Geethanjali College of Engineering and Technology

(UGC Autonomous)

(Recognized by AICTE, Permanently Affiliated to JNTUH, Accredited by NAAC with 'A+' Grade) Cheeryal (V), Keesara (M), Medchal (D), Telangana – 501301

Department of Electronics and Communication Engineering

Python Programming (Value added Course) II B. Tech ECE I SEM A. Y. 2024-25

Unit1: Introduction to Python: Structure of a Python Program, Elements of Python, Python Interpreter, Using Python as calculator, Python shell, Indentation. Atoms, Identifiers and Keywords, Literals, Strings and Operators

Unit-2: Conditional Statements and Looping: Branching, Looping, Conditional Statement, Exit function, Difference between break, continue and pass

Unit-3: Strings and Lists: Understanding string, Accessing Strings, Basic Operations, String slices, Function and Methods, Introduction to list, accessing list, list operations, working with lists.

Unit-4: Tuples and Dictionaries: Introduction to tuples/Dictionaries, Accessing tuples/Dictionaries, Operations, Working, Functions and Methods.

Unit-5: Python Functions: Defining a function, calling a function, Types of functions, Function Arguments, Anonymous functions, Global and local variables, organizing python codes using functions.

Python Modules: Numpy, matplotlib.

Text books:

- 1. Python: The Complete Reference, Martin C. Brown, McGrawHill, Indian Edition
- 2. Introduction to Computing and Problem Solving Using Python, E. Balagurusamy, McGrawHill.