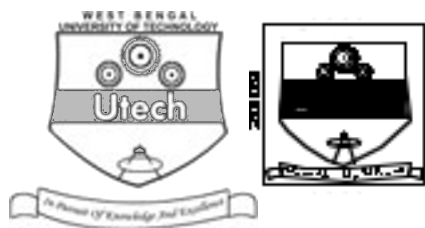


ENVIRONMENT & ECOLOGY (SEMESTER - 2)

CS / B.OPTM / SEM-2 / BO-204 / 09



1.
Signature of Invigilator

2.
Signature of the Officer-in-Charge

Reg. No.

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Roll No. of the Candidate

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CS / B.OPTM / SEM-2 / BO-204 / 09
ENGINEERING & MANAGEMENT EXAMINATIONS, JUNE – 2009
ENVIRONMENT & ECOLOGY (SEMESTER - 2)

Time : 3 Hours]

[Full Marks : 70

INSTRUCTIONS TO THE CANDIDATES :

1. This Booklet is a Question-cum-Answer Booklet. The Booklet consists of **32 pages**. The questions of this concerned subject commence from Page No. 3.
2. a) In **Group – A**, Questions are of Multiple Choice type. You have to write the correct choice in the box provided **against each question**.
 b) For **Groups – B & C** you have to answer the questions in the space provided marked 'Answer Sheet'. Questions of **Group – B** are Short answer type. Questions of **Group – C** are Long answer type. Write on both sides of the paper.
3. **Fill in your Roll No. in the box** provided as in your Admit Card before answering the questions.
4. Read the instructions given inside carefully before answering.
5. You should not forget to write the corresponding question numbers while answering.
6. Do not write your name or put any special mark in the booklet that may disclose your identity, which will render you liable to disqualification. Any candidate found copying will be subject to Disciplinary Action under the relevant rules.
7. **Use of Mobile Phone and Programmable Calculator is totally prohibited in the examination hall.**
8. You should return the booklet to the invigilator at the end of the examination and should not take any page of this booklet with you outside the examination hall, **which will lead to disqualification**.
9. Rough work, if necessary is to be done in this booklet only and cross it through.

No additional sheets are to be used and no loose paper will be provided

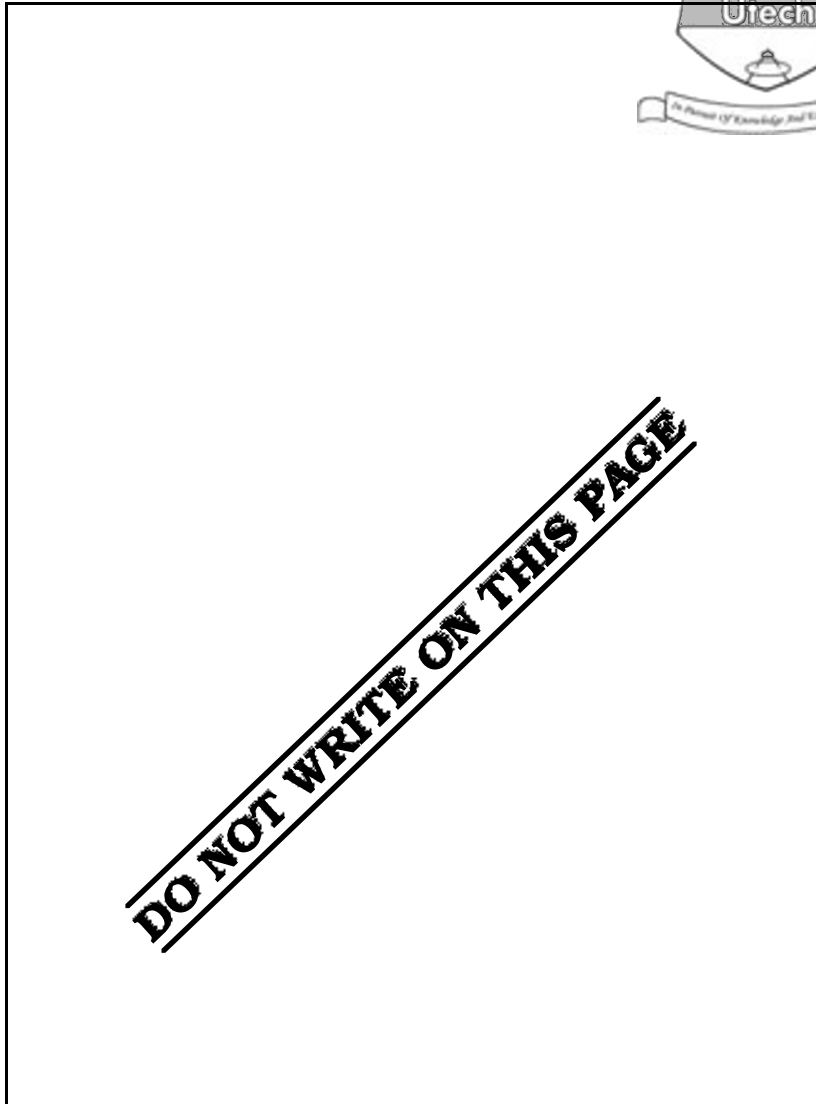
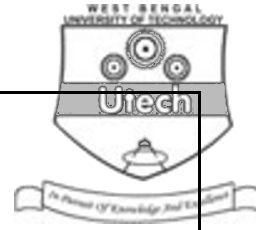
FOR OFFICE USE / EVALUATION ONLY

