BUDHA DAL PUBLIC SCHOOL, PATIALA

LESSON PLAN OF CLASS VIII (SUBJECT: COMPUTER) Term –I & Term-II Syllabus (Session 2024-25)

<u>Term –I</u>

Chapter-1Computer Network Chapter-3 E-Commerce and Blogging Chapter-4 MySQL Chapter-5 HTML5- Form and Multimedia

<u>Term –II</u>

Chapter-6 Javascript-An Introduction Chapter-8 Python-Looping and Tkinter GUI Chapter-9 Data Science- An Introduction Chapter-10Future Possibilities of AI Month Wise Distribution

<u>April</u>

Chapter-1Computer Network May

Chapter-3 E-Commerce and Blogging July

Chapter-4 MySQL August

Chapter-5 HTML5- Form and Multimedia

<u>September</u>

First Term Examination

<u>October</u>

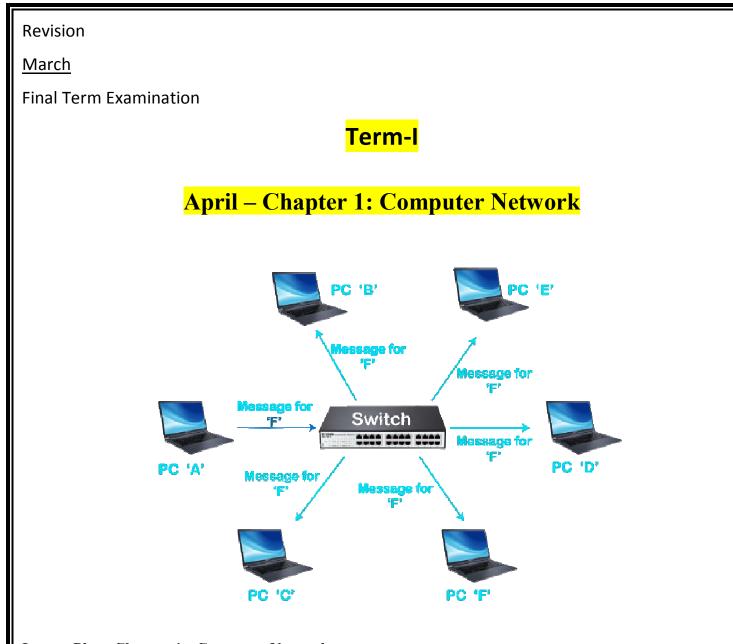
Chapter-6 Javascript-An Introduction

<u>November</u>

Chapter-8 Python-Looping and Tkinter GUI December

Chapter-9 Data Science- An Introduction January

Chapter-10Future Possibilities of AI February



Lesson Plan: Chapter 1 - Computer Network

- Topics:
 - Introduction to Computer Networks
 - Types of Networks (LAN, WAN, MAN)
 - Network Topologies
 - Network Devices (Router, Switch, Hub)
 - Basics of Network Protocols (TCP/IP, HTTP, FTP)
- Learning Objectives:
 - Understand the basics of computer networks and their importance.
 - Identify different types of networks and their characteristics.
 - Learn about various network topologies and their applications.

- Recognize different network devices and their functions.
- Understand basic network protocols and their roles.

• Art & Integrated Activity/Project/Practical:

- Create diagrams of different network topologies.
- Hands-on activities setting up simple networks.
- Research and presentations on network devices and protocols.
- Simulate basic networking using network simulation software.

• Expected Learning Outcomes:

- Students will understand the basics and importance of computer networks.
- They will identify and describe different types of networks and topologies.
- Students will recognize and understand the functions of various network devices.
- They will have a basic understanding of network protocols.

• Assignment and Assessments/Test:

- Assignments on network topologies and devices.
- Quizzes on types of networks and network protocols.
- Practical tests on setting up simple networks.

• Remedial Measures:

- Extra practice sessions and step-by-step guides on network basics.
- Video tutorials on network topologies and devices.
- Personalized feedback and one-on-one assistance for specific challenges.

May – Chapter 3: E-Commerce and Blogging



Lesson Plan: Chapter 3 - E-Commerce and Blogging

- Topics:
 - Introduction to E-Commerce
 - Types of E-Commerce Models (B2B, B2C, C2C, C2B)
 - Basics of Setting Up an Online Store
 - Introduction to Blogging
 - Blogging Platforms and Content Creation

• Learning Objectives:

- Understand the fundamentals of e-commerce and its models.
- Learn the basics of setting up and managing an online store.
- Explore blogging and its importance in digital communication.
- Identify various blogging platforms and their features.
- Create and publish blog content.

• Art & Integrated Activity/Project/Practical:

- Create a mock online store with product listings.
- Research and presentations on different e-commerce models.
- Set up a blog on a chosen platform and publish posts.
- o Develop content plans and schedules for blogging.

• Expected Learning Outcomes:

- Students will understand the fundamentals of e-commerce.
- They will learn how to set up and manage an online store.
- Students will explore the world of blogging and content creation.
- They will identify different blogging platforms and their features.
- Students will create and publish blog content effectively.

