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| FINAL SRI DEVI INSTITURnew  **SHREE DEVI INSTITUTE OF TECHNOLOGY**  **Kenjar, Mangalore-574142**  **MASTER OF COMPUTER APPLICATIONS**  **I Internal Test - June 2025** | | | | | | | |
| **Sem/Sec: 1st Sem** | | | | **Max. Marks: 30** | | | |
| **Course Name: ML & Data Analytics using Python** | | | | **Duration: 1 Hour** | | | |
| **Course Code: MMC201** | | | | **Date: 09/06/2025** | | | |
|  | | | |  | | | |
| Question Number | |  | **Note: Answer any one full question from each part** | | Marks | RBT Level | CO |
| **PART A** | | | | | | | |
| I | | 1  2 | What is Machine Learning? Discuss its types in detail with suitable examples and diagrams.  List some applications of Machine Learning in different domains. Briefly explain. | | 8  7 | L1  L2 | CO1  CO2 |
|  | |  | **OR** | |  |  |  |
| II | | 3  4 | Explain Supervised Learning in detail. Discuss any two algorithms and their applications.  Compare and contrast Pandas and NumPy with suitable use cases. | | 8  7 | L1  L2 | CO1  CO2 |
| **PART B** | | | | | | | |
| III | 5  6 | | Explain how data can be manipulated using Pandas. Give examples of at least three operations.  Explain the steps involved in data preprocessing. Explain its step with example. | | 8  7 | L2  L2 | CO1  CO2 |
|  |  | | **OR** | |  |  |  |
| IV | 7  8 | | Discuss the significance of Python in data analysis and Machine Learning. Explain the role of NumPy, Pandas, and Matplotlib with code snippets.  What is NumPy? Explain its importance in data analysis. Include any four NumPy operations. | | 5  10 | L1  L1 | CO1  CO2 |