

B.Tech. SEM -VII Info. Tech. 2014 Course (CBCS) : SUMMER - 2019

SUBJECT: ELECTIVE -III – NEURAL NETWORK

Day : Tuesday
Date : 14/05/2019

S-2019-2833

Time: 02.30 PM TO 05.30 PM
Max. Marks: 60.

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate full marks.
- 3) Draw neat labeled diagrams **WHEREVER** necessary.
- 4) Assume suitable data, if necessary.

Q.1 Draw the structure of a Biological Neural Network and compare it with Artificial Neural Network. (10)

OR

Q.1 What are the different types of learning schemes used in Artificial Neural Network? Explain each of them clearly with suitable example. (10)

Q.2 Distinguish between the Feedforward and Feedback Neural Networks. Compare their Input-Output mapping. (10)

OR

Q.2 State and prove Perceptron Convergence theorem. (10)

Q.3 What is a linear associative network? Explain storage and retrieval algorithm for Associative memory. (10)

OR

Q.3 Elaborate Bidirectional Associative Memory (BAM). Draw the architecture of BAM and discuss training algorithm. (10)

Q.4 What is X-OR problem? Discuss how it can be overcome. (10)

OR

Q.4 Define Stimulated Annealing algorithm and explain its structure in detail. (10)

Q.5 Explain the architecture and components of Competitive Learning Neural Network with neat diagram. (10)

OR

Q.5 Summarize basic concept behind ART. Explain architecture and operations of ART network in detail. (10)

Q.6 Enlist applications of Artificial Neural Networks and explain any two in brief. (10)

OR

Q.6 Write in detail about pattern association, pattern classification and pattern recognition in Artificial Neural Network. (10)

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