



## MAHATMA GANDHI UNIVERSITY, KERALA

### Abstract

Bachelor of Science (Honours) Food Science and Quality Control - Fifth Semester - Modifications to the Course Outcomes, Course Content and Mode of Assessment - Approved - Orders Issued.

---

### ACA 16

No. 4784/ACA 16/2026/MGU

Priyadarsini Hills, Dated: 14.05.2026

---

*Read:-*1. U.O.No.5797/AC A16/2024/MGU, dated.27.06.2024.

2. Minutes of the meeting of the Expert Committee on Food Science and Quality Control (UG)
4. Orders of the Vice Chancellor under Section 10 (17), Chapter III of the Mahatma Gandhi University Act 1985, dated 14.05.2026.

### ORDER

The syllabi of various Honours Under Graduate Programmes coming under The MGU-UGP (Honours) Regulations, 2024, have been approved vide paper read as (1) above and published on the website of the University.

The Expert Committee on Food Science and Quality Control (UG), deliberated on modifying the **Course Outcomes, Course Content and Mode of Assessment of the DSC, DSE and SEC** type courses in the **Fifth Semester** syllabus of **Bachelor of Science (Honours) Food Science and Quality Control** programme and has submitted recommendations, vide paper read as (2) above. **(Recommendations are attached as Annexure).**

Considering the urgency of the matter, sanction has been accorded by the Vice Chancellor, in exercise of the powers of the Academic Council vested upon him under Section 10(17), Chapter III of the Mahatma Gandhi University Act 1985, vide paper read as (3) above, to approve the aforementioned recommendations.

Hence, the **Course Outcomes, Course Content and Mode of Assessment** of the said courses in the Fifth Semester syllabus of **Bachelor of Science (Honours) Food Science and Quality**

**Control** programme stands modified to this extent.

Orders are issued accordingly.

SUDHA MENON J

ASSISTANT REGISTRAR III

(ACADEMIC)

For REGISTRAR

Copy To

1. PS to VC
2. PA to Registrar/CE
3. Convenor, Expert Committee, Food Science and Quality Control (UG)
4. JR 2 (Admin)/DR 2, AR 3 (Academic)
5. JR/DR/AR (Exam)
6. Tabulation/Academic Sections concerned
7. AC C1/AC C2 Sections
8. IT Cell 3/OQPM1Sections
9. PRO/IQAC/Records Sections
10. Stock File/File Copy

File No. 12178/AC A16-1/2026/AC A16

Forwarded / By Order

Section Officer

The document is digitally approved. Hence signature is not needed.

## ANNEXURE

### SEMESTER V

**Course Name : Technology of Meat, Fish, Egg and Poultry**  
**Course Code : MG5DSCFSQ300**

#### Course Outcomes

CO.No	Expected Course Outcome (Modified)	Learning Domains (Modified)	PO.No	Page No.
1	Illustrate the Composition and Nutritive value in meat, poultry and fish	No Change	No Change	134
2	Illustrate the Composition and Nutritive value in egg	U		
3	No Change	No Change		
4				

#### Course Content (Content for Classroom Transaction (Units))

Module	Units	Course Description	Hours	CO.No (Modified)	Page No.
<b>1. Meat, Poultry and Fish</b>	1.1	No Change	No Change	1	135-136
	1.2				
	1.3				
	1.4				
	1.5				
<b>2. Egg</b>	2.1	No Change	No Change	2	
	2.2				
	2.3				
<b>3. Emerging Trends</b>	3.1	No Change	No Change	3	
<b>4. Practicum</b>	4.1	No Change	No Change	4	
	4.2				
	4.3				
	4.4				
	4.5				
<b>5</b>	<b>Teacher Specific Content</b>				

