FEDERAL UNIVERSITY OF TECHNOLOGY OWERRI
SCHOOL OF ENGINEERING AND ENGINEERING TECHNOLOGY
DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY

2019/2020 Harmattan Semester Examination
Course Title : Organolepyic Factors of Food **Course Code: FST 533**
Instructions: Answer any five questions with atleast two from each section. **Time: 3hours**

SECTION A

QUESTION ONE

a. Define and differentiate organoleptic factors from sensory evaluation of food. Which factors do the sensory analysis of food lay emphasis on and why?. ***10 marks***

b. How do the organoleptic factors of food play vital role in product acceptability and production expansion? ***10 marks***

QUESTION TWO

a. Explain the meaning of the term connoisseurs in the context of food organoleptic evaluation. How would you distinguish between extrinsic and intrinsic organoleptic factors of food. ***10 marks***

b. Explain the importance of food colour to a consumer during food selection. And how can these roles be incorporated in food product development. ***10 marks***

QUESTION THREE

a. What is your justification on the ground that manufactures can use the textural characteristics of the products to attract consumers. ***10 marks***

b. Express clearly the relationship between quality of food taste, palatability and the product's acceptability. ***10 marks***

SECTION B

QUESTION ONE

a. Considering other hydrogen compounds with similar molecular mass, discuss any four (4) properties of water. (10 marks)

b. Explain two (2) different forms of water in foods (4 marks)

c. State three (3) economic importance of low moisture content in foods (3 marks)

d. What are humectants? Give two (2) examples of humectants (3 marks)

QUESTION TWO

a. i.) Define moisture content of food (2 marks)

ii.) Explain three (3) relevance of moisture content in foods (6 marks)

b. i)Define water sorption isotherm (2 marks)

ii.) Explain the two (2) pathways of water sorption isotherm (4 marks)

c. i)Discuss two (2) is relevant of Sorption isotherm in food processing. (4 marks)

ii.) Mention four (4) properties of humectants (2 marks)

QUESTION THREE

a. Discuss five (5) factors that determine the choice of suitable method for moisture estimation in a food. (10 marks)

b. Using a sketch, explain the drying curve (6 marks)

c. Define water activity (a_w) (2 marks)

d. Mention four (4) methods of controlling water activity (2 marks)