

ME CIVIL | Sem II | CBCS | FH 2019

17/05/2019

(3 hours)

Total Marks :80

Note:

Answer any four questions.

Neat, labeled sketches, legible handwriting & practical examples will be appreciated.

1. Answer the following (any 4) 20
 - a) Define GIS along with its inbuilt subsystems. 5
 - b) Discuss the physics of Remote sensing. 5
 - c) Give the Principle of Operation surveying with G.P.S. 5
 - d) Explain classifications of attribute data used in GIS with suitable examples. 5
 - e) Write a note on Advanced GPS devices. 5

2.
 - a) Explain data collection, data input, data manipulation and data output modules in GIS. 10
 - b) List and explain in brief various application of aerial photo interpretation. 10

3.
 - a) What is the necessity of map projection? Differentiate types of map. 10
 - b) Explain Image rectification and Image enhancement in detail. 10

4.
 - a) What is GPS? Explain its segments and add a note on factors affecting the signal errors 10
 - b) Describe raster and vector data representation With a neat sketch 10

5.
 - a) Discuss Digitization and scanning process. 10
 - b) Explain how GIS and remote sensing techniques are used in land use and land cover studies with suitable example . 10

6.
 - a) Illustrate GIS-GPS based Infrastructure management with example. 10
 - b) How GIS and remote sensing techniques are used in flood and drought impact assessment? Explain in detail. 10