



CAMBRIAN PUBLIC SCHOOL KANKE ROAD RANCHI

Class – XII (Session 2026-27)

LEARNING PLAN OUTCOMES

Subject: Computer Science (083)

S. No.	Month	Chapter/Unit Name	Learning Outcomes
1	April	1 Revision tour of python 2 Functions	• Students will be able to explain basic fundamental concept of python programs • They will be able to apply tokens., Data types, Operators & Expressions, conditional statements, iterations, looping in programs • They will be able to analyse the basic concept of functions and apply specific features in python programs. • They will practically create and run function based program on machines. • They will make use of string concept in program as well as specified inbuilt functions used in manipulation of strings.
2	May	Function Continues...	• Students will be able to analyse and apply the concept of Lists in the programs as well as List based functions. • They will apply all the features of functions like passing arguments, return values, local and global variables default arguments. • They will also be able to apply Tuples and Dictionary concept in function-based program as well as they will be able to analyse output of correct python programs.
3	June	Exception Handling File Handling	• Students will be able to identify different types of errors that occurs in programs • They will apply the use of try ... Except concept to handle errors. • Students will be able to explain different types of files that can be created such as text files, binary files, difference between text file and binary file • They will be able to apply text file and binary file for the purpose of reading writing and updating content of files in function based python programs.

			• They will apply the program practically on machines.
4	July	File Handling continues	• They will create many more functions based programs to apply learnt concept in file handling. • They will be able to make use of comma separated values file and how it is different from text file and binary file. • They will be able to create multiple CSV files to read, write and count the number of records present in files. • They will make use of different ios modes to manipulate different files in python in function-based programs.
5	August	Data Structure Stack concept only using list. Database concept and SQL(Structured Query Language)	• Students will analyse the concept of data Structure, • Stack concept, principles of stack and mechanism of stack • They will apply stack learnt concept in function based python programs representing stack concept. • They will be able to analyse the specific concept of database, about tables/ relations, attributes, degree, cardinality of tables, Tuples/ Records • They will be able to apply SQL COMMANDS like CREATE, ALTER, INSERT, UPDATE, SELECT, DELETE, DROP AND DELETE as well as sql based functions like max, min, count etc.
6	September	Revision of Half Yearly syllabus	• Students will be able to to strengthen the learnt above concept by practicing and clearing doubts if any from subject teacher.
7	October	SOL COMMANDS & Connecting Database with Python	• Students will be able to apply all sql concept • They will be able to connect python with SQL databases and operating sql through python.
	November	Networking	• Students will be able to explain the concept of networking different types of network, topologies, network devices, types of cables used, wifi, internet concept, website, client server architecture, peer to peer network, lan, pan, wan, man, VoIP, switching techniques, radio waves, electromagnetic waves etc

			https,ftp,SMTP , protocols of network etc. • Python Project work Practise on computer
	December & January	Revision of whole syllabus	• Students will clear their doubts and practise board based question paper to strengthen their concept.

Guidelines for Teachers:

- Learning outcomes should be competency-based and student-centred.
- Use measurable action verbs such as identify, analyse, explain, compare, apply, and evaluate.
- Include experiential, practical, and application-based learning outcomes wherever possible.
- Ensure alignment with the latest CBSE curriculum and assessment pattern.
- Maintain uniform formatting across all subjects.
