

2016

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. What do you mean by applied climatology? How do you correlate climatology with meteorology? What is 'hydrostatic equilibrium'? 6+6+3

(Turn Over)

2. Why does temperature decrease with increasing altitude? What is inversion of temp? Explain the heat-budget of the earth-atmosphere. 2+3+10
3. Explain the favourable conditions for the origin of tropical cyclone. Discuss the weather conditions associated with the tropical cyclone. What do you mean by 'eye of the cyclone'? 5+8+2
4. Explain the ice crystal theory of raindrop formation. What do you mean by 'Vapour pressure', 'Condensation nuclei' and 'dew point'? 9+6

Group—B

Answer any two questions : 2×10

5. What are the sources of 'green house gases'? Discuss the impacts of global warming on marine environment. 2+8
6. What is 'geostrophic wind'? Explain the influence of jet stream on Indian monsoon. 2+8
7. What is 'wet adiabatic lapse rate'? Explain the processes of air mass modification. 2+8
8. What do you mean by 'ENSO'? What are the climatic impacts of ENSO? 2+8

MODULE-4

(Environmental Studies)

[Marks : 50]

Group—A

Answer any two questions : 2×15

1. What are the sources of groundwater pollution? Write about the contamination of groundwater mentioning arsenic (As) as contaminant. 5+10
2. Give a brief account on the mountain ecosystem of the world with suitable example. How this system affected by anthropogenic interference? What is tree line? 10+3+2
3. Is there any difference between environmental movements and social movements? Elucidate your answer. Critically discuss the role of environmental movements for conserving environment with Indian examples. What do you know about Bhopal? 4+8+3
4. Elucidate the role of IUCN and UNEP for pertaining global environmental quality. What do you mean by MDGs? Point out the tenets of deep ecology. 8+3+4

Group—B

Answer any *two* questions : 2×10

5. What is biomagnification? Give an account on the process of land degradation with suitable diagram. 2+8
6. Differentiate natural ecosystem from managed ecosystem and briefly discuss on agricultural ecosystem as a managed ecosystem. 2+8
7. What is 'dust bowl'? Delineate the sources of water pollution in an urban area. 2+8
8. Discuss the problems specific to the catchment areas of a large dam. 10