

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]

