



# **BACHELOR OF ARTS (B.A.)**

**(THREE YEAR DEGREE COURSE)**

**SUBJECT**

**COMPUTER APPLICATION**

# B.A.(COMPUTER APPLICATION)

## COURSE STRUCTURE

### FIRST YEAR

PAPER – 101: Computer Fundamentals	30 MARKS
PAPER – 102: Operating System & Business Data Processing	30 MARKS
PAPER – 103: PRACTICAL	40 MARKS

### SECOND YEAR

PAPER – 201: Structured Programming Using 'C'	30 MARKS
PAPER – 202: Data Base Management System	30 MARKS
PAPER – 203: PRACTICAL	40 MARKS

### THIRD YEAR

PAPER – 301: Computer Graphics	30 MARKS
PAPER – 302: Internet	30 MARKS
PAPER – 303: PRACTICAL	40 MARKS

# **B.A. (COMPUTER APPLICATION)**

## **FIRST YEAR DETAILED SYALLBUS**

### **PAPER – 101**

#### **COMPUTER FUNDAMENTALS**

##### **UNIT I**

What is computer - an introduction, types of computers, digital & analog computer, capabilities & limitations of computers, computer arithmetic – addition and subtraction, number system: binary, decimal, octal, hexadecimal, character sets, ASCII and EBCDIC code.

##### **UNIT II**

Components of Computer, control unit, ALU, basic block diagram of computers, hardware.

Input device : keyboard, mouse, digitizing tablets, scanner, bar-code reader.

Output device : monitors, types of monitors, dot matrix printers, laser printers, ink-jet printers.

Memory : types of memory, main memory (RAM, ROM, EPROM, EEPROM), secondary memory, backup memory, cache memory, virtual memory.

Auxiliary Storage Device: hard disk, pen-drive, compact disk, DVD, magnetic disk.

##### **UNIT III**

Generation of Computer: First generation, second generation, third generation, fourth generation, fifth generation computers, introduction to software, compiler, interpreter, assembler.

**UNIT IV**

Booting Process of Computer, batch file, .exe files and .com files, introduction to GUI, introduction to viruses, introduction to multi-media.

**UNIT V**

Introduction to MS-word & MS-Excel.

# **B.A. (COMPUTER APPLICATION)**

## **FIRST YEAR DETAILED SYALLBUS**

### **PAPER – 102**

#### **OPERATING SYSTEM & BUSINESS DATA PROCESSING**

##### **UNIT I**

Introduction to various categories of software: Application software and system software, operating system and its functions, interaction of operating system with user programs, components of operating system, memory management, file management, introduction to disk operating system (DOS), DOS commands-move copy, rename, delete files in DOS.

##### **UNIT II**

Device Management, control of various devices, device drivers. BIOS, DOS internal & external commands, restore and backup commands, DOS interrupts. Multi-user, multi-tasking, multi processing and real time OS, brief introduction to memory management techniques.

##### **UNIT III**

File System, File Management, Process Management and Scheduling. Example of multi processing OS, Introduction to UNIX Operating System.

##### **UNIT IV**

Introduction to Data processing, records and file data collection, presentation, verification, editing and checking.

## UNIT V

Business files, introduction to data structure, elements fields and records, classification of files, master file and transaction file.

# **B.A. (COMPUTER APPLICATION)**

## **SECOND YEAR DETAILED SYALLBUS**

### **PAPER – 201**

#### **STRUCTURED PROGRAMMING USING 'C'**

##### **UNIT I**

Introduction to structured programming, elements of structured programming, advantages & disadvantages of structured programming, features of 'C' language, structure of a 'C' program, # define and # include command.

##### **UNIT II**

Variable & Constants, declaration and delimitation of variables, operators: arithmetic, relational, logical operators, interment and decrement operators, conditional operators, CAST operators, size of operator, etc.

##### **UNIT III**

Control structure: if, if-else, if-else-if-statements, for loop, while and do while loop, switch case structure, break and continue statements.

##### **UNIT IV**

Storage Class: Automatic, Static register and external storage class.

##### **UNIT V**

Introduction to function, recursion, introduction to pointers.

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## **SECOND YEAR DETAILED SYALLBUS**

### **PAPER – 202**

## **DATA BASE MANAGEMENT SYSTEM**

### **UNIT I**

Introduction to database, concept and components of database, attributes of DBMS, different model of databases, three tier schema of database, advantages and disadvantages of database.

### **UNIT II**

Database Models: Network, Hierarchical, relational models, RDBMS, entity & attributes, relationship, ER-Diagram.

### **UNIT III**

Introduction to FOX-PRO and MS-Access.

### **UNIT IV**

Different application of DBMS, Structured Query Language (SQL), DDL and DML.

### **UNIT V**

Database Security and Privacy.



# **B.A. (COMPUTER APPLICATION)**

## **THIRD DETAILED SYALLBUS**

### **PAPER – 301**

### **COMPUTER GRAPHICS**

#### **UNIT I**

Why Computer Graphics, interactive input devices, plasma & colour display, components of computer graphics system, computer drafting.

#### **UNIT II**

Introduction to photo shop / Ventura, formatting and printing. Different type of printers, colours printers.

#### **UNIT III**

Introduction to DTP software, interactive job work, documents and publishing with DTP, introduction to page-maker.

#### **UNIT IV**

Computer Graphics and entertainment software, computer games, designing image and pictures.

#### **UNIT V**

Introduction to MS-Paint and drawing simple objects in MS-Paint.

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## **THIRD DETAILED SYALLBUS**

### **PAPER – 302**

#### **INTERNET**

##### **UNIT I**

Introduction to networking, objectives of computer network, LAN, MAN, WAN and internet working, introduction to internet: internet protocols, simplex, half duplex and full duplex communication, line configuration: point to point, multipoint.

##### **UNIT II**

Internet Access : Dial up connection, direct connection, Board band connection, e-mail, features of e-mail, function of e-mail, protocol used e-mail.

##### **UNIT III**

Introduction to TCP/IP, FTP, WWW, HTTP, TELNET.

##### **UNIT IV**

Web browser, notepad, Markup languages, Introduction to HTML, Simple HTML Programs.

##### **UNIT V**

Internet addressing: IP Address, Domain Name, URL, Internet Chat, Intranet, Extranet, Application of Internet, Search Engines.