

2017

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. How is climatology related to meteorology? Discuss the evolution of atmospheric components through ages.

(Turn Over)

Explain the role of aerosol in atmosphere. 6+6+3

2. What is insolation? Describe with diagram when insolation is most unequally distributed over the globe. What is the difference between the average insolation curve and the curve at the time of equinoxes? 3+6+6
3. What is normal lapse rate and adiabatic process of temperature change? Explain with diagram the stability and instability in the atmosphere. 5+10
4. What is an airmass? How and where they are formed? State the process of their modification. 2+3+10

Group—B

(Answer any *two* questions) 2×10

5. Explain in details the impact of weather and climate on agriculture in the Indian context. 10
6. Explain how climate change is going to effect food security? 10
7. Explain different stages of Index cycle in Jet stream. What is Jet Maxima? 8+2
8. What is a tornado? What are its special features? How does it differ from a tropical cyclone? 2+4+4

MODULE-4

(Environmental Studies)

[Marks : 50]

Group—A

Answer any *two* questions : 2×15

1. Compare the components of physical environment with the components of socio-cultural environment. State with example how do the components of socio-cultural environment generate impact on physical environment. 7+8
2. What is thermal inversion? Elaborate with proper diagram how air pollution is caused due to thermal inversion. What are the effects of air pollution on human health. 3+7+5
3. Development takes place often at the Cost of Environment—Explain. Gove a brief account of Narmada Valley Project and its impact on the livelihood of valley dwellers of Narmada Project area. 6+6+3
4. What is ecosystem and what are its components? State the major ecosystems of the world. What is Ecological pyramid and how it is formed? 5+5+5

Group—B(Answer any *two* questions)

2×10

5. Examine the Arsenic Problem in Bengal Basin area. What are the possible remedial measures against arsenic contamination. 6+4
6. Comment on the excessive application of Nitrogen fertilizers and its impact on water pollution. Briefly discuss various types of degradable and non-degradable wastes generated from urban areas. 5+5
7. What is meant by environmental ethics? Elucidate the role of two eminent environmental activists who tried their best for environmental conservation. 2+8
8. What are the main objectives of sustainable development? Explain how environmental pollution and degradation could be controlled through sustainable development. 5+5