

Total No. of Questions : 12]

SEAT No. :

P3432

[4959]-207

[Total No. of Pages : 2

B.E.(Computer Engineering)
c:ARTIFICIAL INTELLIGENCE
(2008 Course)(Semester-I) (Elective-I) (410444)

Time :3Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) *Attempt three questions from section-I and three questions from section-II.*
- 2) *Answer to the two sections should be written in separate books.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Assume suitable data if necessary.*

SECTION-I

Q1) a) Explain four approaches of artificial intelligence. **[8]**

b) Explain an architecture of learning agent. **[8]**

OR

Q2) a) Explain PEAS description for any suitable example. **[8]**

b) Explain the foundations of Artificial Intelligence. **[8]**

Q3) a) Explain any one informed search technique. **[8]**

b) Write a note on Local search techniques. **[8]**

OR

Q4) a) Describe an evaluation criteria for search techniques with a suitable example **[8]**

b) Explain the Hill-climbing algorithm for solving the traveling salesperson problem(TSP) is a touring problem in which each city must be visited exactly once **[8]**

Q5) a) Describe a Mini-Max algorithm for game playing. **[8]**

b) Solve the following Cryptarithmic using CSP
FORTY+TEN+TEN=SIXTY **[10]**

OR

P.T.O.

- Q6)** a) Describe various approaches for solving CSPs. [10]
b) Explain Alpha-Beta Search Algorithm with suitable example. [8]

SECTION-II

- Q7)** a) Explain Resolution procedure in FOL [8]
b) Explain the basic representations for planning. [8]

OR

- Q8)** a) Explain the procedure for conversion of FOL to CNF. [8]
b) What is partial- order planning? Explain a suitable example. [8]

- Q9)** a) Write a note on decision trees [8]
b) What are the axioms of probability? Explain bayes' rule [10]

OR

- Q10)** a) Explain various forms of Learning? Describe supervised Learning. [10]
b) Write a note on decision trees. [8]

- Q11)** a) Explain Syntactic Analysis with a suitable example. [8]
b) Explain the components for designing an Expert System. [8]

OR

- Q12)** a) Explain the steps in natural language understanding. [8]
b) Choose any one case study and design an Expert System. [8]

