

GUJARAT TECHNOLOGICAL UNIVERSITY
B. Pharm - SEMESTER– VIII • EXAMINATION – SUMMER 2017

Subject Code: 2280009

Date: 09/05/2017

Subject Name: Food Analysis

Time: 10:30 AM to 01:30 PM

Total Marks: 80

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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|-------------|---|-------------------------------------|
| Q.1 | (a) Differentiate between the following:
1. Ultra centrifugation and density gradient centrifugation.
2. Gel electrophoresis and paper electrophoresis.
(b) Write short note on zonal centrifugation. Give its applications.
(c) What is isoelectric focusing? Explain in detail with its applications. | 06
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| Q.2 | (a) What is protein? Explain determination of overall protein concentrate.
(b) Write short note on quantitative analysis of reducing sugar.
(c) Explain X-ray diffraction in food analysis. | 06
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| Q.3 | (a) Define vitamin. Explain determination of vitamin by HPLC.
(b) Write a note on thermal analysis of food.
(c) Write a note on Genetically modified food. | 06
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| Q.4 | (a) Define chromatography. Give its applications in food analysis.
(b) Write short note on food additives.
(c) Give applications of immunoassays. | 06
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| Q.5 | (a) Explain packaging requirements for the followings according to food safety and standards requirements:
1. Milk and milk products
2. Fruits and vegetable products.
(b) Write a note on miss branded food according to food safety act.
(c) Give the composition of food safety and standards authority. Explain the duties and responsibilities of it. | 06
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| Q. 6 | (a) Explain duties and functions of food authority.
(b) Give functions of chief executive officer.
(c) How microbial contaminants can be tested in food sample? | 06
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| Q.7 | (a) Explain powers given to the food safety officer according to food safety act.
(b) Write short note on food adulterants. When food is declared adulterated?
(c) Explain responsibilities of food business operator. | 06
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