

(3)

YMCA UNIVERSITY OF SCIENCE & TECHNOLOGY, FARIDABAD
B. TECH. 6TH SEMESTER (UNDER CBS)
INTELLIGENT SYSTEMS (CE-304)

Time: 3 Hours

Max. Marks: 60

- Note:**
1. It is **compulsory** to answer the questions of Part -1. Limit your answers within 20-40 word in this part.
 2. Answer any four questions from Part -2 in detail.
 3. Different parts of the same question are to be attempted adjacent to each other.
 4. Assume suitable standard data wherever required, if not given.

PART -1

- Q1 (a) What is AI? List all components of AI. (2)
- (b) What do you understand by Heuristic function? (2)
- (c) Define the term semantic nets. (2)
- (d) Briefly describe the role of reasoning in AI. (2)
- (e) What is **forward chaining**? (2)
- (f) Compare and contrast expert system with an intelligent system. (2)
- (g) What are the basic issues in solving an AI problem? (2)
- (h) State travelling salesman problem? (2)
- (i) List the applications of genetic algorithm. (2)
- (j) Represent the following sentence in First Order Logic : Every Gardner like the sun. (2)

PART -2

- Q2 Explain BFS in detail. Illustrate with suitable example (10)
- Q3 Explain A* search with an example. (10)
- Q4 What is **uncertainty**? Explain Bayesian network with example. (10)
- Q5 Discuss Partial order planning giving suitable example. (10)
- Q6 Explain various types of learning strategies. Illustrate with suitable examples. (10)
- Q7 Compare rule based expert system with non-rule based expert system. (10)
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