



WEST BENGAL STATE UNIVERSITY  
B.A./B.Sc. Honours 5th Semester Examination, 2022-23

**GEOACOR12T-GEOGRAPHY (CC12)**

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.*

**FOR REGULAR SYLLABUS**

**CATEGORY-A**

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

1. What is atmospheric window and how does it relate to remote sensing? Differentiate between spectral and spatial resolution. 7+3
2. In what way does sensor differ from scanner? Explain the process of downloading satellite data from Bhuvan Web Portal. 3+7

**CATEGORY-B**

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

3. Explain different types of scattering of light.
4. What does microwave window do?
5. Briefly describe three important key elements of visual interpretation of standard FCC.
6. Discuss in brief the advantages and disadvantages of Raster data structure.
7. How shapefiles are created in QGIS?
8. What do you mean by FCC? State four most common band combinations in preparing FCC.
9. What is spectral signature? Describe the spectral response of soil and water in remote sensing technology.

**CATEGORY-C**

Answer any *five* questions from the following (within 50 words each) 2×5 = 10

10. What is spectral reflectance curve?
11. What is non-selective scattering?
12. What is Pseudo-Random Noise (PRN)?
13. What are the wavelengths of three primary colour?

14. What is SRTM?
15. What is LANDSAT mission?
16. Define datum.
17. What is EMR?
18. What are the data types used in GIS?

**FOR TRUNCATED SYLLABUS**

**CATEGORY-A**

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

1. Discuss various approaches to hazard study with reference to risk perception and vulnerability assessment. How does risk differ from threat? 7+3
2. Describe the impact of tropical cyclone on Sundarban. Explain different methods to reduce the risk of cyclonic hazard in coastal areas of India. 5+5

**CATEGORY-B**

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

3. Elucidate the concept of resilience and capacity building in respect to hazard management in brief.
4. Identify factors responsible for river bank erosion in lower Gangetic plain of West Bengal.
5. How geospatial techniques are applied for hazard mapping?
6. What do you understand by vulnerability assessment?
7. Explain the role of technology in disaster management.
8. State the different earthquake preparedness programmes in eastern Himalaya.
9. Write short note on the 'hazard paradigm'.

**CATEGORY-C**

**Answer any *five* questions from the following (within 50 words each) 2×5 = 10**

10. What is 'trauma' in a post-disaster scenario?
11. What is cyclone shelter?
12. What are the four stages of vulnerability management?
13. What do you mean by microinsurance in disaster management?
14. How are tropical cyclones named over north Indian ocean?
15. What is a littoral drift current?
16. What do you mean by climate resilience?
17. What is 'techno-centric approach' in hazard management?
18. Define quasi-natural hazard with suitable examples.

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