| · · | | | | | | |
|-----------|--|--|--|--|--|--|
| Reg. No.: | | | | | | |

Question Paper Code: 1036038

B.E. / B.Tech. DEGREE EXAMINATIONS, NOV / DEC 2024 Sixth Semester Civil Engineering U20CE621 - REMOTE SENSING AND GIS APPLICATION (Regulation 2020)

| Time: Three Hours | Maximum: 100 Marks |
|---------------------|-----------------------|
| Illie. Illiee nouis | Maxillulli. 100 Marks |

Answer ALL questions

 $PART - A \qquad (10 \times 2 = 20 \text{ Marks})$

- 1. What is the application of Remote Sensing?
- 2. Write Wien's displacement law.
- 3. Compare active and passive sensors.
- 4. What is sun synchronous satellite?
- 5. Differentiate supervised and unsupervised classification.
- 6. Define digital image processing.
- 7. Distinguish between spatial and non-spatial data.
- 8. What is DBMS?
- 9. Why is compression needed for remote sensing data?
- 10. What is scanning?

| | PART – B $(5 \times 16 = 80 \text{ Mark})$ | cs) |
|---------|--|--------------|
| 11. (a) | Elucidate with neat sketches the components of remote sensing systems. | (16) |
| | (OR) | |
| (b) | Describe the spectral reflective characteristics of water, vegetation and soil. | (16) |
| 12. (a) | Discuss briefly about pay load description of important earth resources metrological satellites. | and (16) |
| | (OR) | |
| (b) | Elaborate the various types of platforms. | (16) |
| 13. (a) | Explain the basics elements and types of image interpretation. | (16) |
| | (OR) | |
| (b) | Enumerate the various types of data products. | (16) |
| 14. (a) | What are map projections? Illustrate the different types of map projections their characteristics. | with (16) |
| | (OR) | |
| (b) | Explain the components of GIS with neat diagram. | (16) |
| 15. (a) | What is data model? Describe the different types of data. | (16) |
| | (OR) | |
| (b) | Discuss in detail about land information system. | (16) |

-----XXX-----