

Class-11th		Subject-IT (Code-802)	
MONTH	UNITS		PRACTICAL
Jul-25	UNIT 1- Computer Organization Part A	<ul style="list-style-type: none"> • Introduction to Fundamentals of Computer and its use • Characteristics of computer • Components of computer • Block diagram of computer • Processes of task execution • steps of process execution • function of various components of computer and CPU • identify various components of computer • appreciate function and use of I/O devices • learn about various storage devices used in computer • various memory units of storage 	<ul style="list-style-type: none"> • identify and enlist various applications of computer • illustrate various components of computer under different blocks • illustrate functions of various components of computer • illustrate various types of I/O devices • identify and find out the application of each of the I/O Devices
	UNIT 1- Computer Organization Part B	<ul style="list-style-type: none"> • Introduction to Operating System and its need • functions of operating system • types of operating system • difference between various operating systems • introduction to common troubleshooting/ problems • common troubleshooting steps • troubleshooting hardware problems like display, keyboard, mouse etc. • troubleshooting printer problems • understanding printer IP address • understanding various printer settings like fast/ slow printing • sound troubleshooting • understanding speaker settings like volume etc. • troubleshooting software problems • troubleshooting networking problems • learn about problems in network fly lead, network card 	<ul style="list-style-type: none"> • identify different types of OS in computers/mobile phones • identify the different in features of various operating systems • identifying different kinds of problems in the system and its peripheral devices • setting up a printer • selecting a printer • setting default printer • changing printer settings • how to forcefully restart a computer or stop a task • demonstration of problems in fly lead, network card and possible solutions
	Employability Module UNIT 1- Communication Skills	<ul style="list-style-type: none"> • Methods of communication • Communication styles- assertive, aggressive, passive-aggressive, submissive, etc. • Writing skills to the following: Sentence, Phrase, Kinds of Sentences, Parts of Sentence, Parts of Speech, Articles, Construction of a Paragraph 	<ul style="list-style-type: none"> • Writing pros and cons of written, verbal and non-verbal communication • Listing do's and don'ts for avoiding common body language mistakes • Observing and sharing communication styles of friends, teachers and family members and adapting the best practices • Role plays on communication styles. • Demonstration and practice of writing sentences and paragraphs on topics related to the subject
Aug-25	UNIT 1- Computer Organization Part C	<ul style="list-style-type: none"> • Disk Space management • Disk Cleanup • Managing Recycle Bin • learning about disk defragmentation • learn to remove unused programs • learn to disable unused program services • restart the system • learn to use command prompt to search for a file. 	<ul style="list-style-type: none"> • Illustration to view the disk storage • to apply Disk Cleanup utilities to enhance performance of the system • to identify, view and manage Recycle Bin • Illustration and hands onto remove unused programs • Illustration and hands on to disable/enable program services • restart the computer • to search different files using various options and wildcard characters
	UNIT 2- Networking & Internet Part A	<ul style="list-style-type: none"> • Introduction • Need and benefits of networking • Components of a network: sender, receive, message, channel, • Transmission Medium (wired and wireless) • Telephone Network standard (technology used in each generation) • Working Devices (RJ45 connector, Modem, Repeater, Hub, Switch, Bridge, Gateway, Routers) • Network Topology (Bus, Star, Ring, Tree, Mesh) • Types of Networking (LAN, MAN, WAN, PAN, VAN) 	<ul style="list-style-type: none"> • Illustrate various networks and its benefits • Identify the transmission medium, devices, network topology, type of networking in computer lab • Setting up hotspot
	Employability Module UNIT 2- Self Management Skills	<ul style="list-style-type: none"> • Describe the importance of dressing appropriately, looking decent and positive body language • Describe the term grooming • Prepare a personal grooming checklist • Describe the techniques of self- exploration • Describe the important factors that influence in team building • Describe factors influencing team work • Meaning and importance of time management – setting and prioritizing goals, creating a schedule, making lists of tasks, balancing work and leisure, using different optimization tools to break large tasks into smaller tasks. 	<ul style="list-style-type: none"> • Demonstration of impressive appearance and groomed personality • Demonstration of the ability to self- explore • Group discussion on qualities of a good team • Group discussion on strategies that are adopted for team building and team work • Game on time management • Checklist preparation • To-do-list preparation
Sep-25	UNIT 2- Networking & Internet Part B	<ul style="list-style-type: none"> • Introduction and use of Internet • Digital Literacy • Terminology (Channels, Bandwidth (HERTZ, KHZ), ISP) • Internet Devices: Repeater, Hub, Switch, Gateway, Bridge, Router • Data Transfer Rate (bps, Kbps, MBps, MBPS, Gbps, GBPS) • Protocols (TCP/IP, FTP, HTTP, SMTP, POP3, PPP, UDP) • Network safety concerns: (Digital Footprints, Threats, Virus, Worm, Trojan Horse, Spam, Malware, DoS Attacks, Eavesdropping, Adware, Spyware, Snooping) • Networking Security Measures (Antivirus, Firewall, Login ids and Password) • Cyber Crime (Phishing, Pharming, Spoofing, Cyber Bullying, Hacking, Cracking, Identity Theft, Cyber Stalking, Cyber Trolling, • Cyber Safety (Netiquettes, IT Act, Cyber Laws) 	<ul style="list-style-type: none"> • Analyze the Bandwidth, • identify Internet devices and their significance • to check/view Data transfer rate in computer lab/devices • Find out the threats encountered and the security measures used in computer lab and mobile phones
Oct-25	UNIT 3- Office Automation	<ul style="list-style-type: none"> • Introduction work with Word processing applications like OpenOffice, 	<ul style="list-style-type: none"> • List the available word processing applications.
