Roll No. | | | | | | | | | | | | |

Total No. of Pages : 01

Total No. of Questions : 08

M.Tech. (CSE Engg.) Big Data (Campus) (Sem.–2)

MACHINE LEARNING

Subject Code : CSBE-217

M.Code : 51093

Time : 3 Hrs. Max. Marks : 50

INSTRUCTIONS TO CANDIDATES :

1. **Attempt any FIVE questions out of EIGHT questions.**
2. **Each question carries TEN marks.**

1. a) Describe the perspectives and issues in machine learning.
   b) Explain procedure to construct decision trees.
2. a) Discuss the use of machine learning to create effective heuristics for search algorithms.
   b) What is Gaussian discriminant Analysis in Generative Learning Algorithms?
3. Define supervised learning. Discuss its techniques including logistic regression model.
4. What is the general concept of an ensemble method? Explain bagging and boosting in ensemble method?
5. What is Principle Component Analysis in machine learning? How it is used to analyze the data?
6. Define following :
   a) Support Vector Machine
   b) EM Algorithm
7. Define Bayes Theorem. How does naive Bayes classifier work in machine learning?
8. What are learning sets of rules in Machine Learning? Discuss the importance of sequential covering algorithm in learning systems.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.