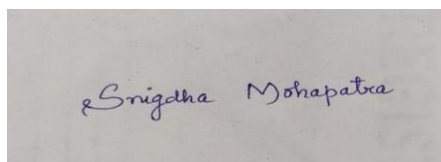


ASIAN SCHOOL OF TECHNOLOGY, KHORDHA
ACADEMIC LESSON PLAN (WINTER-2026)
TH 1- INTERNET OF THINGS-(COURSE CODE: CSEPC 301)

Department: CSE		Semester: 5 th ,	Name of Faculty: MISS.SNIGDHA MOHAPATRA
Subject: INTERNET OF THINGS(IOT)	No. of days/ week Class allotted: 3 periods/ week	No. of periods available: 45	Effective Semester from Date: 02.07.2026 To 05.11.2026
			No. of Week-15
			Topic to be Covered:
			Theory
1 st	1 st	1	UNIT 1: INTRODUCTION TO INTERNET OF THINGS(IOT):
	2 nd	1	1.1 Overview of IoT-Definition and significance of IoT,
	3 rd	1	1.2 Historical evolution and future prospects
2 nd	4 th	1	1.3 Applications across various industries, IoT Architecture and Components
	5 th	1	1.4 Basic architecture-sensors, actuators, connectivity and data processing
	6 th	1	1.5 Hardware components: microcontrollers (e.g., Arduino, Raspberry Pi),
3 rd	7 th	1	1.6 Software components: Operating systems and middleware.
	8 th	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
	9 th	1	UNIT 2: SENSORS, ACTUATORS, AND ACQUISITION:
4 th	10 th	1	2.1 Sensors and Actuators, Types of sensors: Temperature, humidity, motion, etc.,
	11 th	1	2.2 Actuators: Motors, relays, and control mechanisms, Interfacing sensors and actuators with microcontrollers
	12 th	1	2.3 Data Acquisition and Processing-Analog and digital data acquisition methods.
5 th	13 th	1	2.4 Signal conditioning and filtering techniques,
	14 th	1	2.5 Introduction to data processing and storage
	15 th	1	1. Doubt Clearing class 2. Class test -1 3. Assignment
6 th	16 th	1	UNIT 3: COMMUNICATION PROTOCOLS AND NETWORKING:
	17 th	1	3.1 IoT Communication protocols, Overview of protocols: MQTT, CoAP, HTTP, etc
	18 th	1	3.2 Wireless communication: WiFi, Bluetooth, Zigbee, Lora WAN.,
7 th	19 th	1	Wired Communication: Ethernet, serial communication,
	20 th	1	3.3 Networking Fundamentals-IP addressing and Subnetting,
	21 st	1	3.4 Network topologies and architectures,
8 th		1	3.5 Introduction to IPV6 and relevance to IoT.

	22 nd	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
	23 rd	1	UNIT 4: IOT PLATFORMS AND CLOUD INTEGRATION:
9 th	25 th	1	4.1 IoT Platforms
	26 th	1	4.2 Overview of popular IoT platforms (e.g., AWS IoT, Google Cloud IoT)
	27 th	1	4.3 Data analytics and visualisation tools
10 th	28 th	1	4.4 Edge computing concepts
	29 th	1	4.5 Cloud Computing for IoT
	30 th	1	4.6 Introduction to Cloud Services: IaaS, PaaS, SaaS
11 th	31 st	1	4.7 Integration of IoT devices with cloud platforms
	32 nd	1	4.8 Data Storage, Processing, and management in cloud
	33 rd	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
12 th	34 th	1	UNIT 5: IoT SECURITY AND PRIVACY:
	35 th	1	5.1 Security Challenges in IoT
	36 th	1	5.2 Common vulnerabilities and threats
13 th	37 th	1	5.3 Authentication and authorization mechanisms
	38 th	1	5.4 Data encryption and secure communication
	39 th	1	5.5 Privacy Consideration-Data privacy laws and regulations.
14 th	40 th	1	5.6 User consent and data ownership
	41 th	1	5.7 Best practices for ensuring privacy in IoT applications.
	42 th	1	1. Doubt Clearing class 2. Class test -2 3. Assignment
15 th	43 th	1	Revision
	44 th	1	Revision
	45 th	1	Previous Year Question Discussions

