

Code: 13A01803

B.Tech IV Year II Semester (R13) Advanced Supplementary Examinations July 2017

REMOTE SENSING & GIS

(Civil Engineering)

Time: 3 hours

Max. Marks: 70

PART – A

(Compulsory Question)

- 1 Answer the following: (10 X 02 = 20 Marks)
- (a) Write any two advantages of aerial photogrammetry.
 - (b) Define oblique photogrammetry.
 - (c) Differentiate between active and passive remote sensing.
 - (d) Elaborate the concept of geostationary orbit.
 - (e) What are four M's of GIS.
 - (f) What is a buffer?
 - (g) Differentiate between spatial and attribute data.
 - (h) What is data storage? Give an example.
 - (i) Define Bathymetry.
 - (j) Write short notes on reservoir sedimentation.

PART – B

(Answer all five units, 5 X 10 = 50 Marks)

UNIT – I

- 2 Discuss briefly the parallax measurement using fiducially line.

OR

- 3 Explain the geometry of vertical aerial photogrammetry.

UNIT – II

- 4 Write a note on Electro Magnetic Spectrum along with a neat diagram.

OR

- 5 Illustrate and explain the interactions of energy sources with earth's surface feature and atmosphere.

UNIT – III

- 6 Explain in detail the significance of GIS categories.

OR

- 7 Explain three raster GIS model. Give advantages and disadvantages of each.

UNIT – IV

- 8 Describe types of GIS attribute database. Give some examples.

OR

- 9 Give an overview of data manipulation and analysis of spatial GIS.

UNIT – V

- 10 Define watershed and its characteristics for management and development. Support your answer with examples.

OR

- 11 Discuss in detail the relation between rainfall and runoff in water resources.
