Lesson Plan

Name of the Faculty : Mr.Bhoodev Singh (T & P)

Discipline : Medical lab Technology

Semester : 4th

Subject : Hematology-IV

Lesson Plan : 15 weeks (from January-April 2018)

Work load (lecture/practical) per week (in hours) : Lectures-03, practicals-03

Week	Theory		Practical	
	Lecture day	Topic (including assignment & test)	Practical Day	Topic
1st	1st	Introduction to the whole syllabus of hematology-IV	1st	1. Demonstration of bleeding time
	2nd	**Ch – 1 Introduction to normal heamostasis**	2nd	
	3rd	Theories of blood coagulation ; coagulation factors	3rd	
2nd	4th	Extrinsic pathway of blood coagulation	4th	2. Demonstration of clotting time
	5th	Intrinsic pathway of blood coagulation	5th	
	6th	Control of coagulation	6th	
3rd	7th	Platelets and their role in heamostasis	7th	
	8th	Bleeding disorders and related diseases	8th	3. Demonstration of clot retraction time.
	9th	Principles, clinical importance, reference values and methods of: prothrombin time	9th	

4th	10th	prothrombin time index (PTI) International normalized ratio (INR)	10th	4. Demonstration of Hess test
	11th	Partial Thromboplastin time (APTT), Thrombin Time (TT)	11th	
	12th	Assignment – 1. Discuss about hess test and clot retraction time.	12th	
5th	13th	**Ch -2 Bone marrow -** Composition and function of bone-marrow	13th	Viva of the exrperiment no. 1,2 performed in lab
	14th	Aspiration of bone-marrow by various methods	14th	Viva of the exrperiment no. 3
	15th	Preparation, staining and examination of bone-marrow smears	15th	Viva of the exrperiment no. 4
6th	16th	myclogram including M.E. Ratio	16th	5. Determination of prothrombin time
	17th	Iron staining (Perls' reaction)	17th	
	18th	Significance of bone-marrow examination	18th	
7th	19th	Class test-1 of the syllabus covered in class	19th	6. Determination of Activated Partial thrombo plastin time (APTT)
	20th	**Ch – 3 leukemias** Definition of leukemias	20th	
	21st	Classification of leukemias	21st	
8th	22nd	Classification of leukemias	22nd	VIVA of experiment 5
	23rd	FAB Classification of leukemias	23rd	

	24th	Laboratory diagnosis of various leukemias	24th	VIVA of experiment 6
9th	25th	Assignment 2 difference between myloblastic and lymphoblastic leukemias.	25th	7. Demonstration of LE Cell
	26th	**Ch -4. LE Cell** LE Cell phenomenon	26th	
	27th	Le cell & its differentiation from tart cell	27th	
10th	28th	Demonstration of LE cell by various methods	28th	8. Semen analysis
	29th	Clinical significance	29th	
	30th	**Ch -5.Semen Analysis** Introduction to semen analysis	30th	
11th	31st	Semen Analysis in detail	31st	9. Cell counts of biological fluids
	32nd	Semen Analysis in detail	32nd	
	33rd	Revision of Ch – 3,4	33rd	
12th	34th	Class test-2 of the ch - 3,4covered in class	34th	Viva of experiment no. 7
	35th	Cell counts of various biological fluids	35th	Viva of experiment no. 8
	36th	Cerebral spinal fluid	36th	Viva of experiment no. 9
13th	37th	Synovial fluid	37th	Revision of experiments 1,2,3,4
	38th	Serous fluid	38th	
	39th	Revision of Ch-1,2	39th	

14th	40th	Assignment 3 : Methods of Cell counts of various biological fluids	40th	Revision of experiments 5,6,7
	41st	Class test 3: of the ch - 5,6covered in class	41st	
	42nd	Revision	42nd	
15th	43th	Revision	43th	Revision of experiments 8,9 & problem solving of students regarding practicals
	44th	(oral/written)Test of whole syllabus	44th	
	45th	Problem solving of students	45th	