficient.

(D) Both statements together are not sufficient to answer the question.

(E) Both statements together are sufficient, but neither statement alone is sufficient.

Q16. What is the compound interest on a principal P for 2 years at $r\%$ compounded annually?

Statement I: $P = 5{,}000$ and $r = 10$.

Statement II: The simple interest for 2 years on the same principal and rate is ₹1,000.

(A) Statement I alone is sufficient but Statement II alone is not sufficient.

(B) Statement II alone is sufficient but Statement I alone is not sufficient.

(C) Each statement alone is sufficient.

(D) Both statements together are not sufficient to answer the question.

(E) Both statements together are sufficient, but neither statement alone is sufficient.

Q17. What is Meera's current age?

Statement I: Meera is 5 years older than her brother.

Statement II: Meera's brother is twice as old as their cousin.

(A) Statement I alone is sufficient but Statement II alone is not sufficient.

(B) Statement II alone is sufficient but Statement I alone is not sufficient.

(C) Each statement alone is sufficient.

(D) Both statements together are not sufficient to answer the question.

(E) Both statements together are sufficient, but neither statement alone is sufficient.

Q18. What is the HCF (Highest Common Factor) of two numbers p and q?

Statement I: $p + q = 77$.

Statement II: $p = 21$ and $q = 56$.

(A) Statement I alone is sufficient but Statement II alone is not sufficient.

(B) Statement II alone is sufficient but Statement I alone is not sufficient.

(C) Each statement alone is sufficient.

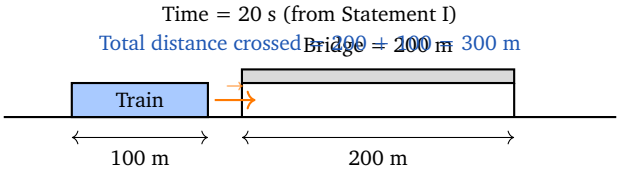
(D) Both statements together are not sufficient to answer the question.

(E) Both statements together are sufficient, but neither statement alone is sufficient.

Q19. What is the speed of a train (in m/s)?

Statement I: The train crosses a 200 m long bridge in 20 seconds.

Statement II: The length of the train is 100 m.



(A) Statement I alone is sufficient but Statement II alone is not sufficient.

(B) Statement II alone is sufficient but Statement I alone is not sufficient.

(C) Each statement alone is sufficient.

(D) Both statements together are not sufficient to answer the question.

(E) Both statements together are sufficient, but neither statement alone is sufficient.

Q20. How much will ₹8,000 amount to in 2 years at 5% simple interest per annum?

Statement I: The principal is ₹8,000 and the rate is 5% per annum simple interest.

Statement II: The amount after 1 year at the given rate on ₹8,000 is ₹8,400.

(A) Statement I alone is sufficient but Statement II alone is not sufficient.

(B) Statement II alone is sufficient but Statement I alone is not sufficient.

(C) Each statement alone is sufficient.

(D) Both statements together are not sufficient to answer the question.

(E) Both statements together are sufficient, but neither statement alone is sufficient.

Answer Key

Part A – Data Interpretation (Q1–Q10):

Part A: Data Interpretation									
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
C	A	D	B	C	D	A	B	C	A

Part B – Data Sufficiency (Q11–Q20):

Part B: Data Sufficiency									
Q11	Q12	Q13	Q14	Q15	Q16	Q17	Q18	Q19	Q20
D	A	B	E	C	A	D	B	E	C

Detailed Solutions

TANCET Data Analysis & Sufficiency — Sample Paper 4

Sol 1.

Solution

Concept — Reading a Bar Chart (Highest Value): To identify the team with the highest total, read the longest bar from the horizontal bar chart or compare totals directly from the table.

Step 1 — List Total Runs: Alpha = 780, Beta = 775, Gamma = 810, Delta = 775, Epsilon = 780.

Step 2 — Identify Maximum: Gamma scored 810 runs, which is higher than all other teams.

Why other options are wrong:

- Option A (Alpha): 780 runs — less than Gamma's 810.
- Option B (Beta): 775 runs — second lowest total.
- Option D (Delta): 775 runs — tied second lowest with Beta.

