OR

b) Enumerate and explain the Inference Rules involving quantifiers

4. a) Briefly explain the necessity of fuzzy systems

OR

b) What is conditional probability? Explain

5. a) Describe the role of special forms and their usage in writing complex programs in LISP

OR

b) Briefly explain about depth-first search strategy in the usage of PROLOG

6. a) Describe the structure of Intelligent Agents

OR

b) List out and explain different tools for building expert systems

[28/III Y/212]

[SPDCA-302]
MCA Degree Examination

III YEAR

ARTIFICIAL INTELLIGENCE & KNOWLEDGE MANAGEMENT

(Effective from the admitted batch 2009-10)

Time: 3 Hours   **Max.Marks: 70**

Instructions: All parts of the unit must be answered in one place only.
Figures in the right hand margin indicate marks allotted.

SECTION-A

1. Answer any five of the following   (5x4=20)

   a) What is the Turing Test approach? Which capabilities the computer would used to possess to pass the Turing test?
   b) Enumerate the steps in a BNF grammar of sentences in propositional logic
   c) Draw the syntax of first-order logic in BNF
   d) What is a single Reflex Agent? List out the limitations of single reflex agents
   e) How do you handle uncertain knowledge?
   f) List out various PROLOG operations on lists
   g) Write the procedures to deal with uncertainty in knowledge systems

SECTION-B

Answer all questions: (5x10=50)

2. a) Draw the figure of an example problem solved by Evau's ANALOGY program

OR

   b) Briefly explain about validity and inference

3. a) Discuss the deduction of Hidden properties of the world