Eligibility: B.Sc degree with Computer Science or Mathematics as one of the optional/ Any degree with Diploma in Computer Application/ B.C.A/ B.Tech/ B.E in any discipline with minimum of 45% marks in aggregate (40% in case of SC/ST and Cat-1). The selection of candidates for this course will be based on an entrance test.

Course Duration: Two years (Four Semester)

Entrance Test Duration: 1 hour

Pattern: Objective type 50 marks Multiple Choice Questions of 1 mark each.

Syllabus

Unit-1 (Karnataka II PUC state Syllabus)

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

Unit II (Karnataka II PUC state Syllabus)

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

UNIT-III (Karnataka II PUC state Syllabus)

Geometry: - (Chapters) Circles, Conic Sections

UNIT-IV (Karnataka II PUC state Syllabus)

(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-VI

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 (UOM UG Syllabus).

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:- IX

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