



# BIOLOGY FOR ENGINEERS

## SNS COLLEGE OF TECHNOLOGY



COIMBATORE – 35

DEPARTMENT OF BIOMEDICAL ENGINEERING (UG & PG)

Final Year Biomedical Engineering, 7<sup>th</sup> Semester

### 2 Marks Question and Answer

**Subject Code & Name:** 19GET277 – BIOLOGY FOR ENGINEERS

**Prepared by:** Mrs.N.Jayashree AP/BME

#### UNIT-2

#### BIODIVERSITY

1.What is the function of chlorophyll in photosynthesis?

Answer: Chlorophyll is a pigment that absorbs light energy and uses it to convert carbon dioxide and water into glucose and oxygen during photosynthesis.

2.What is the role of phosphorus in plant growth?

Answer: Phosphorus is important for plant growth and development, particularly in the formation of roots, flowers, and fruits.

3.What is nitrogen fixation?

Answer: Nitrogen fixation is the process by which atmospheric nitrogen is converted into a usable form, such as ammonia or nitrate, by certain bacteria or through industrial processes.

4.What is transpiration?

Answer: Transpiration is the process by which water is released from plant leaves through small pores called stomata.

# BIOLOGY FOR ENGINEERS

5.What is the function of the xylem in plants?

Answer: The xylem is responsible for transporting water and minerals from the roots to the rest of the plant.

6.What is the function of the circulatory system?

Answer: The circulatory system is responsible for transporting blood and nutrients throughout the body, as well as removing waste products.

7.What is the role of the liver in the digestive system?

Answer: The liver produces bile, which helps break down fats during digestion.

8.What is the purpose of the respiratory system?

Answer: The respiratory system is responsible for taking in oxygen and expelling carbon dioxide, and also helps regulate pH levels in the body.

9.What is the function of the kidneys in the excretory system?

Answer: The kidneys filter waste products from the blood and excrete them in the form of urine.

10.What is the function of the stomach in the digestive system?

Answer: The stomach breaks down food through the use of acid and enzymes.

11.What is the difference between bacteria and viruses?

Answer: Bacteria are single-celled organisms that can reproduce independently, while viruses require a host cell to replicate.

12.What is fermentation?

Answer: Fermentation is the process by which microorganisms convert sugars into acids, gases, or alcohol, often used in food and beverage production.

13.What is pasteurization?

## **BIOLOGY FOR ENGINEERS**

Answer: Pasteurization is a process of heating food or beverages to a specific temperature for a certain period of time to kill bacteria and other microorganisms.

14. What is the purpose of antibiotics?

Answer: Antibiotics are used to treat bacterial infections by targeting specific components of bacterial cells, such as their cell walls or protein synthesis machinery.

15. What is the economic importance of microbes in the food industry?

Answer: Microbes are used in a variety of food production processes, such as cheese and yogurt making, beer brewing, and bread baking.