Course Code	Course Title	Credit	L	T	P	Sessional ME	Sessional IA	ESE	Total
CSA-OE-2201	Computer Education – I	2	2	-	-	20	20	60	100

Course Objectives:

1. To learn the basics of computer system.
2. To understand the basics of computer structure and organization.

Unit	Topic	Proposed Lectures
I	Generations of Computer, Block Diagram of a Computer, Applications of Computers, Advantages and Disadvantage of Computer, CPU, Keyboard, mouse, joystick, track ball, light pen, Data Scanning devices image scanner, OCR, OMR, MICR, Bar code reader, card reader, Voice Recognition Device.	6
II	Monitor, Printer laser pointer, dot matrix printer, ink jet printer, Memory hierarchy, Cache Memory, Primary Memory RAM, DRAM and SRAM, ROM, Secondary Memories.	6
III	Application Software, System Software, Communication Software, Application Software, Programming Language Translators, Assembler, Compiler, Interpreter, Utility Programs, Computer Languages, Machine language, Assembly language, High level language.	6
IV	Number System: Decimal Number System, Binary Number System, Octal Number System and Hexadecimal Number System and their conversions.	6
V	First compliment & Second Compliment Logic Gates- AND, OR, NOT, Universal Logic Gates- NOR, NAND.	6

Suggested Reading:

1. Computer Fundamentals, Forth Edition by P.K. Sinha and Priti Sinha.
4. Computer Fundamentals Architecture and Organization, Third Edition by B. Ram.
5. Digital Principle and Applications, by Donald P Leach, Albert Paul Malvino & Goutam Saha.
6. Fundamentals of Computers, Fourth Edition by V. Raja Raman.

Learning Outcomes: After completing this course, student will be aware of structure, functioning and working procedure of a computer system.

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