



File

FACULTY OF ALLIED HEALTH SCIENCES, UNIVERSITY OF RUHUNA  
 Department of Medical Laboratory Science  
 Year End Examination – Year 3 - 8<sup>th</sup> Batch  
 Histopathology & Cytopathology (MLS 3101) – SEQ

Date: 08<sup>th</sup> November

Time: 09.00 a.m. - 11.00 a.m.

Duration: 2 hours

Answer only four questions.

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1. Four slides (A, B, C and D) prepared by a Medical Laboratory Technologist have been rejected by the Histopathologist of the Department of Pathology in a private medical laboratory. Details of the rejected slides are given in the table.

Slide	Specimen type	Reason for the rejection
A	Gall bladder	Only the external layer of the gall bladder is visible.
B	Breast tissue	Absence of full face
C	Biopsy sample	Presence of air bubbles disturbing evaluation
D	Appendix	Presence of folds disturbing evaluation

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- 1.1 Briefly describe the possible causes for each of the above mentioned reasons for the rejection of slides. (40 marks)
- 1.2 Explain how you would correct the above errors mentioned for slides A to D. (60 marks)

2. Special stains are used for the identification of specific tissues in histopathology.

- 2.1 Briefly describe the basic principle of the following special stains.
- 2.1.1. Perl's stain (20 marks)
  - 2.1.2. Alcian blue stain (20 marks)
  - 2.1.3. Van Gieson stain (20 marks)
- 2.2 List three stains used for counter staining in special stains. (15 marks)
- 2.3 Discuss the value of counter staining in special stains. (25 marks)

- 3.

- 3.1 List five different non-gynecological cytology samples received to the laboratory for assessment. (20 marks)
- 3.2 Describe the instructions that should be followed in the transportation of cytology specimens. (40 marks)
- 3.3 Describe how you would assure laboratory safety while you are working in a cytology laboratory. (40 marks)



- 4.
- 4.1 List the classic signs of acute inflammation. *(10 marks)*
  - 4.2 Describe the pathological basis of development of above mentioned signs in acute inflammation. *(60 marks)*
  - 4.3 Define necrosis. *(10 marks)*
  - 4.4 List **four** types of necrosis giving examples for each type. *(20 marks)*
5. Write short notes on the following.
- 5.1 Antigen retrieval in immunohistochemistry *(30 marks)*
  - 5.2 Dehydration during preparation of tissue for histological assessment *(40 marks)*
  - 5.3 Positive controls in histopathology *(30 marks)*