

Roll No.

24489

**B. Tech. 7th Semester (CSE)
Examination – December, 2016**

NEURAL NETWORKS

Paper : CSE-407-F

Time : Three Hours]

[Maximum Marks : 100

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

*Note : Attempts **five** questions in all, selecting at least **one** question from each Section. Question No. 1 is **compulsory**. All questions carry equal marks.*

- 1. Explain the following :** 20
- (i) Delta learning rule
 - (ii) Single layer reception classifier.
 - (iii) Stability.
 - (iv) Recall mode.

SECTION - I

2. (i) Describe in detail about Biological Neurons. 10
(ii) What do you mean by Feed forward and Feedback Networks ? Explain. 10
3. Define ANN. Describe in detail about different models of ANN. 20

SECTION - II

4. Describe the following :
- (i) Training is classification using discrete Receptron. 10
(ii) Generalized delta learning rule. 10
5. Give a complete description about multi layer feed forward networks. 20

SECTION - III

6. What do you understand by single layer feedback networks ? Explain. 20
7. Describe the following : 20
- (i) Association encoding & decoding.
(ii) By directional association memory.

SECTION - IV

8. Explain the following : 20
- (i) Seperability limitations.
(ii) Recall mode.
(iii) Initialization of weights.
9. Give a complete description about self organizing networks. 20