

**KNT/KW/16/5099**

**Bachelor of Science (B.Sc.) Semester—II (C.B.S.) Examination**

**ENVIRONMENTAL SCIENCE**

**(Introduction to Ecosystem and Biodiversity)**

**Compulsory Paper—2**

Time : Three Hours]

[Maximum Marks : 50

**N.B. :—** (1) **All** questions are compulsory.

(2) All questions carry equal marks.

(3) Illustrate your answers with suitable examples and diagrams.

1. Describe nitrogen cycle with diagrammatic representation. 10

**OR**

(a) Explain carbon cycle in nature. 5

(b) What are biotic and abiotic components of grassland ecosystem ? 5

2. Discuss oxygen production method (Light and Dark Bottle) for the measurement of primary productivity. 10

**OR**

(a) Explain the role of biogeochemical cycle in balancing the nature. 5

(b) Describe carbondioxide method for the measurement of primary productivity. 5

3. Discuss various types of forest in India. 10

**OR**

(a) Give salient features of National Forest Policy. 5

(b) What are the causes of deforestation ? 5

4. Discuss 'Ex-situ' and 'In-situ' methods for the conservation of biodiversity. 10

**OR**

(a) What are the types of biodiversity ? 5

(b) Write a short account on community biodiversity register. 5

5. Attempt any **ten** questions :

- (a) What is ecosystem ?
- (b) Give any two examples of terrestrial ecosystem.
- (c) What is Biomes ?
- (d) Define productivity of an ecosystem.
- (e) Mention any two factors which affect productivity.
- (f) Give examples of sedimentary cycle.
- (g) Enlist minor forest producer.
- (h) What is a significance of forest ?
- (i) What are effects of deforestation ?
- (j) Define the term 'Hotspots of Biodiversity'.
- (k) What are endemic species ?
- (l) What is a level of biodiversity ?

1×10=10