| BICE-006 |

B.Tech. CIVIL ENGINEERING (BTCLEVI)
Term-End Examination
June, 2018

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BICE-006 : GEOINFORMATICS

Time : 3 hours   *Maximum Marks : 70*

Note : *Answer any* **seven** *questions. All questions carry equal marks.*

1. What are aerial photographs ? Describe the classification of aerial photographs in detail.   *10*

2. (a) Discuss the term Overlap in aerial photogrammetry.   *5*

    (b) Compare the aerial map with topographic map.   *5*

3. (a) What do you understand by resolution of a sensor ?   *5*

    (b) Describe the different types of resolution sensors in detail.   *5*

4. (a) Explain the remote sensing process briefly, with the help of a neat sketch.   *5*

    (b) What is spectral reflectance curve and what are its utilities in remote sensing ?   *5*

5. (a) What is Image Histogram ? Explain. *4*

(b) Explain supervised and unsupervised classification of satellite image in detail. *6*

6. Define GIS. Describe the key components of GIS. Explain the function of GIS in detail. *10*

7. Differentiate between raster and vector formats in GIS using suitable examples. *10*

8. (a) What are GPS positioning types ? Explain them in detail. *5*

(b) Discuss the factors which affect GPS survey. *5*

9. Describe the working of a satellite navigation system. *10*

10. Write short notes on any *four* of the following : $4 \times 2\frac{1}{2} = 10$

(a) Parallax Bar

(b) Kinematic GPS

(c) Spatial Filter

(d) Scale in Aerial Photograph

(e) C/A - Code in GPS Satellite Signals