## **Lesson Plan**

Name of the Faculty : Mr.Deepak Rawat (T & P)

Discipline : Medical lab Technology

Semester : 2<sup>nd</sup>

Subject : Hematology-II

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

Work load (lecture/practical) per week (in hours): Lectures-03, practicals-04

Week		Theory	Practical		
	Lecture day	Topic (including assignment test)	Practical Day (2 hours lab each day), (2 hours each day*2days in week=4 weekly load)	Торіс	
1 <sup>st</sup>	1 <sup>st</sup>	Introduction to the whole syllabus of hematology-II			
	2 <sup>nd</sup>	Ch – 1Haemoglobinometery introduction	1 <sup>st</sup> & 2 <sup>nd</sup>	Preparation of peripheral blood film.	
	3 <sup>rd</sup>	Formation of haemoglobin			
2 <sup>nd</sup>	4 <sup>th</sup>	Formation of haemoglobin	3 <sup>rd</sup> &4 <sup>th</sup>	2. Preparation and standardization of stains (leishman and giemsa)	
	5 <sup>th</sup>	functions and its degradation			
	6 <sup>th</sup>	Types of haemoglobin			
3 <sup>rd</sup>	7 <sup>th</sup>	Types of haemoglobin			
	8 <sup>th</sup>	Various methods of estimation with specific reference to cyanmethaemoglobin method	5 <sup>th</sup> & 6 <sup>th</sup>	3. Preparation of thick and thin blood smear	

	9 <sup>th</sup>	Ch -2 Haemocytometery introduction		
4 <sup>th</sup>	10 <sup>th</sup>	Various counting chambers		
	11 <sup>th</sup>	Various counting chambers	7 <sup>th</sup> & 8 <sup>th</sup>	Haemoglobin Estimation     by Sahli's method
	12 <sup>th</sup>	Methods of counting of RBC their calculation and reference values		
5 <sup>th</sup>	13 <sup>th</sup>	Methods of counting of WBC their calculation and reference values		
	14 <sup>th</sup>	Methods of counting of platelets their calculation and reference values	9 <sup>th</sup> & 10 <sup>th</sup>	Viva of the exrperiments performed in lab
	15 <sup>th</sup>	Assignment - 1Common Errors involved in haemocytometery and means to minimize them		
6 <sup>th</sup>	16 <sup>th</sup>	Classtest -1 of the syllabus covered in the class		
	17 <sup>th</sup>	Ch -3 Differential leucocyte counting (DLC)	11 <sup>th</sup> & 12 <sup>th</sup>	5. Counting of RBC
	18 <sup>th</sup>	Preparation and staining of blood film		
7 <sup>th</sup>	19 <sup>th</sup>	Performance of DLC		
	20 <sup>th</sup>	Assignment -2 Normal values and significance of DLC	13 <sup>th</sup> & 14 <sup>th</sup>	6. Counting of WBC
	21 <sup>st</sup>	Blood cell morphology in health and disease (Peripheral blood film)		

22 <sup>nd</sup>	Ch - 4 Quality Assurance in haematology- introduction and need	15 <sup>th</sup> & 16 <sup>th</sup>	Revision of experiment 5,6
23 <sup>rd</sup>	Description of precision & accuracy		
24 <sup>th</sup>	Description of standard deviation as per national standards		
25 <sup>th</sup>	Revision of ch- 3		
26 <sup>th</sup>	Revision of ch -4	17 <sup>th</sup> &18 <sup>th</sup>	7. Demonstration of Platelet counting
27 <sup>th</sup>	Classtest- 2 of ch – 3,4		
28 <sup>th</sup>	Ch - 5 Automation in haematology – introduction		
29 <sup>th</sup>	Various types of Blood cell counter	19 <sup>th</sup> &20 <sup>th</sup>	8. Study of morphology of normal RBC with the help of stained slide
30 <sup>th</sup>	Various types of Blood cell counter		T T T T T T T T T T T T T T T T T T T
31 <sup>st</sup>	Various types of Blood cell counter		
32 <sup>nd</sup>	Principle and operation of the automated blood cell counters	21 <sup>st</sup> &22 <sup>nd</sup>	9. Study of morphology of normal WBC with the help of stained slide
33 <sup>rd</sup>	Principle and operation of the automated blood cell counters		
34 <sup>th</sup>	Revision of ch -5		
35 <sup>th</sup>	Class test – ch -5	23 <sup>rd</sup> & 24 <sup>th</sup>	Viva of experiments 7,8
	23 <sup>rd</sup> 24 <sup>th</sup> 25 <sup>th</sup> 26 <sup>th</sup> 27 <sup>th</sup> 30 <sup>th</sup> 31 <sup>st</sup> 32 <sup>nd</sup> 34 <sup>th</sup>	haematology- introduction and need  23 <sup>rd</sup> Description of precision & accuracy  24 <sup>th</sup> Description of standard deviation as per national standards  25 <sup>th</sup> Revision of ch- 3  26 <sup>th</sup> Revision of ch- 4  27 <sup>th</sup> Classtest- 2 of ch – 3,4  28 <sup>th</sup> Ch - 5 Automation in haematology – introduction  29 <sup>th</sup> Various types of Blood cell counter  30 <sup>th</sup> Various types of Blood cell counter  31 <sup>st</sup> Various types of Blood cell counter  31 <sup>st</sup> Various types of Blood cell counter  32 <sup>nd</sup> Principle and operation of the automated blood cell counters  33 <sup>rd</sup> Principle and operation of the automated blood cell counters  34 <sup>th</sup> Revision of ch -5	haematology- introduction and need  23 <sup>rd</sup> Description of precision & accuracy  24 <sup>th</sup> Description of standard deviation as per national standards  25 <sup>th</sup> Revision of ch- 3  26 <sup>th</sup> Revision of ch- 4  27 <sup>th</sup> Classtest- 2 of ch - 3,4  28 <sup>th</sup> Ch - 5 Automation in haematology - introduction  29 <sup>th</sup> Various types of Blood cell counter  30 <sup>th</sup> Various types of Blood cell counter  31 <sup>st</sup> Various types of Blood cell counter  31 <sup>st</sup> Various types of Blood cell counter  32 <sup>nd</sup> Principle and operation of the automated blood cell counters  21 <sup>st</sup> & 22 <sup>nd</sup> 33 <sup>rd</sup> Principle and operation of the automated blood cell counters  34 <sup>th</sup> Revision of ch -5

	36 <sup>th</sup>	Revision of ch – 1		
13th	37 <sup>th</sup>	Revision of ch – 2		
	38 <sup>th</sup>	Revision test	25 <sup>th</sup> & 26 <sup>th</sup>	10. To study abnormal morphology of RBC,WBC,platelets
	39 <sup>th</sup>	Revision of ch – 3		
14th	40 <sup>th</sup>	Assignment -3 (Various types of Blood cell counter)		
	41 <sup>st</sup>	Revision of ch – 4	27 <sup>th</sup> & 28 <sup>th</sup>	Viva of experiments 9,10
	42 <sup>nd</sup>	Revision test		
15th	43th	Revision of ch – 5	29 <sup>th</sup> &30 <sup>th</sup>	Revision of full practical syllabus
	44 <sup>th</sup>	Revision of full theory syllabus/Problem solving of students		
	45 <sup>th</sup>	Revision of full theory syllabus/Problem solving of students		