

OR

E2 : [Intelligent System]

(Answer any *six* questions from question no.1.

(Each question carries *two* marks) : $2 \times 6 = 12$

Group - A

1. (a) Define Artificial Intelligence on the basis of "System that think rationally" and "System that act like human".
- (b) What is formal logic? Give an example.
- (c) Why do we need Artificial Intelligence?
- (d) What is the role of knowledge in Artificial Intelligence?
- (e) Define Uncertainty. How it is solved?
- (f) What is heuristic search?
- (g) What are the draw backs of Hill climbing search?

Group - B

Answer any *two* questions : $10 \times 2 = 20$

2. (a) Discuss about Constraint Satisfaction Problem.
- (b) Explain the State Space with the use of 8 Puzzle Problem. $5 + 5 = 10$
3. (a) What is MiniMax search for game playing? Explain the Min Max Algorithms.

(5)

(3) Explain A* algorithm with example. Under what situations it can be used. $5+5=10$

4. Write a short note (any two) : $5 \times 2 = 10$

(a) Depth First Search.

(b) Alpha-Beta pruning algorithms

(c) Heuristics Search Techniques

P.T.O.