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**University Examinations 2014/2015**

FOURTH YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN HORTICULTURE

**AFP 2430: PRINCIPLES OF FOOD PROCESSING & PRESERVATION**

 **DATE: APRIL 2015 TIME: 2 HOURS**

**INSTRUCTIONS:** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

1. Define food spoilage. List the major types of food spoilage (4 Marks)
2. Outline the importance of food processing and preservation (3 Marks)
3. List four common unit operations in a food processing industry (4 Marks)
4. Briefly describe the principles of food preservation (3 Marks)
5. Outline the uses of irradiation in food processing (3 Marks)
6. Briefly explain what you understand by high pressure processing (3 Marks)
7. Distinguish between the following:- (10 Marks)
8. Food borne infection and food borne intoxication
9. Food quality and food safety
10. Pasteurization and sterilization
11. Refrigeration and freezing
12. Dehydration and concentration

**QUESTION TWO (20 MARKS)**

1. Discuss common biological hazards in foods (10 Marks)
2. Briefly discuss the preservation of food by use of chemicals (10 Marks)

**QUESTION THREE (20 MARKS)**

1. Explain five factors that influence the rate of dehydration in foods (10 Marks)
2. Discuss briefly the benefits of fermentation (10 Marks)

**QUESTION FOUR (20 MARKS)**

Discuss the factors that influence the growth of microorganisms in foods (20 Marks)