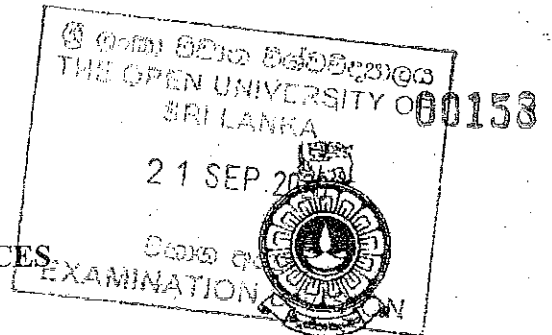


THE OPEN UNIVERSITY OF SRI LANKA  
FACULTY OF HEALTH SCIENCES  
DEPARTMENT OF MEDICAL LABORATORY SCIENCES  
ACADEMIC YEAR 2019/2020 – SEMESTER I

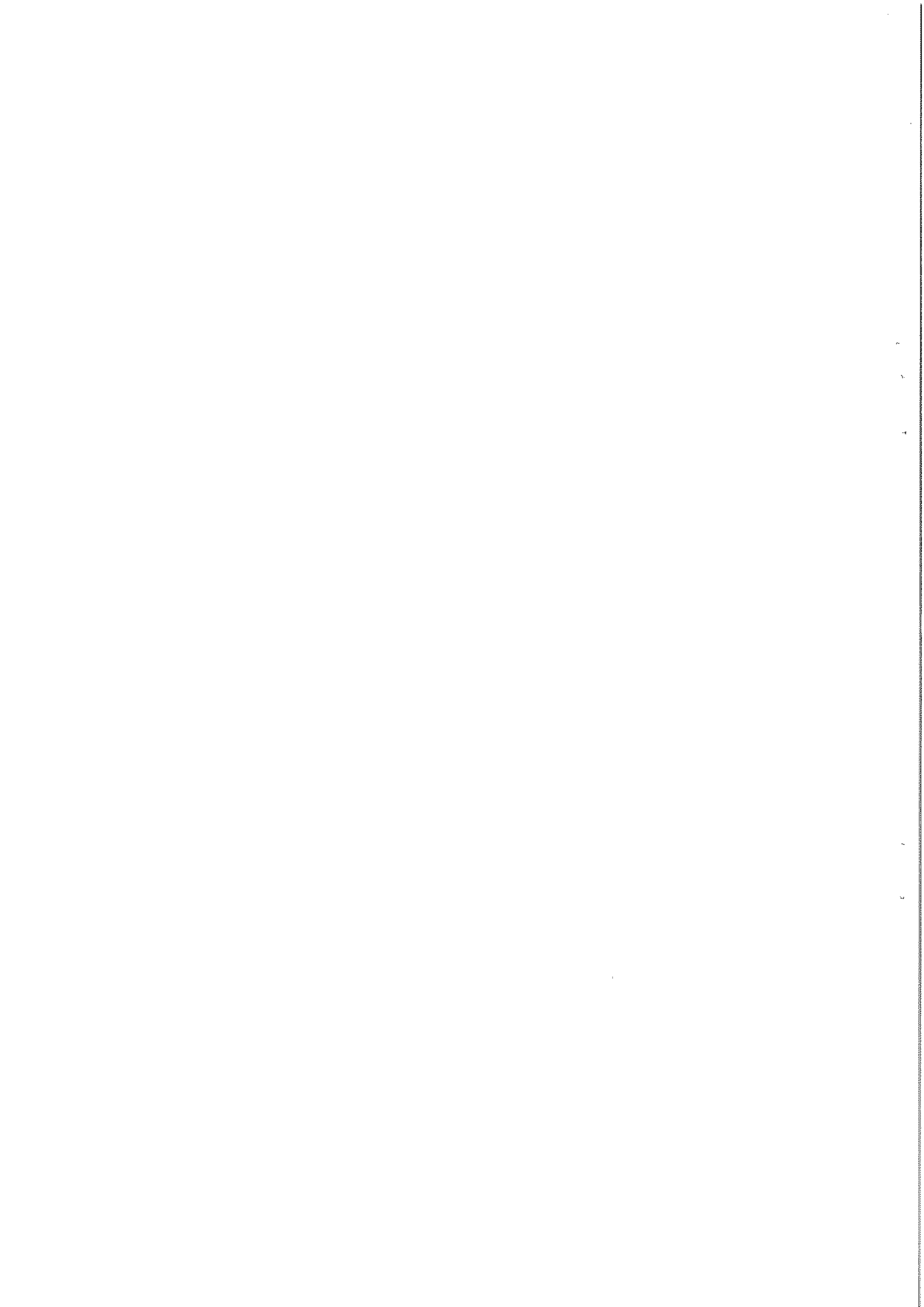


BACHELOR OF MEDICAL LABORATORY SCIENCES HONOURS  
MDU4406 – HISTOPATHOLOGY  
FINAL EXAMINATION

DURATION: THREE HOURS

DATE: 21<sup>ST</sup> SEPTEMBER 2020

TIME: 9.30 AM – 12.30 PM



**Part B: Structured Essay Questions (40 marks)**

**Q1**

1.1 Briefly describe the mechanism of action when tissues are immersed in formalin. (5 marks)

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1.2 State the fate of the tissue when it is stored in formalin for a long-time. (2 marks)

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1.3 What measures must be taken to minimize carryovers in cut up? (3 marks)

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**Total - 10 marks**

**Q2**

2.1 Briefly explain why the tissue for histological evaluation should not be diathermized.

(1½ marks)

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2.2 Outline the important steps in the gross examination of tissue specimens.

(3 marks)

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2.3 List **four (04)** factors influencing the rate of decalcification?

(2 marks)

- i) .....
- ii) .....
- iii) .....
- iv) .....

2.4 What would you do if you find some unexpected calcium deposits in tissue during paraffin sectioning?

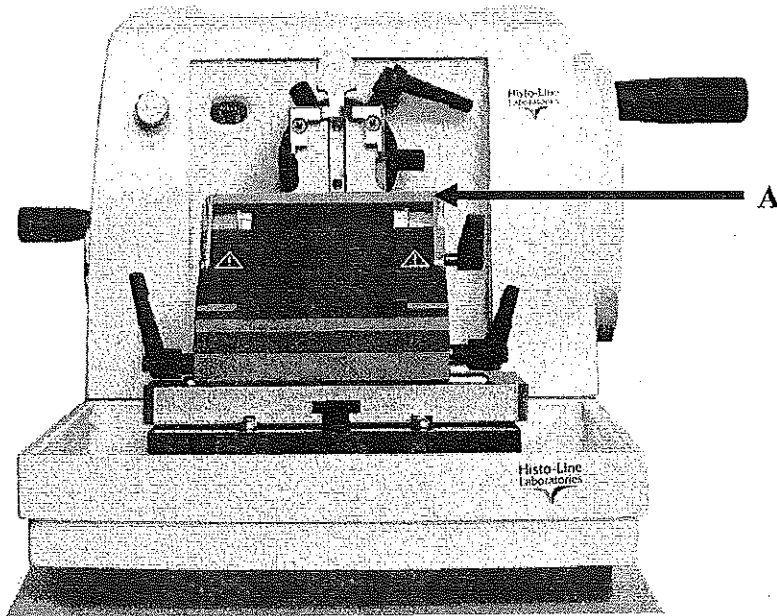
(3½ marks)

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**Total - 10 marks**

**Q3**



3.1 Identify the type of the above instrument?

(1/2 marks)

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3.2 Write down the mechanism of action of the above instrument mentioned in 3.1.

