



**WEST BENGAL STATE UNIVERSITY**  
B.A./B.Sc. Honours 6th Semester Examination, 2022

**GEOACOR14T-GEOGRAPHY (CC14)**

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.*

**CATEGORY-A**

**Answer any *one* question from the following within 600 words** 10×1 = 10

1. Explain the role of spatial and radiometric resolution in visual image interpretation. What are the special characteristics of water and vegetation in blue, green and NIR bands? 4+6
2. Explain how remote sensing and GIS act as a coupled system for geographical studies. How GIS is related to DBMS? 7+3

**CATEGORY-B**

**Answer any *four* questions from the following within 150 words each** 5×4 = 20

3. How does a GNSS Satellite Communicates ground based receiver unit?
4. Explain the concept of atmospheric window.
5. Explain how spatial data and non-spatial data integrate to make a GIS.
6. State the energy sources of remote sensing. How does it work?
7. Explain the role of sensor used in a Satellite.
8. State merits and demerits of raster data format.
9. Explain the importance of multi-spectral satellite image.

**CATEGORY-C**

**Answer any five questions from the following within 50 words each**

**2×5 = 10**

10. What do you mean by image classification?
11. How the band combination changes in preparing the standard FCC from IRS?
12. What is the important band combination used in IRS Satellite for mapping water bodies?
13. What is meta data? Give example.
14. What is the purpose of georeferencing?
15. Why turbid water appears in brighter tone than clear water on a standard FCC?
16. What are the different forms of Scattering?
17. How the image is enhanced?
18. What is atmospheric correction?

**N.B. :** *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

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