SUB CODE: CS6659

SUB. NAME: ARTIFICIAL INTELLIGENCE

ASSIGNMENT II

UNIT II

Part A

- 1. What is Knowledge representation? State the issues in knowledge representation?
- 2. What are the properties of a good system for the representation of knowledge?
- 3. What are forward and backward representation mappings?
- 4. State the use of unification.
- 5. What is Alpha-Beta pruning?
- 6. Define Conceptual Dependency.
- 7. What are scripts?
- 8. What are frames?

Part B

- 1. Explain in detail about approaches to Knowledge Representation and various issues in knowledge representation.
- 2. Explain the unification algorithm used for reasoning under predicate logic with an example. Consider the following facts
 - a. Team India
 - b. Team Australia
 - c. Final match between India and Australia
 - d. India scored 350 runs, Australia scored 350 runs, India lost 5 wickets, Australia lost 7 wickets.
 - e. The team which scored the maximum runs wins.
 - f. If the scores are same the team which lost minimum wickets wins the match.

Represent the facts in predicate, convert to clause form and prove by resolution "India wins the match".

- 3. Explain with an example concept of resolution.
- 4. i) Explain MINIMAX Search Procedure algorithm with suitable illustration.
 - ii) Explain alpha-beta pruning with suitable example.