MBA Fastrack 2025 (CAT + OMETs)

Data Interpretation & Logical Reasoning

DPP: 4

Games & Tournaments 2

Directions (1-5) Read the following passage and answer the given questions.

Fourteen teams competed in a cricket tournament held in three stages.

Stage 1:

- The teams were divided into two groups of seven each.
- Every team played one match against each team in its group.
- The top four teams from each group, based on the number of wins, advanced to Stage 2.

Stage 2:

- The four qualifying teams from each group faced every other team in their group again.
- The top two teams from each group, determined by wins, moved on to Stage 3 i.e. Semi-finals.

Stage 3:

- The two qualifying teams from each group faced every other in their group again.
- The winners of the semi-finals competed in the final to decide the tournament champion.

Additional Rules:

- Every match produced a result. In the event of a tie, a Super Over was used to determine the winner.
- If teams had an equal number of wins in Stage 1 or Stage 2, Net Run Rate (NRR) was used as the tiebreaker.
- **Q1** How many matches were played during the first stage of the tournament?
 - (A) 21
- (B) 35
- (C) 42
- (D) 28

- **Q2** How many matches were played during the second stage of the tournament?
 - (A) 6
- (B) 12
- (C) 16
- (D) 8
- Q3 What was the total number of matches played throughout the tournament?

 [Type 'O' if the value cannot be uniquely determined]
- Q4 If a team wins all its matches in Stage 1, what is the minimum number of wins required by another team from the same group in Stage 1 to guarantee its advancement to Stage 2?
 - (A) 2
- (B) 3
- (C) 4
- (D) None of these
- Q5 In Stage 1, if three teams of the same group lost only one match, what is the minimum number of wins required for a team in this group to advance to Stage 2?

Directions (6-10) Read the following passage and answer the given questions.

Sixteen teams are participating in a national-level hockey tournament, split into two groups - A and B, of eight teams each. In the group stage, every team plays one match against every other team in its respective group.

A win earns a team 2 points, while a loss results in 0 points. There are no ties or draws during the tournament.

At the end of the group stage, the top two teams from each group, determined by their points, will move on to the semi-finals. In the semi-finals, the first-place team from Group A will face the second-place team from Group B, and the first-

place team from Group B will play the secondplace team from Group A.

The winners of the semi-finals will advance to the final, where the tournament champion will be determined.

Additional Information:

No teams will have the same number of points at the end of the group stage. After the group stage, the tournament follows a knockout format.

- **Q6** How many matches are played during the group stage of the tournament?
 - (A) 28

(B) 64

(C) 56

(D) 59

- **Q7** If Team X wins all its matches in the group stage, how many points will it earn?
 - (A) 14
 - (B) 12
 - (C) 10
 - (D) Cannot be determined
- **Q8** What is the minimum number of points scored after which a team may reach the semi-finals?
- **Q9** What is the minimum number of matches a team must win to reach the final?
 - (A)7

(B) 8

(C) Either 7 or 8

- (D) None of these
- **Q10** What is the total number of matches played in the tournament, including the group stage, semi-finals, and final?
 - (A) 58

(B)56

(C) 57

(D) 59

Directions (11-15) Read the following passage and answer the given questions.

The Global Soccer Championship featured 40 teams divided into 8 groups, with each group consisting of 5 teams. During the group stage, every team played a single match against each of the other teams in its group. Teams earned points based on their performance: 2 points for a win, 1 point for a draw, and 0 points for a loss.

After the group stage, the top two teams from each group advanced to the Round of 16.
Rankings within the groups were determined by total points earned, with goal difference (GD) used as a tiebreaker in cases where teams had equal points.

From the Round of 16 onward, the tournament transitioned to a knockout format. The winners of each match advanced to the next stage, with the eight Round of 16 winners progressing to the Quarterfinals. The four Quarterfinal winners then moved on to the Semifinals. The winners of the Semifinals competed in the final match to determine the champion, while the losing Semi-Finalists played a separate match to decide the third-place winner.

The team that emerged victorious in the final match was crowned the Global Soccer Champion.

