

CS5580 Quiz-5

StartWriting at S=5:30pm, StopWriting at D=6pm, Submit by D+15=6:15pm

NOTE: Please write your ROLL NO. clearly on ALL answer sheets.

1. Let K_1, K_2 be two closed cones and let \times denote the Cartesian product. Show that $(K_1 \times K_2)^* = K_1^* \times K_2^*$.
2. Let S, T be two subsets of \mathbb{R}^n . Prove or disprove the statement that the set of all points whose distance from S is smaller than that from T is convex. Distance of a point from a set is defined as the infimum of the distances between the point and the points in the set.