

R18

Code No: 155BZ

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B. Tech III Year I Semester Examinations, August - 2022

MACHINE LEARNING

(Information Technology)

Time: 3 Hours

Max. Marks: 75

**Answer any five questions
All questions carry equal marks**

1. Explain the basic design issues and approaches to Machine learning with examples.[15]
2. Write a short note on:
 - a) Concept Learning as Search
 - b) Inductive Bias in decision tree learning. [7+8]
3. Explain Gradient Descent and the Delta Rule with:
 - a) Derivation of Gradient Descent Rule
 - b) Approximation to Gradient Descent. [8+7]
4. Explain the procedure to estimate the difference in error between two learning methods. [15]
5. Explain Naïve Bayes Algorithm for learning and classifying text. [15]
- 6.a) Explain briefly k-nearest neighbor algorithm.
b) Compare and contrast Lazy and eager learning. [9+6]
7. Explain General to specific beam search algorithm as implementation of Learn-one-rule. [15]
8. Explain the PROLOG-EBG algorithm with example. [15]

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