



**INDIAN SCHOOL MUSCAT**  
**SENIOR SECTION**  
**DEPARTMENT OF BIOLOGY**  
**CLASS XII**  
**ECOSYSTEM**  
**WORKSHEET- 14**

---

- 1 What does the base tier of the ecological pyramid represent? 1
- 2 In the North East region of India, during the process of jhum cultivation, forests are cleared by burning and left for regrowth after a year of cultivation. How would you explain the regrowth of forest in ecological term? 1
- 3 Climax stage is achieved quickly in secondary succession as compared to primary succession. Why? 1
- 4 Why are oceans least productive? 1
- 5 Organisms at a higher trophic level have less energy available. Comment. 2
- 6 What are the shortcomings of ecological pyramids in the study of ecosystem? 2
- 7 How do you distinguish between humification and mineralisation? 2
- 8 List three parameters used for constructing ecological pyramids. Describe any one instance where the pyramid may look inverted. 2
- 9 Differentiate between a detritivore and a decomposer giving an example of each. 2
- 10 Construct an ideal pyramid of energy when 1,00,000 joules of sunlight is available. Label all its trophic levels. 2
- 11 Construct a pyramid of biomass starting with phytoplanktons. Label 3 trophic levels. Is the pyramid upright or inverted? Why? 2
- 12 Explain with the help of two examples how the pyramid of number and the pyramid of biomass can look inverted. 3
- 13 Justify the given statements:
  - a) Energy flow in an ecosystem is unidirectional
  - b) Secondary succession is faster than primary succession
- 14 What will happen to an ecosystem if:
  - a) All producers are removed
  - b) All organisms of herbivore level are eliminated
  - c) All top carnivore population is removed