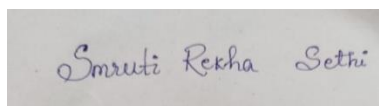


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ASIAN SCHOOL OF TECHNOLOGY, KHORDHA
ACADEMIC LESSON PLAN (WINTER-2026)
TH 2- WEB TECHNOLOGIES-(COURSE CODE: CSEPC 303)

Department: CSE Semester:5 th ,		Name of Faculty: MISS.SMRUTI REKHA SETHI	
Subject: Web Technologies (WT)	No.ofdays/ week Class allotted: 3periods/ week	No. of periods available: 45	Effective Semester fromDate:02.07.2026 To 05.11.2026
			No. ofWeek-15
			Topic to be Covered:
Week	ClassDay		Theory
1 st	1 st	1	UNIT 1: INTRODUCTION TO WWW:
	2 nd	1	1.1 Protocols and programs, secure connections 1.2 Application and Development tools
	3 rd	1	1.3 the web browser, what is server, setting up UNIX and LINUX web servers. 1.4 Logging users, dynamic IP Web Design: Website design principles, planning the site and navigation.
2 nd	4 th	1	UNIT 2: WEB SYSTEMS ARCHITECTURE:
	5 th	1	2.1 Architecture of Web based systems-client/server(2-tier) architecture 2.2 3-Tier architecture
	6 th	1	2.3 Discussion on 2-tier and 3-tier architecture 2.4 Building blocks of fast and scalable data access Concepts- Caches-Proxies-Indexes-Load Balancers-Queues
3 rd	7 th	1	2.5 Web Application architecture (WAA)
	8 th	1	1. Doubt Clearing class 2. Class test -1 3. Assignment
	9 th	1	UNIT 3: JAVA SCRIPT:
4 th	10 th	1	3.1 Client-SIDE SCRIPTING 3.2 What is JavaScript, Simple JavaScript
	11 th	1	3.3 variables, functions, conditions, loops and repetition.
	12 th	1	UNIT 4: Advance Scripting:
5 th	13 th	1	4.1 JavaScript and objects, JavaScript own objects 4.2 DOM and web browser environments
	14 th	1	4.3 forms and validations 4.4 DHTML: Combining HTML
	15 th	1	4.5 CSS 4.6 JavaScript 4.7 events and buttons
6 th	16 th	1	4.8 Controlling your browser 4.9 Ajax: Introduction advantages & disadvantages
	17 th	1	4.10 Ajax based web application 4.11 alternatives of Ajax
	18 th	1	4.12 XML, XSL and XSLT: Introduction to XML 4.13 Uses of XML

7 th	19 th	1	4.14simple XML 4.15DTD and Schemas
	20 th	1	4.17XML with application
	21 st	1	4.18XSL and XSLT 4.19Introduction to web Services
8 th	22 nd	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
	23 rd	1	UNIT 5: PHP:
	24 th	1	5.1Server-side Scripting 5.2Arrays
9 th	25 th	1	5.3Functions and Forms
	26 th	1	5.4Advance PHP Databases
	27 th	1	5.5Basic command with PHP examples
10 th	28 th	1	5.6Connections to server
	29 th	1	5.7Creating database
	30 th	1	5.8Selecting a database 5.9listing database
11 th	31 st	1	5.10 listing table names
	32 nd	1	5.11 creating a table
	33 rd	1	5.12Inserting data 5.13Altering tables
12 th	34 th	1	5.14Queries
	35 th	1	5.15Deleting database
	36 th	1	5.16Deleting data and tables 5.17 PHP my admin
13 th	37 th	1	5.18Database bugs
	38 th	1	1. Doubt Clearing class 2.Class test -2 3. Assignment
	39 th	1	UNIT 6:INTRODUCTION TO MODERN FRAMEWORKS: 6.1 React
14 th	40 th	1	6.2 Angular
	41 st	1	6.3Node JS
	42 nd	1	6.4Bootstrap 6.5Tailwind CSS
15 th	43 rd	1	Revision
	44 th	1	Revision
	45 th	1	Previous Year Question Discussions



