

**PROGRAMME GUIDE
and
PROJECT GUIDELINES
(MVPP-003)**

**Post Graduate Diploma in Food
Safety and Quality Management
(PGDFSQM)**



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

YOU ARE GOING TO BE A DISTANCE LEARNER. TRY TO DEVELOP THE HABIT OF LEARNING THINGS BY WAY OF READING RELEVANT DOCUMENTS. LET THIS PROGRAMME GUIDE MAKE THE BEGINNING OF YOUR JOURNEY OF DISTANCE LEARNING.

This booklet contains relevant information in brief about the Programme on “PG Diploma in Food Safety and Quality Management” and the entire admission and examination procedures.

RECOGNITION

IGNOU is a CENTRAL UNIVERSITY established by an Act of Parliament in 1985 (Act No. 50 of 1985). IGNOU Degree/Diplomas/Certificates are recognized by all the members of the Association of Indian Universities (AIU) and are at par with Degrees/ Diplomas/Certificates of all Indian Universities/Deemed Universities/ Institutions vide UGC Circular No. F1-52/2000 (CPP-II) dated 5 May, 2004 & AIU Circular No. EV/ B(449)/94/176915-177115 dated January 14, 1994.

The “Post Graduate Diploma in Food Safety and Quality Management” has been developed by the School of Agriculture, Indira Gandhi National Open University, New Delhi in collaboration with Agricultural and Processed Food Products Export Development Authority (APEDA), Ministry of Commerce, Govt. of India.

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Further information on the Indira Gandhi National Open University courses may be obtained from the University’s office at Maidan Garhi, New Delhi-110068 or the official website of IGNOU at www.ignou.ac.in.

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1.0 ABOUT THE UNIVERSITY

1.1 Introduction

The Indira Gandhi National Open University has been established by an Act of Parliament in 1985 to achieve the following objectives:

- democratising higher education by taking it to the doorsteps of the learners;
- providing access to high quality education to all those who seek for it, irrespective of age, region or formal qualifications;
- offering highly quality, innovative and need-based academic programmes by giving professional and vocational orientation to the courses;
- promoting and developing distance education in India; and
- setting and maintaining standards in distance education in the country as an apex body.

1.2 Prominent Features

IGNOU has certain unique features such as:

- international jurisdiction;
- flexible admission rules;
- individualized study: flexibility in terms of place, pace and duration of study;
- use of latest information and communication technologies;
- an effective and integrated nationwide student support services network;
- cost-effective programmes;
- modular programmes based on credit system;
- socially and academically relevant programmes based on student's need analysis;
- resource sharing, collaboration and networking with conventional universities, open universities and other institutes/organizations; and
- convergence of open and conventional educational systems.

1.3 Important Achievements

- Emergence of IGNOU as the largest Open University in the World. UNESCO declared IGNOU as the largest institution of higher learning in the world in 2010.
- Recognition as Centre of Excellence in Distance Education by the Commonwealth of Learning (1993).
- Award of Excellence for Distance Education Materials by Commonwealth of Learning (1999).
- Nodal agency for Educational Channels 'Gyan Darshan'.
- Largest network of learners' support system.
- Declaration of Term-end examination results within 45 days.
- Respectability and Acceptability to the ODL (Open and Distance Learning) System.

1.4 The Schools of Studies

The University has established twenty one Schools of Studies to plan, supervise, develop and organize its academic Programmes and courses in coordination with the different academic, administrative and service wings of the University. The emphasis is on providing a wide choice of programme and courses at different levels. The Schools of Studies, established by the University, are as follows:

1. School of Agriculture (SOA)
2. School of Computer & Information Sciences (SOCIS)
3. School of Continuing Education (SOCE)
4. School of Education (SOE)
5. School of Engineering and Technology (SOET)
6. School of Extension and Development Studies (SOEDS)
7. School of Foreign Languages (SOFL)
8. School of Gender and Development Studies (SOGDS)
9. School of Health Sciences (SOHS)
10. School of Humanities (SOH)
11. School of Inter-disciplinary and Trans-disciplinary Studies (SOITS)
12. School of Journalism and New Media Studies (SOJNMS)
13. School of Law (SOL)
14. School of Management Studies (SOMS)
15. School of Performing and Visual Arts (SOPVA)
16. School of Sciences (SOS)
17. School of Social Sciences (SOSS)
18. School of Social Work (SOSW)
19. School of Tourism and Hospitality Service Sectoral Management (SOTHSSM)
20. School of Translation Studies and Training (SOTST)
21. School of Vocational Education and Training (SOVET)

The University has also established few Centres/Units such as National Centre for Disability Studies (NCDS) for development of specific need based programmes.

1.5 Academic Programmes

The University offers a wide range of programmes both short-term and long-term leading to Certificates, Diplomas, Undergraduate Degrees, Postgraduate Degrees and Doctoral Degrees, which are conventional as well as innovative. Most of these programmes have been developed after an initial survey of the demand for such programmes. They are launched with a view to fulfill the learner's needs for:

- certification,
- improvement of skills,
- acquisition of professional qualifications,
- continuing education and professional development at work place,
- self-enrichment,
- diversification and updating knowledge; and
- empowerment.

1.6 Course Preparation

Self Learning/Instructional Study Materials (SLMs), as we call in distance mode of education, is specially prepared by teams of experts drawn from different universities and specialized institutions in the area concerned from all over the country as well as in-house faculty. This material is scrutinized by the content experts, supervised by the instructors/unit designers and edited by the language experts at IGNOU before they are finally sent for printing. Similarly, audio and video cassettes are produced in consultation

with the course writers, in-house faculty and producers. The material is previewed and reviewed by the faculty as well as outside media experts and edited/modified, wherever necessary, before they are finally despatched to the Study Centres and telecast through Gyan Darshan.

1.7 Credit System

The University follows the 'Credit System' for most of its Programmes. Each credit is equivalent to 30 hours of learner's self study comprising all learning activities i.e. reading and comprehending the print material, listening to audio, watching video, attending to counselling sessions, teleconference and writing assignment responses. For example, a four-credit course in the Post Graduate Diploma in Food Safety and Quality Management involves 120 hours of study. This helps the learner to know the academic effort one has to put in, to successfully complete a course. Completion of an academic programme (Degree, Diploma or Certificate) requires successful clearing of assignments, term-end examination and practicals (guided and unguided) of each course in the programme.

1.8 Student Support Services

To provide support to learners and to help them gainfully initiate the learning package, the University has a broad array of support services. These are provided through Regional Centres and Study Centres / Programme Study Centres (PSC) throughout the country. At the Programme Study Centres, the learners interact with the Academic Counsellors and other learners; attend the theory and practical counselling sessions; refer to books in the library; watch/listen to audio/ video cassettes/CDs and interact with the staff of the Study Centres/PSC on administrative and academic matters.

The University's website (www.ignou.ac.in) has a special section marked as "**Student Zone**" to facilitate various student support services, from admission to results, to the students and covers - **registration details, queries about admission, re-registration, results; catalogue for print media and audio video; download facilities for assignment; library; question papers; material despatch details; address checking; registration for SMS alerts; convocation; term-end date sheet; examination form; campus placement and prospectus and application form.** The students are requested to access the Student Zone of the IGNOU website- www.ignou.ac.in. The link is <http://www.ignou.ac.in/ignou/studentzone>. The learners may seek the help of following University functionaries for sorting out the problems indicated:

- i) For admission, change of centre, identity card, change of address, fee receipt and bonafide certificates, write to your Regional Centre.
- ii) For non-receipt of study material and assignments, write directly to your Regional Centre.
- iii) For SMS alert you can register at <https://admission.ignou.ac.in/changeadmdata/UpdateMobile.asp>
- iv) For queries relating to assignments, examination date sheet, result grade cards, re-checking, etc., write directly to the Registrar, Student Evaluation Division (SED), IGNOU, Maidan Garhi, New Delhi – 110 068.
- v) For Migration Certificate, requisition may be sent to the Regional Director along with the following documents:
 - 1) Application (can be obtained from the Head Office and Regional Centres).
 - 2) Attested copy of the Mark sheet.
 - 3) A fee of Rs. 500/- in the form of demand draft drawn in favour of IGNOU. For latest fees check the website www.ignou.ac.in

Every student will select one of the Programme Study Centres (PSCs) taking into consideration his place of work or residence. However, each study centre can handle only a limited number of students, and despite our best efforts, it may not always be possible to allot the study centre of the choice to learners. The particulars regarding the Study Centre to which he is assigned will be communicated to him. The list of programme study centres (PSCs) is provided separately.

Every Study Centre has a Coordinator to coordinate different activities at the centre, an Assistant Coordinator and other supporting staff appointed on a part-time basis. There are several Academic Counsellors in different subjects to provide counselling and guidance to the students in the subjects.

1.8.1 Major Functions of the Study Centres/ Programme Study Centres (PSC)

- 1) **Counselling:** Face-to-face counselling for the courses will be provided at the Study Centres/ Programme Study Centres. Generally there will be theory and practical counselling sessions for the entire programme at the selected Programme Study Centre. The detailed programme of the counselling sessions will be prepared by the coordinator of the Study Centre.
- 2) **Library:** For each course a set of suggested books will be available in the Study Centre library. The students can refer these books during the working hours of the Study Centre.
- 3) **Information and Advice:** At the Study Centre, the students will get relevant information regarding the courses offered by the university, counselling schedule, examination schedule, etc. You will also get guidance in submitting various forms from time to time.
- 4) **Interaction with Fellow-Students:** In the Study Centres, the student gets an opportunity to interact with fellow students.
- 5) **Telecounselling Facility:** Some of the Programme study centres are equipped with the teleconference reception facilities. You can participate in telecounselling session at your study centre.

1.9 Instructional System

The University follows multimedia approach in imparting instruction to its learners. It comprises:

- Self learning/ instructional study material (SLM) in print form.
- Supporting audio-video programmes.
- Face-to-face interaction with academic counsellors at Programme Study Centres and depending on programme requirement at work centres.
- Practicals at designated institutions.
- Project Work in some programmes.
- Work-related field project/Functional assignments as per programme requirements.
- Telecast of video programmes on the National Network of Doordarshan and Gyandarshan.
- Broadcast of audio programmes by All India Radio (selected stations).

1.10 Programme Delivery

The methodology of instruction in this University is different from that of the conventional Universities. The Open University system is more learner-oriented, and the student is an active participant in the teaching and learning process. Most of the instruction is imparted through distance rather than face-to-face communication. The University follows a multimedia approach for instruction. It comprises:

- a) **Self Learning/ Instructional Course Material:** The printed study material (written in self-learning style) for both theory and practical components of the Programmes is given to the students in the form of booklets called Blocks for every course. Normally, a programme consists of few courses, comprising blocks and blocks consist of units. There are eight courses in the “PG Diploma in Food Safety and Quality Management” programme comprising, four theory courses (MVP-001, MVP-002, MVP-003 and MVP-004), one integrated course (MVPI-001), two practical courses (MVPL-001 and MVPL-002) and one project work (MVPP-003). Each theory course has three/four booklets with specified number of units. An integrated course has one practical manual also. The two practical courses have two practical manuals.

- b) **Audio-Visual Materials :** The learning package contains audio and video cassettes which have been produced by the University for better clarification and enhancement of understanding of the course material given to the student. A video programme is normally of 25-30 minutes duration. The audio tapes are run and video cassettes are screened at the study centres during the hours of the counselling sessions. The video programmes are telecast on National Network and Enrichment Channel of Doordarshan. The video programmes can be seen at the following link <https://www.youtube.com/user/ignousoa/videos>

Some of the selected stations of All India Radio are also broadcasting the audio programmes. The students can confirm the scheduled dates for broadcast/ telecast of the programmes from their Study Centres/ Regional Centre/ IGNOU website.

