

Roll No.

ES-504

Environmental Health and Natural Hazards

M. Sc. ENVIRONMENTAL SCIENCE

(MSCEN-13)

First Year, Examination, 2017

Time : 3 Hours

Max. Marks : 60

Note : This paper is of **sixty (60)** marks containing **three (03)** sections A, B and C. Learners are required to attempt the questions contained in these sections according to the detailed instructions given therein.

Section-A

(Long Answer Type Questions)

Note : Section 'A' contains four (04) long answer type questions of fifteen (15) marks each. Learners are required to answer *two* (02) questions only.

1. Write a detailed note on the importance of Epidemiology in Health Programmes and various epidemiological methods and epidemiology of Infectious Diseases.
2. What are the various kinds of toxic and chemical wastes ? Describe in detail.
3. Write an essay on the environmental impacts of volcanoes and earthquakes.

4. What do you understand by vectors ? Describe the methods of transmission of diseases by vectors and also explain the life cycle of mosquito and housefly.

Section-B

(Short Answer Type Questions)

Note : Section 'B' contains eight (08) short answer type questions of five (05) marks each. Learners are required to answer *four* (04) questions only.

1. Write a short note on the environmental impact air pollutants.
2. What is indoor air pollution ? Discuss its sources and effects.
3. Write a short note on the toxicity of Nitrates, Fluorides and Detergents.
4. What do you understand by sedimentation and coagulation processes ? How do they help in purification of water ? Discuss in brief.
5. Write a short note on carcinogenic pollutants.
6. Discuss air quality index (AQI) in brief.

Section-C

(Objective Type Questions)

Note : Section 'C' contains ten (10) objective type questions of one (01) mark each. All the questions of this section are compulsory.

Write True/False against the following.

1. Typhoid is a water borne disease.
2. Particulate matter is a source of indoor air pollution.

3. The people working in stone and mining industries suffer from silicosis.
4. Acid rains is categorized as primary pollutant.
5. Photochemical smog is generally caused in village areas.

Choose the correct alternatives.

6. Which of the following does not affect lungs ?
 - (a) Asbestosis
 - (b) Silicosis
 - (c) Arsenic
 - (d) All of the above
7. Which of the following is affected most by acid rain ?
 - (a) Plants
 - (b) Fishes
 - (c) Ferns
 - (d) Elephants
8. Which of the following chemicals used in coagulation process for water purification is ?
 - (a) Aluminium Sulphates (Alums)
 - (b) Sodium Hydroxide (Caustic Soda)
 - (c) Silver Chloride
 - (d) Both (a) and (c)
9. LD_{50} is the amount of toxic material required for
.... % mortality.
 - (a) 50
 - (b) 75
 - (c) 80
 - (d) 25

10. Which of the following diseases is transmitted by Sand fly ?
- (a) Typhoid
 - (b) Kala-azar
 - (c) Poliomyelitis
 - (d) None of these