Reg. No	•••••	Name	21P2052

### M. Sc DEGREE END SEMESTER EXAMINATION - JULY 2020

#### **SEMESTER 2: ENVIRONMENTAL SCIENCE**

COURSE: 16P2EVST08: REMOTE SENSING AND GIS

(For Regular - 2020 Admission & Supplementary - 2019/2018/2017/2016 Admissions)

# Time : Three Hours PART A

### Answer any 10 (2 marks each)

- 1. Write a short note on Planimeter.
- 2. Define map.
- 3. Explain the basics of cartography.
- 4. What is the concept of remote sensing?
- 5. What are the components of remote sensing?
- 6. What are the digital image processing techniques?
- 7. What is Sun synchronous satellite.
- 8. Write down the the steps of image rectification.
- 9. Define sensors and its types.
- 10. Write briefly data 'information' as one component of GIS.
- 11. What is a spatial reference in Arc GIS?
- 12. How does the vector data model represent surfaces?

 $(2 \times 10 = 20)$ 

Max. Marks: 75

## PART B Answer any 5 (5 marks each)

- 13. Innumerate different kinds of maps based on its usefulness.
- 14. What is topographical map? Explain the interpretation of topographical maps.
- 15. Explain the scope of remote sensing.
- 16. Briefly describe ERS.
- 17. Write a note on INSAT.
- 18. Explain satellite as the most stable platform used in remote sensing .
- 19. What are the methods of map projection based on developable surface area?
- 20. Explain the application of GIS in Geology.

 $(5 \times 5 = 25)$ 

### PART C Answer any 2 (15 marks each)

- 21. Write a note on Indian Remote Sensing program.
- 22. Describe image interpretation.
- 23. Explain supervised and unsupervised classification.
- 24. Explain the vector and raster data model representation of surface features and spatial relationships.

 $(15 \times 2 = 30)$