Final Answer: Gamma scored the highest total (810 runs) $\Rightarrow \boxed{\text{C}}$

Answer: (C) Go Back to Q 1

Sol 2.

Solution

Concept — Arithmetic Mean (Average): Average $= \dfrac{\text{Sum of all values}}{\text{Number of values}}$.

Step 1 — Compute Total Runs: $780 + 775 + 810 + 775 + 780 = 3920$ runs.

Step 2 — Divide by 5: Average $= \dfrac{3920}{5} = 784$ runs per team.

Why other options are wrong:

- Option B (790): Overestimates; sum would need to be 3950.
- Option C (786): Incorrect; $786 \times 5 = 3930 \neq 3920$.
- Option D (780): Only equals the total of Alpha and Epsilon, not the average.

Final Answer: Average total runs $= 784 \Rightarrow \boxed{\text{A}}$

Answer: (A) Go Back to Q 2

Sol 3.

Solution

Concept — Difference Between Two Values: To find by how many runs Gamma outscored Beta, compute Gamma Total − Beta Total.

Step 1 — Identify Totals: Gamma = 810, Beta = 775.

Step 2 — Compute Difference: $810 - 775 = 35$ runs.

Why other options are wrong:

- Option A (25): Would mean Beta = 785, which is incorrect.
- Option B (30): Would mean Beta = 780, which is Alpha's/Epsilon's score, not Beta's.
- Option C (40): Would mean Beta = 770, which is not the correct total.

Final Answer: Gamma outscored Beta by 35 runs $\Rightarrow$ D

Answer: (D) Go Back to Q 3

Sol 4.

Solution

Concept — Identifying Maximum in a Column: Compare Match 2 scores across all five teams.

Step 1 — Match 2 Scores: Alpha = 210, Beta = 175, Gamma = 220, Delta = 195, Epsilon = 190.

Step 2 — Find Maximum: Gamma scored 220 in Match 2, which is the highest.

Why other options are wrong:

- Option A (Alpha): Alpha scored 210 in Match 2 — less than Gamma's 220.
- Option C (Epsilon): Epsilon scored 190 — not the highest.
- Option D (Delta): Delta scored 195 — not the highest.

Final Answer: Gamma scored the highest (220) in Match 2 $\Rightarrow$ B

Answer: (B) Go Back to Q 4

Sol 5.

Solution

Concept — Ratio of Two Quantities: Simplify the ratio of Alpha's total to Epsilon's total.

Step 1 — Identify Totals: Alpha = 780 runs, Epsilon = 780 runs.

Step 2 — Compute Ratio: Alpha : Epsilon $= 780 : 780 = 1 : 1$.

Why other options are wrong:

- Option A (13:12): Incorrect simplification; would imply different totals.
- Option B (39:37): Incorrect; would imply totals like 780:760.
- Option D (26:25): Incorrect; the totals are identical.

Final Answer: Alpha and Epsilon both scored 780, ratio $= 1 : 1 \Rightarrow$ C

Answer: (C) Go Back to Q 5

Sol 6.

Solution

Concept — Comparing Target vs. Actual Values: A shortfall occurs when Actual $<$ Target.

Step 1 — Compare Each Quarter:

- Q1: Target = 120, Actual = 115. Actual $<$ Target $\Rightarrow$ **Shortfall**.
- Q2: Target = 135, Actual = 142. Actual $>$ Target $\Rightarrow$ Surplus.
- Q3: Target = 140, Actual = 138. Actual $<$ Target $\Rightarrow$ **Shortfall**.
- Q4: Target = 150, Actual = 158. Actual $>$ Target $\Rightarrow$ Surplus.

Step 2 — Conclusion: Shortfalls occurred in Q1 and Q3.

Why other options are wrong:

- Option A (Q2 only): Q2 had a surplus of 7 thousand units.
- Option B (Q4 only): Q4 had a surplus of 8 thousand units.

- Option C (Q2 and Q4): Both Q2 and Q4 exceeded their targets.

