

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: 5x2=10)

- 1. What is pixel?
- 2. List out- map elements.
- 3. List out- photo elements in visual interpretation?
- 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 scientific definitions of Remote Sensing and GIS

SECTION: B Attempt any 4 questions (Marks: 4x3=12)

- 1. What is electromagnetic spectrum?
- 2. Why map is called for field workers, how it helps in surveying?
- 3. Define the principle of remote sensing with required diagram?
- 4. Define contour, spot height, north arrow?
- 5. Define longitude and latitude, how these are helping in mapping?
- 6. Define the relation of GPS and GIS helping in disaster Management?
- 7. What is change detection, how it is helping in monitoring and conservation?

SECTION: C (Long Answer Type Questions to be answered in about 750 words. Attempt any two Questions. (Marks: $2 \times 4 = 8$)

- 1. 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?