



## COURSE OUTCOME – MICROBIOLOGY

At the end of the course the students will be able to –

- 1) State and explain the infective microorganisms (Bacteria, Viruses, Fungi, and Parasites) and also opportunistic microorganisms causing diseases in humans and describe their host – parasite relationship with humans.
- 2) Describe the etiopathogenesis of the diseases produced by pathogenic microorganisms and correlate their clinical manifestations with the etiological agents.
- 3) Emphasize on the various sources of infections, modes of transmission of pathogenic and opportunistic organisms in disease transmission also insect vectors responsible in disease transmission.
- 4) Operate and use the light compound microscope.
- 5) Demonstrate and interpret the findings of common laboratory techniques like various staining methods, wet mounts, and peripheral smears for demonstration of microorganisms from various clinical specimens.
- 6) Describe the mechanisms of immunity and infections.
- 7) Apply the knowledge in the diagnosis, treatment, control and prevention of the diseases caused by pathogenic microorganisms and also notifiable communicable diseases.
- 8) Apply the knowledge on antimicrobial agents for use of antimicrobial sensitivity test and interpret the reports thus useful for treatment of infections caused by pathogens.
- 9) Apply the principles of immunology and their use in diagnosis of infections.

10) State national immunoprophylaxis schedule for prevention of most prevalent communicable and infectious diseases.

11) Explain, apply and practice the methods of disinfection and sterilization so as to control and prevent hospital associated infections (HAIs) as well as community acquired infections (CAIs).

12) Recommend laboratory investigations for the commonest prevalent infections (bacterial, Fungal, Parasitic and viral).

13) Apply the knowledge of universal safety precautions and hospital infection control measures while performing any therapeutic, diagnostic, prophylactic interventions on the patients.

14) State and abide to the guidelines and rules of biomedical waste management in hospital.