- Q11 How many matches are conducted during the group stage of the tournament?
 - (A) 72
 - (B) 75
 - (C) 80
 - (D) None of the above
- Q12 What is the minimum number of points after which a team can qualify for the Round of 16 after the group stage?
- Q13 What is the maximum number of matches a team could have won without reaching the final?

(A)7

(B) 6

(C) 5

- (D) None of these
- **Q14** What is the total number of matches played throughout the Championship?

(A) 95

(B) 80

(C)93

(D) None of these

Q15 What is the least number of wins after which a team can become the Champion?

Directions (16-20) Read the following passage and answer the given questions.

In the International Cricket Trophy, 16 teams participated and were divided into two pools, each consisting of eight teams. During the pool stage, every team played two matches against each of the other teams within its pool. The points system awarded 2 points for a win, 1 point for a draw, and 0 points for a loss.

Upon completion of the pool stage, the top three teams from each pool advanced to the Super Six stage. At this stage, all qualifying teams started with zero points. Each team from one pool played a single match against each of the three teams from the other pool, following the same points system as the pool stage.

After the Super Six stage, the four teams with the highest points moved on to the semifinals. The winners of the semifinal matches advanced to the final, where the champion of the tournament was determined.

If, at any stage prior to the semifinals, two or more teams had equal points, tie-breaking rules were applied to establish their rankings.

- Q16 How many matches does each team play during the pool stage?
 - (A) 7

(B) 12

(C) 14

- (D) None of these
- Q17 What is the maximum number of points a team can achieve yet fail to qualify for the Super Six stage?
- **Q18** How many matches are played in total during the tournament?
 - (A) 68

(B) 124

(C) 119

- (D) None of these
- Q19 What is the minimum number of points a team could earn in the Super Six stage and still qualify for the semifinals?
 - (A) 0

(B) 2

(C) 1

(D) None of these

Q20

What is the minimum number of wins a team could achieve and still reach the final?

Directions (21-25) Read the following passage and answer the given questions.

India, China, France, Nepal, Bhutan and Pakistan, take part in a Hockey tournament where each team plays exactly one match with the rest of the five teams. 2 points are awarded to the winning team, 1 point to each team if the match ends in a draw & no points to the team who loses the match. It is further known that teams Nepal and Bhutan have less than 5 points at the end of the tournament.

The table given below represents the final point table of all six teams at the end of the tournament. However, some of the values have been erased from the table. It is further known that France defeated China and China defeated Pakistan.

Teams	Matches	Matches	Total
leams	won	lost	Points
India		0	8
France		2	6
China		2	5
Pakistan	/ //	1	5
Nepal		1	
Bhutan			

Q21 During the tournament, Nepal was defeated by which team?

(A) Pakistan

(B) China

(C) India

- (D) France
- **Q22** Which team played the highest number of draws matches during the tournament?

(A) Bhutan

(B) Pakistan

(C) India

(D) Nepal

Q23 The total points scored by Bhutan at the end of the tournament are

(A) 2

(B) 1

- (C)4
- (D) 3
- Q24 The total number of matches that ended in a draw during the tournament is:
 - (A)6
- (B) 7
- (C) 0
- (D) 12
- **Q25** Which team was not defeated by India?
 - (A) China, Pakistan
 - (B) France, China
 - (C) Pakistan, Nepal
 - (D) None of these

Directions (26-30) Read the following passage and answer the given questions.

Five javelin thrower P, Q, R, S, and T thrower in a competition are given six throws to qualify for the finals. Conditions to quality for the finals are:

- A player has to throw average of minimum 85 meters in all six throws.
- If he throws less than 80 meters in any throw that will be considered foul and distance for the foul throw will be considered as zero '0'.
- A player cannot throw more than 105 meters in any throws.

