

Semester	4
Course	Skill
Paper Code	S2MB230421P
Paper Title	Clinical Biochemistry
No. of Credits	
Theory / Practical / Composite	Practical
Minimum No. of preparatory hours per week a student has to devote	
Number of Modules	No modules
Syllabus	<p>Lipid Profile Test:</p> <ul style="list-style-type: none"> • Estimation of triglycerides • Estimation of serum cholesterol (Total) • Estimation of serum HDL/LDL <p>Liver Function Test:</p> <ul style="list-style-type: none"> • Estimation of total protein and albumin, globulin • Estimation of aminotransferases/transaminases (SGOT and SGPT) • Estimation of serum alkaline phosphatase • Estimation of bilirubin • Estimation of serum amylase <p>Blood Sugar tests:</p> <ul style="list-style-type: none"> • Estimation of blood glucose • Demonstration of glycosylated haemoglobin • Study of basic ideas on clinical markers of diabetes, insulin resistance (Theory) <p>Kidney and Pancreatic Function test:</p> <ul style="list-style-type: none"> • Estimation of blood urea • Estimation of serum creatinine • Estimation of serum amylase • Estimation of serum calcium <p>Advanced Laboratory Tests:</p> <ul style="list-style-type: none"> • Study of important cancer markers e.g, PSA, PAP, Alpha-fetoprotein, Bladder Tumor Antigen, CA27.29, CA19-9, CA-125, Chromogranin A, Calcitonin, CEA etc • Study of clinically important hormones • Study of immune markers (inflammatory molecules) • Demonstration of HIV test

Learning Outcomes	<ul style="list-style-type: none"> • To develop the concept of clinical biochemistry through hands on training. • To learn about various parameter testing as well as advanced laboratory testings. 	
Reading/Reference Lists	<ul style="list-style-type: none"> • Clinical Biochemistry. Nanda Maheswari. 3rd edition JAYPEE • Clinical Biochemistry. Murphy, Srivastava and Deans. • Clinical Biochemistry and Pharmaceutical Chemistry by Dr Satarupa Thakurta. • Clinical Biochemistry, an illustrated Color text, by Allan Gaw et al, publisher-Churchill Livingstone. 	
Evaluation	CA:40 End sem:7 Attendance:3	
Paper Structure for Theory Semester Exam	NA	