Code: 9A01805

R09

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

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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 date 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.

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