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Register Number:

DATE: **05-04-2017**

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BANGALORE-27**

**UG – IV SEMESTER**

**SEMESTER EXAMINATION: APRIL 2017**

**CH OE 4316 : Chemistry of Food Production**

Time- 1 ½ hrs Max Marks-35

**This paper contains two printed pages and three parts**

**PART – A**

Answer any **THREE** of the following questions. Each question carries **2** marks. [3 x 2 = 6]

1. Mention two factors affecting the productivity of soil.

2. What are the problems associated with (i) excess and (ii) deficiency of proteins?

3. Define Calorific value of food. What is its unit?

4. Why are acidity-regulators used in food products?

5. What are (i) anti-caking agents (ii) stabilizers?

**PART – B**

Answer any **FOUR** of the following questions. Each question carries **6** marks. [4 x 6 = 24]

6. What are fertilizers? Explain briefly the manufacture, advantages and disadvantages of urea.

7. What are herbicides? Explain (i) selective and (ii) non-selective herbicides with examples.

8. Explain the (i) function (ii) daily needs and (iii) food sources of carbohydrates.

9. What are the health issues associated with deficiency of mineral nutrients (i) calcium (ii) iodine (iii) iron.

10. Give the sources and deficiency effects of (i) vitamin A (ii) vitamin C (ii) vitamin F.

11. What are adulterants? How do you detect (i) starch in milk (ii) artificial colourings in tea leaves?

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**PART – C**

Answer any **ONE** of the following questions. The question carries **5** marks. [1 x 5 = 5]

12. Choose an example for each of the following from the options given below in the bracket. (i) antimicrobial preservative (ii) sequestrate/sequestrant (iii) flavour enhancer (iv) food colour (v) sweetener

[ calcium chloride, lactic acid, indigo carmine, aspartame, monosodium glutamate]

13. What is fermentation? Discuss the process of fermentation of milk and outline the steps involved in obtaining flavoured yogurt.

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