(For the candidates admitted from 2012-2013 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

Third Semester

Medical Biochemistry

CLINICAL BIOCHEMISTRY

Time: Three hours Maximum: 75 marks

SECTION A —  $(5 \times 5 = 25 \text{ marks})$ 

Answer ALL questions.

All questions carry equal marks.

1. (a) Explain the collection of blood by arterial and venous puncture methods.

Or

- (b) What is the objectives of quality control methods?
- 2. (a) How does the liver influence blood glucose levels?

Or

(b) Write the pathophysiology of Type I diabetes mellitus.

3. (a) Explain the biochemical lesion, clinical features and management of Type II hyperlipo proteinaemia.

Or

- (b) Discuss viral induced hepatitis and biochemical findings in hepatitis.
- 4. (a) How is ammonia transported to the liver for conversion to urea?

Or

- (b) Define Clearance. How is urea clearance determined?
- 5. (a) What are the functions of bile? How does hepatic bile differ from gallbladder bile?

Or

(b) Explain the clinical features of Crigler-Najjar syndrome.

SECTION B —  $(5 \times 10 = 50 \text{ marks})$ 

Answer ALL questions.

All questions carry equal marks.

6. (a) Write a note on Lab errors, Reference range and preservation of blood specimens.

Or

(b) Discuss the alternations in CSF enzymes in various clinical conditions.

7. (a) Elucidate the role of various hormones in the maintenance of blood glucose homeostasis.

Or

- (b) What is glucose tolerance test? Describe the features and significance of this test.
- 8. (a) Give a detailed account of lipid storage diseases.

Or

- (b) Describe the fatty liver types and their biochemical features.
- 9. (a) Explain in detail the primary and secondary Gout.

Or

- (b) Discuss the various test used to assess renal function.
- 10. (a) What are the tests for assessing the function of the liver? Explain the use of hippuric acid test.

Or

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(b) Discuss the most common foetal abnormalities with a note on foetal monitoring.