## Practical module 1

- 1. Titration of monoacid- determination of pKa values.
- 2. Determination of PH
- 3. Separation of plant pigments, amino acids by Paper and TLC.
- 4. Study of affinity and ion exchange chromatography.
- 5. Study of differential centrifugation.
- 6. Determination of lamda max.
- 7. Electrophoresis of nucleic acid by agarose gel electrophoresis.
- 8. Electrophoresis of proteins by PAGE
- 9. Electrophoresis of proteins by SDS PAGE
- 10. To determine MIC, LD 50 of Beta-lactum
- 11. Sterility testing by Bacillus stearothermophilus
- 12. Determination of D value, Z value for heat sterilization in pharmaceuticals
- 13. Determination of antimicrobial activity of a chemical compound.(phenol,resorcinol)

## Practical module 2

- 1. Measurement of Kla
- 2. Fermentation of gluconic acid, ethanol, citric acid.ss
- 3. Fermentation of antibiotic =penicillin
- 4. Estimation of penicillin. By chemical method.
- 5. Bioassay of penicillin.
- 6. Production of amylase, protease and lipase.
- 7. Microbial analysis of milk and food.
- 8. Production of beer and wine.
- 9. Production of PHB.
- 10. Conjugation in E. coli
- 11. Transduction
- 12. Plasmid curring
- 13. Phage titration
- 14. Isolation of DNA from bacteria,
- 15. Isolation of antibiotic resistant mutant by direct and indirect method.
- 16. Find out uv and temperature survival curve of bacteria.
- 17. Isolation of auxotrophic mutant.
- 18. Isolation of respiratory deficient mutant.