CBCS Scheme

USN | | | | | | | | | | 15CV563

Fifth Semester B.E. Degree Examination, Dec.2017/Jan.2018
Remote Sensing & GIS

Time: 3 hrs.   Max. Marks: 80

Note: *Answer FIVE full questions, choosing one full question from each module.*

Module-1

1   a.   Define Remote Sensing, with a neat sketch and explain the process of remote sensing system. **(08 Marks)**
    b.   With a neat sketch and explain the electromagnetic spectrum. **(08 Marks)**

OR

2   a.   Explain the energy interactions in the atmosphere. **(08 Marks)**
    b.   Explain the elements of visual interpretation techniques. **(08 Marks)**

Module-2

3   a.   Explain the different types of platforms used in remote sensing. **(06 Marks)**
    b.   What is resolution of a sensor? Describe all sensor resolutions. **(10 Marks)**

OR

4   a.   Explain digital image processing. **(06 Marks)**
    b.   Write a note on IRS, Landsat, IKonos and Cartosat. **(10 Marks)**

Module-3

5   a.   Define GIS. Describe the key components of GIS. **(08 Marks)**
    b.   Explain the different steps involved in GIS operations. **(08 Marks)**

OR

6   a.   What is a map projections? Explain the types of map projections. **(08 Marks)**
    b.   Write a note on Geospatial data and projected coordinate system. **(08 Marks)**

Module-4

7   a.   What is vector data model? How to represent the simple spatial features in vector data model. **(08 Marks)**
    b.   Write a note on topology and coverage. Mention their importance. **(08 Marks)**

OR

8   a.   Explain the different raster data structures. **(08 Marks)**
    b.   What is raster data model? Explain the different types of raster data used in GIS. **(08 Marks)**

Module-5

9   a.   What is land use land cover? Explain the applications of remote sensing in land use land cover analysis. **(08 Marks)**
    b.   How remote sensing and GIS are used in change detection study? **(08 Marks)**

OR

10 a.   Explain the applications of RS and GIS in natural resource management. **(08 Marks)**
    b.   Explain the following: Urban palnning, Traffic management **(08 Marks)**

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