- c) **Counselling Sessions:** Normally, counselling sessions are held as per a schedule drawn before hand by the Programme In-charge of the study centre allotted to you. **The counselling sessions are mostly held outside the regular working hours of the host institution where the Programme Study Centre (PSC) are located. They are held on weekends, that is to say, Saturday and Sunday of the week.**
- d) **Gyan Darshan – Bouquet of Educational TV Channel:** A collaboration between MHRD, Information and Broadcasting Ministry, Prasar Bharti and IGNOU resulted in Gyan Darshan (GD) – the bouquet of TV Educational Channels in the country. The Gyan Darshan uses C- Bond transponder of INSAT-3C and is fully digitized. The channels are Gyan Darshan I (Educational Channel), GD II (Interactive Channel), GD III (Eklavya) and GD IV (Vyas). The Gyan Darshan signals can be accessed all over the country. The GD-I and II are available on DD Free Dish (Doordarshan's Direct-To-Home platform) and on other DTH network. The educational programmes are telecast, and the schedule may be checked on IGNOU website please.
- e) **Teleconferencing Sessions:** The teleconferencing sessions are telecast from GD II channel. The current status of the channels and teleconferencing sessions are available on the IGNOU website. The toll free number is 1800112345 and other numbers are 011-29532844, 29532845, 29536134, 29573221 and 29573224. The programme can also be viewed from IGNOU website <http://www.ignouonline.ac.in/Broadcast/>
- f) **Gyan Vani FM Radio:** Gyan Vani (GV) is an educational FM Radio channel operating through several FM stations from various cities in the country. At present, 37 FM stations are operational. The educational programme are broadcast in English, Hindi and the regional languages by involving national and local resource experts.
- g) **Interactive Radio-Counselling (IRC):** Interactive Radio-Counselling (IRC) and other phone in programmes are being broadcast by Gyan Vani stations to enable the students to interact with the faculty, academic counsellors and students support staff. The detailed schedule can be accessed at IGNOU-EMPC website. The toll free number of the Gyan Vani studio is 1800112346 and other numbers are 011-29533103, 29536131 and 29573207. Gyan Vani, Delhi is available on DD Free Dish, (Direct-To-Home platform of Doordarsan), and is webcast through the University's website.
- h) **Edusat Studio:** The contact number for Edusat studio are 1800112347, 29532381, 29533581 and 29573258.

The current status and the schedule for Gyan Darshan, Gyan Vani, Teleconferencing, Radio counselling, etc. can be checked at IGNOU-EMPC website:

<http://www.ignou.ac.in/ignou/aboutignou/icc/empc/introduction>

2.0 UNIVERSITY RULES

The rules given in the “Common Prospectus” will be applicable. The University reserves the right to change the rules from time to time. However, latest rules will be applicable to all the students irrespective of year of registration. The students are advised to check the current “Common Prospectus” for the University rules. The common prospectus is also available at IGNOU website on the link given below: <http://www.ignou.ac.in/ignou/studentzone/adminssionanouncement/1>

3.0 SCHOOL OF AGRICULTURE

The School of Agriculture (SOA) was established in 2005 with a mission to improve and sustain the quality of human life and productivity of agriculture and allied sectors through Open and Distance Learning System (ODL). It aims to improve out-reach of agriculture education for rural masses particularly in remote, ecologically and socio-economically marginalized areas through academic, continuing and extension programmes. The objective is to strengthen human resource base through quality education and generate an army of trained manpower in agriculture through ODL in consonance with the national policies and market environment. It also aims to produce entrepreneurial skills and opportunities for life-long learning. The School has developed programmes in collaboration with various national and international organisations like Ministry of Agriculture & Cooperation, Ministry of Food Processing Industries, Department of Land Resources, Ministry of Rural Development, Agricultural and Processed Food Products Export Development Authority (APEDA) and Central Silk Board.

Objectives

- To strengthen the human resource in agriculture and allied sectors through ODL;
- To provide equitable quality education in agriculture to marginalized and disadvantaged groups;
- To enhance knowledge, skills and entrepreneurial capabilities for livelihood security;
- To use ICT for improving outreach and effectiveness of distance education in agriculture;
- To conduct research in emerging areas for effective technology transfer and adoption;
- To establish national and international linkages in agriculture education and knowledge management for sustainable development; and
- To develop and maintain an open repository of agricultural education resources.

3.1 Programmes on Offer

- a) Ph D programme
 - 1) Ph.D. in Dairy Science and Technology (PHDDR)
- b) PG Programmes
 - 1) M. Sc in Food Safety and Quality Management (MSCFSQM)
 - 2) PG Diploma in Food Safety and Quality Management (PGDFSQM)
 - 3) PG Certificate in Agriculture Policy (PGCAP)
 - 4) PG Diploma in Agribusiness (PGDAB)
- c) Diploma Programmes
 - 1) Diploma in Value Added Products from Fruits and Vegetables (DVAPFV)
 - 2) Diploma in Dairy Technology (DDT)
 - 3) Diploma in Meat Technology (DMT)

- 4) Diploma in Production of Value Added Products from Cereals, Pulses and Oilseeds (DPVCPO)
- 5) Diploma in Watershed Management (DWM)
- 6) Diploma in Horticulture (DHORT)
- d) Certificate Programmes
 - 1) Certificate in Organic Farming (COF)
 - 2) Certificate in Sericulture (CIS)
 - 3) Certificate in Water Harvesting and Management (CWHM)
 - 4) Certificate in Poultry Farming (CPF)
 - 5) Certificate in Beekeeping (CIB)
- e) Awareness Programmes
 - 1) Awareness Programme on Dairy Farming for Rural Farmers (APDF)
 - 2) Awareness Programme on Value Added Products from Fruits & Vegetables (APVPFV)

4.0 POST GRADUATE DIPLOMA IN FOOD SAFETY AND QUALITY MANAGEMENT

Food Safety is a fundamental public health concern. The Food Safety and Quality has become an area of priority and necessity for consumers, retailers, manufacturers and regulators. Changing global patterns of food production, international trade, the implementation of new Act. Food Safety and Standards Act and its rules and regulations as well as enforcement, technological developments, technological development, public expectations for health protection and many other factors have created a huge demand for food safety and quality auditing professionals.

The PG Diploma has been developed in collaboration with the Agricultural and Processed Food Products Export Development Authority (APEDA), Ministry of Commerce, Government of India. This programme is expected to meet the increasing human resource requirements for food safety and quality management professionals in the agriculture and food sectors.

4.1 Objectives

The core objective of the PG Diploma programme is to prepare professionals for development, implementation and auditing of Food Safety and Quality Management Systems in the country. It seeks to develop India's capability to meet the global food safety and quality requirements and enhance the competitiveness of food products. In long term perspective, it would contribute to ensure consumer safety within and outside the country.

The PG programme shall enable the students to:

- Comprehend the issues of safety and quality in food production, handling, processing and trade.
- Build technical proficiency in undertaking in food safety and quality assurance in food processing chain i.e., from farm to fork.
- Ensure the safety and quality of food products as per mandatory legal requirements and voluntary standards including export regulations if required.
- Design and implement
 - Good Hygienic Practices (GHP)
 - Good Manufacturing Practices (GMP)
 - Hazard Analysis and Critical Control Point (HACCP)

- Quality Management Systems (QMS) : ISO 9001
- Food Safety Management Systems (FSMS) ISO 22000
- Laboratory Management System : ISO 17025
- Retail Standards
- Be able to effectively plan, conduct, report and audit as per the guidelines of the ISO 19011:2002
- Undertake Standard Microbiological and Chemical analysis of Food Products.
- Apply Good Hygienic, Manufacturing , Laboratory, Transportation and Retail Practices in Food Processing/Hospitality industry and Retail outlets

4.2 Programme Structure

The PG Diploma consists of eight courses as outlined in the following table.

Programme Structure of Post Graduate Diploma in Food Safety and Quality Management (PGDFSQM)

Sl. No.	Course Code	Title of the Course	Nature of the Course	Credits: Theory+Practical=
1.	MVP-001	Food Fundamentals and Chemistry	Theory	4+0=4
2.	MVPI-001	Food Microbiology	Integrated (Theory+Practical.)	2+2=4
3.	MVP-002	Food Laws and Standards	Theory	4+0=4
4.	MVP-003	Principles of Food Safety and Quality Management	Theory	4+0=4
5.	MVP-004	Food Safety and Quality Management Systems	Theory	4+0=4
6.	MVPL-001	Food Safety and Quality Auditing	Practical	0+4=4
7.	MVPL-002	Chemical Analysis and Quality Assurance	Practical	0+4=4
8.	MVPP-003	Project Work-1	Project Work	0+8=8
TOTAL				36

4.3 Syllabus of the Programme

Course-MVP-001: Food Fundamentals and Chemistry (4+0)

Block	Block Title	Unit	Unit Title
1	Introduction to food science	1	Food Basics
		2	Food from Plant Sources
		3	Foods from Animal Sources
		4	Other Foods
2	Food Chemistry	5	Water
		6	Carbohydrates
		7	Proteins and Enzymes
		8	Lipids
		9	Vitamins and Minerals
		10	Food Additives
3	Food Analysis	11	Sampling Techniques of Food Products
		12	Physical and Chemical Analysis of Foods

4	Food Processing and Preservation	13	Instrumentation in Food Analysis
		14	Sensory Evaluation of Food Products
		15	Introduction to Food Preservation and Processing
		16	Food Packaging
		17	Waste Management in Food Processing Industry

Course-MVPI-001 : Food Microbiology (2+2)

Block	Block Title	Unit	Unit Title
1	Fundamentals of Food Microbiology	1	Introduction to Food Microbiology
		2	Food Contamination and Spoilage
		3	Food Borne Diseases
		4	Beneficial Roles of Micro-Organisms
2	Analytical Techniques in Microbiology	5	General Techniques of Detection and Enumeration of Micro-organisms in Food
		6	Screening and Enumeration of Spoilage Micro-organisms in Food
		7	Detection of Pathogens in Food
		8	Rapid Detection Technique for Food Micro-organisms
	Practical Manual	1	Introduction to the Basic Microbiology Laboratory Practices
		2	Cleaning and Methods of Sterilization
		3	Cultivation and Sub-culturing of Microbes
		4	Staining Techniques
		5	Standard Plate Count Method
		6	Direct Microscopic Examination of Foods
		7	Enumeration of Fungi (Yeasts and Molds)
		8	Assessment of Air using Surface Impingement Method
		9	Assessment of Surface Sterilization using Swab and Rinse Method
		10	Detection of Coliforms and Indicator Organisms (1) Most Probable Number
		11	Detection of Coliforms and Indicator Organisms (2) Confirmed and Completed Tests, Membrane Filter Techniques
		12	EXPERIMENT 12 Interpretation of Microbiological Data and its Inferences

Course-MVP-002 : Food Laws and Standards (4+0)

Block	Block Title	Unit	Unit Title
1	Food Safety and Standard Act, Rules and Regulations	1	Food Safety and Standard Act, 2006
		2	Food Safety and Standards Rules and regulations - Standards
		3	Food Safety and Standards Rules and regulations, - Procedures
		4	Inspection and Audit
2	Global Scenario	5	Codex Alimentarius Commission (CAC)
		6	WTO Implications
		7	Other International Standard Setting Bodies
3	Export and Import Laws and Regulations	8	Export (Act,
		9	Export Regulations and Promotion Bodies
		10	Food import and Quarantine aspects
4	Other Laws and Standards Related to Foods	11	International regulatory bodies
		12	Other Laws Related to Food Products
		13	Voluntary National Standards: BIS and AGMARK
		14	National Agencies for Implementation of International Food Laws and Standards
		15	Food Labelling

Course-MVP-003 : Principles of Food Safety and Quality Management (4+0)

Block	Block Title	Unit	Unit Title
1	Food Safety and Quality Management Systems	1	Introduction to Food Safety
		2	Food Safety System
		3	Total Quality Management
		4	Schedule 4 of FSSR
2	Risk Analysis	5	An Introduction to Risk Analysis
		6	Risk Management
		7	Risk Assessment
		8	Risk Communication
3	HACCP	9	History, Background and Structure of HACCP
		10	HACCP Prerequisites and Good Hygienic Practices
		11	Principles and Implementation of HACCP
		12	Case Studies on HACCP
4	Other Food Safety Practices	13	Good Agriculture Practices, Good Animal Husbandry Practices and Good Manufacturing Practices
		14	Good Retail Practices, Good Transport Practices and Nutrition Labelling
		15	Traceability Studies