Final Answer: Q1 and Q3 had production shortfalls $\Rightarrow$ $\boxed{\text{D}}$

Answer: (D) Go Back to Q 6

Sol 7.

Solution

Concept — Summation: Total actual production = sum of actual values across all quarters.

Step 1 — Add Actual Values: $115 + 142 + 138 + 158 = 553$ thousand units.

Step 2 — Verify: $115+142 = 257$; $138+158 = 296$; $257+296 = 553$. Confirmed.

Why other options are wrong:

- Option B (545): This is the total *target*, not actual production.
- Option C (563): Overestimates actual production.
- Option D (535): Underestimates; no arithmetic path leads here.

Final Answer: Total actual production $= 553$ thousand units $\Rightarrow$ $\boxed{\text{A}}$

Answer: (A) Go Back to Q 7

Sol 8.

Solution

Concept — Percentage Excess: $\%$ excess $= \dfrac{\text{Actual} - \text{Target}}{\text{Target}} \times 100$.

Step 1 — Q4 Values: Target = 150, Actual = 158. Excess $= 158 - 150 = 8$ units.

Step 2 — Compute Percentage: $\%$ excess $= \dfrac{8}{150} \times 100 = \dfrac{800}{150} = 5.33\%$.

Why other options are wrong:

- Option A (5.0%): $5\% \times 150 = 7.5$, not 8.
- Option C (6.0%): $6\% \times 150 = 9$, not 8.
- Option D (4.8%): $4.8\% \times 150 = 7.2$, not 8.

Final Answer: Q4 actual exceeded target by $\approx 5.3\% \Rightarrow$ B

Answer: (B) Go Back to Q 8

Sol 9.

Solution

Concept — Identifying Maximum in Actual Production: Compare all four actual production figures.

Step 1 — Actual Values: Q1 = 115, Q2 = 142, Q3 = 138, Q4 = 158.

Step 2 — Find Maximum: Q4 actual = 158 thousand units is the highest.

Why other options are wrong:

- Option A (Q2): Q2 actual = 142 — less than Q4.
- Option B (Q3): Q3 actual = 138 — less than Q4.
- Option D (Q1): Q1 actual = 115 — lowest actual of the year.

Final Answer: Q4 has the highest actual production (158) $\Rightarrow$ C

Answer: (C) Go Back to Q 9

Sol 10.

Solution

Concept — Simplifying Ratios: Find GCD of 545 and 553 to simplify.

Step 1 — Prime Factorisation: $545 = 5 \times 109$. $553 = 7 \times 79$. GCD(545, 553) = 1 (no common factors).

Step 2 — Ratio: Target : Actual $= 545 : 553$ (already in lowest terms).

Why other options are wrong:

- Option B (109:111): $109 \times 5 = 545$ but $111 \times 5 = 555 \neq 553$.
- Option C (5:6): $5 : 6$ implies $5k$ and $6k$ for same k; $545/5 = 109 \neq 553/6$.
- Option D (109:110): $109 \times 5 = 545$ but $110 \times 5 = 550 \neq 553$.

Final Answer: Ratio of target to actual $= 545 : 553 \Rightarrow$ A

Answer: (A) Go Back to Q 10

Sol 11.

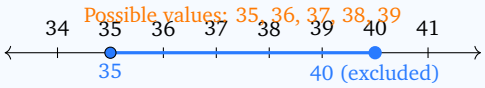
Solution

Concept — Data Sufficiency with Inequalities: A unique value cannot be determined from a range.

Step 1 — Analyse Statement I: Let n = number of students. $n + 10 \geq 45 \Rightarrow n \geq 35$. This gives infinitely many values; not sufficient alone.

Step 2 — Analyse Statement II: $n - 5 < 35 \Rightarrow n < 40$. Again infinitely many values; not sufficient alone.

Step 3 — Combine Both: $35 \leq n < 40$, so $n \in \{35, 36, 37, 38, 39\}$.



Step 4 — Conclusion: Even with both statements, n has 5 possible values — cannot determine exact count.

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

Answer: (D) Go Back to Q 11

Sol 12.

Solution

Concept — Simple Interest Formula: $\text{SI} = \dfrac{P \times R \times T}{100}$.

