

Code.No: 07A60504

R07

SET-1

III B.TECH – II SEM EXAMINATIONS, DECEMBER - 2010
ARTIFICIAL INTELLIGENCE AND NEURAL NETWORKS
(COMPUTER SCIENCE AND ENGINEERING)

Time: 3hours

Max.Marks:80

Answer any FIVE questions
All questions carry equal marks

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- 1.a) What is AI?
b) Explain how mathematics has contributed as a foundation of AI. [8+8]
- 2.a) Explain the breadth first search.
b) Explain the minimax procedure with an example. [8+8]
3. What is a knowledge-based agent? Explain it in detail, using “Wumpus World” as an example. [16]
- 4.a) Explain unification in first order logic.
b) Explain resolution in first order logic. [8+8]
- 5.a) Explain the Hebb’s law, delta learning law and instar learning law.
b) Explain the functional units of ANN. [8+8]
- 6.a) What is a linear associative network? Explain any one method used by it to determine weights by learning for pattern association.
b) What is linear separability in pattern classification? Explain with an example. [8+8]
- 7.a) What is meant by ‘basins of attraction’?
b) Explain the energy analysis of the Hopfield network. [6+10]
8. Explain the analysis of feature mapping networks. [16]

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