

UNIVERSITY OF MYSORE
CENTRE FOR INFORMATION SCIENCE AND TECHNOLOGY(CIST)

Syllabus for MSc in Information Technology Entrance Examination 2024-25

Unit-1

Algebra: - (Chapters) Elements of Number Theory and Congruences, Matrices and Determinants , Groups , Vectors

Unit II

Calculus:- (Chapters) Differentiation , Applications of Derivatives , Maxima and Minima

UNIT-III

Geometry:- (Chapters) Circles, Conic Sections

UNIT-IV

(Chapter) Differential Equations

UNIT-V

General Logical & Reasoning Ability: -Logical and Mathematical Reasoning. Problems based on general concepts- Ratios and proportions, problems on time-work, distance-speed, percentage, etc. Blood relations, Sequence and Series, Coding and Decoding, Visual reasoning, Analytical reasoning and General Aptitude.

UNIT-V

Number systems- Binary numbers, Conversion of numbers from one form to another, Fractional and signed numbers, Hexadecimal numbers, Octal numbers, Octal numbers, Radix-decimal numbers, Binary arithmetic, Addition, Subtraction, Multiplication, Division, Codes, ASCII, EBCDIC.

Logic Gates:- Fundamental gates, Universal gates, De-Morgan's theorem,

UNIT-VII

English and grammar.

UNIT:- VIII

Systems software:- High level language, Assembly language, Machine level language, Compilers, and Interpreters, Programming languages, Algorithm, Flow chart, Editors, Word processors, Basics of DOS and Windows.

UNIT:- I X

Computer Organization:- Classification of computers, Components of a computer system, Microcomputers, Microprocessors, Personal computers, Stored program execution, Various I/O and auxiliary storage devices.

UNIT-X

Personal computing, Desk Top publishing software, Spread sheet packages, Database software packages, Word processing, Internet, Internet tools, Multimedia, Computer Communication, Local Area Network.