

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** FUNDAMENTALS OF NUTRITION (SEMESTER-1) 2022 batch

**COURSE CODE:** FS21103

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

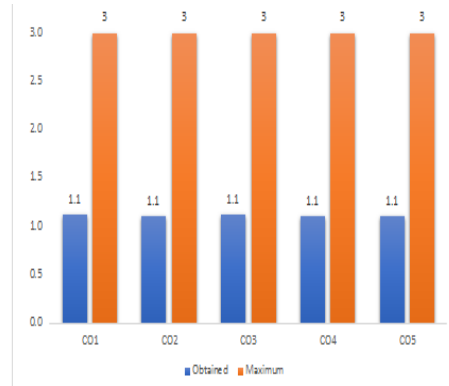
**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	Students will understand nutrient interrelationships and functions of food	I (Remember)
<b>CO2</b>	Students will learn concepts of RDA by ICMR	IV(Analysing)
<b>CO3</b>	Students will evaluate metabolism of energy	V(Evaluating)
<b>CO4</b>	Students will classify and understand knowledge of Macro-nutrients	V(Evaluating)
<b>CO5</b>	Students will classify and understand knowledge of and micro-nutrients	V(Evaluating)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01		H		H			H	H	H	H		
C02		H					H		H	H		
C03		H	H				S	H	H			
C04	H	S					H		H		S	
C05							H	H	H			

H: Highly Supportive  
S: Supportive



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	96.0	3.0			100.0	3.0	94.0	3.0	84.0	2.0	100.0	3.0	2.8	58.0	0.0	0.0	1.1
CO2	96.0	3.0			100.0	3.0			84.0	2.0	100.0	3.0	2.8	58.0	0.0	0.0	1.1
CO3	96.0	3.0	96.0	3.0	100.0	3.0			84.0	2.0	100.0	3.0	2.8	58.0	0.0	0.0	1.1
CO4			96.0	3.0	100.0	3.0			84.0	2.0	100.0	3.0	2.8	58.0	0.0	0.0	1.1
CO5			96.0	3.0	100.0	3.0			84.0	2.0	100.0	3.0	2.8	58.0	0.0	0.0	1.1



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
0	H H	S 0	S H	0 0	0 0	0 0	0 0	0 0
0	H H		H	CO5	0	0	0	0
0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
0	0 0	0 0	0 0	0 0	0 0	0 0	0 0	0 0
AVERAGE OF COS	H						0	0
AVERAGE OF POS	H	H			H		0	0
AVERAGE	H							

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** FOOD SAFETY, QUALITY CONTROL AND SENSORY EVALUATION  
(SEMESTER-3) 2021 batch

**COURSE CODE:** FS22301

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

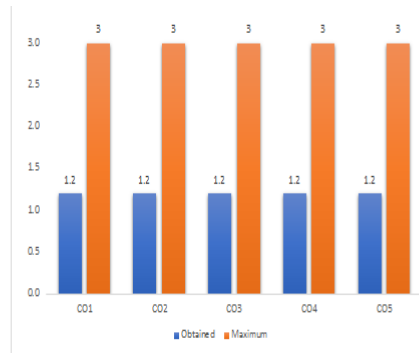
**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students will be able to understand the basic principle of food safety.	I (Remember)
<b>CO2</b>	The students will be able to apply them knowledge of food laws for safe food production.	IV(Analyzing)
<b>CO3</b>	Students will be able to explain various toxicants associated with food.	V(Evaluating)
<b>CO4</b>	Students will be able to identify the chemicals toxicant in foods at various level.	V(Evaluating)
<b>CO5</b>	Students will be able to appraise microbial toxin associated with food, their occurrence, symptoms and preventive measures.	V(Evaluating)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01		H		H			H	H	H			S
C02		H					H		H			S
C03		H	H				S	H	H			S
C04	H	S					H		H			S
C05							H	H	H			S

H: Highly Supportive  
S: Supportive



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	89.6	3.0			100.0	3.0	100.0	3.0	100.0	3.0	100.0	3.0	3.0	56.3	0.0	0.0	1.2
CO2	89.6	3.0			100.0	3.0			100.0	3.0	100.0	3.0	3.0	56.3	0.0	0.0	1.2
CO3	89.6	3.0	89.6	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	56.3	0.0	0.0	1.2
CO4			89.6	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	56.3	0.0	0.0	1.2
CO5			89.6	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	56.3	0.0	0.0	1.2



