Lesson Plan

Name of the Faculty : Ms.Seema

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**
1st	1st		**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.
	2nd		1.2 Introduction to blood. 1.3 Definition & Composition		
	3rd		1.4 Cells-WBC (Granulocytes-Neutrophils, Eosinophils& Basophils), (Agranulocytes-Lymphocytes & Monocytes), RBC, Platelets.		
2nd	4th		1.5 Plasma & its components 1.6 Function-cell functions & plasma functions.		2. Parts of centrifuge: Its function and care. .
	5th		1.7 Formation of blood (Erythropoiesis)		
	6th		(Leukopoiesis&Thrombopoiesis)		
3rd	7th		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
	8th		2.3 Difference between Plasma and serum		
	9th		**Venous blood collection** 3.1 Venipuncture : materials and equipment required for venipuncture		
4th	10th		3.2 Preparation of patients for venipuncture 3.3 Applying tourniquet 3.4 Selection and preparing the venipuncture site		4. Cleaning and drying of glassware
	11th				
	12th				
5th	13th		3.5 Performing venipuncture 3.6 Care of venipuncture site		**UNIT II** 5. Estimation of Differential Leukocyte count.
	14th				
	15th				

6th	16th		3.7 Disposable of blood, syringes, needle and lancets.		**UNIT III** 6. Preparation of various anticoagulants.
	17th				
	18th				
7th	19th		**The capillary puncture** 4.1 Capillary puncture site 4.2 Materials and equipment required for capillary puncture site 4.3 Selecting and preparing the puncture site		**UNIT IV** 7. Collection of blood sample by venipuncture.
	20th				
	21st				
8th	22nd		4.4 Techniques performing the puncture site 4.5 Collection of blood sample 4.6 Care of the capillary puncture site 4.7 Vacutainer system for blood collection		8. Collection of blood sample by capillary puncture
	23rd				
	24th				
9th	25th		**Romanowsky stains (Leishman, Giemsa)** 5.1 Preparation and theory 5.2 Choice of slide and spreader		**UNIT V** 9. Preparation of peripheral blood film (PBF).
	26th				
	27th				
10th	28th		5.3 Preparation of blood film 5.4 Characteristics of good blood smear		10. Preparation of stain.
	29th		5.5 Examination of blood smear		
	30th		5.6 Identification of blood cell		
11th	31st		REVISION		REVISION
	32nd		REVISION		
	33rd		REVISION		
12th	34th		REVISION		REVISION
	35th		REVISION		
	36th		REVISION		
13th	37th		REVISION		REVISION
	38th		REVISION		
	39th		REVISION		
14th	40th		REVISION		REVISION
	41st		REVISION		
	42nd		REVISION		
15th	43rd		REVISION		REVISION
	44th		REVISION		
	45th		REVISION		