

February 2014.



UNIVERSITY OF JAFFNA, SRI LANKA

BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES

FOURTH YEAR FIRST SEMESTER EXAMINATION- JULY 2013

MLSCH 4101 CLINICAL HISTOTECHNOLOGY

PAPER II

DATE: 02.08.2013

TIME: 2½ Hours

ANSWER ALL EIGHT QUESTIONS

1.
 - 1.1 List the factors affecting fixation. (30 marks)
 - 1.2 Briefly describe how these factors affecting fixation. (70 marks)

2. Write short notes on following.
 - 2.1 Knife sharpening. (30 marks)
 - 2.2 Freezing microtome. (30 marks)
 - 2.3 Vacuum embedding. (40 marks)

3.
 - 3.1 List 3 main steps in tissue processing observed in automated tissue processor. (15 marks)
 - 3.2 Briefly describe how you achieve these steps in automated tissue processor giving examples of reagents used in each step. (60 marks)
 - 3.3 List the advantages of automated tissue processor. (25 marks)

4.
 - 4.1 Briefly describe the factors that should be considered in transporting histology specimens to Histopathology laboratory. (50 marks)
 - 4.2 Describe your duties as the MLT in the sample receiving counter. (50 marks)

- 5.
- 5.1 What is the mechanism of action in the commonly used fixative formalin in tissue fixation? (20 marks)
- 5.2 List the advantages and disadvantages of formalin fixative. (40 marks)
- 5.3 List the properties of a good fixative. (40 marks)
- 6.
- 6.1 Describe briefly the principle steps in section cutting and getting sections in floating water bath. (60 marks)
- 6.2 Explain the terms “chattering” and “scores” and mention how these artifacts are produced. (40 marks)
- 7.
- 7.1 List 5 fluid specimens received in the Histopathology laboratory for cytology. (20 marks)
- 7.2 What are your duties as the assisting MLT in fine needle aspiration cytology (FNAC) procedure. (Detailed description of staining procedures is not required.) (40 marks)
- 7.3 What will you do if you accidentally expose to a needle prick injury while assisting in FNAC procedure. (40 marks)
- 8.
- 8.1 What are the 3 main types of dyes used in staining procedures? (15 marks)
- 8.2 Briefly describe them giving one example to each category. (60 marks)
- 8.3 Mention the special staining methods used to demonstrate various microorganisms and give expected results in each of them. (25 marks)