

**Paper –X : Any One of the Following**

**Paper-X (A) : Computer Application in Sociology (5685 A)**

M.M:- 100

**Module-I Fundamentals of Computer (20 hours)**

Impact of computer on society. History of computers computer generations. Types of Computers. Characteristics of computers. Number System Binary, Octal and Hexa Decimal, Character representation. Block diagram of Computer, CPU, CPUs used in computers Memory, RAM and ROM, Input Output devices, Keyboard, Mouse, magnetic Ink Character Recognition, Optical Mark Reader, Visual Display Unit, Printers (Dot Metrics, Inkjet, Laser jet Printers), Secondary Storage Device and Media : Floppy Disk Drives, Fixed Disk Drives, CDROM Drives Cartridge Tape Drives, Computer Interfaces, Bus & Ports (Elementary ideas Only). ISA, PCI Bus, IDE Interface, Graphics Accelerator & Display card, Serial and parallel ports. Specifications of standard computer system and peripherals. Computer system and peripherals. Computer Software (Brief idea only). Operating System Software, Application Packages, Compilers, Editor, Computer Viruses, Introduction to Multimedia & Desk Top Publishing (Definition, advantages, requirement of hardware & software). Computer Networks (Brief idea only): Computer networking and its advantages, different types of networks, Different Network Softwares, Modern, Internet and Intranet, e-mail, World Wide Web.

**Module-II Programming Fundamentals and Operating System Softwares (10 hours)**

Development of algorithm, Flow charts symbols, advantages, flow charts for simple computation, scientific, statistical and business problems Disk Operating System (Dos),

Internal and External commands, batch file, Configuration and System files important features of Windows 95.

### **Module-III Electronic Spreadsheet and Database (20 hours)**

Introduction to Spreadsheets : Electronic Spreadsheet and its advantages. Popular Spreadsheet packages, worksheet and Workbook, General Editing and Formatting facilities, Macros, Mathematical and Statistical functions, String and Logical functions, creating formulas and auditing workbooks, charts, maps, drawings and important pictures. Lists and Tables, Analysing data with pivot tables, analysing statistical data.

Introduction to database and FoxPro FoxPro Menu system, Database structure and field types, Listing contents of a database file, viewing and editing data, memo, field and file utilities, sorting and indexing data base files, printing reports, programming with Foxpro, Using multiple data base files. Designing custom screens, debugging techniques.

### **Module-IV Familiarity to Software Packages (10 hours)**

Brief introduction to important Terminology, Facilities, Features and

Applications of the one of the following

C) SPSS

D) GIS