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B. TECH. HONORS DEGREE EXAMINATIONS, JULY/AUGUST-2023

CSE/AM

AI AND ML DOMAIN

ADVANCED PYTHON PROGRAMMING

Time: Three Hours   **Maximum: 70 Marks**

Answer ONE Question from each unit.   5 x 14 = 70 M

All Questions carry equal marks.

UNIT-I

1. a) Explain the concept of scope and lifetime of variables in python programming language with an example.

    b) Write a python code to demonstrate type conversions using int(), float() and str().

(OR)

2. a) What is Dictionary? Explain Python dictionaries in detail discussing its operations and methods.

    b) Write Python code to find the factorial of a number.

UNIT-II

3. a) Differentiate between class and instance variables (or attributes)?

    b) Explain the Data hiding and Data encapsulation with examples.

(OR)

4. a) Program to demonstrate the Overriding of the Base Class Method in the Derived Class.

    b) What happens if except clause is written without any Exception type? Explain with an example.

UNIT-III

5. a) What is Data stream? How to create our own streams.

    b) Analyze the university result of various colleges in department wise using read and write file.

(OR)

6. a) Describe in detail exception handling with sample program.

    b) Identify the various methods used to delete the elements form the dictionary.

UNIT-IV

7. Explain about various components used in Python with examples.

(OR)

8. Create a GUI Mark sheet using python-Tkinter library.

UNIT-V

9. Write a sample code using the modules sys, calendar, time, date time and math?

(OR)

10. Explain the usage of pandas for Data Analysis?