

**2022/TDC (CBCS)/EVEN/SEM /  
EESSEC-601T/109**

**TDC (CBCS) Even Semester Exam., 2022**

**ECOLOGY AND ENVIRONMENTAL SCIENCE**

**( 6th Semester )**

**Course No. : EESSEC-601T**

**( Ecosystem Analysis and Biodiversity )**

Full Marks : 50

Pass Marks : 20

**Time : 3 hours**

*The figures in the margin indicate full marks  
for the questions*

**SECTION—A**

**Answer any fifteen of the following questions :**

**1×15=15**

- 1. Give an example of forest ecosystem.**
- 2. What is estuarine ecosystem?**
- 3. What is biome?**
- 4. What is food chain?**

5. What is ecological pyramid?
6. What is biogeochemical cycle?
7. What do you mean by community?
8. What is basal area?
9. What is point method?
10. What do you mean by life form?
11. Define biodiversity.
12. What is hydrosere?
13. What is ecosystem service?
14. What is *in-situ* conservation?
15. What is a botanical garden?
16. What is gene bank?
17. What is tissue culture?
18. What do you mean by ecological restoration?
19. What is agroforestry?
20. What is social forestry?

SECTION—B

Answer any *five* of the following questions : 2×5=10

21. Give two examples of aquatic ecosystem.
22. Name one dominant plant and one dominant animal of desert biome.
23. Mention two methods for measuring primary productivity of aquatic system.
24. What do you mean by community? Give example.
25. What do you mean by vertical stratification? Give example.
26. What is the difference between density and abundance?
27. What is phenology?
28. What is quadrat method?

29. Define 'climax'.
30. Name few plant species which are generally included in agroforestry system.

## SECTION—C

Answer any *five* of the following questions : 5×5=25

31. Describe briefly the characteristics of tundra biome. Name any plant and animal species found in the tundra biome.
32. What are the major characteristics of vegetation found in mangrove ecosystem? Mention the importance of mangrove ecosystem.
33. Describe briefly with suitable diagrammatic illustration the nitrogen cycle.
34. What is the difference between primary and secondary productivity? Describe briefly the role of primary and secondary productivity in maintaining the ecosystem function.

35. Describe briefly the harvest method and leaf area method for measuring primary productivity.
36. Describe briefly the method related to quantitative analysis of herbaceous plant community.
37. Describe the process by which succession takes place in any ecosystem.
38. Describe briefly the different processes of *in-situ* conservation.
39. Write a note on the importance of biodiversity.
40. Write a note on India as a mega diversity nation.

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