

B.E. (Full time) Degree Examination
Geoinformatics Branch
CE 183 Remote Sensing (Regulation 2004)

Time: 3 hours

Max marks 100

Part A (10x2=20 marks)

1. Explain Electro Magnetic Radiation
2. Explain the Band designation in Microwave Remote Sensing
3. Explain the Landsat series of remote sensing-satellites.
4. What do you mean by Ground Station
5. Explain the Resolving power of lenses
6. What do you mean by Signal to noise ratio
7. What do you mean by SAR in microwave remote sensing
8. Explain the Brightness Temperature.
9. What do you mean by Geometric correction of Satellite images.
10. Explain the application of Spectro-radiometer

Part B (5x16=80 Marks)

11. (a) Explain resolution concept in various remote-sensing systems.
12. (a) (i) Distinguish between the earth 's radiant energy peak and the reflected energy peak.(8)
(ii) Explain the different type of scanning system in space borne remote sensing.(8)
(or)
(b) (i) Draw reflectance curves of vegetation, unaltered rocks, soil and typical urban features. (8)
(ii) Furnish the details of Indian remote sensing satellite IRS 1C, IRS 1D spectral bands.(8)
13. (a)(i) Explain about the thermal scanner and its operating wavelength. (8)
(ii) What are the different characteristics of thermal imagery? (8)
(or)
(b)(i) Explain in detail the scale distortion, relief displacement of microwave imagery.(8)
(ii) Explain the high-resolution satellite missions and its applications.(8)
14. Explain the atmospheric characteristics that affect the function of remote sensing to observe the earth features.
(or)
(b) (i) Explain different application of satellite imagery in natural resources. (8)
(ii) Explain visual interpretation keys.(8)
15. (a) (i) Explain the principles involved in mapping using satellite data.(8)
(ii) Why ground truth verification is necessary for remote sensing interpretation. (8)
(or)
(b)(i) Explain wave theory and particle theory to explain the EMR.(8)
(ii) Explain the concept and use of Spectroradiometer.(8)

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