## Mode of Assessment

<b>A. Continuous Comprehensive Assessment (Modified)</b>			<b>Page No.</b>
Theory: 25 marks Assignment/Test/ Seminar  Practicals: 15 marks Viva/ Skill/ Knowledge			136
<b>B. End Semester Evaluation: Theory (Modified)</b>			
<b>Total Marks :50</b>		<b>Duration: 1.5 Hrs</b>	
Type of Questions	No.of Questions to be Answered	Total Marks	
MCQ	10 out of 10	10 x 1= 10 marks	
Short Answer	4 out of 6	4 x 5 = 20 marks	
Essay	2 out of 4	2 x 10 = 20 marks	
<b>Practical :35 marks</b> Lab report – 5 marks Viva – 5 marks Written Test (Principle and Procedure of two experiments)- 10 marks <b>Experimentation- Any two experiments</b> Major- 10 marks Minor – 5 marks			

**Course Name : Dairy Technology**  
**Course Code : MG5DSCFSQ301**

### Course Outcomes

CO.No	Expected Course Outcome (Modified)	Learning Domains (Modified)	PO.No	Page No.
1	No Change			
2				
3	From this course students will be able to make use of and distinguish the processing of Indian dairy products	No Change	No Change	138-139
4	Formulation of dairy products utilizing the various principles of milk processing technology and its evaluation adhering to	C		

	established standards			
5	Removed			

**Course Content  
(Content for Classroom Transaction (Units))**

Module	Units	Course Description	Hours	CO.No (Modified)	Page No.
<b>1- Introduction to Dairy Technology and Properties of Milk</b>	1.1	No Change	No Change	No Change	139-141
	1.2				
	1.3				
<b>2- Processing &amp; Packaging of Milk</b>	2.1	No Change			
	2.2				
	2.3				
	2.4				
	2.5				
<b>3- Dairy Products</b>	3.1	No Change		2	
	3.2				
	3.3			3	
	3.4				
	3.5				
<b>4- Practicum</b>	4.1	No Change		4	
	4.2				
	4.3				
	4.4				
	4.5				
<b>5</b>	<b>Teacher Specific Content</b>				

**Mode of Assessment**

<b>A. Continuous Comprehensive Assessment (Modified)</b>	<b>Page No.</b>
Theory: 25 marks Assignment/Test/ Seminar	141-142
Practicals: 15 marks Viva/ Skill/ Knowledge	

<b>B. End Semester Evaluation: Theory (Modified)</b>		
<b>Total Marks :50</b>		<b>Duration: 1.5 Hrs</b>
<b>Type of Questions</b>	<b>No.of Questions to be Answered</b>	<b>Total Marks</b>
MCQ	10 out of 10	10 x 1= 10 marks
Short Answer	4 out of 6	4 x 5 = 20 marks
Essay	2 out of 4	2 x 10 = 20 marks

**Practical :35 marks**  
 Lab report – 5 marks  
 Viva – 5 marks  
 Written Test (Principle and Procedure of two experiments)- 10 marks  
**Experimentation- Any two experiments**  
 Major- 10 marks  
 Minor – 5 marks

**Course Name : Technology of Cereals, Pulses and Oil Seeds**  
**Course Code : MG5DSEFSQ300**

#### Course Outcomes

<b>CO.No</b>	<b>Expected Course Outcome (Modified)</b>	<b>Learning Domains</b>	<b>PO.No</b>	<b>Page No.</b>
1	No Change	No Change	No Change	143-144
2				
3				
4	Assess the chemical composition, anti-nutritional factors and processing technology of different pulses and oil seeds.			
5	Removed			

#### Course Content

##### (Content for Classroom Transaction (Units))

<b>Module</b>	<b>Units</b>	<b>Course Description</b>	<b>Hours (Modified)</b>	<b>CO.No. (Modified)</b>	<b>Page No.</b>
<b>1- Technology of Rice</b>	1.1	No Change	6	No Change	
	1.2		4		
	1.3		4		