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
0	H H	S O	S H	O O	O O	O O	O O	O O
	H H		H	CO5	O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
AVERAGE	H						O	O
AVERAGE	H	H			H		O	O
AVERAGE	H							



**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

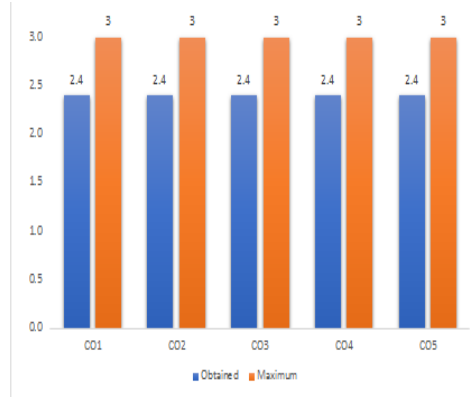
**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	Students will be able to understand the significance of research methodology in Home Science research.	II (UNDERSTAND)
<b>CO2</b>	Students will be able to understand the types of sampling and sampling designs.	II (UNDERSTAND)
<b>CO3</b>	Students will be able to learn the knowledge of principles and purpose of research designs.	I (REMEMBERING)
<b>CO4</b>	Students will be able to know various research tools and methods of data collection.	II (UNDERSTAND)
<b>CO5</b>	Students will be able to provide knowledge on coding and classification of data.	III(APPLY)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01	S	H						S	H	S		
C02	S	H		S				S	H	H		H
C03	S	H							H	H		H
C04	S	H						S	H	H		S
C05	S	H							H	H		S





co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	96.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	100.0	3.0	3.0	80.0	2.0	2.0	2.4
CO2	96.0	3.0			100.0	3.0			100.0	3.0	100.0	3.0	3.0	80.0	2.0	2.0	2.4
CO3	96.0	3.0	96.0	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	80.0	2.0	2.0	2.4
CO4			96.0	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	80.0	2.0	2.0	2.4
CO5			96.0	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	80.0	2.0	2.0	2.4



AVERAGE	AVERAGE
2	2.4



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
0	H H	S O	S H	O O	O O	O O	O O	O O
	H H		H	CO5	O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
AVERAGE	H						O	O
AVERAGE OF COS	H					H		
AVERAGE OF POS		H					O	O
AVERAGE	H							

**COURSE TITLE: FOOD PRESERVATION**

**(SEMESTER-4)**

**2021 batch**

**COURSE CODE: FS22402**

**CREDITS: 4**

**DEPARTMENT: Food Science Nutrition and Dietetics**

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

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**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE)**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

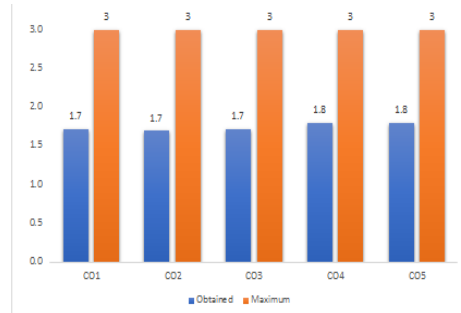
**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students will be able to analyse basic concepts of preservation	IV(Analyzing)
<b>CO2</b>	The students will be able to elaborate principles and preservation of various food products	VI (Creating)
<b>CO3</b>	The students will be able to apply preservation methods	III(Applying)
<b>CO4</b>	The students will be able to outline other preservative methods	II(Understanding)
<b>CO5</b>	The students will be able to simplify the role of packaging in food preservation	IV(Analyzing)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01	H	H	H	H					H		S	S
C02	H	H							H		H	H
C03	H		H						H		H	H
C04	H								H		H	S
C05	H		H						H		H	S



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	81.3	2.0			100.0	3.0	100.0	3.0	100.0	3.0	100.0	3.0	2.8	68.8	1.0	1.0	1.7
CO2	81.3	2.0			100.0	3.0			100.0	3.0	100.0	3.0	2.8	68.8	1.0	1.0	1.7
CO3	81.3	2.0	97.9	3.0	100.0	3.0			100.0	3.0	100.0	3.0	2.8	68.8	1.0	1.0	1.7
CO4			97.9	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	68.8	1.0	1.0	1.8
CO5			97.9	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	68.8	1.0	1.0	1.8



