C/18/M Phil/1st Sem/LSC-115

2018

M. Phil.
1st Semester Examination

LIFE SCIENCE

PAPER—LSC-115

Full Marks : 40

Time : 2 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.

Group-A

1. Answer any *four* questions : 4×2

(a) What is rescue effect ?

(b) Differentiate species diversity from the genetic diversity.

(c) Explain the term ecological trap.

(d) Mention the criteria to designate a place as to be 'biodiversity hotspot'.

(e) What do you mean by term megadiversity ?

(f) What are the main objectives of conservation biology ?

Group-B

2. Answer any *four* questions : 4×4

(a) Schematically represent the values of biodiversity.

(b) Explain the resilience and resistance stability in ecosystem functioning.

(c) Write a note on conservation ethics.

(d) What is novel ecosystem ? State its significance.

(e) Discuss briefly the geospatial methods for documenting the coastal resources with examples.

(f) What is meta population ? Explain Levin's model of meta population. 1+3

Group-C

3. Answer any *two* questions : 2×8

(a) Enlist different reasons for biodiversity loss. Schematically mention different conservation categories as per IUCN red data book. What is ecorestoration ? 3+3+2

(b) What are the criteria for become National parks and Biosphere reserve ? Differentiate *in-situ* conservation method from *ex-situ* one. What is a key-stone species ? 4+2+2

(c) (i) What are the advantages and disadvantages of various remote sensing platforms ?

(ii) State the use of remote sensing in bioresources. 4+4