## Rayat Shikshan Sanstha's Balwant College Vita Department of Statistics Minutes of the Meeting

Date:-30/08/2022

Meeting of Members of Board of studies for Add-on Course on "Basic Python Programming" has been conducted on Thursday, 01st Sept, 2022 in the Principals cabin at 11:00 a.m.

After discussion on the syllabus of Add-on Course on "Basic Python Programming" and duration of the course the following resolution has been passed:

- 1. Add-on Course on "Basic Python Programming" should be for B.Sc.-III (Semester-V)
- 2. Add-on Course on "Basic Python Programming" should be of 40 hours.
- 3. Syllabus of Course should be:

## Theory (15 Hours) and Practical (25 Hours):

- 1) Introduction to Python
- 2) Installation Setup and Overview
- 3) iPython / Jupyter Notebook Overview
- 4) Introduction to numpy
- 5) Creating arrays, Using arrays and scalars, Indexing Arrays, Array Transposition, Array Processing, Array Input and Output
- 6) Data Frames, Index objects, Re-index, Drop Entry, Selecting Entries
- Data Alignment, Rank and Sort, Summary Statistics, Missing Data, Reading and Writing Text Files
- 8) HTML with Python, Microsoft Excel files with Python
- 9) Merge, Merge on Index, Concatenate, Combining Data Frames
- 10) Duplicates in Data Frames, Mapping, Replace, Binning
- 11) GroupBy on DataFrames, GroupBy on Dict and Series
- 12) Splitting Applying and Combining