

LESSON PLAN

NAME OF FACULTY : Sachin Mangla

DISCIPLINE : DMLT

SEMESTER : 4th

SUBJECT : Clinical Microbiology IV

LESSON PLAN DURATION : 15 Weeks (from January, 2018 to April, 2018)

Work Load Per week : Lectures- 3, Practical -3

WEEK	THEORY		PRACTICAL	
	LECTURE DAY	TOPIC (ASSIGNMENT/TEST)	PRACTICAL DAY (Each day for 3 hours)	TOPIC
1st	1	Mycology introduction	1st	Preparation of different culture media used in mycology - Sabouraud's dextrose agar with and without antibiotics, Corn meal agar, BHI (Brain, Heart Infusion)
	2	Characteristics of medically important fungi		
	3	classification of medically important fungi		
2nd	4	Revision	2nd	To perform wet mount techniques – KOH and LCB
	5	Fungal Culture media - SDA (Sabouraud's dextrose agar) with and without antibiotics		
	6	CMA (Corn meal agar) - BHI (Brain Heart Infusion)		
3rd	7	Collection and processing of sample for fungal infection in Skin, Nail and Hair	3rd	To study characteristics of common laboratory fungal

		KOH preparation		contaminants
	8	LCB (Lactophenol cotton blue) - India ink		
	9	Fungal Cultivation introduction		
4th	10	fungi - Candida, Dermatophytes	4th	Collection and processing of samples for diagnosis of fungal infections in skin, hair, nail scrapings
	11	Laboratory Contaminants – Penicillium, Rhizopus,		
	12	Mucor, Aspergillus		
5th	13	Assignment of unit 1,2,3,4	5th	To perform serological test - Widal test (Both slide method)
	14	Test of unit 1,2,3,4		
	15	Introduction to Immunology		
6th	16	Immunity: - Innate		To perform serological test - Widal test (tube method)
	17	Immunity: - Innate		
	18	Immunity: - Acquired		
7th	19	Immunity: - Acquired	7th	ASO titre
	20	Revision		
	21	Antigens introduction		
8th	22	Types of Antigens	8th	CRP
	23	properties of Antigens		
	24	Revision		
9th	25	Antibodies introduction	9th	Rheumatoid factor
	26	Antibodies types		
	27	Antibodies		

		properties		
10th	28	Revision	10th	VDRL Test
	29	Antigen – Antibody Reactions introduction		
	30	Principle and applications of agglutination,		
11th	31	Principle and applications of precipitation	11th	HIV Screening
	32	Principle and applications of flocculation reactions		
	33	Assignmet of unit 5,6,7,8		
12th	34	Test of unit 5,6,7,8	12th	HBsAg Screening
	35	Serological test introduction		
	36	Serological test type		
13th	37	Principle, techniques and interpretation of - Widal - Tube method method	13th	Revision
	38	Principle, techniques and interpretation of - Widal - Titre slide method		
	39	Principle, techniques and interpretation of Anti streptolysin O		
14th	40	Principle, techniques and interpretation of C-reactive protein	14th	Revision
	41	Principle, techniques and interpretation of - VDRL/RPR		
	42	Principle, techniques and interpretation of		

		- Rheumatoid factor (RF)		
15th	43	Principle, techniques and application of - ELISA (direct)	15th	Viva
	44	Principle, techniques and application of - ELISA (indirect)		
	45	Test and assignment of unit 9		