

2007

GEOGRAPHY AND ENVIRONMENT
MANAGEMENT

PAPER 11

Full Marks :100

Time : 4 hours

*The figures in the right-hand margin indicate marks
Candidates are required to give their answers in their
own words as far as practicable*

Illustrate the answers wherever necessary

**Write the answers to questions of each Module
in separate books**

MODULE-3

[Marks :50]

(*Climatology*)

Answer *any four* questions, selecting *two*.
from each Group

GROUP-A

Why is the earth-atmosphere system considered a steady-state system ? Justify your answer in the light of planetary energy budget. "Life is possible on Earth solely because of a process known as Greenhouse effect." Discuss.

9+6

- 2. Bring out the nature and characteristics of wind circulation in upper troposphere highlighting the transfer of Westerly angular momentum within atmosphere. What are the ecological impacts of ENSO event? 10+5**
- 3. What are the major external and internal forcing of the phenomenon of global warming ? Describe the probable consequences of global warming with particular reference to the marine environment. 5 + 10**
- 4. Divide the continent of Asia into different climatic regions following the scheme of Stamp and describe their characteristics. 15**

GROUP--B

- 5. Identify and briefly discuss the (probable) positive and negative impacts of changes in global climate during the recent part. 10**
- 6. Describe the conditions and mechanism of rain making process. 10**
- 7. Discuss the structure and pathways of the tropical cyclones. 10**
- 8. Write short notes on any two : 5x2**

(i) Albedo

(ii) Beaufort Scale

(iii) Index cycle

(iv) Jet stream.

MODULE-4

[Marks :50)

(Environment Study)

**Answer any four questions, selecting two
from each Group**

GROUP-A

- 1. Evaluate the role of humans in degradation of natural resources with special reference to land areas. What do you mean by conservation of resource? 10+5**
- 2. 'The next World War may be fought on water.' Elucidate this statement. What is your suggestion for ensuring availability of water in future? 10+5**
- 3. Discuss the factors affecting spatial distribution of air pollution. What are the effects of air pollution on plants? 10+5**
- 4. What are the causes of unsustainability in resource use? Write briefly on international programmes on sustainable development. 8+7**

GROUP-B

- S. Discuss the relationship between physical and socio-cultural problems citing examples from India. 10**
6. Write a short **note on** Chipko movement. 10
7. Write briefly **on the perspectives and strategies of sustainable development in India.** 10
- S. Answer any *ten* of the following : 1 x 10
- (i) Give the definition of Geothermal energy.
 - (ti) Differentiate Lentic and Lotic ecosystem.
 - (iii) What do you mean by oligotrophic lake ?
 - (iv) What are the sources of secondary air **pollution?**
 - (v) What is the role of Ganga Action Plan ?
 - (vi) What is ex-situ conservation ?
 - (vii) Define biosphere reserve.
 - (vii) What do you mean by environmental ethics?

(5)

- (ix) Define Urban ecology.
- (x) Why is **Ozone in troposphere** considered as a **pollutant** ?
- (xi) Define ecological niche.
- (xii) What is UNEP?