

## CORE PRACTICAL I

### QUANTITATIVE ANALYSIS & BIOCHEMICAL TECHNIQUES

Sem	Sub. Code	Category	Lecture		Theory		Practical		Credits
			Hrs/ week	Hrs/ sem.	Hrs/ week	Hrs/ sem.	Hrs/ week	Hrs/ sem.	
II	21CPBC21	Core Practical	-	-	-	-	5	60	5

#### A. Quantitative Analysis

1. Estimation of Vitamin C.
2. Estimation of inorganic phosphorus by Fiske and Subba Row method.
3. Determination of Pyruvate.
4. Determination of protein by Lowry's method.
5. Determination of Tryptophan.
6. Estimation of sodium and potassium by flame photometry.
7. Estimation of Glucose-by-OT method.
8. Estimation of Iron by Ramsay's Dipyrldyl method.
9. Water analysis

#### B. Techniques

1. Preparation of buffers and measurement of pH using indicators and pH meter
2. Separation of amino acids and sugars by paper chromatography
3. Separation of amino acids sugars and lipids by thin layer chromatography
4. Separation of plant pigments by column chromatography

5. Separation of serum proteins by PAGE
6. Separation of DNA by Agarose gel Electrophoresis (Demo)

**REFERENCE BOOKS:**

S.No	Author Name	Title of the Book	Publisher	Year
1.	S.K.Sawhney	Introduction to Practical Biochemistry	Alpha science international Ltd.,.	2 <sup>nd</sup> edition (2005)
2.	A. Sadasivam and A.Manickam	Biochemical techniques	New age international publisher	2003
3.	J. Jayaraman	Laboratory manual in biochemistry	New age international Pvt	2011
4.	Green and Sambrook	Laboratory manual in biochemistry	Cold Spring Harbor Laboratory Press	4 <sup>th</sup> edition(2012)

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