Note:

- · All the throws are integer in meters while average can be non-integer.
- In his 2nd and 5th attempt, P throws 85 meters and 90 meters respectively.
- Q throws two javelin of distances 76 meters and 84 meters in 3rd and 6th throws respectively.
- R throws 80 meters and 81 meters in 1st and 6th throw while S throws 100 meters and 78

- meters in 2nd and 4th throw respectively.
- In his 1st and 5th throws, T throws 82 meters and 88 meters respectively.
- Q26 Can player Q qualify for the finals?
 - (A) Always
 - (B) Never
 - (C) Not always but in some conditions
 - (D) Cannot be determined
- Q27 Player T did not qualify for the finals he did not make any foul, then what is the maximum distance he can throw in any one chance?
 - (A) 100 meters
- (B) 105 meters
- (C) 99 meters
- (D) 95 meters
- Q28 Who among the following may be qualify for the finals even if they did not throw more than 85 and less than 80 meters in all of their remaining 4 attempts?
 - (A) Only P
- (B) P, R and T
- (C) P and T
- (D) R and T
- Q29 If P qualifies and it is given that in the remaining 4 attempts, P scores 85 in 3 attempts, then find the score of P in the last attempt.
 - (A) 70
- (B) 80
- (C) 82
- (D) 85
- Q30 If S qualifies for the finals, then what is the minimum distance that he can throw in any one chance (Exclude the foul throw)?
 - (A) 90 meters
- (B) 95 meters
- (C) 100 meters
- (D) 85 meters

Answer Key

Q1	(C)
Q2	(B)

Q3 57

Q4 (C)

Q5 2

Q6 (C)

Q7 (A)

Q8 12

Q9 (A)

Q10 (D)

Q11 (C)

Q12 3

Q13

Q14 (D)

(A)

Q15 4

Q16 (C)

Q17 22

Q18 (B)

Q19 (A)

Q20 1

Q21 (D)

Q22 (D)

Q23 (A)

Q24 (A)

Q25 (C)

Q26 (B)

Q27 (C)

Q28 (C)

Q29 (B)

Q30 (B)

Hints & Solutions

Note: scan the QR code to watch video solution

Q1. Text Solution:

Let, two groups be A and B.

Fourteen teams are divided into two groups of seven teams each.

The teams are:

Group A	A1	A2	А3	A4	A5	A6	A7
Group B	B1	В2	В3	В4	В5	В6	В7

Stage 1:

Each team played against every other team within its group once.

So, each team will play 6 matches

In each match, two teams are playing.

So, the total matches for each group = $\frac{7 \times 6}{2}$ = 21

Total matches for Stage-1 = $21 \times 2 = 42$

Video Solution:



Q2. Text Solution:

Stage 2:

The four teams from each group played again against every other team.

Let, A1, A2, A3, and A4 are the top four teams of Group A after Stage 1.

B1, B2, B3, and B4 are the top four teams of Group B after Stage 1.

Similarly, each team will play 3 matches.

So, the total matches for each group = $\frac{4\times3}{2}$ = 6

Total matches for stage-2 = 6×2 = 12

Video Solution:



Q3. Text Solution:

Stage	1	2	3	Final	Total
Matches	40	10	2	1	F.7
played	42	IZ	2	1	5/

The total number of matches played in the tournament = 57

Video Solution:



Q4. Text Solution:

Let A1 from Group A be the team that wins all its matches. Possible cases for the win:

Group A	A1	A2	А3	Α4	A5	A6	A7
Case 1	6	5	4	3	2	1	0
Case 2	6	5	3	3	3	1	0
Case 3	6	5	2	2	2	2	2
Case 4	6	4	4	4	2	1	0
Case 5	6	4	4	4	1	1	1
Case 6	6	3	3	3	3	3	0
Case 7	6	3	3	3	3	2	1

To secure a spot in Stage 2 without being subject to the tie-breaking rule, a team must win at least 4 matches.

Video Solution:



Q5. Text Solution:

Let A1, A2, and A3 from Group A be the team that wins 5 of its matches. Possible cases for the win:

Group A	A1	A2	А3	A4	A5	A6	A7
Case 1	5	5	5	3	2	1	0
Case 2	5	5	5	3	1	1	1
Case 3	5	5	5	2	2	2	0
Case 4	5	5	5	2	2	1	1

The number of minimum wins after which a team can play Stage 2 is 2.

Video Solution:



Q6. Text Solution:

Let the teams are:

Group A	A1	A2	А3	A4	A5	A6	Α7	A8
Group B	B1	B2	В3	В4	B5	В6	В7	В8

Each team played against every other team within its group once.

