

25-3-17



**DOON UNIVERSITY, DEHRADUN**

**Second Semester, Mid Semester Examination, 2017**  
**M.Sc. School of Environment & Natural Resources**  
**Course: ENR – 514: GEOMATICS**

*Time Allowed: 3 Hour*

*Maximum Marks: 30*

*Note: Attempt All Questions from Sections A, B, C.*

**SECTION : A**

**Short Answer Type Questions. Attempt any 5 Questions.**

*(Marks: 5x 2=10)*

1. What is pixel?
2. Describe- map elements.
3. What is the difference between rocket and satellite?
4. Define raster and vector data?
5. What do you mean by FCC and DN value?
6. Define types of scale?
7. What do you mean by resolution in Remote sensing?
8. Give correct definitions of Remote Sensing and GIS

**SECTION: B Attempt any 4 questions**

*(Marks: 4x3=12)*

1. What is electromagnetic spectrum define with diagram?
2. What is map how it helps in surveying?
3. Define contour, spot height, north arrow?
4. Define longitude, latitude, central meridian?
5. What is GPS how it helps in GIS?
6. Define the principle of remote sensing with required diagram?
7. Define electromagnetic radiation with required diagram?

**SECTION: C (Long Answer Type Questions to be answered in about 750 words.**

**Attempt any two Questions.**

*(Marks: 2 x 4 = 8)*

1. Why Remote sensing is useful in NRM, develop the relation among GIS, GPS & RS?

Or

What do you mean by spatial and non-spatial data how it can be converted for analysis?

2. Define digitizing errors and how they can be fixed?

Or

Explain raster to vector conversion with all editing and building topology?