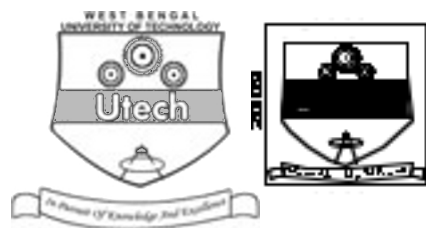


ENVIRONMENTAL SCIENCE – I (SEMESTER - 2)

CS / BNS / SEM-2 / BNS-205 / 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 / BNS / SEM-2 / BNS-205 / 09

ENGINEERING & MANAGEMENT EXAMINATIONS, JUNE – 2009

ENVIRONMENTAL SCIENCE – I (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				Total Marks	Examiner's Signature
Question Number																	
Marks Obtained																	

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

2373 (13/06)



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ENGINEERING & MANAGEMENT EXAMINATIONS, JUNE – 2009

ENVIRONMENTAL SCIENCE - I

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) Which layer of the atmosphere maintains an almost uniform temperature ?

a) Troposphere

b) Tropopause

c) Stratosphere

d) Ionosphere.

ii) What happens to pressure when temperature is lowered ?

a) It also becomes lower

b) It increases

c) It stays constant

d) They are not interrelated.

iii) The process of water vapour changing directly into ice is

a) condensation

b) snowfall

c) sublimation

d) precipitation.

iv) When humidity is expressed as a percentage, it is called

a) relative humidity

b) absolute humidity

c) specific humidity

d) percentage humidity.



v) The temperature at which the air is fully saturated is called

- a) critical temperature b) saturation point
c) dew point d) condensation point.



vi) When the tide-producing forces of the sun and moon act in a straight line complementing each other, it produces

- a) Spring tides b) Neap tides
c) Tidal bores d) Normal tides.

vii) One of the warm currents in the Indian Ocean is the

- a) Labrador current b) Agulhas current
c) Kuroshio current d) Humboldt current.

viii) In which of the following areas is salinity likely to be the highest ?

- a) Indian Ocean b) Red Sea
c) North Pacific d) North Atlantic.

ix) Isopleths of temperature are shown as

- a) isobars b) isotherms
c) isorymes d) isobaths.

x) Which process would most likely be responsible for the formation of dew ?

- a) Radiation b) Altitude increase
c) Advection d) Evaporation.



5

GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following.



3 ∞ 5 = 15

2. State various types of clouds and the weather associated with each type.
3. How many types of waves are there ? Explain their behaviour in deep and shallow water of the ocean ?
4. Describe the formation of cargo sweat in the event of a rise in air temperature due to voyage into the tropics.
5. What is the relationship between temperature salinity density and pressure of sea water ?

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following.

3 ∞ 15 = 45

6. What are the primary and secondary factors in ocean water density ? Describe how it is affecting the ocean circulation.
7. Explain energy budget of ocean with respect to radiation budget of the earth/atmospheric system.
8.
 - a) What is greenhouse effect and what is its impact on global warming ?
 - b) Explain various measures to be taken to reduce the effect of global warming.
 - c) What is IPCC and Kyoto protocol ?
9. What are the causes of oceanic currents ? Explain spatial distribution of surface circulation.

6 + 6 + 3

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END