

--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

School of Basic Sciences
Bachelor of Science Honours in Mathematics
Mid Term Examination - Nov 2023

Duration : 90 Minutes
Max Marks : 50

Sem III - E2UC321T - Introduction to Artificial Intelligence

General Instructions

Answer to the specific question asked

Draw neat, labelled diagrams wherever necessary

Approved data hand books are allowed subject to verification by the Invigilator

- 1) Recall the key components of machine learning. K2 (2)
- 2) Describe the difference between narrow AI and Strong AI. K1 (3)
- 3) Explain the difference between supervised and unsupervised learning in machine learning. K2 (4)
- 4) Critically examine the challenges of AI adoption in various industries. K2 (6)
- 5) List the key components of an agent's interaction with its environment. K3 (6)
- 6) Analyze the strengths and limitations of semantic networks in representing complex knowledge. K3 (9)
- 7) Design an AI system that integrates multiple foundational concepts to solve a complex problem. K4 (8)
- 8) List three potential benefits of adopting AI technologies in various industries and identify three risks associated with the widespread adoption of AI. K4 (12)

OR

Explain with three example how AI can improve decision-making processes in healthcare. K4 (12)