Roll No…….. **Total No. of Printed Pages: [01]**
Total No. of Questions: [11]

M. Tech. (CSE) (Semester –1st)
INTRODUCTION TO INTELLIGENT SYSTEMS
SUBJECT CODE: MCSES1-112
Paper ID: [23190205]

Time: 03 Hours **Maximum Marks: 60**

Instruction for candidates:

1. Section A is Compulsory.
2. Attempt any THREE questions from Section B.
3. Attempt any TWO questions from Section C.

Section – A **(4 marks each)**

Q1. Explain the depth first search strategy with example.
Q2. Give a brief introduction of fuzzy neural networks.
Q3. What are the issues in knowledge representation?
Q4. What are the recent trends in fuzzy logic?

Section –B **(8 marks each)**

Q5. Describe the main features of Genetic Algorithm.
Q6. What do you mean by knowledge based system structures with its basic components?
Q7. What are evolutionary algorithms? Explain the steps of evolutionary algorithms.
Q8. Explain iterative deepening search and stochastic annealing.

Section –C **(10 marks each)**

Q9. Explain in detail the heuristic search methodology with suitable examples.

Q10. (a) Explain the ideas of black board architecture.

(b) Explain Denpster – Shafer theory of evidential reasoning.

Q11. Describe the following, briefly

a. Artificial intelligence (2.5)
b. Back propagation networks (2.5)
c. Radial basis function networks (2.5)
d. Recurrent networks. (2.5)