

Total No. of Questions : 8]

SEAT No. :

P3079**[5059]-631**

[Total No. of Pages : 2

**B.E. (Electronics and Telecommunication)
ARTIFICIAL INTELLIGENCE
(2012 Course) (Semester-I) (Elective-II)**

*Time : 2½ Hours]**[Max. Marks : 70**Instructions to the candidates:*

- 1) *Attempt Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8.*
- 2) *Figures to the right indicates full marks.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Assume suitable additional data if necessary.*
- 5) *Use of non programmable calculator is permitted.*

- Q1)** a) Give any three examples of agent types and their PAGE descriptions. **[6]**
- b) Define pruning. Explain alpha beta pruning with its effectiveness. **[8]**
- c) Explain backward chaining algorithms with suitable example. **[6]**

OR

- Q2)** a) Explain different uninformed searching strategies with respect to different parameters. **[6]**
- b) Explain back tracking search and local search of CSP with algorithm. **[8]**
- c) What is knowledge engineering? Explain knowledge engineering Vs. Programming. **[6]**
- Q3)** a) What is reinforcement learning? Explain passive & active reinforcement learning in details. **[10]**
- b) How performance of learning algorithm is assessed? **[8]**

OR

P.T.O.

- Q4)** a) What are the different learning method? Explain any one in detail. [10]
b) Explain statistical learning methods with example. [8]

- Q5)** a) Explain expert system constituents with an example of “Medical Diagnosis System”. [8]
b) Explain Perception confined to Vision and Speech recognition. [8]

OR

- Q6)** a) Explain Waltz algorithm with example. What are its limitations? [8]
b) Give detailed architecture of Expert system. [8]

- Q7)** a) What is Natural Language Understanding? Explain in detail. [8]
b) Explain the Syntactic analysis with suitable Example. [8]

OR

- Q8)** a) Explain in details “Probabilistic language models”. [8]
b) Explain the Semantic interpretation with suitable example. [8]