So, each team will play 7 matches In each match, two teams are playing. So, the total matches for each group = $\frac{8 \times 7}{2}$ = 28 Total matches for Group stage = $28 \times 2 = 56$

Video Solution:



Q7. Text Solution:

If Team X wins all its matches in the group stage i.e. 7 matches

Point for one win = 2

Total points = 7×2 = 14

Video Solution:



Q8. Text Solution:

It is given that: No teams will have the same number of points at the end of the group stage.

Won	7	6	5	4	3	2	1	0
Points	14	12	10	8	6	4	2	0

The second-best team is the one that has 6 wins to qualify for the semi-finals.

Therefore, the minimum number of points required is 12.

Video Solution:



Q9. Text Solution:

Let's see in Group A

Group A	A1	A2	A3	A4	A5	A6	Α7	A8
Won	7	6	5	4	3	2	1	0
Points	14	12	10	8	6	4	2	0

A2 will reach the Semi-finals with 6 wins in the group stage.

To reach finals A2 has to win Semi-final. So, minimum wins required = 6 + 1 = 7

Video Solution:



Q10. Text Solution:

Total matches for Group stage = 56 Total matches for Semi-final = 2

Total Matches for Final = 1 Hence, total = 56 + 2 + 1 = 59

Video Solution:



Q11. Text Solution:

Let, A, B, C, D, E, F, G, and H be the 8 groups. Consider the outcomes of the group stage for Group A that will reflect on the other groups too. A1, A2, A3, A4, and A5 are the 5 teams in group A.

Every team plays a single match against the other teams in its group.

In each match, two teams are playing.

For the group stage:

The total matches for each group = $\frac{5\times4}{2}$ = 10 Hence, total matches for the Group stage = 10×8 = 80

Video Solution:



Q12. Text Solution:

In such a scenario, to advance to the Round of 16, one team must score the highest possible points and the remaining teams must have equal points. A1, A2, A3, A4, and A5 are the 5 teams in group A.

Hence, considering A1 to be the best team must have 8 points.

The remaining teams each play 3 matches with each other.

Each match ends in a draw earning 3 points for each team.

	Team	Points
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	8
A2	3
	3
	3
A5	3

Hence, with a minimum of 3 points, a team can qualify for the Round of 16 after the group stage.

Video Solution:



Q13. Text Solution:

As per the given condition, the team must lose its semifinal match and must win all the remaining matches.

Note: One match was played between the two losing teams in the semifinal for third place.

The below table shows the at most number of matches that the team won without playing in the final:

Stago	Group	Round	Quarter-	Semi-	3rd
Stage	Group	16	final	final	Place
Won	4	1	1	0	1

The answer = 4 + 1 + 1 + 0 + 1 = 7

Video Solution:



Q14. Text Solution:

The below table shows the number of matches played in the Championship:

<u> </u>		•	•			
Group	Round	Quarter-	Semi-	3rd	Final	
Stage	16	final	final	Place	Final	
80	8	4	2	1	1	

The answer = 80 + 8 + 4 + 2 + 1 + 1 = 96

Video Solution:



Q15. Text Solution:

In such a scenario, to advance to the Round of 16, one team must score the highest possible points and the remaining teams must have equal points. A1, A2, A3, A4, and A5 are the 5 teams in group A.

Hence, considering A1 to be the best team must have 8 points.

The remaining teams each play 3 matches with each other.

Each match ends in a draw earning 3 points for each team.

Team	Points
A1	8
A2	3
A3	3
A4	3
A5	3

Hence, with a minimum of 3 points, a team can qualify for the Round of 16 after the group stage. Therefore, the minimum wins in each stage:

Group stage = 0

Round 16 = 1

Quarter-final = 1

Semi-final = 1

Final = 1

The answer = 0 + 1 + 1 + 1 + 1 = 4 wins

Video Solution:



Q16. Text Solution:

Two pools are Pool A and Pool B.

Sixteen teams are divided into two pools of eight teams each.

The teams are:

Pool A	A1	A2	А3	Α4	A5	A6	Α7	A8
Pool B	B1	В2	В3	В4	В5	В6	В7	В8

During the pool stage, every team played two matches against each of the other teams in its pool.

