

VOCATIONAL COURSE**30** COMPUTER APPLICATION

Scheme :	Min. Pass Marks	Max. Marks
Arts/Commerce	72 (Th. 47 Pr. 25)	200
Science	54 (Th. 36 Pr. 18)	150
Paper-I 3 hours duration	Computer Fundamentals and Introduction to IBM PC	Arts/Com. 65 Science 50
Paper-II 3 hours duration	Operating Systems and Business Data Processing	Arts/ Com. 65 Science 50
Paper-III Practical		Arts/Com. 70 Science 50

**Paper I : Computer Fundamentals and Introduction to IBM PC**

What is Computer ? An introduction. Uses of computers in modern society e.g. weather forecasting, census, oil exploration, speech recognition, banking, publishing, accounting, research etc.

Information concepts and processing - hardware, software- computer capabilities and limitations. Concept of files and directories.

Computer arithmetic and number systems. ASCH & EBCDIC character sets.

Elements of a computer processing system- hardware, software computer capabilities and limitations. Concept of files and directories.

Hardware features and use- CPU, I/O devices. Storage devices and media.

Introduction to networking, multiprocessing, time sharing, multi-tasking and real time computing.

Variety of hardware systems and features. Various types of computers available in market. Micro, Mini and Main frames, Supercomputers.

Evolution of personal computers, Commodore, Atari, Apple, IBM, PC, Basic block diagram of computer. Difference between personal and main frames- Simple operating system, Easy to use, Less Memory, Dedicated, Normally single user.

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Introduction to microprocessors and associated computers. Tim-  
display controllers, DMA controllers.

Block diagram of IBM PC. Introduction to 8086 and 8088.  
Functional description of various modules and cards.

Boot process in IBM PC. System files. Self test.

Various types of displays and other peripherals used in IBM  
PCs.

Disk Operating System - Introduction. Batch files.

Configuration files. COM, EXE, SYS, BIN and TXT files. In-  
troduction to programming in BASIC. Development of programs in  
Q. BASIC. Use of graphics facilities using Basic.

Diagnostics for IBM PC. Use of Norton Utilities and other pack-  
ages for undeleting files and other system maintenance jobs.

Advance version of IBM and compatibles.

## Paper II : Operating Systems and Business Data Processing

Introduction to various categories of softwares. Operating sys-  
tem and its functions. Interaction of operating system with hardware  
and user programs.

Various components of operating system with reference to DOS.  
Single user operating system. Task loader. Memory management.

File management, Directory structure in DOS. Moving, renam-  
ing, copying, deleting and undeleting files under DOS.

### Practical

Visit to computer Lab. Introduction to various components of a  
computer. A simple documentation preparation and printing. Usage  
of printer and other components.

Physical inspection of IBM PC and internal cards. Introduction  
to nomenclature (COM1, COM2, etc.) Writing batch files for various  
purposes. Modifying config. sys files. Creating RAM Disk. Diag-  
nostics on IBM PC. Controlling PC hardware using BASIC Pro-  
grams.

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