



MASENO UNIVERSITY
UNIVERSITY EXAMINATIONS 2013/2014

SECOND YEAR FIRST SEMESTR EXAMINATIONS FOR THE
DEGREE OF BACHELOR OF SCIENCE IN MEDICAL
LABORATORY SCIENCE AND BACHELOR OF SCIENCE IN
MEDICAL BIOTECHNOLOGY WITH INFORMATION
TECHNOLOGY
(MAIN CAMPUS)

PMT 211: MEDICAL HISTOLOGY

Date: 26th November, 2013

Time: 11.00 a.m. - 1.00 p.m.

PMT 211: MEDICAL HISTOLOGY

BSC. MEDICAL BIOTECHNOLOGY & BSC MEDICAL LABORATORY SCIENCE

END OF SEMESTER EXAM DURATION: 2 HRS

Section A

Answer all the questions in this section. Clarity will be awarded. Use diagram where necessary.

1. Explain the histological strategies for identifying epithelial cells. (4 marks)
2. Explain any FIVE qualities of a good embedding medium. (4 marks)
3. Explain the importance of tissue staining in histology and why H&E is the most common stain used in histology? (4 marks)
4. Describe histological features of thyroid gland. (4 marks)
5. Name and explain a function of any FOUR cell types found in the gastric gland. (4 marks)
6. Describe any FIVE factors which will affect tissue fixation process. (4 marks)
7. Describe the histological differences between the bone and cartilage (4 marks)
8. Draw a schematic diagram showing the functional compartments of the lymph node. (4 marks)
9. Describe the major histological features of the heart muscles. (4 marks)
10. Describe the microanatomy of the uterus. (4 marks)

Section B

Answer question 11 and ANY OTHER question in this section. Use diagrams where necessary.

11. Discuss tissue processing for histological examination using light microscope under the following sub-headings:
 - a) Tissue fixation and its importance (5 marks)
 - b) Bone decalcification and its importance (5 marks)
 - c) Tissue embedding and its importance (5 marks)
 - d) Tissue staining and its importance (5 marks)
12. Discuss body tissues under the following sub-headings:
 - a) Histological differences between bone and cartilage (5 marks)
 - b) Cells of connective tissues and their functions (5 marks)
13. Discuss histology of the lungs under the following sub-headings:
 - a) Features of the bronchioles (5 marks)
 - b) Histological features of the trachea (5 marks)