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 **PRESIDENCY UNIVERSITY**

  **Bengaluru**

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| **Ph. D Course Work End Term Examinations – JAN-FEB 2025** |
| **Date:** 04 – 02- 2025 **Time:** 09:30 am – 12:30 pm |

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| **School:** SOM | **Program:** Ph. D |
| **Course Code :** MGT918 | **Course Name :** Data Visualization |
| **Semester**: | **Max Marks**: 100 | **Weightage**: 50% |

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| **CO - Levels** | **CO1** | **CO2** | **CO3** | **CO4** | **CO5** |
| **Marks** | **20** | **20** | **10** | **30** | **20** |

**Instructions:**

1. *Read all questions carefully and answer accordingly.*
2. *Do not write anything on the question paper other than roll number.*

**Part A**

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| **Answer ALL the Questions. Each question carries 10 marks. 6Q x 10M=60Marks** |
| **1** | Discuss the data-ink ratio in Visualization | **10 Marks** | **L1** | **CO1** |
| **2** | Describe the functions of exploratory data analysis with suitable algorithm. | **10 Marks** | **L1** | **CO1** |
| **3** | Explain the ethical considerations in data visualization. | **10 Marks** | **L2** | **CO2** |
| **4** | what are storyboards? Explain the different types of story boards. | **10 Marks** | **L2** | **CO2** |
| **5** | Explain the difference between Real-time vs. Periodic Dashboards? Where is Real-time Dashboard used vs. Periodic. | **10 Marks** | **L3** | **CO3** |
| **6** | What is Augmented Reality AR and Virtual Reality VR. How are they different and used in Data Visualization. | **10 Marks** | **L3** | **CO4** |

**Part B**

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| **Answer the Questions. Each question carries 20 marks 2Q x 20 = 40 Marks** |
| **7.** |  | Discuss the following with respect to Matplotlib. 1) Labels, Titles, Text, Annotations, Legends.– | **20 Marks** | **L5** | **CO4** |
|  |
| **8.** |  | Describe the process of data wrangling and its significance in data visualization. – **10 marks** Explain different types of plots in relation plots. – **10 marks**  | **20 Marks** | **L5** | **CO5** |

**\*\*\*\*\* BEST WISHES \*\*\*\*\***