

**Total No. of Questions: 07**

**BCA(2011 & Onwards)/B.Sc.(IT) (2015 & Onwards) (Sem. – 2)**

**ENVIRONMENTAL SCIENCE**

**M Code: 10056**

**Subject Code: EVSC-101**

**Paper ID: [B1112]**

**Time: 3 Hrs.**

**Max. Marks: 60**

**INSTRUCTIONS TO CANDIDATES:**

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
- 2. SECTION-B contains SIX questions carrying TEN marks each and students have to attempt any FOUR questions.**
- 3. Each part of the same questions should be strictly at the same place.**

**SECTION A**

- a) Name 2 Indian contributors towards environment. 20

b) Name 3 subdivisions of biosphere and the material they provide to living organisms.

c) Name one producer, one consumer, one decomposer and one detritivore.

d) Explain 10% law regarding flow of energy.

e) Name a few devices to harness solar energy.

f) What are aerosols and why their use should be minimized?

g) Give one structural and one non-structural control strategy for flood mitigation.

h) What is noise? Sound of what intensity is harmful for our ears?

i) Name 3 types of threatened species in order of the danger of extinction they face.

j) What is zero population growth? Name 2 countries who have achieved it.

**SECTION B**

2. a) What is acid rain and how is it formed? Discuss the major impacts of acid rain and the measures to control it. 5
- b) "Water is a limited natural resource" - Justify the statement. Discuss the merits as well as problems/conflicts associated with dams. 5
3. a) What are food chains and food webs? Draw a diagram of a food web in any ecosystem and why are food webs ecologically more stable. 5
- b) What is ecological or biotic succession? Describe the process of Biotic succession on a bare rock or a pond. 5
4. a) Define energy and differentiate between conventional and non-conventional energy resources. Discuss the pros and cons of using coal as an energy resource. 5
- b) Discuss the major causes and consequences of deforestation. Explain the various ecological and economical services rendered by forests. 5
5. a) Discuss the main threats to the biodiversity and describe the various methods and strategies for biodiversity conservation. 5
- b) What are stationary and mobile sources of air pollution? Give their examples. Discuss the strategies and methods which can be adopted to control air pollution from motor vehicles. 5
6. a) What are age structure diagrams or population pyramids and what do they signify? Draw a typical population pyramid of India and discuss how it is likely to differ from that of Japan and Germany (with diagram)?
- b) Describe the powers and measures of Environment (Protection) Act and the Air (Prevention and control of pollution) Act. 5
7. Write notes on any four: 10
- a) Primary and secondary air pollutants
- b) Bharat gas tragedy
- c) Eutrophication--its causes and consequences
- d) Sanitary land fills and their advantages
- e) Solar cell and its applications