2021

ENVIRONMENTAL SCIENCE — HONOURS

Paper : DSE-B-1

(Natural Hazards and Disaster Management)

Full Marks : 50

The figures in the margin indicate full marks.

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

1. Answer **any five** questions from the following : 2×5

   (a) What do you mean by disaster?

   (b) Define lead time of disaster.

   (c) What do you mean by vulnerability assessment?

   (d) What do you mean by dam induced seismicity?

   (e) What is tsunami?

   (f) What do you mean by rehabilitation?

   (g) What do you mean GLOF?

2. Write short notes on **any two** of the following : 5×2

   (a) Role of Geoinformatics in Disaster Management

   (b) Disaster Management Cycle

   (c) Chernobyl disaster

   (d) SENDAI Protocol.

3. Answer **any three** questions :

   (a) Differentiate hazardous events and disaster. How a hazardous event can be prevented from becoming a disaster? 4+6

   (b) 'Construction and deforestation along river bank increase the chances of flood' – Comment on it. How Geoinformatics play important role in flood risk assessment? 5+5

   (c) What are the anthropogenic reasons behind landslides? Briefly discuss different landslide management options for a hilly terrain. What is slope stability? 2+6+2

   (d) Write an essay on the administrative, legal and technical framework available in India in the context of Disaster Management. 10

   (e) What are the components of risk? Describe the 'measurement and characterization of risks' for risk assessment. 2+8

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