



(M.Sc-HomeScience) (Food Biotechnology)
(M.Sc.-H.Sc.) (Food Biotechnology) Semester (I)

Course Code	PH01CFBT54	Title of the Course	Practical based on PH01CFBT53 (Basic Biochemistry)
Total Credits of the Course	02	Hours per Week	04

Course Objectives:	1. To develop skill of the analysis of carbohydrate, protein and lipid in foods and biological science
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Course Content		
Unit	Description	Weightage (%)
1.	Qualitative and quantitative analysis of carbohydrates	20
2.	Quantitative estimation of starch	10
3.	Determination of the following chemical constants of fats & oils. Saponification value, Iodine value, Peroxide value, Acid value, R. M. value	20
4.	Determination of the total serum protein, albumin, globulin and albumin/globulin ratio.	20
5.	Estimation of cellular protein by Lowry method.	05
6.	Enzyme kinetics with reference to the determinations of optimum pH, and temperature	15
7.	Quantitative estimation of cholesterol	10

Teaching-Learning Methodology	Classroom lectures (Blackboard), demonstration and than actual performance by students, discussion of results
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Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Attendance (As per CBCS R.6.8.3)	15%





3.	University Examination	70%
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Course Outcomes: Having completed this course, the learner will be able to

1.	Analyze the Carbohydrate, Lipid and Protein qualitatively and quantitatively.
2.	Develop skill in enzyme analysis.

Suggested References:

Sr. No.	References
1.	Sadasivam, S. & Manickam A. (1996). <i>Biochemical methods</i> . New age international.
2.	Rakesh Patel and Kiran Patel. (2012). <i>Experimental Microbiology- part 2</i> , Aditya Publication.
3.	Tomasino, S. (2000). Official methods of analysis of AOAC International.

On-line resources to be used if available as reference material

On-line Resources

prsvkm_laboratory_manual_of_biochemistry.pdf

