

NOIDA INSTITUTE OF ENGINEERING AND TECHNOLOGY, GREATER NOIDA
(An Autonomous Institute Affiliated to AKTU, Lucknow)
B.Tech

SEM: IV - THEORY EXAMINATION (2021 - 2022)

Subject: Environmental Science

Time: 3 Hours

Max. Marks: 50

General Instructions:

1. The question paper comprises three sections, A, B, and C. You are expected to answer them as directed.
2. Section A - Question No- 1 is 1 mark each & Question No- 2 carries 2 mark each.
3. Section B - Question No-3 is based on external choice carrying 5 marks each.
4. Section C - Questions No. 4-8 are within unit choice questions carrying 4 marks each.
5. No sheet should be left blank. Any written material after a blank sheet will not be evaluated/checked.

SECTION A

15

1. Attempt all parts:-

1-a. Ammonification is the formation of (CO1)

- (a) Ammonia from nitrates by decomposers
- (b) Ammonia from nitrogen
- (c) Ammonia from amino acids
- (d) Ammonia from nitrates by nitrogen fixers

1-b. Hydroponics is a technique of growing crops without _____ (CO2)

- (a) Water
- (b) Air
- (c) soil
- (d) Sunlight

1-c. The community which begins succession in a habitat is designated as (CO3)

- (a) Seral community
- (b) Biotic community
- (c) Ecosere
- (d) Pioneer community

1-d. Excess Fluoride in drinking water is likely to cause (CO4)

- (a) Blue baby syndrome
- (b) Fluorosis
- (c) Cancer
- (d) Intestinal irritation

1-e. When the consumption of natural resources are equal to nature's ability to replenish then sustainability is (CO5)

- (a) Not sustainable
- (b) Steady state economy
- (c) Environmentally sustainable
- (d) none of the above

2. Attempt all parts:-

2.a. Name the four segment of environment? (CO1)

2.b. Name the different types of coal? (CO2)

2.c. State a difference between endemic and exotic species. (CO3)

2.d. What is the full form of three R? How they are beneficial for environment protection? (CO4)

2.e. Define bioindicators. How they work to check the environmental conditions? (CO5) 2

SECTION B

15

3. Answer any three of the following:-

3-a. Draw the diagram of pyramid of biomass, pyramid of number and pyramid of energy? (CO1) 5

3-b. With the help of diagram discuss biogas production in India? (CO2) 5

3.c. Write down the role of biosphere reserve, sanctuaries, and national park regarding to biodiversity conservation? (CO3) 5

3.d. Discuss the different methods of solid waste disposal? (CO4) 5

3.e. Environmental education can play an important role in environmental protection? Justify it? (CO5) 5

SECTION C

20

4. Answer any one of the following:-

4-a. Differentiate between renewable and non-renewable natural resources? (CO1) 4

4-b. Discuss the different steps of Nitrogen cycle? (CO1) 4

5. Answer any one of the following:-

5-a. Discuss the limitations of solar and wind energy? (CO2) 4

5-b. Describe potential of hydrogen as a future source of energy. (CO2) 4

6. Answer any one of the following:-

6-a. List reasons responsible for the depletion of wildlife? (CO3) 4

6-b. Differentiate between In situ and ex situ conservation method of biodiversity? (CO3) 4

7. Answer any one of the following:-

7-a. Write three basic characteristics of a modern landfill site. What are the reasons they are used? (CO4) 4

7-b. What is Eutrophication? Explain its consequences on the life of plants & animals living in such water? (CO4) 4

8. Answer any one of the following:-

8-a. What do understand by EIA? Write involve steps in procedure of EIA. (CO5) 4

8-b. Write short notes on the drawback of the wildlife Act? Discuss the objectives of Wild life Act? (CO5) 4