

SATISH CHANDRA MEMORIAL SCHOOL

Pedagogical Lesson Plan 2025-26

Subject: Computer Science

Teacher's Name: Saurav Bhattacharjee

Lesson : Data Representation & Boolean logic

Topic : Data Representation

Class: XI

Total Number of Periods: 10

Date of Commencement: 11-04-2025

Expected Date of Completion: 30-04-2025

No. of periods	Learning Objective	Focus points/Keywords	Explanation of Contents	Methodology	Activities	Assessment	Learning Outcome
01	Understanding number systems used in computing	Digital Number System	Representation of Computer System	Discussion regarding digits	Identification of number in number system.	Assessment based on Objective type question	Students will be able to recognize and differentiate numbers across various number systems.
02 - 04	Understanding types of Number Systems.	- Decimal Number System - Binary Number System - Octal Number System - Hexadecimal Number System	Most Significant Bit Least Significant Bit Base / Radix	Board work, Smart Board & Text Book	Conversion of number from one number system to another	Assessment based on Objective type question	Students will be able to identify and understand different types of number systems.
05 - 08	Understanding conversion of different Number System	- Decimal - Binary - Decimal – Octal - Octal – Binary - Decimal – Hexa - Binary - Hexa	Number conversions, fractional conversions	Board work Smart Board	Conversion of number system	Assessment based on number system with conversion exercises.	Students will be able to do number conversions.
09	Understanding Binary representation	Binary representation of integers in computer	- Sign and Magnitude - ASCII - ISCII	Board work Smart Board & Discussion	Identification of Sign and magnitude of binary numbers	Assessment based on encoding / Decoding mini quiz	Student will be able to find codes from the messages.
10	Understanding encoding, including ASCII, ISCII, and Unicode, is fundamental in computing.	Representing characters in memory	American Standard Code for Information Interchange , UTF- 8 and UTF - 32	Board work Smart Board , Discussion	Identification and Encoding text using ASCII and Unicode values with case study on different encoding techniques used in modern applications.	Assessment based on ASCII, Unicode , ISCII with short written assessments	Students will be able to differentiate various Encoding Schemes, Interpret Encoded data and applying encoding in data storage application.

Verified By _____

Teacher's Signature _____