OUTCOME	PO1		PO2		PO3		PO4		PO5		PO6		PO7		PO8	
0	H	H	S	0	S	H	0	0	0	0	0	0	0	0	0	0
0	H	H				H	CO5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AVERAGE OF COS	H												0		0	
AVERAGE OF POS	H		H						H				0		0	
AVERAGE	H															



## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE: FOOD PACKAGING (SEMESTER-6) 2020 batch**

**COURSE CODE: FS18602B**

**CREDITS: 4**

**DEPARTMENT: Food Science Nutrition and Dietetics**

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

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**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

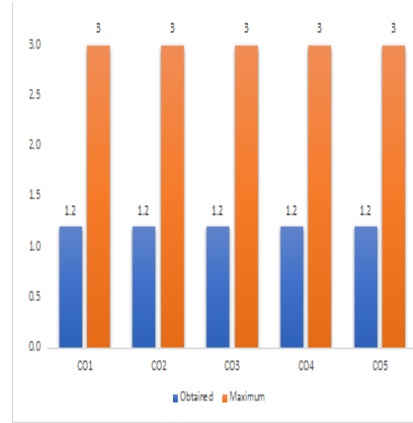
**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students will be able to demonstrate food packaging	II (Understanding)
<b>CO2</b>	The students will be able to organize packing materials	IV(Analyzing)
<b>CO3</b>	The students will be able to inspect packaging designs and consumer behaviour	IV(Analyzing)
<b>CO4</b>	The students will be able to evaluate packaging	V(Evaluating)
<b>CO5</b>	The students will be able to list out food packaging laws and regulations	IV(Analyzing)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01		H						H	S		H	H
C02			H		H				H		H	H
C03	H		H					H	H		H	H
C04	H	H			H				H		H	H
C05	H		H	H			H		H		H	H

H: Highly Supportive  
S: Supportive



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam			co wise total average	
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level		co wise external average
CO1	88.5	3.0			100.0	3.0	100.0	3.0	100.0	3.0	100.0	3.0	3.0	57.7	0.0	0.0	1.2
CO2	88.5	3.0			100.0	3.0			100.0	3.0	100.0	3.0	3.0	57.7	0.0	0.0	1.2
CO3	88.5	3.0	100.0	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	57.7	0.0	0.0	1.2
CO4			100.0	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	57.7	0.0	0.0	1.2
CO5			100.0	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	57.7	0.0	0.0	1.2



OUTCOME	PO1		PO2		PO3		PO4		PO5		PO6		PO7		PO8	
0	H	H	S	0	S	H	0	0	0	0	0	0	0	0	0	0
0	H	H			H	CO5	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AVERAGE OF COS	H													0		0
AVERAGE OF POS	H		H						H					0		0
AVERAGE	H															

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Basic Food Science (SEMESTER-1) 2022 batch

**COURSE CODE:** FS21102

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

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**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

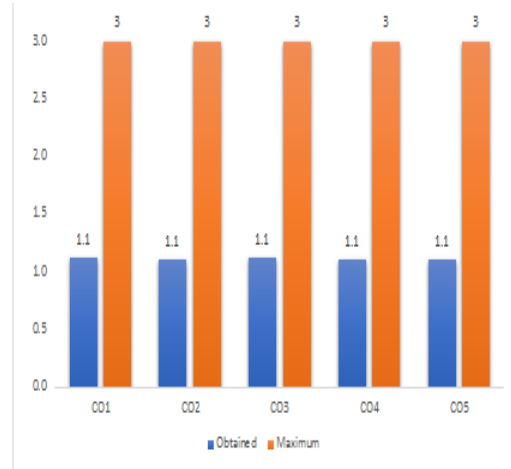
**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

**PSO3.** Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.** Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students will be able to be identifying major and minor food commodities, methods of food preparation.	I (Remember)
<b>CO2</b>	Students will be able to learn about poly saccharides, starch, non starch poly saccharides, sugars and sweetners.	I (Remember)
<b>CO3</b>	Students will be able to learn different cereal grains and products, fats and oils related product sources and composition.	V(Evaluating)
<b>CO4</b>	Students will be to able to understand the importance of protein and enzymes classification, nature and composition.	IV(Analyzing)
<b>CO5</b>	Students will be able to know milk and meat products processing, storage and nutritive values.	V(Evaluating)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
C01	S								H	H	
C02		H					S		H	H	H
C03		H							H		
C04	H	S	S				H	S	H		
C05		H							H		



