

ASSIGNMENT BOOKLET

PG DIPLOMA

IN

FOOD SAFETY AND QUALITY MANAGEMENT

Academic Session: 2013



**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 80% and the weightage to the continuous assessment will be 20%. 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 20% 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 October 2013 |
| Assignment 3 (MVP-002) and 4 (MVP-003) | Before 31 st December 2013 |
| Assignment 5 (MVP-004) | Before 28 th February 2013 |

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. Give the structure and classification of proteins in detail. 10
- Q.2. Give the structure and composition of cereals, and details of primary, secondary and tertiary processing of cereals. 1
- Q.3. What is the importance of sampling in analysis of food products? Describe different sampling techniques. How would you ensure that the sample drawn is a representative sample? 10
- Or
- What are different chromatographic techniques used for food analysis? Describe the features, different type of detectors and applications of High Performance Liquid Chromatography (HPLC) technique. 10
- Q.4. Explain different forms and types of food packaging materials. 10
- Q.5. (a) What are nutraceuticals? Give examples of various types of functional foods. 5
(b) What are Genetically Modified (GM) foods? Explain with examples. 5

Assignment - 2
Course Code: MVPI-001

Maximum Marks: 25

Note: Attempt all the questions.

- Q.1. (a) Explain the following terms: 5
(i) Osmophilic Bacteria (ii) Facultative Anaerobe
(iii) Saccharolytic Bacteria (iv) Lipolytic Bacteria
(v) Halotolerant Bacteria
- Q.2. What beneficial role is played by the microbes in food processing? Explain fermented foods and their importance. 5
- Q.3. Describe different food borne disease and their causative agents. What are the reasons for spreading of new food borne diseases? 5
- Q.4. Explain probiotics and synbiotics. 5
- Q.5. Give the benefits of rapid detection techniques in microbiology and explain ELISA and PCR method of detection of food borne pathogens. 5

Assignment - 3
Course Code: MVP-002

Maximum Marks: 50

Note: Attempt all the questions.

- Q.1. Give the salient features of FSSA, 2006 (Food Safety and Standards Act, 2006) and explain the need for an integrated Food Law (FSSA-2006). 10
- Q.2. Define Codex and describe Codex Standard Setting Process. Why there is a need for harmonizing national standards with codex? 10

- Q.3. Describe the requirements to be met by a milk processing plant for exporting its products. 10
- Q.4. (a) What do you mean by grading & certification for internal trade under AGMARK & how it is beneficial to farmers, processors and consumers? 5
(b) What is food labelling? Give the requirements under different Acts with respect to labelling. 5
- Q.5. (a) Define WTO and describe the importance of trade agreements. 5
(b) Explain important general conditions being imposed while importing food products into our country. 5

Assignment - 4
Course Code: MVP-003

Maximum Marks: 50

Note: Attempt all the questions.

- Q.1. (a) Describe the Quality and its various dimensions for manufactured products. 5
(b) How changed pattern of food consumption and opening up of trade in food from around the world has increased the risk from food borne infection? 5
- Q.2. What do you understand by food hygiene and safety? Explain the inherent risks and different kinds of hazards. 10
- Q.3. (a) Explain the structure, challenges and benefits in application of risk analysis. 5
(b) What are general occupational health problems? How these can be controlled? 5
- Q.4. Describe the benefits and barriers in implementing HACCP and write its seven principles and role of utilities and control operations in safety of the food. 10
- Q.5. Define GAP and write its principles, objectives, potential benefits, challenges and elements. 10

Assignment - 5
Course Code: MVP-004

Maximum Marks: 50

Note: Attempt all the questions.

- Q.1. Explain clause wise interpretation of ISO 9001:2000 (2008). What is the purpose of quality manual? 10
- Q.2. Describe all the audit activities in detail and competencies of auditors. 10
- Q.3. Enumerate management requirements applicable to testing of physical & chemical parameters in a food testing laboratory. 10
- Q.4. What are the requirements with respect to control of production, product identification, and traceability and recall in SQF 2000? 10
- Q.5. Explain the key elements and benefits of ISO-22000: 2005. Give FSMS document structure. 10