

UNIVERSITY OF MUMBAI
DEPARTMENT OF COMPUTER SCIENCE

**Syllabus for Entrance Examination
(M.Sc. Computer Science with specialization in Data Science)**

Minimum Qualification: Any Graduate from recognized University with 50% score

Total Questions: 60

Total Marks: 60

Test Duration: 60 Minutes

No negative marking

Section-1: English

- a. English Comprehension
- b. Vocabulary Knowledge, an appropriate usage of a word, correct forms of words.

Section-2: General Knowledge

- a. Questions on History, Culture, Literature, Civics & Politics, Sports, Environmental science, Technology, Behavioral science & Psychology

Section-3: Logic

- a. Analogy, Sequence, Blood relations, Predicate and Propositional logic

Section-4: Mathematics

- a. Matrices and Determinants
- b. Lattice theory and linear algebra
- c. Differentiation and integration
- d. 2-D and 3-D geometry
- e. Numerical methods

Section-5: Statistics

- a. Elementary statistics: Aggregation and measure of central tendency
- b. Probability and Random numbers
- c. Discrete and continuous probability distributions
- d. Hypothesis testing
- e. Operations research

Section-6: Computer Science

- a. Algorithms and data structures
- b. Operating environments and operating systems
- c. Programming and software engineering
- d. Finite state machines
- e. Networking and databases
