

USN

--	--	--	--	--	--	--	--	--	--

18BT36

Third Semester B.E. Degree Examination, July/August 2022
Python Programming

Time: 3 hrs.

Max. Marks: 100

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 a. What is an algorithm? Explain with an example. What are the building blocks of algorithms? (10 Marks)
b. Define flow chart. Explain the rules for drawing a flow chart and draw flow chart to check greatest of two numbers. (10 Marks)

OR

- 2 a. Write an algorithm of, (i) Guess an integer number in a range (ii) Find minimum in a list (iii) Insert a card in a list of sorted cards. (10 Marks)
b. What is Pseudocode? Explain the common keywords used in pseudo code. Write a pseudo code for to check greatest of three numbers. (10 Marks)

Module-2

- 3 a. What is Interpreter and compiler? Write the difference between them. Explain how python works in interactive mode and script mode with examples. (10 Marks)
b. Summarize the precedence of mathematical operators in python with example. (10 Marks)

OR

- 4 a. Define functions with syntax. Explain different types of function prototypes. (10 Marks)
b. Write a short notes on:
(i) Statement and Expression
(ii) Comments.
(iii) Quotation in Python
(iv) Tuple assignment
(v) Input and Output function. (10 Marks)

Module-3

- 5 a. Write a Python program for,
(i) Exchanging the values of two variable.
(ii) To find distance between two point.
(iii) To circular n numbers. (10 Marks)
b. Explain different type of conditional statement along with flow chart and example. (10 Marks)

OR

- 6 a. What are loop control statements? Demonstrate with suitable example. (10 Marks)
b. List 10 string built-in functions and method along with syntax, example and description. (10 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, $42+8=50$, will be treated as malpractice.

Module-4

- 7 a. Explain fruitful functions, Void function and composition function with suitable example. (10 Marks)
- b. With syntax and example, explain the following methods in array,
- (i) append ()
 - (ii) insert ()
 - (iii) pop ()
 - (iv) index ()
 - (v) reverse ()
- (10 Marks)

OR

- 8 a. Implement python program for, (i) Binary search (ii) find GCD of two numbers (10 Marks)
(iii) Sum of array elements. (10 Marks)
- b. Write a note on List mutability aliasing and cloning List. (10 Marks)

Module-5

- 9 a. Define tuple datatype? Explain following operation on tuple with example:
- (i) Creating a Tuple.
 - (ii) Indexing
 - (iii) Slicing
 - (iv) Concatenation
 - (v) Repetition
- (10 Marks)
- b. Briefly describe with code the various operations on dictionaries. (10 Marks)

OR

- 10 a. Write a python program for selection sort and insert sort with step by step explanation. (10 Marks)
- b. Explain merge sort with suitable python program. (10 Marks)

* * * * *