

Code No: C6307**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****M.Tech I Semester Examinations March/April-2011****MACHINE LEARNING****(IMAGE PROCESSING)****Time: 3hours****Max.Marks:60****Answer any five questions
All questions carry equal marks**

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1. a) What is Machine learning? Explain different perspectives and issues in machine learning.
b) What are the concepts of learning as search? [12]
2. a) Explain basic decision tree algorithm.
b) Explain how hypothesis space search is carried in decision tree learning. [12]
3. a) Explain Back propagation algorithm. Mention its limitations.
b) Discuss a general approach for deriving confidence intervals. [12]
4. a) Discuss maximum likelihood hypothesis for predicting probabilities in Bayesian learning.
b) Explain Gibbs algorithm. [12]
5. a) Explain Hypothesis space search in genetic algorithms.
b) How Genetic Algorithm can be parallelized? [12]
6. a) Discuss Explanation-Based learning of search control knowledge.
b) How learning can be carried with perfect domain theories? [12]
7. a) Explain Inductive analytical approaches to learning.
b) Explain Lazy and Eager learning. [12]
8. Write short notes on the following:
 - a) Temporal difference learning.
 - b) Dynamic programming. [12]
