Printed Pages: 01 **Sub Code: MTCS031**

Paper Id: 210201 **Roll No.** | | | | | | | | | | |

M. TECH.
(SEM-II) THEORY EXAMINATION 2018-19
MACHINE LEARNING

Time: 3 Hours ***Total Marks: 70***

Note: Attempt all Sections. If require any missing data; then choose suitably.

SECTION A

1. Attempt *all* questions in brief. **2 x 7 = 14**

a. Define Machine Learning?
b. Explain regression model.
c. What is ANN?
d. Explain Well defined learning problems.
e. Define Decision tree.
f. ExplainBayes classifier.
g. Explain Q Learning.

SECTION B

2. Attempt any *three* of the following: **7 x 3 = 21**

a. Explain the role of genetic algorithm in knowledge based technique.
b. Differentiate between Genetic algorithm & traditional algorithm with suitable example.
c. Explain various ANN architecture in detail.
d. Describe any algorithm to implement simulated annealing.
e. Explain DBSCAN with its role in forming clusters.

SECTION C

3. Attempt any *one* part of the following: **7 x 1 = 7**

(a) Explain back propagation algorithm with suitable example.
(b) Explain learning with any two learning techniques with its expression for weight-updating.

4. Attempt any *one* part of the following: **7 x 1 = 7**

(a) Write Short Note on followings (i) Sampling Theory (ii) Bayes Theorem
(b) Explain any comparing learning technique with suitable example.

5. Attempt any *one* part of the following: **7 x 1 = 7**

(a) Explain the followings (i) Generalization (ii) Multilayer Network
(b)

6. Attempt any *one* part of the following: **7 x 1 = 7**

(a) Define the process of designing a learning system. Explainvarious issues in Machine learning
(b) Explain Candidate elimination algorithm in detail.

7. Attempt any *one* part of the following: **7 x 1 = 7**

(a)
(b)

www.aktuonline.com

http://www.aktuonline.com