

R7811

SUB. CODE

465101

P.G., DIPLOMA EXAMINATION, NOVEMBER - 2022

Scuba Diving

First Semester

MARINE BIODIVERSITY

(CBCS- 2022 Onwards)

Time: 3 Hours

Maximum: 75 Marks

Part - A

(10 × 2 = 20)

Answer all questions

1. Alien species.
2. Marine Specific Policy.
3. Conotoxin.
4. Biosphere Reserve
5. Knee roots.
6. Microplastics.
7. What are endangered species? Give examples
8. Blubber.
9. Species evenness.
10. Coral reef

Part – B

(5 × 5 = 25)

Answer all questions, choosing either (a) or (b)

11. (a) Write note on the ecological characteristics of a Biosphere Reserve
(OR)
(b) Discuss briefly on the methods of biodiversity assessment in a marine ecosystem.
12. (a) What is Marine Resource Management? What is its impact on species diversity?
(OR)
(b) Describe briefly on the types of Marine Policies.
13. (a) What do you understand by Representative Species? Give examples of Marine Representative Mammals from Indian coast.
(OR)
(b) Discuss briefly on the adaptation of marine animals in pelagic regions.
14. (a) What is Biodiversity? What are its characteristics?
(OR)
(b) What do you understand by species inventory?
15. (a) Write notes on the overexploitation.
(OR)
(b) Briefly describe the characteristics of Mangrove ecosystems.

Part - C

(3 × 10 = 30)

Answer any three questions

16. Write an essay on the management and conservation of islands and coral-reef ecosystem.
 17. What are the different types of Biodiversity? Add a note on the fundamentals of species inventory?
 18. Write an essay on the distribution and adaptation of Marine Invertebrates?
 19. What are marine protected areas? Discuss about the conflicts and management solutions associated to protect these areas.
 20. Write an essay on the values of Biodiversity.
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R7812

SUB. CODE

465102

P.G., DIPLOMA EXAMINATION, NOVEMBER - 2022

**Scuba Diving
First Semester
BENTHIC ASSESSMENT
(CBCS- 2022 Onwards)**

Time: 3 Hours

**Maximum: 75 Marks
(10 × 2 = 20)**

Part - A

Answer all questions

1. Hess Sampler
2. Belt transects.
3. Photo quadrat.
4. Fairness index.
5. GPS
6. Dredges.
7. Quadrat transects.
8. Permanent quadrat.
9. Trophic group
10. Pielou's evenness index.

Part - B

(5 × 5 = 25)

Answer all questions choosing either (a) or (b)

11. (a) How to plan a benthic survey? List all the equipment that is necessary.
(OR)
(b) Give a brief account on narcotisation and preservation techniques.
12. (a) Compare and contrast Transect method and Point Intercept Transect method.
(OR)
(b) Write notes on Transect Quadrat method and Underwater Video Transect method.
13. (a) Describe briefly on Photo-Quadrat method.
(OR)
(b) Write notes on steps involved for entry of data using a spread sheet with suitable example.
14. (a) Comment on Manta Tow Survey method.
(OR)
(b) How will you collect intertidal benthic fauna?
15. (a) How to calculate Shannon Weiner diversity index.
(OR)
(b) Write notes on the Dominance index.

Part - C

(3 × 10 = 30)

Answer any three questions

16. Write an essay on the different sampling techniques for assessment of benthic organisms?
 17. What are the different types of Transect methodologies used in benthic survey? Add a note on their advantages and disadvantages.
 18. Describe in detail the different types of Quadrat methodologies used in marine environment?
 19. Give detailed description of formulation and management of benthic data.
 20. What are different Biodiversity indices and highlight the importance of the indices in benthic studies.
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