

56244.A

Name:

Reg.No.

EIGHTH SEMESTER B.TECH DEGREE EXAMINATION, JUNE 2009

CE.04.804 (F) - Remote Sensing and GIS

(2004 Admission)

Time: Three hours

Maximum: 100 marks

(Answer all questions)

1. a. Distinguish between Passive and Active remote sensing.
b. Discuss on significance of atmospheric windows in remote sensing.
c. Give a brief description on the different sensors used in satellites.
d. Distinguish between SLAR and SAR.
e. What are the benefits of GIS over conventional methods?
f. Explain the architecture of GIS.
g. What is filtering?
h. What is supervised and unsupervised classification? **(8x5=40 marks)**

2. a. i) Discuss on Spectral Signature and its role in identifying objects, with suitable diagram. **(8 marks)**
ii) Explain the principle of working of Remote Sensing. **(7 marks)**

OR

b. i) With a suitable diagram, explain Electromagnetic spectrum and its characteristics used in remote sensing. **(8 marks)**
ii) Explain on the different types of interactions of EMR with atmosphere. **(7 marks)**

3. a. i) Give a detailed description on the classification of satellite. **(8 marks)**
ii) Write a short note on the Indian Remote Sensing programme. **(7 marks)**

OR

b. i) What is a role of a scanner in remote sensing and describe the different types of scanners used in remote sensing. **(8 marks)**
ii) Discuss the importance of Thermal infrared in remote sensing. **(7 marks)**

4. a. i) What is a data model? Enumerate different types of GIS data. **(8 marks)**
ii) Write short notes on (i) Overlaying (ii) Buffering in GIS. **(7 marks)**

OR

b. i) What is map projection and explain the different types of map projections with their characteristics. **(8 marks)**
ii) Explain on the different methods of Data Input in GIS. **(7 marks)**

5. a. i) Write a detailed description on the elements of Visual Interpretation, quoting suitable examples for each. **(8 marks)**
ii) Give a brief description on application of remote sensing in urban planning. **(7 marks)**

OR

b. i) Describe the different digital image processing techniques used. **(8 marks)**
ii) Give a brief description on application of remote sensing and GIS in watershed management. **(7 marks)**

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