

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI  
(END SEMESTER EXAMINATION)**

**CLASS: M SC  
BRANCH: GEOINFORMATICS**

**SEMESTER : III  
SESSION : MO/18**

**SUBJECT: SGI3017 GEOINFORMATICS IN ENVIRONMENTAL STUDIES  
TIME: 3 HRS.**

**FULL MARKS: 60**

**INSTRUCTIONS:**

1. The question paper contains 7 questions each of 12 marks and total 84 marks.
  2. Candidates may attempt any 5 questions maximum of 60 marks.
  3. The missing data, if any, may be assumed suitably.
  4. Before attempting the question paper, be sure that you have got the correct question paper.
  5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
- 

- |   |     |
|---|-----|
| Q.1(a) What is an Ecosystem? Discuss Terrestrial ecosystems.  | [6] |
| Q.1(b) Elaborate sustainable development.   | [6] |
| Q.2(a) What is the significance of air quality monitoring and management? Elaborate                 | [2] |
| Q.2(b) What is understood by Global warming and climate change?                                     | [4] |
| Q.3(a) How can Urban landscapes be understood spatially? Discuss relevant indices                   | [6] |
| Q.3(b) What are the criteria of Solid Waste Disposal site selection?                                | [6] |
| Q.4(a) What do you understand by Biodiversity? Can India be called a Mega Biodiverse State? Justify | [6] |
| Q.4(b) Why is Wildlife Management an important aspect of Forestry?                                  | [6] |
| Q.5(a) What is meant by Freshwater Ecosystem?   | [6] |
| Q.5(b) Explain how Ocean Surface is monitored through remote sensing satellites.                    | [6] |
| Q.6(a) Why is Environmental Impact Assessments done? Explain.                                       | [6] |
| Q.6(b) Explain the steps involved in Cost Benefit analysis with respect to ecological issues.       | [6] |
| Q.7(a) Give the use of Geoinformatics in Ecological Modelling.                                      | [6] |
| Q.7(b) Write an elaborate note on Disaster Management.  | [6] |

:::::03/12/2018:::::M