

Core Course X (CC) – Medical Microbiology

Unit-I: Introduction of Medical Microbiology:

History, Koch & River's postulates, Role of Microbiology in Medicine, Classification of medically important microbes, Normal Microbial flora, Infections- Source, Mode of transmission, Prevention of medically important microbes.

Unit-II: Systematic Medical Bacteriology:

Mechanism of Bacterial pathogenesis of medically important bacteria Staphylococcus aureus, Group A Streptococci, Pathogenic, Enterobacteriaceae, Vibrio, Nisseriae, Haemophilus influenza, Corynebacterium, Pseudomonas, Chlamydia, Mycoplasma, anaerobic bacteria & infections, Mycobacterium tuberculosis, Atypical Mycobacterium, Chlamydia, Bacillus, Rickettsia, Zoonotic bacteria, Helicobacter pylori.

Unit-III: Mycology & Protozoology:

Mechanisms of Fungal Pathogenesis, Superficial and Cutaneous Mycoses, Subcutaneous Mycoses, Systemic Mycoses, Opportunistic Mycoses, Mycotoxicoses, Intestinal, Blood and Tissue Protozoa.

Unit-IV: Viral diseases:

Influenza viruses, Measles, Mumps, Chicken Pox, Hepatitis A,B,C, D& E, Poliomyelitis, AIDS, Human Papilloma Virus (HPV), Rabies, Yellow fever, Dengue and Japanese Encephalitis.

Unit-V: Laboratory Diagnosis:

Laboratory diagnosis of bacterial diseases, Laboratory diagnosis of mycological and Parasitological diseases, Laboratory diagnosis of viral diseases, Antibiotic sensitivity test. Molecular diagnosis.

References:

- Medical Microbiology(2001) Jawetz, Melnick and Adelberg's 22nd edition McGraw Hill Medical Publication division
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Medical Microbiology (1990) Anathanarayanan & Jeyaram Paniker, Orient Publications, New Delhi.
Medical Parasitology (2007) K.D Chatterjee 7th edition.
Foundations in Microbiology (2005) Cathleen park Talaro 6th edition, McGraw Hill Medical Publication division.
Microbiology Lab Manual (2007) John P. Harley 7th edition McGraw Hill Medical Publication division.
Microbiology (2007). Prescott, Harley, Klein's 7th edition McGraw Hill Medical Publication division.
Medical Microbiology (2007) S. Rajan MJP Publishers Chennai.