Step 1 — Analyse Statement I: $P = 8000$, $R = 6\%$, $T = 4$ years. $\text{SI} = \dfrac{8000 \times 6 \times 4}{100} = \dfrac{192000}{100} = 1920$. **Statement I alone is sufficient.**

Step 2 — Analyse Statement II: Amount after 4 years $= 9920$. $\text{SI} = 9920 - P$. Without knowing P, SI cannot be determined. **Statement II alone is not sufficient.**

Why other options are wrong:

- Option B: Statement II alone cannot give SI without the principal.
- Option C: Statement II alone fails; so C is incorrect.
- Option E: Statement I alone is sufficient, so E is too weak.

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

Answer: (A) Go Back to Q 12

Sol 13.

Solution

Concept — Area of Circle: $A = \pi r^2$. To compute A, the radius r must be known.

Step 1 — Analyse Statement I: "The diameter is twice the radius" is always true by definition ($d = 2r$). No numerical value is given. Not sufficient.

Step 2 — Analyse Statement II: $r = 14$ cm. Area $= \frac{22}{7} \times 14^2 = \frac{22}{7} \times 196 = 22 \times 28 = 616$ cm^2. **Statement II alone is sufficient.**

Why other options are wrong:

- Option A: Statement I is a tautology — gives no value; it is not sufficient.
- Option C: Statement I is definitively not sufficient.
- Option E: Statement II alone is already sufficient; both are not needed.

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

Answer: (B) Go Back to Q 13

Sol 14.

Solution

Concept — Compound Interest Formula: $A = P\left(1 + \frac{r}{100}\right)^n$. Both P and r are needed.

Step 1 — Analyse Statement I: Rate $r = 10\%$, $n = 3$ years. But P is unknown. Cannot find A. Not sufficient.

Step 2 — Analyse Statement II: $P = 12{,}000$. But r is unknown. Cannot find A. Not sufficient.

Step 3 — Combine Both: $A = 12000 \times (1.10)^3 = 12000 \times 1.331 = 15{,}972$. Both together $\Rightarrow$ sufficient.

Why other options are wrong:

- Option A or B: Each statement alone lacks one necessary variable.

- Option C: Neither statement alone is sufficient.
- Option D: Both together do give a unique answer.

Final Answer: Both statements together are sufficient $\Rightarrow$ $\boxed{\text{E}}$

Answer: (E) Go Back to Q 14

Sol 15.

Solution

Concept — Comparing Squares of Positives: For positive numbers, $x > y > 0 \Rightarrow x^2 > y^2$.

Step 1 — Analyse Statement I: $x > y > 0$. Since both are positive and $x > y$, squaring preserves the inequality: $x^2 > y^2$. **Sufficient.**

Step 2 — Analyse Statement II: $x > 0$, $y > 0$, $x - y > 0 \Rightarrow x > y > 0$. This is the same condition as Statement I in a different form. **Sufficient.**

Why other options are wrong:

- Option A: Both statements are sufficient; not just I.
- Option B: Both statements are sufficient; not just II.
- Option D: Both alone answer the question.
- Option E: Neither needs the other.

Final Answer: Each statement alone is sufficient $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q 15

Sol 16.

Solution

Concept — Compound Interest vs. Simple Interest: CI $= P\left[\left(1+\frac{r}{100}\right)^2 - 1\right]$. Both P and r must be known.

Step 1 — Analyse Statement I: $P = 5000$, $r = 10\%$. CI $= 5000\left[(1.10)^2 - 1\right] = 5000 \times 0.21 = 1050$. **Statement I alone is sufficient.**

Step 2 — Analyse Statement II: SI $= 1000$ for 2 years. SI $= \frac{P \times r \times 2}{100} = 1000 \Rightarrow Pr = 50{,}000$. Many combinations of P and r satisfy this (e.g.,

$P = 5000, r = 10$ or $P = 10000, r = 5$). Without unique values, CI cannot be determined. **Not sufficient.**

Why other options are wrong:

- Option B: Statement II has infinitely many (P, r) solutions.
- Option C: Statement II alone is not sufficient.
- Option E: Statement I alone is already sufficient.

