Lesson plan

Discipline : DMLT

Semester : 3rd

Subject : Haematology III

Lession Plan Duration: 15 weeks (from October, 2021 to January, 2022)

Work load (Lecture / practical) per week (n hours) = Lecture=3, Practical=6

WORK	THEORY		Practical	
	Lecture Day	**Topic (Including assignment/test}**	**Practical Day**	**Topic**
1st	1	. Introduction to Erythrocyte sedimentation rate (ESR	L1	ESR estimations by wintrobe method in blood sample
	2	Westergren's method of ESR estimation		
	3	Wintrob's method of ESR estimation		
2nd	4	Introduction to packed cell volume (PCV)	L2	ESR estimations by westergren method in blood sample
	5	Macrohaematocrite method of PCV estimation		
	6	Microhaematocrite method of PCV estimation		
3rd	7	Merits and Demerits of ESR & PCV estimation	L3	Determination of PCV in blood by Macro Methods
	8	Factors involved in ESR& Interpretation of results		
	9	Clinical Significance of ESR &PCV estimation		
4th	10	Assignment	L4	Determination of PCV in blood Micro Methods
	11	Test		
	12	Introduction to Red Cell Indicies		
5th	13	Definition, reference range of MCV	L5	Counting of Reticulocyte in blood
	14	Calculation and interpretation of MCV		
	15	Definition, reference range of MCH		
6th	16	Calculation and interpretation of MCH	L6	To perform red cell fragility test on blood by osmotic fragility method
	17	Definition, reference range of MCHC		
	18	Calculation and interpretation of MCHC		
7th	19	Assignment	L7	To perform red cell fragility test on blood by mechanical fragility method
	20	Introduction to Supravital stain and reticulocyte counting		
	21	Principle and procedure of staining		

		reticulocytes		
8th	22	Calculation,Reference values and interpretation of Reticulocytes count	L8	To perform Sickling test on blood by solubility test
	23	Physiological Values of Hb		
	24	Physiological Values of PCV		
9th	25	Physiological Values of TLC	L9	To perform Sickling test on blood by peripheral blood film
	26	Physiological Values of Platelet count		
	27	Definition& Symptoms of Anaemias		
10th	28	Introduction to aetiological classification of Anaemia	L10	Estimation of foetal haemoglobin by alkali denaturation test
	29	Introduction to morphological classification of Anaemia		
	30	Haemorrhagic & Dyshaemorrhagic anaemia in detail		
11th	31	Microcytic anemia & Megaloblastic anemia	L11	Estimation of plasma haemoglobin by Sahli's method
	32	Haemolytic Anaemia in Detail		
	33	Aplastic anemia in Detail		
12th	34	Laboratory diagnosis of:Iron deficiency anaemia	L12	Estimation of plasma haemoglobin by Cyanmethemoglobin method
	35	Laboratory diagnosis of Megaloblastic anaemia		
	36	Laboratory diagnosis of Haemolytic anaemias		
13th	37	Laboratory diagnosis of sickle cell anaemia&thallasseamia	L13	Estimation of plasma haemoglobin by Oxyhemoglobin method
	38	Laboratory diagnosis of Aplastic anaemia		
	39	Assignment		
14th	40	Test	L14	Estimation of plasma haemoglobin by Alkaline hematin method
	41	Introduction to Red cell fragility		
	42	Mechanical erythrocyte fragility test		
15th	43	Osmotic erythrocyte fragility test	L15	Estimation of and G6PD by Methylene Blue Reduction Test
	44	Interpretation & Significance of Red Cell Fragility		
	45	Assignment		