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	100.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	76.0	2.0	2.8	24.0	0.0	0.0	1.1
CO2	100.0	3.0			100.0	3.0			100.0	3.0	76.0	2.0	2.8	24.0	0.0	0.0	1.1
CO3	100.0	3.0	100.0	3.0	100.0	3.0			100.0	3.0	76.0	2.0	2.8	24.0	0.0	0.0	1.1
CO4			100.0	3.0	100.0	3.0			100.0	3.0	76.0	2.0	2.8	24.0	0.0	0.0	1.1
CO5			100.0	3.0	100.0	3.0			100.0	3.0	76.0	2.0	2.8	24.0	0.0	0.0	1.1

□

AVERAGE	AVERAGE
0	1.108



□

OUTCOME	PO1		PO2		PO3		PO4		PO5		PO6		PO7		PO8	
0	H	H	S	0	S	H	0	0	0	0	0	0	0	0	0	0
0	H	H				H	CO5	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AVERAGE OF COS	H												0		0	
AVERAGE OF POS	H		H						H				0		0	
AVERAGE	H															

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Basics of Research (SEMESTER-1I) 2021 batch

**COURSE CODE:** FS22406

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

#### **PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

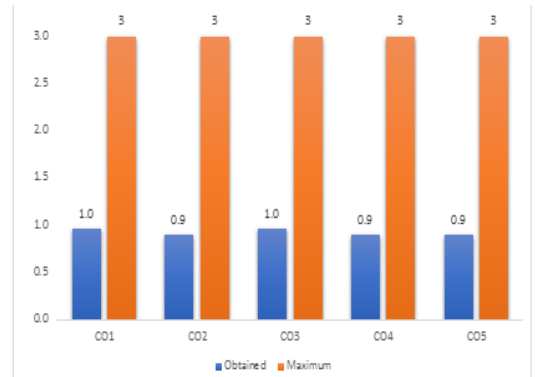
**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students will be able to be identifying major and minor food commodities, methods of food preparation.	I (Remember)
<b>CO2</b>	Students will be able to learn about poly saccharides, starch, non starch poly saccharides, sugars and sweetners.	I (Remember)
<b>CO3</b>	Students will be able to learn different cereal grains and products, fats and oils related product sources and composition.	V(Evaluating)
<b>CO4</b>	Students will be to able to understand the importance of protein and enzymes classification, nature and composition.	IV(Analyzing)
<b>CO5</b>	Students will be able to know milk and meat products processing, storage and nutritive values.	V(Evaluating)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01		H	H		S		S					
C02	H			S			S					
C03	H	H		H			S					
C04	S	S		S			H					
C05	H	S	S	S	S		S					

H: Highly Supportive  
S: Supportive



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	97.9	3.0			100.0	3.0	100.0	3.0	97.9	3.0	27.1	0.0	2.4	45.8	0.0	0.0	1.0
CO2	97.9	3.0			100.0	3.0			97.9	3.0	27.1	0.0	2.3	45.8	0.0	0.0	0.9
CO3	97.9	3.0	100.0	3.0	100.0	3.0			97.9	3.0	27.1	0.0	2.4	45.8	0.0	0.0	1.0
CO4			100.0	3.0	100.0	3.0			97.9	3.0	27.1	0.0	2.3	45.8	0.0	0.0	0.9
CO5			100.0	3.0	100.0	3.0			97.9	3.0	27.1	0.0	2.3	45.8	0.0	0.0	0.9



AVERAGE	AVERAGE
0	0.924



OUTCOME	PO1		PO2		PO3		PO4		PO5		PO6		PO7		PO8	
0	H	H	S	0	S	H	0	0	0	0	0	0	0	0	0	0
0	H	H			H	CO5	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AVERAGE OF POS	H													0		0
AVERAGE OF POS	H			H					H					0		0
AVERAGE	H															

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Diet And Medical Nutrition Therapy (SEMESTER-1) 2020 batch

