

Total No. of Questions : 12]

SEAT No. :

P1067**[4659]-81**

[Total No. of Pages : 2

B.E. (Electrical Engg.)**d-ANN & ITS APPLICATIONS IN ELECTRICAL ENGINEERING
(2008 Course) (Semester - II) (Elective - III)***Time : 3Hours]**[Max. Marks :100**Instructions to the candidates:*

- 1) *Answer three questions from Section-I and three questions from Section-II.*
- 2) *Answers to the two sections should be written in separate answer books.*
- 3) *Your answers will be valued as a whole.*
- 4) *Use of logarithmic tables, slide rule, Mollier charts, electronic pocket calculator and steam tables is allowed.*
- 5) *Assume suitable data, if necessary.*

SECTION-I

- Q1)** a) Explain various intelligent tools used. [8]
 b) Explain Biological inspiration for development of artificial neural network. [10]

OR

- Q2)** a) Explain difference between ANN and Knowledge based system. [10]
 b) Explain basic MC-Lock pitts model of NN. [8]
- Q3)** a) What is Error - correction learning for artificial neural network. [8]
 b) Explain Memory based learning for ANN. [8]

OR

- Q4)** a) Explain Hebbian learning with an example. [8]
 b) Explain MLP in detail with neat sketch. [8]
- Q5)** a) Explain Perceptron architecture. [8]
 b) What is Least - Mean square algorithm used in ANN. [8]

OR

- Q6)** a) What is perceptron training algorithm. [8]
 b) Define Learning rate. [8]

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SECTION-II

Q7) a) Explain feed forward Neural Network in detail. [8]

b) What is Back propagation algorithm used in ANN. [10]

OR

Q8) a) Give Limitation of Back - Propagation algorithm. [10]

b) Explain momentum coefficient needed in neural network. [8]

Q9) a) Explain Kohonen Organizing Maps used in ANN. [8]

b) Explain ART1. [8]

OR

Q10)a) What is Radial Basis functions. [8]

b) Explain theory of Adaptive Response Theory. [8]

Q11) Explain generation scheduling problem in detail and apply ANN to resolve the same. [16]

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OR

Q12) Use ANN to solve the Security assessment in power system network. [16]

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