Code No: 137DV

R16

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech IV Year I Semester Examinations, March - 2021
MACHINE LEARNING
(Computer Science and Engineering)

Time: 3 Hours   Max. Marks: 75

Answer any Five Questions
All Questions Carry Equal Marks
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1.a) Define Well-Posed problem. Illustrate any four examples for Well-Posed problems.
 b) With an example, explain the candidate elimination algorithm and its limitations. [7+8]

2.a) With an example, explain the working of Find-S algorithm.
 b) Explain about decision tree based learning? How it is represented? Give some problems for which decision tree based learning is appropriate. [8+7]

3.a) State Baye's theorem. Illustrate Bayes theorem with an example.
 b) Describe the Inductive Bias decision tree learning process. [8+7]

4.a) State and Explain the Minimum Description Length Principle.
 b) Discuss maximum likelihood hypothesis for predicting probabilities in Bayesian learning. [7+8]

5.a) Explain Back propagation algorithm with an illustrative example.
 b) Write the differences between Eager Learning and Lazy learning approaches. [8+7]

6.a) What are the inductive-analytical approaches to learning? Discuss.
 b) Discuss about Locally Weighted linear regression and its remarks. [8+7]

7.a) Write the sequential covering algorithm for learning disjunctive set of rules.
 b) Demonstrate the use of genetic algorithm with example. [7+8]

8.a) Discuss explanation-based learning algorithm with a suitable example.
 b) Write the basic algorithm for learning sets of First-Order Rules. [8+7]

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