## **Assignment 4**

- 1a. Draw a neat diagram and explain how Adaline can be used to solve a 2-class linearly separable problem.
- b. What are the different types of stimuli in associative learning?
- 2a. State the LMS Algorithm and explain its importance.
- b. Draw a neat diagram and explain Adaptive Noise Cancellation.
- 3a. Draw a neat diagram and explain the working of a Banana associator.
- b. Write the equation and explain the importance of outstar rule.
- 4a. Explain instar rule.
- b. Give Hebb's rule with decay. Derive the expression for the maximum weight value when decay term is present.
- 5a. Draw a neat diagram and explain Hamming Network.
  - b. What are the problems with Competitive Layers? Explain.