

**M.A./M.Sc. 2nd Semester Examination, 2010**

**GEOGRAPHY**

PAPER—GR - 1204

*Full Marks : 40*

*Time : 2 hours*

*The figures in the right-hand margin indicate marks*

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

*Illustrate the answers wherever necessary*

**UNIT—XIX**

*(Environmental Engineering)*

**GROUP—A**

1. Answer any *one* question : 8 × 1

(a) Discuss the mechanism of biological treatment of waste water with special reference to activated sludge treatment system.

*(Turn Over)*

- (b) Explain standard techniques of measuring particulate matter in the air. What is the unit of measurement of particulate matter?

GROUP—B

2. Answer any *two* questions : 4 x 2

(a) Explain the operating principle of Infra red spectrophotometer.

(b) Point out the noise scale and its implications.

(c) Identify the advantages of bio-fertilizer use.

(d) Account for characteristics of problematic sludge with respect to management.

GROUP—C

3. Answer any *two* questions : 2 x 2

(a) Define hazardous waste with examples.

(b) What is meant by bio-accumulation of chemicals?

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(c) Identify the major sources of indoor air pollution.

(d) How is sludge dewatering done ?

UNIT—XX

(*Environmental Hazards*)

GROUP—A

1. Answer any *one* question : 8 × 1

(a) Explain the term vulnerability and trace the significance of vulnerability analysis and mapping in the preparedness of environmental hazards.

(b) Discuss the causes and types of flood hazard. Identify the risk assessment methods of flood hazard for management purpose.

GROUP—B

2. Answer any *two* from the following : 4 × 2

(a) Explain the aftermath of earthquake hazard with special reference to tsunami incidence in Indian Ocean nations.

- (b) Identify the causes and types of drought.
- (c) Enumerate the anthropological factors for landslides in the mountain environment.
- (d) Specify the impact of urban poverty as social hazards.

**GROUP—C**

3. Draw parallel between any *two* of the following couples of terms, with examples : 2 x 2
- (a) Hazards and Disasters
  - (b) Risk and Vulnerability
  - (c) Endemic and Epidemic
  - (d) Trauma and Aftermath.
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