

Register Number: Date: 21/11/2020

ST. JOSEPH'S COLLEGE (AUTONOMOUS), BENGALURU-27 M.Sc. FOOD SCIENCE AND TECHNOLOGY - III SEMESTER SEMESTER EXAMINATION: NOVEMBER 2020 FST 3319 – FOOD ADDITIVES, CONTAMINANTS AND TOXICOLOGY

Time- 2 1/2 hrs

Max Marks-70

This paper contains 2 printed pages and 04parts

I. Answer any FIVE of the following

3×5=15

- 1. What are Food Additives? Give examples and its applications
- 2. What are food preservatives? Give two examples and its application in food industry.
- 3. Giving examples write a note on antifoaming agents and its applications.
- 4. What are food allergens? Give examples.
- 5. What is the toxicity associated with production of acrylamide in foods?
- 6. What are dioxins? Explain its toxicity in animals and human beings.
- 7. Write a note on formation of nitrosamines, a toxicant in food.

Answer any FIVE of the following

5×5=25

- 8. What are Mycotoxins? Discuss the toxicity associated with foods
- 9. Discuss the applications of natural and artificial sweeteners used in food industry
- 10. Discuss the presence of animal drug residues in food and water
- 11. What are pesticides? Discuss the toxicity associated with pesticide residues in food.
- 12. What are genetically modified foods? Discuss the risk associated with use of genetically modified food.
- 13. What are heavy metals? Explain the contamination and toxicity associated with heavy metal consumption.
- 14. What are food thickeners? Write a note on its application in food industries.

III. Answer any TWO of the following

10×2=20

- 15. What are chelating agents? Discuss their types and applications.
- 16. What are food emulsifiers? Discuss in detail the process of emulsification.
- 17. Write in detail the risk or toxicity associated with food additives.

IV. Answer the following

10×1=10

18. The compounds found in most food substances which are deleterious to humans or in some ways limit the nutrient availability to the body. Discuss in detail the types and antinutritional factors of plant foods and its mode of action.

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