(2 marks)

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3.3 List **five (05)** advantages of above the above instrument mentioned in 3.1. (2 ½ marks)

- i) .....
- ii) .....
- iii) .....
- iv) .....
- v) .....

3.4. Identify “A” and its shape. (1 mark)

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3.5 What do you mean by “honing” and “stropping”? (4 marks)

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**Total - 10 Marks**

**Q4**

4.1 If alcohol that has been used to dehydrate a fairly large piece of biopsy is mixed with water and the resulting liquid is turbid. Give the reason. (1 mark)

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4.2 What is the purpose of use of a positive and negative controls when performing stains? (1½ marks)

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4.3 List **three (03)** properties of a positive control. (1½ marks)

- i) .....
- ii) .....
- iii) .....

4.4 State **three (03)** types of connective tissue fibres and indicate the most suitable staining methods that can be used to demonstrate them in tissues. (3 marks)

	Substances	Staining method
i)		
ii)		
iii)		

4.5 It is sometimes necessary to remove the coverslip from a mounted section. Devise a reasonable procedure by which such a section could be made ready to stain in an aqueous solution of a dye. (3 marks)

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**Total - 10 Marks**

**Part C: Essay Questions (30 marks)**

1. Describe the measures that contribute for implementation of quality assurance in pre-analytical phase in a histopathology laboratory. (15 marks)

2. Briefly describe the steps of performing indirect method of immunohistochemistry for a surgically removed breast biopsy. (15 marks)

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