

ASSIGNMENT BOOKLET

PG DIPLOMA

IN

**FOOD SAFETY AND QUALITY MANAGEMENT
(PGDFSQM)**

Academic Session : 2020



**School of Agriculture
Indira Gandhi National Open University
New Delhi - 110068**

Dear student,

As you are aware that for theory, the weightage to the term-end examination will be 70% and the weightage to the continuous assessment will be 30%. The continuous assessment is in form of assignments. There is one assignment for each course i.e. total five assignments for the programme. Each assignment will be of 50 marks which ultimately will be converted to have weightage of 30% of theory. Instructions to format your assignments are as follows:

Instructions to format your assignments

Before attempting the assignments, please read the following instructions carefully.

1. On top of the first page of your answer sheet, please write the details exactly in the following format.

Enrollment no:.....
Name:.....
Address:.....
.....
.....

Course Code:.....
Course Title:.....
Study Centre:..... Date:.....
(Name and Code)

Please follow the above format strictly to facilitate evaluation and to avoid delay.

2. Use foolscap size paper for writing your answer.
3. Leave 4cm margin on the top, bottom and left of your answer sheet.
4. Clearly indicate question no. and part of the question being solved while writing answers.

Assignment No.	Date of Submission
Assignment 1 (MVP-001) and 2 (MVPI-001)	Before 31 st March
Assignment 3 (MVP-002) and 4 (MVP-003)	Before 31 st March
Assignment 5 (MVP-004)	Before 31 st March

5. Assignments have to be sent to the coordinator of your study centre.
6. We strongly suggest that you should retain a copy of your assignment responses.

Wishing you good luck.

Assignment - 1
Course Code: MVP-001

Maximum marks: 50

Note: Attempt all the questions.

- Q.1. Describe in details different methods of food preservation. 10
- Q.2. Explain principle and steps involved in treatment of solid and liquid wastes in a food processing plant. 10
- Q.3. Explain nutraceuticals and Genetically Modified Foods (GMP) with examples. 10
- Q.4. (a) Define immobilized enzymes and give an example of its application in food industry. 5
- (b) What are Emulsions? Give examples of naturally occurring emulsions. 5
- Q.5. (a) What is importance of sampling plan in analysis of food products? Enlist various sampling methods/ techniques and give basic requirements of a good sampling method. 5
- (b) Describe principle and procedure of the Kjeldahal method used for protein determination. 5

Assignment - 2
Course Code: MVPI-001

Maximum marks: 25

Note: Attempt all the questions.

- Q.1. What is fermentation? Explain various types of food fermentation with examples. 5
- Q.2. Describe the normal microflora of important food groups of our diet. Give the sources of contamination in a food chain. 5
- Q.3. Explain probiotics, prebiotics and synbiotics. 5
- Q.4. Discuss the methods of detection of E.Coli and Listerea monocytogenes. 5
- Q.5. Describe intrinsic and extrinsic parameters affecting microbial growth in a food system. 5

Assignment - 3
Course Code: MVP-002

Maximum marks: 50

Note: Attempt all the questions.

- Q.1. Describe Codex Subsidiary Bodies and their functions. Explain the need for harmonizing national standards with Codex. 10
- Q.2. (a) Describe the salient features of Part II of Schedule 4 of Licensing and Registration of Food Business: General Requirements on Hygienic and sanitary Practices. 5
- (b) Explain the role of Quality Council of India (QCI) and National Accreditation Board for Testing Calibration Laboratories (NABL). 5
- Q.3. Explain salient features of the Food Safety and Standards Act, 2006 and Food Safety and Standards (Licensing and Registration of Food Businesses) Regulations, 2011. 10
- Q.4. Describe important features of the earlier existing PFA and Essential Commodities Act, 1955. 10
- Q.5. Explain the role of BIS and AGMARK standards in maintaining Food Quality Standards. 10

Assignment - 4
Course Code: MVP-003

Maximum marks: 50

Note: Attempt all the questions.

- Q.1. Enlist principles and steps involved in implementation of the HACCP. What is objective of having Prerequisite programme for the HACCP? Develop a hazard analysis worksheet covering critical control points, operating limits and verification activities for a food processing plant packaging pasteurized milk/ fruit juice. 10
- Q.2. (a) Define Total Quality Management and give its benefits. Enumerate dimensions of quality with respect to a manufactured food and for a service. 5
(b) Explain three phases of project management, and 7-S framework of project management. 5
- Q.3. (a) Describe the principles, objectives, potential benefits and elements of Good Agriculture Practices (GAP). 5
(b) Explain the objectives and rationale of traceability? Describe the components of the traceability tool. 5
- Q.4. What do you understand by food hygiene and safety? Explain the inherent risks and different kinds of hazards. 10
- Q.5. Differentiate between quality control and quality assurance. Describe the dimensions of food quality with respect to manufactured food and for a service. 10

Assignment - 5
Course Code: MVP-004

Maximum marks: 50

Note: Attempt all the questions.

- Q.1. Enumerate management requirements applicable to a food testing laboratory involved in testing of biological parameters. 10
- Q.2. Give the documentation structure and clauses of ISO-9001:2000 (2008). 10
- Q.3. List names of ISO 22000 family standards and explain key elements of ISO 22000. Enlist elements of FSMS documentation structure and describe the salient features of each element. 10
- Q.4. What are the requirements with respect to control of production and verification in SQF 2000? 10
- Q.5. Describe salient features of the BRS Food Standard and IFS. Identify the issues and challenges in implementation in reference to our food processing industry. 10