

DELHI PUBLIC SCHOOL, JAMMU
Session : 2023-2024

Subject: Computer Science (083)

Class: XII

Syllabus Bifurcation

Computer science is **the study of computation, automation, and information**. Computer science spans theoretical disciplines (such as algorithms, theory of computation, and information theory) to practical disciplines (including the design and implementation of hardware and software).

OBJECTIVES OF THE THEORY:

To produce programmers equipped with an understanding of

1. Fundamental computational concepts underlying most programming languages.
2. The role of programming within the overall software development process.

<u>S.no</u>	<u>Month</u>	<u>Name of the Lesson/Topic</u>
1.	April	Review of Python Basics Functions: types of function (built-in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, function returning value(s), flow of execution, scope of a variable (global scope, local scope) <ul style="list-style-type: none">• Assignment/Foundation Worksheet to assess the previous knowledge.
2.	May	Functions (contd.) <ul style="list-style-type: none">• Revision Sheet on the related topic.
3.	June & July	File Handling (Text file, Binary File) <ul style="list-style-type: none">• Class Test to be conducted for revision purpose.
4.	August	File Handling (CSV files contd.), Computer Networks <ul style="list-style-type: none">• Performing the Practical Test for the related topic.
5.	September	Computer Networks(contd.) , Introduction to Database Management <ul style="list-style-type: none">• Kahoot Quiz Activity

6.	October	<p>Database Management, Aggregate functions (max, min, avg, sum, count), group by, having clause, joins : Cartesian product on two tables, equi-join and natural join</p> <ul style="list-style-type: none"> • Solving Questions Based on Previous Year Question Papers.
7.	November	<p>Interface Python with MySQL</p> <ul style="list-style-type: none"> • Revision Test through Assignments
8.	December	<p>Data structure: Stacks using List</p> <ul style="list-style-type: none"> • Assessment of Project Work
9.	January	<p>Revision of File Handling & My SQL</p> <ul style="list-style-type: none"> • Class Tests/ Practical Implementation of the Programs to be done
10.	February	<p>Doubt clearing session</p> <ul style="list-style-type: none"> • Quick Recap of Most Important Topics for Practical Exams
11.	March	<p>Revision for Final Examination</p> <ul style="list-style-type: none"> • Practice of Sample Question Papers

EXAM SCHEDULE

Syllabus for Formative Assessment-I

1. Review of Python Basics
2. Functions

Syllabus for Half Yearly Examination

1. Review of Python Basics
2. Functions in Python
3. File Handling
4. Computer Networks

Syllabus for Pre-Board-I

1. Review of Python Basics
2. Functions in Python
3. File Handling
4. Computer Networks
5. My SQL, Interface Python with MySQL

Syllabus for Pre-Board-II

1. Review of Python Basics
2. Functions in Python
3. File Handling
4. Computer Networks
5. My SQL, Interface Python with MySQL
6. Data structure(Stacks using List)

(SUBJECT COORDINATOR)