

I B. Tech II Semester Regular/Supplementary Examinations, August- 2022**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) Write a program to display the Fibonacci sequences up to nth term where the user provides n. (7M)
b) Discuss the differences between While and FOR loop with an example. (7M)

Or

- 2 a) Write a program to find the sum of all Odd and Even numbers up to a number specified by the user. (7M)
b) Explain the need for input validation loops with an example. (7M)

UNIT-II

- 3 a) Survey the commonly used String methods in Python with example codes? (7M)
b) Explain briefly about the Multi-Valued Data types, for example. (7M)

Or

- 4 a) Explain string slicing with suitable examples. (7M)
b) Write a Python program to search a given substring that is present in a given string. (7M)

UNIT-III

- 5 a) Explain how functions can be used to provide abstraction. (7M)
b) Explain the advantage of packages. Explain the procedure to create a package and use the same. (7M)

Or

- 6 a) Explain anonymous functions with examples. (7M)
b) What is a Module? Explain Module loading and execution in Python. (7M)

UNIT-IV

- 7 a) Explain how adding and retrieving dynamic attributes of classes is possible in Python. (7M)
b) Explain how to define a Class and creation of Objects with an example Python code. (7M)

Or

- 8 a) List and explain various built-in Class Methods and attributes in Python. (7M)
b) Explain the procedure to read and write from the file. (7M)



UNIT-V

- 9 a) Develop a Python program to implement a single try block with multiple except blocks and trace the code for its execution. (7M)
b) Explain how we can use the assert statement to generate Assertion Error with the help of an example program. (7M)

Or

- 10 a) How to handle an exception using try-except block? Explain with the help of a program. (7M)
b) Explain how data hiding is achieved in Python. (7M)