So, each team will play $7 \times 2 = 14$ matches

Video Solution:



Q17. Text Solution:

The below table shows the necessary points to consider:

Pool A	A1	A2	А3	A4	A5	A6	A7	A8
Played	14	14	14	14	14	14	14	14
Won	14	12	10	8	6	4	2	0
Points	28	24	20	16	12	8	4	0

The team that could not qualify for the Super Six stage must be the 4th best team in its pool.

For such a scenario, the top 4 teams must have the same number of points.

Hence, the average of the top 4 points = 28 + 24 + 20 + 16

Video Solution:



Q18. Text Solution:

The below table shows the number of matches in each stage:

Stage	Pool	Super Six	Semi- final	Final
Matches	112	9	2	1

Total matches = 112 + 9 + 2 + 1 = 124

Video Solution:



Q19. Text Solution:

The below table shows the necessary points to consider:

Pool A	A1	A2	А3	Α4	A5	A6	A7	A8
Played	14	14	14	14	14	14	14	14
Won	14	12	10	8	6	4	2	0
Points	28	24	20	16	12	8	4	0

The team must finish as the 4th best in the Super Six.

In this scenario, all three teams from one pool must win all their matches, while all three teams from the other pool must lose all their matches. This would result in:

The three winning teams qualifying as the top three based on points.

The fourth semifinal spot being awarded to one of the teams from the losing pool, despite having lost all their matches, due to tie-breaking rules. Therefore, the minimum points a team could have and still qualify for the semifinals is 0 (zero).

Video Solution:



Q20. Text Solution:

The below table shows the necessary points to consider:

Pool A A1 A2 A3 A4 A5	6 A6 A7 A8
---------------------------------	------------

Played	14	14	14	14	14	14	14	14
Won	14	12	10	8	6	4	2	0
Points	28	24	20	16	12	8	4	0

In this scenario:

The team must finish as the 3rd best team in the Super Six.

To determine the minimum number of wins:

The top two teams must have the highest points, while the 3rd best team has the same number of points as all the other remaining teams.

Hence, the points for teams A3 to A8 = $\frac{20+16+12+8+4+0}{6}$ = 10 each

A team could earn 10 points in the pool stage by drawing 10 matches, resulting in 0 wins during the pool stage.

In the Super Six stage, the same team, with no wins, could still qualify for the semifinals based on tie-breaking rules.

To reach the final, the team would need to win the semifinal match.

Therefore, the minimum number of wins and still can play in the final is: 0 (pool stage) + 0 (Super Six stage) + 1 (semifinal) = 1

Video Solution:



Q21. Text Solution:

Total matches played by 6 teams = 15. Total points awarded = $15 \times 2 = 30$ points. Each team played exactly 5 matches. By the given table, India lost 0 matches and scored 8 points. The only possibility is (3W, 2D, 0L)

France lost 2 matches and scored 6 points. The only possibility is (3W, OD, 2L).

China lost 2 matches and scored 5 points. The only possibility is (2W, 1D, 2L).

Pakistan lost one match and scored 5 points. The only possibility is (1W, 3D, 1L).

Given that France defeated China and China defeated Pakistan.

	India	France	China	Pakistan	Nepal	Bhutan	Points
India	XXXX						8
France		XXXX	Win				6
China		Loss	XXXX	Win			5
Pakistan			Loss	XXXX			5
Nepal					XXXX		
Bhutan						XXXX	

Since France has 0 Draws, the winner of the France and Pakistan match is Pakistan as Pakistan can not lose more than one match. Hence

	India	France	China	Pakistan	Nepal	Bhutan	Points
India	XXXX			Draw			8
France		XXXX	Win	Loss			6
China		Loss	XXXX	Win			5
Pakistan	Draw	Win	Loss	XXXX	Draw	Draw	5
Nepal				Draw	XXXX		
Bhutan				Draw		XXXX	

Total points scored by Nepal and Bhutan together = 30 - (8+6+5+5) = 6 points. Given that Nepal and Bhutan scored less than 5 points. So possibilities are-

- (1) Nepal 4 points, Bhutan 2 points
- (2) Nepal 3 points, Bhutan 3 points
- (3) Nepal 2 points, Bhutan 4 points
 Possibilities 2 and 3 are ruled out, as Nepal lost
 one match only and scored less than 5 points.
 Hence the possibility of Nepal is 4 points (OW,
 4D, 1L) and Bhutan 2 points (OW, 2D, 3L). Out of 2
 draws of Bhutan, one must be against Nepal.

