PGDM / PGDM (FINTECH) Program
TRIMESTER - VI (Batch: 2023-25)
END-TERM EXAMINATION, APRIL 2025

Course Name	AI for Managers	Course Code	AIM
Duration	Three Hours	Max. Marks	60 ·

Instructions:

- The Question paper has three sections named Section A, Section B and Section C.
- The details on how many questions to be answered are provided along with the section's name.
- Each question carries **5 marks.**
- If you feel that any data is incomplete or missing, assume and write it down in the answer sheet. Read and understand the questions carefully and approach them.

Best wishes!

Section A (20 Marks)

(All Questions are compulsory (CO1, CO2))

1. What is the difference between Artificial Intelligence, Machine Learning, Deep Learning and Generative AI? Explain with suitable examples.

2. Define the difference between traditional programming and programming for ML with suitable examples.

3. Differentiate between Supervised, Unsupervised, and Reinforcement Learning. Provide business applications for each.

4. What is NLP? List the different activities done by NLP to provide the desired outcome.

Section B (25 Marks)

(Answer any five questions (CO1, CO2, CO4)

5. What is LLM? Explain with suitable applications of LLM. Describe Prompt Engineering, Hallucinations and Retrieval Augmented Generation with respect to LLM.

6. What are the biases in ML? How can it be mitigated?

7. What are the different types and dimensions of AI risks?

8. What are machine values and how are they different from human values? Explain Black-Swan event in reference to AI.

9. What is Q-learning algorithm? How is it different than the Random Forest Algorithm?

10. A global email service provider is using an AI-powered spam filter to classify emails as spam or not spam. Define the role of AI in spam filtering. What key features might the AI model use to distinguish between spam and legitimate emails? Provide at least three examples. (5 Marks)

11. Explain computer vision and its association with deep learning. Explain how computer vision helps in image classification and object detection with suitable examples.

Section C (15 Marks)

(Answer any three questions)

12. You are the Marketing Manager at a fintech company. Your team wants to use AI to personalize customer communications and loan offerings based on behavioral data. What ethical concerns might arise from this use of AI? How would you ensure that the AI system remains fair, transparent, and non-discriminatory? (CO3, CO4, CO5)

13. What are the potential risks and ethical challenges associated with deploying AI in self-driving cars and in social and military robots? (CO2, CO4)

14. A retail company uses facial recognition in stores to monitor customer behavior and improve layout design. Discuss the ethical, privacy, and legal challenges that may

arise. How should the firm address them?

(CO3, CO4)

15. Choose an industry of your choice (e.g., retail, logistics, education, banking, manufacturing). Identify **two specific use cases** where AI can create value. For each, briefly explain:

   a. The business problem

   b. The AI approach used

   c. Managerial decisions impacted   (CO2, CO3, CO5)