

B.TECH. CIVIL ENGINEERING (BTCLEVI)

Term-End Examination

December, 2013

BICE-006 : GEOINFORMATICS

Time : 3 hours

Maximum Marks : 70

Note : Attempt any seven questions. All questions carry equal marks.

1. (a) What are the classification of aerial photographs. 4
(b) A vertical photograph was taken at an altitude of 1500 metres above MSL. Determine the scale of the photograph for terrain lying at elevation of 100 metres and 380 metres if the focal length of the camera is 14 cm. 6
2. Discuss the different elements of aerial photo-interpretation in detail. 10
3. What do you understand by electromagnetic spectrum ? Explain the various interaction of incident EM energy with the atmosphere. 10
4. (a) Explain the different types of scattering in detail. 5
(b) Write a detailed note on applications of remote sensing. 5

5. (a) Discuss the supervised and unsupervised classification in detail. 5
(b) Explain the radiometric restoration and geometric restoration in detail. 5
6. (a) Define GIS "GIS can work as a decision support system". Comment on it. 5
(b) Explain the applications of GIS. 5
7. (a) Explain in detail the satellite image characteristics. 5
(b) Write different data format's for digital satellite imagery. 5
8. (a) Explain the different components of GIS. 5
(b) Describe Vector and Raster Overlay operations. 5
9. What do you understand by GPS ? Mention its 3 segments and explain the purposes of each. 10
10. Write a detailed note on **any two** : 2x5=10
(a) Land use /Land cover classification criteria.
(b) Image histogram
(c) DGPS
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