

ASIAN SCHOOL OF TECHNOLOGY, KHORDHA

ACADEMIC LESSON PLAN (WINTER-2026)

COURSE CODE: TH 5- Fundamentals of Computing and Artificial Intelligence

Discipline: All Branch(Common) , Semester: 1st , Name of Faculty : MISS.SMRUTI REKHA SETHI			
Subject: Fundamentals of Computing and Artificial Intelligence	No. of days/ week Class allotted: 2periods/week	No of periods available: 64	Effective Semester from Date: 17.08.2026 To 17.04.2027
			NO OF WEEK-32
Week	Class Day		Theory
1 st	1 st	1	UNIT1: Basic Organization of computer:
	2 nd	1	• Introduction to Computer
2 nd	3 rd	1	• Functional block diagram of computer
	4 th	1	• Input units: Keyboard, Mouse, Scanner, Joystick
3 rd	5 th	1	• Output units: Monitor, Printer, Speaker
	6 th	1	• CPU: ALU, Control unit
4 th	7 th	1	• Memory: Primary memory
	8 th	1	secondary memory (HDD, SSD)
5 th	9 th	1	• Memory Hierarchy
	10 th	1	• Memory Hierarchy
6 th	11 th	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
	12 th	1	Class test-1
7 th	13 th	1	UNIT 2: Computer software
	14 th	1	• Types of software (System software, Application software, utility software)
8 th	15 th	1	System software
	16 th	1	Application software
9 th	17 th	1	utility software
	18 th	1	• What is Operating Systems
10 th	19 th	1	• Functions of Operating Systems
	20 th	1	• Types of Operating Systems (GUI, CUI, Multi-programmed, Timesharing & Real time)
11 th	21 st	1	GUI, CUI
	22 nd	1	Multi-programmed
12 th	23 rd	1	Timesharing
	24 th	1	Real time
13 th	25 th	1	• Computer Virus (Boot Sector Virus, Macro Virus, Memory Resident Virus, Polymorphic Virus, File Infector Virus)
	26 th	1	Boot Sector Virus ,Macro Virus
14 th	27 th	1	Memory Resident Virus, Polymorphic Virus
	28 th	1	File Infector Virus
15 th	29 th	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
	30 th	1	Class test-2

16 th	31 st	1	Internal Assesment-I
	32 nd	1	Doubt Clearing class
17 th	33 rd	1	UNIT 3: Computer Networks and Internet
	34 th	1	• Basic concept of computer networking
18 th	35 th	1	• Types of Networks (PAN, LAN, MAN, WAN)
	36 th	1	• Transmission media (wired and Wireless media)
19 th	37 th	1	• Networking Devices (Hub, Switch, Router) (definitions only) • Basic concept of internet, ISP, Web browser and search engines
	38 th	1	• Internet Services (E-Mail, WWW, Chatting, Conferencing, Online Shopping)
20 th	39 th	1	• Awareness about Digital India portals (state and national portals).
	40 th	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
21 st	41 st	1	UNIT 4: Problem Solving Methodology
	42 nd	1	• Algorithm • Flowchart • Examples of Problem solving through Flowchart
22 nd	43 rd	1	a) Write a program to determine sum and average of 5 numbers.
	44 th	1	b) Write a program to find the greatest number among two numbers.
23 rd	45 th	1	c) Write a program to check the input number is even or odd.
	46 th	1	d) Write a program to find the average of n numbers by using for loop.
24 th	47 th	1	e) Write a program to find the factorial of a number.
	48 th	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
25 th	49 th	1	Class test-3
	50 th	1	Internal Assesment-II
26 th	51 st	1	UNIT 5: Python Essentials
	52 nd	1	• Basic Python Syntax • Input and print statements • Variables & Constants • Data Types (int, float, string)
27 th	53 rd	1	• Operators (Arithmetic, Assignment, Logical, Comparison)
	54 th	1	• Conditional Statements (if, if...else, if...elif...else) • Loops (for, while)
28 th	55 th	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
	56 th	1	UNIT 6: Introduction to AI & Fundamentals of AI
29 th	57 th	1	• Definition of Artificial Intelligence (AI) • Goals and Characteristics of AI

	58th	1	• Importance and Applications of AI
30th	59th	1	• AI in Daily life • Definition of Generative AI
	60th	1	• Definition of Machine Learning • Definition of Deep Learning
31st	61st	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
	62nd	1	Class test-4
32nd	63rd	1	Internal Assesment-III
	64th	1	PREVIOUS YEAR QUESTION AND ANSWER DISCUSSION

Smruti Rekha Sethi

NAME OF FACULTY

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