**COURSE CODE:** FS18503

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

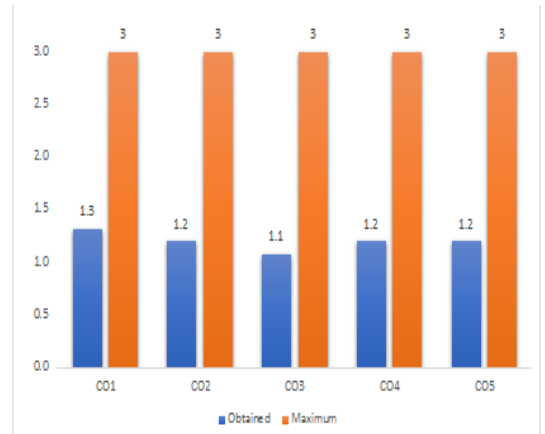
**PSO3.** Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.** Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students will be able to understand the concept of diet therapy.	II (Understanding)
<b>CO2</b>	Students will be identify various metabolic disorders	III (Applying)
<b>CO3</b>	Students will be able to understand the dietary requirements for hypertension and CVD.	II (Understanding)
<b>CO4</b>	Students will be to able to understand dietary modifications in liver disorders.	II (Understanding)
<b>CO5</b>	Students will be able to construct various diet plans for renal disorders.	III( Applying)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
C01	S	H						S	H	S		
C02	S	H		S				S	H	H		H
C03	S	H							H	H		H
C04	S	H						S	H	H		S
C05	S	H							H	H		S

H: Highly Supportive  
S: Supportive



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	0.0	0.0			100.0	3.0	100.0	3.0	100.0	3.0	0.0	0.0	1.8	68.6	1.0	1.0	1.3
CO2	0.0	0.0			100.0	3.0			100.0	3.0	0.0	0.0	1.5	68.6	1.0	1.0	1.2
CO3	0.0	0.0	0.0	0.0	100.0	3.0			100.0	3.0	0.0	0.0	1.2	68.6	1.0	1.0	1.1
CO4			0.0	0.0	100.0	3.0			100.0	3.0	0.0	0.0	1.5	68.6	1.0	1.0	1.2
CO5			0.0	0.0	100.0	3.0			100.0	3.0	0.0	0.0	1.5	68.6	1.0	1.0	1.2

□

AVERAGE	AVERAGE
1	1.2



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
0	H H	S O	S H	O O	O O	O O	O O	O O
0	H H		H	CO5	O O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
AVERAGE OF COS	H						O	O
AVERAGE OF POS	H	H			H		O	O
AVERAGE	H							



## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Therapeutic Diets (SEMESTER-1) 2021 batch

**COURSE CODE:** FS22304

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

**PSO3.** Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

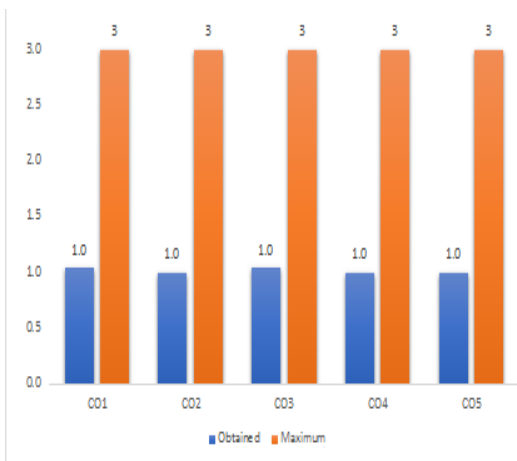
**PSO4.** Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students will be able to understand diet for weight management.	II (Understand)
<b>CO2</b>	Students will be identify various causes of diabetic mellitus and its diet.	V (Evaluate)
<b>CO3</b>	Students will be able to create knowledge on various renal diseases and their diets.	VI (Create)
<b>CO4</b>	Students will be to able to identify various GI diseases and their causes and types.	V(Evaluate)
<b>CO5</b>	Students will be able to construct various diet plant for liver and biliary disorders.	III( Apply)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01	S	H							H	H		S
C02					S		S		H	H		S
C03		S							H	H		S
C04		S					H	S	H	H		S
C05		S							H	H		S