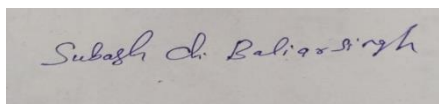
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ASIAN SCHOOL OF TECHNOLOGY, KHORDHA
ACADEMIC LESSON PLAN (WINTER-2026)
TH-3A (PROGRAMMING WITH JAVA (COURSE CODE: CSEPE 301)

Department :CSE	Semester:5 th ,		Name of Faculty: Subash ch. Baliarsingh
Subject: Programming with Java	No. of days/ week Class allotted: 3periods/week	NO. OF PERIODS AVAILABLE	Effective From Date:02.07.2026 to 05.11.2026
			No. of Week-16
			Topic to be Covered:
Week	Class Day	45	Theory
1 st	1st	1	UNIT1:INTRODUCTIONTO JAVA 1.1History and features of Java?
			1.2Setting up the java Development Kit(JDK)
			1.3The Java Virtual Machine (JVM)
	2nd	1	1.4VariablesandDatatypes 1.5Primitive Datatypes&Declarations
			1.6Arrays,Non-PrimitiveDatatypes 1.7Control flow Statements (if-else, switch, loops)
	3 rd	1	1.8Arrays,Non-PrimitiveDatatypes 1.9Castingand Type Casting
2 nd	4 th	1	1.10Writing Simple Program 1.11OperatorsandExpressions
			1.12Compiling and Executing 1.13 Create Packaged Class
	5 th	1	UNIT 2 :Introduction to Object Oriented Programming 2.1Concept of oops :object , inheritance , polymorphism and Syntax of class
			classes ,Encapsulation
3 rd	7 th	1	2.2DefiningaClass & Object 2.3ConceptandSyntaxofMethods
	8 th	1	2.4DefiningMethods 2.5CreatinganObject
4 ^t	9 th	1	2.6AccessingClassMembers 2.7InstanceDataandClassData
			2.8Accessspecifiers: public, protected ,private , default 2.9 Encapsulation: Hiding data through access modifiers 2.11 Access control
	10 th	1	2.10 Constructor, over loading methods, overloading constructors
			11 th
	12 th	1	
	13 th	1	
14 th	1		
6 th	15 th	1	

7th	16 th	1	UNIT 3:INHERITANCE 3.1Inheritance in Java
	17 th	1	3.2UseofInheritance 3.3TypesofInheritance
	18 th	1	3.4SingleInheritance
		1	3.5Multi-level Inheritance
		1	3.6HierarchicalInheritance
8th	19 th		3.7Method of overriding
	20 th	1	3.8 Interface: Defining and implementing interface
			1. Doubt Clearing class 2. Quiz test 3. Assignment
9 th	21 st	1	UNIT 4:Interface 4.1Purpose of interface
		1	4.2defining an interface
	22 nd	1	4.3implementing interface
		1	4.4 Interface variable
	23 rd	1	4.5 Extending interface
10 th	24 th		1. Doubt Clearing class 2. Class test -2 3. Assignment
11th	25 th	1	UNIT5:ARRAY AND STRING 5.1Introduction
	26 th	1	5.2Declaring array, accessing array element
	27 th	1	5.3multi dimensional arrays
	28 th	1	5.4string array, String methods
12 th	29 th	1	5.5wrapper Classes
	30 th	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
13 th	31th	1	UNIT6:EXCEPTIONHANDLING / JAVAFILESAND I/O 6.1Exceptions Overview
	32 nd	1	6.2Exception Keywords 6.3Catching Exceptions
		1	6.4Using Finally Statement 6.5Exception Methods
	34 th	1	6.6Declaring Exceptions 6.7Defining and throwing exceptions
14 th	35 th	1	6.8 Errors and Runtime Exceptions
			6.9What is astream?
		1	6.10Readingandwritingto files(only text files 6.11Input and Output Stream

	36 th	1	6.12 Manipulating Input data
	37 th		6.13 Opening and Closing Streams
15 th	38 th	1	6.14 Predefined streams
	39 th		6.15 File handling Classes and Methods , buffered writer
	40 th		1. Doubt Clearing class 2. Quiz test 3. Assignment
15 th	41 st		UNIT 7: MULTITHREADED PROGRAMMING
		1	7.1 basic of threads
	42 nd	1	7.2 java threaded model
	43 rd	1	7.3 defining thread model runnable interface
16 th	44 th	1	7.4 thread super class
	45 th	1	7.5 thread synchronization using synchronized blocks
	46 th	1	1. Doubt Clearing class 2. Class test 2 3. Assignment
			Revision
			Previous Year Question Discussions



