

AT-366

B.Sc. (Part—II) Semester—IV Examination

FOOD SCIENCE

(Food Preservation and Quality Control)

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) ALL questions are compulsory.

(2) Draw a well labelled diagram, if necessary.

1. (A) Fill in the blanks : 2

- (i) Meaning of FPO _____
- (ii) Any one method of drying _____.
- (iii) The preservatives that are not harmful are known as class _____ preservatives.
- (iv) Any one function of packaging _____.

(B) Choose the correct alternative : 2

- (i) Under or over volume of bread is _____ spoilage.
 - (a) Chemical
 - (b) Microbiological
 - (c) Physical
 - (d) None of above
- (ii) Low temperature _____
 - (a) Kill the microorganisms
 - (b) Stop the growth
 - (c) Increase the growth
 - (d) None of above
- (iii) Preservation by irradiation uses _____
 - (a) Temperature
 - (b) Electromagnetic waves
 - (c) Low temperature
 - (d) Pressure
- (iv) PFA is related with :
 - (a) Spoilage
 - (b) Packaging
 - (c) Nutrition
 - (d) Adulteration

- (C) Answer in **one** sentence : 4
- (i) What is trimming ?
 - (ii) Define freezing.
 - (iii) What are class II preservatives ?
 - (iv) What is sun—drying ?
2. What is food spoilage ? Explain the factors affecting food spoilage with examples. 12
- OR**
- Define 'Quality'. Explain the factors contributing to the quality. 12
3. (A) Explain any one method of preservation by low temperature. 4
- (B) What are the principles of food preservation ? 4
- (C) What is the difference between refrigeration and freezing ? 4
- OR**
- (P) Explain the applications of low temperature preservation with examples. 4
- (Q) Give an account of importance of food preservation. 4
- (R) Explain the types of freezing. 4
4. (A) Explain the canning process with flow diagram. 4
- (B) What is drying ? Enlist the various methods of drying. 4
- (C) Differentiate between pasteurization and sterilization. 4
- OR**
- (P) What are the factors that affect the time of sterilization ? 4
- (Q) Discuss the various factors important in effective drying. 4
- (R) Discuss mechanical drying. 4

5. Explain microwave oven with diagram. compare it with conventional oven. 12

OR

Define Class I and Class II preservatives with example. Explain preservation by pickling and osmosis. 12

6. (A) What is HACCP ? Discuss its need. 4

(B) Define adulteration. Give its types. 4

(C) Explain MNPO and FPO. 4

OR

(P) Explain the simple methods to find our adulteration in milk and honey. 4

(Q) Explain Agmark. 4

(R) What are the principles of HACCP ? 4

7. (A) Discuss the functions of packaging. 4

(B) Discuss the mandatory food labelling. 4

(C) What are the sources of food contamination ? 4

OR

(P) What are the rules for choosing the correct cleaning agent ? 4

(Q) Discuss the importance of personal hygiene. 4

(R) Discuss Flexible Films as packaging material. 4