	1.4		4		144-145
	1.5		4		
<b>2- Technology of Wheat</b>	2.1		6	No Change	
	2.2		4		
	2.3		4		
<b>3- Technology of Corn</b>	3.1		4	3	
	3.2		4	No Change	
<b>4- Technology of Pulses and Oilseeds</b>	4.1		4	4	
	4.2		4		
	4.3		4		
	4.4		4		
<b>5</b>	<b>Teacher Specific Content</b>				

### Mode of Assessment

<b>A. Continuous Comprehensive Assessment (Modified)</b>			<b>Page No.</b>
Theory: 30 marks Assignment/Test/ Seminar			145
<b>B. End Semester Evaluation: Theory (Modified)</b>			
<b>Total Marks : 70</b>		<b>Duration: 2 Hrs</b>	
<b>Type of Questions</b>	<b>No. of Questions to be Answered</b>	<b>Total Marks</b>	
MCQ	20 out of 20	20 x 1 = 20 marks	
Short Answer	6 out of 8	6 x 5 = 30 marks	
Essay	2 out of 4	2 x 10 = 20 marks	

**Course Name : Coconut Processing Technology**

**Course Code : MG5DSEFSQ301**

### Course Outcomes

CO.No	Expected Course Outcome (Modified)	Learning Domains	PO.No	Page No.
1	No Change	No Change	No Change	147-148
2				
3				
4	Analyze the impact of different variables on coconut processing			

	outcomes and innovative coconut processing techniques or improvements.			
5	Removed			

**Course Content  
(Content for Classroom Transaction (Units))**

Module	Units	Course Description	Hours	CO.No. (Modified)	Page No.	
<b>1- Introduction to Coconut Processing Technology</b>	1.1	No Change	No Change	No Change	148-149	
	1.2					
	1.3					
	1.4			1		
	1.5					
<b>2- Coconut Oil Extraction</b>	2.1					2
	2.2					
<b>3- Quality Control in Coconut Processing</b>	3.1					3
	3.2					
<b>4- Production of Coconut-based Products and byproducts</b>	4.1					4
	4.2					
	4.3					
	4.4					
	4.5					
5	<b>Teacher Specific Content</b>					

## Mode of Assessment

<b>A. Continuous Comprehensive Assessment (Modified)</b>			<b>Page No.</b>
Theory: 30 marks Assignment/Test/ Seminar			149
<b>B. End Semester Evaluation: Theory (Modified)</b>			
<b>Total Marks : 70</b>		<b>Duration: 2 Hrs</b>	
Type of Questions	No. of Questions to be Answered	Total Marks	
MCQ	20 out of 20	20 x 1= 20 marks	
Short Answer	6 out of 8	6 x 5 = 30 marks	
Essay	2 out of 4	2 x 10 = 20 marks	

**Course Name : Confectionary and Chocolate Processing Technology**  
**Course Code : MG5DSEFSQ302**

**Course Content**  
**(Content for Classroom Transaction (Units))**

Module	Units	Course Description	Hours	CO.No (Modified)	Page No.		
<b>1- Introduction to Sugar and Confectionary</b>	1.1	No Change	No Change	No Change	152-153		
	1.2			1			
<b>2- Cocoa Products and Processing</b>	2.1			No Change		No Change	2
	2.2						
	2.3						
<b>3- Sugar &amp; Flour Confectionary</b>	3.1			No Change		No Change	3
	3.2						
	3.3						
	3.4						
<b>4- Miscellaneous Products</b>	3.5			No Change		No Change	4
	4.1						
5	<b>Teacher Specific Content</b>						

## Mode of Assessment

<b>A. Continuous Comprehensive Assessment (Modified)</b>			<b>Page No.</b>
Theory: 30 marks Assignment/Test/ Seminar			153
<b>B. End Semester Evaluation: Theory (Modified)</b>			
<b>Total Marks : 70</b>		<b>Duration: 2 Hrs</b>	
<b>Type of Questions</b>	<b>No. of Questions to be Answered</b>	<b>Total Marks</b>	
MCQ	20 out of 20	20 x 1= 20 marks	
Short Answer	6 out of 8	6 x 5 = 30 marks	
Essay	2 out of 4	2 x 10 = 20 marks	

