

INDIRA UNIVERSITY, PUNE

SCHOOL OF INFORMATION TECHNOLOGY- BSC AIML

Backlog Examination (2025 Pattern) April/ May – 2026 - Semester – I

Subject Name: Fundamentals of Artificial Intelligence
Subject Code: 25AML103T

Max. Marks: 25
Time: 1:30 Hrs.

Instructions

- All Questions are Compulsory.
- Figures to the right indicate full marks

CO #	Cognitive Ability	Course Outcome
CO1	Remember	Describe the core concepts, foundations, history, and current state of Artificial Intelligence.
CO2	Understand	Differentiate between symbolic and sub-symbolic approaches and identify various types of AI including reactive, limited memory, theory of mind, and self-aware systems
CO3	Apply	Apply problem-solving techniques using search strategies to solve AI-based scenarios.

Q1.	Attempt any 5 out of 7. (1 mark each) a) Name one state-of-the-art AI application in robotics b) What are the 4 types of AI c) Define Actuator d) Define problem solving agent e) Which year marks the birth of Artificial Intelligence? f) List the sources of Bias in AI g) With reference to a learning agent, what does critic mean?	(5 Marks)	CO1
Q2.	Attempt any 2 out of 4. (5 marks each) a) Write a note on State of the Art AI Applications b) Explain Utility based agents c) Explain the components of a well-defined problem d) What is Artificial General Intelligence? Explain self-learning AGI.	(10 Marks)	CO2

Q.3.	Attempt ALL . (5 marks each) (10 Marks) 1. Consider the following agent scenarios: an online chess game with a timer. Apply your understanding of static and dynamic environments to classify each scenario and justify your classification. 2. Compare and contrast single agent and multi agent task environment. OR	CO3
Q.3	Attempt the question (10 Marks) Consider a self-driving car designed to transport passengers safely and efficiently in urban environments. Apply the PEAS framework to this agent by identifying and listing the Performance Measures, Environment, Actuators, and Sensors for the system.	
