



(University of Choice)

MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY

(MMUST)

MAIN CAMPUS

UNIVERSITY EXAMINATIONS

2021/2022 ACADEMIC YEAR

FIRST YEAR SECOND SEMESTER EXAMINATIONS

FOR THE DEGREE OF MSC IN MEDICAL DIETETICS

COURSE CODE: HMD 817

COURSE TITLE: FOOD AND NUTRIENT PROCESSING TECHNOLOGY

DATE: 22/4/2022

TIME: 2.00-5.00PM

INSTRUCTIONS TO CANDIDATES

Answer question ONE and any other TWO questions.

TIME: 3Hours

MMUST observes ZERO tolerance to examination cheating

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

Instructions: Answer Question ONE and any other TWO questions.

1. (a) In the production of nutraceuticals, some technologies are preferable over others. Discuss any FOUR such technologies with examples of nutraceuticals products where they can be applied and justification for the same (16 marks)
(b) Critique the microwave technology in food processing (7 marks)
(c) Food irradiation could be the ONLY option in some cases for food preservation and processing. Elucidate with examples. (7 marks)
2. (a) Packaging material migration reverses ALL the gains of food processing and preservation. Discuss (10 marks)
(b) Highlight what happens during frying as a food processing and preservation method (5 marks)
(c) Outline the controversies around frying as a food processing and preservation technology and how to mitigate against them (5 marks)
3. Discuss any FIVE “GRAS” chemicals applied in food processing and preservation highlighting their merits and demerits upon use (20 marks).
4. With examples, highlight FIVE examples EACH of fungal and bacterial spoilage in foods (20 marks)
5. Using examples, highlight TEN effects of processing on named nutrient(s) in food (20 marks)