

S.No. 5608

P 16 BCE 5

(For candidates admitted from 2016–2017 onwards)

M.Sc. DEGREE EXAMINATION, APRIL 2019.

Biochemistry — Elective

ECOLOGY AND ENVIRONMENTAL SCIENCES

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20)

Answer ALL questions.

1. What is abiotic and biotic factors?
2. What is the definition of population in ecology?
3. What are the three different types of communities?
4. What are the two types of niches?
5. What is the function of ecosystem?
6. What are the different terrestrial ecosystems?
7. What is the main conservation of biology?
8. What are 'terrestrial habitats'?
9. What are the effects of pollution?
10. What is biodiversity?

SECTION B — (5 × 5 = 25)

Answer ALL questions, choosing either (a) or (b).

11. (a) Discuss abiotic and biotic environment and their interactions.
Or
(b) Explain population growth curve.
12. (a) Write the concept of habitat and niche.
Or
(b) Explain the levels of species diversity.
13. (a) Explain the types of ecological succession.
Or
(b) Describe the structure and function of aquatic ecosystem.
14. (a) Discuss the cause of global environmental change.
Or
(b) What are the biodiversity management approaches? Explain.
15. (a) Write a note on biogeographically zones of India.
Or
(b) Explain major approaches to the conservation management system.

SECTION C — (3 × 10 = 30)

Answer any THREE questions.

16. Discuss the concept of meta population demes and dispersal.
 17. Explain the community structure and attributes.
 18. Discuss ecological mechanisms and changes evolved in succession.
 19. Explain the major drivers of biodiversity change.
 20. Explain the theory of island biogeography.
-

S.No. 7108

P 16 BCE 5

(For candidates admitted from 2016–2017 onwards)

M.Sc. DEGREE EXAMINATION, APRIL 2018.

Biochemistry — Elective

ECOLOGY AND ENVIRONMENTAL SCIENCES

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20)

Answer ALL questions.

1. What are the three common patterns of population distribution?
2. What are the different types of population growth?
3. What is the difference between a community and ecosystem?
4. What is an ecological community example?
5. What is the difference between the environment and an ecosystem?
6. Do deep sea fish explode when brought to the surface?

7. How does air pollution affect our breathing?
8. What diseases are caused by water pollution?
9. Why Island biogeography is important?
10. What are the six biogeographic regions?

SECTION B — (5 × 5 = 25)

Answer ALL questions.

11. (a) Explain the properties of hydrosphere and lithosphere.

Or

- (b) Discuss on age structured populations.

12. (a) Give a note on the levels of species diversity and its measurement.

Or

- (b) Discuss biogeographical regions.

13. (a) Explain the changes involved in succession.

Or

- (b) Describe the structure and function of terrestrial ecosystem.

14. (a) Explain the major drivers of biodiversity change.

Or

(b) Explain the management approaches of biodiversity.

15. (a) Discuss the theory of island biogeography.

Or

(b) Discuss Indian case studies on conservation.

SECTION C — ($3 \times 10 = 30$)

Answer any THREE questions.

16. Discuss population ecology in detail.

17. Describe resource partitioning.

18. Give a brief note on structure and function of ecosystem.

19. Discuss global environmental change.

20. Give an account on major terrestrial biomes.