MPVM GANGA GURUKULAM
Syllabus BreakUp of Informatics Practices (New)

MONTH	TOPICS
July	- Basic computer organization - Basics of Python programming - Process of writing a program, running it an print statement - Introduction of variable and data-types
August	- Operators and their precedence, assignment statement, expressions - Conditional statements – if, if-else, if-elif-else
September	- Control statements – for, while – flowcharts and relative programs - Programs like- interest calculation, tax calculation, standard deviation etc. - List and Dictionary - Linear search , counting the frequency of elements in a list using a dictionary
October	- Text handling - compare , concat and substring operations - Introduction of Python modules
November	**Data Handling:** - Introduction to Python Pandas - Data structures in Pandas - series and data frame - Operations on a series - Data Frame operations- create display, iteration, select, add and delete column - Binary operations in a Data Frame - Comparisons, Boolean reductions, combining Data Frames.
December	Transfer data between CSV Files/SQL database and Data Frame objects
January	**Data Management :** - Concept and need of relational database , keys - Use of SQL commands to create a table, keys - Basic SQL : Select, project and join
February	**Society , law and Ethics- Cyber safety** - Safe browsing , accessing information over internet and data communicaton - Appropriate usage of social networks

Unit test 1	:	Basic computer organization
		Use of variable, data types
		Operators and conditional statements- if , if –else, if – elif-else
Half yearly Exam	:	Control statements , List and Dictionary handling operations, Text handling and Python modules
Unit test 2	:	Python Pandas
Annual Exam	:	Complete syllabus