

INDIAN MARITIME UNIVERSITY

(A Central University, Government of India)

END SEMESTER EXAMINATIONS –JUNE 2022

B Sc (Nautical Science)

Semester-II

Environmental Studies

UG21T5206

Date: 27.06.2022

Time: 3Hrs

Maximum Marks: 70

Pass Marks: 35

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- 1) Support your answer's with appropriate diagrams.
 - 2) Answer the questions to the point in sequential manner
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Part A – 10 MCQs (10 X 01 Mark)

Q1) In the following questions below, select one of the most appropriate answers.

(i)What implies the use of resources in a managed way to provide resources for the future generations.

- a) Development.
- b) Biodiversity.
- c) Sustainable development.
- d) Ecology.

(ii)Life on this planet depends upon a large number of things and services provided by the nature, which are known as.

- a) Alternate resources.
- b) Artificial resources.
- c) Natural resources.
- d) Human resources.

(iii)Transfer of food energy from the plants through a series of organisms is referred to as.

- a) Food bank.
- b) Food chain.
- c) Food sustainability.
- d) Food production.

(iv) The level of bio diversity, refers to the total number of genetic characteristics in the genetic makeup of species is called.

- a) Global diversity.
- b) Ecosystem diversity
- c) Species diversity.
- d) Genetic diversity.

(v) Some organic pollutants get decomposed by aerobic bacteria which deplete

- a) Nutrient from water.
- b) Hydrogen from water
- c) Oxygen from water.
- d) Minerals from water.

(vi) Marine pollution is specifically caused by

- a) Direct discharge of sewage into the sea.
- b) Petroleum and oils washed off from roads.
- c) Pollutants from offshore oil platforms.
- d) All of the options

(vii) Ozone in the upper atmosphere however, is vital to all life as it protects the earth from the sun's harmful

- a) Ultraviolet radiation.
- b) Infrared radiation.
- c) Gamma radiation.
- d) Alpha radiation.

(viii) EIA must define what impact it would have on

- a) Water, soil and air.
- b) Flora and fauna identified in the region is documented and to specify any endangered species
- c) Lives of local people

d) All of the options.

(ix) The Separation zone between Stratosphere and Mesosphere is called

- a) Mesopause
- b) Tropopause
- c) Ionopause
- d) Stratopause

(x) When a warm and cold airmass are in contact, their line of separation is called

- a) The Front.
- b) The cold front.
- c) The warm front.
- d) Warm & cold front.

Part B - 5 Short Questions (05 X 02 Marks)

Q2) Answer the following questions to the point.

- (a) Define Biodiversity.
- (b) Define an Ecosystem. What are the different types of ecosystems?
- (c) The Natural resources on which mankind is dependent are provided by various spheres, name these spheres, and explain them in brief.
- (d) Define pollution & list its various types.
- (e) Define relative humidity.

Part C - 7 Long Questions-Answer Any 5 (05 X 10 Marks, each sub question carries 5 marks)

Q3) a) Explain How the need for public awareness & public participation to conserve the environment can be achieved.

b) Explain the classification of Natural Resources on the basis of their

- 1) Renewable & Non-renewable
- 2) Living & Non-living
- 3) Exhaustible & Inexhaustible nature.

Q4)a) What is meant by Ecological Succession? Mention the factors influencing Ecological Succession.

b) Explain in detail the In-Situ & Ex-Situ conservation strategies of biodiversity.

Q5)a) Explain Solid Waste & Hazardous waste Management in detail.

b) Write 10 points on the disadvantages of Environment-Human Population Interface. (5 marks)

Q6)a) Explain Global Warming, Acid Rain & Ozone Layer Depletion.

b) Explain the 3R's principles?

Q7)a) Describe the composition and structure of earth's atmosphere.

b) Explain DALR & SALR, state the factors that causes them

8)a) What is the semi Diurnal Variation of Atmospheric Pressure? Explain why does this diurnal pressure change occur?

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

Q9)a) Describe the process of formation of clouds. Classify clouds on the basis of height.

b) Explain Coriolis Force, What is the role of Coriolis force in creating wind system?

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B-sc 4