



**NATIONAL INSTITUTE OF TECHNOLOGY SRINAGAR,
HAZRATBAL-190006, JAMMU AND KASHMIR
DEPARTMENT OF CSE
B. Tech (CSE)
CSE 601, Artificial Intelligence.**

Assignment 4.

- Q1.** Optimize the function $f(x) = x_1^2 + x_2^2$, here $-5 \leq x_1, x_2 \leq 5$. Using Particle Swarm Optimization (PSO) minimize the above function using the following position vector and velocity vector (for Position Vector and Velocity Vector, you have to consider the examples from the theory class). Calculate Position Vector and Velocity Vector until it converge into one point (As per my discussion in theory class).