



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

AFS 4404 : CEREAL AND LEGUME TECHNOLOGY
|SPECIAL/ SUPPLIMENTARY EXAMINATIONS

SERIES: SEPTEMBER 2018

TIME: 2 HOURS

DATE: Pick Date Sep 2018

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.

1. Question ONE

- a. Describe the cellular structure of cereal endosperm (4 marks)
- b. Explain two important factors considered in the classification of wheat. (4marks)
- c. Explain the continuous dough making mechanical development process for making bread. (6 marks)
- d. Starting with the semolina production, describe the manufacturing process of pasta product (6marks)
- e. Explain bread stalling as a default in baking industry. (6 marks)
- f. Explain the importance of germination process in legume processing (4mks)

Question TWO

Discuss the following methods of conditioning wheat;

- a) Tempering/cold conditioning (5 marks)

b) Hot conditioning (5 marks)

c) Warm conditioning (5 marks)

d) Steam conditioning (5 marks)

Question THREE

Discuss the commercial processing of rice. (20 marks)

Question FOUR

Discuss the process of maize wet milling (20 marks)

Question FIVE

Explain the four main ingredients in bread making (20 marks)