

Reg No.: _____



Jyothi Engineering College(Autonomous)

M.Tech Degree S2 (R) Examination, May 2026 (2025 Scheme)

25PADT235 - KNOWLEDGE BASED SYSTEM DESIGN



Name: _____

Total Time: 2hr 30min

CO MARK

Total Mark: 60

PART A

Answer All Questions

1. Explain the fundamental purpose of a Knowledge-Based System in your own words, and illustrate how its objectives differ from those of a standard data-processing program. CO1 (5)
2. Discuss how to use "Rule Saliency" (prioritization) to resolve a conflict between two competing expert system rules. CO2 (5)
3. Explain the specific architecture required for a Knowledge-Based System. CO3 (5)
4. Explain the different stages of knowledge acquisition. CO4 (5)
5. Demonstrate the "Semantics of Expert Systems". CO5 (5)

PART B

Answer Any Five Question(s)

6. Explain the internal components of a Knowledge-Based System and why each component is needed. CO1 (7)
7. Discuss the various "Types of Knowledge" and how they are organized in a system. CO1 (7)
8. Illustrate Hayes-Roth's and Clancey's classification of expert systems. CO2 (7)
9. Demonstrate the working of an Industrial/Commercial Expert System. CO3 (7)
10. Demonstrate the strategies for dealing with Multiple Experts. CO4 (7)
11. Elaborate Learning Evaluation process in Machine Learning for KBS. CO5 (7)
12. Describe Testing and Tuning in Machine Learning. CO5 (7)
