

COMPUTER EDUCATION

CLASS VIII

Yearly Syllabus 2026- 2027

S.No	Chapter Name	Sub-topics	Learning Outcomes	Assessment Questions
Half Yearly Examination				
1	Computer Networking	Computer Network; Need for Computer Network; Advantages; Components of Data Communication; Network Terminologies; Devices; Types of Networks; Topology; Network Architecture; Wireless Networking; Protocol	Understand basics of networking; identify components and types; explain working of networks and communication systems	What is a computer network? Why is it needed? Explain types of networks and topology.
2	Images, Links & Frames in HTML5	Inserting Images; Linking Web Pages; Adding Audio & Video; Frames	Design web pages using multimedia elements; create links and frames	How do you insert images in HTML? What are hyperlinks? Explain frames.
3	Forms in HTML5	Form in HTML5; <FORM> Tag; <INPUT> Tag; <SELECT> Tag; <TEXTAREA> Tag	Create interactive web forms; use different form elements effectively	What is a form? Explain INPUT and SELECT tags with examples.
4	AI Project Lifecycle	Problem Scoping; Data Acquisition; Data Exploration; Modelling; Evaluation	Understand stages of AI lifecycle; apply problem-solving approach in AI projects	What is AI project lifecycle? Explain its steps.
5	Artificial Intelligence and Its Applications	Introduction to AI; Applications in daily life; Impact of AI systems	Understand AI concepts; identify applications; analyze impact of AI	What is AI? Give examples. How does AI impact our lives?
6	Data and Fairness	Understanding how AI uses data Identifying bias in datasets Strategies to ensure fairness and inclusivity	Students will understand how AI uses data, identify bias, and learn ways to ensure fairness in AI systems.	1. What is bias? 2. Why is fairness important? 3. How can we reduce bias in AI?

Annual Examination

7	Loops in Python	for Loop; while Loop; Jump Statements; Programs	Understand repetition using loops; apply loops in programs	What is a loop? Difference between for and while loop? What are jump statements?
8	Functions and Strings in Python	Features; Advantages; Components; Types of Functions; Creating & Calling Functions; String; Programs	Understand functions; write reusable code; work with strings	What is a function? Types of functions? What is a string?
9	List in Python	Creating List; Modifying Elements; Traversing; Slicing; List Methods; Python Functions; Operations	Create and manipulate lists; apply operations on lists	What is a list? Explain list methods and slicing.
10	AI Domains	Domains of AI; Real Life Applications	Understand different AI domains; relate them to real-life applications	What are AI domains? Give examples of applications.
11	Developments Using AI	Automated Transportation; Safety & Security; Traffic Management; Smart Homes & Cities; Smart Highway; Healthcare; Education; Finance; Military & Cybersecurity	Understand AI advancements; analyze real-world AI implementations	Explain AI use in healthcare and transportation. What are smart cities?
12	Ethics and Responsible AI	Privacy Misinformation Responsible AI use	Students will understand ethical issues, privacy concerns, and responsible use of AI tools.	1. What is privacy? 2. Why use AI responsibly? 3. Explain ethical issues in AI.

Computer Department

Middle Wing