

Lesson Plan

Name of the Faculty

: Ashish Duhan

Discipline

: Medical Lab Technology

Semester

: 4th

Subject

: Microbiology-IV

Lesson Plan

: 15 weeks (From 13th March 2023 to 30 June 2023)

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

Week			Theory	Practical	
	Lecture day	Tentative date of lect.	Topic (including assignment test)	Practical Day (3 hours lab in week = 3 weekly load)	Topic
1 st	1 st		Mycology-Characteristics	1 st &2 nd	1. Preparation of different culture media used in mycology - Sabouraud's dextrose agar with and without antibiotics, Corn meal agar, BHI (Brain, Heart Infusion)
	2 nd		classification of medically important fungi		
	3 rd		SDA (Sabouraud's dextrose agar) with and without antibiotics		
2 nd	4 th		- CMA (Corn meal agar)	3 rd &4 th	2. To perform wet mount techniques - KOH and LCB
	5 th		- BHI (Brain Heart Infusion)		
	6 th		Collection and processing of sample for fungal infection in Skin, Nail and Hair		
3 rd	7 th		- KOH preparation	5 th &6 th	3. To study characteristics of common laboratory fungal contaminants
	8 th		- LCB (Lactophenol cotton blue)		
	9 th		- India ink		
4 th	10 th		Medically important fungi - Candida	7 th &8 th	4. Collection and processing of samples for diagnosis of fungal infections in skin, hair, nail scrapings
	11 th		Dermatophytes		
	12 th		- Laboratory Contaminants - Penicillium,		
5 th	13 th		Rhizopus,	9 th &10 th	5. Widal test (Both slide and tube method)
	14 th		Mucor,		
	15 th		Aspergillus		
6 th	16 th		Introduction to Immunology	11 th &12 th	6. ASO titre
	17 th		Innate		

	18 th		Acquired		
7 th	19 th		Antigens-Definition,types andproperties	13 th &14 th	-7. CRP
	20 th		Antibodies- Definition,typesandpropertie s		
	21 st		Antigen- AntibodyReactions (06hrs) - Principleandapplicationsof agglutination		
8 th	22 nd		Precipitationand flocculationreactions		
	23 rd		-Widal- Tubemethod/Titreslidemeth od	15 th &16 th	8.Rheumatoidfactor
	24 th		-AntistreptolysinO		
9 th	25 th		-C-reactiveprotein		
	26 th		- VDRL/RPR	17 th &18 th	9.- VDRLTest
	27 th		-Rheumatoidfactor(RF)		
10 th	28 th		Principle,techniquesanda pplicationof	19 th &20 th	10.-HIVScreening
	29 th		-ELISA(directandindirect)		
	30 th		Revision		
11 th	31 st		Revision	21 st &22 nd	11.-HBsAgScreening
	32 nd		Revision		
	33 rd		Revision		
2 nd Sessional					
12 th	34 th		Revision	23 rd &24 th	Revision
	35 th		Revision		
	36 th		Revision		
13 th	37 th		Revision	25 th &26 th	Revision
	38 th		Revision		
	39 th		Revision		
14 th	40 th		Revision	27 th &28 th	Revision
	41 st		Revision		
	42 nd		Revision		
15 th	43 rd		Revision	29 th &30 th	Revision
	44 th		Revision		
	45 th		Revision		
3 rd Sessional					

