

# ELEMENTARY COMPUTER APPLICATIONS

FOR THE YEAR 2007-2008

EXAMINATION SCHEME FOR THE COMPULSORY SUBJECT ENTITLED ELEMENTARY COMPUTER APPLICATION AT UNDERGRADUATE LEVEL

The student has to pass in theory as well as in practical paper separately.

## Theory paper :

The Theory paper will consist of three sections with a maximum of 60 marks.

### Section A

Covering complete syllabus. One compulsory question containing 10 multiple choice questions.

### Section B

Covering complete syllabus. candidate has to attempt four out of six questions. Each question may have parts and brief answers are expected.

### Section C

Covering complete syllabus. One has to attempt two out of four questions. Each question may have parts and long answer are expected.

## Distribution of Marks:

Theory :

Duration: Three hours

Max. Marks 60

Min. Marks 22

Section A 1x10 : 10

Section B 4x6 : 24

Section C 2x13 : 26

**Total : 60**

## PRACTICAL:

Duration : Four hours

Max. Marks 40

Min. Marks 14

The practical examination will have exercises based on followings:

### A. Operating system concepts:

MS-DOS 4 Marks

WINDOWS 4 Marks

### B. MS-OFFICE

MS-WORD 7 Marks

MS-EXCEL 7 Marks

POWER-POINT 7 Marks

### C. Internet Browser

Viva-voce 6 Marks

**Total**

**40 Marks**

conducting practical examination student  
may be grouped such that number of  
in a group is equal to number of  
available for conducting practical

students in a given batch may be given a set  
of questions to test the computer skills acquired  
during their practical training Practical examiner  
can frame his own questions to test student  
knowledge in computer operation through set of  
short type of questions which can be answered  
by students who have undergone practical  
training.

## SYLLABUS

### ELEMENTARY COMPUTER APPLICATIONS

#### Common for Arts, Science & Commerce Faculties

1. **Information concepts and Processing :** Definition of Information, need quality and value of Information, categories of information in business organization level of information, storage and retrieval of data, comparison of manual and electronic storage of data. Organization of data as files, data processing in government, large business, multinational and private organizations.
2. **Elements of Computer Processing system :** The Electronic digital computer, the number systems (binary, digital, octal and hexadecimal and their inter conversions), character code (ASCII and EBCDIC), concept of hardware and software, the architecture of a computer system. CPU, memory and Input/output devices, magnetic storage devices, optical devices, printers and monitors, categories of software, system software, application software, packages.
3. Classification of Computers and Generation of Computers, parallel processing and component, RISC and CISC machines, development of Intel family processors.

4. **Operating System Concept:** The need of an OS (Operating System), OS as resource, processor and memory manager, the various types of operating systems, MS-DOS, WINDOWS 95/98, WINDOWS 2000, UNIX Operating System.
5. **Computer and Communication:** Need for data transmission over distances, communication channels; twisted pair, coaxial cable, microwave, radio wave, optical fiber and satellite, digital and analog transmission, serial and parallel data transmission, Modems, Networking of Computers, LAN, WAN concepts.
6. **Programming Languages:** Machine, Assembly and high level languages, Generation of Languages, 3 GL and 4 GL languages, Graphic User Interfaces.
7. **Personal Computer Software:** Word processing Packages, Spreadsheet Packages and Database Management Packages, Desk Top Publishing, Computer Animation Packages, Introduction to MS-Office.
8. **Internet Technology:** Concept and how it works, e-mail services, Internet surfing, browsers and search engines, World Wide Web, web programming, HTML, and JAVA Programming Concepts.
9. **E-commerce:** What is e-commerce and growth of e-commerce, electronic payment systems,

security considerations, digital currencies, Credit cards, cybercash, e-cash, smart cards, supply chain management.

10. Benefits of electronic forms of data processing and management in education, commerce, public delivery systems, banking and other financial transactions, new developments in these areas.

**Laboratory:** The laboratory exercises will be designed to help in the understanding of the concepts of computer and the utilization in the areas outlined in the theory syllabus. The emphasis should be on practical uses rather than on theoretical concepts only.

**Books Recommended:**

1. V.K. Jain Computer Fundamentals.
2. V.Rajaraman Fundamentals of Computer.