K-1005

Total Page No. : 3] [Roll No.

MCS-E4

MCA IIIrd Semester Examination Dec., 2023

BASIC OF REMOTE SENSING AND GIS

Time: 2 Hours] [Max. Marks: 70

Note:— This paper is of Seventy (70) marks divided into two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given there in. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

Section-A

(Long Answer Type Questions) 2×19=38

Note: Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each.

Learners are required to answer any two (02) questions only.

K–1005 (1) P.T.O.

- 1. What is GIS? How does GIS impact decision-making in various industries?
- What do you mean by spatial and non-spatial data?
 Provide examples of spatial and non-spatial data commonly used in GIS.
- 3. Explain REMOTE SENSING in details. What are its benefits?
- 4. What is GPS ? How does GPS determine precise locations on the Earth's surface ?
- 5. What are the special cameras ? How do scientists use special cameras in space to help farmers ?

Section-B

(Short Answer Type Questions) $4 \times 8 = 32$

- **Note:** Section 'B' contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.
- 1. Explain advance GIS.
- 2. Discuss the differences between passive and active remote sensing techniques.
- 3. Discuss the role of artificial intelligence in GIS, in the future.

K-1005

- 4. Explain the concept of image fusion in digital image processing.
- 5. What is the main purpose of GIS?
- 6. What are contour lines used for on a topographic map?
- 7. What does remote sensing help scientists for research and study?
- 8. How do sensors on satellites work?
