

M.A/M.Sc. 2nd Semester Examination, 2011

**GEOGRAPHY**

PAPER—GEO-204

*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) Explain with necessary illustrations, the standard techniques for reduction of automobile emission.

*( Turn Over )*

- (b) Explain the expression representing energy balance in a settling tank for removal of suspended particles.

GROUP – B

2. Answer any *two* questions : 4 x

- (a) Elucidate the physiological impacts of noise.
- (b) Discuss with illustration the functional mechanism of cascade impactor for sampling air pollution.
- (c) How is the public health protected through managing waste ?
- (d) Discuss the principle of activated sludge treatment.

GROUP – C

3. Answer any *two* questions : 2 x

- (a) What are the ecological impacts of harming non-target species by using pesticides ?

- (b) How does an ESP function ?
- (c) How is the scrubber solution used to reduce pollutants ?
- (d) Mention the techniques to reduce industrial noise.

UNIT-XX

( *Environmental Hazards* )

GROUP - A

1. Answer any *one* question : 8 × 1

- (a) Discuss the causes and types of earthquake hazard and comment on preparedness for such hazard.
- (b) What is meant by social pathology ? Enumerate and discuss the environmental factors responsible for delinquent behaviour mentioning their types under IPC.

GROUP – B

2. Answer any *two* questions :

- (a) Why crime is considered as an important social hazard ?
- (b) Under what circumstances an endemic disease culminates into its *epidemic* and *pandemic* phases ?
- (c) Differentiate *income* poverty line from *calorie* poverty line and explain poverty cycle.
- (d) Elaborate the concepts of hazards and disasters.

GROUP – C

3. Draw parallel between any *two* of the following couples of terms with examples :

- (a) Vulnerability and Risk.

- (b) Risk perception and Risk assessment.
  - (c) Dimensions of hazard and Response to hazard
  - (d) Biophysical hazard and Social hazard.
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