

16032(J)

J-16

B. Tech 2nd Semester Examination

Disaster Management and Environmental Science (NS)

HS-101

Time : 3 Hours

Max. Marks : 100

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : The question paper consists of five Sections A, B, C, D and E. The candidates are required to attempt five questions in all selecting one question from each section A, B, C and D and all subparts of Section E. Use of non-programmable calculator is allowed.

SECTION - A

1. (a) Define the following:

(i) Hurricanes.

(ii) Terrorism.

(iii) Avalanche.

(iv) Anticyclones.

(v) Epidemics.

(5×2=10)

(b) Explain the following:

(i) Causes of forest fires.

(ii) Classification of forest fires.

(2×5=10)

[P.T.O.]

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2. (a) What are the possible causes of Earthquakes? Discuss. (10)

(b) Give the classification of Earthquakes based upon various terminologies. (10)

SECTION - B

3. What you understand by "Tropical Cyclone"? What are its characteristics? (20)

4. Define the following terms in reference to disaster prevention and mitigation:

(a) Disaster prevention.

(b) Disaster mitigation.

(c) Disaster preparedness.

(d) Risk.

(e) Vulnerability.

(5×4=20)

SECTION - C

5. (a) What is renewable energy?

(b) List pros and cons of using renewable energy.

(5+15=20)

6. (a) Answer the following questions:

(i) Sources of 'Thermal Pollution'.

(ii) Measures to prevent 'Thermal Pollution'. (2×5=10)

(b) List two main general effects of 'Radioactive Pollution' and explain them. (4)

- (c) What are the measures to control the 'Radioactive Pollution'?
(6)

SECTION - D

7. (a) List the main sources of environmental pollution. Discuss each of them briefly how they contribute to pollution.
(4+6=10)
- (b) Discuss how the following substance lead to air pollution:
- Oxides of Nitrogen.
 - Hydrocarbons.
 - Aerosols.
 - Particulate matter. (10)
8. Write short notes on the following:
- Source of water pollution.
 - Greenhouse causes and effects. (2×10=20)

SECTION - E

9. Answer all the parts: (each to be answered in about thirty (30) words. Each question carries two (2) marks.
- List out at least four areas to be addressed by the disaster mitigation works.
 - Distinguish between cyclone and anticyclone.
 - Define photochemical smog.
 - List four causes that can trigger landslides.

[P.T.O.]

- List four effects of 'Noise Pollution'.
- Define 'Thermal Discharge' index.
- What is difference between disaster preparedness and disaster mitigation?
- List four major environmental issue faced by the global society.
- Name at-least two main gases alongwith their percentage contribution to greenhouse effect.
- What is the role of the ozone layer for living beings?
(2×10=20)