M.Sc. 3rd Semester Examination-2022-23 GEO-INFORMATICS

Course ID: 33153 Course Code: GI-303EA

Course Title: Geo-Informatics for Resource and Disaster Management

Time: 2 Hours Full Marks: 40

The figures in the right hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer any four questions selecting at least one from each unit.

UNIT-I: Introduction to Disaster Management

- Discuss about disaster management. Briefly discuss the role of satellite systems in disaster preparedness. 4+6
- Briefly discus different types of disaster forecasting.
 Discuss the role of satellite images for damage assessment after disaster events.

UNIT-II: Disaster Management Application-I

- 3. Explain how drought prone areas can be identified using different satellite images. Point out how SPI (Standardized Precipitation Index) method is useful for drought monitoring?
 6+4
- 4. Write a short note on causes of forest fire and risk zonation mapping for forest fire using Geoinformatics.

4+6

UNIT-III: Disisater Management Application-II

- 5. Discuss the role of RS & GIS for soil erosion modeling.
 Mention the role of geoinformatics for landslide monitoring.
 5+5
- Discuss the causes and effects of Tsunami and rehabilitation after disaster.