• Assignment and Assessments/Test:

- Assignments on creating a mock online store and blogging.
- Quizzes on e-commerce models and blogging platforms.
- Practical tests on setting up an online store and blog.

• Remedial Measures:

- Extra practice sessions and step-by-step guides on e-commerce and blogging.
- Video tutorials on setting up online stores and blogs.
- Personalized feedback and one-on-one assistance for specific challenges.
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July – Chapter 4: MySQL



Lesson Plan: Chapter 4 - MySQL

- Topics:
 - Introduction to MySQL and Databases
 - Basic SQL Commands (SELECT, INSERT, UPDATE, DELETE)
 - Creating and Managing Databases
 - Using Queries to Retrieve Data
 - Database Normalization
- Learning Objectives:
 - Understand the basics of MySQL and database management.
 - Learn and execute basic SQL commands.
 - Create and manage databases effectively.
 - Use queries to retrieve and manipulate data.
 - Understand the principles of database normalization.
- Art & Integrated Activity/Project/Practical:
 - Hands-on practice with SQL commands and queries.
 - Create and manage databases using MySQL.
 - Develop projects involving data retrieval and manipulation.
 - Explore normalization techniques through practical examples.
- Expected Learning Outcomes:
 - Students will understand the basics of MySQL and database management.

- They will execute basic SQL commands effectively.
- Students will create and manage databases using MySQL.
- They will retrieve and manipulate data using queries.
- Students will understand and apply database normalization principles.

• Assignment and Assessments/Test:

- Assignments on executing SQL commands and managing databases.
- Quizzes on SQL commands and database principles.
- Practical tests on creating and managing databases.

• Remedial Measures:

- Extra practice sessions and step-by-step guides on MySQL and SQL commands.
- \circ $\;$ Video tutorials on executing SQL commands and managing databases.
- Personalized feedback and one-on-one assistance for specific challenges.

August – Chapter 5: HTML5 – Form and Multimedia



Lesson Plan: Chapter 5 - HTML5: Form and Multimedia

- Topics:
 - Introduction to HTML5 Forms
 - Creating and Validating Forms
 - Adding Multimedia Elements (Audio, Video)
 - Embedding Multimedia in Web Pages

• HTML5 Form Attributes and Elements

• Learning Objectives:

- Understand the basics of HTML5 forms and multimedia.
- Create and validate forms using HTML5.
- Add and embed multimedia elements in web pages.
- Explore various HTML5 form attributes and elements.

• Art & Integrated Activity/Project/Practical:

- Hands-on projects creating and validating HTML5 forms.
- Embed multimedia elements in web pages.
- Develop web pages incorporating forms and multimedia.
- Practice using various HTML5 form attributes and elements.

• Expected Learning Outcomes:

- o Students will understand the basics of HTML5 forms and multimedia.
- They will create and validate forms using HTML5.
- o Students will add and embed multimedia elements in web pages.
- They will use various HTML5 form attributes and elements effectively.
- Assignment and Assessments/Test:
 - Assignments on creating and validating HTML5 forms.
 - Quizzes on HTML5 form attributes and multimedia elements.
 - Practical tests on embedding multimedia in web pages.

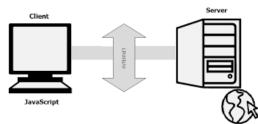
• Remedial Measures:

- Extra practice sessions and step-by-step guides on HTML5 forms and multimedia.
- Video tutorials on creating and validating forms, and embedding multimedia.
- Personalized feedback and one-on-one assistance for specific challenges.

September – First Term Examination

Term-II

October – Chapter 6: JavaScript – An Introduction



Lesson Plan: Chapter 6 - JavaScript: An Introduction

• Topics:

- Basics of JavaScript
- JavaScript Syntax and Data Types
- Variables and Operators
- Functions and Events
- Integrating JavaScript with HTML

• Learning Objectives:

- Understand the basics of JavaScript and its role in web development.
- Learn JavaScript syntax and data types.
- Use variables and operators in JavaScript programs.
- Create and use functions and handle events in JavaScript.
- Integrate JavaScript with HTML for dynamic web pages.

• Art & Integrated Activity/Project/Practical:

- Hands-on programming exercises with JavaScript.
- Develop simple interactive web pages using JavaScript.
- Practice using functions and handling events in JavaScript.
- Integrate JavaScript with HTML in various projects.

• Expected Learning Outcomes:

- Students will understand the basics of JavaScript.
- They will use JavaScript syntax, data types, variables, and operators effectively.
- Students will create and use functions and handle events in JavaScript.
- \circ They will integrate JavaScript with HTML for dynamic web pages.

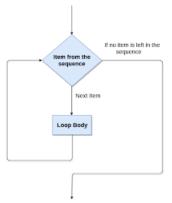
• Assignment and Assessments/Test:

- Assignments on JavaScript syntax, data types, and functions.
- Quizzes on JavaScript basics and event handling.
- Practical tests on integrating JavaScript with HTML.

