



QP CODE: 26019665



Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, MARCH 2026

Fourth Semester

M Sc Artificial Intelligence

ELECTIVE - AI810406 - EXPERT SYSTEMS

2020 Admission Onwards

01C851C8

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. What is ANS?
2. What is meant by Knowledge?
3. Discuss the differences between AND-OR trees and AND-OR graphs in problem-solving methodologies.
4. What is analogy?
5. What are the errors related to Measurement?
6. What is uncertain evidence?
7. What are the primary sources of uncertainty in rule-based systems?
8. Discuss the major Errors in Expert System.
9. What are the steps to selecting an Expert System tool?
10. What are the techniques for Extracting Knowledge from Domain Expert?

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Explain the Basic Concept of an Expert System.
12. Explain Semantic Nets and its limitations.





13. Explain First Order Predicate Logic.
14. Explain Backward Chaining with example.
15. Explain Inference Net Architecture.
16. Explain the transition rule of Fuzzy logic.
17. Explain the necessary requirements for Expert Systems development.
18. Explain the tasks in building Expert System.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Explain Set and different Set Operations using Venn diagram.
20. Explain the different Rule of Inference for Propositional Logic in detail.
21. Explain Compound Probability and Conditional Probability in detail.
22. Explain Expert system Building Process with an example.

(2×5=10 weightage)

