

LESSON PLAN

NAME OF FACULTY : Sachin Mangla

DISCIPLINE : DMLT

SEMESTER : 2nd

SUBJECT : Clinical Biochemistry II

LESSON PLAN DURATION : 15 Weeks (from January, 2018 to April, 2018)

Work Load Per week : Lectures- 3, Practical - 4

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (ASSIGNMENT/TEST)	PRACTICAL DAY (Each day for 2 hours)	TOPIC
1st	1	Metabolism of Glucose	1	Preparation of reagents (stock and working)
	2	Principle and methods of estimation		
	3	Principle and methods of estimation	2	Estimation of blood glucose/sugar (Folin-Wu method)
2nd	4	Reference values	3	Estimation of blood glucose/sugar (O-toluidine method)
	5	Renal threshold		
	6	Importance and Performance of ST/GTT	4	Estimation of blood glucose/sugar (enzymatic method)
3rd	7	Clinical importance of blood sugar, ST/GTT	5	Performance of ST/GTT
	8	Revision	6	Performance of ST/GTT
	9	Assignment		
4th	10	Test	7	Serum urea

	11	Formation and excretion of urea		estimation
	12	Formation and excretion of urea	8	Serum urea estimation
5th	13	Principle and procedures of different methods of urea estimation	9	Serum creatinine estimation
	14	Principle and procedures of different methods of urea estimation		
	15	Reference values	10	Serum creatinine estimation
6th	16	Clinical Importance	11	Serum uric acid estimation
	17	Revision		
	18	Introduction, principle and procedure of various estimation methods of creatinine estimation	12	Serum uric acid estimation
7th	19	Introduction, principle and procedure of various estimation methods of creatinine estimation	13	Plasma and serum protein estimation
	20	Reference values and Clinical importance		
	21	Revision	14	Plasma and serum protein estimation
8th	22	Assignment and test of 2nd and 3rd unit	15	Estimation of electrolyte levels of Na ⁺ , by colorimetric method
	23	Serum proteins Introduction		
	24	Different methods of estimation including	16	Estimation of electrolyte

		principles and procedures of serum protein		levels of K ⁺ by colorimetric method
9th	25	Different methods of estimation including principles and procedures of serum protein	17	Estimation of electrolyte levels of Cl ⁻ by colorimetric method
	26	Reference values and Clinical importance		
	27	Revision	18	Estimation of blood glucose/sugar (Folin-Wu method)
10th	28	Assignment	19	Estimation of blood glucose/sugar (O-toluidine method)
	29	Test		
	30	Introduction of Na, K, and Cl	20	Estimation of blood glucose/sugar (enzymatic method)
11th	31	principles and procedures of estimation of Na ⁺	21	Performance of ST/GTT
	32	principles and procedures of estimation of K ⁺		
	33	principles and procedures of estimation of, Cl ⁻ .	22	Performance of ST/GTT
12th	34	Reference values and Clinical importance	23	Serum urea estimation
	35	Reference values and Clinical importance		
	36	Revision	24	Serum urea estimation
13th	37	Assignment and Test	25	Serum creatinine estimation
	38	Introduction uric acid,		

	39	principles and procedures of various estimation methods of uric acid estimation	26	Serum creatinine estimation
14th	40	Reference values Clinical Importance	27	Serum uric acid estimation
	41	Revision		
	42	Quality Assurance in Biochemistry	28	Serum uric acid estimation
15th	43	Internal quality assurance	29	Plasma and serum protein estimation
	44	External quality assurance		
	45	Assignment And Test	30	Estimation of electrolyte levels of Na ⁺ , by colorimetric method