Question Paper Code: 40727

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2018
Sixth Semester
Civil Engineering
CE 6003 – REMOTE SENSING TECHNIQUES AND GIS
(Regulations 2013)

Time: Three Hours
Maximum: 100 Marks

Answer ALL questions.

PART – A

(10×2=20 Marks)

1. Write the expression of Stefan-Boltzmann law.

2. What is called atmospheric windows?

3. Define the terms orbit and orbital plane.

4. Distinguish between active and passive remote sensing.

5. List out the elements of image interpretation.

6. What is meant by pre-processing?

7. What do you understand by topographical map?

8. What are the key components of GIS?

9. How do you represent spaghetti model?

10. Differentiate between vector and raster data.

PART – B

(5×13=65 Marks)

11. a) Discuss on the spectral reflectance characteristics of water and vegetation in different spectral bands.

(OR)

b) Explain briefly about the atmospheric scattering phenomenon.

(13)
12. a) Discuss the Classification the remote sensing based on platform. (13)

   (OR)

   b) What is resolution of a sensor? Describe all sensor resolution. (13)

13. a) List out various types of remote sensing data products and explain each one briefly (13)

   (OR)

   b) i) What do you understand by image enhancement techniques. (6)

   ii) What are the difference between supervised and unsupervised classification? (7)

14. a) What do you understand by map projection and explain briefly about Azimuthal projection? (13)

   (OR)

   b) i) Write the advantages of DBMS. (5)

   ii) Explain the functions of DBMS. (8)

15. a) What do you understand by spatial data model? Describe conceptual and logical data models for spatial data. (13)

   (OR)

   b) Describe briefly about integrated data analysis. (13)

   PART – C

   15 Marks

16. a) With an example explain how geographical information system is useful for handling land information system. (15)

   (OR)

   b) Describe the payload description of few important earth resources satellites. (15)