

QP Code: 202383

Reg . No.....

**Second Year M.Sc. MLT Degree Examinations November 2017  
(Biochemistry)**

PAPER – VI DIAGNOSTIC BIOCHEMISTRY, RECENT ADVANCES IN CLINICAL CHEMISTRY AND  
BIOSTATICS

**Time: 3 hrs.**

**Max. marks: 100**

- *Answer all questions*
- *Draw diagrams wherever necessary*

**Essays:**

**(10x10 = 100)**

1. Mention the composition of gastric juice. Explain any four gastric function tests with an emphasis on principle and clinical significance. (2+8)
2. Mention the various thyroid function tests. Give the reference intervals and explain the significance of assays of hormones in differential diagnosis of thyroid disorders. (2+8)
3. Explain the importance of serum amylase, urine amylase and serum lipase with emphasis on principles of assay methods, reference intervals and clinical significance
4. Classify the liver function tests. Explain the tests based on excretory and detoxification functions of liver. (2+6+2)
5. What are acute phase proteins. Give examples. Explain the diagnostic importance of any three acute phase proteins. Add a note on assay methods for acute phase proteins. (1+1+6+2)
6. Mention the causes, laboratory findings and compensatory mechanisms of metabolic acidosis and respiratory acidosis. Add a note on significance of anion gap. (4+4+2)
7. Mention the principles of assay methods for lead, lithium and digoxin in blood. What is the clinical significance of assays of these substances. (6+4)
8. Define and briefly explain: mean, median, mode and standard deviation. Name the statistical tests which analyze of significance and correlation. (6+4)
9. How is quality control serum prepared. Explain the concepts of internal quality control and external quality control. (2+4+4)
10. Explain the concept and procedure of evaluation of a method and method comparison

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