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

DATE: **4-04-2018 ( 9AM)**

**UG – IV SEMESTER (OPEN ELECTIVE)**

**SEMESTER EXAMINATION: APRIL 2018**

**CH OE 4316 : Chemistry of Food Production, Health and Nutrition**

Time- 1 ½ hrs Max Marks-35

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

(For supplementary candidates)

Do not write the register number on the question paper

Please attach the question paper along with the answer script.

**PART – A**

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

1. Name thefactors which affect the acidity in soil.
2. Which biomolecule imparts green colour to the plants?
3. Give an example for a fertiliser which provides Potassium to plants.
4. What are the disadvantages of DDT?
5. Name any one naturalsource of vitamin A.
6. Name the disease caused by the deficiency of Iron in humans.
7. What is the role of baking powders?
8. When is the food deemed to be adulterated?
9. Name an adulterant present in tea powder.
10. Name a test to determine adulterant in vegetable oils.
11. List the physical changes when natural food grains are roasted.
12. Give an exampleeach for a natural and artificial food colour.

**PART – B**

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

1. What arethe problems associated with the management of plant micro nutrients in soil?
2. What are the natural pathways of nitrogen fixation in soil?
3. Give the sources and deficiency effects of vitamin A.
4. Write any two factors affecting neurotransmission.
5. What are flavour enhancers? Give two examples.
6. Give a method to detect the presence of urea as an adulterant in milk.
7. What is the chemical process involved in fermentation dosa batter.

**PART C**

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

1. Explain briefly the manufacture of urea. Give two advantages and disadvantages of its appliation.
2. Explain the (i) function (ii) daily needs and (iii) problems associated with excess of **protein** in food.
3. What are the criteria for assessment of daily dietary requirements?Suggest the appropriate composition of a balanced diet.
4. What are vitamins? How are they classified? Mention the role of each of them in the functioning of the various systems in human body.
5. What are food preservatives? How are they classified? Explain briefly their mode of action.

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