Reg. No.										

MANIPAL UNIVERSITY

SECOND YEAR B.Sc. M.L.T. DEGREE EXAMINATION – JUNE 2015

SUBJECT: CLINICAL BIOCHEMISTRY

Monday, June 15, 2015

Time: 10:00-13:00 Hrs. Max. Marks: 80

✍ **Answer ALL questions. Draw diagrams wherever necessary.**

1A. Enumerate the panel of renal function tests. Describe clearance test in detail.

1B. Discuss the serum protein electrophoresis with its interpretation and clinical significance.

1C. Describe the mechanism of regulation of blood sugar level. Add a note on diabetes mellitus.

(10 marks × 3 = 30 marks)

2. **Write detailed notes on:**

2A. Regulation of pH by renal mechanism

2B. Jaundice

2C. Cholesterol

2D. Posterior pituitary hormones

2E. Tumor markers

(6 marks × 5 = 30 marks)

3. **Write short notes on:**

3A. Gout

3B. Potassium

3C. Metabolic acidosis

3D. Diabetic ketoacidosis

3E. ALP

(4 marks × 5 = 20 marks

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MANIPAL UNIVERSITY

SECOND YEAR B.Sc. M.L.T. DEGREE EXAMINATION – JUNE 2015

SUBJECT: HAEMATOLOGY AND CLINICAL PATHOLOGY

Wednesday, June 17, 2015

Time: 10:00-13:00 Hrs. Max. Marks: 80

Answer ALL questions. Draw diagrams wherever necessary.

1A. Name the tests done on urine in a patient with jaundice. Add a note on these tests with their clinical significance.

1B. Describe the structure of hemoglobin. Mention the different methods of hemoglobin estimation. Write in brief the standard method of hemoglobin estimation.

1C. Discuss principle, procedure, normal values and clinical significance of ESR.

(10 marks × 3 = 30 marks)

2. **Write detailed notes on:**

2A. Constituents of blood

2B. Skin puncture

2C. CML

2D. Factor VIII assay

2E. Reticulocyte count

(6 marks × 5 = 30 marks)

3. **Write short notes on:**

3A. Benedict's test

3B. Casts in urine

3C. Serum and plasma

3D. Hemoglobin degradation

3E. Clot retraction

(4 marks × 5 = 20 marks)

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MANIPAL UNIVERSITY

SECOND YEAR B.Sc. M.L.T. DEGREE EXAMINATION – JUNE 2015

SUBJECT: IMMUNOHAEMATOLOGY

Friday, June 19, 2015

Time: 10:00-11.30 Hrs. Max. Marks: 40

✍ **Answer ALL the questions. Draw diagram wherever necessary.**

1. List the test done under compatibility testing. Explain about coomb's cross match.

(4+6 = 10 marks)

2. **Write detailed notes on:**

2A. Adverse donor reaction

2B. Antigens and antibodies of Rh group

2C. Preparation and Indication of FFP

2D. IgG

2E. DCT

(6 marks × 5 = 30 marks)