Course-MVP-004 : Food Safety and Quality Management Systems (4+0)

Block	Block Title	Unit	Unit Title
1	Management Systems, Auditing and Accreditation	1	Introduction to Management Systems
		2	Auditing
		3	Standardization and Accreditation
2	Quality Management System	4	ISO-9001:2015 - An Overview
		5	ISO-9001:2015 – Structure
		6	Clause wise Interpretation of ISO 9001:2015
		7	ISO 9001:2015- Case Studies
3	Food Safety Management Systems	8	ISO 22000:2018 - An overview
		9	Clause Wise Interpretation of ISO 22000
		10	ISO 22000:2018 - Food Safety Plan
		11	ISO 22000:2018 - Case Studies
4	Laboratory Quality Management System	12	An Overview and Requirements of ISO 17025
		13	Requirements Specific to Food Testing Laboratories - Physical and Chemical Parameters
		14	Requirements Specific to Food Testing Laboratories - Biological Parameters
		15	General Topics: Related to Food Testing Laboratories
5	Retailer Standards	16	BRC Food and BRC/IOP Standards - An Overview
		17	International Food Standard (IFS)
		18	SQF 1000 and SQF 2000
		19	Global GAP and India GAP

Course-MVPL-001 : Food Safety and Quality Auditing (0+4)

Practical Manual	1	Visit to a nearby Food Establishment
	2	GHP and GMP in a Food Factory a) Identifying the Key Focus Areas for GHP and GMP b) Identifying Gaps in its Implementation c) Closure Plans for Identified Gaps in a Food Factory/ Food Outlet
	3	Developing the Process Flow for the Food Establishment Including all the Inputs, Outputs and Interim Loops
	4	Development of Methodology (Decisions Trees) as per Clause 7.4.4 of ISO 22000 for a Food Establishment

		5	Developing FSMS (Module 1) a) Data Collection and Hazard Identification (Physical, Chemical and Biological) b) Hazard Analysis (Using FMEA Technique for Risk Assessment)
		6	Developing FSMS (Module 2) a) Development of OPRP (Operational Pre-requisite Programme) and Development of HACCP Plan (Critical Limits including Rationale for Limits), Monitoring Procedure, Correction and Corrective Measures) b) Managing Unsafe Product
		7	Developing FSMS (Module 3) a) Verification and Validation of Control Measures (OPRP and HACCP Plan) as per Codex Guidelines on Validation b) Emergency Situation, Preparedness and Response Plan c) Communication (External and Internal)
		8	Developing FSMS (Module 4): Traceability System as a Tool for, Recall/ Withdrawal (ISO 22005: 2007)
		9	Application of ISO 9001 Model a) Understanding Process Approach b) Defining Quality Policy and Objectives c) Correction, Corrective Action and Preventive Action d) Continual Improvement
		10	Food Laws (Module 1) Identification of Legal Requirements for following Food Groups/Products/Standards: a) Fruits and Vegetable Products b) Dairy products c) Meat and Meat Products d) Cereal/Pulses/Oil Seeds Products e) Fish and Sea Foods f) Ready to Eat Foods
		11	Food Laws (Module 2) Hygienic Requirements for Manufacturing Premises as Prescribed by Law
		12	Food Laws (Module 3) Design a Label for any Food Product
		13	Matrix Preparation to Find Correspondence between ISO 22000, HACCP Series and BRC and any other Related Standard (Food Retail Management-Basic Requirements)
		14	Understanding ISO 17025 Requirements for 9001 and Clause 8.3 in ISO 22000:2005
		15	Audit Planning a) Role and Responsibilities of Auditors and Lead Auditors and Pre-audit Information Required to Plan the Audit (Module 1) b) Preparation of an On-site Audit Plan that is Appropriate to the Audit Scope (Stage 1 and Stage 2) (ISO:22003 and 17021) (Module 2)
		16	Produce an Audit Checklist Including Salient Features of ISO 9001 and FSMS 22000 (Module 3)
		17	Document Review as per the Case Study (Module 4)
		18	Auditing (Module 5) a) Conducting the Opening Meeting and Closing Meeting (as per ISO: 19011) b) Establishing Qualification Criteria for Auditors and Lead Auditors (ISO 17021 and ISO 22003 for a Food Industry)
		19	Mock Audit Exercise to Develop Interpersonal Skills Information Gathering Techniques and Exercising Objectivity in the Review of Evidences Collected (Module 6)
		20	Post Audit Activities (Module 7) a) Report Writing, including Writing Valid, Factual and Value adding Non-conformity Report b) Proposals for Corrective Action and Follow Up

Course-MVPL-002 : Chemical Analysis and Quality Assurance (0+4)

Practical Manual	1	Calibration of Glassware
	2	Preparation of Standard Volumetric Solutions
	3	Determination of Moisture in Food Products by Hot Air Oven-drying Method
	4	Determination of Moisture in Food Products Using Karl Fischer Titration Method
	5	Determination of Moisture in Food Products by Dean and Stark Method
	6	Determination of Protein Content in Food Products by Kjeldahl Method
	7	Determination of Crude Fat in Foods by Soxhlet Extraction Method
	8	Determination of Total Fat in Foods by Rose Gottlieb Method
	9	Determination of Volatile Oil in Spices
	10	Determination of Starch in Cereal Grains by Acid Hydrolysis Method
	11	Determination of Starch in Cereal Grains by Glucoamylase Method
	12	Determination of Crude Fibre in Food Sample
	13	Determination of Total Ash Content in Food Products
	14	Determination of Acid Insoluble Ash in Food Products
	15	Determination of pH of Food Products by Using pH Meter
	16	Determination of Free Fatty Acids and Acid Value in Oils and Fats
	17	Determination of Unsaponifiable Matter in Oils and Fats
	18	Determination of Melting Point or Solidification Point of Oils and Fats
	19	Determination of Refractive Index of Oils and Fats
	20	Determination of Specific Gravity of Oils and Fats
	21	Determination of Titre Value of Oils and Fats
	22	Determination of Colour of Oils and Fats by Lovibond Tintometer
	23	Determination of Iodine Value in Oils and Fats
	24	Determination of Saponification Value in Oils and Fats
	25	Determination of Acetyl Value and Hydroxyl Value in Oils and Fats
	26	Determination of Allyl Isothiocyanate in Mustard Oil
	27	Determination of Reichert Meissl (RM) Value and Polenske Value (PV) in Oils and Fats
	28	Determination of Peroxide Value of Oils and Fats
	29	Determination of Sodium Chloride Content in Butter
	30	Determination of Gluten Content in Wheat Flour
	31	Determination of Sorbic Acid in Food Products
	32	Determination of Copper, Zinc, Lead and Cadmium in Food Products by Atomic Absorption Spectroscopy
	33	Determination of Cholesterol Content in Ghee by GC
	34	Determination of Vitamin A Content in Ghee by HPLC
	35	Sensory Evaluation Laboratory
	36	Selection of Sensory Panelists
	37	Sensory Evaluation of Food Products–Hedonic Rating Test
	38	Judging of Milk

Course-MVPP-003: Project Work-1

- a) **Objective:** Study implementation of GHP/ HACCP/ QMS/FSMS in Food Establishments. This could be undertaken in establishments like: Manufacturing, Hospitality, Retail and Street food hawkers. The suggestive list of topics is as follows:

List of Suggestive Topics

1. Study on effective implementation of correction, corrective action and preventive actions as per QMS in an organization.
2. Study on implementation of process approach as required by QMS in a organization.
3. Study of GHP of street food hawkers (Minimum 4 hawkers in one location) and report the recommendations for implementation.

4. Study of GMP in different food industries (organized and unorganized) in different food groups.
5. Development of Training Modules for workers on GMP & GHP.
6. Development of Training Modules for middle management : Internal Audit and concept and Implementation of HACCP.
7. Study on compliance to legal and customer requirements related to food safety and hygiene in a Food establishment.
8. Study on appropriate CCP identification for a food establishment as required by ISO 22000 clause 7.4.4.
9. Study on CCP Monitoring, corrective actions and verifications in a food organization and propose improvement.
10. Food Safety and Standards Act: Study of existing food laws versus Food Safety and Standards Act 2006.
11. Study on different emergency situations affecting food safety in a food establishment and propose mitigation plan.
12. Study on Internal communication in an organization for ensuring compliance to 22000 clause 5.6.
13. Study on External communication in an organization for ensuring compliance to 22000 clause 5.6.
14. Study on effective cleaning of equipment/machinery (food contact surfaces including food gloves) in a food establishment.
15. Study on hygienic practices at raw material suppliers' premises and recommendations for improvement.
16. Study on suitability of packaging material at various stages of processing (raw, intermediate and finished product) as per prescribed standards.
17. Study on compliance to labeling requirements for domestic and imported food items (minimum four different category of products).
18. Study on repeatability and reproducibility of testing methods and results in an organization.
19. Designing an ideal plant layout for a food establishment related to food safety.
20. Study on calibration techniques of instruments in food industry, food laboratories and CCP monitoring.
21. Study on Waste (liquid and solid) Management in a food establishment.
22. Study on Pest Management in a food establishment.
23. Study on existing versus idealistic process for identification, Traceability and withdrawal (recall) as per ISO 22000 and ISO 22005.
24. Study on method adopted for finalizing/establishing shelf life of a product (against declared/claim).
25. Study on allergens, intolerants (*e.g Lactose*) and their control in a food products.
- b) **Guidelines:** The guidelines for synopsis and project preparation are given in the Chapter 8 of this Programme Guide please.

4.4 Eligibility for Admission

Graduation in Science/Tech in Food Safety and Quality Management/Agriculture/ Food Science/Food Tech/Engineering having chemistry and microbiology subjects/ Post Harvest Technology/ Home Science/ Life Science/Microbiology/ chemistry/ Biochemistry/ Biotechnology/Pharmacy/Medical Lab Tech/ Horticulture/ Dairy Technology/ Veterinary/ Fisheries/Medical/ Dental Sc./ Nursing/BAMS/ BHMS/Hotel Management and Catering etc.

4.5 Medium of Instruction

The **PG Diploma in Food Safety and Quality Management (PGDFSQM)** is offered by the University in English language only.

4.6 Target Group

The PG Diploma is intended for graduates in Sciences/Agriculture /Food Science or allied disciplines contemplating a career in Food Safety and Quality Management. It is also intended for professionals in food processing and quality control for strengthening their proficiency in design and implement new food Act – Food Safety and Standards Act, 2006. The programme shall also open new vista for entrepreneurs who intent to diversify in food safety and quality aspects.

4.7 Duration

The minimum duration of the programme is 12 months (one year). However, the students are given a maximum period of the three years to complete the programme from the date of registration.

4.8 Job Opportunities

Quality Control Officer or Quality Assurance/ Management professionals in food/ hospitality/ retail industry and laboratories; Food Safety Officer in the regulatory bodies, Food Auditor in Certification and Inspection bodies; Trainer/Counsellors in Food Safety & Quality Management Systems; and Self-employment as food certifying/ auditing professionals for the Food Safety and Quality Management Systems.

4.9 Programme Fee

The programme fee for the PG Diploma is Rs. 14,400/-. At present it is offered in both January and July session. The programme fee should be paid online. The process of fee submission may please be filled as given in Common Prospectus of the University. Please visit www.ignou.ac.in for updated fee.

4.10 Programme Study Centre

The Programme Study Centres (PSCs) will be allocated to the students near to their workplace or residence depending upon their availability. About 30-35 students would be allocated to each PSC for quality counselling. There could be two or more batches if number of the students are more subject to concurrence of the host institution. For details of the PSC **visit IGNOU website or Regional Centre website.**

4.11 Other Useful Information

The Common Prospectus available on the IGNOU Website www.ignou.ac.in covers the following:

- a) Information about the university like, prominent features, the schools of studies, academic programmes, course preparation, credit system, student support services, instructional system, programme delivery, evaluation, etc.
- b) Information regarding the rules of the university like reservation, scholarships and reimbursement of fee, refund of fee, change/correction of address and study centres, change of region, incomplete and late applications, simultaneous registration, disputes on admission and other university matters, recognition, etc.
- c) List of Regional Centers.
- d) Other useful forms.

