

**SARDAR PATEL UNIVERSITY**  
**Programme: BSC (MICROBIOLOGY)**  
**Semester: VI**  
**Syllabus with effect from: November 2013**

<b>Paper Code:</b> US06CMIC04	<b>Total Credit: 3</b>
<b>Title Of Paper:</b> Medical Microbiology	

Unit	Description in detail	Weighting (%)
<b>1</b>	<b>Hematology:</b> Components of Blood & their functions, Hematopoiesis, Hemostasis & Anticoagulants. Immuno hematology. ABO & Rh Blood Group System. Coombs Test Principles of Blood Banking, Safety in Blood Transfusion.	
<b>2</b>	<b>Clinical Microbiology:</b> Collection, Handling & Transport of Clinical Specimen, Methods of Diagnosis, Microscopy, Identification of microorganisms from specimen. Bacteriophage Typing, Serotyping, Antibigram, Rapid Identifying Techniques <b>Techniques in Clinical Immunology:</b> Immunodiffusion, Immunoelectrophoresis, ELISA, Western Blot, RIA Immunofluorescence.	
<b>3</b>	<b>Clinical Biochemistry</b> Kidney function test : Significance of Urea, Creatinine, Uric acid. Liver function test : Significance of Bilirubin, SGPT, SGOT, Alkaline Phosphatase, Total Proteins, Albumin, Globulin Cardiac function test : Phosphokinase, Cholesterol, Triglycerides, Serum Electrolytes, Blood Principles of Epidemiology. Vaccines, Bioterrorism.	
<b>4</b>	Causative Agent, Symptoms, Pathogenesis, Transmission, Laboratory diagnosis, Treatment & prevention of Typhoid, Tuberculosis, AIDS, Malaria Hospital Infections .	

**Basic Text & Reference Books:**

- Text Book of Microbiology - Ananthnarayan & Paniker
- Microbiology - Prescott, Harley & Klein.
- Medical Laboratory Technology - K.L.Mukherjee.
- Text Book of Medical Laboratory Technology - P.B.Godkar
- Medical Microbiology - Murray and Drew.

