K26FY1542 Pages: 2 Reg No:.....
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# Second Semester FYUGP Degree (Reg/Sup/Imp) Examination April 2026

# KU2DSCCSC112 - BASICS OF DATA ANALYTICS

2024 Admission onwards

Time : 1.5 hours Maximum Marks : 50

## Section A

**Answer any 6 questions. Each carry 2 marks.**

1. Define data analytics.
2. What are the types of data analytics?
3. What is the purpose of the figure() function in Matplotlib?
4. What is Matplotlib used for in Python? Provide two key features of Matplotlib.
5. What is the purpose of the arange() function in NumPy? Provide an example.
6. How do you fill missing values in a DataFrame.
7. What is the purpose of the enumerate() function in Python?
8. What is a Python module, and why is it useful in large Python projects?

## Section B

**Answer any 4 questions. Each carry 6 marks.**

9. How does the linspace() function differ from arange()? Explain with an example.
10. Write code to generate a NumPy array of even numbers from 10 to 30 using arange(), and generate 5 equally spaced numbers between 0 and 1 using linspace().
11. How do you handle missing data in Pandas? Discuss the fillna() method with an example, and explain how it is used to fill missing values in a DataFrame.
12. Explain built-in methods of dictionaries.
13. Explain the concept of importing a module.
14. Explain math module in python.

## Section C

**Answer any 1 questions. Each carry 14 marks.**

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15. (a) List the different types of data analytics (descriptive, diagnostic, predictive, and prescriptive) and explain how they are used in solving business problems.

    (b) Explain different operators in Python with simple code

16. (a) Explain the use of xlabel(), ylabel(), title(), and text() functions for adding labels and annotations to a plot. Give an example.

    (b) Write a program to create the following plots for x=[1,2,3,4] and y=[10,20,15,25] a. Bar chart b. Scatterplot c. Histogram

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