

**Syllabus for the First Degree Programme in Mathematics
of the University of Kerala**

**Semester VI
Computer Programming-II (Practicals)**

CODE: MM 1645

Instructional hours per week: 5

No.of credits: 4

Module 1 \LaTeX Programming (30 hrs)

Basic, document, bibliography, bibliographic data base, table of contents, displayed text, row and columns, typesetting mathematics, typesetting theorems, several kinds of boxes, floats, cross references in \LaTeX , footnotes, marginpars and end-notes.

TEXT: Indian \TeX Users Group, Trivandrum, India - \LaTeX Tutorials-
A Primer, Chapters 1 to 13 (free download www.sarovar.org)

Module 2 Python (30 hours)

Whetting your appetite, using the Python interpreter, An informal introduction to Python, More control flow tools, data structures, modules, input and output

TEXT: Guido van Rossum Fred L. Drake, Jr., editor Python Tutorial- Release 3.1.1
Sections 1 to 7

Module 3 Python (continued) (30 hours)

Errors and exceptions, classes, brief tour of the standard library, brief tour of the standard library Part II, interactive input editing and history substitution, floating point arithmetic: issues and limitations.

TEXT: Guido van Rossum Fred L. Drake, Jr., editor Python Tutorial- Release 3.1.1
Sections 8 to 14

About the examination

- (a) This paper has only a practical examination of duration 3 hours. There shall be one external examiner and one internal examiner for the practical examination.
- (b) The maximum number of students allowed per batch for the practical examination shall be 20.
- (c) Out of a total of 100 marks, 75 marks shall be for the practical (external) examination and 25 for internal assessment (15 for theory and 10 for practical record.)
- (d) Each student shall submit a lab record consisting of at least thirty programs based on modules 1, 2 and 3. (This may include problems from other course work).
- (e) The internal assessment for theory shall be based on a written (internal) examination.