Indian Maritime University

(A Central University, Govt of India)

End Semester Examinations – June 2024

BSc Nautical Science

Semester II

Subject Code: UG21T5206

Subject Name: Environmental Studies

Date: 13.06.2024	Max Marks: 70
Duration: 03 Hrs	Pass Marks: 35

General Instructions

(i) All Sections (A, B & C) are to be attempted.
(ii) Options, if any, are specified in respective section.
(iii) Support your answers with appropriate diagram

Section A

Answer all questions (10 x 1mark = 10 marks)

1. If $0 < b < 1$ and $x > 1$, then the function $f(x) = b^x$, represents _____.
   A. exponential growth
   B. linear growth
   C. exponential decay
   D. logarithmic growth

2. Chemicals like sulphur dioxide and nitrogen oxides are produced when fossil fuels are burned are the root cause of Acid Rain – True or False

3. Only the lightest gases – mostly oxygen, helium, and hydrogen are found in _____.
   A. Exosphere
   B. Thermosphere
   C. Stratosphere
   D. Troposphere

4. In the Beaufort Weather Notation, the suffix "o" denotes _____.
   A) great intensity
   B) very slight intensity
   C) intermittent
   D) shower of

5. _____ is called a thundercloud.

(A) Nimbostratus
(B) Stratocumulus
(C) Cumulus
(D) Cumulonimbus

6. Terrestrial radiation is.....
A) Radiation from the sun
B) Radiation from the atmosphere
C) Radiation from the earth
D) radiation from the dust particle

7. Which among the following is not a greenhouse gas?
A) Water vapour
B) Oxygen
C) Carbon dioxide
D) Methane

8. _____ are the consumers which feed on dead organisms.
A) Carnivores
B) Omnivores
C) Scavengers
D) Herbivores

9. Waste sharps including metals belongs to _____ category of Biomedical wastes.
A) Yellow
B) Red
C) White (translucent)
D) Blue

10. Marine pollution is not specifically caused by
A) Direct discharge of sewage into the sea
B) Direct discharge of chemicals
C) Pollutants from offshore oil platforms
D) Direct dumbing of domestic waste in land

Section B

Answer all questions (5 x 2marks = 10 marks)

11. What is meant by the Multidisciplinary Nature of Environmental Studies?

12. Name any *four* non-timber forest products (NTFPs) provided by natural forest ecosystems

13. Briefly describe Beaufort scale?

14. What is Barometric Tendency?

15. Define Relative Humidity

Section C

Answer any five out of Seven Questions (5 x 10 marks = 50 marks)

16. Describe Ecological Succession in detail – 10 MARKS

17. a) What is the semi–diurnal Variation of Atmospheric Pressure? Explain why does this diurnal pressure change occur? - 5 MARKS

17. b) State Buys Ballot's Law. What precautions are to be considered while applying Buys Ballot's Law? – 5 MARKS

18. Write a detailed note on Biogeographic Zones of India – 10 MARKS

19. What is meant by Environmental Ethics and State some possible solutions to the issues concerning them. – 10 MARKS

20. Write a detailed note on Radiation Budget - 10 marks

21. a) Describe the composition and structure of Earth's Atmosphere. – 7 MARKS

21. b) What is Precipitation? List the four different types of precipitation- 3 MARKS

22. Sketch and name the Global pressure belts and the wind flow therein - 10 MARKS

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