

S. Y. B. Sc. (Biotechnology) SEM – IV (CBCS - 2015 COURSE) :

SUMMER - 2019

Subject: Environmental Biotechnology

Day: Monday
Date: 08/04/2019

S-2019-1380

Time: 10.00 AM TO 01.00 PM
Max. Marks: 60

N.B.:

- 1) Q1 and Q5 are compulsory.
- 2) Answer ANY TWO questions from Q 2, 3, 4 in Section I.
- 3) Answer ANY TWO questions from Q 6, 7, 8 in Section II.
- 4) Answers to Both the sections to be written in '**SAME**' answer books.
- 5) Draw a labeled diagram WHEREVER necessary.

SECTION - 01

Q.1) Answer the following: (ANY FIVE) (2 Marks X 5 = 10)

- a) Give two examples of over-exploitation of water resources.
- b) Why is the atmosphere essential for life?
- c) Define ozone hole and its effect on human health.
- d) Write the constituents of environment.
- e) What do you mean germplasm?
- f) Explain the way of loss of biodiversity.

Q.2) Answer the following: (5 Marks X 2 = 10)

- a) Describe marine ecosystem on biosphere.
- b) Describe hydrological cycle in nature.

Q.3) Explain the following: (5 Marks X 2 = 10)

- a) Elaborate on abiotic factors of grassland ecosystem.
- b) Differentiate between various endangered categories of plant species.

Q.4) Write short notes on the following: (5 Marks X 2 = 10)

- a) Significance of phosphate solubilization in biosphere.
- b) Bioaccumulation of heavy metals.

SECTION - 02

Q.5) Answer the following: (ANY FIVE) (2 Marks X 5 = 10)

- a) What is a biodiversity hotspot?
- b) Write the methods of conservation of endangered plant species.
- c) How does noise pollution affect health?
- d) Enlist types of reactors used in wastewater treatment.
- e) What are the sources of air pollution?
- f) Enlist the impacts of air pollutants on plants.

Q.6) Answer the following: (5 Marks X 2 = 10)

- a) Mention various types of natural resources and their current status.
- b) Mention the types and sources of ground water pollution.

Q.7) Explain the following: (5 Marks X 2 = 10)

- a) Describe the bioconversion of heavy metals.
- b) What are characteristics of hazardous waste?

Q.8) Write short notes on the following: (5 Marks X 2 = 10)

- a) Suggested methods of biomedical waste disposal.
- b) Microbes in wastewater treatment.
