

BITS PILANI, DUBAI CAMPUS

SECOND SEMESTER 2013-2014

Test – 1 (Closed Book)

BIOT F424: FOOD BIOTECHNOLOGY

Date: 27.02.14(Th8)

Time 50 minutes

Max Marks: 25(Weightage 25%)

Answer all the questions. Marks are mentioned against each question.

Q1a. What are the aims of the food industry today? [2]

b. What are the different pressures that influence the food processing industry? Give an example of any one product processes under these pressures. [3]

c. What is the Reynolds number? How is it important in the food industry? [3]

d. What are the effects of processing on food flavours and aroma? [2]

e. What is meant by TQM? List the areas covered by TQM. [3]

Q2a. What are unit operations? Give an example. [2]

b. Why is it important to understand the viscosity and density of the food in a manufacturing process? [3]

c. What is the significance of the *D-value* and *z-value*? What are the factors that influence these values? [3]

d. Explain with examples the different methods of sorting. Mention the equipments that aid these sorting methods. [2]

e. What is water activity? Explain with two examples how *a_w* affects the shelf life of food? [2]

*****ALL THE BEST*****

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Quiz – 2

BIOT F424: FOOD BIOTECHNOLOGY

Date: 11.05.14(Su2)

Time 20 minutes

Max Marks: 7 (Weightage 7%)

1. What is called the dew point temperature? [1]

2. What are the important components of fluidized-bed drier? [0.75]

3. What are the different modes by which heat is supplied to the food in an oven? [0.75]

4. During baking, why doesn't the temperature of food exceed 100C?

[1]

5. Though dehydration and baking involve removal of moisture using dry heat, how are they different?

[1]

6. Frying of food takes some time. What are the factors that which determine the time taken by the food to be completely fried?

[1.25]

7. How is Ohmic heating different from microwave or radiation heating of foods?

[1.25]