Hence

	India	France	China	Pakistan	Nepal	Bhutan	Points
India	XXXX			Draw		Win	8
France		XXXX	Win	Loss		Win	6
China		Loss	XXXX	Win		Win	5
Pakistan	Draw	Win	Loss	XXXX	Draw	Draw	5
Nepal				Draw	XXXX	Draw	4
Bhutan	Loss	Loss	Loss	Draw	Draw	XXXX	2

Using the discussion in the beginning, we can have the following table

	India	France	China	Pakistan	Nepal	Bhutan	Points
India	XXXX	Win	Win	Draw	Draw	Win	8
France	Loss	XXXX	Win	Loss	Win	Win	6
China	Loss	Loss	XXXX	Win	Draw	Win	5
Pakistan	Draw	Win	Loss	XXXX	Draw	Draw	5
Nepal	Draw	Loss	Draw	Draw	XXXX	Draw	4
Bhutan	Loss	Loss	Loss	Draw	Draw	XXXX	2

Nepal loses the match against France.

Video Solution:



Q22. Text Solution:

	India	France	China	Pakistan	Nepal	Bhutan	Points
India	XXXX	Win	Win	Draw	Draw	Win	8
France	Loss	XXXX	Win	Loss	Win	Win	6
China	Loss	Loss	XXXX	Win	Draw	Win	5
Pakistan	Draw	Win	Loss	XXXX	Draw	Draw	5
Nepal	Draw	Loss	Draw	Draw	XXXX	Draw	4
Bhutan	Loss	Loss	Loss	Draw	Draw	XXXX	2

Nepal is the one who played the highest number of draws.

Video Solution:



Q23. Text Solution:

	India	France	China	Pakistan	Nepal	Bhutan	Points
India	XXXX	Win	Win	Draw	Draw	Win	8
France	Loss	XXXX	Win	Loss	Win	Win	6
China	Loss	Loss	XXXX	Win	Draw	Win	5
Pakistan	Draw	Win	Loss	XXXX	Draw	Draw	5
Nepal	Draw	Loss	Draw	Draw	XXXX	Draw	4
Bhutan	Loss	Loss	Loss	Draw	Draw	XXXX	2

Bhutan scores 2 points at the end of the tournament.

Video Solution:



Q24. Text Solution:

	India	France	China	Pakistan	Nepal	Bhutan	Points
India	XXXX	Win	Win	Draw	Draw	Win	8
France	Loss	XXXX	Win	Loss	Win	Win	6
China	Loss	Loss	XXXX	Win	Draw	Win	5
Pakistan	Draw	Win	Loss	XXXX	Draw	Draw	5
Nepal	Draw	Loss	Draw	Draw	XXXX	Draw	4
Bhutan	Loss	Loss	Loss	Draw	Draw	XXXX	2

There will be a total 6 matches that ended in a draw during the tournament

Video Solution:



Q25. Text Solution:

	India	France	China	Pakistan	Nepal	Bhutan	Points
India	XXXX	Win	Win	Draw	Draw	Win	8
France	Loss	XXXX	Win	Loss	Win	Win	6
China	Loss	Loss	XXXX	Win	Draw	Win	5
Pakistan	Draw	Win	Loss	XXXX	Draw	Draw	5
Nepal	Draw	Loss	Draw	Draw	XXXX	Draw	4
Bhutan	Loss	Loss	Loss	Draw	Draw	XXXX	2

India Drew two matches with Pakistan and Nepal.

Video Solution:



Q26. Text Solution:

Table given below shows the distance of throws by five players:

Players	Р	Q	R	S	Т
1st throw			80		82
2nd throw	85			100	
3rd throw		76			
4th throw				78	
5th throw	90				88
6th throw		84	81		

Sum of minimum distance in all the six chances that a player needs to throw to qualify for the finals = $85 \times 6 = 510$ meters

In one of his attempts, Q throws 76 meters which is less than 80 meters which will be considered as '0' meters.