**Course Name : Bakery Product Technology**  
**Course Code : MG5DSEFSQ303**

<b>Course Name (Modified)</b>	<b>Bakery Product Technology</b>	<b>Page No. 155</b>
-------------------------------	----------------------------------	---------------------

### Course Outcomes

CO.No	Expected Course Outcome (Modified)	Learning Domains (Modified)	PO.No	Page No.
1	Understand the growth and significance of the bakery and confectionery industry, the basic principles of baking, temperature effects, and the roles of key ingredients and processes in products like bread, biscuits, cookies, crackers, cakes, and pastries.	No Change	No Change	155-156
2	Understand production processes, ingredient functions, equipment, product varieties, and quality control measures for bread, biscuits, cookies, and crackers, including common faults and corrections.			
3	Apply ingredient functions, formula balancing, and processing techniques in preparing cakes, muffins, pastries, and related products, while identifying and correcting faults			
4	Analyze modifications in bakery			

	formulations to meet special nutritional needs (high-fiber, low- sugar etc.) and examine product safety and regulatory standards.	An		
--	---	----	--	--

**Course Content  
(Content for Classroom Transaction (Units))**

Module	Units	Course Description	Hours	CO.No. (Modified)	Page No.
<b>1- Bakery Industry and its Fundamentals</b>	1.1	No Change	No Change	No Change	156-157
	1.2			1	
	1.3			No Change	
<b>2- Technology of Bread, Biscuits, Cookies and Crackers</b>	2.1			2	
	2.2			No Change	
	2.3				
	2.4				
	2.5			2	
<b>3- Technology of Cakes, Pastries and other Bakery Products</b>	3.1			3	
	3.2				
	3.3				
	3.4				
<b>4- Modified Bakery Products and Safety Aspects of Bakery Products</b>	4.1			4	
	4.2				
<b>5</b>	<b>Teacher Specific Content</b>				

### Mode of Assessment

<b>A. Continuous Comprehensive Assessment (Modified)</b>			<b>Page No.</b>
Theory: 30 marks Assignment/Test/ Seminar			158
<b>B. End Semester Evaluation: Theory (Modified)</b>			
<b>Total Marks : 70</b>		<b>Duration: 2 Hrs</b>	
<b>Type of Questions</b>	<b>No. of Questions to be Answered</b>	<b>Total Marks</b>	
MCQ	20 out of 20	20 x 1= 20 marks	
Short Answer	6 out of 8	6 x 5 = 30 marks	
Essay	2 out of 4	2 x 10 = 20 marks	

**Course Name : Spices and Oleoresins**

**Course Code : MG5DSEFSQ304**

<b>Course Name (Modified)</b>	<b>Spices and Oleoresins</b>	<b>Page No. 159</b>
-------------------------------	------------------------------	---------------------

### Mode of Assessment

<b>A. Continuous Comprehensive Assessment (Modified)</b>			<b>Page No.</b>
Theory: 30 marks Assignment/Test Paper/ Seminar			161
<b>B. End Semester Evaluation: Theory (Modified)</b>			
<b>Total Marks : 70</b>		<b>Duration: 2 Hrs</b>	
<b>Type of Questions</b>	<b>No. of Questions to be Answered</b>	<b>Total Marks</b>	
MCQ	20 out of 20	20 x 1= 20 marks	
Short Answer	6 out of 8	6 x 5 = 30 marks	
Essay	2 out of 4	2 x 10 = 20 marks	

**Course Name : Processing Technology of Fruits and Vegetables**  
**Course Code : MG5DSEFSQ305**

**Course Outcomes**

CO.No	Expected Course Outcome (Modified)	Learning Domains	PO.No	Page No.
1	No Change	No Change	No Change	162
2				
3	Build an understanding of emerging technologies in fruit and vegetable processing			
4	Plan appropriate preservation techniques for each category of product involved			

