Total No. of Questions : 12]

SEAT No. :

P2962

[Total No. of Pages : 3

[5354]-176
B.E. (Computer)
ARTIFICIAL INTELLIGENCE
(2008 Pattern)

Time : 3 Hours] *[Max. Marks : 100*

Instructions to the candidates:

1) ***Answer 3 questions from section - I and 3 questions from section - II.***
2) ***Neat diagrams should be drawn wherever necessary.***
3) ***Assume suitable data wherever necessary.***

SECTION - I

Q1) a) What are intelligent agents? Explain the architecture of a typical agent. **[8]**

b) What is the role of table driven agent program in simple reflex agent? Explain the functions of model based reflex agents. **[8]**

OR

Q2) a) Explain in detail what is meant by task environment. Illustrate with example. **[8]**

b) Define the term Artificial Intelligence? Explain two applications of AI. **[8]**

Q3) a) What is hill climbing? Explain Plateau, ridge, local maxima and global maxima. **[10]**

b) Write short notes on "heuristic search". **[8]**

OR

Q4) a) Explain A * Algorithm with suitable example. How is it possible to avoid loops in A*. **[10]**

b) What is Means ends analysis. Explain with example. **[8]**

P.T.O.

Q5) a) Explain alpha beta cut off with an example. Assume a sample game tree for explanation. **[8]**

b) Explain Constraint satisfaction problem with example. **[8]**

OR

Q6) Write short notes on **[16]**

a) backtracking for CSP

b) Evaluation functions for games

c) Local search for CSP

d) Partially observable games

SECTION - II

Q7) a) Explain goal stack planning with an example of blocks world. **[8]**

b) Explain how planning problem is expressed in STRIPS. **[10]**

OR

Q8) a) Comment on Non linear planning and hierarchical planning. **[8]**

b) State the rules for converting the well formed formula to clause form with example. **[10]**

Q9) a) Describe any two learning methods. **[8]**

b) Explain fuzzy set and crisp set. Mention applications of fuzzy logic. **[8]**

OR

Q10)a) What are the basic axioms of probability? Why are they reasonable. **[8]**

b) Define the Bayes rule and explain its use with example. **[8]**

Q11)a) Give detailed architecture of expert system and explain its components. **[8]**

b) Explain the various phases of NLP with an example. **[8]**

OR

Q12)a) What is the difference between expert systems and traditional system? Comment on advantages and disadvantages of expert systems. **[8]**

b) Write short notes on Parsing. **[8]**

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