24U324 (Pages: 2) Name : .....

Reg. No : .....

THIRD SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2025

(FYUGP)

CC24UGEL3CJ201 - INTRODUCTORY GEOINFORMATICS

(B.Sc. Geology - Major Course)

(2024 Admission - Regular)

Time: 2.0 Hours Maximum: 70 Marks

Credit: 4

Part A (Short answer questions)

Answer ***all*** questions. Each question carries 3 marks.

1. Explain editing. [Level:2] [CO1]
2. Explain hardware. [Level:2] [CO1]
3. Explain why atlas maps are categorized as small-scale maps. [Level:2] [CO4]
4. Name two types of maps based on scale. [Level:1] [CO4]
5. Explain what an azimuthal (planar) projection is. [Level:2] [CO4]
6. Explain the importance of overlaps in aerial photography. [Level:2] [CO5]
7. Explain relief displacement. [Level:2] [CO5]
8. Briefly define ‘specular reflection’ in radiation target interaction. [Level:1] [CO5]
9. State the impact of organic matter content on soil reflectance. [Level:1] [CO5]
10. Mention the temperature scale used in radiation laws. [Level:1] [CO5]

(Ceiling: 24 Marks)

Part B (Paragraph questions/Problem)

Answer ***all*** questions. Each question carries 6 marks.

11. Distinguish GIS and photogrammetry. [Level:4] [CO1]
12. Explain the growth of GIS technology in 1980s and 1990s. [Level:2] [CO2]
13. Explain how colour is used to group like features perceptually in a map. [Level:2] [CO4]
14. Compare map legend and grid system for their utility to map readers. [Level:4] [CO4]

15. Explain how tone, texture, and pattern help in identifying land features in aerial photographs? [Level:2] [CO5]

16. Explain the historical development of remote sensing and its significance in modern earth studies. [Level:2] [CO5]

17. Discuss the significance of spectral signature curves in identifying surface materials. [Level:2] [CO5]

18. Explain the seven elements involved in remote sensing. [Level:2] [CO5]

(Ceiling: 36 Marks)

Part C (Essay questions)

Answer any ***one*** question. The question carries 10 marks.

19. Explain GIS and its applications. [Level:2] [CO6]

20. Compare vertical and oblique aerial photographs in terms of geometry, interpretation, and applications. [Level:4] [CO5]

(1 × 10 = 10 Marks)

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