



FIJI NATIONAL UNIVERSITY
College of Agriculture, Fisheries & Forestry
School of Agriculture
Department of Soil Science & Agril Chemistry
FINAL EXAMINATION: 2016

B.Sc Fisheries IIIrd year: Trimester IInd

REMOTE SENSING AND GIS APPLICATION: AGR 705

TOTAL MARKS: 50

TIME ALLOWED: 3:10 HOURS

INSTRUCTIONS:

This paper consists of three (3) pages. Please check to see that your paper is complete.

Answer all questions in the answer booklet.

- Number your answers correctly in the provided answer booklet.
- Write your student ID number on all pages that you use including any additional sheet paper.
- Printed or written study materials are not allowed into the examination hall.
- Mark values appear at the end of each question or part thereof.

"MOBILE PHONES ARE STRICTLY NOT ALLOWED"

Part I: Write the full form of given abbreviations**10 x 1 = Total 10 marks**

1. SAR
2. GPS
3. EMS
4. MSS
5. RADAR
6. LIDAR
7. FLIR
8. NOAA
9. NASA
10. AVHRR

Part II: Draw the neatly labeled sketch of given remote sensing systems**4 x 3 = Total 12 marks**

1. Airborne LIDAR system.
2. Schematic of rudimentary MSS.
3. Active and Passive remote sensing system
4. Remote sensing process components

Part III: Write the short answer for given questions**7 x 4 = Total 28 marks**

1. What is remote sensing? Briefly explain the scope of remote sensing? List down the key areas of fisheries science in which remote sensing and GIS can be applied.

2. What do you understand by remote sensor? Explain the types of sensors used in remote sensing. Explain any one scanner in short.
3. List down the types of resolutions. Explain any one with suitable diagram. What are the difference between thematic mapper and multi spectral scanner?
4. What do you understand by thermal scanner? What are the advantages of satellite scenes? What are the airborne sensors?
5. What is Geographic Information System? What are the components of a GIS? Explain any two in short.
6. What is the difference between a GIS hardware and GIS software? How a GIS works? List down the name of GIS tasks.
7. What do you understand by a raster and vector data. List and explain the name of GIS enteritis used for representations of real world features.

END OF EXAMINATION PAPER