

Code No: 155BZ

R18

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, March - 2021

MACHINE LEARNING

(Information Technology)

Time: 3 Hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks

- 1.a) Explain about Decision Tree Learning Algorithm with an example.
b) Summarize the issues in Decision Tree learning. [8+7]
- 2.a) Demonstrate face recognition application using back propagation.
b) How to estimate hypothesis accuracy in artificial neural networks? [8+7]
- 3.a) Discuss about Gibbs algorithm with suitable example.
b) Describe k-nearest neighbor algorithm. Elaborate why it is called instance based learning? [7+8]
- 4.a) Distinguish between active learning and reinforcement learning.
b) Demonstrate Q-learning algorithm with an example. [6+9]
- 5.a) Demonstrate explanation-based learning of search control knowledge.
b) How to augment search operators using prior knowledge? [8+7]
- 6.a) Explain about concept learning and list out its benefits.
b) How to compare various learning algorithms? [7+8]
- 7.a) Explain the problems in neural networks learning.
b) Explain how to estimate the hypothesis accuracy. [7+8]
- 8.a) Explain about K-nearest neighbor algorithm.
b) What are the reasons for the popularity of genetic algorithms? [8+7]

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