



*(University of Choice)*

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

**MAIN CAMPUS**

**UNIVERSITY EXAMINATIONS (MAIN PAPER)  
2022/2023 ACADEMIC YEAR**

**FIRST YEAR SECOND TRIMESTER EXAMINATIONS**

**FOR THE DEGREE  
OF  
MASTER OF MEDICAL LABORATORY SCIENCES/MASTER  
OF MEDICAL BIOTECHNOLOGY**

**COURSE CODE: BMH 826**

**COURSE TITLE: MOLECULAR DIAGNOSTICS AND BLOOD  
TRANSFUSION**

**DATE: 19<sup>TH</sup> APRIL 2023**

**TIME: 11.00AM – 2.00PM**

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**INSTRUCTIONS TO CANDIDATES**

Answer All Questions

**TIME: 3 Hours**

MMUST observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over

1. Give an account of the history of molecular diagnostic techniques [20 Marks]
2. Discuss the use of spectral karyotyping imaging for diagnosis [20 Marks]
3. Elucidate the methods for molecular blood grouping [20 Marks]
4. Discuss the limitations of DNA analysis [20 Marks]
5. Discuss the applications of molecular methods in prenatal setting [20 Marks]