PVP 14

Code: CE7T2

IV B.Tech - I Semester – Regular Examinations – October - 2017

REMOTE SENSING AND GIS APPLICATIONS
(CIVIL ENGINEERING)

Duration: 3 hours Max. Marks: 70

PART – A

Answer ***all*** the questions. All questions carry equal marks

11 x 2 = 22

1.

a) Discuss the principle of Photogrammetry.
b) Enumerate the assumptions of satellite remote sensing.
c) What is a sensor?
d) What is attribute data?
e) Define the Spectral Signatures.
f) What are the limitations and objectives of Remote Sensing?
g) What is Resolution? Mention its types.
h) What are the various advantages of buffering?
i) What is the database management system?
j) Define geographically referenced data.
k) What are the corrections to be made for remote sensing data?

PART – B

Answer any ***THREE*** questions. All questions carry equal marks.

3 x 16 = 48 M

2. a) Briefly explain about Electromagnetic spectrum. Discuss the various types of spectral reflectance curves. 8 M

   b) Discuss the different types of resolutions in remote sensing with their uses. 8 M

3. a) Explain in detail the components of Geographical Information System. 8 M

   b) Define edge enhancement and briefly explain the types of edge enhancements. 8 M

4. a) Briefly explain about Raster data models and Vector data models. 8 M

   b) Describe in detail about various Buffering techniques. 8 M

5. a) Discuss the applications of satellite remote sensing in the watershed development. 8 M

   b) Explain the importance and role of land use / land cover in water resources. 8 M

6. a) Explain in detail Aerial photography and Satellite data in urban studies. 8 M

b) What is a Remote sensing platform? Explain the different types of platforms used in remote sensing. 8 M