| Question Paper Code | 12002 |

M.E. / M.Tech. - DEGREE EXAMINATIONS, APRIL/MAY 2023
Second Semester
M.E - CAD/CAM
20PCDEL206 - ARTIFICIAL INTELLIGENCE AND ITS INDUSTRIAL APPLICATIONS
(Regulations 2020)

Duration: 3 Hours   Max. Marks: 100

PART - A (10 × 2 = 20 Marks)
Answer ALL Questions

		Marks, K-Level, CO
1.	List the programming languages for AI development.	2,K1,CO1
2.	What are the main features of fifth generation?	2,K1,CO1
3.	Define fuzzy logic.	2,K1,CO2
4.	Write the properties of Forward-Chaining.	2,K1,CO2
5.	What is a Compiler in LISP?	2,K1,CO3
6.	Write the Phases of Expert System Development Life Cycle.	2,K2,CO3
7.	Recall the advantages of MYCIN.	2,K1,CO4
8.	Define heuristic matching.	2,K1,CO4
9.	List the applications of Image Processing.	2,K1,CO5
10.	What are the functions of robotic vision system?	2,K2,CO5

PART - B (5 × 13 = 65 Marks)
Answer ALL Questions

11.	a)	Explain the concepts of fifth generation computing.	13,K2,CO1
		OR	
	b)	What is NLP? Explain the steps involved in NLP.	13,K2,CO1
12.	a)	Explain the Semantic Network Representations in Rule-Based Inference Systems.	13,K2,CO2
		OR	
	b)	Describe the Certainty Factor in Artificial Intelligence.	13,K2,CO2
13.	a)	Elaborate the Steps to Develop an Expert System.	13,K2,CO3
		OR	

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create   **12002**

b) Discuss about the LISP and its program structure.   *13,K2,CO3*

14. a) Explain the forms of learning in detail.   *13,K2,CO4*

OR

b) Discuss the fundamentals of object-oriented programming.   *13,K2,CO4*

15. a) Explain the following in Image Processing (i) Noise Reduction (ii) Gray Scale Modification (iii) Histogram Flattening.   *13,K2,CO5*

OR

b) Illustrate the application to object recognition and inspection.   *13,K3,CO5*

PART - C (1 × 15 = 15 Marks)

16. a) Explain the Automated Machine Learning with the steps. Write the importance of Automated machine learning.   *15,K2,CO2*

OR

b) Discuss about the creation of expert system using an expert system tool.   *15,K2,CO4*