

14. ECOSYSTEMS AND ENERGY TRANSFER

MULTIPLE CHOICE QUESTIONS (1 MARK EACH)

- 1 Lichens taking roots on bare rocks are an example of _____.
A. climax community
B. **pioneer species**
C. climax species
D. secondary succession
- 2 Growth of new grasses and shrubs on a patch of forest burnt down by forest fire, is a an example of _____.
A. **secondary succession**
B. pioneer species
C. climax species
D. primary succession
- 3 All types of ecological succession whether on land or in water always reaches _____.
A. **climax community**
B. pioneer species
C. climax species
D. secondary succession
- 4 Secondary consumers are
A. herbivores
B. producers
C. **Carnivores**
D. autotrophs
- 5 Which of the following statements is incorrect for the energy pyramid?
A. It shows energy content of different trophic levels
B. Its base is broad
C. **It always inverted**
D. It is always upright.
- 6 Which one of the following is not a functional unit of ecosystem?
A. energy flow
B. decomposition
C. productivity
D. **stratification**

7. Humus is
- dark coloured, amorphous , colloidal organic matter rich in nutrients
 - contains only cellulose
 - red coloured matter
 - product of photosynthesis

VERY SHORT ANSWER TYPE QUESTIONS(1 MARK EACH)

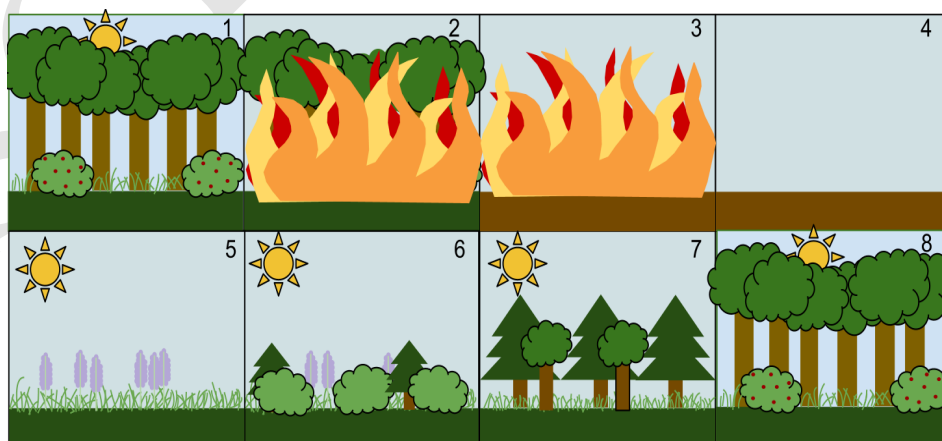
- What is 'Sere'?
- Define 'Ecological succession'
- What is 'Climax community'?
- Define zonation.
- Define gross primary productivity.
- What do you understand by the term PAR?
- What is 10% law of energy transfer?
- What is the reservoir of carbon on the earth?
- What is the cause of eutrophication?
- What is fragmentation?

SHORT ANSWER TYPE QUESTIONS(SA-I) (2 MARKS)

- Name the types of succession of plants based on the nature of habitat.
- Give reasons – 'Primary succession is always slower than secondary succession'
- Differentiate between stratification and zonation.
- Explain grazing food chain with suitable example.
- Write a note on pyramid of numbers.
- Give reasons, 'pyramid of energy is always upright.
- Explain any three categories of ecosystem services.

SHORT ANSWER TYPE QUESTIONS(SA-II) (3 MARKS)

- What are 'pioneer species'? Give two examples of them.
- Explain the following sequence of succession after a forest fire.



- Explain process of decomposition in detail.
- Write an account of carbon cycle.
- Describe the sedimentary cycle you have studied.

LONG ANSWER TYPE QUESTIONS (LA-) (4 MARKS)

- 1 Explain the progress of ecological succession in newly formed volcanic island.

15. BIODIVERSITY, CONSERVATION AND ENVIRONMENTLA ISSUES

MULTIPLE CHOICE QUESTIONS (1 MARK EACH)

- 1 Dodo bird, stellar sea cow and passenger pigeon are few examples of extinction due to _____.
A habitat loss
B hunting
C Alien species invasion
D overexploitation.
- 2 Select the odd example with respect to types of conservation strategies.
A Pawra tribals in Satpuda have protected varieties of corn with different coloured kernels.
B Kanha forest as tiger reserve.
C Crocodile bank of Chennai
D Sacred groves
- 3 India boasts a handsome share of ____ % of total biodiversity wealth of the earth.
A 2.4
B 8.1
C 14
D 22
- 4 Measurement rate of O₂ consumption in unit volume of water is
A. biogas generation
B. Biological oxygen demand
C. Biosynthesis pathway
D. Fermentation
- 5 In a coal fired power plant, electrostatic precipitator is used to control emission of
A. Oxides of nitrogen
B. SPM
C. CO
D. oxides of sulphur
- 6 E. coli is used as an indicator to determine pollution of water with
A. heavy metals
B. faecal matter
C. industrial effluents
D. Pollen of aquatic plants
7. Which of the following is not the component of greenhouse gases?
A. methane
B. carbon dioxide
C. CFC
D. ozone