



TECHNICAL UNIVERSITY OF MOMBASA
FACULTY OF APPLIED AND HEALTH SCIENCES
DEPARTMENT OF PURE & APPLIED SCIENCES
UNIVERSITY EXAMINATION FOR:
FOOD PROCESSING

AFS 4411

SPECIAL/ SUPPLIMENTARY EXAMINATIONS

SERIES: SEPTEMBER 2018

TIME: 2HOURS

DATE: Sep2018

Instructions to Candidates

You should have the following for this examination

Answer Booklet, examination pass and student ID

This paper consists of **FIVE** questions. Attempt question ONE (Compulsory) and any other TWO questions.

Do not write on the question paper.

Question ONE

- a) List six futuristic food packaging technologies 3marks
- b) State four food ingredients that justify the fact that all foods are of plant or animal origin 3marks
- c) Explain the six categories of additives 6marks
- d) State two methods of pasteurization widely used in the food industry and explain briefly how they work. 6marks
- e) Define and explain furfurals including their uses 6marks
- f) Briefly discuss six functional properties of sugar in food 6marks

Question TWO

- a) Explain the process of protein digestion and absorption including all the enzymes involved 10marks
- b) Discuss the degumming process steps of the following
 - i. Water degumming 5marks

ii. Acid degumming

5marks

Question THREE

Discuss including illustrations where appropriate the step by step process of starch production 20marks

Question FOUR

- a) Explain the process of fats digestion indicating all the enzymes involved 10marks
- b) Define Blanching and discuss five primary reasons why it is undertaken 10marks

Question FIVE

- a) State two regions in Kenya where coffee is grown and discuss the processing steps of its manufacture 10marks
- b) Discuss five manufacturing steps in the processing of jams and jellies 10marks