VASAVI COLLEGE OF ENGINEERING (Autonomous) IBRAHIMBAGH, HYDERABAD - 500 031

DEPARTMENT OF INFORMATION TECHNOLOGY

INTRODUCTION TO SCRIPTING LANGUAGES

(Open Elective-II) (Common for CIVIL, ECE, EEE & MECH) SYLLABUS FOR B.E. IV SEMESTER

L:T:P(Hrs./week): 3:0:0		
Credits: 3	SEE Marks: 60	Course Code : U190E420IT
	CIE Marks: 40	Duration of SEE : 3 Hours

COURSE OBJECTIVES	COURSE OUTCOMES On completion of the course, students will be able to
This course will enable the students to acquire basic skills for writing python scripts.	 Write a python script to solve a basic problem using structured programming constructs Write a python script to solve a basic problem using object oriented programming constructs Create and use python modules Handle file related operations Encode and decode strings

Unit - I

Introduction to Python, running a python script, writing comments, using variables, operators, strings and text, format specifiers , printing information. passing command line arguments, prompting users, parameters, unpacking variables.

Unit - II

Decision making : if and else if, repetition : while loops and for loops, lists, operations on list , tuples, operations on tuples, sets, operations on sets, dictionaries, operations on dictionaries.

Unit - III

Defining functions, passing arguments to functions, returning values from functions, Exception handling.

Modules , Classes and Objects, is – a relationship : inheritance, has-a relationship : composition.

Unit - V

File handling, serialization using JSON and pickle, encoding and decoding.

Learning Resources

- 1. Allen B. Downey, Think Python, 2nd Edition, Green Tea Press
- 2. "Learning Python", 5th Edition, O'reilly
- 3. https://www.python.org
- 4. https://nptel.ac.in/courses/106106182/

The break-up of CIE: Internal Tests+ Assignments + Quizzes

1 No. of Internal Tests : 2 Max. Marks for each Internal Tests 2 No. of Assignments 3 Max. Marks for each Assignment 3 No. of Quizzes 3 Max. Marks for each Quiz Test

Duration of Internal Tests : 90 Minutes

30

HOD, IT