DECEMBER 2022 **P/ID 4441/PGE3J**

Time : Three hours Maximum : 80 marks

SECTION A — (10 × 2 = 20 marks)

Answer any TEN questions in 50 words each.

1. Define the term “Open Traverse Survey”.
2. Define the term “Principal Point”.
3. What are oblique photographs?
4. EMR – Define.
5. What does temporal resolution mean?
6. What are “value added data products”?
7. What is meant by micro-wave sensing?
8. Why meteorological satellites are needed?
9. What does CCD sensor system mean?
10. What are sample sets?
11. Define the term NDBI.
12. What does features extraction mean?

SECTION B — (5 × 6 = 30 marks)

Answer any FIVE questions in 250 words each.

13. How will you measure the orientation of an aerial photography?

14. Examine various methods of data acquisition in remote sensing process.

15. What are the three basic formats of remote sensing data? Explain any of them.

16. Describe the characteristics of a non-imaging sensors and its applications.

17. Examine the concept and characteristics of thermal scanning method in remote sensing.

18. Explain the importance of using feature vectors when performing digital image classification.

19. How do you differentiate between a high-pass filter and a low-pass filter?

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions in 500 words each.

20. Discuss the traditional survey methods and instruments with suitable illustrations.

21. What is remote sensing? Explain the basic components of a remote sensing system.

22. Critically examine the advantages and disadvantages of geostationary satellites for remote sensing imaging.

23. What are the differences between supervised and unsupervised classifications? Explain various process involved in surpervised classification technique.

24. Discuss the role of remote sensing in geological and geomorphological studies with suitable case studies.

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