Marks Obtained

	Group – A					Group – B					Group – C						
Question Number																Total Marks	Examiner's Signature
Marks Obtained																	

.....
Head-Examiner / Co-Ordinator / Scrutineer

2326 (11/06)



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ENGINEERING & MANAGEMENT EXAMINATIONS, JUNE - 2009

ENVIRONMENT & ECOLOGY

SEMESTER - 2



Time : 3 Hours]

[Full Marks : 70

GROUP - A

(Multiple Choice Type Questions)

1. Choose the correct alternatives for the following :

10 ∞ 1 = 10

i) Long distance radio communication is possible due to presence of

a) Troposphere

b) Stratosphere

c) Mesosphere

d) Thermosphere.

ii) The two primary pollutants for the formation of photochemical smog are

a) HC and NO_x

b) CO and CO₂

c) CO and SO_x

d) SO_x and NO_x .

iii) Bhopal gas tragedy happened on

a) 3rd December, 1986

b) 3rd December, 1984

c) 3rd June, 1986

d) 3rd June, 1984.

iv) Kyoto protocol was held in

a) Japan

b) India

c) Africa

d) Australia.

2326 (11/06)



v) Which one is the unit of frequency of noise ?

- | | |
|---------------------|-----------------|
| a) decibel (dB) | b) hertz (Hz) |
| c) kilometre (km) | d) metre (m). |

vi) Trickling filter is used for

- a) primary treatment of water
- b) secondary treatment of water
- c) tertiary treatment of water
- d) sludge treatment.

vii) Medha Patekar is involved in

- | | |
|----------------------------|---------------------------|
| a) Chipko movement | b) Silent Valley movement |
| c) Narmada Bachao movement | d) None of these. |

viii) Which of the following is not released from motor vehicle ?

- | | |
|-------|----------------------|
| a) CO | b) Fly ash |
| c) HC | d) SO ₂ . |

ix) Which of the following may damage eardrum ?

- | | |
|----------------|----------|
| a) Water | b) Noise |
| c) Temperature | d) Air. |

x) Identify the disease not caused by polluted water.

- | | |
|--------------|-------------|
| a) Typhoid | b) Jaundice |
| c) Dysentery | d) Malaria. |



5

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following.



3 ∞ 5 = 15

2. Define environmental degradation. Mention the causes of it.
3. Distinguish between primary and secondary air pollutants.
4. State the harmful effects of ozone depletion.
5. How do you explain Greenhouse effect ?
6. State the different components of earth.

2 + 3

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following.

3 ∞ 15 = 45

7. a) Discuss the main sources of water pollution. Name some diseases caused by water pollution.
 - b) What is BOD ? How is it related to water quality ?
 - c) Outline the steps in standard 5 day unseeded BOD test ?
 - d) The dissolved oxygen in an unseeded sample of diluted waste having an initial DO of 9 mg/L is measured to be 3 mg/L after 5 days. The dilution factor *P* is 0.030 and the reaction rate constant *K* is 0.22/day. What is the 5 day BOD of the waste ? What would be the ultimate carbonaceous BOD ?
- (2 + 2) + (2 + 2) + 3 + 4
8. How do you explain solid waste management ? What are the different methods to treat solid wastes ? Should a country continue open dumping method ?

5 + 7 + 3



6

9. Differentiate between noise and sound. Write the different sources of noise. Write the effects of noise pollution in human life. 2 + 4 + 9
10. Define acid. What is acid rain? What are the causes for formation of acid rain? How does acid rain affect the biotic and abiotic things? 2 + 2 + 6 + 5
11. Define environment. Discuss the different components of environment. How are the different parts of the environment interrelated? 2 + 6 + 7

END