

BT-7/D-23

## EXPERT SYSTEMS

Paper-PE-CS-D415A

Time Allowed : 3 Hours]

[Maximum Marks : 75

**Note** : Attempt **five** questions in all, selecting at least **one** question from each Unit. All questions carry equal marks.

### UNIT-I

1. (a) What is an Expert System? Explore its various components in detail. 7
- (b) Elaborate rule-based architecture of an expert system. Also discuss its advantages. 8
2. (a) Write a note on the applications of Expert System. 7
- (b) What are the types of problems handled by Expert System? 8

### UNIT-II

3. What are the different techniques of representing the knowledge in expert systems? Discuss. 15
4. Explain the following factors related with expert system:
  - (a) System Building Aids.
  - (b) Knowledge Engineering.

### UNIT-III

Discuss how expert system tools facilitate the development of expert systems and provide an overview of the tools commonly used in the creation of these systems. 15

6. Explain the procedure of Building an Expert System in detail. 15

### UNIT-IV

7. Discuss in detail the difficulties faced in interaction with Domain experts during expert system development. 15
8. Write a detailed note on common pitfalls in planning for expert system development. 15

