Lesson plan

Discipline : DMLT

Semester : 3rd

Subject : Transfusion Medicine

Lession Plan Duration: 15 weeks (from Aug, 2024)

Work load (Lecture / practical) per week (in hours) = Lecture=3, Practical=6

WORK	THEORY		Practical	
	Lecture Day	**Topic (Including assignment/test}**	**Practical Day**	**Topic**
1st	1	Historical introduction to Transfusion medicine (blood banking	L1	Performing ABO blood grouping by Slide & Tube Test
	2	Definition of antigen and antibody		
	3	Classification of antigens		
2nd	4	Classification of antibodies.	L2	Performing-Rh grouping by Slide & Tube technique
	5	Introduction to ABO blood grouping		
	6	Antigens and antibodies involved in ABO blood grouping		
3rd	7	Principle and procedure of ABO blood grouping Slide method	L3	Performance of Coombs Test by Direct method
	8	Principle and procedure of ABO blood grouping Tube method		
	9	Various blood sub groups (A_1,A_2, A_1B, A_2B)		
4th	10	Assignment	L4	Performance of Coombs Test by Indirect method
	11	Introduction to Rh Blood Group System		
	12	Antigen and antibody involved in Rh blood grouping		
5th	13	Principle and procedure of Rh grouping	L5	Cross Matching (compatibility testing) by Major testing
	14	Variant of D antigen		
	15	Types and composition of various anticoagulants		
6th	16	Advantages and disadvantages of various anticoagulants	L6	Cross Matching (compatibility testing) by Minor testing
	17	Criteria for selection of Donor		
	18	Screening of blood donor for Blood Collection and storage		
7th	19	Characteristics of ideal blood donor.	L7	Preparation of anticoagulants – ACD (Acid Citrate Dextrose) –
	20	Blood collection procedure		

	21	Transportation and storage		CPD (Citrate Phosphate Dextrose) - CPDA (Citrate Phosphate Dextrose Adenine)
8th	22	Screening of blood donors for MP	L8	Malarial Parasite test by Thick smear preparation
	23	Staining of blood film for MP		
	24	Slide test for VDRL		
9th	25	VDRL Buffer Saline test	L9	Malarial Parasite test by Thin smear preparation
	26	ELISA based HIV test		
	27	Western Blot test for HIV		
10th	28	Screening of blood donors for HbsAg & HCV	L10	VDRL Test
	29	Assignment		
	30	Introduction to Cross Matching		
11th	31	Major Cross Matching	L11	HIV Test
	32	Minor Cross Matching		
	33	Saline method for cross matching		
12th	34	Albumin& Albumin globulin test method for cross matching	L12	HbsAg Test
	35	Assignment		
	36	Introduction to Coombs Test		
13th	37	Principle, procedure of Indirect coombs test	L13	HCV Test
	38	Importance and application of Indirect coombs test		
	39	Principle, procedure of Direct coombs test		
14th	40	Importance and application of Direct coombs test	L14	Preparation of platelet rich plasma
	41	Preparation,Preservation&Uses of Packed cells		
	42	Preparation,Preservation&Uses of Fresh frozen plasma		
15th	43	Preparation,Preservation&Uses of Cryoprecipitate &PRP	L15	Preparation of platelet poor plasma
	44	Immediate Immune mediated Transfusion Reaction		
	45	Delayed Immune mediated Transfusion Reaction		