

2015

DDE

M.A./M.Sc. Part-I Examination

GEOGRAPHY

PAPER—II

Full Marks : 100

Time : 4 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

Write the answer question of each Group in separate books

MODULE-3

(Climatology)

[Marks : 50]

Group—A

Answer any two questions : 2×15

1. Name the gases by which and in what proportion the atmosphere is composed of. Divide it vertically into layers and explain in brief the characteristics of these layers.

5+10

2. What is insolation? What are the factors responsible for its distribution over the earth? Describe with diagram when the insolation is most unequally distributed over the globe. What is the difference between the average annual insolation curve and the curve at the time of equinoxes? 1+4+5+5

3. Explain the life history of a temperate cyclone and describe the weather characteristics associated with warm and cold front. 10+5

4. What is agro-meteorology? What are the elements of agro-meteorology and state how these are measured? 5+10

Group—B

Answer any *two* questions : 2×10

5. What is an airmass? How it is modified? 2+8

6. What do you understand by climate change? Explain in brief the factors responsible for recent climate change over the globe. 2+8

7. What is normal lapse rate and what do you understand by adiabatic process of temperature change? Why wet adiabatic lapse rate differs from dry adiabatic lapse rate? 5+5

8. What do you understand by ENSO phenomena? 10

MODULE-4

(Environmental Studies)

[Marks : 50]

Group—A

Answer any *two* questions : 2×15

1. What do you understand by the term holistic environment? Elucidate with example how the components of Lithosphere-hydrosphere and atmosphere impact on each other? What is ionosphere? 3+10+2

2. There is a reciprocal relationship between biotic and abiotic components of the natural environmental system' — Elucidate the statement by giving examples from the major biomes. What is ecosystem pyramid? 10+5

3. 'Development occurs at the cost of environment' — Do you support this statement? Analyse the role of demographic component and housing as a factor for social environment? 7+8

4. Elucidate the importance of environmental ethic in conserving environment. Analyse the role of IPCC for controlling climatic deterioration. 8+7

Group—B

Answer any *two* questions : 2×10

5. What is meant by managed environmental system? Delineate the components of urban ecosystem with proper example. 2+8
6. Differentiate Entrophic from Oligotrophic and state how they are linked with water pollution? Comment on the significance of DO, BOD and COD count in fresh water. 5+5
7. What do you know about Human Development Index (HDI)? How is Socio-cultural environment linked with HDI? 2+8
8. Give a brief account on Chipko movement. Name the first environmental movement in India. 9+1