

24U134

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Name :

Reg. No :

FIRST SEMESTER UG DEGREE EXAMINATION, NOVEMBER 2024

(FYUGP)

CC24U GEL1 MN101 - GEOINFORMATICS - I

(B.Sc. Geology - Minor 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. Identify the key steps involved in editing GIS data. [Level:1] [CO2]
2. Describe the characteristics of thematic maps. [Level:2] [CO4]
3. Define the term "overlaps" in the context of aerial photography. [Level:1] [CO5, CO6]
4. Explain the factors that influence reflection of EMR by different surface features. [Level:2] [CO5]
5. Identify the key elements involved in designing a map. [Level:1] [CO4]
6. Describe the applications of oblique aerial photographs in urban planning. [Level:2] [CO1, CO5]
7. Identify the technologies used in Geoinformatics. [Level:1] [CO1, CO4]
8. Explain the significance of data processing in remote sensing. [Level:2] [CO5]
9. Describe how cylindrical, conical, and azimuthal projections differ. [Level:2] [CO4]
10. Describe how atmospheric particles affect the scattering of EMR. [Level:2] [CO5]

(Ceiling: 24 Marks)

Part B (Paragraph questions/Problem)

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

11. Identify the significance of shape and association in image analysis. [Level:2] [CO5]
12. Describe how the spectral reflectance of soil can indicate its composition. [Level:2] [CO5]
13. Explain the benefits and limitations of mobile GIS. [Level:2] [CO3]
14. Identify the contributions of people in the functioning of GIS. [Level:1] [CO2, CO3]
15. Explain the ways in which maps represent location and extent. [Level:2] [CO5]
16. Identify the different regions of the Electromagnetic Spectrum. [Level:1] [CO5]

17. Define the concept of stereoscopy and its significance. [Level:1] [CO5]

18. Explain Wein's displacement law and its implications in physics. [Level:2] [CO5]

(Ceiling: 36 Marks)

Part C (Essay questions)

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

19. Summarize the importance of scale and principal point in the geometry of aerial photographs. [Level:2] [CO5]

20. Discuss the contributions of key pioneers in remote sensing and how their work has influenced modern practices. [Level:2] [CO5]

(1 × 10 = 10 Marks)
