QP CODE: 23800326

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Reg No : .....

Name : .....

INTEGRATED PG DEGREE EXAMINATION, DECEMBER 2023

Third Semester

CORE - ICSC3CR2 - PROGRAMMING IN PYTHON

INTEGRATED MSC COMPUTER SCIENCE-ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING & INTEGRATED MSC COMPUTER SCIENCE- DATA SCIENCE

2020 ADMISSION ONWARDS

E055060A

Time: 3 Hours Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

*Weight **1** each.*

1. What is a syntax error?
2. Is it important to have an integrated development environment like Jupyter?
3. What are advantages and disadvantages of recursion?
4. Write the output for the following code str="Banana" print(str[:3]).
5. How to create a dictionary for python?
6. Define reverse lookup.
7. Differentiate single Exception block and multiple Exception block.
8. What are the operations performed on a File?
9. Discuss markers in matplotlib plots.
10. What is the use of 'na_values' argument of read_csv() in pandas?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

*Weight **2** each.*

11. Write the program to check the given number is odd or even.
12. Explain variable assignment with suitable example.
13. Explain Indexing and Slicing operation for the list with example in python.

14. Compare tuple and list.

15. Explain the concept of Class with suitable examples.

16. Explain single inheritance.

17. What is ndarray? What are the attributes of an ndarray object?

18. Discuss any 5 tkinter widgets.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

*Weight **5** each.*

19. Explain in detail about Control flow structures in python.

20. Assume that the variable data refers to the string "Python rules!". Use a string method to perform the following tasks: a. Obtain a list of the words in the string. b. Convert the string to uppercase. c. Locate the position of the string "rules". d. Replace the exclamation point with a question mark

21. Let farm={'Sheep':5,'Cows':2,'Goats':10} be a dictionary. Write the statements for following operations. To add the key value pair ('Ducks':8) .To display the number of items in the dictionary.To remove the key value pair ('Cows':2)

22. Explain a) decorators. b) generators. c) Iterators.

(2×5=10 weightage)