

**B.TECH. CIVIL ENGINEERING
(BTCLEVI)**

Term-End Examination

December, 2013

**BICEE-003 : REMOTE SENSING IN CIVIL
ENGINEERING**

Time : 3 hours

Maximum Marks : 70

Note : Attempt any seven questions.

All questions carry equal marks.

1. What is Remote sensing ? Discuss the Remote sensing process with illustrative line diagram. 10
2. Explain the following terms in brief : 4x2.5=10
 - (a) Hemispherical absorptance
 - (b) Hemispherical transmittance
 - (c) Hemispherical reflectance
 - (d) Percent reflectance
3. What is filter in photographic imaging ? Explain different types of filter used in photographic imaging. 10
4. Name the different sensors developed by India for Remote sensing. State the spectral and spatial resolution of all LISS sensors. 10
5. Explain the use of remote sensing data for geomorphological and soil mapping in the context of geological mapping. 10

6. Explain the application of remote sensing in ocean and coastal monitoring. 10
 7. What are the differences between supervised and unsupervised classification of digital images ? Explain briefly. 10
 8. What do you understand by visual Image Interpretation ? Explain the elements of image interpretation in brief. 10
 9. Define the term Orbit in reference to geometry of Remote sensing. Discuss the different types of Orbits with neat sketches. 10
 10. Attempt **any four** of the following : 4x2.5=10
 - (a) Nadir and Swath
 - (b) Spectral Resolution
 - (c) Colour Composite
 - (d) Microwave Remotesing
 - (e) Panoramic Cameras
 - (f) GIS and Remote-Sensing
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