# Subject: BIOTECHNOLOGY:

Class: 11th

Maximum Marks: 70.

Long Answer type Questions   (5x3=15)
1. What is bio-chemical engineering? Name and explain the steps involved in it.
2. Name the four steps of Mitosis and briefly describe what happens in each step.
3. Mendels Law of Independent assortment is explained by dihybrid cross. Discuss.

Short Answer type Questions   (3x11=33)
4. What are Food Lab Practices.Name the steps involved in it.
5. Define the following –Mean, Median, Mode.
6. What is the importance of patents to inventors?
7. Discuss the Watson and Cricks model of DNA structure.
8. Name the steps involved in glycolysis.
9. Give the three applications of flow cytometry.
10. Mitochondria is called as power house of cell.Explain.
11. Name the three applications of Electrophoratic techniques.
12. Define test cross with examples.
13. Differentiate between Gene, DNA and Genome.
14. Write down the three applications of Polymerase Chain Reaction(PCR).

Short Answer type Questions (I)  (2x8=16)
15. Calculate the mean of following data:
    5, 7, 8, 9, 10, 11.
16. Name two properties of polysacharides.
17. What are saturated fatty acids?
18. Differentiate between Anabolism and Catabolism.(only one)
19. Why is a cell called the basic structure and functional unit of life?
20. Who said cells are the basic unit of life?
21. Define the term Meiosis.
22. Define Muton, Codon.

Very Short Answer type Questions (1x6=6)
23. Who discovered Pencillium?
24. ATP is :
    (a)Vitamin  (b)Enzyme (c)Nucleic acid  (d)Nucleotide.
25. Simplest form of Carbohydrate is:
    (a)Carbon (b)Starch (c)Monosacharide (d)Cane Sugar.
26. Full form of SDS-PAGE.
27. Who coined the term Gene?
28. Write one difference between Purine and Pyrimidine.