

R09

Code: 9A01805

B.Tech IV Year II Semester (R09) Advanced Supplementary Examinations, July 2013

REMOTE SENSING AND GIS

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 (a) Explain different types of aerial photographs.
(b) Describe the procedure for parallax measurements for height.
- 2 Define remote sensing. With a neat sketch, enumerate the process of electromagnetic remote sensing.
- 3 (a) Define GIS. With a neat sketch, explain various components of GIS.
(b) Explain spatial data and non spatial data with suitable examples.
- 4 (a) Explain the various interactions of electromagnetic energy with earth's atmosphere.
(b) List and explain in brief various types of resolutions of a sensor.
- 5 Explain data collection, data input, data manipulation and data output modules in GIS.
- 6 Write short notes on the following:
 - (a) Buffering.
 - (b) Topological overlay.
 - (c) Raster overlay.
 - (d) Reclassification.
- 7 With a neat flow chart, explain the methodology adopted in flood and drought impact assessment and monitoring using remote sensing and GIS techniques.
- 8 Explain how remote sensing and GIS techniques are used in identification of sites for artificial recharge structures for ground water development.
