

Code: 9D12105b

M.Tech I Semester Regular & Supplementary Examinations February 2016

GEOGRAPHICAL INFORMATION SYSTEMS

(Geotechnical Engineering)

(For students admitted in 2011, 2012, 2013, 2014 & 2015 only)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Explain in detail about spectral reflectance of vegetation and water.
(b) Describe about the energy interaction with atmosphere.
- 2 (a) Differentiate between geo-synchronous and sun-synchronous satellites.
(b) What are the different types of sensors based on energy source?
- 3 Discuss in detail about the sources of geometric distortions and nature of corrections for various purposes.
- 4 (a) Differentiate between supervised and unsupervised classification.
(b) Identify two situations in which you would use an unsupervised classification.
- 5 (a) Explain in detail about the components of GIS.
(b) What do you mean by geospatial topology?
- 6 Elaborate about various data models in GIS.
- 7 Take an application of GIS for finding landslide hazard zones and explain the methods of analysis in detail.
- 8 How will you use GIS tools for the purpose of doing pollution modeling?
