

**UNIVERSITY OF JAFFNA, SRI LANKA**  
**BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES**  
**SECOND YEAR SECOND SEMESTER EXAMINATION- AUGUST 2016**

**MLSHE 2235 HAEMATOLOGY II**

**Paper- II**

**Date: 19.08.2016**

**Time: 2 Hours**

**ANSWER ALL EIGHT QUESTIONS.**

1.

- 1.1. Draw and label the pathway of normal haemostasis. (40 marks)
- 1.2. What are the investigations available to investigate each pathway? (30 marks)
- 1.3. Describe how you would prepare the most suitable anticoagulant to investigate a patient with a coagulation disorder. (30 marks)

2.

- 2.1. Mention the ideal anticoagulant used for osmotic fragility. (10 marks)
- 2.2. Mention two (2) preliminary tests you would do before performing osmotic fragility test. (30 marks)
- 2.3. Briefly describe the method for the osmotic fragility test. (30 marks)
- 2.4. How will you interpret the osmotic fragility test results? (30 marks)

3.

- 3.1. Briefly describe the function of platelets in the haemostasis process. (40 marks)
- 3.2. List three (3) tests to investigate platelet function defects. (30 marks)
- 3.3. Briefly describe the principle of one the tests you mentioned in 3.2. (30 marks)

- 4.
- 4.1. List three (3) conditions which give rise to hemosiderinuria. (15 marks)
  - 4.2. Briefly describe the pathophysiology of hemosiderinuria. (45 marks)
  - 4.3. Describe how you will detect hemosiderin in urine. (40 marks)
- 5.
- 5.1. Briefly describe the classification of leukemia. (50 marks)
  - 5.2. Mention the two (2) methods/techniques available for further sub classification of these diseases. (20 marks)
  - 5.3. List two (2) reasons why the methods you mentioned in 5.2 is useful. (30 marks)
- 6.
- 6.1. List five (5) pre-analytical errors in coagulation test and mention what steps you would take to prevent each error that you mentioned. (60 marks)
  - 6.2. List three (3) analytical errors in coagulation test. (30 marks)
  - 6.3. List two (2) post-analytical errors in coagulation test. (10 marks)
- 7.
- 7.1. Describe the classification of disorders of haemoglobin. (40 marks)
  - 7.2. List three (3) red cell morphological changes seen in disorders of haemoglobin. (30 marks)
  - 7.3. List three (3) investigations available for the diagnosis of disorders of haemoglobin. (30 marks)
8. Describe the important steps in the preparation of normal control plasma for coagulation studies. (100 marks)