

Lesson Plan

Name of the Faculty: Ashok Kumar

Discipline: Mechanical Engineering

Semester: 1st

Subject: FIT (Fundamentals of Information Technology)

Lesson Plan Duration: 16 weeks

Work Load (Lecture/Practical) per Week (In Hours): Lecture - 02, Practical - 04

Week	Lec. Day	Theory Topic	Prac. Day	Group	Practical Topic
1st	1	Brief history of development of computers	1st	Group-1	Browser features, browsing, using various search engines, writing search queries
	2	Definition of Computer, Block diagram of a Computer, Hardware, Software, Booting: Cold Boot, Warm Boot	2nd	Group-2	Browser features, browsing, using various search engines, writing search queries
2nd	3	Interaction between the CPU and Memory with Input/Output devices	3rd	Group-1	Visit various e-governance/Digital India portals, understand their features, services
	4	Function of CPU and major functional parts of CPU, Memory, Bit, Nibble, Byte, KB, MB, GB, TB, PB	4th	Group-2	Visit various e-governance/Digital India portals, understand their features, services
3rd	5	Functions of memory, Use of storage devices in a Computer	5th	Group-1	Read Wikipedia pages on computer hardware components, look at those components in lab, identify them, recognize various ports/connections
	6	List types of memory used in a Computer	6th	Group-2	Read Wikipedia pages on computer hardware components, look at those components in lab, identify them, recognize various ports/connections
4th	7	Importance of cache memory, CPU speed and CPU word length	7th	Group-1	Using Administrative Tools/Control Panel Settings of Operating Systems
	8	Revision Unit-1	8th	Group-2	Using Administrative Tools/Control Panel Settings of Operating Systems
5th	9	Understanding browser, Introduction to WWW, efficient use of search engines, Awareness about Digital India portals (state portals, e-governance)	9th	Group-1	Connect various peripherals (printer, scanner, etc.) to computer, explore various features of peripheral and their device driver software
	10	Advantages of Email, Various email service providers, Creation of email, sending and receiving emails, attaching documents with email	10th	Group-2	Connect various peripherals (printer, scanner, etc.) to computer, explore various features of peripheral and their device driver software
6th	11	Effective use of Gmail, G-Drive, Google Calendar, Google Sites, Google Sheets, Online mode of communication using Google Meet, Webex	11th	Group-1	Explore features of Open Office tools and MS Office, create documents, create presentation, create spreadsheet, using these features, do it in lab
	12	Revision Unit-2	12th	Group-2	Explore features of Open Office tools and MS Office, create documents, create presentation, create spreadsheet, using these features, do it in lab
7th	13	Introduction to Programming, Steps involved in problem solving, Definition of Algorithm	13th	Group-1	Working with Conversion Software like PDF to Word, Word to PPT, etc.
	14	Definition of Flowchart, Steps involved in algorithm development	14th	Group-1	Working with Conversion Software like PDF to Word, Word to PPT, etc.
8th	15	Differentiate algorithm and flowchart, Symbols used in flowcharts	15th	Group-1	Working with Mobile Applications – Searching for Authentic Mobile app, Installation and Settings, Govt. of India Mobile Application
	16	Algorithms for simple problems, flowcharts for simple problems, Practice logic building using flowchart/algorithms	16th	Group-2	Working with Mobile Applications – Searching for Authentic Mobile app, Installation and Settings, Govt. of India Mobile Application
9th	17	Revision Unit-3	17th	Group-1	Creating email id, sending and receiving mails with attachments
	18	Office Tools like LibreOffice/OpenOffice/MS Office	18th	Group-2	Creating email id, sending and receiving mails with attachments

Week	Lec. Day	Theory Topic	Prac. Day	Group	Practical Topic
10th	19	OpenOffice Writer – Typesetting Text and Basic Formatting, Inserting Images, Inserting Tables	19th	Group-1	Using Google Drive, Google Calendar
	20	Bookmarks, Tables and Table Properties in Writer, Introducing LibreOffice/OpenOffice Calc	20th	Group-2	Using Google Drive, Google Calendar
11th	21	Working with Cells, Sheets, data, tables, using formulae and functions, using charts and graphics	21st	Group-1	Create Flow chart and Algorithm for the following: a. Addition of n numbers and display result; b. Convert temperature from Celsius to Fahrenheit; c. Find Area and Perimeter of Square, Rectangle, Triangle
	22	OpenOffice Impress – Creating and Viewing Presentations, Inserting Pictures and Tables, Slide Master and Slide Design, Custom Animation	22nd	Group-2	Create Flow chart and Algorithm for the following: a. Addition of n numbers and display result; b. Convert temperature from Celsius to Fahrenheit; c. Find Area and Perimeter of Square, Rectangle, Triangle
12th	23	Revision Unit-4	23rd	Group-1	e. Find the smallest of two numbers; f. Find whether given number is Even or Odd; g. Print first n even numbers; h. Find sum of series $1+2+3+\dots+n$
	24	Introduction to Digital Marketing – Why Digital Marketing	24th	Group-2	e. Find the smallest of two numbers; f. Find whether given number is Even or Odd; g. Print first n even numbers; h. Find sum of series $1+2+3+\dots+n$
13th	25	Characteristics of Digital Marketing, Tools for Digital Marketing	25th	Group-1	i. Print multiplication table of a number; j. Generate first n Fibonacci terms 0,1,1,2,3,5...n (n>2); k. Sum and average of given series of $1+2+3+\dots+n$
	26	Effective use of Social Media like LinkedIn, Google+, Facebook, Twitter, etc.	26th	Group-2	i. Print multiplication table of a number; j. Generate first n Fibonacci terms 0,1,1,2,3,5...n (n>2); k. Sum and average of given series of $1+2+3+\dots+n$
14th	27	Features of Social Media, Advantages and Disadvantages of Social Media	27th	Group-1	l. Factorial of number n ($n! = 1 \times 2 \times 3 \times \dots \times n$); m. Armstrong Number; n. Find whether given number is Prime or Composite
	28	Social Media (continued)	28th	Group-2	l. Factorial of number n ($n! = 1 \times 2 \times 3 \times \dots \times n$); m. Armstrong Number; n. Find whether given number is Prime or Composite
15th	29	Revision Unit-5	29th	Group-1	Revision
	30	Revision	30th	Group-2	Revision
16th	31	Revision	31st	Group-1	Viva
	32	Revision	32nd	Group-1	Viva