Geographic Information System (GIS)

<center>CEL747 – Major Test   30 April, 2008</center>

Q. 1   a) What is the role of interpretation in GIS?
        b) What are the sampling strategies usually deployed?
        e) Write short note on Kriging?

<div align="right">(2, 4, 4)</div>

Q. 2   a) What do you understand by normalisation in databases? What is the role of normalization? How many normal forms are there? Write briefly about them.

        b) Construet an ER diagram for the Hospital applieation of the IIT Delhi system taking into aeeount the entities of Patient, Medieine, Doctor, Dispenser, and Store

<div align="right">(4, 6)</div>

Q. 3   a) Compare the DEM and TIN models for terrain?

        b) Explain various steps used for delineating a watershed using the D-8 approach and the following grid. Take the cell with elevation 11 as the final pour point. Also gcnerate the drainage using the threshold value as 2.

58	52	69	71	58	49
54	67	56	49	46	50
49	53	44	37	38	48
44	58	55	22	31	24
56	61	47	21	16	19
74	53	34	12	11	12

<div align="right">(4, 6)</div>

Q. 4   a) What is the role of projeetion systems in the GIS? How the projection systems are elassified?

        b) Explain the UTM projection system.   (5, 5)