



JP – 714

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III Semester M.B.A. (Day/Evening) Examination, May/June 2023
(CBCS) (2022-23 & Onwards) (Freshers)
MANAGEMENT

3.11.1 : Data Science using R and Python

Time : 3 Hours

Max. Marks : 70

SECTION – A



Answer **any five** of the following. **Each** question carries **five** marks. **(5×5=25)**

1. What is R Studio ? What are the different types of panes in R studio ?
2. Write a note on :
 - summary() function
 - supply() function
3. Differentiate between List and Tuple in Python.
4. What is data frame in Python ? How do you create a data frame in python ? Give an example.
5. What is stat.desc() function ? Write the steps to install Pastecs package in R.
6. What is Jupyter Notebook ? What is the difference between Python and Jupyter Notebook ?
7. List out the common approaches for handling missing values in R with example.

SECTION – B

Answer **any three** of the following. **Each** question carries **10** marks. **(3×10=30)**

8. What is par() function in R ? Explain the parameters of par() function with an example.
9. What is aggregated pyramid in R ? Explain the arguments used in aggregated pyramid.

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10. Create an Array in R with name "MySales" with 30 observations using following methods.
- By using array with dimension of 3,5 and 2
 - By using vector method
11. What is moving window function in python? Explain the different types of window function.

SECTION – C

Compulsory Question :**(1×15=15)**

12. Case Study :

Suppose we have two arrays, A (1, 2, 3) and B (4, 5, 6), and we want to perform the following operations using NumPy: Write a Python script for the following questions :

- Import Numpy as np and see the version
 - Create an array C that is the sum of A and B
 - Create an array D that is the difference between A and B
 - Create an array E that is the product of A and B
 - Create an array F that is the result of element-wise division of A by B
 - Create an array G that is the dot product of A and B.
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