H: Highly Supportive  
S: Supportive



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	95.8	3.0			100.0	3.0	100.0	3.0	100.0	3.0	66.7	1.0	2.6	56.3	0.0	0.0	1.0
CO2	95.8	3.0			100.0	3.0			100.0	3.0	66.7	1.0	2.5	56.3	0.0	0.0	1.0
CO3	95.8	3.0	91.7	3.0	100.0	3.0			100.0	3.0	66.7	1.0	2.6	56.3	0.0	0.0	1.0
CO4			91.7	3.0	100.0	3.0			100.0	3.0	66.7	1.0	2.5	56.3	0.0	0.0	1.0
CO5			91.7	3.0	100.0	3.0			100.0	3.0	66.7	1.0	2.5	56.3	0.0	0.0	1.0



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
0	H H	S O	S H	O O	O O	O O	O O	O O
0	H H		H	CO5	O	O	O	O
0	O O	O O	O O	O O	O O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
AVERAGE OF COS	H						O	O
AVERAGE OF COS	H	H			H		O	O
AVERAGE	H							

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Basic Dietetics (SEMESTER-4) 2022 batch

**COURSE CODE:** FS21201

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

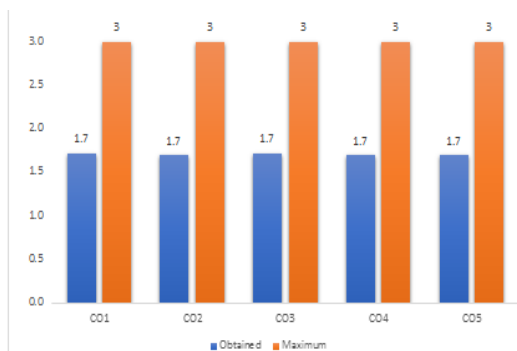
**PSO3.** Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.** Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students will gain knowledge regarding the practical aspects of meal planning.	II(Understanding)
<b>CO2</b>	The students will learn principles of diet and dietary modifications	II(Understanding)
<b>CO3</b>	The students will evaluate the strategies for menu planning	V (Evaluating)
<b>CO4</b>	The students will identify the importance of intermittent fasting	IV (Analyzing)
<b>CO5</b>	The students will understand various deficiency disorders	II(Understanding)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01	S							S	H	H		H
C02	S	H						S	H	H		H
C03	S	H			S	S			H	H		H
C04	S	H						S	H	H		H
C05	S	H							H	H		H

H: Highly Supportive  
S: Supportive



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	91.8	3.0			100.0	3.0	100.0	3.0	100.0	3.0	77.6	2.0	2.8	71.4	1.0	1.0	1.7
CO2	91.8	3.0			100.0	3.0			100.0	3.0	77.6	2.0	2.8	71.4	1.0	1.0	1.7
CO3	91.8	3.0	98.0	3.0	100.0	3.0			100.0	3.0	77.6	2.0	2.8	71.4	1.0	1.0	1.7
CO4			98.0	3.0	100.0	3.0			100.0	3.0	77.6	2.0	2.8	71.4	1.0	1.0	1.7
CO5			98.0	3.0	100.0	3.0			100.0	3.0	77.6	2.0	2.8	71.4	1.0	1.0	1.7

AVERAGE	AVERAGE
1	1.708



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
0	H	S	S	0	0	0	0	0
0	H	0	H	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
AVERAGE OF COS	H						0	0
AVERAGE OF POS	H	H			H		0	0
AVERAGE	H							

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Emergency Nutrition (SEMESTER-6) 2020 batch

**COURSE CODE:** FS18601B

**CREDITS:** 5

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

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**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

**PSO3.** Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

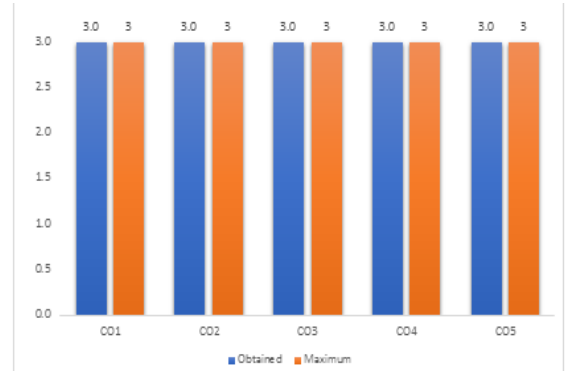
**PSO4.** Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students will understand the need for medical nutrition therapy for feeding SAM children.	II(Understanding)
<b>CO2</b>	The students will understand WHO protocol for management of SAM.	II(Understanding)
<b>CO3</b>	The students will learn the experiences of SAM management through NRC's.	III(Applying)
<b>CO4</b>	The students will understand the use of RTE foods in management of SAM.	II(Understanding)
<b>CO5</b>	The students will know the role of nutrition in other emergencies.	V (Evaluating)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01	S	H			S	S		S		S	S	H
C02	S	H				S			S	H	S	H
C03	S	H			S	S			S	S	S	H
C04	S	H			S	S		S	H	H		H
C05	S	H				S		S	S	H		H