**Course Content  
(Content for Classroom Transaction (Units))**

Module	Units	Course Description	Hours	CO.No. (Modified)	Page No.
<b>1- Composition and Classification of Fruits and Vegetables</b>	1.1	No Change	No Change	No Change	163-164
	1.2				
	1.3				
	1.4				
<b>2- Methods of Storage</b>	2.1			2	
	2.2				
	2.3				
	2.4				
<b>3- Preservation and Emerging Trends for Fruits and Vegetable Processing</b>	3.1			3	
	3.2				
	3.3				
	3.4				
	3.5				
	3.6				
	3.7				
<b>4- Fruits and Vegetable Products</b>	4.1			4	
	4.2				
	4.3				
	4.4				

5	<b>Teacher Specific Content</b>	
---	---------------------------------	--

### Mode of Assessment

<b>A. Continuous Comprehensive Assessment (Modified)</b>			<b>Page No.</b>
Theory: 30 marks Assignment/Test/ Seminar/Viva			164
<b>B. End Semester Evaluation: Theory (Modified)</b>			
<b>Total Marks : 70</b>		<b>Duration: 2 Hrs</b>	
<b>Type of Questions</b>	<b>No. of Questions to be Answered</b>	<b>Total Marks</b>	
MCQ	20 out of 20	20 x 1= 20 marks	
Short Answer	6 out of 8	6 x 5 = 30 marks	
Essay	2 out of 4	2 x 10 = 20 marks	

**Course Name : Food Photography and Styling**  
**Course Code : MG5SECFSQ300**

### Mode of Assessment

<b>A. Continuous Comprehensive Assessment (No Change)</b>			<b>Page No.</b>
<b>B. End Semester Evaluation: Theory (Modified)</b>			168
<b>Total Marks : 50</b>		<b>Duration: 1.5 Hrs</b>	
<b>Type of Questions</b>	<b>No.of Questions to be Answered</b>	<b>Total Marks</b>	
MCQ	20 out of 20	20 x 1= 20 marks	
Short Answer	5 out of 7	5 x 4 = 20 marks	
Long Essay	1 out of 2	1 x 10 = 10 marks	

**Course Name : Inflight Catering Technology**  
**Course Code : MG5SECFSQ301**

**Course Outcomes**

CO.No	Expected Course Outcome (Modified)	Learning Domains	PO.No	Page No.
1	No Change	No Change	No Change	169-170
2				
3	Interpret aviation regulations affecting catering services and compliance with international and local standards.			
4	No Change			
5				

**Mode of Assessment**

A. Continuous Comprehensive Assessment (No Change)			Page No.
B. End Semester Evaluation: Theory (Modified)			171
Total Marks :50			
Duration: 1.5 Hrs			
Type of Questions	No.of Questions to be Answered	Total Marks	
MCQ	20 out of 20	20 x 1= 20 marks	
Short Answer	5 out of 7	5 x 4 = 20 marks	
Long Essay	1 out of 2	1 x 10 = 10 marks	

**Course Name : Food Safety Management System**  
**Course Code : MG5SECFSQ302**

**Mode of Assessment**

<b>A. Continuous Comprehensive Assessment (No Change)</b>			<b>Page No.</b>
<b>B. End Semester Evaluation: Theory (Modified)</b>			175-176
<b>Total Marks :50</b> <span style="float: right;"><b>Duration: 1.5 Hrs</b></span>			
<b>Type of Questions</b>	<b>No.of Questions to be Answered</b>	<b>Total Marks</b>	
MCQ	20 out of 20	20 x 1= 20 marks	
Short Answer	5 out of 7	5 x 4 = 20 marks	
Long Essay	1 out of 2	1 x 10 = 10 marks	