

- www.slideshare.net/biinoida/bioinformatics
- www.slideshare.net/PrashantTripathi59/sequence-analysis-71940516
- www.creative-proteomics.com/services/protein-structure-analysis-service.htm

SYLLABUS DESIGNER:

- Dr. K. Shoba, Assistant Professor of Bio-Chemistry
- Dr.S. Asha, Assistant Professor of Bio-Chemistry

CORE PRACTICAL IV

BIOCHEMICAL ANALYSIS OF BLOOD, IMMUNOLOGICAL & MOLECULAR METHODS

Sem	Sub. Code	Category	Lecture		Theory		Practical		Credit
			Hrs/ week	Hrs/ sem.	Hrs/ week	Hrs/ sem.	Hrs/ week	Hrs/ sem.	
IV	21CPBC41	Core Practical	-	-	-	-	5	75	5

I. BIOCHEMICAL ANALYSIS OF BLOOD

1. Estimation of A/G ratio by Reinhold method .
2. Estimation of Urea by Diacetylmonoxime method.
3. Determination of Protein by Lowry's method.
4. Determination of LDH activity in serum.
5. Estimation of Uric acid by Caraway's method.
6. Estimation of Creatinine in serum by Jaffe's method.

7. Estimation of Cholesterol method by Zak's method.
8. Estimation of Bilirubin by Malloy and Evelyn method.
9. Estimation of Blood Glucose by GOD/POD Method
10. Estimation of uric acid by Uricase method
11. Estimation of Triglycerides by GPO-DAP end point assay

II. BLOOD GROUPING

Blood grouping and Rh Typing

III. IMMUNOLOGICAL AND MOLECULAR METHODS

1. Widal test-Rapid slide test for typhoid
2. VDRL test –Test for Syphilis
3. Slide test for pregnancy
4. Immuno diffusion-Single radial immuno diffusion.

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 nd 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 th edition (2012)

SYLLABUS DESIGNER:

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- Dr.S. Asha, Assistant Professor of Bio-Chemistry

CORE PRACTICAL V**HAEMATOLOGICAL METHODS AND URINE ANALYSIS**

Sem	Sub. Code	Category	Lecture		Theory		Practical		Credit
			Hrs/ week	Hrs/ sem.	Hrs/ week	Hrs/ sem.	Hrs/ week	Hrs/ sem.	
IV	21CPBC42	Core Practical	-	-	-	-	5	75	5

I. HAEMATOLOGICAL METHODS

1. Collection and storage of Blood
2. Total RBC Count
3. Total WBC Count
4. Total Platelet Count
5. Determination of Haemoglobin content
6. Determination of Clotting time
7. Determination of Prothrombin Time
8. Determination of Bleeding Time
9. Determination of ESR

10. Determination of PCV
11. Pathological examination of blood film

II. URINE ANALYSIS

1. Qualitative Analysis of Normal Urine.
2. Qualitative Analysis of abnormal constituents of Urine.
3. Estimation of titrable acidity of Urine.
4. Estimation of Protein in Urine by Biuret method.
5. Estimation of Creatinine in Urine by Jaffe's method.
6. Estimation of Urea in Urine by DAM method.
7. Estimation of Uric acid in Urine by Caraway's method.
8. Determination of organic acids in Urine – screening of inborn errors of metabolism.
9. Analysis of Urinary Calculi.

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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 th edition(2012)

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