

**BANKURA UNIVERSITY****B.Sc. Semester-III Examination, 2022-23****ENVIRONMENTAL SCIENCE [Programme]****Course ID : 31810      Course Code : SP/ENV/304/SEC-1****Course Title : Remote Sensing, Geographic Information System & Modelling**

Time : 1 Hour 15 Minutes

Full Marks : 25

*The figures in the right-hand margin indicate marks.**Candidates are required to give their answers in their own words as far as practicable.*1. Answer any **five** of the following questions:

1×5=5

- What is EMR?
- What is radiometric resolution?
- What do you mean by spectral signature?
- Define passive sensor.
- What do you mean by vector overlay?
- Write any two advantages of mode.
- Define snowball sampling.
- What do you mean by Standard Deviation?

i) What is Sun synchronous satellite?

2. Answer any **two** of the following questions:

5×2=10

- Describe the key components of GIS.
- Distinguish between spatial data and non-spatial data.
- Which sensors are useful for land use and land cover studies?
- Distinguish between random and systematic sampling.

3. Answer any **one** from the following questions:

10×1=10

- What are the advantages and limitations of visual image interpretation and digital image processing?  
5+5
- Explain the use of Remote Sensing and GIS techniques in forestry applications.