

Indian Institute of Science

Neural Networks and Learning Systems-I

Instructor: Shayan Srinivasa Garani

Homework #4, Fall 2021

Late submission policy: Points scored = Correct points scored $\times e^{-d}$, $d = \#$ days late

Assigned date: Nov. 20th, 2021

Due date: Dec. 1st, 2021, 11:59 pm

PROBLEM 1: Solve problems 7.6, 7.8, 8.7 and 8.18 from Haykin's book, 3rd edition. (60 pts.)

PROBLEM 2: Problem 4.19 from Haykin's book, 3rd edition has equations related to the Lorenz dynamical system. Trace the trajectories that govern the dynamics of the state evolution. How many attractors are there in the system? (10 pts.)