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Register Number:

Date:

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

**UG – IV SEMESTER (OPEN ELECTIVE)**

**SEMESTER EXAMINATION: APRIL 2018**

**CHOE 4316 : Chemistry of Food Production, Health and Nutrition**

Time- 1 ½ hrs Max Marks-35

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

**PART – A**

Answer any **TEN** of the following questions. [10 x 1 = 10 marks]

1. Give any two factors which affect the productivity in soil.
2. Name one natural source of calcium for plants.
3. Define straight fertiliser.
4. Name the pesticide which caused the bird’s eggshell to be thinner than usual.
5. Name any one food item that is relatively rich in protein content.
6. Name the disease caused by the deficiency of iodine in human.
7. What is meant by caking of food powders?
8. When a food is called adulterated?
9. Name an adulterant present in turmeric powder.
10. What is the health hazard caused by the intake of excess of kesari dal?
11. Name the gas which is produced in the baking process and causes the bread to rise.
12. Give an example of a food item that is produced by fermentation process.

**PART – B**

Answer any **FIVE** of the following questions. [5 x 2 = 10 marks]

1. List the primary mineral plant nutrients and their natural sources.
2. How does selective and nonselective herbicides differ in their function?
3. What is malnutrition? How can it be prevented?
4. Write any two factors affecting BMR.
5. How does polyhydric alcohol prevent the food from drying out?
6. Give a method to detect the presence of starch as an adulterant in milk.
7. What is leavening of bread? What is the chemical process involved?

**PART C**

Answer any **THREE** of the following questions. [3 x 5 = 15]

1. Explain briefly the manufacture of calcium super phosphate fertilizer. Give two advantages and disadvantages of its application.
2. Explain the (i) function (ii) daily needs and (iii) food sources of carbohydrates.
3. How is nutritional status of human being assessed?
4. Give the sources and deficiency effects of (i) vitamin A (ii) vitamin C (iii) vitamin K.
5. What are food additives? Explain briefly about any three types of food additives.