

Reg. No .....

Name .....

**M. Sc DEGREE END SEMESTER EXAMINATION - MARCH 2020**  
**SEMESTER 2 : ENVIRONMENTAL SCIENCE**  
**COURSE : 16P2EVST08 : REMOTE SENSING AND GIS**  
*(For Regular - 2019 Admission & Supplementary 2018/2017/2016 Admissions)*

Time : Three Hours

Max. Marks: 75

**Section A**

**Answer any 10 (2 marks each)**

1. What is grid on a map?
2. What is Geodetic surveying?
3. Write a short note on aerial photogrammetry.
4. Write the advantages of remote sensing over the conventional ground methods.
5. Expand RADAR and LIDAR. Write a short note on each.
6. What is temporal resolution?
7. Write a short note on spectral characteristics of vegetation.
8. What is supervised and unsupervised classification?
9. What is image rectification and image registration?
10. List out the advantages of GIS.
11. What is conical projection?
12. How does spatial data represent features?

(2 x 10 = 20)

**Section B**

**Answer any 5 (5 marks each)**

13. Explain the different ways of representation of map scale.
14. Write a brief note on theodolite as a survey instrument.
15. Describe briefly the principles and concept of remote sensing.
16. Briefly describe IRS satellites.
17. Explain multispectral scanning.
18. Explain imaging and non-imaging sensors.
19. What applications of the Arc GIS desktop are you familiar with?
20. Write a note on GPS space segment.

(5 x 5 = 25)

**Section C**

**Answer any 2 (15 marks each)**

21. Explain digital data processing?
22. What is digital image classification? Explain the two approaches in classification.
23. Explain image restoration and rectification.
24. What is map projection? Explain the classification of map projection?

(15 x 2 = 30)