The above information are not covered in this programme guide and the students are requested to refer to the Common Prospectus for detailed information.

5.0 STUDY MATERIAL

Well planned self learning/instructional study material (SLM), in print form both for the theory and practical components, is the main part of the “PG Diploma in Food Safety and Quality Management” programme. The study material prepared by the University is self-instructional in nature and is divided in booklets called Blocks. Each theory block contains three-four chapters which are called units. The practical exercises have been structured to facilitate self-guidance during the practical counselling sessions/work experience.

5.1 How to Study Print Material?

5.1.1 Theory

While going through the syllabi of courses, you must have noted that each course has been divided into 3-4 blocks for a four (4) credit course. Each block has 3-4 units. These units of each block have a certain thematic unity and arranged in a related logical sequence to maintain the continuity of learning of the particular subject.

As explained the course material provided to you is in the form of well designed printed booklets called block. Each booklet is a block containing units. The first page of each block indicates the numbers and titles of the units comprising the block. Further, the first block of each course starts with the course introduction followed by a brief introduction to the block.

Each unit has an introduction dealing with the contents of the units. Each unit outlines a list of objectives which we expect you to achieve working throughout the unit. This is followed by the main body of the unit, which is divided into various sections and sub-sections. We end up each unit by summarizing its contents to enable you to recall the main points.

The “Check Your Progress” exercises given in each unit are meant to help the learner to assess his/ her understanding of the subject.

5.1.2 Practical Manual

While, going through the Practical Manual you will note that each course has been divided into a number of experiments. The number of practical exercises is based on the theory component of the courses. The Practical Manual has been prepared with the objective of providing you a guidelines to study and practice these skills/experiments when you are placed in the Laboratory/ Processing Hall/Programme Study Centre/ Work Centre for practical experience/work.

5.2 Audio-Video Material

In addition to the print material, the audio and video programmes have been prepared for each course. The audio-video material is supplementary to the print material. The audio tapes and video cassettes are available at your programme study centre. The audio and video programmes help the students to understand the subject better. Video programmes are transmitted by Doordarshan on National Network and Gyan Darshan from 6.25 to 6.55 a.m. in the morning and evening 8.00-8.55 p.m. The video programmes are also available at <https://www.youtube.com/user/ignousoa/videos>

Timings are subject to change which can be checked with the Programme Study Centre/ Regional Centre/ IGNOU Website (www.ignou.ac.in). Please check the status and schedule of Gyan Darshan and Gyan Vani on IGNOU website.

Audio-video material will not be supplied individually but made available at the Programme Study Centres. These programmes can be watched during counselling sessions. The students desirous of buying the audio-video tapes can procure them from the Marketing Unit, EMPC, IGNOU, Maidan Garhi, New Delhi-110068.

5.3 Academic Counselling

The Programme Study Centre will organise academic counselling sessions for all courses of study. The counselling sessions are mostly held outside the regular working hours of the host institutions where the

Programme Study Centres are located. The students can take help from the counsellors. The counselling sessions are not meant to be classroom lectures. The students must study the material and try to assimilate it, prior to coming for counselling. Whatever problems are faced with, students must consult their counsellor for clarifications and help.

There will be 25 theory counselling sessions (2 hours each) and, 50 Practical counselling sessions (4 hours each) for the entire programme at the selected Programme Study Centre. The detailed programme of the counselling sessions will be prepared by the coordinator of the programme study centre. The exact dates of counselling sessions will be announced by the concerned Study Centres/ Programme Study Centre. The counsellors may also organise sessions to listen to/view audio-video programmes. These programmes often supplement your course material. The exact dates of these audio-video based counselling shall be announced by the concerned Study Centres. During the counselling sessions, there will be ample opportunity to interact with fellow students which will help students to formulate self-help groups. The students are advised to bring all the blocks/units as per the schedule during the counselling sessions/practical sessions.

5.4 Practical Sessions

The participation in practical session is an integral and compulsory part of the PG Diploma programme. The practical component of the programme has been designed to explain the theory text and provide hands-on experience to chemical and microbial testing of food products and implementation of GHP/ HACCP/QMS/FSMS in the food units. This will help you to improve your skills, knowledge and competence that you will need to practice as a competent PG Diploma-holder with University education. Throughout the programme, the material provided to you will encourage you to think about what you have already known and do in your practice as a competent food safety professional.

Your practice is, therefore, an integral and compulsory part of the M.Sc. programme. **75% attendance in the practical counselling sessions is compulsory for becoming eligible to appear in the Term-End Examinations.**

We hope that in addition to developing new skills and competencies, you will be able to reflect on what you do, how well you do it and consider the ways you might do it better.

5.5 Teleconferencing

The teleconferencing sessions are telecast from GD II channel. The current status of the channels and teleconferencing sessions are available on the IGNOU website. The toll free number is 1800112345 and other numbers are 011-29532844, 29532845, 29536134, 29573221 and 29573224. The programme can also be viewed from IGNOU website <http://www.ignouonline.ac.in/Broadcast/>

5.6 Interactive Radio-Counselling

Interactive Radio-Counselling (IRC): Interactive Radio-Counselling (IRC) is being done by the Gyan Vani stations. The current status of Gyan Vani and the detailed broadcast schedule of IRC can be seen at the IGNOU website. The toll free number of the Gyan Vani studio is 1800112346 and other numbers are 29533103, 29536131 and 29573207.

5.7 Study Centres/Programme Study Centres

To provide effective support, IGNOU has set up a large number of Study Centres and their variants all over the country. The Programme Study Centres (PSCs) which are programme specific, have been set up in select institutions for the PG Diploma Programme. Each PSC will be handling about 30-35 students. The counselling sessions are coordinated by the Programme Incharge and is your contact person at the PSC. The detailed particulars regarding the Programme Study Centres to which you are assigned, will be communicated to you by the concerned Regional Centre after confirmation of your admission. The practical sessions of the programme will be held at the PSCs.

As mentioned earlier, major support for academic and other related matters would be provided at your Study

Centre/Programme Study Centre (PSC). This will mainly include the following:

- Information, counselling and advice on your programme as well as other academic aspects including other programmes offered by the University.
- Induction Programme for the newly enrolled students, where in the students, are oriented about the open and distance education system in general and about the PG Diploma in Food Safety and Quality Management programme in particular. You will be interacting with the officials from the Regional Centre, Academic Experts/Teachers from the Study Centre. A brief overview would be given about the structure of the programme; instructional system; academic counselling; assignments; various components of assignments and evaluation system.
- Please note that Induction Meeting/Programme is a very important programme, which is organized only once for you, on enrolling for the first time. As such, you must attend the programme, without fail.
- Distribution of Academic Counselling schedule.
- Provision of audio-video teleconferencing, radio counselling facilities for supplementing the counselling sessions.
- Submission and evaluation of assignments, evaluated assignments would be returned back to you with marks and feedback.
- Support about other academic and administrative queries pertaining to the conduct of programme and other procedural requirements.
- Provide information on evaluation and assignment system followed by the University including term-end examination.

Study Centre/Programme Study Centre is the contact point for you. All the important communications are sent to the Coordinator of the Study Centres and concerned Regional Directors. The Coordinators would display a copy of such important circular/notification on the notice board of the Study Centre for your benefit. You are, therefore, advised to check the notice board of the Study Centre and also get in touch with your Coordinator about assignments, submission of examination forms, date-sheet, list of students admitted to a particular examination, declaration of result, etc. Please give your feedback to the Regional Director or to the Programme Coordinator.

So far as possible, the programme study centers will be allocated to the students near to their workplace or residence.

6.0 ASSIGNMENTS

Assignments constitute an integral component of this programme. You are given certain course wise problems/questions for writing assignments. You are advised to write your response for these assignments based on your understanding of Self Learning Material pertaining to course, discussions and interactions you have had with academic counsellors, and fellow learners. Each course will have one assignment. You are required to submit assignment responses of every course at the Study Centre (PSC) allotted to you within the stipulated time frame. Every assignment marks will be counted for the final marking for each course.

Course-wise questions for assignments prepared by the faculty are sent to you along with the study material. It can also be downloaded from the IGNOU website i.e. available at

<https://webservices.ignou.ac.in/assignments/>.

You are given enough time (see the assignment schedule/ operation schedule supplied to you) to go through the study material, refer books, discuss/interact with Academic Counsellors and fellow learners to develop an understanding and comprehending before you attempt actual assignment response preparation. After completing the assignments, you should submit the same to the Study Centre (PSC) with which you are attached, for assignment evaluation and feedback. The evaluator will carefully evaluate the assignment response and provide you feedback in the form of teaching comments on the strengths and weakness of each of the assignment response for your benefit. Remember, the assignment carry a weightage of 30% per course, which will be added to the final grade in the concerned course.

6.1 Rationale of Assignments

Since assignment forms essential part of the programme, you must allocate enough time for preparing and writing assignment responses as per the guidelines of the University and submit them to the Study Centre/ Programme Study Centre.

Please make sure that you **write assignment responses on your own which will improve your understanding, knowledge and skills about the course curriculum**. At the same time, you are also advised not to reproduce the course material given in the units or assignments responses of others. Any learner, found indulging into such practice, may be penalized by awarding “Zero mark”. Your sincere efforts in writing assignment responses will enable you to integrate your knowledge, understanding, and skills and provoke you to think on your own to test your comprehension of content and competencies in applying the concept.

6.2 Steps to be followed for Assignment Preparation

While writing assignment responses, you may follow the guidelines given below which will facilitate for preparing better assignment responses:

- Read assignment question very carefully and identify the block(s) unit(s) to which it relates.
- Make your answer precise, concise and systematic, which is relevant to assessment question.
- Supplement your response with examples, illustrations and real life situations, as per requirement, which will help you in acquiring better knowledge and skill.
- Stick to the word limit, if indicated, in the assignment, by drafting, re-drafting assignment responses till you arrive a final draft response.
- Remember, you have to write answer in your own handwriting, as such, do not send typed assignment response

Further guidelines, if required, may be obtained from your Academic Counsellor(s) attached with the Study Centre/ Programme Study Centre.

6.3 Submission of Completed Assignment Responses

Always submit your assignments within the specified time limit:

- Write your enrolment number, name and full address at the right hand corner of the 1st page of your assignment response.

- Submit your assignment response only to the Study Centre/ Programme Study Centre with which you are attached. Please do not submit/forward your assignments to any other Centre/institution.
- The course for which the assignment has been done, its Course code should be written in capital letters in the centre of the top of the 1st page of the response sheets. The top left hand corner should be kept for office use.
- The format given below may be used:

Programme Code
 Programme Title
 Course Title
 Course Code
 Enrolment No
 Name:
 Address:
 Telephone
 E-mail:
 Date of Submission:

Instructions for submitting/sending Assignment Responses

- Send assignment responses complete in all respect. Incomplete assignments will not carry any credit.
- Use-A-4 size paper for writing your response and leave a margin of about 2½ inch on the left side for writing tutor comments and providing feedback.
- Always retain a copy of the assignment response with you as a precautionary measure. In case the assignment response submitted is lost in transit or otherwise, you may be asked to send another copy. As such, retain a photocopy of the assignment response till you successfully complete the Programme.
- The assignment should be submitted to the Coordinator/Programme-Incharge of the Study Centre/ PSC on or before the last date indicated, as per the schedule of assignments, given by the University.
- Always procure a set of new assignment questions, which are on offer if you have not cleared them in previous year(s).

Once you have obtained pass marks in an assignment, you cannot resubmit assignment response, for improvement of grade/mark. Assignments are not subject to re-evaluation except for factual errors, if any.

