

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)

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- 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.

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