## TM244563F

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Reg. No :
Name :

# MASTER'S DEGREE (C.S.S) EXAMINATION, MARCH 2024 2022 ADMISSIONS REGULAR

# SEMESTER IV - P.G Diploma In Management In Business Analytics BA4E01TM20 - Data Science Using Python

Time: 3 Hours Maximum Weight: 30

#### Part A

#### I. Answer any Eight questions. Each question carries 1 weight

(8x1=8)

- 1. Define Object.
- 2. Define abs().
- 3. Define Shape() with example.
- 4. How do you create a 2-D array in python?
- 5. Write the statement for fetching the indexed elements "hello" and "hi" from the below list. list1=[1,2,3,4,[5,6,7,[8,9,"hello",[11,12,"hi"]]]]
- 6. How do you use LOWER function?
- 7. Define Dictionary.
- 8. Compare and contrast decision tree and random forest.
- 9. How does the function score help in prediction?
- 10. Define pandas.

#### Part B

### II. Answer any Six questions. Each question carries 2 weight

(6x2=12)

- 11. Comment on Python List Slicing
- 12. Name and comment Comparison operator in Python.
- 13. Write a program to input two numbers and to swap them without using user defined function.
- 14. Why you should use Numpy arrays instead of Nested python list in most cases? Explain it with suitable examples of NumPy array as well as Nested list.
- 15. Describe the Data Analysis process.
- 16. Distinguish Indexing and Slicing with appropriate examples.
- 17. Define machine learning.
- 18. Compare and contrast SVM and KNN.

#### Part C

# III. Answer any Two questions. Each question carries 5 weight

(2x5=10)

- 19. Compare and contrast For and While loop with an example.
- 20. How To Reverse A List In Python Using Slicing ?Write a program to reverse the element in an array using the slicing technique with the help of a user-defined function. Eg: [1,2,3,4],Output should be [4,3,2,1]
- 21. How can you build a simple Linear regression model in python?
- 22. How can you build a clustering model in python? Explain with example .

