# Syllabus for Lateral Entry Entrance Test (CUJ) 2023-24

#### **General Instructions:**

- 1. Total 50 MCQs having 4 options for each will be given in entrance test.
- 2. Each question will carry 2 marks. There will be no negative marking for wrong answer.
- 3. Total time 60 minutes will be given to attempt the questions.
- 4. Syllabus have five parts: **General English**, **Fundamentals of Computers**, **Mathematics**, and **Aptitude**.

There shall be Multiple Choice Questions on the following topics:

### English (10 MCQs)

- 1. Subject-Verb agreement
- 2. Text Completion Exercises
- 3. Basic Verb Patterns (SV, SVO, SVOO, SVC, SVOC, SVOA)
- 4. One-word Substitution
- 5. Commonly used idioms and phrases.
- 6. Prefix, Suffix, and Commonly confusing words, Analogy.
- 7. Phrases and Clauses: their types
- 8. Simple, Complex and Compound Sentences: Transformation and synthesis
- 9. Active and Passive Voice
- 10. Conditional Sentences
- 11. Removing Redundancy; Parallelism in sentences.
- 12. Parts and Kinds of Business Letters.

#### **Fundamentals of Computer (10 MCQs)**

- 1. Basic of Computers and its operation
- 2. Types of computers
- 3. Hardware Organization
- 4. Input-output devices
- 5. Input-output ports and connectors
- 6. Data representation
- 7. Introduction to programming languages
- 8. Operating systems
- 9. Computer networks and internet
- 10. Operators and expressions
- 11. Problem solving and programming methodology

#### Mathematics (20 MCQs)

- 1. Matrices
- 2. Eigenvalue

- 3. Eigenvector
- 4. Orthogonality
- 5. Solution of simultaneous equations
- 6. Similar matrix
- 7. Calculus
- 8. Function of several variables
- 9. Basic statistics: Mean, mode, median, standard deviations
- 10. Moments and random variables
- 11. Ordinary differential equations.

## Aptitude (10 MCQs)

- 1. Allegations and mixtures
- 2. Problems on Age
- 3. Boat Problems
- 4. Data Interpretation
- 5. Number Series
- 6. Pipes and Cisterns
- 7. Quadratic Equations
- 8. Simplification and Approximation
- 9. Speed, Distance and Time
- 10. Data Sufficiency
- 11. Time and Work
- 12. Problems on Train