

B.Sc. (Part—III) Semester—V Examination

5S—FOOD SCIENCE

Food Processing—I

Time : Three Hours]

[Maximum Marks : 80

Note :—(1) All questions are compulsory.

(2) Draw a flowchart/diagram wherever necessary.

1. (A) Fill in the blanks :—

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- (i) Gluten is formed due to action of the proteins present in Flour _____ and _____ .
- (ii) The carbohydrate present in Rice is in the form of _____ .
- (iii) _____ Food is the another name for baby/infant food.
- (iv) Oils are in _____ state on room temperature, except coconut oil.

(B) Choose the correct alternative :—

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- (i) _____ is more effective method of cooking, from nutritional point of view :
 - (a) Dry heat
 - (b) Moist heat
 - (c) Baking
 - (d) None of the above
- (ii) Sensory evaluation is related to :
 - (a) Nutrition
 - (b) Microbial Count
 - (c) Texture and Aroma
 - (d) None of the above
- (iii) The chief ingredient of candies is :
 - (a) Acid
 - (b) Starch
 - (c) Sugar
 - (d) None of the above
- (iv) Addition of necessary nutrients :
 - (a) Fortification
 - (b) Supplementation
 - (c) Weaning
 - (d) None of the above

(C) Answer in **ONE** sentence :

- (i) Define unsaturated Fatty acids. 1
- (ii) What is simmering ? 1
- (iii) Define sanitation. 1
- (iv) Which species of microorganism is used for the fermentation in bread manufacturing ? 1

- 2. (A) Give an account of objectives of cooking. 4
- (B) What are the dry heat methods of cooking ? Explain any one. 4
- (C) Discuss Solar cooking with its advantages and disadvantages. 4

OR

- (P) What are the preliminary cooking methods ? Explain the importance. 4
- (Q) Explain the work of microwave oven with diagram. 4
- (R) Explain the importance of Moist heat methods. 4

- 3. (A) Explain the triangle test in sensory evaluation. 4
- (B) State the importance of sanitation in Food Processing Plant. 4
- (C) Explain the term nutritional quality. How the nutritional quality can be maintained ? 4

OR

- (P) What is personal hygiene ? Give the importance. 4
- (Q) What are the factors that can be considered while selecting the panel of judges in sensory evaluation ? 4
- (R) What is Food quality ? Explain the factors. 4

- 4. (A) Explain the milling properties of Wheat in brief. What are the types of Flours ? 4
- (B) Discuss the palatability and nutritional quality of sprouted grains. 4
- (C) Discuss the processing of any one corn product. 4

OR

- (P) Explain the processing of white rice. 4
- (Q) Discuss the processing of any one sweet legume product. 4
- (R) Explain the structure of Wheat grain. 4

5. Give the sources, properties, composition and importance of oils. 12

OR

Discuss the processing of oil seeds to extract oils. What is hydrogenation ? Give the products of processing. 12

6. Give the ingredients, processing, functioning of ingredients of manufacturing of bread. 12

OR

Explain the ingredients, function, processing of any one hard boiled candies. 12

7. (A) What are additives ? Explain antioxidants. 4
(B) What is fortification ? Give any two examples in brief. 4
(C) Give an account of non-nutritive sweeteners. 4

OR

- (P) Discuss the importance and uses of colouring agents used. 4
(Q) What are flour improvers and leavening agents ? Explain the mechanism with example. 4
(R) Discuss weaning food with its requirement and importance. 4

