

CORE COURSE VII (CC) -MEDICAL MICROBIOLOGY

UNIT – I

Normal microbial flora of the human body, Host-microbe interactions – virulence factors of microbes. Invasiveness and pathogenicity.

UNIT – II

Diagnostic Microbiology – collection and transport of specimen for Microbiological examination – General methods for isolation and identification of bacteria.

UNIT – III

Clinical symptoms. Epidemiology, pathogenesis, laboratory diagnosis, prevention and treatment of the following bacterial infections (a) Streptococcal infections, (b) Staphylococcal infections, (c) Meningitis, (d) Tuberculosis, (e) Leprosy, (f) Gastrointestinal disorders – typhoid, cholera, bacillary dysentery, (g) Sexually transmitted diseases – syphilis, gonorrhoea. (h) Anaerobic wound infection – tetanus, gas gangrene.

UNIT – IV

Clinical symptoms. Epidemiology, pathogenesis, laboratory diagnosis, prevention and treatment of the following viral infections (a) respiratory diseases, common cold, influenza, measles. (b) neurological diseases – Dengue, Rabies (c) Liver diseases : Hepatitis A,B,C,D & E (d) Immunodeficiency diseases - AIDS.

UNIT – V

Clinical symptoms. Epidemiology, pathogenesis, laboratory, prevention and treatment of the following fungal and protozoan infections (a) Fungal – superficial and subcutaneous mycoses, (b) Protozoan: Amoebiasis, Malaria (c) Helminths – Filariasis, Ascariasis, Zoonotic diseases, Hospital acquired infections.

Reference:

Rajan.S. Medical Microbiology. MJP Publishers, Chennai. 2007.

David Greenwood. Richard C.B. Slack and John F. Peutherer.(1992). Medical Microbiology.(14th edition). ELBS with Churchill Livingstone.

E. Joan Stokes, G. L. Ridgway and M. W. D. Wren (1993). Clinical Microbiology. 7th edition. Edward Arnold. A division of Hodder and Stoughton.

Huge W.B. and Russell A.D.(1989). Pharmaceutical Microbiology. IV edition. Blackwell Scientific Publication, Oxford.

J. C. Collee, J.P., Duguid, A. C. Fraser, B.P. and Marimon (1989). Mackie and Mc Carteny Practical Medical Microbiology – 13th Edition, Churchill Livingstone.

Joan stokes, E. Ridgway, G. L and Wren, M.W.D. (1993). Clinical Microbiology(7th edition). Edward Arnold.A division of Hodder and stoughton.

Schaechter, M. Medoff, G. and Eisenstein, B.C.(1993). Mechanism of Microbial Diseases. 2nd edition. Williams & Wilkins, Baltimore.

Topley & Wilson's (1990). Principles of Bacteriology, Virology and Immunity, VIII edition, Vol.III Bacterial Diseases, Edward Arnold, London.