

BSP410 BIOCHEMICAL TECHNIQUES LAB

Course Outcomes:

After successful completion of the course, students will be able to:

- CO 1. Separate the mixtures by planar and column chromatographic techniques.
 - CO 2. Undertake quality analyses required in food industry by identifying additives, vitamins, preservatives, proteins, sugars and aminoacids.
 - CO 3. Use UV-Vis spectrophotometry for estimation.
 - CO 4. Operate flame photometry.
 - CO 5. Perform electrophoretic techniques for separation and determination of molecular weight.
 - CO 6. Perform immune-diffusion techniques and ELISA for detecting presence and quality antigens.
 - CO 7. Use centrifugation for separation of molecules.
1. Ascending, descending and circular paper chromatography for separation of amino acids/carbohydrates
 2. TLC of amino acids (1D and 2D)/carbohydrates
 3. UV-Visible Spectrophotometry-verification of Beer Lambert's law
 4. Flame photometry and its application in the estimation of serum, calcium, potassium and lithium and sodium.
 5. HPLC(Demonstration)
 6. Gel electrophoresis- native and SDS-PAGE and estimation of molecular weight of Proteins
 7. ELISA for quantification of antigen.
 8. Immunodiffusion
 9. Centrifuge use and application of centrifugation techniques for separation
 10. Separation by filtration technology



