KIIT POLYTECHNIC, BHUBANESWAR

LESSON PLAN
Session (2022-2023)

Discipline: Mechanical/metallurgy Engineering	**Semester:** 1st, W/2022	**Name of the faculty:** Laxmipriya Samantaray **Email:** laxmipriyasamantarayfcs@kp.kiit.ac.in
Subject: Computer Application, Theory-1b	**No. of Days/week:** 05	**Start Date:** 24/10/2022 **End Date:** 20/02/2023

Week	Class Day	Theory Topics
1st	1st	**1. Introduction to Computer Organisation**
	2nd	Introduction to Computer Evolution of Computers Generation of Computers Classification
	3rd	of Computers
	4th	Basic Organisation of Computer (Functional Block diagram) Input Devices, CPU &
2nd	1st	Output Devices.
	2nd	Computer Memory and Classification of Memory
	3rd	Revision
	4th	Question answer discussion
3rd	1st	**2. Introduction to Computer Software**
	2nd	Software concept, System software, Application software
	3rd	Overview of Operating System Objectives and Functions of O.S
	4th	Types of Operating System: Batch Processing, Multiprogramming, Time Sharing OS
4th	1st	Features of DOS, Windows and UNIX
	2nd	Programming Languages
	3rd	Compiler Interpreter Computer Virus
	4th	Different Types of computer virus
5th	1st	Detection and prevention of Virus
	2nd	Application of computers in different Domain
	3rd	Revision
	4th	**3. Introduction to Computer Network & Internet**
6th	1st	Networking concept, Protocol, Connecting Media, Date Transmission mode
	2nd	Network Topologies, Types of Networks
	3rd	Networking Devices like Hub, Repeater, Switch, Bridge, Router, Gateway & NIC
	4th	Internet Services like E-Mail, WWW, FTP, Chatting, Internet Conferencing,
7th	1st	Electronic Newspaper & Online Shopping
	2nd	Different types of Internet connectivity and ISP

	3rd	Revision
	4th	Quiz -1
8th	1st	**4. Introduction to File Management & Data Processing**
	2nd	Concept of File and Folder
	3rd	File Access and Storage methods.
	4th	Sequential, Direct, ISAM
9th	1st	Data Capture, Data storage
	2nd	Data Processing and Retrieval
	3rd	Doubt Clearing Session
	4th	Revision
10th	1st	**5. Introduction to Problem Solving Methodology**
	2nd	Algorithm, Pseudo code and Flowchart Generation of Programming Languages
	3rd	Structured Programming Language
	4th	Examples of Problem solving through Flowchart
11th	1st	Continuing Problem-solving flowchart
	2nd	Revision
	3rd	**6. Overview of C Programming Language**
	4th	Constants, Variables and Data types in C Managing Input and Output operations.
12th	1st	Operators, Expressions, Type conversion & Typecasting
	2nd	Decision Control and Looping Statements (If, If-else, If-else-if, Switch, While, do while,
	3rd	For, Break, Continue & Goto)
	4th	Programming Assignments using the above features.
13th	1st	Revision
	2nd	Quiz -2
	3rd	**7. Advanced Features of C**
	4th	Functions and Passing Parameters to the Function (Call by Value and Call by Reference)
14th	1st	Scope of Variables and Storage Classes
	2nd	Recursion Function and Types of Recursions
	3rd	One Dimensional Array and Multidimensional Array
	4th	String Operations and Pointers
15th	1st	Pointer Expression and Pointer Arithmetic Programming Assignments using the above
	2nd	features. Structure and Union (Only concepts, No Programming)
	3rd	Doubt Clearing Session
	4th	Revision