



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2022/2023 ACADEMIC YEAR**

**MAIN EXAMS
FIRST YEAR SECOND SEMESTER EXAMINATION
FOR THE DEGREE
OF**

**MASTER OF SCIENCE IN BIOMEDICAL SCIENCES/MEDICAL
LABORATORY SCIENCES**

COURSE CODE: BML 828

**COURSE TITLE: BIOMEDICAL TECHNOLOGY DEVELOPMENT
AND INNOVATION**

DATE: 18TH APRIL 2023

TIME: 11.00AM – 2.00PM

INSTRUCTIONS TO CANDIDATES

This paper consists FIVE questions. Answer FOUR questions. **Question 1 (one) is compulsory. Do Not Write on The Question Paper.**

TIME: 3 Hours

MMUST observes ZERO tolerance to examination cheating 1

This Paper Consists of 2 Printed Pages. Please Turn Over.

QUESTION ONE is compulsory



1. Define for following terminologies: Patent, Intellectual property right and trademark? (3mks)
 - a. Which body is responsible for Patenting innovations in Kenya? (2mks)
 - b. Explain the process of obtaining a patent in Kenya? (5mks)
 - c. What is the significance of institutional and national ethical review board in human subject research? (8 mks)
 - d. Explain the moral foundations of technology development and innovation (7 mks)
2. Discuss the Philosophical basis of technology development and innovation (10mks)
 - a. Explain the process of technology development and innovation (15 mks)
3. Discuss the principles and strategies for promoting technology change adoption and diffusion (15mks)
 - a. Explain the controversial issues emerging from technology development and innovations (15mks)
4. Explain the fundamental nature of the evolution of science and technology (10mks)
 - a. Explain ethico-legal considerations involved in technology development and innovation (15mks)
5. Explain the recent innovations in the following fields of biomedical sciences (25mks)
 - a. Hematological and blood transfusion sciences
 - b. Immunological techniques
 - c. Parasitology and Microbiological techniques
 - d. Histology and cytology techniques