PRESIDENCY UNIVERSITY

BENGALURU

End - Term Examinations – MAY 2025

Date: 20-05-2025   **Time:** 09:30 am – 12:30 pm

School: SOC	**Program**: BBA- Analytics
Course Code: BBB3024	**Course Name:** Artificial Intelligence for Managers
Semester: VI	**Max Marks**: 100 — **Weightage**:50%

CO - Levels	CO1	CO2	CO3	CO4
Marks	11	26	35	28

Instructions:

(i) Read all questions carefully and answer accordingly.

(ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2 marks.   **10Q x 2M=20M**

1.	Define Artificial Intelligence.	2 Marks	L1	CO1
2.	List three types of AI.	2 Marks	L1	CO1
3.	Name two AI technologies used in voice assistants.	2 Marks	L1	CO2
4.	Describe the concept of supervised learning.	2 Marks	L1	CO2
5.	Recall the sources of data collection for AI model development.	2 Marks	L1	CO3
6.	Define model deployment in the AI lifecycle.	2 Marks	L1	CO3
7.	List any three types of AI-generated reports.	2 Marks	L1	CO3
8.	Outline the use of heat maps in data visualization.	2 Marks	L1	CO4
9.	Recognize the differences between Tableau and Power BI.	2 Marks	L1	CO4
10.	Name any three types of charts used in data visualization.	2 Marks	L1	CO4

Part B

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

11.	a.	Explain the role of AI in modern society with suitable examples.	07 Marks	L2	CO1
		Or			
12.	a.	Explain the ethical concerns that managers should consider when implementing AI systems in business.	07 Marks	L2	CO1

13.	a.	Apply your understanding of deep learning to explain how image recognition works.	07 Marks	L2	CO2

		Or			
14.	**a.**	Explain Machine Learning. Elucidate the differences between supervised, unsupervised, and reinforcement learning, providing examples of each.	**07 Marks**	**L2**	**CO2**

15.	**a.**	Illustrate the steps in training and evaluating an AI model.	**07 Marks**	**L2**	**CO3**
		Or			
16.	**a.**	Explain the significance of model deployment and monitoring in the AI pipeline.	**07 Marks**	**L2**	**CO3**

17.	**a.**	Compare Tableau and Power BI based on their visualization capabilities.	**07 Marks**	**L2**	**CO4**
		Or			
18.	**a.**	How can interactive dashboards improve decision-making in a business environment? Discuss with examples of tools that support such features.	**07 Marks**	**L3**	**CO4**

19.	**a.**	Analyze the impact of data quality on model training and evaluation in AI.	**07 Marks**	**L3**	**CO3**
		Or			
20.	**a.**	Analyze the importance of feature engineering in the AI model development process.	**07 Marks**	**L3**	**CO3**

Part C

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

21.	**a.**	A school introduces an AI-powered chatbot to help students with homework questions. It works 24/7 and gives quick answers. Some teachers worry that students may stop thinking critically and over-rely on the bot. Apply your understanding of AI to explain the benefits and possible risks of using AI chatbots in education. Suggest two ways to use it responsibly.	**15 Marks**	**L3**	**CO 1**

22.	**a.**	An e-commerce platform like Amazon collects user reviews and ratings for thousands of products daily. They struggle to understand overall customer sentiment. How can Natural Language Processing (NLP) and Machine Learning be applied to analyze this data effectively?	**15 Marks**	**L4**	**CO2**
23.	**a.**	A local business wants to use AI to predict sales but doesn't have clean, complete data. Their team collects some data manually, but errors and missing values make model training difficult. Apply your understanding of the AI process to explain why data preparation is important. Suggest simple steps the business can take to clean and prepare their data.	**15 Marks**	**L3**	**CO3**

24.	**a.**	A health NGO wants to visualize the spread of a disease across districts using real-time data. They are confused about which type of chart to use and whether to adopt Tableau or Power BI for dynamic dashboards. Evaluate the suitable types of data visualizations for this case and recommend a tool. Support your suggestions with reasons based on data characteristics.	**15 Marks**	**L4**	**CO4**