

D 51098

Name.....

Reg. No.....

**EIGHTH SEMESTER B.TECH. (ENGINEERING) DEGREE
EXAMINATION, DECEMBER 2008**

CE 04 804 (F) - REMOTE SENSING AND GIS

(2004 Admissions)

Time : Three Hours

Maximum : 100 Marks.

1. (a) Discuss the role of EMR and its components in Remote Sensing.
(b) How the platforms for remote sensing be classified? Explain their features.
(c) What are the different types of sensors used in satellites and explain their characteristics?
(d) Discuss the principles of thermal remote sensing.
(e) Differentiate GIS from conventional information systems.
(f) Compare various data structure used in GIS.
(g) Explain the fundamentals of image interpretation.
(h) Distinguish between supervised and unsupervised classification.

(8 × 5 = 40 marks)

2. (a) (i) Discuss the atmospheric effects in Remote Sensing.
(ii) With suitable sketches, explain the spectral signature of soil.

Or

(b) (i) Explain different types of scattering.
(ii) Discuss the EMR interaction with earth surface.

(8 + 7 = 15 marks)

3. (a) (i) Differentiate SAR and SLAR.
(ii) Write a note on earth resources satellites.

Or

(b) (i) Explain the characteristics of SPOT satellite.
(ii) Write short notes on spatial, spectral, radiometric and temporal resolutions.

(8 + 7 = 15 marks)

4. (a) (i) What are the characteristics and imitations of conventional maps?
(ii) Explain buffering.

Or

(b) (i) With suitable example, explain the concepts of data compression.
(ii) Compare various output method in GIS.

(8 + 7 = 15 marks)

5. (a) How will you integrate Remote Sensing and GIS in watershed management?

Or

(b) Discuss the applications of Remote Sensing in urban planning.

(15 marks)

[4 × 15 = 60 marks]