

UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA
Department of Mathematics & Science

Academic Lesson Plan for 1st Semester - 2023 (Winter)

Subject: COMPUTER APPLICATION-THEORY (Th.1b)

Name of the teaching faculty- Dr. Sisira Kumar Kapat, Lecturer (Computer Application)

Semester from date: 16/08/2023	No. of periods per week: 4 No. of weeks: 15 Total periods: 60	Internal Exam. : 20 Marks End Semester Exam.: 80 Marks Total Marks: 100 Marks
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WEEK	CLASS DAY	THEORY/PRACTICAL TOPICS
1ST	1ST	Introduction to Computer, Evolution of Computers
	2ND	Generation of Computers, Classification of Computers
	3RD	Basic Organisation of Computer (Functional Block diagram)
	4TH	Input Devices, CPU & Output Devices.
2ND	1ST	Computer Memory and Classification of Memory
	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
3RD	1ST	Features of DOS, Windows and UNIX, Programming Languages
	2ND	Compiler, Interpreter
	3RD	Computer Virus, Different Types of computer virus, Detection and prevention of Virus
	4TH	Application of computers in different Domain
4TH	1ST	Networking concept, Protocol, Connecting Media, Data Transmission mode
	2ND	Network Topologies, Types of Network
	3RD	Networking Devices: Hub, Repeater, Switch
	4TH	Networking Devices: Bridge, Router, Gateway & NIC
5TH	1ST	Internet Services like E-Mail, WWW
	2ND	FTP, Chatting, Internet Conferencing
	3RD	Electronic Newspaper & Online Shopping
	4TH	Different types of Internet connectivity and ISP
6TH	1ST	Concept of File and Folder
	2ND	File Access and Storage methods.
	3RD	Sequential, Direct, ISAM
	4TH	Data Capture, Data storage
7TH	1ST	Data Processing and Retrieval
	2ND	Algorithm, Pseudo code
	3RD	Flowchart
	4TH	Generation of Programming Languages
8TH	1ST	Structured Programming Language
	2ND	Examples of Problem solving through Flowchart
	3RD	Constants, Variables and Data types in C
	4TH	Managing Input and Output operations.
9TH	1ST	Operators, Expressions,
	2ND	Type conversion & Typecasting
	3RD	Decision Control Statements (if, if-else, if-else-if), Programming Assignments using these features.

	4TH	Decision Control Statements (if, if-else, if-else-if), Programming Assignments using these features.
10TH	1ST	Loop Control Statements (While and do-while loop) Programming Assignments using these features.
	2ND	Loop Control Statements (While and do-while loop) Programming Assignments using these features.
	3RD	Loop Control Statements (for loop) Programming Assignments using these features.
	4TH	Loop Control Statements (for loop) Programming Assignments using these features.
11TH	1ST	Switch Control Statement (use of break) Programming Assignments using these features.
	2ND	Switch Control Statement (use of break) Programming Assignments using these features.
	3RD	Use of continue and goto in programming.
	4TH	Summary of control statements. Programming Assignments using different control statements.
12TH	1ST	Summary of control statements. Programming Assignments using different control statements.
	2ND	Functions and Passing Parameters to the Function (Call by Value and Call by Reference)
	3RD	Functions and Passing Parameters to the Function (Call by Value and Call by Reference) Programming Assignments using the above features.
	4TH	Functions and Passing Parameters to the Function (Call by Value and Call by Reference) Programming Assignments using the above features.
13TH	1ST	Scope of Variables and Storage Classes Programming Assignments using the above features.
	2ND	Recursion Function and Types of Recursion Programming Assignments using the above features.
	3RD	Recursion Function and Types of Recursion Programming Assignments using the above features.
	4TH	One Dimensional Array Programming Assignments using the above features.
14TH	1ST	Multidimensional Array Programming Assignments using the above features.
	2ND	Multidimensional Array Programming Assignments using the above features.
	3RD	String Operations and Pointers Programming Assignments using the above features.
	4TH	String Operations and Pointers Programming Assignments using the above features.
15TH	1ST	Pointer Expression and Pointer Arithmetic Programming Assignments using the above features.
	2ND	Pointer Expression and Pointer Arithmetic Programming Assignments using the above features.
	3RD	Pointer Expression and Pointer Arithmetic Programming Assignments using the above features.
	4TH	Structure and Union (Only concepts, No Programming)