

**GURU JAMBHESWAR UNIVERSITY OF SCIENCE AND TECHNOLOGY, HISAR**  
**DIRECTORATE OF DISTANCE EDUCATION**

**Programme: Certificate/Diploma in Food Quality Assurance**

**Nomenclature: Food Fundamentals**

**Semester: 1<sup>st</sup>**

Code: IFQA01

**Total Marks: 30**

**Important Instructions:**

- 1) Attempt all Questions each assignment given below
- 2) Each assignment carries 15 marks
- 3) all questions are to be attempted in legible handwriting on plane white A-4 size paper and upload the scanned copy of the assignments on student's portal

**Assignment-I**

- Q1. What is Food and Food Science? Classify the food on the basis of perishability.
- Q2. What do you understand by macronutrients? Discuss their functional role.
- Q3. Discuss protective micro-nutrients and their functional role.

**Assignment-II**

- Q1. State the basic principles of preservation with appropriate examples.
- Q2. What are the functions of food packaging systems?
- Q3. What are food additives? Briefly discuss its classification and role.

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Programme: Certificate/Diploma in Food Quality Assurance

**Nomenclature: Introduction to Food Microbiology**

**Semester: 1<sup>st</sup>**

Code: IFQA02

**Total Marks: 30**

**Important Instructions:**

- 1) Attempt all Questions each assignment given below
- 2) Each assignment carries 15 marks
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**Assignment -I**

- 1- Explain the cell structure with suitable diagram.
- 2- Define the term microorganism, its types and factors affecting growth of microorganisms.
- 3- Write a short note on the following fermented foods-
  - 1) Beer
  - 2) Fruits and vegetables

**Assignment -II**

- 1- What are the common signs of microbial spoilage in milk and how do specific types of bacteria contribute to the degradation of its quality?
- 2- In the context of meat and fish, what microbial factors lead to spoilage.
- 3- Explain the types of food poisonings and food safety measures in preventing food poisoning outbreaks.

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Programme: Certificate/Diploma in Food Quality Assurance

**Nomenclature: Food Safety and Quality Assurance**

**Semester: 1<sup>st</sup>**

Code: IFQA03

**Total Marks: 30**

**Important Instructions:**

- 1) Attempt all Questions each assignment given below
- 2) Each assignment carries 15 marks
- 3) all questions are to be attempted in legible handwriting on plane white A-4 size paper and upload the scanned copy of the assignments on student's portal

**ASSIGNMENT – I**

1. Explain importance of safety and quality in food industry and write down various programs opted by food sectors regarding quality.
2. Discuss objectives and elements of total quality management system.
3. Discuss in brief the role of PRP's in food safety.

**ASSIGNMENT – II**

1. Explain objectives of auditing and discuss audit program procedures.
2. Discuss salient features and advantages of FSMS 22000.
3. Explain various quality tools used in food industry in brief.

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**DIRECTORATE OF DISTANCE EDUCATION**

**Programme: Certificate/Diploma in Food Quality Assurance**

**Nomenclature: Food Laws, Standards and Regulations**

**Semester: 1<sup>st</sup>**

**Code: IFQA04**

**Total Marks: 30**

**Important Instructions:**

- 1) Attempt all Questions each assignment given below
- 2) Each assignment carries 15 marks
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**ASSIGNMENT – I**

1. Describe important features of the food safety and standards (licensing and registration of food businesses) regulation, 2011.
2. Define the codex and its functions. Describe the process of standard setting followed by codex.
3. Discuss in brief the role of various international bodies in setting food safety and quality standards.

**ASSIGNMENT – II**

1. Briefly discuss the salient features of food safety and standards act, 2006.
2. Discuss the role of BIS and AGMARK standards in maintaining food quality standards.
3. Explain the salient features of export inspection council and foreign trade policy.

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Programme: Certificate/Diploma in Food Quality Assurance

**Nomenclature: FOOD SANITATION AND HYGIENE**

**Semester: 1<sup>st</sup>**

Code: IFQA05

**Total Marks: 30**

**Important Instructions:**

- 1) Attempt all Questions each assignment given below
- 2) Each assignment carries 15 marks
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**Assignment-I**

- Q. 1. Detail the various principles following hygiene practice for the commodities and equipments. Give some suggestions for designing and constructing sanitary for food processing and its total quality management.
- Q. 2. Explain the different types of food hazards in food industry. Explain the "Danger Zone" in terms of temperature control.
- Q. 3. Describe the different types of food contaminants and the preventive measures to be taken in order to reduce food contaminations.

**Assignment-II**

- Q. 1. Explain the working of cleaning agents. How cleaning compounds can be classified? Give examples
- Q. 2. Why is personal hygiene crucial in a food service environment? Why is it important for food handlers to wear clean and appropriate attire?
- Q. 3. Describe a situation where you identified and resolved a potential food safety hazard. Explain the potentially hazardous foods (PHFs) and time-temperature control of PHFs.