GALGOTIAS UNIVERSITY

ADMISSION NUMBER

School of Basic Sciences

Bachelor of Science Honours in Mathematics
Semester End Examination - Jul 2024

Duration : 180 Minutes
Max Marks : 100

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)	Summarize the significance of natural language processing in AI.	K1(3)
2)	Name a key figure in the history of AI and describe their contributions.	K2(4)
3)	Describe the role of natural language processing in healthcare records analysis.	K2(6)
4)	Develop a simple AI model for diagnosing a specific medical condition from medical images.	K3(6)
5)	Design a text-mining algorithm for extracting medical insights from patient records.	K3(6)
6)	Analyze the challenges and economic considerations in implementing AI in automotive manufacturing.	K3(9)
7)	Describe the role of machine learning in autonomous vehicle perception and decision-making.	K3(9)
8)	Analyze the influence of environmental complexity on an agent's decision-making process.	K4(8)
9)	List the types of tasks the industrial robots were designed to handle in the manufacturing process.	K4(12)
10)	Assess the effectiveness of AI-based quality control in automotive production.	K5(10)
11)	Evaluate the efficiency of propositional logic for representing knowledge in different AI applications.	K5(15)
	OR	
	Create a risk-benefit analysis for the implementation of AI in a business context.	K5(15)
12)	Create an AI-based algorithm for optimizing vehicle routing in a fleet management system.	K6(12)

OR

Design an AI-driven system for autonomous vehicle navigation and obstacle avoidance. K6(12)