B.Tech. Degree VII Semester Examination in Computer Science and Engineering, May 2002

CS 702 ARTIFICIAL INTELLIGENCE
(1995 Admissions)

Time: 3 Hours   Max. Marks: 100

I	a)	What are the methods of knowledge reprsentation in Artificial Intelligence? Briefly discuss.	(10)
	b)	How do you structure AI program using production systems? What are the advantages of production system model?	(10)

OR

II	a)	What is learning by Analogy?	(8)
	b)	Discuss Hill climbing search method for solving such problems.	(12)

III	a)	With an example show how parsing is done on a sentence to determine the details of its structure.	(12)
	b)	What are the methods for understanding multiple sentences ?	(8)

OR

IV	a)	With an example show how sentence is represented using Shank's conceptual dependency.	(14)
	b)	Give an account of grammar free analyzer.	(6)

V	a)	Give the use of predicate logic for representing knowledge with the help of an example.	(14)
	b)	Write short note on Horn's clauses.	(6)

OR

VI		How knowledge is repsented in a semantic network? Give an example and show the LISP representation.	(20)

VII	a)	Explain the Mycin's approach to combine several sources of inconclusive Information to form a conclusion.	(12)
	b)	Give an account of Meta knowledge.	(8)

OR

VIII	a)	Give the structure of the expert system dendral.	(16)
	b)	What is a self explaining system?	(4)

IX		Describe the steps to be performed in pattern recognition process.	(20)

OR

X		Write short notes on:	
	(i)	Machine perception.	
	(ii)	Speech recognition.	(20)