

**M. TECH.-I (INFORMATION TECHNOLOGY) (CBCS – 2015
COURSE) : WINTER - 2017
SUBJECT : MACHINE LEARNING**

Day: **Wednesday**
Date: **17/01/2018**

W-2017-2785

Time: **11.00 AM TO 02.00 PM**
Max. Marks: 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Draw suitable figures **WHEREVER** required.
- 3) Assume suitable data if **NECESSARY**.

SECTION-I

Q.1 What do you mean by Over -Fitting? Explain with an example. **[10]**

OR

In Machine Learning how is Supervised learning better than Un-Supervised Learning? **[10]**

Q.2 How do Random Variables affect the quality of learning as against Discrete Variables? **[10]**

OR

Which Learning Models are utilized to do Machine Learning? **[10]**

Q.3 Which types of problems are classification problems? Is Human Intervention really necessary in solving Classification Problems? **[10]**

OR

What are the disadvantages of the use of Rule-Based Expert Systems as compared to Intelligent Systems which can learn on their own? **[10]**

SECTION – II

Q.4 Which key properties of PCA are employed in Machine Learning? **[10]**

OR

Can Machine Learning be applied to Real Time Systems? Give an example of the same. **[10]**

Q.5 What do you mean by un-learning? When does that happen? How is it done? **[10]**

OR

Do all Intelligent System employ Machine Learning to make systems intelligent? **[10]**

Q.6 How are HMM applied to Simple Learning Problems? Explain with an example. **[10]**

OR

List and explain two Learning Algorithms that you have come across. Compare the two on the basis of Learning Accuracy. **[10]**

* * * * *