THIRD SEMESTER B.VOC. DEGREE EXAMINATION, NOVEMBER 2016

GEC 3ES 09—ENVIRONMENTAL SCIENCE

Time : Three Hours   Maximum : 80 Marks

Part A

Fill in the blanks with correct answer.

1. The main nitrogen reservoir in the biosphere is —————.

2. Edaphic factors refers to —————.

3. Soil is an ————— ecological factor

4. Functional status of an organism in the community is called as —————.

5. The area, where all the living organisms interact with each other and their environment is —————.

6. Herbivores are also known as —————.

7. ————— Ecosystem has still water.

8. Micro consumers popularly known as —————.

9. Oxidation of ammonia into nitrate by chemosynthetic bacteria is known as —————.

10. ————— is the biggest mangrove formation in India.

(10 × 1 = 10 marks)

Part B

*Answer **all** questions.*

1. Ecotone.

2. Hydrosphere.

3. Arid ecosystem.

4. Pyramid of biomass.

5. Energy flow.

6. Neutralism.

7. Carrying capacity.

Turn over

8. Soil erosion.

9. Mortality.

10. Chemical weathering of rocks.

(10 × 2 = 20 marks)

Part C

Answer any **five** *of the following.*

1. How population is different from community ? Give detailed explanation with appropriate examples ?

2. Structure of tropical rain forest

3. What is succession ? How does primary succession differ from secondary succession ?

4. Pyramid of energy

5. Lentic and Lotic habitats

6. Explain the concept and scope of environmental science? How environmental science and ecology interconnected with each other ?

7. Describe the major soil groups of India along with their modern nomenclature.

8. What is ecological adaptations ? Give examples of three plant species.

(5 × 6 = 30 marks)

Part D

Answer any **two** *of the following.*

1. Write detailed notes on :

    (a) Hydrological cycle.

    (b) Phosphorus cycle.

2. What is an ecosystem ? Describe in detail the structure and functioning of forest and grassland ecosystems.

3. How biological process affected by temperature ? Explain with suitable examples ?

(2 × 10 = 20 marks)