

## 2023/TDC(CBCS)/EVEN/SEM/ EESSEC-601T/208

TDC (CBCS) Even Semester Exam., 2023

## 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:  $1 \times 15 = 15$ 

- 1. What is grassland ecosystem?
- 2. Give one example of agro-ecosystem?
- 3. What is estuarine ecosystem?

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(Turn Over)



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- 4. Define ecosystem.
- 5. What is food web? Give example.
- 6. Give an example of forest ecosystem.
- 7. What do you mean by biogeochemical cycle?
- 8. What is gas exchange method?
- Define community.
- 10. What is phenology?
- 11. What is basal area?
- 12. What is vertical stratification?
- 13. What is xerosere?
- 14. What is climax community?
- 15. What do you mean by ecological succession?
- 16. What is microbial succession?
- 17. What is gene bank? in signous one
- 18. What is IUCN?

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19. What is social forestry?

20. What is JFM? The land the state of the s

SECTION-B

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

- 21. Write the characteristics of agro-ecosystem.
- 22. What is biome? Name the major biomes.
- 23. Write a note on phosphorous cycle.
- 24. What do you mean by primary and secondary succession?
- 25. What are the different methods of studying community?

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- 26. What is the difference between core area and basal area?
- 27. What is the difference between density and abundance?
- 28. Write on the stages of ecological succession.

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29. What is tissue culture? State its application.

30.	Name the different biodiversity hotspots.	
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	SECTION—C	
Ansv	ver any five of the following questions: $5 \times 5 = 2$	5 -
31.	Describe the characteristics of grassland and desert ecosystem. 3+2=	5
32.	Write notes on the following: 2+3= (a) Pond ecosystem	5
	(b) Desert biome	
33.	What is ecological pyramid? Explain the different types of ecological pyramid with proper illustration.  1+4-	=5
34.	Write a note on carbon cycle in nature with suitable diagrammatic illustration.	5
35.	Describe the different methods of studying community.	5
36.	Describe the characteristics of community with proper illustration.	5

(5)

37. Explain the process of succession in hydrophytes.

38. What are the basic types of ecological succession? Explain each type of succession with proper illustration. 1+4=5

5

5

5

 Describe the role of local communities and traditional knowledge in conservation of biodiversity.

**40.** Describe the role of botanical garden and gene bank in *ex-situ* conservation of biodiversity.

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