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MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

SECOND YEAR B.Sc. M.L.T. DEGREE EXAMINATION – AUGUST 2006

SUBJECT: CLINICAL BIOCHEMISTRY

Monday, August 07, 2006

Time: 3 Hrs. Max. Marks: 80

- Answer all questions. Draw diagrams if necessary.
- Discuss in detail about the regulation of blood glucose in the body. Explain the effects of hormones in maintaining the glucose level in the blood.
- 2. Define enzyme. Discuss about the enzymes indicating hepatocellular damage.
- What are the important blood buffer systems in the body? Discuss the role of different buffer systems in the regulation of blood pH.

 $(10\times3 = 30 \text{ marks})$

Write detailed notes on:

 $(5 \times 7 = 35 \text{ marks})$

- 4A. Intravenous GTT.
- 4B. Lipid profile.
- 4C. Multiple myeloma.
- 4D. Hyperkalemia.
- 4E. Respiratory regulation of pH.
- 4F. Isoenzymes.
- 4G. Ketone bodies.
- 5. Write short notes on:

 $(3\times5=15 \text{ marks})$

- 5A. HbS
- 5B. Testosterone.
- 5C. Acid phosphatase.
- 5D. Metabolic alkalosis.
- 5E. Glucagon.

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MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

SECOND YEAR B.Sc. M.L.T. DEGREE EXAMINATION - AUGUST 2006

SUBJECT: HAEMATOLOGY AND CLINICAL PATHOLOGY

Tuesday, August 08, 2006

Answer all questions.

Time: 3 Hrs.

Max. Marks: 80

 Discuss the normal coagulation cascade with the help of flow chart. Discuss the principle and procedure of test to check the efficiency of extrinsic pathway.

(7+(2+6) = 15 marks)

2. Define ESR. Mention various methods of ESR estimation. Discuss the factors affecting ESR.

(2+3+7 = 12 marks)

- 3. Discuss the principle, procedure and interpretation of the following tests.
- 3A. Osmotic fragility test.
- 3B. LE cell phenomenon.
- 3C. Benzedine test.

 $(6 \times 3 = 18 \text{ marks})$

- 4. Write short notes on:
- 4A. Preparation of Leishman stain.
- 4B. Urine findings in nephrotic syndrome.
- 4C. CSF findings in pyogenic meningitis.
- 4D. Stool findings in amoebic dysentery.

 $(5\times4 = 20 \text{ marks})$

- 5. Write short notes on:
- 5A. Preparation and uses of Buffy coat.
- 5B. Reticulocyte count.
- 5C. Principle of electric impedence in cell counters.

 $(5\times3 = 15 \text{ marks})$

Reg. No.

MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

SECOND YEAR B.Sc. M.L.T. DEGREE EXAMINATION - AUGUST 2006

SUBJECT: IMMUNOHAEMATOLOGY AND BLOOD BANKING

Wednesday, August 09, 2006

Time: 11/2 Hrs.

Max. Marks: 40

- Answer all questions.
- 1. Describe the complications of blood transfusion and its prevention.

(10 marks)

- Write short note on:
- 2A. Plasmapheresis.
- 2B. Lewis blood group system.
- · 2C. Crossmatching.
 - 2D. Autoantibodies.
 - 2E. Storage of blood.

 $(5\times6=30 \text{ marks})$