## Faculty of Engineering & Technology

## M.Tech. (Computer Science and Engineering) Artificial Intelligence

**Verbal Ability:** English Grammar, Synonyms, Antonyms, Sentence Completion, Verbal Analogies, Word Groups, Reading Comprehension, Critical Reasoning and Verbal Deduction.

**Numerical Ability:** Numerical computation, numerical estimation, Permutation and combination, Progression, Ratio, Proportion and variation, Speed, Distance and Time.

**Logical Reasoning and Data Interpretation:** Blood Relations, Proposition, Direction Sense, Coding-Decoding, Assumptions, Puzzles, Binary Logic, Tables, Pie Charts, Bar Diagrams, Pattern Perception.

**Linear Algebra:** Matrices, determinants, system of linear equations, eigenvalues and eigenvectors, Vector spaces, Matrix Factorization

**Calculus:** Limits, continuity and differentiability, Maxima and minima, Mean value theorem, Integration.

**Probability and Statistics:** Random variables; Uniform, normal, exponential, Poisson and binomial distributions; Mean, median, mode and standard deviation; Conditional probability and Bayes theorem; Linear regression analysis.

**Computer Programming:** Basics of programming in C language.