



MURANG'A UNIVERSITY OF TECHNOLOGY

SCHOOL OF PURE, APPLIED AND HEALTH SCIENCES

DEPARTMENT OF HEALTH SCIENCES

UNIVERSITY ORDINARY EXAMINATION

2023/2024 ACADEMIC YEAR

THIRD YEAR SECOND SEMESTER EXAMINATION FOR BACHELOR

OF SCIENCE IN MEDICAL LABORATORY SCIENCES

MML 310 – HISTOPATHOLOGY

DURATION: 2 HOURS

INSTRUCTIONS TO CANDIDATES:

1. Answer question ONE any other two questions.
2. Mobile phones are not allowed in the examination room.
3. You are not allowed to write on this examination question paper.

SECTION A (30 MARKS) – ANSWER ALL QUESTIONS IN THIS SECTION

QUESTION ONE (30 MARKS)

- a) State the principle of the following special techniques:
- i. Micrometry (2 marks)
 - ii. Photomicrography (1 mark)
 - iii. Autoradiography (2 marks)
- b) Mention **FIVE** causes of disturbances in cell metabolism. (5 marks)
- c) List **FIVE** conditions resulting from disturbances in cell metabolism. (5 marks)
- d) (i) Define embalming (2 marks)
- (ii) State **THREE** reasons why embalming is important. (3 marks)
- e) Using **ONE** suitable example in each case, indicate the **FIVE** categories used to classify histopathology specimens. (5 marks)
- f) Tabulate **FIVE** differences between benign and malignant neoplasms. (5 marks)

SECTION B (40 MARKS) – ANSWER ANY TWO QUESTIONS IN THIS SECTION

QUESTION TWO (20 MARKS)

Briefly describe the diagnostic techniques used in studying pathology. (20 marks)

QUESTION THREE (20 MARKS)

Discuss cellular reactions to injury. (20 marks)

QUESTION FOUR (20 MARKS)

- a) Describe organization of histopathology laboratory. (10 marks)
- b) Discuss cellular and vascular events that occur in acute inflammation. (10 marks)