DELHI PUBLIC SCHOOL, PAKUR

Affiliated to C.B.S.E., New Delhi, Up to **10 +2 Level**

(Affiliation Number-3430354)

(SYLLABUS BI-FURCATION)

Class-XII

S.N	SUB	EXAM.	FULL SYLLABUS
1.	COMP. SCS	UT-1	*Unit 1: Python Revision Tour – I* *Unit 2: Python Revision Tour – II* *Unit 3: Working with Functions* *Unit 4: Using Python Libraries*
		HYL	*Unit 5: File Handling* *Unit 6: Recursion* *Unit 7: Idea of Algorithm Efficiency* *Unit 10: Communication and Network Concepts* **PRACTICAL** **Python programming** ❖ *Read a text file line by line and display each word separated by a #.* ❖ *Read a text file and display the number of vowels/consonants/uppercase/lowercase characters in the file.* ❖ *Remove all the lines that contain the character 'a' in a file and write it to another file.* ❖ *Create a binary file with name and roll number. Search for a given roll number and display the name, if not found display appropriate message.* ❖ *Create a binary file with roll number, name and marks. Input a roll number and update the marks.* ❖ *Write a random number generator that generates random numbers between 1 and 6 (simulates a dice).* ❖ *Write a python program to implement a stack using list.* ❖ *Create a CSV file by entering user-id and password, read and search the password for given user- id.* ❖ *Write a function push () which takes "name" as argument and add in a stack named "mystack".*

			After calling push() three times, a message should be displayed "stack is full" ❖ *Write a function addemp () and delemp () to add a new employee name and remove a employee name from a listemp, considering them to act as push and pop operations of stack data structure in python.* ❖ *Write a function addbook (), delbook () and disbook () to add a new book name, remove a book name and to Display book in stack format, according to data structure in python.*
		UT-2	*Unit 8: Data Structures – I* *Unit 9 : Data Structures -II* *Unit 11 : Relational Database* *Unit 12: Simple Queries in SQL* *Unit 13: Table Creation and Data Manipulation* *Unit 14: Grouping Records , Joins in SQL* *Unit 15: Interface Python with My SQL* **PRACTICAL** **Database management** ● *create a student table and insert data.* *Implement the following SQL commands on the student table:* ❖ *Write sql command to show all databases.* ❖ *Write command to create table 'student'.* ❖ *Write command to add new column 'city' in 'student' table.* ❖ *Write command to modifying and existing column definition or data type.* ❖ *Write command to removing or drop column.* ❖ *Write command to insert data for all the columns into tables.* ❖ *Write command to insert data into specific columns of tables.* ❖ *Write command to delete any data of table.* ❖ *Write SQL command to show name, marks and city only.* ❖ *Write SQL command to show all cities names.* ❖ *Write SQL command to show students name having marks more than 75.* ❖ *To display student name and stream name by joining both tables 'student' and 'stream'.* ❖ *To display all data in ascending order by name and descending order by stream.* ❖ *To display maximum marks scored by each stream.* ❖ *To display sum of marks scored by each stream.* ❖ *To display all student who has opted 'arts' stream.*

			Write SQL command to show all information of 'student' table. *Write command to update any column using expression or formula.* *Write command to update any single column.* *Write command to rename existing column.* **Part(c) –Python Database Connectivity** *Write a program to display all record from table 'student' using my SQL database connectivity in python.* *Write a program to display all one record from table 'student' using my SQL database connectivity in python..* **PROJECT (Any One in a group of 4 students)** **Result maker using the concept of python database connectivity** **School management system** **Railways ticket management system** **Airlines ticket management system** **Medicine ERP System**
		PRE-BOARD -2	*Full syllabus according to* **CBSE** *Board*