<center>**Lesson Plan**</center>

Discipline:MLT

Semester: 3rd

Subject:CLINICAL BIOCHEMISTRY -III

Lesson Plan Duration: 15 WEEKS (from Aug, 2024)

Work Load (Lecture/Practical) per week (in hours): 3+4

	Theory		Practical	
	Lecture day	**Topics (including assignment/test)**	**Practical day**	**Topics**
1	1	Serum Bilirubin-Formation and excretion of bilirubin	1	Serum bilirubin estimation
	2	Formation of bile pigments		
	3	Conjugated and unconjugated bilirubin		
2	4	Principle and procedure of direct bilirubin estimation	2	Phosphorus estimation
	5	Principle and procedure of indirect bilirubin estimation		
	6	Reference values & Clinical importance		
3	7	Assignment -1	3	Calcium estimation
	8	SGOT and SGPT (AST and ALT) introduction		
	9	Principle and procedure of estimation SGOT		
4	10	Principle and procedure of estimation SGPT	4	Renal clearance tests
	11	Reference values & Clinical importance		
	12	Assignment-2		
5	13	ALP and ACP introduction	5	SGOT estimation
	14	Principle and procedure of estimation ALP		
	15	Principle and procedure of estimation ACP		

6	16	Reference values & Clinical importance	6		SGPT estimation
	17	Assignment -3			
	18	Test 1,2,3 unit			
7	19	Serum Amylase introduction	7		ALP estimation
	20	Principle and procedure of estimation			
	21	Reference values & Clinical importance			
8	22	Assignment - 4	8		ACP estimation
	23	Serum calcium and phosphorus introduction			
	24	Principle and procedure of estimation for Serum calcium			
9	25	Principle and procedure of estimation forSerumphosphorus	9		Total cholesterol estimation
	26	Reference values & Clinical importance			
	27	Assignment - 5			
10	28	Lipid profile introduction, formation of cholesterol	10		Triglyceride estimation
	29	HD and LD cholesterol			
	30	Principle and procedure for cholesterol estimation			
11	31	Ref. value and clinical importance	11		Estimation of HDL and calculation of VLDL and LDL
	32	Triglycerides, principle and procedure for estimation			
	33	Importance of various ratios of HDL, LDL and VLDL			
12	34	Test 4,5,6	12		Urinary protein estimation
	35	Urinary proteins and creatinine introduction			
	36	24hr. urinary proteins estimation			
13	37	24hr. urinary creatinine estimation	13		Urinary creatinine estimation
	38	Ref. values and clinical significance			
	39	Assignment - 6			
14	40	Renal function test introduction	14		Estimation of serum amylase
	41	Urea clearance test			
	42	Creatine clearance test			
15	43	Clinical significance	15		LDL estimation

	44	Test 7,8		
	45	Viva voice		