7.0 EVALUATION

The system of evaluation in IGNOU is different from that of conventional universities. In Indira Gandhi National Open University, every course is considered as an independent unit. Hence, every course will be evaluated separately and for all purposes each course will be considered as a separate entity. There are eight courses in the "PG Diploma in Food Safety and Quality Management" programme comprising, four theory courses (MVP-001, MVP-002, MVP-003 and MVP-004), one integrated course (MVPI-001), two practical courses (MVPL-001 and MVPL-002), and one project work (MVPP-003). For successful completion of the programme, you will have to secure pass marks in all the eight courses. The assessment system of the programme is given below:

7.1 Evaluation Structure for Theory, Practical and Project Work

7.1.1 Theory

For theory, the weightage to the term-end examination (Final Theory Examination) will be 70% and for continuous assessment (assignment) it will be 30%. The continuous assessment is in form of Assignments. There will be one assignment for each theory and integrated course. The weightage to the assignment component will be 30% of the theory component.

Assignments have to be submitted to the Programme Incharge of programme study centre and instruction for formatting the assignments and date of submission of the same are given in the assignment section of the Programme Guide.

Note: You have to submit all the assignments of five courses having theory/Term-End-Exam (TEE) i.e. MVP-001, 002, 003, 004 and MVPI-001 before submission of the TEE Examination Form and it is essential/compulsory to get the authentication (signature) of the Programme Incharge in the TEE exam form that you have submitted all the assignments for appearing in the Term-End Exams.

The weightage to the term-end examination will be 70 % and the minimum pass marks in term-end examination will be 40 per cent. The marks obtained by the students in the term-end examination will be converted to have weightage of 70% in theory courses. The pass percentage for an assignment is also 40% marks. The students have to secure 40% marks on aggregate basis also.

7.1.2 Practical

The practical evaluation shall be for one integrated course (MVPI-001) and two practical courses (MVPL-001 and MVPL-002). The practical evaluation is divided under two components: (i) guided experiments and (ii) unguided experiments. The guided experiments shall be performed during the counselling sessions under the guidance of the counsellors. The unguided experiment shall be undertaken by the students in the last session. For unguided experiment, student shall not be provided any guidance while performing the experiment(s).

Both the components will be evaluated. The weightage of 70% will be assigned to guided experiments and 30% weightage is for unguided experiments. Each experiment performed by the student would be evaluated. The student performance would be assessed by the counsellors covering various aspects like manipulative skills, observation and their understanding of the basic concepts related to the experiment.

Weightage: Practical

Component	Weightage
Guided Experiments	70%
Un-guided Experiments	30%
Total	100 %

The pass percentage is 40% on individual and on aggregate basis please.

7.1.3 Project Work

The project work evaluation will involve preparation of project report. The marks are to be awarded by the experts. The weightage to the project report is 100% of the total marks. The procedure involves approval of the project proposal (synopsis) by the concerned Regional Centre and submission of final

project report is also to the concerned Regional Centre. The detail guidelines are given in the section marked for the project work i.e. MVPP-003 (Chapter 8.0 of this Programme Guide).

The proforma for approval of synopsis is given in the Project Guidelines. The distribution of marks is as follows:

- a) Project report: out of 100 marks

The pass percentage is 40% on individual and on aggregate basis please.

7.2 Pass Percentage for Theory and Practical Examination

The students will have to secure minimum 40% marks in all the components of the course on individual basis as well as on aggregate basis for the course i.e. (i) term-end examination (ii) assignment; (iii) practical (total marks obtained in guided and unguided experiments), (iv) project work, and (v) on aggregate basis.

7.3 Modalities for Theory and Practical Examination Criteria

Theory: Term-End Examination 70% and continuous assessment: 30%

The examination shall be held twice in a year i.e. June and December.

Practical: Guided Experiments: 70% and Unguided Experiments: 30%

(i) Evaluation- Guided Experiments

The students will be evaluated by the counsellor for performing the experiments. The weightage for unguided experiments is 70%. For a particular experiment, split up of marks may be broadly on the following lines:

S. No.	Component	Weightage
a)	Actual performance of experiment and observation (psychomotor and manipulative skills)	40%
b)	Reporting (Problem solving skills)	20%
c)	Viva-voce	20%
d)	Record	20%

(Please see and use Evaluation Form No. 1(a) & 1 (b). The Evaluation Form No.1(a) is applicable for MVPI-001. The Evaluation Form No.1(b) is applicable for MVPL-001 & MVPL-002. Please use separate Evaluation Form for MVPL-001 and MVPL-002)

(ii) Evaluation- Assigned Unguided Experiments

It will be conducted in the last session of the laboratory work. The student should not be provided any guidance while performing this experiment. For this experiment 30% marks are allotted, split up of marks may be broadly on the following lines:

S. No.	Component	Weightage
a)	Actual performance of experiment and observation (psychomotor and manipulative skills)	50%
b)	Reporting (Problem solving skills)	25%
c)	Viva-voce	25%

(Please see and use Evaluation Form No. 2(a) & 2 (b). The Evaluation Form No.2(a) is applicable for MVPI-001. The Evaluation Form No.2(b) is applicable for MVPL-001 & MVPL-002. Please use separate Evaluation Form for MVPL-001 and MVPL-002)

There shall be one internal examiner and one external examiner. The counsellor conducting the practical counselling sessions for the course shall be the internal examiner. The external counsellor could be either one of the counsellor from the same study centre or other study centre or an approved external examiner. The course-writer/editors/faculty members of the SOA could also act as external examiners. The proposal shall be made by the PSC.

7.4 Preparation of Consolidated Mark List

The consolidated mark list of all students shall be prepared using the proforma given in Evaluation Form No. 3 (**Please see and use Evaluation Form No. 3(a) & 3 (b). The Evaluation Form No.3(a) is applicable for MVPI-001. The Evaluation Form No.3(b) is applicable for MVPL-001 & MVPL-002. Please use separate Evaluation Form for MVPL-001 and MVPL-002).** This mark list shall be directly sent to the Regional Director within a week after completion of practical counselling sessions.

Consolidation of Practical Marks: Please use Evaluation Form No.3 for consolidation of the marks. The proformas are given in the Appendix XII.

7.5 Participation and Attendance for Practical

Practical are essential components of the programme. For successful completion of the Programme, a participant is required to have a minimum of 75% attendance in the practical sessions at Programme Study Centre. A student will not be eligible to appear in Term End examination if the percentage of attendance in practical session (Programme Study Centre) falls below 75%.

7.6 Project Work

The project work involves preparation of project report after the approval of synopsis and the viva voce. The criteria for project report evaluation include: (1) Task Definition and Approach (25% weight), (2) Literature Review, Findings and Evaluation (50% weight), and (3) Communication of Ideas and Presentation (25% weight). The distribution of marks shall be as follows:

(a) Project report: out of 100 marks.

7.6.1 Empanelment of Experts for evaluation of the Project Reports

- The empanelment of experts will be done by the School in consultation with the Regional Centres.
- The writers/editors of the study material of the programme, approved counsellors of the programme at different Programme Study Centre (PSC) and faculty members of the School of Agriculture of IGNOU are eligible to undertake Evaluation of Project Reports and Conduct of Viva-voce.
- The Regional Centre will forward the names of academic experts/officials associated with the Food Safety and Standards Authority/Food Auditors for approval in the School as per the University norms.
- The name approved in the School Board of the School of Agriculture.

7.6.2 Formats

The pass percentage is 40% on individual and on aggregate basis please.

The formats for awarding the marks are enclosed for reference please and are as follows:

a) For Project Reports Evaluation: Evaluation Form No. 4(a) under Appendix II

7.7 Distribution of Marks

Every course is considered as an independent unit. The maximum marks for each course (theory/practical/ integrated) shall be 100. The integrated course MVPI-001 shall have 50 marks for theory and 50 marks for practical. The course wise distribution of marks is given below in the table.

Total and Course-wise Distribution of Marks

Course Code	Theory		Practical		Project	Total Marks Obtained out of 100
	Term-end	Continuous Assessment	Guided	Unguided		
MVP-001	70 (28)	30 (12)	00 (00)	00 (00)	00 (00)	100 (40)
MVPI-001	35 (14)	15 (6)	35 (14)	15 (6)	00 (00)	100 (40)
MVP-002	70 (28)	30 (12)	00 (00)	00 (00)	00 (00)	100 (40)
MVP-003	70 (28)	30 (12)	00 (00)	00 (00)	00 (00)	100 (40)
MVP-004	70 (28)	30 (12)	00 (00)	00 (00)	00 (00)	100 (40)
MVPL-001	00 (00)	00 (00)	70 (28)	30 (12)	00 (00)	100 (40)
MVPL-002	00 (00)	00 (00)	70 (28)	30 (12)	00 (00)	100 (40)
MVPP-003	00 (00)	00 (00)	00 (00)	00(00)	100 (40)	100 (40)
Total	315(126)	135 (54)	175 (70)	75 (30)	100 (40)	800 (320)

* The marks in bracket indicate minimum pass marks.

7.8 Pass Percentage for the Programme

The students will have to secure 40% marks in all the courses on individual basis and on aggregate basis in all the eight courses for award of the programme degree.

7.9 Result and Certification

The final certification of the PG Diploma shall be made on a five point scale and Grade point average as approved by the University vide Item No. 19.6 of the Academic Councils Standing Committee is as follows:

Letter Grade	Point Grade	Range	% of Marks	Division
A	5	4.50 and above	80% and above	1st Division with Dist.
B	4	3.50 to 4.49	60% to 79.9%	1st Division
C	3	2.50 to 3.49	50% to 59.9%	2nd Division
D	2	1.50 to 2.49	40% to 49.9%	Pass
E	1	0 to 1.49	Below 40%	Failed

7.10 Term-End Examination (TEE)

The University conducts Term-end Examination twice in year in the month of June and December. The Students will be permitted to appear in Term-end Examination, subject to the condition, that registration for the courses in which they wish to appear is valid. Further, maximum time to pursue the programme has not elapsed and they have also submitted the required number of assignment(s) by the due date and have 75% attendance under the practical counselling sessions. The first examination can be taken in June/December,

after completion of one year, depending upon the cycle of admission i.e. July/January. In other words, student admitted in January session will be eligible to take first term-end examination in December and those admitted in July session can take exam in next June. Thereafter, the examination can be given in June or December, within the total span of the programme. To be eligible to appear at the term- end examination in any course, students are required to fulfill the following conditions:

- 1) Should pursue the prescribed course and should have valid registration at the time of submission of examination form.
- 2) Should complete 75% of attendance in practical courses/ practical counselling sessions.
- 3) Should submit the examination form before stipulated date.
- 4) Should have submitted all the assignments of various courses.

7.10.1 Examination Fee

The University conducts Term-end Examination twice in year in the month of June and December. The first examination can be taken in June/December, after completion of one year, depending upon the cycle of admission i.e. July/January. In other words, student admitted in January session will be eligible to take first term-end examination in December and those admitted in July session can take exam in next June. Thereafter, the examination can be given in June or December, within the total span of the programme. To be eligible to appear at the term- end examination in any course, students are required to fulfill the following conditions:

- 5) Should pursue the prescribed course and should have valid registration at the time of submission of examination form. Further, maximum time to pursue the programme has not elapsed.
- 6) Should complete 75% of attendance in practical courses/ practical counselling sessions.
- 7) Should submit the examination form before stipulated date.
- 8) Should have submitted all the assignments of various courses.

Students should submit on-line examination form as per guidelines through IGNOU website at www.ignou.ac.in. **For the latest information** regarding Programme fee, Exam fee, Late fee etc., you are requested to visit the IGNOU website.

About last date of form fill up and the examination fee, please visit the University website.

i) The date of submission of Examination form without late fee:

For June TEE : 1st March to 31st March

For December TEE : 1st September to 30th September

ii) Examination forms with late fee are accepted as per following schedule:

Dates for Submission of Exam Form

FOR JUNE TEE	LATE FEE	FOR DEC TEE	LATE FEE
1 March to 31 March	NIL	1 Sept. to 30 Sept.	NIL
1 April to 20 April	₹ 300/-	1 Oct. to 20 Oct.	₹ 300/-
21 April to 30 April	₹ 500/-	21 Oct. to 31 Oct.	₹ 500/-
1 May to 15 May	₹ 1000/-	1 Nov. to 15 Nov.	₹ 1000/-

7.10.2 Examination Centre

Normally, the study centre is the examination centre. However, it could also be another Study Centre in the district/adjoining district. A student is required to fill the same Study Centre Code as exam centre code in the

examination form. For this purpose the students are advised to go through the list of studycentres available in the Student Handbook and Prospectus/Programme Guide. In case any student wishes to take examination at a particular study centre, the code of the chosen centre be filled up as examination centre code. However, in case the examination centre chosen by a student, is not activated, the university will allot another examination centre under the same District/Region.

