

B. Tech. Sem - VIII (Computer Engg.) (2014 COURSE) (CBCS) :

SUMMER - 2019

SUBJECT: MACHINE LEARNING

Day: Thursday
Date: 23/05/2019

S-2019-2885

Time: 02.30 PM TO 5.30 PM
Max Marks : 60

N.B. :

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat diagrams wherever necessary.
- 4) Use of nonprogrammable calculator is allowed.

-
- Q.1 a)** What is Learning System? Explain structure of Learning System. **(05)**
- b)** Differentiate between Testing and Training. **(05)**
- OR**
- Q.1 a)** Differentiate between Learning and Designing. **(05)**
- b)** Write short note on Machine Intelligence. **(05)**
- Q.2 a)** What is Supervised Learning? Explain with example. **(05)**
- b)** Differentiate between Semi-Supervised and Unsupervised Learning. **(05)**
- OR**
- Q.2 a)** Explain Logic Based Model in detail. **(05)**
- b)** Differentiate between Supervised and Unsupervised Learning. **(05)**
- Q.3 a)** Explain Naive Bayes Classifier with its Advantages and Disadvantages. **(05)**
- b)** What is Decision Tree? Explain with example. **(05)**
- OR**
- Q.3 a)** Write short note on Classifier Accuracy Measures. **(05)**
- b)** Write short note on Back propagation. **(05)**
- Q.4** What is Regression? Enlist and explain types of Regression. **(10)**
- OR**
- Q.4** Explain Linear Regression in detail. Enlist and explain issues in Regression. **(10)**
- Q.5** Explain K-Means Clustering and Hierarchical Clustering in detail. **(10)**
- OR**
- Q.5** Explain Neural Networks and Self Organizing Map (SOM) in detail. **(10)**
- Q.6 a)** Explain the concept of Bagging and Boosting. **(05)**
- b)** Write short note on Deep Learning. **(05)**
- OR**
- Q.6 a)** Explain Online learning and Sequence prediction method. **(05)**
- b)** Write short note on Reinforcement Learning. **(05)**

* * * *