

Lesson plan

Name of the Faculty : Ms. Pratima Saini
 Discipline : MLT
 Semester : 1st
 Subject : Introduction to Hematology
 Lesson Plan Duration: From 01 September 2023

Work load (Lecture / practical) per week (n hours) = Lecture=3, Practical=4

WORK	THEORY		PRACTICAL	
	Lecture Day	Topic (Including assignment/test)	Practical Day	Topic
1 st	1	Introduction to haematology	L1	Parts of microscope (Monocular & Binocular): Its function and care)
	2	Various glassware used in haematology labs		
	3	Various plasticware used in haematology labs		
2 nd	4	Hb tube, Hb pipette, RBC pipette, WBC pipette)	L2	Parts of centrifuge: Its function and care
	5	Definition & Composition Cells-WBC (Granulocytes-Neutrophils, Eosinophils & Basophils)		
	6	(Agranulocytes-Lymphocytes & Monocytes)		
3 rd	7	RBC, Platelets	L3	Parts of Blood Mixer: Its function and care
	8	Plasma & its components		
	9	Function-cell functions & plasma functions		
4 th	10	Class Test	L4	Cleaning and drying of glassware
	11	Formation of blood (Erythropoiesis)		
	12	Assignment		
5 th	13	Formation of blood (Leukopoiesis)	L5	Estimation of Differential Leukocyte count
	14	Formation of blood (Thrombopoiesis)		
	15	Definition and various types of anticoagulants		
6 th	16	Mode of action and preparation of Anticoagulants	L6	Preparation of various anticoagulants
	17	Merits and demerits of anticoagulants		
	18	Define Plasma		
7 th	19	Define Serum	L7	Collection of blood sample by venipuncture
	20	Difference between Plasma and serum		
	21	Revision		
8 th	22	Venipuncture : materials and equipment	L8	

		required for venipuncture		
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	23	Assignment		Collection of blood sample by capillary puncture
	24	Preparation of patients for venipuncture		
9 th	25	Applying tourniquet, Selection and preparing the venipuncture site	L9	Preparation of peripheral blood film (PBF)
	26	Class test		
	27	Collection of blood; by venous method		
10 th	28	Safety measures at the time of sampling and collection	L10	Preparation of stain
	29	Disposables of blood, syringes, needle and lancets		
	30	Various equipment used for collection of blood samples		
11 th	31	Selecting and preparing the puncture site	L11	
	32	Techniques performing the puncture site		
	33	Collection of blood by capillary method		
12 th	34	Assignment	L12	
	35	Care of the capillary puncture site		
	36	Vacutainer system for blood collection		
13 th	37	Introduction to Romanowsky stains	L13	
	38	Class Test		
	39	Theory and preparation of leishman stain		
14 th	40	Theory and preparation of Giemsa stain	L14	
	41	Theory and preparation of Wright stain		
	42	Choice of slide and spreader and preparation of blood film		
15 th	43	Characteristics of good film preparation	L15	
	44	Staining procedure of Romanowsky stains		
	45	Examination of blood smear, Identification of blood cell		