



# SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai

Accredited by NAAC-UGC with 'A++' Grade (Cycle III) &

Accredited by NBA (B.E - CSE, EEE, ECE, Mech & B.Tech.IT)

COIMBATORE-641 035, TAMIL NADU



## 19GET277 – Biology for Engineers

### UNIT 1 – Question Bank

#### Two Mark Questions

1. What are the main characteristics of living organisms?
2. Define the cell theory.
3. List two differences between prokaryotic and eukaryotic cells.
4. What is a biomolecule? Give an example.
5. Name the four major types of biomolecules.
6. What are monosaccharides? Provide an example.
7. Differentiate between saturated and unsaturated lipids.
8. State the primary function of proteins in the body.
9. What is the role of nucleic acids in cells?
10. Name the two types of nucleic acids and give one function of each.
11. What are vitamins, and why are they important?
12. Define enzymes and their role in biochemical reactions.
13. What is the difference between a gene and a chromosome?
14. Explain the term "amino acid."
15. What is the function of ribosomes in a cell?
16. State two key differences between DNA and RNA.
17. What is the function of chloroplasts in eukaryotic cells?
18. Name two types of carbohydrates and give an example for each.
19. Describe the fluid mosaic model of cell membranes in brief.
20. What is the role of the mitochondria in eukaryotic cells?

#### 16-Mark Questions

1. Discuss the cell theory in detail and explain its significance in biology.
2. Compare and contrast the structure and functions of prokaryotic and eukaryotic cells with appropriate diagrams.
3. Describe the structure of carbohydrates, lipids, and proteins, and explain their functions in living organisms.
4. Explain the structure and function of DNA and RNA in detail. How do they differ from each other?
5. Discuss the role of enzymes in metabolic processes. How do they work, and what factors affect their activity?
6. Provide a detailed overview of the types, structure, and functions of lipids.
7. Describe the structure of proteins and the levels of protein organization. How does the structure of a protein relate to its function?
8. Explain the process of DNA replication, transcription, and translation in eukaryotic cells.
9. Discuss the importance of vitamins and minerals in human health. Include examples and their specific roles.



# SNS COLLEGE OF TECHNOLOGY

*(An Autonomous Institution)*

*Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai*

*Accredited by NAAC-UGC with 'A++' Grade (Cycle III) &*

*Accredited by NBA (B.E - CSE, EEE, ECE, Mech & B.Tech.IT)*

*COIMBATORE-641 035, TAMIL NADU*



10. Describe the genetic basis of inheritance. Include the structure of genes and chromosomes and their role in heredity.