

Annexure 'AAB-CD-01'

**Course Title: Computer and Information Technology** 

**Course Code: CSIT113** 

Credit Units: 4 Course Level: UG

L	Т	P/S	SW/FW	No. of PSDA	TOTAL CREDI T UNITS
2		2	2	5	4

## **Course Objectives:**

The course objective is to

- Provide the basic knowledge of computer system, its history
- Provide basic knowledge of architecture and components of a computer system
- Provide knowledge about number systems and their conversions
- Provide skills to programming concepts like flowchart, algorithms and pseudocode

**Pre-requisites: None** 

# **Course Learning Outcomes:**

- Explain the architecture and different units of a computer system.
- Describe different number systems and their conversions
- Categorize the use of Information Technology system basics
- Explain the use of operating system,

• Explain concept of programming concepts

Course Content	Weightage (%
Module I :	20
<b>Descriptors/Topics:</b> Computer Fundamentals: Generations of Computers, Definition, Block Diagram along with its components, characteristics & classification of computers, Limitations of Computers, Human-Being VS Computer, Applications of computers in various fields. Memory: Concept of primary & secondary memory, RAM, ROM, types of ROM, Cache Memory, flash memory, Secondary storage devices: Sequential & direct access devices viz. magnetic tape, magnetic disk, optical disks i.e. CD, DVD, virtual memory.	
Module II:	20
Descriptors/Topics; Computer hardware & software: I/O devices, definition of software, relationship between hardware and software, types of software. Overview of operating system: Definition, functions of operating system, concept of multiprogramming, multitasking, multithreading, multiprocessing, time-sharing, real time, single-user & multi-user operating system. Computer Virus: Definition, types of viruses, Characteristics of viruses, anti-virus software.	
Module III :	20
Descriptors/Topics; Computer Languages: Analogy with natural language, machine language, assembly language, high-level languages, fourth generation languages, compiler, interpreter, assembler, Linker, Loader, characteristics of a good programming language, Planning the Computer Program: Concept of problem solving, Problem definition, Program design, Debugging, Types of errors in programming, Documentation. Structured programming concepts, Programming methodologies viz. top-down and bottom up programming, Advantages and disadvantages of Structured programming.	
Module IV :	20
Descriptors/Topics:  Overview of Networking: An introduction to computer networking, Network types (LAN, WAN, MAN), Network topologies, Modes of data transmission, Forms of data transmission, Transmission channels(media), Introduction to internet and its uses, Applications of internet, Hardware and Software requirements for internet, Intranet, Applications of intranet.	
Module V:	20

<b>Descriptors/Topics:</b>
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Functions and features of Windows and hands on practical's, MS-Word, Ms-Excel, MS-PowerPoint, MS-Access.

List of Practical's

- 1.EXPLORE WINDOWS AND ITS FEATURES, EXECUTE DOS COMMANDS
- 2.CREATING CALENDER USING MS-WORD AND DISPLAY SPECIFIC HOILDAY LIST OF SAME.
- 3.CREATING TIME TABLE IN MS-WORD.
- 4.PROCEDURE OF MAKING CV IN MS-WORD USING DIFFERENT TYPES OF BULLETS AND NUMBERING.
- 5.PROCEDURE OF USING DROP CAP IN MS-WORD.
- 6.CREATING SIMPLE NEWSLETTER IN MS-WORD.
- 7.CREATING A COVER PAGE OF A PROJECT REPORT USING MS-WORD.
- 8. USING MAIL MERGE IN MS-WORD.
- 9. USING MACROS IN MS-WORD.
- 10.CREATING GRADE SHEET USING MS-EXCEL.
- 11. DISPLAY PERCENTAGE IN PIE CHART USING MS-EXCEL.
- 12.CREATING A POWERPOINT PRESENTATION.
- 13.ADDING ANIMATION IN PRESENTATION IN POWERPOINT.

### SW/PSDA

Suggested to have 2-5 group activities

#### **Pedagogy for Course Delivery:**

The course joins together lectures, practical labs, case studies, work assignments.

### **Assessment Scheme**

75 25 100			
	75	25	

**Theory Assessment (L&T):** 

	End Term Examination				
	(60%)				
Components (Drop down)	Viva	CT	Self Work	Attendance	
Weightage (%)	5	10	20	5	60

# Lab/ Practical/ Studio Assessment:

	Continuous Assessment/Internal Assessment					End Term Examination	
		(60 %)					
Components (Drop down	Mid-Term Exam	Lab Record	Continuous Performance	Internal Viva	Attendance	Practical Evaluation	Viva
Weightage (%)	10	10	10	5	5	40	20

**Text Books:** 

- 1. Gill, Nasib S.: Essentials of Computer and Network Technology, Khanna Book Publishing Co., New Delhi.
- 2. Gill Nasib Singh: Computing Fundamentals and Programming in C, Khanna Books Publishing Co., New Delhi.
- 3. Chhillar, Rajender S.: Application of IT in Business, Ramesh Publishers, Jaipur.
- 4. Donald Sanders: Computers Today, McGraw-Hill Publishers.
- 5. Davis: Introduction to Computers, McGraw-Hill Publishers.
- 6. V. Rajaraman: Fundamental of Computers, Prentice-Hall India Ltd., New Delhi.
- 7. Learning MS-Office2000 by R Bangia (Khanna Book Pub)
- 8. Teach yourself MS-Office by Sandlers (BPB Pub).
- 9. Using MS-Office by Bott( PHI). Note: Latest and additional good books may be suggested and added from time to time, covering the syllabus