## **CAT 2025 LRDI (Slot-1) Question Paper**

**Time Allowed :**120 Minutes | **Maximum Marks :**204 | **Total questions :**68

#### **General Instructions**

#### Read the following instructions very carefully and strictly follow them:

- 1. The total duration of the test is **120 Minutes**, with **40 minutes** allotted per section.
- 2. The question paper is divided into **three sections**:
  - Section 1: Verbal Ability and Reading Comprehension (VARC) 24
    questions
  - Section 2: Data Interpretation and Logical Reasoning (DILR) 22 questions
  - Section 3: Quantitative Aptitude (QA) 22 questions
- 3. Each correct answer carries +3 marks.
- 4. For multiple-choice questions (MCQs), **–1 mark** will be deducted for each wrong answer.
- 5. There is **no negative marking** for Type-in-the-Answer (TITA) questions.

#### 1. A, B, C, D, E, and F are seated around a circular table facing the center.

B sits third to the left of A.

Only one person sits between C and D.

E is not a neighbor of A or C.

F sits immediately to the right of D.

### How many distinct seating arrangements satisfy all conditions?

# 2. A store sells four products — P, Q, R, and S — across four days (Mon-Thu), exactly one product per day.

P is not sold on Monday or Wednesday.

R is sold before Q.

S is not sold on Thursday.

Exactly one of P or Q is sold on Tuesday.

How many valid schedules are possible?

# 3. A group of 120 students attend at least one of three workshops: Data, Logic, and Verbal.

48 attend Data, 60 attend Logic, 50 attend Verbal.

20 attend both Data & Logic, 15 attend both Logic & Verbal, 12 attend both Data & Verbal, and 8 attend all three.

How many students attend exactly one workshop?

### 4. Four machines A, B, C, D produce items in a ratio.

A produces 40 more than B.

C produces 20% more than A.

D produces half of B.

If total production is 860 items,

how many items did Machine C produce?

### 5. Six people — P, Q, R, S, T, U — stand in a line.

P is somewhere ahead of Q.

Exactly two people stand between Q and R.

S is not adjacent to P or R.

T is not in the first or last position.

How many distinct valid arrangements are possible?

# 6. A delivery network allows routes from Start (S) to End (E) through intermediate hubs A, B, C.

Allowed edges:

$$S \rightarrow A$$
,  $S \rightarrow B$ ,  $A \rightarrow C$ ,  $A \rightarrow E$ ,  $B \rightarrow C$ ,  $C \rightarrow E$ .

A route cannot visit more than 3 nodes including S and E.

## How many valid routes from S to E are possible?

## 7. Four players — W, X, Y, Z — play a round-robin tournament (each plays each once).

A win gives 2 points, loss 0.

W scores more points than X.

Y wins exactly one match.

Z does not lose to X.

How many distinct possible point-tables exist for the four players?