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**PRESIDENCY UNIVERSITY**

**Bengaluru**

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| **End - Term Examinations – MAY 2025** |
| **Date:** 22-05-2025 **Time:** 01:00 pm – 04:00 pm |

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| **School:** SOM- UG | **Program:** BBA – Business Analytics | |
| **Course Code :** BBB2001 | **Course Name:** Essential of Business Analytics | |
| **Semester**: II | **Max Marks**: 100 | **Weightage**:50% |

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| **CO - Levels** | **CO1** | **CO2** | **CO3** | **CO4** | **CO5** |
| **Marks** | **20** | **20** | **20** | **20** | **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 2 marks. 10Q x 2M=20M** | | | | |
| **1.** | What is the role of analytics in business decision-making? | **2 Marks** | **L1** | **CO1** |
| **2.** | List any four application fields of analytics. | **2 Marks** | **L1** | **CO1** |
| **3.** | List any two data collection techniques used in business analytics. | **2 Marks** | **L1** | **CO2** |
| **4.** | Explain the concept of big data management. | **2 Marks** | **L2** | **CO2** |
| **5.** | List any two measures of central tendency. | **2 Marks** | **L1** | **CO3** |
| **6.** | Explain the use of visualizations in summarizing business data. | **2 Marks** | **L2** | **CO3** |
| **7.** | List any two forecasting techniques used in predictive analytics. | **2 Marks** | **L1** | **CO4** |
| **8.** | List any two data mining techniques. | **2 Marks** | **L1** | **CO4** |
| **9.** | Define content analytics with examples. | **2 Marks** | **L1** | **CO5** |
| **10.** | List two ethical concerns in business analytics. | **2 Marks** | **L1** | **CO5** |

**Part B**

**Answer ALL the Questions. Each question carries 7 Marks. Total Marks 35M**

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| 11. | a. | Compare Marketing Analytics with HR Analytics using business scenarios. | 07 Marks | L4 | CO1 |
| Or | | | | | |
| 12. | **a.** | Explain the role of a data scientist in business and society. | **07 Marks** | **L5** | **CO1** |

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| 13. | a. | List the importance of data quality and how to handle missing data. | 07 Marks | L4 | CO2 |
| Or | | | | | |
| 14. | **a.** | Explain the steps involved in data classification | **07 Marks** | **L5** | **CO2** |

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| 15. | a. | List the steps of creating data dashboards using MS Excel. | 07 Marks | L4 | CO3 |
| Or | | | | | |
| 16. | **a.** | Explain the role of cross tabulations in descriptive analytics with an example. | **07 Marks** | **L5** | **CO3** |

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| 17. | a. | Analyze the use of multiple regression in business forecasting. | 07 Marks | L4 | CO4 |
| Or | | | | | |
| 18. | **a.** | Compare the classification technique in data mining with real-life business data. | **07 Marks** | **L5** | **CO4** |

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| 19. | a. | Discuss the role of artificial intelligence in e-commerce and m-commerce. | 07 Marks | L6 | CO5 |
| Or | | | | | |
| 20. | **a.** | Explain the significance of sentiment analysis and opinion mining in modern businesses. | **07 Marks** | **L5** | **CO5** |

**Part C**

**Answer any Three Questions. Each question carries 15 marks 3Q x 15M=45M**

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| 21. | a. | Evaluate how predictive analytics influences business strategy across different sectors. Use examples. | 15 Marks | L5 | CO1 |

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| 22. | a. | A health-tech startup is collecting real-time patient data from multiple hospitals. The data arrives in inconsistent formats, with missing entries and duplicate records. The company intends to use this data to build predictive models for disease trends. As a business analyst, elaborate the process of data exploration to be conducted for predictive analytics. | 15 Marks | L6 | CO2 |

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| 23. | a. | A retail company has collected monthly sales data from five different cities over the last 12 months. Management wants to identify sales trends and compare city-wise performance to support strategic planning. As a business analyst, analyze the given data using descriptive analytics techniques.   1. Explain the measures used to summarize the data. 2. Assess the suitable visualization techniques can be adopted for comparison. 3. Explain how dashboard can enhance business decision-making. | 15 Marks | L5 | CO3 |

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| 24. | a. | A startup in the fitness tech industry collects user data through its mobile app, which includes variables like age, gender, average daily steps, hours of sleep, calorie intake, and weight. The company wants to predict a user’s weight based on the available variables and determine the most significant predictors.  As a business analyst, perform the following tasks:   1. Identify and categorize the data types and variables. 2. Determine which type of regression analysis is most appropriate for this situation and justify your choice. 3. Outline the steps you would take to build a regression model using these variables. | 15 Marks | L5 | CO4 |