



## UOE017 PHARMACEUTICAL BIOCHEMISTRY

Course Code	Course Title	L	T	P	C
UOE017	Biochemistry	2	-	-	2

### Objectives:

Upon completion of course student shall able to

**CLO1. Determine<sup>5</sup>** the presence and concentration of various normal and abnormal constituents in biological fluids.

**CLO2. Identify<sup>4</sup>** proteins and carbohydrates using biochemical tests.

**CLO3. Analyze<sup>4</sup>** the concentration enzyme and effect of various parameters on its levels.

**CLO4. Measure<sup>6</sup>** physicochemical and chemical properties of prepared chemical and biochemical solutions.

### Description:

#### Unit 1

Qualitative analysis of carbohydrates (Glucose, Fructose, Lactose, Maltose, Sucrose and starch)

Identification tests for Proteins (albumin and Casein)

Quantitative analysis of reducing sugars (DNSA method) and Proteins (Biuret method)

#### Unit 2

Qualitative analysis of urine for abnormal constituent

Determination of blood creatinine

Determination of blood sugar

#### Unit 3

Determination of serum total cholesterol

Preparation of buffer solution and measurement of pH

#### Unit 4

Study of enzymatic hydrolysis of starch

Determination of Salivary amylase activity



## Recommended Books (Latest Editions)

1. Gupta RC, Bhargava S, **Practical Biochemistry**. New Delhi: CBS Publishers & Distributors.
2. Plummer DT. **Introduction of Practical Biochemistry**. New York: McGraw-Hill Education.
3. Rajagopal G, Ramakrishnan S. **Practical Biochemistry for Medical students**. Hyderabad: Orient BlackSwan.
4. Varley H. **Practical Clinical Biochemistry**. New Delhi: CBS Publishers & Distributors.
5. Nelson DL, Cox MM. **Lehninger Principles of Biochemistry**. New York: W. H. Freeman and Company, England: Macmillan Higher Education.
6. Murry R, Bender DA, Botham KM, Kennelly PJ, Rodwell VW, Anthony Weil P. **Harper's Illustrated Biochemistry**. New York: McGraw-Hill Education/Lange Textbooks