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Name	
Reg. No	

SECOND SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2020 (CUCSS - PG) **CC19P ESC2 C10 - REMOTE SENSING AND GIS**

(Environmental Science)

(2019 Admissions – Regular)

Time: Three Hours

Maximum: 30 Weightage

- I. Answer any *four* questions. Each question carries 2 weightage:
 - 1. What are the different ways of representation of map scale?
 - 2. Differentiate plane surveying and Geodetic surveying.
 - 3. Give an account on imaging and non-imaging sensors and their uses.
 - 4. Differentiate vector and raster data model.
 - 5. Write a brief note on Aerial photogrammetry.
 - 6. Differentiate supervised and unsupervised classification in remote sensing.
 - 7. Write a note on LANDSAT

$(4 \times 2 = 8 \text{ Weightage})$

- II. Answer any *four* questions. Each question carries 3 weightage:
 - 8. What is topographical map? Explain the interpretation of topographical maps.
 - 9. Explain the scanners used in sensors with neat diagram.
 - 10. Write a brief explanation of compass surveying.
 - 11. What are the factors that affecting the GPS signal to produce optimal result?
 - 12. Explain the principle and concept of remote sensing.
 - 13. Give a detailed account on image restoration and image rectification?
 - 14. Explain EMR as a major source of energy in remote sensing and its interaction with the atmosphere.

$(4 \times 3 = 12 \text{ Weightage})$

III. Write an essay on any *two* of the following. Each question carries 5 weightage:

- 15. Describe the Digital Image Processing Techniques.
- 16. What are the applications of GIS and remote sensing in the following area?
 - b. Climate a. Agriculture c. Forestry
- 17. Explain the spectral characteristics of surface features (soils, vegetations, water)
- 18. What is map projection? What are the methods used for map projection?

$(2 \times 5 = 10 \text{ Weightage})$
