

Elementary Computer Applications

Session **2025-26**

Max. Marks: 100

Min. Passing Marks: 36

Time: 2 Hours

Semester III

Course Code: ***5SDCT31

Type of the course: Discipline Specific Core Course I of Semester I

Title of the Course: Elementary Computer

Level of the Course: NHEQF Level 5

Credit of the Course: 4

Delivery sub-type of the course: Theory 3. Tutorial 1

Pre-requisites and requisites of the course: Student enrolled and registered in UG Programme first semester.

Duration of Exam: 3 Hours

Maximum Marks: 100

Theory Exam: 100 Marks

Pattern of Examination:

1. Passing in theory examination shall be necessary by securing at least 36% marks.
2. The theory paper shall consist of 100 objective-type questions. Each question will carry 1 mark.
Candidates will have to write the correct answer (A) or (B) or (C) or (D) in space provided against the questions on the OMR sheet.
3. Non-scientific Calculator is allowed to be used in examinations.

Course Content:

Introduction to Information Technology, Generation of Computers, Types of computers: Micro, Mini, Mainframe, Super.

Architecture of Computer System: CPU, Primary Memory: RAM, ROM, Cache memory, Secondary memories, Input/output devices, Pointing device.

Number System and their conversions: Binary, Octal, Decimal, Hexadecimal. Logic gates. Languages: Machine, assembly and High Level Languages including 3GL, 4GL.

Concept of Operating System, Need and Types of Operating System: Batch, Single User, Multiprocessing, Time Sharing. Introduction to Windows.

Internet: Concept, e-mail services, WWW, Web Browsers, Search Engines, Simple programs in HTML, type of HTML Documents, Document Structures: Element, type and Character Formatting, Tables, Frames, Forms. Style Sheets.

Computer Networking: Type of networks, LAN, MAN and WAN, Concept of topology, Bridges, Routers, Gateways, Modem, ISDN Leased lines, teleconferencing and videoconferencing.

E-Commerce: Concept of E-Commerce, benefits and growth of E-Commerce, E-Commerce categories, E-Governance, EDI, Electronic Funds transfer on EDI networks, Electronic Payment System.

Computer Ethics, Cyber Law, Introduction to IT Act 2000, IT act law related to Software Piracy, Intellectual property, Child Abuse, Social Engineering.

Introduction to AI: What is AI? History of AI. Applications of AI. Advantages and Disadvantages of AI. AI in our day-to-day life.

References:

1. Computer Fundamentals By P.K. Sinha (BPB Publications)
2. Computer made Easy for Beginners(in Hindi) By Niranjana Bansal, Jayshri Saragoi
3. IT Tools and Application by Satish Jain, Shashank Jain, Dr. Madulika Jain(BPB Publication)
4. Rapidex Computer Course By Vikas Gupta(PustakMahal)
5. Internet and Web page Designing By V.K. Jain(BPB Publications)
6. Web Enabled Commercial Application Development using HTML, DHTML, Java Script, Perl CGI By Ivan Bayross (BPB Publications)
7. Cyber Security by Nina Godbole & Sunit Belapure