**Subject- Computer Science** 

UNIT NAME	MONTH	TOPIC NAME	LEARNING OUTCOMES
Revision Tour of Basic Concept of Python	April	Revision Tour of Python Data types , Operators ,List , Tuples Dictionary and String Operation	Almost all student will understand the concept clearly
Functions	May June	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)	Almost all student understand the concept
File Handling	June july	Introduction to files, types of files (Text file, Binary file, CSV file), relative and absolute paths • Text file: opening a text file, text file open modes (r, r+, w, w+, a, a+), closing a text file, opening a file using with clause, writing/appending data to a text file using write() and writelines(), reading from a text file using read(), readline() and readlines(), seek and tell methods, manipulation of data in a text file • Binary file: basic operations on a binary file: open using file open modes (rb, rb+, wb, wb+, ab, ab+), close a binary file, import pickle module, dump() and load() method, read, write/create, search, append and update operations in a binary file • CSV file: import csv module, open / close csv file, write into a csv file using csv.writerow() and read from a csv file using csv.reader()	student will understand the concept clearly
Data Structures	August	Understanding the concept of Stack and its Principles, Application of stack In python programming using list, tuple and Dictionary, PUSH and POP operation, Displaying the members of Stack	student will understand concept clearly and precisely
Database and SQL	September October	Understanding the concept of DatabaseUse of SQL Commands LIKE DDL Commands Ex: CREATE, ALTER, DROP Also DML commands like SELECT, INSERT, UPDATESET, DELETE Functions Like max(), min(), sum(), count()Program using Database Connectivity through Python using MySQL.Connector as well activating cursor Program using Database Connectivity through Python using MySQL.Connector as well activating cursorProject based on Database Connectivity with SQL	Almost all student will understand the concept clearly
Computer Network	October November	Network Fundamentals, Evaluation, Switching Techniques, Data Communication Terminologies, Topologies, Devices Used in Network, Types of Cable its Uses Transmission Media Network Protocol like FTP, TCP/IP,HTTP,SMTP, POP3, GSM, WLL, GPRS, Mobile Telecommunication Technology, Email Protocols VoIP, WiFi, WiMax, Network Security Concepts, Threats and Prevention from virus, worms and Trojans Spams etcPrevention through Firewalls, IT ACT2000, Cyber Law, Web Services: WWW, HTML, XML, URL, Websites, COOKIES, Web hosting, Web Scripting	Almost all student will understandd the concept clearly.