PG CBCS

M.Sc. Semester-III Examination, 2020 FOOD SCIENCE & NUTRITION

PAPER: FSN 303 FOOD PROCESSING

Full Marks: 40 Time: 2 Hours

Answer any four questions:

10X4=40

- 1. What do you mean by emulsifiers? Write the role of emulsifiers in baking. Define shortening. Why antioxidants are used in baking? 2+3+2+3
- 2. What do you mean by leavening agents? Mention the name of common chemical leaveners used in baking. Write the role of yeasts in baking. 2+3+5
- 3. Discuss about straight dough fermentation process. Write the internal and external characteristics of a good bread.
- 4. Why wheat flour is commonly chosen in baking instead of other flours? Write the role of water in the process of baking.
- 5. What is sensory evaluation? Briefly describe different techniques for sensory evaluation. What is product descriptor? 2+5+3
- 6. What is solid state fermentation? What are advantages of solid state fermentation?

 Differentiate between solid state and submerged fermentation. What is the function of antifoam during fermentation?

 2+3+3+2
- 7. Describe the steps of cheese fermentation. What is the role of calcium in cheese fermentation? What is cheese ripening? What is the role of salt in cheese ripening? 5+2+1+2
- 8. How do you improve a strain for better production of enzyme? Describe L-glutamate production. 5+5
- 9. Write the preparation process of citric acid fermentation? What is the role of iron in citric acid fermentation? Why biotin limitation condition is essential L-glutamate production? 5+2+3
- 10. Write the basic ingredients, procedure for preparation and nutritional value of jam. State the different types of packaging materials in food packaging with special reference to advantages and limitation.

 5+5