

# **ASSIGNMENT BOOKLET**

**PG DIPLOMA**

**IN**

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

**Academic Session: 2018**



**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. The four theory courses assignments are 50 marks and one integrated course MVPI001 is of 25 marks. The assignment awards will be converted to have weightage of 30% of theory marks. 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.

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

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

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

2. Use foolscap size paper for writing your answer. The assignment should be hand written
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. The assignment should be written by the students in their own handwriting.

<b>Assignment No.</b>	<b>Date of Submission</b>
Assignment 1 (MVP-001) and 2 (MVPI-001)	Before 31 <sup>st</sup> October
Assignment 3 (MVP-002) and 4 (MVP-003)	Before 31 <sup>st</sup> December
Assignment 5 (MVP-004)	Before 28 <sup>th</sup> February

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. Explain physico-chemical and functional properties of proteins. 10
- Q.2. Explain the nutritional importance of vitamins and minerals. Give the need and importance of fortification and summarize salient features of the recent initiatives being taken and planned in our country on the subject. (Please refer to FSSAI website. <https://www.fssai.gov.in/home>) 10
- Q.3. Explain principle and steps involved in treatment of solid and liquid wastes in a food processing plant. 10
- Q.4. (a) Differentiate between whole grains and refined grains. Describe secondary and tertiary processing of cereals. 5
- (b) Characterize compositional features of legumes and oilseeds, and reflect on their processing also. 5
- Q.5. Explain nutraceuticals and Genetically Modified Foods (GMP) with examples. 10

**Assignment - 2**  
**Course Code: MVPI-001**

**Maximum marks: 25**

**Note: Attempt all the questions.**

- Q.1. Describe the normal microflora of important food groups of our diet. Give the sources of contamination in a food chain. 5
- Q.2. Explain probiotics, prebiotics and synbiotics. 5
- Q.3. What are mycotoxins? Explain different types of mycotoxins. 5
- Q.4. Explain MPN method for coliforms i.e. presumptive, confirmed and Completed tests. 5
- Q.5. Give the benefits of rapid detection techniques in microbiology and explain immunological methods of rapid detection. 5

**Assignment - 3**  
**Course Code: MVP-002**

**Maximum marks: 50**

**Note: Attempt all the questions.**

- Q.1. Give the salient features of Food Safety and Standards: Act, 2006; Rules 2011 and Regulations, 2011. (Please refer FSSAI website- <https://www.fssai.gov.in/home>) 10
- Q.2. Explain the role of BIS and AGMARK standards in maintaining Food Quality Standards. 10

- Q.3. Describe Codex Subsidiary Bodies and their functions. Explain the need for harmonizing national standards with Codex. 10
- Q.4. (a) Explain the salient features of the Export Inspection Council. 5  
(b) What are standards of emission or discharge of environmental pollutants? 5
- Q.5. (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

**Assignment - 4**  
**Course Code: MVP-003**

**Maximum marks: 50**

**Note: Attempt all the questions.**

- Q.1. What do you understand by food hygiene and safety? Explain the inherent risks and different kinds of hazards. 10
- Q.2. Differentiate between quality control and quality assurance. Describe the dimensions of food quality with respect to manufactured food and for a service. 10
- Q.3. What is the role of food chain professional in risk management? List various principles of risk communications. 10
- Q.4. What are benefits and barriers in implementing HACCP? What is the process of HACCP certification? 10
- Q.5. Give the features of 7-S framework of project management? Explain the role of teams and strategy in project management. 10

**Assignment - 5**  
**Course Code: MVP-004**

**Maximum marks: 50**

**Note: Attempt all the questions.**

- Q.1. Enlist and explain mandatory procedures given in ISO 9001:2000. What is the purpose of quality manual? 10
- Q.2. (a) Enlist eight clauses of ISO 22000:2005 and give FSMS documentations structure. 5  
(b) Enumerate and explain all mandatory procedures specified under ISO 22000:2005. 5
- Q.3. Enumerate management requirements applicable to a food testing laboratory involved in testing of biological parameters. 10
- Q.4. What are the requirements with respect to control of production and verification in SQF 2000? 10
- Q.5. How an audit programme is managed? List the audit activities also. 10