



Vishwavidyalaya Karyasoudha,
Crawford Hall, Mysore-570 005.

Dated: 19.08.2020

No.AC.2(S)/378/2020-21

NOTIFICATION

Sub: Approval of syllabus in SEC-2 & SEC-3 of B.Sc. and B.C.A. programs from the academic year 2020-21.

Ref: 1. Decision of Board of Studies in Computer Science (UG) meeting held on 13.12.2019.
2. Decision of the Faculty of Science & Technology Meeting held on 18.02.2020.
3. Decision of Academic Council meeting held on 18.06.2020.

The Board of Studies in Computer Science (UG) which met on 13.12.2019 has approved the syllabus of SEC papers SEC-2: Introduction to Latex (1:0:1) and SEC-3: Python (1:0:1) common for B.Sc. & B.C.A. programs from the academic year 2020-21.

The Faculty of Science and Technology and Academic Council meeting held on 18.02.2020 and 18.06.2020 respectively have approved the above said proposal and the same is hereby notified.

The approved syllabus of SEC papers of B.Sc. & B.C.A. programs is annexed. The contents may be downloaded from the University Website i.e., www.uni-mysore.ac.in.

Draft approved by the Registrar

Deputy Registrar(Academic),
Deputy Registrar (Academic)
University of Mysore
Mysore-570 005

To:

1. The Registrar (Evaluation), University of Mysore, Mysore.
2. The Dean, Faculty of Science & Technology, DOS in Psychology, MGM.
3. The Chairperson, BOS in Computer Science(UG), DOS in Computer Science, Manasagangotri, Mysore.
4. The Chairman, DOS in Computer Science, Manasagangotri, Mysore.
5. The Director, College Development Council, Moulya Bhavan, Manasagangotri, Mysore.
6. The Deputy/Assistant Registrar/Superintendent, AB and EB, UOM, Mysore.
7. The P.A. to the Vice-Chancellor/Registrar/Registrar (Evaluation), UOM, Mysore.
8. Office file.

SEC-2: Introduction to Latex (Common to both V Sem BCA and V Sem B.Sc)

Introduction to Latex

(L:T:P:: 1:0:1) 2 Credits

Unit -1

Installation of the software LaTeX, Understanding Latex compilation, Basic Syntax, Writing equations, Matrix, Tables, Page Layout – Titles, Abstract Chapters, Sections, References, Equation references, citation, List making environments, Table of contents, Generating new commands, Figure handling numbering, List of figures, List of tables, Generating index.

Unit-2

Packages: Geometry, Hyperref, mathematical equations, symbols, algorithms, algorithmic graphic, color, tilez listing, Classes: article, book, report, beamer, slides, IEEtran. Applications to: Writing Resumae, Writing question paper, Writing articles/ research papers.

Reference Books

1. Latex Companion -Frank Mittelbach, Michel Goossens, Addison Wesley Publications
2. Latex Beginners Guide - Stefan Kottwitz, Packt Publishications

SEC-3: Python (Common to both VI Sem BCA and VI Sem B.Sc)

PYTHON

(L:T:P::1:0:1) 2 Credits

UNIT I

DATA, EXPRESSIONS, STATEMENTS :Python interpreter and interactive mode; values and types: int, float, boolean, string, and list; variables, expressions, statements, tuple assignment, precedence of operators, comments; modules and functions, function definition and use, flow of execution, parameters and arguments;

CONTROL FLOW, FUNCTIONS: Conditionals: Boolean values and operators, conditional (if), alternative (if-else), chained conditional (if-else-if); Iteration: state, while, for, break, continue, pass;

UNIT II

FRUITFUL FUNCTIONS: return values, parameters, local and global scope, function composition, recursion; Strings: string slices, immutability, string functions and methods, string module; Lists as arrays.

LISTS, TUPLES, DICTIONARIES: Lists: list operations, list slices, list methods, list loop, mutability, aliasing, cloning lists, list parameters; Tuples: tuple assignment, tuple as return value; Dictionaries: operations and methods; advanced list processing – list comprehension;

Reference Books

1. Core Python Programming – R. Nageshwara Rao, Dreamtech Publications, First Edn
2. Python Programming: Using Problem solving approach – Oxford Publications, First Edn