

Class: B.Sc IIInd Year

Semester: IV

Paper Name: Medical Microbiology

Topic	URL
I - Epidemiology	
Definition, classification and scope of epidemiology.	https://www.youtube.com/watch?v=RwiQHTrS_RY
Infection- Types of infection and modes of transmission.	https://www.youtube.com/watch?v=P0MP_QJRFg
Normal flora of human body.	https://www.youtube.com/watch?v=2uVhgdAKSOo
Infection process, pathogenicity and virulence, Microbial virulence factors: toxins, enzymes	https://www.youtube.com/watch?v=x8GB4LAvbfU
Control of communicable diseases.	https://www.youtube.com/watch?v=2JWku3KjpdQ
II- Immunology	
Organs and cells of immune system	https://www.youtube.com/watch?v=DsLooY8KcyE
General Nonspecific factors- Physiological barriers, Natural cellular factors, Natural humoral factors.	https://www.youtube.com/watch?v=P6N_9MOZF_o
Immunity- Definition and classification	https://www.youtube.com/watch?v=t_1cZkNUavs
Innate immunity- Species, Racial, Individual, Herd immunity.	https://www.youtube.com/watch?v=vdvl2AyRU90
Acquired immunity- Active and passive immunity, Immune response and hypersensitivity	https://www.youtube.com/watch?v=E1ZvKKkA2tE https://www.youtube.com/watch?v=xWClgE1HKfA
III- Serology	
Antigens- Definition, types and factors determining antigenicity. Bacterial antigens.	https://www.youtube.com/watch?v=QZdglwM9phE
Antibodies- Definition, Structure, classification, Properties and differences, monoclonal antibodies.	https://www.youtube.com/watch?v=Y8-DnMe4O4k
Antigen Antibody reactions- Agglutination, Precipitation, Complement fixation test, ELISA & RIA.	https://www.youtube.com/watch?v=s2bRMZKEc_w
IV- Pathogenic Bacteria	
Morphology, cultural and biochemical properties, antigenic structure, pathogenesis, laboratory diagnosis and prophylaxis:	
a) Staphylococcus aureus	https://www.youtube.com/watch?v=P8L6tWR5rMo
b) Clostridium tetani	https://www.youtube.com/watch?v=ys9Buil3dNo
c) Salmonella typhi	https://www.youtube.com/watch?v=f67GERJpaCs

d) Mycobacterium tuberculosis	https://www.youtube.com/watch?v=yUEO5BX3nL4
e) Treponema pallidum	https://www.youtube.com/watch?v=3LjNHpAwKAA
f) Vibrio cholerae	https://www.youtube.com/watch?v=tnWWXfCGOC4
V- Other Pathogenic organisms	
a) Viruses- AIDS , Hepatitis, Polio, Rabies.	https://www.youtube.com/watch?v=kQH6B93M3lg https://www.youtube.com/watch?v=y6XfSQ_zQgQ https://www.youtube.com/watch?v=byX30Pk3rig https://www.youtube.com/watch?v=kS64WQ_GNzg
b) Rickettsias- R. prowazekii	https://www.youtube.com/watch?v=UOahYfw-Dvo
c) Protozoa- E. histolytica	https://www.youtube.com/watch?v=IzjUhCdu8Wg
d) Fungi- C. albicans	https://www.youtube.com/watch?v=dnGhYh_ljKU
VI- Antimicrobial chemotherapy	
Ideal characters of chemotherapeutic agents	https://www.youtube.com/watch?v=FaYoAtnwhqQ
Major antimicrobial agents and its clinical uses:	https://www.youtube.com/watch?v=7z0W0ukJR4s
Antibacterial agents: Rifampicin	https://www.youtube.com/watch?v=Pi_n1PoERcg
Chloramphenicol	https://www.youtube.com/watch?v=H5gl_X1tDNQ
Streptomycin	https://www.youtube.com/watch?v=RGPyWblwVo
Ciprofloxacin	https://www.youtube.com/watch?v=kUd2hAYfM2s
Antiviral agents: Azidothymidine	https://www.youtube.com/watch?v=HAO9WIndHt4
Amantadine	https://www.youtube.com/watch?v=UEZTS7rsDUM
Basic mechanism of antibiotic action	https://www.youtube.com/watch?v=NGwP471sehl
to CLSI (NCCLS), MIC. Disc diffusion, agar dilution, broth dilution (macro and micro).	https://www.youtube.com/watch?v=WAvRj1cRwXM