

B.Sc. 3rd Semester (Honours) Examination, 2019-20**ENVIRONMENTAL SCIENCE****Course ID : 31815****Course Code : SH/ENV/305/SEC-1**

Course Title: Remote Sensing, Geographic Information System
and Modeling

Time: 1 Hour 15 Minutes**Full Marks: 25***The figures in the margin indicate full marks.*

1. Answer any *five* questions: 1×5=5
 - (a) What is EMS?
 - (b) What is network analysis in GIS?
 - (c) Define spatial resolution.
 - (d) What is IFOV?
 - (e) What is vector data structure?
 - (f) Among the three measures of central tendency, which is most sensitive?
 - (g) What is simple random sampling?
 - (h) What do you mean by Linear regression?

 2. Answer *any two* questions: 5×2=10
 - (a) What is GIS? Briefly describe the different key components of GIS? 1+4
 - (b) Answer *any two* from the given below: 2·5×2
 - (i) Data manipulation
 - (ii) Spectral signature
 - (iii) LANDSAT
 - (c) Define Sun-synchronous satellite. What are the major application of these satellite? 1+4
 - (d) Discuss about different types sensors used in the remote sensing.

 3. Answer any *one* question: 10×1=10
 - (a) Describe how remote sensing and GIS techniques are used for natural resource management.
 - (b) How can one apply the best use of remote sensing and GIS technology as a tool for land use and land cover mapping?
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