	Employability Module UNIT 3- ICT Skills	<ul style="list-style-type: none"> • Introduction to word processing. • Software packages for word processing. • Opening and exiting the word processor. • Creating a document • Editing text • Wrapping and aligning the text • Font size, type and face. • Header and Footer • Auto correct • Numbering and bullet • Creating table • Find and replace • Page numbering • Printing document • Saving a document in various formats. 	<ul style="list-style-type: none"> • Demonstration and practice of the following: • Listing the features of word processing • Listing the software packages for word processing • Opening and exit the word processor • Creating a document • Demonstration and practicing the following: • Editing the text • Word wrapping and alignment • Changing font type, size and face • Inserting header and footer • Removing header and footer • Using autocorrect option • Insert page numbers and bullet
	UNIT 3- Office Automation Tools Part B	<ul style="list-style-type: none"> • Introduction to presentation software • start OpenOffice Impress • overview of OpenOffice • study of various tabs of OpenOffice • understand various views of • presentation, animations, transitions, header, footer etc. 	<ul style="list-style-type: none"> • Students will be able to work with presentation software

Nov-25	UNIT 4- RDBMS Part A	<ul style="list-style-type: none"> Database and its purpose Components of a table Relational Database Model Terminology (Relation, Tuple, Attribute, Cardinality) Keys (Primary, Candidate, Alternate, Foreign) Introduction To MySQL Classification of MySQL commands (DDL, DML) Data Types in MySQL (char, varchar, decimal, int, date, time) Create database Create table View structure of a table Add constraints in table Modify structure Show all tables created in a database Delete structure 	<ul style="list-style-type: none"> Installation of MySQL Simple calculations in MySQL CREATE DATABASE USE CREATE TABLE DESCRIBE SHOW TABLES ALTER TABLE DROP TABLE
	Employability Module UNIT 4- Entrepreneurial Skills	<ul style="list-style-type: none"> Values in general and entrepreneurial values Entrepreneurial value orientation with respect to innovativeness, independence, outstanding performance and respect for work Attitudes in general and entrepreneurial attitudes Using imagination/ intuition Tendency to take moderate risk Enjoying freedom of expression and action Looking for economic opportunities Believing that we can change the environment Analyzing situation and planning action Involving in activity 	<ul style="list-style-type: none"> Listing of entrepreneurial values by the students. Group work on identification of entrepreneurial values and their roles after listing or reading 2-3 stories of successful entrepreneur. Exhibiting entrepreneurial values in Ice breaking, rapport building, group work and home assignments. Preparing a list of factors that influence attitude in general and entrepreneurial attitude Demonstrating and identifying own entrepreneurial attitudes during the following micro lab activities like thematic appreciation test Preparing a short write-up on "who am I" Take up a product and suggest how its features can be improved Group activity for suggesting brand names, names of enterprises, etc.
Dec-25	UNIT 4- RDBMS Part B	<ul style="list-style-type: none"> Add rows to a table Viewing content of a table Display selected data depending on specific condition Display data in a order modify the data stored in a table delete contents of a table 	<ul style="list-style-type: none"> INSERT INTO UPDATE DELETE Using WHERE, ORDER BY, DISTINCT, LIKE, BETWEEN, IN
	UNIT 5- Fundamentals to Java Programming Part A	<ul style="list-style-type: none"> Components of IDE Understand and change Properties and methods of Components like JButton, JLabel, JTextField, JTextarea, JRadioButton, JCheckBox, JPasswordField, JList, JBox, JComboBox 	<ul style="list-style-type: none"> Create a project Create a JFrameForm container Add a button component on JFrameForm and change properties like text, font, foreground etc using properties window Add other container controls like JTextField, JTextarea, JRadioButton, JCheckBox, JPasswordField, JList, JBox, JComboBox and change their properties
	Employability Module UNIT 5- Green Skills	<ul style="list-style-type: none"> Main sectors of green economy- E-waste management, green transportation, renewal energy, green construction, water management Policy initiatives for greening economy in India Stakeholders in green economy Role of government and private agencies in greening cities, buildings, tourism, industry, transport, renewable energy, waste management, agriculture, water, forests and fisheries 	<ul style="list-style-type: none"> Preparing a poster on any one of the sectors of green economy Writing a two-page essay on important initiatives taken in India for promoting green economy Preparing posters on green Sectors/Areas: cities, buildings, tourism, industry, transport, renewable energy, waste management, agriculture, water, forests and fisheries
Jan-26	UNIT 5- Fundamentals to Java Programming Part B	<ul style="list-style-type: none"> Introduction to Object Oriented Programming To understand various data types (primitive) and purpose of each data type To understand the need and usage of variables To understand usage of operators (assignment, arithmetic, relational, logical, bitwise) To understand how to attach a code with components like JButton, JLabel, JTextField and create a simple application on JFrame To understand the use of various components like JTextarea, JRadioButton, JCheckBox, JPasswordField, JList, JBox, JComboBox, JTable, JOptionPane, JPanel To understand when to use selection statements (if, if else and switch case) 	<ul style="list-style-type: none"> Display message Using JLabel and JTextField Join two text entries and display them Write code to close the application Using Joption Pane display a message "welcome to INFORMATION TECHNOLOGY" Perform simple arithmetic calculation using operators and display the result Write the code to find simple interest Write code to perform an operation based on the criteria input by the user in a checkbox or radio button change the background colour of JButton based on the colour selected from the JListBox /JComboBox accept marks in 5 subjects and find out the total, percentage. Also display grade depending on the total marks obtained. Enter a character and find out it is vowel or consonant
Feb-26			
Mar-26			