

Roll No

EL/IC-7201

B.E. VII Semester

Examination, December 2016

Artificial Intelligence

Time : Three Hours

Maximum Marks :70

- Note:** i) Answer five questions. In each question part A, B, C is compulsory and D part has internal choice.
ii) All parts of each question are to be attempted at one place.
iii) All questions carry equal marks, out of which part A and B (Max. 50 words) carry 2 marks, part C (Max. 100 words) carry 3 marks, part D (Max. 400 words) carry 7 marks.
iv) Except numericals, Derivation, Design and Drawing etc.

Unit - I

1. a) List AI problems.
b) Define AI and expert systems.
c) Discuss Forward and Backward Reasoning.
d) Define the problem of "play cross" as a state space sensor.

OR

Explain control strategies and its characteristics.

Unit - II

2. a) What is Proportional logic?
b) Define predicate logic.
c) What are the limitations of proportional logic over predicate logic?
d) Explain Reasoning problem with the help of a suitable example.

OR

Explain frames and semantic network.

Unit - III

3. a) What is LISP?
b) What is PROLOG?
c) Define AI techniques and their applications.
d) Explain the characteristics of LISP.

OR

Explain the important characteristic of PROLOG.

Unit - IV

4. a) What is System Shells?
b) What is medical diagnosis expert system?
c) Discuss some Important expert systems.
d) Explain structure of an expert system.

OR

Discuss steps in the expert system design.

Unit - V

5. a) What is Artificial Neural Network?
b) What are Perceptions?
c) What is Back Propagation?
d) Explain Hopfield Network.

OR

Explain Cohenon self-organising network.
