

Code No: 155BZ**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year I Semester Examinations, September - 2021****MACHINE LEARNING****(Information Technology)****Time: 3 Hours****Max. Marks: 75**

Answer any five questions
All questions carry equal marks

- 1.a) Describe candidate elimination algorithm in detail with appropriate example.
- b) What are the remarks on version spaces and candidate elimination? [8+7]
- 2.a) Demonstrate multilayer feed forward mechanism in back propagation with suitable example.
- b) Summarize the limitations of back propagation algorithm. [8+7]
- 3.a) How is Naïve Bayes algorithm useful for learning classification problems? Explain in detail.
- b) Discuss about EM algorithm with suitable example. [8+7]
- 4.a) What are the salient features of a Genetic Algorithm? Describe the basic genetic algorithm.
- b) Describe in brief about the learning sets of First-Order rules: FOIL. [8+7]
- 5.a) What are the inductive-analytical approaches to learning? Explain in detail.
- b) How to alter the search objective using prior knowledge? [9+6]
- 6.a) How machines learn? Discuss the benefits of machine learning.
- b) Discuss about find-S, finding a maximally specific hypothesis in brief. [7+8]
- 7.a) Explain the representation of neural networks.
- b) Explain the importance of artificial neural networks. [8+7]
- 8.a) Explain case based reasoning learning mechanism.
- b) Explain the remarks on lazy and eager learning. [8+7]

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