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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech.(CE) (2011 onwards) (Sem.-4)

**GEOMATICS ENGINEERING**

Subject Code : BTCE-401

Paper ID : [A1171]

Time : 3 Hrs.

Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students has to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students has to attempt any TWO questions.

**SECTION-A****1. Write briefly :**

- a) What do you mean by photogrammetric surveying?
- b) Define crab and drift.
- c) How does mosaic differs from a map?
- d) How is vertical angle measurement made with the help of Total Station?
- e) Draw schematic diagram of geodimeter.
- f) Give broad classification of remote sensing.
- g) Name various sensors on board of Indian Remote sensing Satellites (IRS).
- h) Define GIS.
- i) Give applications of remote sensing in water resources.
- j) Draw a schematic diagram of Generic GPS receiver.

**SECTION-B**

2. Derive an expression to determine the elevation of a point by photographic measurement.
3. What are the various types of EDM instruments? Explain.
4. Write a note on remote sensing observation platforms.
5. How is Raster and Vector data represented?
6. Why is the GPS signal so complicated?

**SECTION-C**

7. Name and explain various parts of aerial camera. Also draw the schematic diagram of aerial camera.
8. Explain various types of Raster GIS Models.
9. Explain various segments of GPS System along with neat sketches.