KERALA AGRICULTURAL UNIVERSITY

B.Sc.Hons (Forestry) 2014 Admission IIIrd Semester Final Examination-February -2016

Marks: 50.00 Cat. No: Wild 2103 Time: 2 hours Title: Remote Sensing and GIS (1+1)

I a. State whether the following statements are 'True or False'

 $(10 \times 1=10)$

- 1. Active sensor operates by emitting its own energy
- Geo stationary satellites are used for telecommunication and weather forecasting purposes
- Lansat, SPOT, MOS are Geo synchronous Meteorological satellite 3.
- Microwaves are not capable to penetrate cloud cover
- Rocket is an example of Air based platform
- NRSA is located at Bangalore

Match the following

7. LANDSAT

a) India

8. SPOT

b) USA

9. IRS

- c) RADAR
- 10. Active Sensor
- d) France

II Answer any Five questions

(5 x 2=10)

- 1. Active Remote sensing
- 2. Atmospheric windows
- 3. Spectral signature
- 4. Procedure to get multi spectral photograph
- 5. Plank's law in contest to remote sensing
- Aerial cameras
- Expand any two of the following with their functions
 - a) ISRO b) IRS c) NRSA

III Answer any Five questions

 $(5 \times 4 = 20)$

- 1. Write about the basic elements of aerial photo interpretation
- Explain the Visual interpretation of remote sensing data
- Discuss the type of orbits used for satellites 3.
- Satellite imageries are used in forest cover mapping and damage assessment-Discuss
- Explain the elements of object recognition
- Discuss the application of remote sensing in forestry and agriculture
- 7. Explain resolution and write about different types of resolution

IV Write essay on Any ONE

(1 x 10=10)

- 1. Discuss about the application of GIS in forestry
- 2. Enumerate the properties of EMR and describe its interaction with atmosphere and ear surface