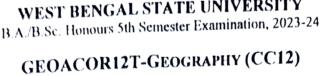




# WEST BENGAL STATE UNIVERSITY





Time Allotted: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks. Candidates should answer in their own words and adhere to the word limit as practicable All symbols are of usual significance

### CATEGORY-A

### Answer any one question from the following (within 600 words)

 $10 \times 1 = 10$ 

- What is the standard False Colour Composite (FCC)? Explain how remote sensing 1. and GIS act as a coupled system for geospatial analysis.
- Explain different types of remote sensing satellites and their application. Compare the advantages and disadvantages of visual and digital image interpretation.

#### **CATEGORY-B**

### Answer any four questions from the following (within 150 words each)

 $5 \times 4 = 20$ 

- Discuss about the various approaches of Land use Land cover (LULC) mapping in 3.
- What is the role of spatial and radiometric resolution in image interpretation?
- How does a GNSS satellite communicate with ground based receiver unit?
- Distinguish between raster and vector data.
- Explain how spatial and attribute data integrate to prepare GIS.
- What do you mean by Overlay Operation?
- How would you prepare a standard FCC in QGIS using Landsat images?

#### **CATEGORY-C**

## Answer any five questions from the following (within 50 words each)

 $2 \times 5 = 10$ 

- What is atmospheric window? . A0.
  - How the band combination changes in preparing the standard FCC from IRS to 11. Landsat?
- What is the purpose of georeferencing? X2.
- What is meta data? Give example. 13.
- What do you mean by image classification? \ 14.
- What are the wavelengths of Green, Red and Near IR radiation? 15.
- Explain the significance of DBMS in GIS platform. 16
- 17 Distinguish between panchromatic and multi-spectral images. 1
- 18 Define Swath.

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