



**ANNAMACHARYA INSTITUTE OF TECHNOLOGY AND SCIENCES**  
(An Autonomous Institution)  
**RAJAMPET, ANDHRA PRADESH**  
**DEPARTMENT OF HUMANITIES AND SCIENCES**  
**TITLE OF THE COURSE: LIFE SCIENCES FOR ENGINEERS**

**Dr. SHAIK SADAK BASHA, M.Sc, B.Ed, Ph.D.,**  
(CSIR- RA-New Delhi, PDF-Malaysia)

1. Describe meant by classification? Write the importance of Classification?
2. Explain the differences between Plant cell and Animal cell? Describe is mitochondrion? Write their structure and important functions and draw the labelled diagram?
3. Describe the types of cells and write the differences between prokaryotes and eukaryotes cells with labelled diagrams?
4. Write the characteristics of cell and explain structure and important functions of nucleus and ribosome's and draw the labelled diagram?
5. What is cell division? Describe the mitosis cell division process with labelled diagrams?
6. What is cell division? Describe the meiosis cell division process with labelled diagrams?
7. Explain the Glycolysis pathway and importance?
8. Explain the reaction of Krebs/TCA cycle?
9. What is an exocrine gland and explain any four endocrine glands?
10. Describe of the structure and functions of the brain of man?
11. Define the genetics? Explain the Mendel's Laws?
12. Describe the autosomal abnormalities in human?
13. Explain the various steps DNA finger Printing and applications?
14. Describe the Recombinant Vaccines?

15. Define the animal cloning? What are the potential applications of cloning animals?
16. What is Parasitism? Explain *Plasmodium vivax* life cycle?
17. What is Parasitism? Explain *Wuchereria bancrofti* life cycle?
18. Write about the procedure involved in MRI and PET scan?