1994 Paper 7 Question 8

Computational Neuroscience

Explain the following methods for updating the weights in associative networks:

(a) the Hebbian rule [5 marks]

(b) the Delta Rule (or LMS or Widrow–Hoff rule) [5 marks]

(c) the rule used by Kohonen feature maps [5 marks]

What are the advantages and disadvantages of each? [5 marks]