

MPVM GANGA GURUKULAM
Syllabus BreakUp of Informatics Practices (New)

MONTH	TOPICS
July	<ul style="list-style-type: none"> ▪ Basic computer organization ▪ Basics of Python programming ▪ Process of writing a program, running it and print statement ▪ Introduction of variable and data-types
August	<ul style="list-style-type: none"> ▪ Operators and their precedence, assignment statement, expressions ▪ Conditional statements – if, if-else, if-elif-else
September	<ul style="list-style-type: none"> ▪ 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	<ul style="list-style-type: none"> ▪ Text handling - compare , concat and substring operations ▪ Introduction of Python modules
November	<p>Data Handling:</p> <ul style="list-style-type: none"> ▪ 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	<p>Data Management :</p> <ul style="list-style-type: none"> ▪ Concept and need of relational database , keys ▪ Use of SQL commands to create a table, keys ▪ Basic SQL : Select, project and join
February	<p>Society , law and Ethics- Cyber safety</p> <ul style="list-style-type: none"> ▪ Safe browsing , accessing information over internet and data communication ▪ 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