

## DOON UNIVERSITY, DEHRADUN

## Mid Semester Examination, 2016 School of Environment & Natural Resources (M.Sc.)

Course: ENR – 514: Geomatics

Time Allowed: 2Hours

Maximum Marks: 30

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

SECTION: A (Short Answer Type Questions/ to be answered in about 25/50/75/150 words. Attempt <u>any 10Questions</u>.

(Marks:  $1 \times 10 = 10$ )

- 1. What is an image?
- 2. Write the name of two satellites?
- 3. What is spatial data?
- 4. What is non spatial data?
- 5. What is pixel?
- 6. Write four applications where RS and GIS can be used?
- 7. What is vector?
- 8. What is raster?
- 9. What is GPS how it is helpful in RS and GIS?
- 10. Why do we need to understand Map?
- 11. What is Scale and its type
- 12. What is Contour and why it is important?

## SECTION: B (Short Answer Type Questions to be answered in about 75/100/250 words. (Attempt any 4 Questions)

(Marks: 2.5x 4=10)

- 1. Describe the basic principles of Remote Sensing?
- 2. Define Passive and Active sources of energy?
- 3. Why remote sensing is useful?
- 4. What is GIS how it is linked with RS?
- 5. What is Map orientation why it is important in survey?
- 6. Define Latitude and Longitude?
- 7. Describe small scale and large scale map?

## SECTION: C (Long Answer Type Questions to be answered in about 750 words. Attempt any two Questions.

(Marks: 5x 2=10)

- 1. Explain with figure the physics of remote sensing?
- 2. Define elements of GIS, link data sets and GIS analysis?
- 3. Describe with example how RS and GIS can be used in real world?