H: Highly Supportive  
S: Supportive





co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	100.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	100.0	3.0	3.0	92.3	3.0	3.0	3.0
CO2	100.0	3.0			100.0	3.0			100.0	3.0	100.0	3.0	3.0	92.3	3.0	3.0	3.0
CO3	100.0	3.0	100.0	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	92.3	3.0	3.0	3.0
CO4			100.0	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	92.3	3.0	3.0	3.0
CO5			100.0	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	92.3	3.0	3.0	3.0



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
0	H H	S O	S H	O O	O O	O O	O O	O O
0	H H		H	CO5 O	O O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
0	O O	O O	O O	O O	O O	O O	O O	O O
AVERAGE	H						0	0
AVERAGE	H	H			H		0	0
AVERAGE	H							

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Human Anatomy and physiology (SEMESTER-1) 2022 batch

**COURSE CODE:** FS21101

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

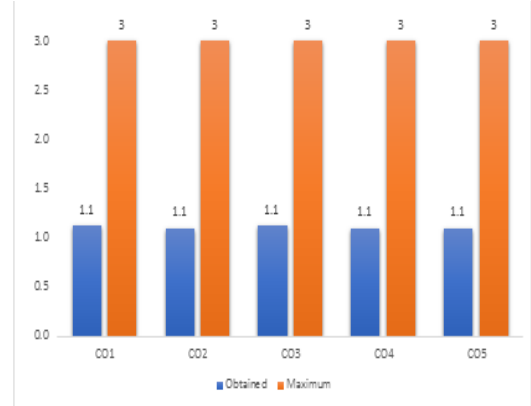
**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students will be able to understand the concept of cell and skin	II (Understanding)
<b>CO2</b>	Students will be learning digestive and respiratory system.	I(remembering)
<b>CO3</b>	Students will be able to understand the circulatory, hormonal and endocrine glands.	II (Understanding)
<b>CO4</b>	Students will be to able to understand nervous and musculoskeletal system..	I (remembering)
<b>CO5</b>	Students will be able to understand reproductive and excretory system..	II(understanding)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01	H			S			S	S		S		H
C02	H		S	H	S		H	S	S	H	S	H
C03	H	S		H		S	H	S		H		H
C04	H			H			H	S		H	S	S
C05	H		S	H	S		S	H	S	H	S	H

H: Highly Supportive  
S: Supportive



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	90.2	3.0			100.0	3.0	100.0	3.0	100.0	3.0	78.4	2.0	2.8	45.1	0.0	0.0	1.1
CO2	90.2	3.0			100.0	3.0			100.0	3.0	78.4	2.0	2.8	45.1	0.0	0.0	1.1
CO3	90.2	3.0	94.1	3.0	100.0	3.0			100.0	3.0	78.4	2.0	2.8	45.1	0.0	0.0	1.1
CO4			94.1	3.0	100.0	3.0			100.0	3.0	78.4	2.0	2.8	45.1	0.0	0.0	1.1
CO5			94.1	3.0	100.0	3.0			100.0	3.0	78.4	2.0	2.8	45.1	0.0	0.0	1.1

AVERAGE	AVERAGE
0	1.108



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	H 1.12							
CO2	H 1.1			H 1.1			H 1.1	
CO3	H 1.12			H 1.12			H 1.12	
CO4	H 1.1			H 1.1			H 1.1	
CO5	H 1.1			H 1.1				H 1.1
AVERAGE OF COS FOR POS	1.108			1.105			1.10666667	1.1
AVERAGE OF POS	1.1056			1.105			1.106667	1.1
AVERAGE	1.104316667							

## CONCLUSION

The pass percentage is 99 percentage.

