

2016

**M.Sc. Part-I Examination**

**ENVIRONMENTAL SCIENCE**

**PAPER—I**

Full Marks : 100

Time : 4 Hours

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

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

*Illustrate the answers wherever necessary.*

Answer Q. No. 1 and any five questions from the rest.

1. Answer any ten from the following : 10×2

- (i) Mention the year and place of United Nations Conference on Environment and Development (UNCED).

(Turn Over)

- (ii) What do you mean by heterotrophs ?
- (iii) What are major habitats of the earth from ecological point of view ?
- (iv) What is noosystem concept ?
- (v) Define ecological succession.
- (vi) Mention any two animal characteristics of human.
- (vii) Mention any two features of Prosimians.
- (viii) Mention the habitats of Gorilla and Orangutan.
- (ix) Mention any four causes for the development of human settlement.
- (x) Define crude birth rate.
- (xi) What do you mean by carrying capacity ?
- (xii) What do you mean by Lithosphere ?
- (xiii) Mention the factors responsible for aurora borealis and aurora australis.

- (xiv) Define sustainable yield.
- (xv) What is conduction ?
2. Discuss in brief about the fundamental concept of ecosystem and components of ecosystem. 16
3. Discuss the mechanism of energy transfer and transformations within earth system. How is the energy balance achieved ? 10+6
4. Discuss in brief about General, External and Skeletal character of human. Write down the position of man in animal kingdom. 8+8
5. Discuss in brief about Christaller's Central Place theory with proper explanation. 16
6. Discuss the causes of human population growth. Predict the future of human population. How doubling time of a population is generally measured ? 16
7. (a) Discuss in brief about thermal structure of the atmosphere.
- (b) Write down the process of formation of windroses. Mention its utilities 8+8

8. Briefly discuss about functioning of environmental system.  
Discuss the relationship between man and environment. 8+8
9. Discuss in brief on different aspects of forest resources with special reference to forest resources of India in the context of global forest cover. 16
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