Class 12th Syllabus Session(2023-2024)

Month	Week	Syllabus	Theory	Practical	Day	Day wise topics
April	Week 1,2		Structure of a network, Types of networks: local area and wide area (web and internet), New technologies such as cloud and IoT, Public vs Private cloud, Wired and Wireless networks;	Idea of retransmission, and rate modulation when there is congestion (analogy to a road network)	Day-1	Introduction about structure of a network
					Day-2	Types of network
					Day-3	Concept of clouding and IOT
					Day-4	Idea of retransmission
					Day-5	Doubt session
					Day-6	Recap
	Week 3,4		Network devices such as a NIC, Switch, Hub, Router, and Access point.	Protocols: 2G, 3G, 4G, WiFi. What makes a protocol have a higher bandwidth?	Day-1	Introduction of network devices
					Day-2	Basic devices switch, router etc
					Day-3	Internet protocols
					Day-4	Doubt session
					Day-5	Do's and Dont's

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		Unit 1: Computer Networks (CN)			Day-5	Do's and Dont's
					Day-6	Recap
May+June	Week 1,2		Network stack: Amplitude and frequency modulation, Collision in wireless networks, Error checking and the notion of a MAC address, Main idea of routing	Basic network tools: Trace route, Ping, IPconfig, NSlookup, Whois, Speed-test	Day-1	Introduction about network stack
					Day-2	Error checking
					Day-3	Idea of routing
					Day-4	Basic network tools
					Day-5	Doubt session
					Day-6	Recap
	Week 3,4		IP addresses: (v4 and v6), Routing table, Router, DNS, and web URLs, TCP, Application layer: HTTP (basic idea), Working of email, secure communication: Encryption and certificates (HTTPS)	Network applications: Remote desktop, Remote login, HTTP, FTP, SCP, SSH, POP/IMAP, SMTP, VoIP, NFC	Day-1	Introduction of IP adresss
					Day-2	Working of email
					Day-3	Basic about network application
					Day-4	Information about secure communication
					Day-5	Practical

Month		Unit			Day	Topic
	Week 3,4		layer: HTTP (basic idea), working of email, secure communication: Encryption and certificates (HTTPS)	FTP, SCP, SSH, POP/IMAP, SMTP, VoIP, NFC	Day-4	Information about secure communication
					Day-5	Practical
					Day-6	Recap
July	Month	Unit 2: Society, Law and Ethics	Intellectual property rights, Plagiarism, digital rights management and licensing (Creative Commons, GPL and Apache), Open source, Open data, Privacy.	Technology and society: Understanding of societal issues and cultural changes induced by technology.	Day-1	Introduction about intellectual property rights
					Day-2	About plagiarism
					Day-3	Internet protocols
					Day-4	Information about technology and society
					Day-5	Open source and privacy
					Day-6	Recap
August	Month		Privacy laws,Fraud, Cyber crime-Fishing, Illegal downloads, Child pornography, Scams; Cyber forensics IT Act, 2000.	E-waste management: Proper disposal of used electronic gadgets, Identity theft, Unique ids, Biometrics, Gender and Disability issues while teaching	Day-1	About privacy laws
					Day-2	About fraud and cyber crime
					Day-3	E-waste management
					Day-4	Information about biometrics and unique id

Month		Unit			Day	Topic
August	Month		Privacy laws,Fraud, Cyber crime-Fishing, Illegal downloads, Child pornography, Scams; Cyber forensics IT Act, 2000.	disposal of used electronic gadgets, Identity theft, Unique ids, Biometrics, Gender and Disability issues while teaching and using computers	Day-3	E-waste management
					Day-4	Information about biometrics and unique id
					Day-5	Doubt session
					Day-6	Recap
September	Week 1, 2	Unit 3: Working in Spreadsheet Packages	Installation/De-installation of Office Package	Cell Referencing – Relative, Absolute and Mixed Cell Reference	Day-1	Introduction about installation of office packages
					Day-2	About cell referencing
					Day-3	About mixed cell referencing
					Day-4	Hand-on practice
					Day-5	Doubt session
					Day-6	Recap
	Week 3,4		Microsoft Excel, Libre Office-	Working with formula across	Day-1	Introduction of formula
					Day-2	Use of different keys in worksheet
					Day-3	Idea about different sheets

Month	Week	Unit	Topic	Subtopic	Day	Detail
	Week 3,4		Microsoft Excel, Libre Office-Calc, Google Sheets	Working with formula across sheets	Day-3	Idea about different sheets
					Day-4	Finding sum and avg etc
					Day-5	Hand-on practice
					Day-6	Recap
October	Week 1,2	Unit 3: Working in Spreadsheet Packages	Using formula for Sheets references and workbook reference	Specifying Header & Footer	Day-1	Idea about sheet referencing
					Day-2	Use of Header and footer
					Day-3	Idea about workbook reference
					Day-4	Doubt session
					Day-5	Hand-on practice
					Day-6	Recap
	Week 3,4		Formatting sheets	Page setup & printing	Day-1	Basic formatting of spreadsheet
					Day-2	Information about page setup
					Day-3	Process of printing sheets

Month	Week	Unit	Topic	Subtopic	Day	Detail
	Week 3,4		Formatting sheets	Page setup & printing spreadsheets	Day-3	Process of printing sheets
					Day-4	Classroom activity
					Day-5	Doubt session
					Day-6	Hand-on practice
November	Week 1,2	Unit 3: Working in Spreadsheet Packages: Advance	Protecting spreadsheet/Work book	Sorting and Filtering records	Day-1	Idea about protecting spread sheet
					Day-2	Use of sorting and filtering
					Day-3	Information about auto fill and fill handle
					Day-4	Doubt session
					Day-5	Hand-on practice
					Day-6	Recap
	Week 3,4		Exporting spreadsheet in PDF	Embedding Charts	Day-1	Need of exporting spreadsheet
					Day-2	How to export in pdf form
					Day-3	Information about embedding charts

	Week 3,4		Exporting spreadsheet in PDF form	Embedding Charts	Day-2	How to export in pdf form
					Day-3	Information about embedding charts
					Day-4	Doubt session
					Day-5	Recap
					Day-6	Hand-on practice
December	Month	Unit 3: Working in Spreadsheet Packages: Advance	Conditional Formatting	Using Form for data entry	Day-1	About conditional formatting
					Day-2	Data entry using form
					Day-3	Some advance formatting
					Day-4	Doubt session
					Day-5	Practical
					Day-6	Recap
					Day-1	Idea about data sort and filter
					Day-2	Advance formula and function

January	Week 1,2	Unit 3: Working in Spreadsheet Packages: Advance	Data Sort & Filter	Using advance formula and functions (Text, Logical, Financial etc)	Day-2	Advance formula and function
					Day-3	Where to apply advance formula
					Day-4	Doubt session
					Day-5	Practical
					Day-6	Hand-on practice
	Week 3,4		Inserting Pivot table	More on advance options available in Spreadsheet package...etc	Day-1	Use of pivot table
					Day-2	Insertion of pivot table
					Day-3	Need of advance options
					Day-4	Information about advance options in spreadsheet
					Day-5	Doubt session
					Day-6	Recap