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

Answer: (A) Go Back to Q 16

Sol 17.

Solution

Concept — Age Problems with Multiple Unknowns: With 3 unknowns and fewer than 3 independent equations, a unique solution is impossible.

Step 1 — Assign Variables: Let Meera's age $= M$, brother's age $= B$, cousin's age $= C$.

Step 2 — Analyse Statement I: $M = B + 5$. One equation, two unknowns. Not sufficient.

Step 3 — Analyse Statement II: $B = 2C$. One equation, two unknowns. Not sufficient.

Step 4 — Combine Both: $M = B + 5$ and $B = 2C$, so $M = 2C + 5$. Three unknowns (M, B, C), only 2 equations. Infinitely many solutions. E.g., if $C = 10$: $B = 20$, $M = 25$. If $C = 15$: $B = 30$, $M = 35$. Not sufficient.

Why other options are wrong:

- Option A, B, or C: Neither statement alone, nor together, gives a unique age.
- Option E: Even combined, the system is underdetermined.

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

Answer: (D) Go Back to Q 17

Sol 18.

Solution

Concept — HCF Requires Both Numbers to be Known: HCF can only be computed if both numbers are specified.

Step 1 — Analyse Statement I: $p + q = 77$. Many pairs sum to 77: $(21, 56)$, $(7, 70)$, $(11, 66)$, etc. Each pair may have a different HCF. Not sufficient.

Step 2 — Analyse Statement II: $p = 21$, $q = 56$. $21 = 3 \times 7$, $56 = 8 \times 7$. $\text{HCF}(21, 56) = 7$. **Statement II alone is sufficient.**

Why other options are wrong:

- Option A: Statement I gives a sum, not unique values; cannot determine HCF.
- Option C: Statement I is not sufficient.
- Option E: Statement II alone is already sufficient; both are not needed.

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

Answer: (B) Go Back to Q 18

Sol 19.

Solution

Concept — Train Crossing a Bridge: When a train crosses a bridge, total distance = length of train + length of bridge. Speed $= \dfrac{\text{Total Distance}}{\text{Time}}$.

Step 1 — Analyse Statement I: The train crosses a 200 m bridge in 20 s. Total distance $= 200 + L_{\text{train}}$. Without L_{train}, speed cannot be found. Not sufficient.

Step 2 — Analyse Statement II: Length of train $= 100$ m. Without bridge length or time, speed cannot be computed. Not sufficient.

Step 3 — Combine Both: Total distance $= 200 + 100 = 300$ m. Time $= 20$ s.

$$\text{Speed} = \frac{300}{20} = 15 \text{ m/s} = 54 \text{ km/h}$$

Both together $\Rightarrow$ sufficient.

Why other options are wrong:

- Option A or B: Each statement alone is missing one key dimension.

- Option C: Neither statement alone is sufficient.
- Option D: The combination does yield a unique answer.

Final Answer: Both statements together are sufficient $\Rightarrow$ $\boxed{\text{E}}$

Answer: (E) Go Back to Q 19

Sol 20.

Solution

Concept — Simple Interest Amount: $A = P + \text{SI} = P + \dfrac{P \times R \times T}{100}$.

Step 1 — Analyse Statement I: $P = 8000$, $R = 5\%$, $T = 2$ years. $\text{SI} = \dfrac{8000 \times 5 \times 2}{100} = 800$. $A = 8000 + 800 = 8800$. **Sufficient.**

Step 2 — Analyse Statement II: Amount after 1 year $= 8400$. So annual SI $= 8400 - 8000 = 400$. After 2 years: $\text{SI} = 2 \times 400 = 800$. Amount $= 8000 + 800 = 8800$. **Sufficient.**

Why other options are wrong:

- Option A: Statement II alone is also sufficient; not just I.
- Option B: Statement I alone is sufficient; not only II.
- Option D: Both statements individually suffice.
- Option E: Both alone are sufficient; E implies neither alone is sufficient, which is false.

Final Answer: Each statement alone is sufficient $\Rightarrow$ $\boxed{\text{C}}$

Answer: (C) Go Back to Q 20