Sum of total distances in two given attempts = 0 + 84 = 84 meters

Suppose he throws maximum possible distance in remaining 4 throws.

Sum of his total thrown distance = $84 + 4 \times 105$ = 84 + 420

Since minimum qualifying criteria for the finals is 510 meters.

Which means Q can never qualify for the finals.

Video Solution:



Q27. Text Solution:

Table given below shows the distance of throws by five players:

Players	Р	Q	R	S	Т
1st throw			80		82
2nd throw	85			100	
3rd throw		76			
4th throw				78	
5th throw	90				88
6th throw		84	81		

Sum of minimum distance in all the six chances that a player needs to throw to qualify for the finals = $85 \times 6 = 510$ meters

Since T did not qualify for finals which means sum of distances, he throws overall will be less than 510 meters.

Also, he did not make any foul in his all attempts, it means he throw more than or equal 80 meters. To find the maximum throw in any one chance, suppose he throws minimum possible distance in 3 throws out of remaining 4 throws.

Let him throw 'a' meter in the remaining one throw.

 $82 + 88 + 80 \times 3 + a < 510$ a < 510 - 170 - 240

a < 100

Which means maximum distance T can throw in any one chance is 99 meters.

Video Solution:



Q28. Text Solution:

Table given below shows the distance of throws by five players:

Players	Р	Q	R	S	T
1st throw			80		82
2nd throw	85			100	
3rd throw		76			
4th throw				78	
5th throw	90				88
6th throw		84	81		

Sum of minimum distance in all the six chances that a player needs to throw to qualify for the finals = $85 \times 6 = 510$ meters

Average minimum distance required in remaining 4 attempts by P to qualify for the finals =

$$\frac{(510-85-90)}{4}$$
 = 83.75 meters

Average minimum distance required in remaining 4 attempts by Q to qualify for the finals =

$$rac{(510-0-84)}{4}=106.5$$
 meters

Average minimum distance required in remaining 4 attempts by R to qualify for the finals =

$$\frac{(510-80-81)}{4}$$
 = 87.25 meters

Average minimum distance required in remaining 4 attempts by S to qualify for the finals =

$$\frac{(510-100-0)}{4}$$
 = 102.5 meters

Average minimum distance required in remaining 4 attempts by T to qualify for the finals =

$$\frac{(510-82-88)}{4}$$
 = 85 meters

Hence, only P and T will qualify for the finals if they did not throw more than 85 meters and less than 80 meters in their remaining attempts. Hence option c.

Video Solution:



Q29. Text Solution:

Table given below shows the distance of throws by five players:

Players	P	Q	R	S	T
1st throw			80		82
2nd throw	85			100	
3rd throw		76			
4th throw				78	
5th throw	90				88
6th throw		84	81		

The sum of the minimum distance in all the six chances that a player needs to throw to qualify for the finals = $85 \times 6 = 510$ meters

Required score in the last attempt = $510 - 85 - 90 - 85 \times 3 = 80$

The answer is option B.

Video Solution:



Q30. Text Solution:

Table given below shows the distance of throws by five players:

Players	Р	Ø	R	S	T
1st throw			80		82
2nd throw	85			100	
3rd throw		76			
4th throw				78	
5th throw	90				88
6th throw		84	81		

Sum of minimum distance in all the six chances that a player needs to throw to qualify for the

finals = $85 \times 6 = 510$ meters

Since in one attempt S throws only 78 meters which is less than 80 meters which will be considered as '0' meters.

Sum of distances of two throws by S = 100 + 0 = 100 meters

S qualifies for the finals which means he has to throw a sum of 510 meters in all the six attempts together.

Suppose he throws 105 meters in 3 attempts out of the remaining 4 attempts.

Total distance of throw for the 4th remaining attempt = $510 - 100 - 105 \times 3 = 410 - 315 = 95$ Hence, minimum distance that S can throw in any one chance is 95 meters excluding the foul. Hence option b.

Video Solution:



