

I B. Tech II Semester Regular Examinations, September- 2021**PROBLEM SOLVING USING PYTHON****(Com. to CSE-CS&T, CSE-CS, CSE-IOT&CS Incl BCT, CSE-CS&BS, CSE-IOT, Cyber Security)**

Time: 3 hours

Max. Marks: 70

Answer any five Questions one Question from Each Unit**All Questions Carry Equal Marks****UNIT-I**

- 1 a) Explain the basic data types available in Python with examples. (7M)
 b) Write a Python program to print the first ten prime numbers. (7M)

Or

- 2 a) Explain the following Decision control Statements. (7M)
 i) if-else
 ii) nested if-else
 iii) if-elif-else
 b) Write a Python program to print the first 100 even numbers. (7M)

UNIT-II

- 3 a) Write a Python program to print the reverse of a string. (7M)
 b) Write a Python program to illustrate the selection of one statement from a set of n statements. (7M)

Or

- 4 a) Explain how data encryption is done in Python. (7M)
 b) Develop a Python program to print the following pattern: (7M)
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 * *
 * * *
 * * * *
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UNIT-III

- 5 a) Write a recursive Python function that recursively computes the sum of elements in a list of lists. (7M)
 b) Explain how data abstraction is done in Python. (7M)

Or

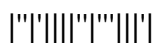
- 6 a) What is the lambda function? What are the characteristics of a lambda function? Give an example. (7M)
 b) Explain how to perform the Tuple assignment and Tuples for returning multiple values. (7M)

UNIT-IV

- 7 a) Write a program to illustrate multiple inheritances. (7M)
 b) Explain creating classes in Python with examples. (7M)

Or

- 8 a) Demonstrate implementation of hierarchical inheritance in Python, with a Program. (7M)
 b) Write a Python program to read config files. (7M)



UNIT-V

- 9 a) Define an Error. Explain about types of Errors and Exceptions in Python. (7M)
- b) How can we write a single except block that can handle multiple Exceptions and a single except block to handle all kinds of exceptions. (7M)

Or

- 10 a) Explain about Built-in Exceptions in Python. (7M)
- b) Develop a Python Program to create User Defined Exception and trace the code? (7M)

