15CV563   Remote Sensing and GIS Model question paper

Time -3hrs   **V Sem Civil**   **Max. Marks-80**

Note: Answer any Five full questions, choosing one full question from each module

Module-1

1. (a) What is remote sensing ?   (02 marks)

    (b) Explain electromagnetic spectrum.   (08 marks)

    (c) Explain the advantages and limitations of remote sensing.   (06 marks)

                                        OR

2. (a) Explain the elements of visual interpretation techniques.   (08 marks)

    (b) With a neat diagram explain the spectral reflectance curves.   (08 marks)

Module-2

3. (a) What is resolution of a sensor? Describe all sensor resolutions.   (10 marks)

    (b) What are the advantages and disadvantages of various remote sensing platforms.   (06 marks)

                                        OR

4. (a) Briefly describe the Indian satellite program.   (12 marks)

    (b) Explain systematic correction methods.   (04 marks)

Module-3

5. (a) Define GIS. Describe the key components of GIS.   (08 marks)

    (b) Explain how spatial data and attribute data integrated to make a GIS.   (08 marks)

                                        OR

6. (a) What is a map? Explain the classifications of a map.   (06 marks)

    (b) Describe different types of coordinate systems.   (10 marks)

Module-4

7. (a) Explain topological model of vector data. (08 marks)

    (b) Describe spaghetti, vertex dictionary and DIME . (08 marks)

OR

8. (a) Explain block encoding and quadtree data model. (08 marks)

    (b) Explain run length encoding method. (04 marks)

    (c) Explain the advantages of raster. (04 marks)

Module-5

9. (a) Explain role of remote sensing to monitor land use changes. (08 marks)

    (b) Explain the applications of remote sensing in water resources. (08 marks)

OR

10. (a) Explain the applications of remote sensing in natural resource management. (08 marks)

    (b) Explain the following: i. Change detection   ii. Remote sensing applications in traffic management (08 marks)