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**Question Paper Code: 52312**

M.E. DEGREE EXAMINATION, NOV 2016

First Semester

Computer Science and Engineering

15PCS102 - MACHINE LEARNING TECHNIQUES

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART - B (5 x 20 = 100 Marks)

1. (a) Explain the machine learning approach to knowledge acquisition. (20)

Or

(b) What is machine learning? Give an overview of machine learning with suitable diagram. (20)

2. (a) Discuss various artificial neural network architectures. (20)

Or

(b) Construct the regularized regression method and apply the regression functions in any one of the field of machine learning. (20)

3. (a) (i) Explain K-Nearest neighbor learning. (10)

(ii) Explain in detail about naive Bayes classifier. (10)

Or

(b) Write short notes on K-d trees. (20)

4. (a) Explain the basic decision tree learning algorithm. (20)

Or

(b) Explain about regression and the Bias-Variance decomposition. (20)

5. (a) Explain detail about generalization in reinforcement learning. (20)

Or

(b) Differentiates correlated equilibrium and Nash equilibrium. (20)

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