Name: _____	**Subject:** Biology	**Class:** 12th	**Time:** 80 minutes	Total Marks:	**40**
Chapter No.25	**MJDexpert.com**			Obtained marks	

Note: Please attempt any 10 short questions from Question 2. Also, attempt both parts of Question 3. Cutting and removal of any content is strictly prohibited.

Q#1 Encircle the Correct Option (10 x 1 = 10)

1. All populations within an ecosystem are collectively known as:
A) Biosphere B) Biome C) Population D) Community

2. Nitrogen makes up what percentage of gases in the atmosphere?
A) 78% B) 87% C) 76% D) 80%

3. The percentage of total solar energy trapped by producers in an ecosystem is around:
A) 1.5% B) 1% C) 2% D) 2.5%

4. All living organisms on planet Earth are collectively called the:
A) Ecosystem B) Biosphere C) Lithosphere D) Hydrosphere

5. The relationship between insects and plants is an example of:
A) Parasitism B) Predation C) Mutualism D) Commensalism

6. The animal that is consumed in a predator-prey relationship is called:
A) Predator B) Host C) Parasite D) Prey

7. Which of the following is an example of a predator-prey relationship?
A) Fungus and algae B) Flower and insect C) Fox and rabbit D) None of these

8. The study of relationships between organisms and their environment is known as:
A) Biology B) Ecology C) Zoology D) Mycology

9. Organisms that produce their own food are called:
A) Predators B) Parasites C) Producers D) Prey

10. A combination of many interconnected food chains is known as a:
A) Ecosystem B) Food Chain C) Food Web D) Both A and B

Q #2 Short Questions (2 x 10 = 20)

1. Define a community and give an example.
2. What is a "niche"? Who first introduced this concept?
3. Differentiate between a food chain and a food web.
4. What is parasitism? Provide one example.
5. How do biotic and abiotic components differ?
6. What are root nodules?
7. Define symbiosis with an example.
8. Outline the three main steps in the nitrogen cycle.
9. What is Mycorrhiza?
10. Define prey and predator with examples.

Q #3 Long Questions (2 x 5 = 10)

1. Write a detailed note on the food web.
2. Explain the nitrogen cycle and its significance.