Please remember that the University reserves the right for allocation of the Examination Centre.

7.10.3 Issue of Examination Hall Ticket

University issues Examination Hall Ticket to the students at least two weeks before the commencement of Term-end Examination. It could be downloaded from the University's website www.ignou.ac.in. Change of examination centre is permitted only in exceptional cases for which you have to make a request to the Registrar, SED at least one month before the commencement of the examination as per the University norms.

Always remember your Enrolment Number is your Roll Number for the term-end-examination (theory paper). Please exercise enough care in writing it correctly. Any mistake in writing the Roll Number will lead to non-declaration of result.

If you do not get the Hall Ticket, check the list of students registered for examination at the Examination Centre or on the IGNOU website www.ignou.ac.in. If your name is in the list, you shall be permitted to appear at the examination by showing your Identity Card (Student Card)/downloaded Hall Ticket to the Examination Centre Superintendent.

7.11 Declaration of Results

Although all efforts are made to declare the result in time. The University may not be able to declare the results of the last examination before commencement of next examination, however, due to unforeseen/unavoidable reasons.

You are, therefore, advised to fill up the term-end examination form for next term-end examination without waiting for the result of previous term-end examination.

Always quote your name, Enrollment Number, name of the programme and complete address for any correspondence with the University (including Regional Centre and Study Centre). In absence of such details, we may not be able to attend to your problems.

No student is allowed to re-appear in an examination or re-submit assignment responses for improving the marks/grade after successfully completing it.

7.12 Early Declaration of Results

The University has the provision of early declaration of term-end examinations results. The application for early declaration of results shall be entertained only if you have been selected for any post or applied for further studies, wherein mark-sheet/certificate for qualifying examination is required to be submitted to the institution by a particular date, which may be before the date of declaration of the University results. You must compulsorily submit documentary evidence (proof) in support of the reason for early declaration of your result.

It may be noted that early declaration of result is allowed only in respect of theory courses. **This facility is not applicable for practical/lab courses, project, workshop, assignments, seminar, etc. based courses. The application for early declaration of results shall be entertained for final year courses or maximum of four backlog courses only.** Prescribed fee shall be paid for early result declaration. Application form along with required amount of fee must be submitted to the Registrar, S.E. Division, IGNOU, Maidan Garhi, New Delhi-110068 before the date of the commencement of term-end examination i.e., before 1st June and 1st December, respectively. The link for Early Declaration of Results is placed in this book.

7.13 Re-evaluation of Answer Script(s)

The students who are not satisfied with the marks/grade secured by them in Term-end Examination can apply for re-evaluation within one month from the date of result declaration i.e. the date on which the results are made available on the University website on payment of the prescribed fee as per the prescribed application form available on the University website. The better of the two scores of original marks/grades and re-evaluated marks/grades will be considered and the revised marks/grades shall be incorporated in the student's records, if applicable. Re-evaluation is not permissible for Projects, Practicals, Assignments and Seminars, etc.

7.14 Issue of Official Transcript

The students may also obtain 'Official Transcript' for submission to the Overseas or Indian Institutes/ Universities on request. They may apply in the prescribed form by paying the requisite fee as under by means of demand draft in favour of 'IGNOU' and payable at 'New Delhi':

The students may also obtain 'Official Transcript' for submission to the Overseas or Indian Institutes/ Universities on request. They may apply in the prescribed form by paying the requisite fee.

A sample prescribed application form with rules and regulations in detail for this purpose is given in the Common Prospectus and also made available at <http://www.ignou.ac.in/ignou/studentzone/forms/> 1 on University's website www.ignou.ac.in.

7.15 Photocopy of the Evaluated Answer Script

The students may obtain the photocopy of the evaluated answer scripts for the term-end examination on request. They may apply the prescribed application form from 1st March to 15th April for June Term-end Examination and from 1st September to 15th October for December Term-End Examination along with the requisite fee.

A sample prescribed application form with rules and regulations in detail for this purpose is given in the Common Prospectus and also made available at <http://www.ignou.ac.in/ignou/studentzone/forms/> 1 on University's website www.ignou.ac.in.

8.0 GUIDELINES FOR PROJECT WORK (MVPP-003)

MVPP-003: PROJECT WORK-1

The project course **MVPP-003** is an integrated part of the PG Diploma in Food Safety and Quality Management (PGDFSQM). The purpose of the project work is to sensitize you to the realities and practices of Food Safety and Quality Management at field (floor) level. The project means here a type of action oriented research with planning and designing elements as well. It is also an opportunity for you to critically look into any specific issue / problems that you might have faced or you are currently facing at your work place. For registration purpose, the project course is treated as one course.

8.1 Objective

The objective of the project is to develop capabilities, among the students, for a comprehensive analysis of implementation of Good Hygienic Practices/ HACCP/ Quality Management System/ Food Safety Management System in a food establishment. The objective also includes enabling you to conduct investigation in a systematic way and to expand your understanding on the subject.

8.2 Approach

The students may undertake any topic studied in the seven courses of the PG Diploma Programme in Food Safety and Quality Management. The broad themes for study could include:

- a) Good Hygienic Practices/ HACCP/ Quality Management System/Food Safety Management System
- b) Development of Training modules
- c) Food Laws & Standards
- d) Analysis of Food Products

The project work may be undertaken in a food manufacturing/processing (organized/unorganized), hospitality, retail & street food unit. The project should not be a theory/literature based exercise. It should be practice oriented.

The types of project may include: (a) Comprehensive case study (problem formulation, analysis and recommendations), (b) comparison of practices/ validation of theory/ survey of quality management practices and (c) field study (empirical study). The project should be challenging but manageable within the resources and time available.

An outline of your project proposal from your end in form of synopsis will initiate a dialogue between you and your supervisor who will then help you to work on the chosen topic and report.

8.3 Project Synopsis (Proposal)

Proposal Formulation: Synopsis of the project should be prepared. The synopsis should clearly state the objectives and research methodology, sampling, instruments to be used, limitations if any, and future direction for further research.

- a) **Identification of Topic:** The selection of topic is of crucial importance. It should be decided and based on your understanding of the study, experience in the field and interest. The topic should be discussed with the supervisor. It should be in harmony with your areas of interest and the specialization of the supervisor. It is always better to identify a micro topic to remain focussed and complete the project on the time and within the budget and resources. The topic should be clear, directional, focussed and feasible.
- b) **Development of Project Synopsis:** The synopsis should be around 500 words. The synopsis should consist of:
 - i) a clear statement of the topic of the project;
 - ii) a statement of objectives (what you intend to achieve through the project);
 - iii) your hypothesis (if any) on which you build your study;
 - iv) the methodology you intend to adopt to carry out your study – tools and techniques to be used, if any;
 - v) population and sample size proposed, if the project involves any field work; and
 - vi) implications of the project for food safety & quality Management.

The statements of the topic and of the hypotheses are closely related. You state your hypotheses based on your present knowledge about the topic. Your hypotheses may be proved correct or changed later, based on the analysis of the data you collect. Your hypotheses also can be in the form of few research questions.

When you set objectives, it is better to limit them to four or five. A large number of objectives will be difficult to achieve, given the present scope of the project and the time available to us. The objectives should be achievable and measurable.

Methodology should include the ways through which you would collect your information, data, etc., and analyse them.

You need not worry much about the implications of your project at the initial stage. You need to state, however, in general terms the purpose of your project. Implications and conclusions will be stated

more specifically and concretely towards the end of your actual Project Work.

In addition to the above steps your proposal may also include relevant literature/ studies, and Time/ Schedule, listing various activities you have to carry out in the project, time needed for each activity and resources you have to spend on them. This time schedule will help you to carry out your project work in a systematic way.

- c) **Submission:** The Synopsis of the project should be sent to **the Concerned IGNOU Regional Centre (RC) only**. The concerned RC will give the Project Synopsis Number and shall inform the student about its approval.

8.4 Eligibility for Project Supervisor: The following are eligible to be supervisor:

- i) Faculty at the Headquarters (School of Agriculture).
- ii) Academic Counsellors of Food Safety & Quality Management Programme having relevant experience.
- iii) Teacher in Agriculture having 5 years of PG teaching experience in areas related to disciplines, e.g. in food processing, food analysis, good agricultural practices, food safety and quality management, etc. / Professionals holding Masters' degree in Food technology or allied disciplines having a minimum of 5 years of experience in the relevant area. (In exceptional cases, a supervisor with a B.E. degree and 5 years of relevant experience may also be approved)

8.5 Project Synopsis Submission and Approval

Students are advised to send their project synopsis and bio-data of the supervisor (in case of (ii) and (iii) above, which must be duly signed by the guide) to the concerned Regional Centre (RC). Synopsis proposals not accompanying a complete and signed Bio- Data of supervisor will not be considered for approval. Project synopsis can be submitted throughout the year. The concerned Regional Centre will forward the original synopsis approval to the student.

In case the proposed supervisor is not acceptable to the Faculty, the student shall be advised so, and in such cases the student should change the supervisor and resubmit the proposal. Hence the student will submit project proposal afresh with the signature of the new supervisor, as it will be considered as a new proposal. Similarly if a student wants to change his/her supervisor for any reason, he/she would be required to submit the project proposal alongwith the signature of the new supervisor on a new project proposal proforma, as it would be considered as a new proposal.

In case of academic counsellors, it should be clearly mentioned as to which are the course he/she is counselling for, and since when, alongwith the name and code of the study centre, he/she is attached with. The project supervisor will be paid a token honorarium as per the University norms for guiding the student.

At any given point of time a supervisor can not guide more than six students.

Note: Student are advised to select supervisors who are active professionals in the relevant area of the selected topic. Project Supervisors are also advised to restrict guiding projects in their core specialization area only.

Communication of Approval: A written communication regarding the approval/ non- approval of the project will be sent to the student by the Regional centre.

Resubmission of Project Proposal: In case of non- approval of the proposal the comments/suggestions for reformulating the project will be communicated to the student. In such case the revised project synopsis should be submitted with revised project proposal proforma and a copy of the rejected synopsis and project proposal proforma bearing the comments of the evaluator and P.P. No. (Project Proposal Number) allotted by the concerned Regional Centre (RC).

8.6 Project Report

8.6.1 Managing the project time: As you are aware, the project work-1 (MVPP- 003) is worth 8 credits or 240 study hours. We suggest you manage your time according to the following guidelines.

Activity	Time (Hours)	Days
Identification of project and finalizing project proposal in consultation with project counselor and field guide	64	8
Planning and conducting project work in the field with periodic review by project counsellor and field guide	112	14
Analyzing observation/results and writing the project report	64	8
Total	240	30

8.6.2 Components of Project Report: The Project Report may be presented in accordance with the following outline:

- i) **Introduction:** What prompted you to choose the topic? How is the topic important from Food Safety and Quality Management point of view?
- ii) **Objectives:** Specific and lucid statement of what you wish to achieve through the project.
- iii) **Review of literature:** The work done in the area be reviewed for reference.
- iv) **Methodology:** This may contain:
 - a) **Design:** A statement on what your overall plan of action is.
 - b) **Sampling:** How did you go about selecting the specific object, events or respondents you selected for study?
 - c) **Tools/ Techniques:** What instruments, devices, material or techniques did you choose for collecting your data?
 - d) **Processing and Analysing Data:** What techniques you did use to process the data which you collect and analyse them to answer your question?
- v) **Analyses and Findings:** A lucid presentation (numerical or graphical wherever necessary) of the analysed data and the interpretations you make thereof.
- vi) **Suggestions and Action live:** Recommendations/ suggestions and action live with people who are to perform them be specified.
- vii) **Conclusions:** The insights you have gained through this exercise, and how these may help in understanding the concept and promoting the principles and practices of food safety and quality management on the whole.
- viii) **Bibliography and Appendices.**
- ix) **Approved Project Proposal.**

8.6.3 Formulation: The following guidelines may facilitate formulation of the Report

- i) The length of the report may be about 80-100 double spaced typed pages for MVPP-003 (excluding appendices and exhibits). However 10% variation on either side is permissible.
- ii) Each project report must adequately explain the research methodology adopted and the directions for future research.
- iii) The project report should also contain the following:
 - a) Copy of the Approved Project Synopsis (Proposal) Proforma and Synopsis
 - b) Certificate of originality duly signed by the student and the supervisor

8.6.4 Submission of Project Report: One typed copy of the project report is to be submitted to the Regional Director (RD) of the concerned Regional Centre (RC). As soon as you submit the Project Report, a P.R.No. would be allotted which will be communicated to you. You should quote this P.R.No. while corresponding with the concerned Regional Centre regarding Project Report.

