

17P452

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Name.....

Reg. No.....

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2019

(CUCSS - PG)

(Applied Geology)

CC17P GEL4 E01 - REMOTE SENSING AND GEOGRAPHIC INFORMATION SYSTEM

(2017 Admission Regular)

Time: Three Hours

Maximum: 36 Weightage

I. Answer *all* questions. Each question carries 1 weightage.

1. Digital numbers and tone of images.
2. Charged couple device.
3. Stereoscope.
4. Payload of a satellite.
5. Georeferencing.
6. Attribute table of a line and polygon data.
7. Duplexer of a radar system.
8. Fiducial marks.
9. Thematic maps.
10. Raster data.
11. SRTM data and its spatial resolution.
12. Topology.
13. Eye base and air base.
14. Radiometric resolution.

(14 x 1 = 14 Weightage)

II. Answer any *seven* questions. Each question carries 2 weightage.

15. Temporal resolution of satellite imageries.
16. Elements of image interpretation of aerial photographs.
17. Flight plan for aerial photography.
18. Across track multispectral scanning.
19. Spectral signatures and Hyperspectral remote sensing.
20. Doppler effect and its applications in designing radar systems.
21. Commercial and open source GIS software.
22. Indian remote sensing satellites.
23. Platforms and Sensors.

24. Projected coordinate system in GIS.

(7 x 2 = 14 Weightage)

III. Long essay type questions. Answer any *two* questions. Each question carries 4 weightage.

25. Discuss the application of GIS based scientific studies in disaster management.

Or

26. Describe the procedure for preparing thematic maps in ArcGIS software.

27. Explain the principles of remote sensing process. Compare and contrast the merits and demerits of aerial photography and satellite remote sensing.

Or

28. Discuss the principles and applications of Thermal Infra-Red (TIR) remote sensing.

(2 x 4 = 8 Weightage)