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ASIAN SCHOOL OF TECHNOLOGY, KHORDHA
ACADEMIC LESSON PLAN (WINTER-2026)
TH: 4(A)- Mobile Computing – (COURSE CODE: CSEPE 303)

Department: CSE		Semester: 5 th ,	Name of Faculty: MISS.SMRUTI REKHA SETHI
Subject: Mobile Computing (MC)	No. of days/ week Class allotted: 3 periods/week	No. of periods available: 4 5	Semester From Date: 02.07.2026 To 05.11.2026
			No. of Week- 15
			Topic to be Covered:
Week	Class Day		Theory
1 st	1 st	1	UNIT 1: INTRODUCTION TO WIRELESS & MOBILE NETWORKS
	2 nd	1	1.1 Historic background 1.2 cellular Industry
	3 rd	1	1.3 Advantages and Disadvantages of Mobile systems 1.4 Cell concepts 1.5 Wireless Network
2 nd	4 th	1	UNIT 2: BASICS OF WIRELESS & MOBILE SYSTEM:
			2.1 Wire based and wireless systems 2.2 Infrared systems
	5 th	1	2.3 Cellular radio 2.4 Concepts of wireless LANS
	6 th	1	2.5 Voice signals-its characteristics 2.6 Frequency spectrum 2.7 Digital signal, Broadband and baseband signals
3 rd	7 th	1	UNIT 3: CELLULAR SYSTEMS:
	8 th	1	3.1 Cell layout 3.2 Path-loss 3.3 Propagation delay
	9 th	1	3.4 Fading size and shape of cell 3.5 Concepts of frequency reuse 3.6 Spectrum efficiency
4 th	10 th	1	3.7 Cell capacity to handle calls
	11 th	1	3.8 Call demand in a cell channel requirement
	12 th	1	3.9 Cell splitting 3.10 Cell sectoring concept
5 th	13 th	1	1. Doubt Clearing class 2. Class test 1 3. Assignment
	14 th	1	UNIT 4: CHANNEL UTILIZATION SCHEMES:
	15 th	1	4.1 Concepts of Multiplexing: FDM 4.2 FDMA
6 th	16 th	1	4.3 TDD 4.4 TDM
	17 th	1	4.5 CDMA 4.6 Concepts of spread spectrum
	18 th	1	4.7 Frequency hopping 4.8 Introductory idea on AMPS 4.9 Compression operations
7 th	19 th	1	4.10 Voice compression

	20 th	1	4.11 Data compression
	21 st	1	4.12 V.42 4.13 Fax compression
8 th	22 nd	1	4.14 Introductory idea
	23 rd	1	4.15 Discussion
	24 th	1	4.16 Revision 1. Doubt Clearing class 2. Quiz test 3. Assignment
9 th	25 th	1	UNIT 5: GLOBAL SYSTEM FOR MOBILE COMMUNICATION (GSM):
	26 th	1	5.1 Historical background 5.2 SIM and GSM
	27 th	1	5.3 Overview of GSM Operations 5.4 Registration 5.5 Call Establishment 5.6 Roaming
10 th	28 th	1	5.7 GSM channel 5.8 Operations
	29 th	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
	30 th	1	UNIT 6: BLUETOOTH AND WIRELESS LANS:
11 th	31 st	1	6.1 Need of compatibility
	32 nd	1	6.2 Bluetooth concepts
	33 rd	1	6.3 Comparison with IR system 6.4 Architecture
12 th	34 th	1	6.5 Potential applications
	35 th	1	6.6 IEEE 802.11x Wireless LAN standard - basic configuration and architecture
	36 th	1	6.7 concepts of wireless home networking
13 th	37 th	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
	38 th	1	UNIT 7: SECURITY AND PRIVACY:
	39 th	1	7.1 Introduction 7.2 Frequency hopping spread spectrum
14 th	40 th	1	7.3 Encryption concepts
	41 st	1	7.4 Public key Encryption
	42 nd	1	7.5 Authentication Model 7.6 smart card
15 th	43 rd	1	7.7 Biometric Authentication
	44 th	1	1. Doubt Clearing class 2. Class test 2 3. Assignment, Revision
	45 th	1	Previous Year Question Discussions