Project Report can be submitted any time throughout the year. Students are requested to kindly note that the “Project Report submitted after 30th November to till 31st May will be counted for June Term-End and Project Report submitted after 31st May to till 30th November will be counted for December Term-End”.

The project evaluation shall be conducted from the approved panel of evaluators.

8.6.5 Enquiries

Enquiries regarding the approval of Project Synopsis should be addressed to the concerned Regional Director, IGNOU Regional Centre, IGNOU.

8.6.6 Submission of Project Evaluation Marks

The Regional Centre shall forward the Project Report marks as per evaluation methodology to the **Registrar, Student Evaluation Division (SED), Block-12, Indira Gandhi National Open University, Maidan Garhi, New Delhi - 110068** for further processing as per university norms. The format for sending project report marks is given at Appendix I.

8.6.7 List of Topics

An illustrative list of topics, is already given at the Section 4.3, under Syllabus of the Programme, to give you an idea as to what kind of topics could be selected for project work. It is however, advised that the students select their topics outside this list.

8.6.8 Project Report Evaluation Criteria

1. Task Definition and Approach (25% weight)

- a)* Objectives/ rationale: Precise statement of objectives with rationale which outlines and refers to the underlying principles in the academic literature providing a clear theoretical frame for the project work.
- b)* Approach/ process: Specification of methodology/ process, justification of choice of approach, its appropriateness, evidence of clear planning, organization and administration, and references to research methods literature.

2. Literature Review, Findings and Evaluation (50% weight)

- a)* Literature Review: Development of a clear conceptual framework to underpin the study including rationale based on summary of findings of previous studies.
- b)* Analysis: Evidence of analysis to support ideas, objectives and questions raised in the literature.
- c)* Synthesis/evaluation: Concerned with the linking of different strands of arguments together. It includes the learner's ability to compare and contrast, synthesize and evaluate, and integrate issues raised in the literature and in the project through objectives and data gathered.
- d)* Conclusion/recommendations: Relevant/ feasible and clear conclusion and recommendations that flow out of the analysis. Shows evidence of transfer of knowledge from the study to new situations.
- e)* Creativity/ reflection: Evidence of the ability to take a position and defend it on the basis of data collected; Reflection on the implications of the study and suggestions on areas of further research.

3. Communication of Ideas and Presentation (25% weight)

- a)* Coherence of argument: Clarity of arguments with supporting evidence from literature or data, and clear flow of ideas.
- b)* Format and language: Written in an academic style – predominantly 3rd person; clear and correct usage of English; and adherence to aesthetic presentation of tables and diagrams.

8.6.9 Pass Percentage

The pass percentage is 40% on individual and on aggregate basis please.

SOME IMPORTANT NOTES WHILE PREPARING THE PROJECT SYNOPSIS (PROPOSAL)

- 1) *Send only one copy of the Project Proposal, and retain a copy with you.*
- 2) *“MVPP-003” should be written prominently on the envelope and should address to the “Regional Centre”.*
- 3) *Ensure the inclusion of the following while submitting the Proposal:*
 - a) *Proforma for Approval of Project Proposal duly filled and signed by both, the student and the supervisor.*
 - b) *Details Bio-Data of the supervisor duly signed by him/her. (Bio-data of the guide should include his/her detailed office address with phone numbers.*
 - c) *Synopsis of the Project*
 - d) *Ensure that the Project Proposal is not a Theory/Literature-based exercise. It should be action research/practice-oriented exercise to be undertaken.*
- 4) *The synopsis of your Project Proposal should include the following Rationale:*
 - a) *Introduction and Rationale for the study*
 - b) *Objectives of the study*
 - c) *Research Methodology to be used for carrying out the study (detailing nature of data, data sources, collection methods, tools and techniques of analysis, sampling etc.)*
 - d) *The expected contribution from the study*
 - e) *Limitations, if any, and the direction for future research.*

SOME IMPORTANT NOTES WHILE PREPARING THE PROJECT REPORT

1. *The Project Work should be submitted in original in A-4 size (29x20 cm) typed in double space, in a bound volumes to the concerned Regional Centre (RC) of the University by Registered insured post.*
2. *Before binding the project report the student should ensure that it contains the following in original.*
 - i) *Approved Project Proposal Proforma*
 - ii) *Approval Synopsis alongwith the Bio-data of the of the guide, and*
 - iii) *An originality certificate duly signed by the student and supervisor (Proforma enclosed)*

If any Project Report is received in the absence of the above, the same will returned to the students for compliance.

- 3) *Kindly mentioned on the top of the envelope "PROJECT REPORT-MVPP-003. This will facilitate sorting out project report. The project report will not be returned to the student. The students should keep a copy of the report for their reference propose.*

CERTIFICATE OF ORIGINALITY

This is to certify that the project titled "_____
_____ " is an original work of the Student
and is being submitted in partial fulfillment for the award of the PG Diploma
in Food Safety & Quality Management of Indira Gandhi National Open
University. This report has not been submitted earlier either to this University
or to any other University/ Institution for the fulfillment of the requirement of
a course of study.

SIGNATURE OF SUPERVISOR

SIGNATURE OF STUDENT

Place :

Place:

Date:

Date:

Project Synopsis No. _____

PGDFSQM Programme

(To be assigned by the concerned Regional Centre)

**SCHOOL OF AGRICULTURE
INDIRA GANDHI NATIONAL OPEN UNIVERSITY
Maidan Garhi, New Delhi - 110068**

PROFORMA FOR APPROVAL OF PROJECT PROPOSAL

Enrolment No.....

Study Centre.....

Regional Centre.....

Name and Address of the Student :

Email & Mobile No. :

Title of the Project :

Subject Area :

Name and Address of the Supervisor :

Is the Supervisor an Academic Counsellor: Yes.....No

of Food Safety & Quality Management Programme of IGNOU ?

If Yes, Name and code of Study :

Centre and the courses he/she is

Counselling for and since when

No. of the student currently working :

Under the supervisor for

Signature of Student

Signature of Supervisor

Date:

Date:

Please do not forget to enclose the synopsis of the project and the Bio-data of the Supervisor. In case the complete and signed Bio-Data of the Supervisor (Even if the proposed supervisor is an academic counselor of IGNOU's Food safety and Quality Management Programme) is not enclosed, the proposal will not be entertained.

<i>SYNOPSIS</i>	<i>SUPERVISOR</i>
<i>APPROVED</i>	<i>APPROVED</i>
<i>NOT APPROVED</i>	<i>NOT APPROVED</i>

For Office Use Only

Signature of Evaluator/RC Official

DATE :.....

The remuneration bill has to be submitted after or alongwith the submission of the Project Report.

**SCHOOL OF AGRICULTURE
INDIRA GANDHI NATIONAL OPEN UNIVERSITY
Maidan Garhi, New Delhi - 110068**

REMUNERATION BILL FOR GUIDANCE OF PROJECT WORK

1. *PROGRAMME TITLE* : *PG Diploma in Food Safety and Quality management*
2. *COURSE TITLE* : *MVPP- 003.....*
2. *NAME OF SUPERVISOR* :
3. *RESIDENTIAL ADDRESS* :
.....
4. *DESIGNATION* :
.....
5. *OFFICIAL ADDRESS* :
.....
.....
6. *TELEPHONE NO.* : *OFF :* *RES :*
& Email : *Email ID.*

<i>S.NO.</i>	<i>PROJECT</i>	<i>ENROLMENT NO.</i>	<i>NAME OF THE STUDENT</i>	<i>AMOUNT</i>

Certified that I have guided the students for their Project Work

*Please Affix
Rev.*

Date: *Signature of the Supervisor* _____

Note: The remuneration payable for guidance of Project Work is Rs./- per student

Certified that the above Project Supervisor was approved and recommended by the concerned Regional centre and the above may be admitted.

Dy. Registrar/Asstt. Registrar

Section Officer

Dealing Assistant

9.0 SOME USEFUL INFORMATION

9.1 Some Useful Addresses

For your information, addresses of important officers dealing with different educational aspects are given below. Whenever you have a problem, you can directly contact the concerned officer. **If you have any query regarding admission procedures, please write to Regional Director of your region.**

WHOM TO CONTACT FOR WHAT

1. Identity Card, Fee Receipt, Bonafide Certificate, Migration Certificate, Scholarship Forms	Concerned Regional Centre
2. Non-receipt of study material and assignments	Concerned Regional Director
3. SED Registrar's Secretariat	Contact No. Phone No: 011-29535828/ 2482 Intercom No. 2204/2205 FAX No.011-29534429 sed@ignou.ac.in
4. Original Degree/Diploma/Verification of Degree/Diploma	Deputy Registrar (Exam-I), SED, Block-9, IGNOU, Maidan Garhi, New Delhi-110 068 e-mail: convocation@ignou.ac.in Ph. 011-29535438, 29572224, 29572213
5. Schedule/Information regarding Exam-form, Entrance Test, date-sheet, IGNOU, Hall Ticket	Assistant Registrar (Exam-II), Student Evaluation Division (SED), Block-12, Room No. 2, IGNOU, Maidan Garhi, New Delhi-110 068 e-mail: sgoswami@ignou.ac.in Tele No. 011-29536743, 29572202, 29572209
6. Result, Re-evaluation, Grade Card, Provisional Certificate, Early Declaration of Result, Transcripts	Deputy Registrar (Exam-III), SED, Block-12, Room No. 1, IGNOU, Maidan Garhi, New Delhi-110 068 e-mail: npsingh@ignou.ac.in or Ph. 011-29536103, 29572201, 29572211, 29571525
7. Non-reflection of Assignment Grades/ Marks	Assistant Registrar (Assignment), Student Evaluation Division, Block-3, Room No. 12, IGNOU, Maidan Garhi, New Delhi-110 068 e-mail: assignments@ignou.ac.in or Ph. 011-29532294, 29571312, 29571319, 29571325
8. Change of elective/medium/opting of left over electives/deletion of excess credits	Concerned Regional Centre
9. Student Grievances (online)	Assistant Registrar (Student Grievance) SED, Block-3, Room No. 13, IGNOU, Maidan Garhi, New Delhi-110 068 e-mail: sregrievance@ignou.ac.in Ph. 011-29532294, 29571313
10. Purchase of Audio/Video Tapes	Marketing Unit, EMPC, IGNOU, Maidan Garhi, New Delhi-110 068 Ph. 011-29573210

11. Academic Content	Director, School of Agriculture, Zakir Hussain Bhawan, Academic Complex, Block-G, IGNOU, Maidan Garhi, New Delhi-68 Ph. 011-29537067, 29572976, 29572973 e-mail: soa@ignou.ac.in
12. Information Regarding Counselling Sessions & Assignment Submission	Concerned study centres and Programme Study Centre
13. Status of Project Report	Phone No: Intercom No. 1324/1320/1321 E-mail: projects@ignou.ac.in
14. Student Support Services and Student Grievances, pre-admission inquiry of various courses in IGNOU	Regional Director, Student Service Centre, IGNOU, Maidan Garhi, New Delhi-110068 e-mail: ssc@ignou.ac.in Ph. :011-29535414, 29533869 Fax: 011-2953 3129
15. Front Office (May I help you) (Students' General Enquiries) IGNOU Telephone Exchange Number	Phone No:011-29572218, 2210/ 2211/2208/ 2216/ 2209 29571000
16. Public Information Center (PIC)	PH: 29533715, 29572508

IGNOU admissions are made strictly on the basis of merit. Only those learners who satisfy the eligibility criteria fixed by the University will be admitted. Learners will not be admitted if they are not eligible as per the eligibility criteria. Therefore, the candidates should not be misled by the false promises of admission made by any private individuals or institution.

