

The Open University of Sri Lanka
Bachelor of Medical Laboratory Sciences (B.MLS)
MLU1249- Histological Techniques and Cytology
Semester 01- Academic year 2015/2016



No Book Test 01

Return your question paper with the answer sheet

Date: 21.10.2015	Duration – 1 1/2 hours
Time: 1.30 p m – 03.00 p m	Registration No.....

Please read the following instructions carefully before you answer the paper.
(100 marks)

Part - A (10 marks)

You are given 10 matching questions. Match the answers given in the column B with the descriptions given in the column A. Write the correct letter in the given space.

Part B (50 marks)

You are given 2 short answer questions. Each question contains four parts. Answer all the questions in given spaces.

Part C (40 marks)

There is one Structured Essay Question. The question contain 4 parts. Answer all the questions in given spaces.

Good Luck!

Part A – 10 True/ False (10 Marks)

State whether “True” or “False” by underlining the following statements in the given bracket of each statement.

01	Histotechnology is processing of tissues in such a manner as to enable microscopy / study of the tissue	(True/ False)
02	Immunofluorescence can be performed in a fixed tissue	(True/ False)
03	If multiple biopsies are sent from the same patient, each specimen should be sent in a separate container indicating the sites of biopsy.	(True/ False)
04	Paraffin blocks and slides are kept permanently where possible, or for the lifetime of the patient. In practice in local centers, where storage facilities and space are limited, these are kept for up to 10 years.	(True/ False)
05	Putrefaction is bacterial colonization leading to further destruction of tissue structure by bacterial enzymes, together with production of smelly sulfur-containing gases	(True/ False)
06	70% ethanol is a cross linking fixative	(True/ False)
07	Bouin's fixative is a good general fixative for connective tissue stains, and gastrointestinal tract biopsies.	(True/ False)
08	Acetic acid is not widely used for nuclear stains	(True/ False)
09	10% formal saline is a cross linking fixative	(True/ False)
10	Pure formaldehyde is a gas	(True/ False)

Part B – Short Answer Questions (50 Marks)

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1.1. Briefly list 06 major steps involved in preparation of a histological slide (05 marks)

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- 1.2. List 04 special investigation methods which can be carried out using tissue samples, additionally to the Histo-technology (05 marks).

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- 1.3. Briefly list five (05) information should be mentioned in a histopathological sample (05marks).

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- 1.4. Histopathological samples (tissue, blocks and slides) are retained for several purposes.

Briefly list 04 (four) purposes of sample retention (10 marks)

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2.

2.1 List three types of chemical fixatives depending on the action? (05 marks)

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2.2 List 05 (five) examples for coagulant fixatives (05 marks).

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2.3 List five factors affect for protein denaturation of tissue sample in a fixative solution (05 marks).

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2.4 List 04 (four) main ingredients using for preparation of 10% formal saline (10 marks).

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Part D (30 marks)
Structured Essay Questions
Answer all the questions in given spaces.

Answer all the questions in given spaces.

1.

- 1.1. When a histological specimen is received in the lab, the receiving Medical Laboratory Technologist should perform special checks before accepting the sample. Briefly describe the special checks should follow in accepting a histological sample in the given space.

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1.2. Briefly explain aim of fixation of a tissue sample.

1.3. Briefly explain mechanism of coagulant fixative.

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1.4. List 05 (five) disadvantages of Mercuric chloride as a fixative (using five points)

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