• Remedial Measures:

- Extra practice sessions and step-by-step guides on JavaScript basics.
- Video tutorials on JavaScript programming and event handling.
- Personalized feedback and one-on-one assistance for specific challenges.

November – Chapter 8: Python – Looping and Tkinter GUI



Lesson Plan: Chapter 8 - Python: Looping and Tkinter GUI

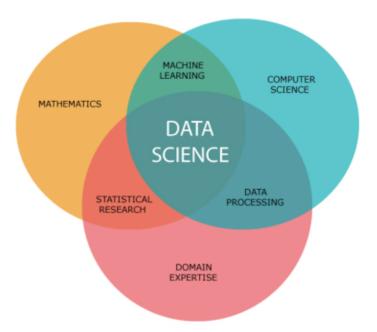
- Topics:
 - Looping Constructs (for, while) in Python
 - Nested Loops and Loop Control Statements
 - Introduction to Tkinter GUI Programming
 - Creating Basic GUIs with Tkinter
 - Integrating Looping Constructs in Tkinter Projects
- Learning Objectives:
 - Understand and use looping constructs in Python.
 - Apply nested loops and loop control statements.
 - Learn the basics of Tkinter GUI programming.
 - Create basic GUIs using Tkinter.
 - Integrate looping constructs in Tkinter projects.
- Art & Integrated Activity/Project/Practical:
 - Hands-on programming exercises with loops and Tkinter.
 - Develop basic GUI applications using Tkinter.
 - Practice integrating loops in Tkinter projects.
 - Explore creative GUI projects with looping constructs.
- Expected Learning Outcomes:
 - \circ $\;$ Students will understand and use looping constructs in Python.
 - They will create basic GUIs using Tkinter.
 - Students will integrate loops in Tkinter projects.
 - They will develop creative GUI projects using Python.
- Assignment and Assessments/Test:
 - Assignments on looping constructs and Tkinter GUI programming.
 - Quizzes on loops and Tkinter basics.

• Practical tests on developing GUI applications with loops.

• Remedial Measures:

- Extra practice sessions and step-by-step guides on loops and Tkinter.
- Video tutorials on Tkinter GUI programming.
- Personalized feedback and one-on-one assistance for specific challenges.

December – Chapter 9: Data Science – An Introduction



Lesson Plan: Chapter 9 - Data Science: An Introduction

- Topics:
 - Introduction to Data Science and Its Importance
 - Data Collection and Preparation
 - o Basics of Data Analysis and Visualization
 - o Tools and Technologies in Data Science (Python, R, SQL)
 - Case Studies in Data Science
- Learning Objectives:
 - Understand the basics of data science and its importance.
 - Learn data collection and preparation techniques.
 - Explore basic data analysis and visualization methods.
 - Get acquainted with tools and technologies used in data science.
 - Analyze case studies to understand real-world applications.
- Art & Integrated Activity/Project/Practical:

- Hands-on activities in data collection and preparation.
- Practice basic data analysis and visualization.
- Explore tools like Python, R, and SQL for data science tasks.
- Research and presentations on data science case studies.

• Expected Learning Outcomes:

- Students will understand the basics and importance of data science.
- They will learn data collection and preparation techniques.
- Students will explore basic data analysis and visualization methods.
- They will get acquainted with data science tools and technologies.
- Students will analyze case studies to understand real-world applications.
- Assignment and Assessments/Test:
 - Assignments on data collection, preparation, and analysis.
 - Quizzes on data science basics and tools.
 - Practical tests on data analysis and visualization.

• Remedial Measures:

- Extra practice sessions and step-by-step guides on data science.
- Video tutorials on data analysis and visualization.
- Personalized feedback and one-on-one assistance for specific challenges.

January – Chapter 10: Future Possibilities of AI



Lesson Plan: Chapter 10 - Future Possibilities of AI

- Topics:
 - Current Trends in AI
 - Emerging AI Technologies and Innovations
 - o AI Applications in Various Industries
 - o Ethical and Societal Implications of AI
 - Future Prospects and Challenges in AI

• Learning Objectives:

- Explore current trends and emerging technologies in AI.
- Understand the applications of AI in various industries.
- Discuss the ethical and societal implications of AI.
- Analyze the future prospects and challenges of AI.

• Art & Integrated Activity/Project/Practical:

- Research and presentations on current AI trends and technologies.
- Case studies on AI applications in different industries.
- Debates and discussions on ethical and societal implications of AI.
- Projects exploring future prospects and challenges in AI.

• Expected Learning Outcomes:

- Students will explore current trends and emerging technologies in AI.
- They will understand AI applications in various industries.
- Students will discuss the ethical and societal implications of AI.
- They will analyze the future prospects and challenges of AI.

• Assignment and Assessments/Test:

- Assignments on current AI trends and applications.
- Quizzes on AI technologies and ethical implications.
- Practical tests on analyzing AI case studies.

• Remedial Measures:

- Extra practice sessions and step-by-step guides on AI topics.
- Video tutorials on AI trends and technologies.
- Personalized feedback and one-on-one assistance for specific challenges.

February – Revision for Final Exam

March – Final Term Examination