You are also advised to get in touch with the Programme Incharge of your Study Centre.

9.2 Online Facilities

IGNOU website is www.ignou.ac.in. A few important links under the site are enlisted here.

- Schools:** Where you will get the information about the programmes offered by different Schools. In the School of Agriculture, programmes being offered in agriculture sector are available.
- For students:** The University's website (www.ignou.ac.in) has a special section marked as "Student Zone" to facilitate various student support services, from admission to results, to the students and covers- registration details, queries about admission, re-registration, results; catalogue for print media and audio video; download facilities for assignment; library; question papers; material dispatch details, address checking; registration for SMS alerts; convocation; term-end date sheet; examination form; campus placement and prospectus and application form. The students are requested to access the Student Zone of the IGNOU website- www.ignou.ac.in. The link is <http://www.ignou.ac.in/ignou/studentzone>

For SMS alert you can register at <https://admission.ignou.ac.in/changeadmdata/UpdateMobile.asp>

- Division:** Under this section, there are links of Material Production and Distribution Division, Regional Service Division, Student Registration Division and Student Evaluation Division.
 - Student Registration Division- This link will give you information about admission and re-admission. <http://admission.ignou.ac.in/changeadmdata/AdmissionStatusNew.ASP>
 - Student Evaluation Division- This link gives information about term-end examination, grade card status, results, hall ticket etc.
<http://www.ignou.ac.in/ignou/studentzone/results/2>
 - MPDD:** The link <http://www.ignou.ac.in/upload/price%20catale.pdf> and registarmppdd@ignou.ac.in / mpdd@ignou.ac.in give the price catalogue of the study material.
 - Electronic Media:** You will get the information about the Gyan Darshan Schedule, Gyan Vani schedule, Interactive Radio Counselling, teleconferencing schedule and feedback form. Please check with empc@ignou.ac.in / directoremprc@ignou.ac.in or edusat-empc@ignou.ac.in

9.3 List of Regional Centres and Study Centres for PGDFSQM Programme

1. IGNOU website: <http://www.ignou.ac.in/>
2. For the list of study centres/program study centres: www.ignou.ac.in
3. IGNOU Regional Centres' website: <http://www.ignou.ac.in/ignou/aboutignou/regional/website>
4. Whom to contact for what:
<http://www.ignou.ac.in/ignou/aboutignou/division/sed/activities/detail/163>

9.4 Some Forms for Your Use

Please see the latest version of the forms at the following links.

1. Sample Form for Early Declaration of Result.
<http://www.ignou.ac.in/userfiles/APPLICATION%20FORM%20FOR%20EARLY%20DECLARATION%20OF%20RESULT%20OF%20TERM-END%20EXAMINATION.pdf>
2. Sample Form for Re-evaluation of Answer Scripts
[http://www.ignou.ac.in/userfiles/Application%20form%20for%20Reevaluation%20of%20Answer%20Scripts\(1\).pdf](http://www.ignou.ac.in/userfiles/Application%20form%20for%20Reevaluation%20of%20Answer%20Scripts(1).pdf)
3. Sample Form for Improvement in Division/Class
<http://www.ignou.ac.in/userfiles/Improvement%20form.pdf>
4. Sample Form for Obtaining Photocopy of the Answer Script
<http://www.ignou.ac.in/userfiles/Application%20Form%20for%20obtaining%20photocopy%20of%20the%20answer%20script.pdf>
5. Sample Form for Issue of Official Transcript
<http://www.ignou.ac.in/userfiles/Official%20Transcript%20form.pdf>
6. Sample Form for Issue of Migration Certificate
<http://ignou.ac.in/userfiles/Migration%20Certificate.pdf>
7. Sample Form for Obtaining Duplicate Grade Card/Mark sheet
<http://www.ignou.ac.in/userfiles/Duplicate%20mark%20sheet%20form.pdf>
8. Application Form for Obtaining Duplicate Copy of Degree/Diploma/Certificate
[http://www.ignou.ac.in/userfiles/Duplicate%20Degree,Diploma%20and%20Certificate%20Form.p
df](http://www.ignou.ac.in/userfiles/Duplicate%20Degree,Diploma%20and%20Certificate%20Form.pdf)

Evaluation Form No.1 (a)**Evaluation Sheet for Guided Experiments for MVPI-001 (for 35 Marks)**Programme and Course : **MVPI-001**

Name of the Student :

Enrolment No. :

Residential Address :

Sl. No.	Date	Title of the Experiment	Evaluation of guided experiment				Total marks	Remarks
			Performance & Observations	Reporting	Record	Viva-Voce		
			(4)	(2)	(2)	(2)	(10)	
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								

Total Marks in experiments

Total (out of 35)

Date :

Place :

Signature of Counsellor

Note: Kindly use this proforma for each student individually.
Kindly use separate proforma for each course.

Evaluation Form No.1 (b)**Evaluation Sheet for Guided Experiments for MVPL-001 and MVPL-002 (for 70 Marks)**

Programme and Course :

Name of the Student :

Enrolment No. :

Residential Address :

Sl. No.	Date	Title of the Experiment	Evaluation of guided experiment				Total marks	Remarks
			Performance & Observations	Reporting	Record	Viva-Voce		
			(8)	(4)	(4)	4)	(20)	
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								

Total Marks in experiments

Total (out of 70)

Date :

Place :

Signature of Counsellor

Note: Kindly use this proforma for each student individually.
Kindly use separate proforma for each course.

Evaluation Form No.2 (a)**Evaluation Sheet for Unguided Experiments for MVPI-001 (for 15 Marks)**

Programme and Course :

Name of the Student :

Enrolment No. :

Residential Address :

Sl. No.	Date	Title of the Experiment	Evaluation of guided experiment			Total marks	Remarks
			Performance & Observations	Reporting	Viva-Voce		
			(8)	(2)	(5)	(15)	
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							

Total (out of 15)

Date :

Place :

Signature of Counsellor

Note: Kindly use this proforma for each student individually.
Kindly use separate proforma for each course.

Evaluation Form No.2 (b)**Evaluation Sheet for Unguided Experiments MVPL-001 and MVPL-002 (for 30 Marks)**

Programme and Course :

Name of the Student :

Enrolment No. :

Residential Address :

Sl. No.	Date	Title of the Experiment	Evaluation of guided experiment			Total marks	Remarks
			Performance & Observations	Reporting	Viva-Voce		
			(16)	(4)	(10)	(30)	
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							

Total Marks (out of 30)

Date :

Place :

Signature of Counsellor

Note: Kindly use this proforma for each student individually.
Kindly use separate proforma for each course.

Evaluation Form No.3 (a)

Proforma for Consolidated Mark List for MVPI-001

Programme and Course :

Centre Code :

Name of the Centre :

Year & Month :

Sl. No.	Enrolment No. of the Student	Marks obtained in guided experiments (Out of 35)	Marks obtained in assigned unguided experiment (out of 15)	Total (out of 50)

Date :

Signature of the Counsellor

Place :

Signature of the Coordinator

- Note:**
- This is a collective statement for all the students.
 - Only the consolidated mark-list must be forwarded to the concerned Regional Director of IGNOU. A copy of the forwarding letter be sent to the Director, School of Agriculture.
 - The evaluation sheets for guided experiments and for assigned unguided experiment must be handed over to the Coordinator of the study centre.

ii) Evaluation Form No.3 (b)

Proforma for Consolidated mark list for MVPL-001 and MVPL-002

Programme and Course :

Centre Code :

Name of the Centre :

Year & Month :

Sl. No.	Enrolment No. of the Student	Marks obtained in guided experiments (Out of 70)	Marks obtained in assigned unguided experiment (out of 30)	Total (out of 100)

Date :

Signature of the Counsellor

Place :

Signature of the Coordinator

- Note:**
- i) This is a collective statement for all the students.
 - ii) Only the consolidated mark-list must be forwarded to the concerned Regional Director of IGNOU. A copy of the forwarding letter be sent to the Director, School of Agriculture.
 - iii) The evaluation sheets for guided experiments and for assigned unguided experiment must be handed over to the Coordinator of the study centre.
 - iv) Kindly use separate proforma for MVPL-001 and MVPL-002 each course.

Evaluation Form No.4 (a)

AWARD LIST OF PGDFSQM PROJECT (MVPP-003)

PGDFSQM: PROJECT REPORT EVALUATION					
Sl. No.	P.R. No.	P.S. No.	STUDENT NAME	ENROLMENT No.	PROJECT REPORT (Out of 100)
1.					
2.					

Project Synopsis (P.S.) No. given by the concerned Regional Centre

Project Report (P.R.) No. also given by the concerned Regional Centre

(Signature of Evaluator)

Name of Evaluator :

Address :

Email :

Ph.:

Mobile :



INDIRA GANDHI NATIONAL OPEN UNIVERSITY
STUDENT REGISTRATION DIVISION
MAIDAN GARHI, NEW DELHI-110068

Application for Internal Credit Transfer for PGDFSQM Programme

I hereby apply for transfer of Credits for PGDFSQM Programme.

Enrolment Number (Old) PGDFSQM

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Enrolment Number (New) allotted for PGDFSQM Programme

--	--	--	--	--	--	--	--	--	--	--

Sl.No.	Course Code	Title of Course	Credits
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
Total			

NOTE:

- Fee of Rs.500/- per course is required to be paid by means of a Demand Draft drawn in favour of IGNOU and payable at New Delhi, for transfer of credits for the above mentioned courses of PGDFSQM Programme. The students should submit this Credit Transfer Form, only after taking the fresh admission in PGDFSQM Programme and allotted a new enrolment number by SRD, to the address given below in the box.

 Fee paid details: SBI collect No./Demand Draft No. _____ Date _____
 Amount in Rs. _____
 Bank(in case of DD) _____
- Credit Transfer of all the above courses may be affected to PGDFSQM Programme.
- Credit Transfer for the Course MVPP-001 is not allowed as the Project Course, Code and Credits have been changed and the New Course is Project Work-1 with Project Code MVPP-003 which is of eight credits.**

Speed Post this Credit Transfer Form along with the application, supporting documents, fee paid details to:

**The Registrar,
 SRD, Block No.3, IGNOU,
 Maidan Garhi, New Delhi- 110068.**

Signature of the Student: _____

Name and address of the student: _____

Mobile No.: _____

E-mail: _____

Dated : _____

IMPORTANT INFORMATION

Please keep this Programme Guide safely till you complete the Programme. You will need to repeatedly consult it while pursuing the PG Diploma Programme, as this guide carries information pertaining to structure, course and units; guidelines for operationalization of the programme and formats required for different purposes to make correspondence with the University.

Printed Self Learning/Instructional Study Material (SLM) is the backbone of Open and Distance Learning System (ODL). The study material is prepared by a team of experts keeping in view the requirements, understandings and interest of the learners. The material is developed through an expert committee who are distinguished academics and professionals in respective disciplines. The study material is written in such a manner that the learners can study themselves with little assistance from the Academic Counsellors at the Learner Support Centres. **It is mandatory to attend the stipulated Practical Counselling sessions (75% attendance is minimum) at the Programme Study Centre.** Further, you may also refer to text books and reference books, as per your requirement. These are available with select libraries attached to the Study Centres and Regional Centres.

The Concerned IGNOU Regional Centre will send you the study material and assignments by the registered post or may be handed over in person. If you do not receive the same for any reason, it may be immediately reported to your Regional Centre, for verification and necessary action. Further, in case, you do not receive assignments, you may obtain a copy of the same from the Study Centre or Regional Centre with which you are attached or may download it from the **IGNOU website (www.ignou.ac.in)**.

Remember, you are eligible for Term-end-examination in June/December, depending upon the cycle of your admission i.e. January/July, till you have valid registration up to maximum period of four years.