

Lesson Plan

Name of the Faculty	: Bipul Kumar Mahto
Discipline	: Medical Lab Technology
Year	: 1st SEM
Subject	: Introduction to Hematology
Lesson Plan	: 15 weeks
Work load (lecture/practical) per week (in hours)	: Lectures-03, practicals-04

Week	Theory			Practical	
	Lecture day	Date	Topic (including assignment test)	Practical Day (2 hours lab each day), (2 hours each day*2 days in week=4 weekly load)	Topic
1 st	1 st		Introduction to haematology 1.1 Various glassware/plastic-ware used in Haematology Labs. (Hb. Tube, Hb. Pipette, RBC Pipette, WBC Pipette).		1. Parts of microscope (Monocular & Binocular): Its function and care.
	2 nd		1.2 Introduction to blood. 1.3 Definition & Composition		
	3 rd		1.4 Cells-WBC (Granulocytes-Neutrophils, Eosinophils& Basophils), (Agranulocytes-Lymphocytes & Monocytes), RBC, Platelets.		
2 nd	4 th		1.5 Plasma & its components 1.6 Function-cell functions & plasma functions.		2. Parts of centrifuge: Its function and care.
	5 th		1.7 Formation of blood (Erythropoiesis)		
	6 th		(Leukopoiesis&Thrombopoiesis)		
3 rd	7 th		Definition 2.1 Various types along with their mode of action, merit and demerit its of each Anticoagulant vials		3. Parts of Blood Mixer: Its function and care
	8 th		2.3 Difference between Plasma and serum		
	9 th		Venous blood collection 3.1 Venipuncture : materials and equipment required for venipuncture		
4 th	10 th		3.2 Preparation of patients for venipuncture		4. Cleaning and drying of glassware
	11 th		3.3 Applying tourniquet		
	12 th		3.4 Selection and preparing the venipuncture site		
5 th	13 th		3.5 Performing venipuncture		UNIT II 5. Estimation of Differential Leukocyte count.
	14 th		3.6 Care of venipuncture site		
	15 th				

6 th	16 th		3.7 Disposable of blood, syringes, needle and lancets.		UNIT III 6. Preparation of various anticoagulants.
	17 th				
	18 th				
7 th	19 th		The capillary puncture 4.1 Capillary puncture site		UNIT IV 7. Collection of blood sample by venipuncture.
	20 th		4.2 Materials and equipment required for capillary puncture site		
	21 st		4.3 Selecting and preparing the puncture site		
8 th	22 nd		4.4 Techniques performing the puncture site		8. Collection of blood sample by capillary puncture
	23 rd		4.5 Collection of blood sample		
	24 th		4.6 Care of the capillary puncture site		
9 th	25 th		Romanowsky stains (Leishman, Giemsa) 5.1 Preparation and theory		UNIT V 9. Preparation of peripheral blood film (PBF).
	26 th		5.2 Choice of slide and spreader		
	27 th				
10 th	28 th		5.3 Preparation of blood film 5.4 Characteristics of good blood smear		10. Preparation of stain.
	29 th		5.5 Examination of blood smear		
	30 th		5.6 Identification of blood cell		
11 th	31 st		REVISION		REVISION
	32 nd		REVISION		
	33 rd		REVISION		
12 th	34 th		REVISION		REVISION
	35 th		REVISION		
	36 th		REVISION		
13 th	37 th		REVISION		REVISION
	38 th		REVISION		
	39 th		REVISION		
14 th	40 th		REVISION		REVISION
	41 st		REVISION		
	42 nd		REVISION		
15 th	43 rd		REVISION		REVISION
	44 th		REVISION		
	45 th		REVISION		

