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Reg.No :

Name :

MAHATMA GANDHI UNIVERSITY, KOTTAYAM
MGU-UGP (HONOURS) REGULAR EXAMINATION MARCH 2025
SECOND SEMESTER

Multi-Disciplinary Courses (MDC) - MG2MDCCSC100 - DATA
VISUALIZATION USING PYTHON
(2024 ADMISSION ONWARDS)

Duration: 1 Hours

Maximum Marks: 35

Remember(K), Understand(U), Apply(A), Analyse(An), Evaluate(E), Create(C), Skill(S), Interest(I) and Appreciation(Ap)

Students should attempt at least one question from each course outcome to enhance their overall outcome attainability.

Part A

Very Short Answer Questions

Answer all questions

Each question carries **2** marks

1. Arrange the following steps in the correct order to create a Matplotlib plot: (Customize plot, Show plot, Import library, Create figure, Add data). [K] / [CO1]
2. Name two Python libraries besides Matplotlib used for data visualization. [K] / [CO1]
3. Explain the term 'hover'. [U] / [CO2]
4. Write down 2 best practices for data visualization. [U] / [CO2]
5. Recall the role of dcc.Graph() in Dash. [K] / [CO2]

[2x5 = 10]

Part B

Short Answer Questions

Answer any **5** questions

Each question carries **5** marks

6. Describe the importance of data visualization in decision-making. [K] / [CO1]

7. Discuss the advantages and disadvantages of using pie charts for data representation. [U] / [CO2]
 8. Discuss when to use box plots and violin plots for statistical visualization. [U] / [CO1]
 9. Briefly explain some interactive function available. [U] / [CO2]
 10. Discuss about Plotly Graph Objects. [U] / [CO2]
 11. What is a multi-plot grid in Seaborn? How is it useful? [K] / [CO1]
 12. Describe how to use a built-in dataset in Plotly Express for visualization with an example. [U] / [CO2]
- [5x5 = 25]**