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Question Paper Code: 45896

5 Year M.Sc. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

Sixth Semester

Software Engineering

XCS 363/10677 SW 602 — ARTIFICIAL INTELLIGENCE

(Common to 5 Year M.Sc. Information Technology and M.Sc. Computer Technology)

(Regulation 2003/2010)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. What is Intelligence?
- 2. What is heuristic search?
- 3. Differentiate prepositional and predicate logic.
- 4. What is script? What is its use?
- 5. What is fuzzy logic? What is its use?
- 6. Define Bayes theorem.
- 7. Define linguistics. List the general classification of languages.
- 8. What is distributed reasoning?
- 9. What are Expert Systems?
- 10. What is learning? What are its types?

PART B — $(5 \times 16 = 80 \text{ marks})$

11.	(a)	Discuss about the knowledge based systems.								
	•	\mathbf{Or}								
	(b)	Write short notes on the terms:								
		(i) Hill climbing (6)								
		(ii) Depth first (5)								
		(iii) Breadth first. (5)								
12.	(a)	Define prepositional logic. Briefly explain the prepositional logic and clause form.								
		\mathbf{Or}								
	(b)	How are categories useful in knowledge representation? Explain.								
13.	(a)	Describe briefly about the modal and temporal logics.								
		\mathbf{Or}								
	(b)	Define Bayesian networks. Explain it briefly.								
14.	(a)	What is parsing? What is its importance? Discuss briefly about its techniques.								
		\cdot Or								
	(b)	Define agents. What are the components of agents? Explain.								
15 .	(a)	Explain briefly about the knowledge acquisition and validation of expert systems.								
	•	\mathbf{Or}								
•	(b)	What are the types of learning? Discuss them briefly.								