



13/12/2012

DOON UNIVERSITY, DEHRADUN
Semester Final Examination, Second Semester, 2012

Ph.D (Environmental Science)

Course: EES-514: Geomatics

Time: Three Hours

Maximum Marks: 50

Note: paper is divided into three sections. Attempt **all** questions from section A, B and C.

SECTION: A. Short note on the following topics. Attempt any **FIVE** questions.

(Marks: 3X5=15)

- a) What is Geographical Information System
- b) What do you mean by GPS
- c) What is raster and Vector
- d) What do you mean by pixel?
- e) What do you mean by resolution and its type
- f) What is point line and polygon
- g) What do you mean by map and its elements

SECTION: B. Attempt any **THREE** questions.

(Marks: 5x3=15)

Q. 1. Explain in detail the data conversion process.

Q.2. Describe the different components and working of Global Positioning System (GPS) and its applications in different fields?

Q.3. How and why the followings are differing from each other.

1. Natural Resources and Environmental Studies
2. Visual and digital interpretation
3. GIS and GPS
4. Map and satellite Image
5. INSAT system and LANDSAT

Q.4. What is overlay analysis, how it can be used in GIS application with an example?

SECTION: C. Attempt any **TWO** questions

Q1. Describe the components of GPS and its applications in the field of Natural Resource Management? **(Marks= 10)**

Q2. What do you mean by database generation, how GIS can be used in village level planning with an example? **(Marks=10)**

Q3. How habitats can be mapped, monitored and managed using technological interventions? **(Marks=10)**