



The Open University of Sri Lanka
Bachelor of Medical Laboratory Sciences (B.MLS)
MLU1249- Histological Techniques and Cytology
Semester 02- Academic year 2015/2016
Final Examination
Return your question paper with the answer sheet

Date: 29.07.2016

Duration – 3 hours

Time: 9.30 a.m. –12.30 p.m.

Index No

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

Part A: Multiple Choice Questions (30 marks)

There are thirty (30) multiple choice questions in this part, each question with four responses. Select the correct response and encircle in the answer paper.

Part B: Structured Essay Questions (30 marks)

You are given four (04) structured essay questions. Answer all the questions.

Part C: Essay Question (40 marks)

There are two (02) essay questions. Answer all the questions in given papers.

Good Luck!

Part B – Structured Essay Questions.

(30 marks)

Answer all the questions.

1.

1.1 List three main stages of processing in an Automated Tissue Processor? **(03 marks)**

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1.2 Mention the aim of the each step mentioned in 1.1. **(03 marks)**

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1.3. A-What is the most commonly used clearing agent? **(01 1/2 marks)**

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B- Mention one advantage and one disadvantage of the agent that you mentioned in A.

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.....

2.

2.1. Mention the aim of adding an oxidizing agent during ripening process of haematoxylin? **(01 mark)**

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2.2. List the two types of ripening methods for haematoxylin mentioning one example for each method. **(04 marks)**

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2.3 Name the oxidizing agent used in Harris's haematoxylin? **(1/2 marks)**

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2.4 Mention a reagent that can be used for following stages in staining with Harris's haematoxylin? **(02 marks)**

A-Differentiation:.....

B-Blueing:

3.

3.1 Briefly describe the term exfoliative cytology? **(01 mark)**

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3.2 Give two examples for exfoliative cytology samples. **(01 mark)**

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3.3 Name two types of smears prepared from Fine Needle Aspiration (FNA) for cytological assessment. **(02 marks)**

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3.4 Name two staining methods that can be used for each type of smears mentioned above in 3.2. **(02 marks)**

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3.5 Give three limitations of FNAC. **(1 ½ marks)**

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4.

4.1. Which area of the cervix should be sampled when doing a pap smear test? (1/2 marks)

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4.2 Name the staining method used for cervical smears and list the dye solutions used in this method? (03 marks)

.....

4.3 Fill the following table with targeted tissue component and the result in relation to above mentioned (in 4.2) stain components. (04 marks)

Stain component	Tissue component/organelle stained	Result/Colour of The Tissue component/organelle Following staining

Part – C: Essay Question.

(40 marks)

Answer all the questions.

1.

- i) Write a short note on staining principle of haematoxylin and eosin stain. (10 marks)
- ii) Compare manual and automated tissue processing. (10 marks)

2. Describe how you prepare direct smears from the fine needle aspirates using pull-apart technique. (20 marks)