## Write the answer for each unit in separate sheet

The figures in the right-hand margin indicate full marks.
Candidates are required to give their answers in their own words as far as practicable.

## UNIT: GEO 303D. 1

PHYSICAL BASIS OF REMOTE SENSING
Marks: 20
GROUP-A

1. Answer any ONE question: $1 \times 8=8$
a. Explain the atmospheric interaction with electromagnetic radiation.
b. Discuss about platforms and sensors available at present for acquisition of satellite imageries.

## GROUP-B

2. Answer any TWO questions: $2 \times 4=8$
a. Explain the components of real Remote Sensing System.
b. Differentiate Radiant temperature from Kinetic temperature.
c. Describe the various types of resolutions of satellite imageries.
d. Explain the remote sensing data acquisition and data reception.

## GROUP-C

3. Answer any TWO questions: $2 \times 2=4$
a. Define spectral signature curve.
b. What are the types of scattering?
c. What are the primary colours?
d. Differentiate between BIL and BSQ format of satellite image data.

## UNIT: GEO 303 D. 2 PHOTOGRAMMETRY, AERIAL PHOTO AND SATELLITE SYSTEM Marks: 20 GROUP-A

a. Briefly explain with illustrations the concept of relief displacement and image parallax in aerial photographic operations.
b. What are the different properties of photographic film which impact on the quality of aerial photograph?

## GROUP-B

2. Answer any TWO questions:
$2 \times 4=8$
a. Distinguish whiskbroom from pushbroom satellite system with proper illustration.
b. Write a brief note on digital photogrammetry.
c. Write on different types of resolutions in satellite systems with suitable examples.
d. Explain the working principle of mirror stereoscope with suitable diagrams.

## GROUP-C

3. Answer any TWO questions:
$2 \times 2=4$
a. What is parallax?
b. Define Nadir point.
c. What is meant by fiducial marks?
d. What is side lap and end lap?
(2)
