

Register No:

Date:

**ST. JOSEPH'S COLLEGE (AUTONOMOUS) BANGALORE-27**  
**UG-IV SEMESTER (OPEN ELECTIVE)**  
**SEMESTER EXAMINATION- APRIL 2020**  
**CHOE 4316: CHEMISTRY OF FOOD PRODUCTION, HEALTH AND NUTRITION**

Time: 1 ½ hrs

Max Marks:35

This question paper contains **1 printed page** and **3 parts**

**PART-A**

Answer any **TEN** of the following questions

**10x1=10**

1. Name any two major minerals in the human body.
2. What are non-mineral plant nutrients?
3. List any two water insoluble vitamins.
4. Give an example of (a) Sequestrant (b) Flavour enhancer.
5. What is the role of baking powder?
6. What are adulterants?
7. Give an example of a thickener.
8. Give the full form of BMR.
9. Name an adulterant used in milk.
10. Deficiency of which vitamin causes scurvy?
11. Give the chemical composition of soil.
12. Give an example of an adulterant in (a) Spices (b) Sugar.

**PART-B**

Answer any **FIVE** of the following questions

**5x2=10**

13. What is calorific value? Explain the calculation of calorific value of food.
14. Explain selective and non-selective herbicides with an example each.
15. What is the chemical process involved in fermentation of milk to yogurt?
16. What is malnutrition? Give any one cause of malnutrition.
17. How do you detect the presence of artificial colouring in tea leaves?
18. Give one source and deficiency effect of Vitamin A.
19. What are emulsifiers? Give an example.

**PART-C**

Answer any **THREE** of the following questions

**3x5=15**

20. What is nitrogen fixation? Explain in detail the two ways in which nitrogen is absorbed and assimilated by plants.
21. What are the criteria for assessment of daily dietary requirements? Suggest the appropriate composition of a balanced diet.
22. Name any four distinct categories of food additives and specify their function.
23. Explain the function and daily needs of carbohydrates. Mention any four sources.
24. Discuss the advantages and disadvantages of the following fertilizers (a) Ammonium sulphate (b) Calcium ammonium nitrate?

**CHOE4316\_A\_20**