Q.P. Code : 2303

(3 Hours)   **[Total Marks : 100**

N.B.: (1) Question No. 1 is compulsory
(2) Write any four questions out of remaining.
(3) Assume suitable data if required.

1	(a)	Explain in brief configuration space.	5
	(b)	Explain forward chaining.	5
	(c)	What do you mean an admissible heuristics function? Discuss with suitable example.	5
	(d)	Explain steps in problem formulation.	5
2	(a)	Explain IDA* algorithm with example.	10
	(b)	Explain supervised and unsupervised learning with example	10
3	(a)	Explain various methods of knowledge representation with example.	10
	(b)	Discuss various position sensors used in robots.	10
4	(a)	Discuss the application of decision tree for restaurant example.	10
	(b)	Explain Hill-Climbing Algorithm with its limitations.	10
5	(a)	List and explain steps in designing the reactive behavioural system.	10
	(b)	Describe different types of environments applicable to AI agents.	10
6	(a)	Explain structure of Intelligent Agent.	10
	(b)	What is Uncertainty? How probability theory can be applied for toothache problem?	10
7		Write short note on	20
	(a)	TCV	
	(b)	Predicate Logic.	
	(c)	Belief network.	
	(d)	Properties of environment.	

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