CBCS SCHEME

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18BT36

Third Semester B.E. Degree Examination, June/July 2023
Python Programming

Time: 3 hrs. Max. Marks: 100

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

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-1

1 a. Define Algorithm. Explain the building blocks of Algorithm. (08 Marks)
b. Discuss the Tower of Honoi problem with an algorithm and flowchart. (08 Marks)
c. Write an algorithm to check whether a number entered by user is prime or not. (04 Marks)

OR

2 a. Explain simple strategies for developing algorithm. (10 Marks)
b. Explain the steps in problem solving. (06 Marks)
c. With suitable example, explain flow chart. (04 Marks)

Module-2

3 a. Explain values and types in detail. (10 Marks)
b. Define operators. Mention different operators and explain in detail. (10 Marks)

OR

4 a. Define function. What are the different types of arguments in python. (08 Marks)
b. List the rules to declare a variable in python. Demonstrate atleast three different types of variable uses with an example program. (08 Marks)
c. Explain the rules of precedence used by python to evaluate an expression. (04 Marks)

Module-3

5 a. Explain conditional statement in detail with example. (10 Marks)
b. Write a short note on break, continue and pass. (10 Marks)

OR

6 a. Discuss the various operations that can be performed on a tuple and lists (minimum 5) with an example program. (10 Marks)
b. Explain string slicing in python. Show with an example. (10 Marks)

Module-4

7 a. What are lists? Lists are mutable. Justify the statements with examples. (10 Marks)
b. Implement a python program using lists to store and display the average of N integers accepted from the user. (10 Marks)

OR

8 a. Explain function composition in detail. (10 Marks)
b. Compare and contrast linear search and binary search with suitable example. (10 Marks)

Module-5

9	a.	Define Dictionary. Explain in detail about dictionary operation.	(10 Marks)
	b.	Define tuple. Explain tuple operations in detail.	(10 Marks)

OR

10	a.	Write a python program to sort 'n' numbers using selection sort.	(05 Marks)
	b.	Differentiate between list, tuple and dictionary.	(10 Marks)
	c.	Write a note on list comprehension.	(05 Marks)

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