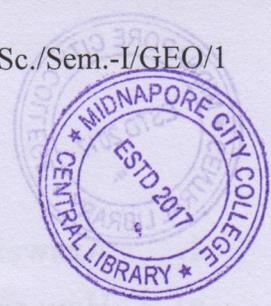


PG (NEW) CBCS
M.Sc. Semester-I Examination, 2018
GEOGRAPHY
PAPER: GEO-104
 (Environmental Geography)

**Full Marks: 40****Time: 2 Hours**

Write the answer for each unit in separate sheet

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.

GEO104.1: Basics of Environment and Ecology

Marks: 20

GROUP-A

1. **Answer any one question:** **1×8=8**
- a) Explain the major threats to biodiversity in Indian perspective with proper examples. **8**
- b) Trace out the energy flow (taking any model) in an ecosystem with proper illustrations. **8**

Group-B

2. **Answer any two questions:** **2×4=8**
- a) Write in brief about structure of agricultural ecosystem. **4**
- b) Write about the function of producers, consumers and decomposers, in an ecosystem. **4**
- c) Describe photosynthesis and respiration as two important-ecosystem processes. **4**
- d) Distinguish between ex-situ and in-situ conservation methods of biodiversity. **4**

Group-C

3. **Answer any two questions:** **2×2=4**
- a) Define trophic structure. **2**
- b) Give any two examples of common symbiotic nitrogen fixing bacteria. **2**
- c) List the four conceptual spheres in the earth's environment. **2**
- d) What is ecosystem metabolism? **2**

(Turn Over)

GEO104.2: Landscape ecology and planning**Marks: 20****GROUP-A****1. Answer any one question:****1×8=8**

- a) How anthropogenic modification control the landscape environment and what are the process of anthropogenic modifications? **5+3=8**
- b) State the structure of Landscape with reference to patch-corridor-matrices model. **8**

Group-B**2. Answer any two questions:****2×4=8**

- a) Outline implications of Sharron's diversity index in measuring habitat fragmentation. **4**
- b) Narrate the roles of Keystone species in conserving ecosystem. **4**
- c) What do you mean by TEK? What is the importance of TEK on conserving landscape? **4**
- d) What do you mean by landscape dynamics? How do nutrients move among the landscapes? **4**

Group-C**3. Answer any two questions:****2×2=4**

- a) What are the relationships among the structures of landscape? **2**
- b) Differentiate extinct species from endangered species. **2**
- c) What is Red data book? **2**
- d) What are indicator species? **2**
