G. VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI – 628 502.

PG DEGREE END SEMESTER EXAMINATIONS - APRIL 2025.
(For those admitted in June 2023 and later)

PROGRAMME AND BRANCH: M.Sc., COMPUTER SCIENCE

SEM	CATEGORY	COMPONENT	COURSE CODE	COURSE TITLE
II	PART-III	CORE ELECTIVE -2	P23CS2E2A	ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

Date & Session: 30.04.2025/AN **Time : 3 hours** **Maximum: 75 Marks**

Course Outcome	Bloom's K-level	Q. No.	SECTION – A (10 X 1 = 10 Marks) Answer ALL Questions. Choose the best Answer:
CO1	K1	1.	In ____ alan turing proposed a method for determining whether a machine can think. a) 1930　　　　b) 1935 c) 1940　　　　d) 1950
CO1	K2	2.	A _____ is a production system in which the application of a rule never prevents the later application of another rule. a) Monotonic　　　　b) Non monotonic c) Commutative　　　　d) Non commutative
CO2	K1	3.	The generate and test strategy is _____ approach. a) Bottom up　　　　b) Simple c) Strong　　　　d) Top down
CO2	K2	4.	A _____ is a collection of attributes and associated values that describe some entity in the world. a) Window　　　　b) Frameset c) Frame　　　　d) None of these
CO3	K1	5.	Natural deduction is not a _____ term to solve problem. a) Precise　　　　b) Broad c) Short　　　　d) All of these
CO3	K2	6.	Backward chaining systems usually use _____first backtracking to select individual rules. a) breadth　　　　b) depth c) a & b　　　　d) None of these
CO4	K1	7.	Machine learning is a form of ___ that enables a system to learn from data. a) AI　　　　b) BI c) DS　　　　d) DA
CO4	K2	8.	____ computing allows businesses to test new endeavours without the large upfront costs of on-premises hardware. a) Grid　　　　b) Distributed c) Cloud　　　　d) C/S
CO5	K1	9.	_____learning is a powerful set of technologies that can help organizations transform their understanding of data. a) Deep　　　　b) Machine c) Reinforcement　　　　d) None of these
CO5	K2	10.	____ is a technique to modify models to avoid the problem of over fitting. a) Normalization　　　　b) Defragmentation c) Regularization　　　　d) All of these

Course Outcome	Bloom's K-level	Q. No.	SECTION – B (5 X 5 = 25 Marks) Answer ALL Questions choosing either (a) or (b)
CO1	K2	11a.	Define Artificial Intelligence & its problem definitions?
			(OR)
CO1	K2	11b.	Describe state space search.
CO2	K2	12a.	Discuss best – first search.
			(OR)
CO2	K2	12b.	Narrate the approaches to knowledge representation.
CO3	K3	13a.	How would you explain computable functions and predicates?
			(OR)
CO3	K3	13b.	Identify the differences of Forward vs backward reasoning.
CO4	K3	14a.	Examine big data and its context with machine learning?
			(OR)
CO4	K3	14b.	Demonstrate the role of statistics and data mining with machine learning?
CO5	K4	15a.	Examine the term Data preparation.
			(OR)
CO5	K4	15b.	Analyse the role of machine learning algorithms.

Course Outcome	Bloom's K-level	Q. No	SECTION – C (5 X 8 = 40 Marks) Answer ALL Questions choosing either (a) or (b)
CO1	K4	16a.	Analyse AI technique & approaches to solve problems?
			(OR)
CO1	K4	16b.	Investigate the term problem characteristics.
CO2	K5	17a.	Discuss the term Hill climbing & its various types of algorithms
			(OR)
CO2	K5	17b.	Determine the issues in knowledge representation.
CO3	K5	18a.	How will you representing simple facts in logic?
			(OR)
CO3	K5	18b.	Critically evaluate the procedural (vs) declarative knowledge.
CO4	K5	19a.	Determine the Leveraging the power of machine learning.
			(OR)
CO4	K5	19b.	Evaluate the approaches to machine learning.
CO5	K6	20a.	Discuss the types of machine learning algorithms.
			(OR)
CO5	K6	20b.	How will you construct the machine learning cycle?