

**MEERUT INSTITUTE OF ENGINEERING AND TECHNOLOGY**

NH-58, Delhi-Roorkee Highway, Baghpat Road, Meerut – 250 005 U.P.

**Sessional Examination – II, EVEN Semester 2022-23**

610

17/6/23

Course/Branch : B Tech. (EP 1,2,3,4,5,6,7,8,9,10,11,12,13,14)  
Subject Name : ENVIRONMENT & ECOLOGY  
Subject Code : BAS204

Semester : II  
Max. Marks : 60  
Time : 120 min

CO-3 : On completion of this course, the student will be able to develop critical thinking for environmental pollution and environmental protection.

CO-4 : On completion of this course, the student will be able to understand various current environmental issues and concerns of national and global importance.

**Section – A (CO - 3) # Attempt both the questions # 30 Marks**

Q.1 : Attempt any SIX questions (Short Answer Type). Each question is of two marks. (2 x 6 = 12 Marks)

- What is environmental pollution? Give its types. (K2)
- What was the 1984 Bhopal Gas Tragedy? (K2) *8000, home*
- What is Biomagnification? (K2)
- What is Eutrophication? (K2)
- Distinguish between primary and secondary pollutants (K2)
- Distinguish between incineration and pyrolysis. (K2)
- What do you understand by the terms soil pollution and soil erosion? (K2)

Q.2 : Attempt any THREE questions (Medium Answer Type). Each question is of 6 marks. (3 x 6 = 18 Marks)

- What is photochemical smog? How does it differ from London smog? What are its effects? (K4)
- What is noise pollution? What are its causes? Critically examine the adverse impacts of noise pollution on human beings (K4)
- What are the causes of water pollution? Critically examine the adverse impacts of water pollution on living beings and non-living things. (K4)
- Construct a diagram/layout of waste water treatment plant and explain waste water treatment process. (K3)
- Critically evaluate the environmental problems associated with improper (poor) management of solid waste. Suggest the ways for proper solid waste management. (K6)

**Section – B (CO - 4) # Attempt both the questions # 30 Marks**

Q.3: Attempt any SIX questions (Short Answer Type). Each question is of two marks. (2 x 6 = 12 Marks)

- What are CFCs and HCFCs? (K2)
- What are "Montreal" and "Kyoto" Protocols? (K2)
- What is global climate change? (K2)
- What is stubble burning of paddy (rice)? (K2)
- What is dry and wet type of acid deposition? (K2)
- What is thermal pollution? (K2) *C & NW*
- Where is Ozone layer found in atmosphere and what is the importance of Ozone layer? (K2)

Q.4 : Attempt any THREE questions (Medium Answer Type). Each question is of 6 marks. (3 x 6 = 18 Marks)

- Discuss the phenomena of greenhouse effect. Critically examine the effects of global warming on environment? (K4)
- Discuss the causes and impacts of acid rain on plants, animals and material (especially monuments). (K4)
- Explain the causes and environmental impacts of burning of paddy straw? What remedial measures would you suggest to overcome this problem. (K5)
- What are the causes of ozone layer depletion? Discuss the adverse effects of ozone layer depletion on environment and what is its solution? (K5)
- Critically examine the adverse impacts of automobile pollution or air pollution on human health. What steps you can take to minimize automobile pollution? (K6)



# MEERUT INSTITUTE OF ENGINEERING AND TECHNOLOGY

NH-58, Delhi-Roorkee Highway, Baghpat Road, Meerut – 250 005 U.P.

Sessional Examination – I, EVEN Semester 2022-23

12/5/23

Course/Branch : B Tech. (EP 1 to 14)  
 Subject Name : ENVIRONMENT & ECOLOGY  
 Subject Code : BAS204

Semester : II  
 Max. Marks : 60  
 Time : 120 min

CO-1 : On completion of this course, the student will be able to understand basic concepts related to ecosystem, EIA and need of sustainable development.

CO-2 : On completion of this course, the student will be able to understand about natural resources and impacts of human actions on natural resources.

## Section – A (CO - 1) # Attempt both the questions # 30 Marks

Q.1 : Attempt any **SIX** questions (Short Answer Type). Each question is of two marks. (2 x 6 = 12 Marks)

- a) What do you understand by the terms “ecology” and “ecosystem”?
- b) What are the segments of environment?
- c) What is the scope or importance of environmental studies?
- d) What do you mean by the terms food chain and food web?
- e) What do you understand by energy flow in an ecosystem?
- f) Why there is a need of public awareness to protect the environment?
- g) What is the concept of sustainable development?

Q.2 : Attempt any **THREE** questions (Medium Answer Type). Each question is of 6 marks. (3 x 6 = 18 Marks)

- a) Illustrate the structure and functions of an ecosystem.
- b) What are ecological pyramids? Explain various types of ecological pyramids giving suitable examples. Which ecological pyramid is always upright and why?
- c) What are the different regions/layers of atmosphere? Construct a table showing different regions of atmosphere and their characteristics.
- d) What is EIA? With the help of a flow chart, describe EIA process.
- e) Critically evaluate the environmental problems associated with modern agriculture and mining.

## Section – B (CO - 2) # Attempt both the questions # 30 Marks

Q.3: Attempt any **SIX** questions (Short Answer Type). Each question is of two marks. (2 x 6 = 12 Marks)

- a) What are natural resources? Give examples
- b) What is Hydrological cycle?
- c) What do you mean by rainwater harvesting and watershed management?
- d) What are water borne diseases? Give examples
- e) What are the functions of forest resource?
- f) What is biogas? Give its composition.
- g) Distinguish between conventional and non-conventional energy resources giving examples.

Q.4 : Attempt any **THREE** questions (Medium Answer Type). Each question is of 6 marks. (3 x 6 = 18 Marks)

- a) What do you mean by Bio-geochemical cycle? Explain by drawing sketch Nitrogen and Sulphur cycle?
- b) Discuss the advantages and disadvantages of solar energy and wind energy.
- c) Discuss the causes and impacts of Fluoride and Arsenic problem in drinking water.
- d) What is deforestation? Discuss the causes and impacts of deforestation.
- e) Critically evaluate the environmental problems associated with burning of fossil fuels (coal & petroleum).