

Total No. of Questions : 10]

SEAT No. :

**P3136**

**[5154]- 702**

[Total No. of Pages : 2

**B.E. (I.T.)**

**GEO INFORMATICS SYSTEM (Elective - II)  
(2012 Pattern) (Semester - I) (End Sem.) (414457 D)**

*Time :2½ Hours]*

*[Max. Marks :70*

*Instructions to the candidates:*

- 1) Answer Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6, Q.7 or Q.8, Q.9 or Q.10*
- 2) Figure to the right indicate full marks.*

**Q1) a) Define GIS and explain fundamental operations of GIS. [5]**

**b) With example write scales of measurement. [5]**

OR

**Q2) a) Explain different types of map projections with neat diagram. [5]**

**b) Classify imaging sensor system. [5]**

**Q3) a) Draw and explain a theoretical schme of sensor target interaction. [5]**

**b) Write down steps to train the dataset. [5]**

OR

**Q4) a) What is geometric correction? When it is used. [5]**

**b) What is spatial filtering? What is the need? Explain. [5]**

**Q5) a) Why graphic data is represented in spatial data? Draw spatial data model with example. [8]**

**b) Explain any two transformation techniques in detail. [8]**

OR

**Q6) a) What is attribute data? What is the use of attribute data in GIS? [8]**

**b) What are sources of errors in GIS? Explain different types of errors in detail. [8]**

**P.T.O.**

- Q7)** a) What are the types of raster GIS models? Explain it with suitable example. [8]  
b) Compare vector and raster based data models with advantages and disadvantages. [8]

OR

- Q8)** a) Explain vector data analysis. [8]  
b) What is GIS modeling? Explain any two basic elements of GIS modelling. [8]

**Q9)** Write short note on (any 2) [18]

- a) Components of ITS
- b) Analysis of traffic data in GIS
- c) Open source GIS.

OR

- Q10)** a) Explain what are upcoming technologies effectively used for urban and municipal planning. [9]  
b) Explain architecture of ITS. [9]

