MSc DEGREE END SEMESTER EXAMINATION - MARCH/APRIL 2019
SEMESTER 2 : ENVIRONMENTAL SCIENCE
COURSE : **16P2EVST08** : REMOTE SENSING AND GIS
(For Regular - 2018 Admission and Supplementary - 2017/2016 Admissions)

Time : Three Hours   Max. Marks: 75

Section A
Answer any 10 (2 marks each)

1. What are the various ways by which the Earth can be mapped?
2. What is grid on a map?
3. Write a short note on aerial photogrammetry.
4. Define remote sensing. Write the different types of remote sensing?
5. Expand RADAR and LIDAR. Write a short note on each.
6. What is radiometric resolution?
7. What are the advantages of digital image processing?
8. List the steps in supervised classification
9. What are the two approaches for information extraction from an image?
10. Write briefly data 'information' as one component of GIS.
11. What are the basic principles of GPS?
12. How does the vector data model represent surfaces?

(2 x 10 = 20)

Section B
Answer any 5 (5 marks each)

13. Explain the different ways of representation of map scale.
14. What is topographical map? Explain the interpretation of topographical maps.
15. Write a note on LANDSAT and INSAT.
16. Briefly describe NOAA.
17. What is image enhancement? Mention various enhancement techniques available in the image processing packages.
18. Explain multispectral scanning.
19. Write a note on raster data model.
20. Explain the factors affecting the GPS signal to produce optimal result

(5 x 5 = 25)

Section C
Answer any 2 (15 marks each)

21. How do you interpret an image? Describe.

22. Explain supervised and unsupervised classification.

23. Describe the principal functions of GIS.

24. How do the vector and raster data model represent surface and spatial relationships?

(15 x 2 = 30)