

# FACULTY OF ENGINEERING

B.E. 4/4 (Civil) I - Semester (Main) Examination, December 2011

Subject : **Geographical Information Systems**  
(Elective – I)

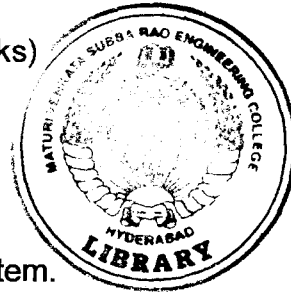
Time : 3 Hours

Max. Marks: 75

**Note:** Answer all questions of Part – A. Answer any five questions from Part-B.

## PART – A (25 Marks)

1. What do you understand by projection? (2)
2. What is Digital Elevation Model? (2)
3. Explain relational data base management system. (3)
4. Explain quadtree method of data compression technique. (3)
5. Explain about attribute functions. (2)
6. Explain Analogue data and digital data. (2)
7. What are the different input methods of GIS? (2)
8. Discuss briefly about energy interactions with earth surface features. (3)
9. What are the advantages of vector models? (3)
10. Explain Edge Matching. (3)



## PART – B (50 Marks)

11. What is the importance of data reliability GIS? (10)
12. Distinguish between Vector data model and Raster data model. (10)
- 13.(a) Explain overlay analysis in GIS. (6)  
(b) What do you understand by geometric transformation? (4)
- 14.(a) What are the different connectivity functions? (4)  
(b) Distinguish between conflation and edge matching. (6)
15. What is GPS and explain its principle? How a GPS is used in GIS? (10)
16. What are various out functions are used in GIS? Explain. (10)
17. Explain the image characteristics of real remote sensing system. (10)