

# SARDAR PATEL UNIVERSITY

Programme: B.Sc (Home Science)

Semester: IV

(Food & Nutrition)

Syllabus with effect from: November/December-2012

## Theory

### Objectives:

This course will enable students to:-

- Develop an understanding of the principles of biochemistry as applicable to human nutrition.
- Obtain an insight into the chemistry of major nutrients and physiologically important compounds.
- Understand the biological process and systems as applicable to human nutrition.

<b>Paper Code:UH04CFDN04</b>	<b>Total Credit: 3</b>
<b>Title Of Paper: Biochemistry</b>	

<b>Unit</b>	<b>Description in detail</b>	<b>Weighting (%)</b>
I	<b>Biomolecules</b> Carbohydrate: Classification, general structure, properties Protein :Classification, general structure, properties Lipids: Classification, general structure and properties of oils and fats.	25%
II	<b>Bioenergetics And Metabolism</b> Glycolysis, pyruvate oxidation and citric acid cycle Electron transport chain and oxidative phosphorylation Biosynthesis of Lipids Oxidation of fatty acids Biosynthesis of protein Protein and Degradation Genetic Code	30%
III	<b>Hormone Biochemistry</b> Animal hormones	10%
IV	<b>Nutrition Biochemistry</b> Water soluble vitamins Fat soluble vitamins Minerals	35%

### Basic Text & Reference Books

- Wset;E.S.,Todd W.R,Mason H.S and Bruggen J.T.(1974)4<sup>th</sup> ed.Text book off biochemistry,Amerind publishing co.pvt,ltd.
- White A,Handlar P,smith E.L.Stetten<D.W.(1959)2<sup>nd</sup> ed.principles of biochemistry,Mc.Grew Hill book co.
- Lehninger A.L.Nelson D.L and Cox M.M (1993)2<sup>nd</sup> ed.Principles of biochemistry ,eds publishers and distributes

