

[A-76]

SARDAR PATEL UNIVERSITY

M. Sc Integrated Biotechnology (IGBT) - IVth (04) Semester

Subject & Code: PS04CIGB03- ENVIRONMENTAL BIOLOGY

Date: 25-04-2015, Saturday Time: 02: 30 P.M. TO 05: 30 P.M Total Marks: 70

Note: (1) All questions are compulsory. (2) Figure to right indicate marks.

Q-1. Answer the following objective questions. 1x8= 08

1. is an autotroph.
(A) Grass (B) Rabbit (C) Lion (D) Fungi
2. is a branch of ecology that deals with the study of soil.
(A) Ethology (B) Pedology (C) Paleo ecology (D) Spece ecology
3. In ecology,occurs when one species hurts another, but does not benefit from this interaction.
(A) Mutualism (B) Commensalism (C) Ammensalism (D) None of them
4. is a relationship between two different organisms where the parasite harms the host.
(A) Competition (B) Predation (C) Mutualism (D) Parasitism
5. Under the coniferous of the Taiga, the A₁ horizon shallow and very sharply demarcated from the leached A₂ layer is soil is called
(A) Mor (B) Mull (C) Both A and B (D) None of them
6. Concentration of various salts in the aquatic environment affects thein the body of the living organism.
(A) Salt pressure (B) Osmotic pressure (C) Blood pressure (D) Water pressure
7. Portion of the sun light which can be conceived by the human eye is known as.....
(A) Sun light (B) Infrared light (C) Visible light (D) Ultraviolet light
8.are capable of adapting and surviving relatively large temperature in the environment.
(A) Hyperthermic (B) Homeothermy (C) Stenotherms (D) Eurytherms

Q-2. Answer the following (Any Seven). 02X07=14

1. Write the scope of ecology.
2. What is the role of decomposers in an ecosystem?
3. Define Natality and Mortality.
4. Justify- Light as universal synchronizer.
5. Define Oceanic zone and Euphotic Zone.
6. What are the different from of soil water?
7. Draw the flow diagram of nitrogen cycle.
8. Give brief account on temperature tolerance.
9. Define Phototaxis and Telotaxis.

Q-3 (A) Give a detailed account on ecological pyramids. (06)

(B) Write a note on: Food web. (06)

OR

(B) Enlist the different components of abiotic and biotic ecosystem. Discuss the any one components of an ecosystem. (06)

Q-4 (A). Write a short note on Mutualism. (06)

(B) Describe the types of survivorship curves. (06)

OR

(B) Define community ecology. Discuss the community succession. (06)

Q-5 (A). What are the fresh water ecosystems? Discuss the pond as an ecosystem. (06)

(B) Write a short note on chemical weathering in Soil. (06)

OR

(B) Define ecosystem. Give account on Tundra and Taiga ecosystems. (06)

Q-6 (A). What are the effects of temperature on plant and animals? Explain any three effects. (06)

(B) Write a short note on Hydrological cycle. (06)

OR

(B) What are the types of adaptation? Explain any one adaptation. (06)