# CENTURION UNIVERSITY OF TECHNOLOGY AND MANAGEMENT, ODISHA School of Engineering and Technology Parlakhemundi

# **Environmental Science Common to all branches**

#### **Module-1:**

## **Section-A (Short answer question)**

- 1. What is the scope of environmental studies?
- 2. How would public awareness help protect our environment?
- 3. Sukinda mines, Odisha have been identified as third polluted place in the World. What is the cause of the problem?
- 4. Write the causes of protest made by various environmental activists for the construction of a dam?
- 5. Write any six applications of solar energy collected through solar collector.
- 6. What do you mean by biosphere?
- 7. Write the meaning of undernourishment, malnourishment and overnutrition.
- 8. What is the importance of decomposers in an ecosystem?
- 9. Differentiate between GPP and NPP.
- 10. Write the difference between renewable and non-renewable energy.
- 11. Write any three effects of mineral extraction and use.
- 12. Define the terms with suitable example and significance (a) Food Chain (b) Food web (c) Pyramid of energy
- 13. Explain the detritus food chain with diagram
- 14. Draw the schematic diagram of energy flow and material flow in an ecosystem.
- 15. Justify your answer: the pyramid of energy can never be inverted.
- 16. What is the significance of food web in an ecosystem?
- 17. Identify the type of food chain (i) Grass □ Grasshopper □ toad □ snake, (ii) Dead plant / animal □ Fungi □ Bacteria
- 18. list the different natural resources available in our environment and categorize them as renewable and non-renewable resources.

### **Section-B(Long answer question)**

- 1. Write an explanatory note on the multidisciplinary nature of the environmental science.
- 2. What are natural resources? How you will classify the global naturalresources? Is forest a renewable / non-renewable resource? Justify.
- 3. What is deforestation? Enumerate & discuss the various causes and consequences of deforestation?
- 4. Define and list some renewable and non renewable energy sources. Describe the importance of renewable energy sources in the present context
- 5. What is geothermal energy? How it is used for generation of electrical power? Discuss its merits & limitations?
- 6. Write briefly the different environmental problem pertaining to construction of a Dam with some case studies.
- 7. What are solar cells? Draw a diagram and enumerate its applications.
- 8. What is nuclear energy? Discuss its two types.
- 9. Write short notes on (a) tropical rain forests (b) Savannas (c) Arctic Tundra.
- 10. Write the different components of an ecosystem? Classify biotic components according to the mode of energy acquisition and define each with suitable example