

Medical Microbiology

Details of course: -

Course Title	Course Structure			Pre-Requisite
	L	T	P	
Medical Microbiology (BT324)	3	1	0	NIL

Course Objective:

To impart basic understanding of human pathogens and medical microbiology

Course Outcome:

1. Enlist various bacteria, microorganism like staphylococcus, streptococcus, pneumococcus, vibrio
2. Summarize life cycle, morphology, disease, and lab diagnosis of various protozoans and nemato
3. Define morphology, diseases and lab diagnosis of many virus pathogens.
4. Analyze morphology, structure, classification of fungi and learning its process of nutrition cultivation.
5. Apply medical knowledge in microbiology to know about urinary tract infection, nosocomial infections, and introduction to immunization.

S. No.	Content	Contact Hours
1.	Systemmic Bacteriology: Study of - Staphylococcus, Streptococcus, Pneumococcus, Neisseira gonorrhoea, Neisseira meningitis, Cornybacterium diphtheriae, Mycobacterium, Clostridium, E. coli, H. pylori, Klebsiella, Salmonella, Proteus, Pseudomonas, Vibrio & Spirochaetes	9
2.	Parasitology: Protozoa: Intestinal Amoebae a. E. Histolytica, Flagellates of intestine/genitalia a. Giardia lamblia, Trichomonas vaginalis, Malarial Parasite, Plasmodium vivax, P. malaria, P. falciparum & P. ovale, Nematodes: Life cycle, Morphology, disease & lab diagnosis	8
3.	Virology: Viral pathogens Morphology, disease & lab diagnosis	8

4.	Mycology: Morphology and structure of fungi. - Classification of fungi. - Nutrition and cultivation of fungus. - Cutaneous & Sub cutaneous and Systemic Mycosis. 14 - Lab diagnosis of fungal Infections. - Opportunistic fungal infections.	8
5.	Applied Medical Microbiology: Urinary tract infections, Nosocomial infections, Pyrexia of unknown origin, Immunization, Automation - Introduction, meaning, advantages, history	9
	TOTAL	42

Books: -

S. No.	Name of Books/ Author/Publisher
1	Medical Microbiology 7 th ed Murray, Rosenthal, Pfaller
2	Medical Microbiology, 4th edition ISBN-10: 0-9631172-1-1
3	<u>Polymicrobial Diseases.</u> Brogden KA, Guthmiller JM Washington (DC): ASM Press
4	Prescott's Microbiology 9 th ed. Joanne Willey, Linda Sherwood and Christopher J. Woolverton
5	Topley and Wilson's Microbiology and microbial infections, 10 th ed