Smriti Rekha Sethi

Signature of Faculty

ASIAN SCHOOL OF TECHNOLOGY, KHORDHA

ACADEMIC LESSON PLAN (WINTER-2026)

TH 5(B)- LEADERSHIP AND MANAGEMENT SKILLS-(COURSE CODE: OE 301)

Department: CSE Semester:5 th ,		Name of Faculty: MISS.SNIGDHA MOHAPATRA	
Subject: TH5(B)- LEADERSHIP AND MANAGEMENT SKILLS	No. of days/ week Class allotted: 3periods/wee k	No. of periods available: 45	Semester FromDate:02.07.2026 To 05.11.2026
			No. ofWeek-15
			Topic to be Covered:
			Theory
Week	ClassDay		
1st	1ST	1	UNIT 1: LEADERSHIP & MANAGEMENT, CONCEPT, PRINCIPLES:
	2ND	1	1.1 Definition of leadership, management
	3RD	1	1.2 Leadership Theories 1.3 Leadership Characteristics
2nd	4th	1	1.4 Principles of management
	5th	1	1.5 Managerial functions
	6th	1	1.6 Leader v/s Manager, Leader/Manager traits and character 1.7 Leadership Styles
3rd	7th	1	1. Doubt Clearing class 2. Class test 1 3. Assignment
	8th	1	UNIT 2: HUMAN RESOURCE MANAGEMENT IN ORGANIZATIONS:
	9th	1	2.1 Human Resource Management: Meaning, Nature 2.2 Objectives, Scope
4th	10th	1	2.3 Job & Job analysis
	11th	1	2.4 Staff Development: Need and Objectives of staff Development
	12th	1	2.5 Approaches
5th	13th	1	2.6 Training & development
	14th	1	2.7 Organizational Development: Components of OD process
	15th	1	2.8 Learning Organization
6th	16th	1	UNIT 3: PERSONAL DISPOSITION, SKILLS & ABILITIES OF LEADERS:
	17th	1	3.1 Self-awareness
	18th	1	3.2 Leadership characteristics 3.3 Traits
7th	19th	1	3.4 Leadership skills 3.5 Leadership abilities
	20th	1	3.6 Emotional Intelligence & its components
	21st	1	3.7 Importance in leadership
8th	22nd	1	3.8 Communication skills for effective leadership
	23rd	1	3.9 Barriers to effective Communication
	24th	1	3.10 Active Listening 3.11 Mindful Listening
9th	25th	1	3.12 Leading & Mentorship
	26th	1	3.13 Influencing & Mentoring
	27th	1	UNIT 4: LEADER'S ROLE IN MOTIVATING, INSPIRING AND TRANSFORMATIVE LEADERSHIP, NURTURING TEAM-WORK

10 th	28 th	1	4.1 Goal setting & Leadership
	29 th	1	4.2 Transformative Leadership
	30 th	1	4.3 Vision & envisioning
11 th	31 st	1	4.4 Motivational role of leader in people management
	32 nd	1	4.5 Group & team
	33 rd	1	4.6 Team Dynamics 4.7 Conflict Management
12 th	34 th	1	4.8 Strategies in managing Conflicts
	35 th	1	1. Doubt Clearing class 2. Quiz test 3. Assignment
	36 th	1	UNIT 5: CHANGE MANAGEMENT & LEADERSHIP:
13 th	37 th	1	5.1 Models of change 5.2 Forces driving change
	38 th	1	5.3 Change Management-Process
	39 th	1	5.4 Goal, Importance
14 th	40 th	1	5.5 The process of change happening in an organization
	41 st	1	5.6 Key aspects of leadership in change management 5.7 Responsibilities of a change leader.
	42 nd	1	Group/Individual presentation on the basic principles of leadership and management
15 th	43 rd	1	Discussion on readings -Individuals or group presentation of assigned topics in class on leadership and management principles and theories.
	44 th	1	1. Doubt Clearing class 2. Class test 2 3. Assignment, REVISION
	45 th	1	PREVIOUS YEAR QUESTION DISCUSSION

Snigdha Mohapatra

Signature of Faculty