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## I B. Tech II Semester Supplementary Examinations, January/February - 2023 PROBLEM SOLVING USING PYTHON

(Common 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 a) Write about Python environment variables. [3M] b) Explain the modules and methods that help you to parse command-line options [4M] and arguments. c) Write a Python program to demonstrate the usage of Logical, Membership and [7M] Identity operators. (OR) a) With neat flow diagrams, explain the decision making statements available in 2 [7M] Python programming. b) Write a python program to calculate the total amount to be paid by user after [7M] reducing the 10% discount on purchases more than 1000 rupees. **UNIT-II** a) Write a Python program that prints all Prime numbers from 1 to 100 except even 3 [7M] primes. b) Explain the execution behavior of 'for' loop statement supported by Python [7M] programming with an example program. (OR) a) Explain various String handling functions provided by Python programming. 4 [7M] b) Write a Python program to read a Text file line by line and store it into an Array. [7M] **UNIT - III** a) Explain the syntax to create Lists in Python? And write a Python program to print 5 [7M] a specified list after removing the 0<sup>th</sup>, 4<sup>th</sup> and 5<sup>th</sup> elements. b) Describe various Built-in Dictionary methods available in Python Programming. [7M] (OR) a) Explain the concept of Anonymous functions in Python with an example program. [7M] b) Write about the following features in Python programming [7M] i)Modules ii) globals() and locals() Functions iii)Packages **UNIT-IV** a) Explain about read() and write() methods in Python programming. 7 [7M] b) Explain the following [7M] i)Python Garbage collection ii)Data hiding

b) Discuss the Python's Language level support for achieving Class Inheritance.

a) Explain the steps for reading and writing config files in Python.

## UNIT - V

a) List and explain any 12 Standard Exceptions available in Python. [7M]
b) How to pass an argument to an exception in python? Explain with a sample python code. (OR)

10 a) Write a Python GUI program to create three single line text-box to accept a value [7M] from the user using tkinter module.

b) Write about block-based visual programming language and explain its features. [7M]

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