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** FOOD MICROBIOLOGY (SEMESTER-II) 2021 batch

**COURSE CODE:** FS21201

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

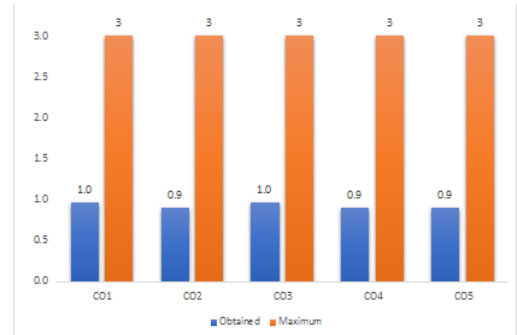
**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

**PSO3.** Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.** Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students will be able to understand the concept of food microbes.	II (Understanding)
<b>CO2</b>	Students will be identify various microorganisms	III (Applying)
<b>CO3</b>	Students will be able to understand the microbiology of food commodities.	II (Understanding)
<b>CO4</b>	Students will be to able to understand the application of microorganisms in food.	II (Understanding)
<b>CO5</b>	Students will be able to understand the various food borne illnesses	II(understanding)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03
C01	H		H	S			S	S		S	
C02	H			H			H	S		H	
C03	H				H		H	S			
C04	H		H		S		H	S			
C05	H		H	H	S		S	H		H	



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		co wise internal average	External Exam			co wise total average
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level		pass%	Attainment level	co wise external average	
CO1	88.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	52.0	0.0	2.4	36.0	0.0	0.0	1.0
CO2	88.0	3.0			100.0	3.0			100.0	3.0	52.0	0.0	2.3	36.0	0.0	0.0	0.9
CO3	88.0	3.0			100.0	3.0			100.0	3.0	52.0	0.0	2.4	36.0	0.0	0.0	1.0
CO4			94.0	3.0	100.0	3.0			100.0	3.0	52.0	0.0	2.3	36.0	0.0	0.0	0.9
CO5			94.0	3.0	100.0	3.0			100.0	3.0	52.0	0.0	2.3	36.0	0.0	0.0	0.9

AVERAGE	AVERAGE
0	0.924



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	H 0.96		H 0.96					
CO2	H 0.9			H 0.9			H 0.9	
CO3	H 0.96				H 0.96		H 0.96	
CO4	H 0.9		H 0.9				H 0.9	
CO5	H 0.9		H 0.9	H 0.9				H 0.9
AVERAGE OF COS FOR POS	0.924		0.92	0.9	0.96		0.92	0.9
AVERAGE OF POS	0.9168		0.906667	0.9	0.96		0.92	0.9
AVERAGE	0.917244444							

Conclusion; The pass percentage is 100.

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Principles of food processing (SEMESTER-III) 2021 batch

**COURSE CODE:** FS22302

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.



**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

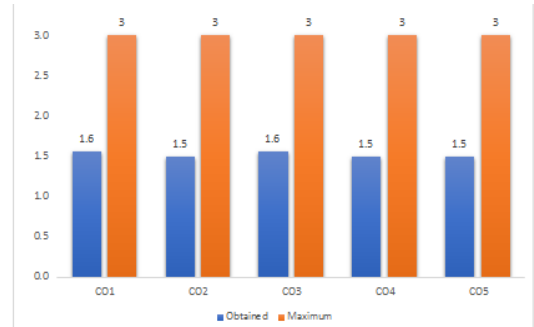
**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students will be able to understand the principles involved in processing of various food grains.	II (Understanding)
<b>CO2</b>	Students will be evaluate various steps to eliminate antinutritional components	V(evaluating)
<b>CO3</b>	Students will be able to identify various dairy processing method	II (Understanding)
<b>CO4</b>	Students will be to able to understand the changes occurring in fruits and vegetables during maturation.	II (Understanding)
<b>CO5</b>	Students will be able to appraise the role of sugar in food preparations	III( Applying)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01	H		H	S			S	S		S		H
C02			H	H			H	S		H		H
C03			H		H					H		H
C04			H		S					H		S
C05	H		H	H	S		S	H		H		H



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	91.7	3.0			100.0	3.0	100.0	3.0	100.0	3.0	58.3	0.0	2.4	66.7	1.0	1.0	1.6
CO2	91.7	3.0			100.0	3.0			100.0	3.0	58.3	0.0	2.3	66.7	1.0	1.0	1.5
CO3	91.7	3.0	91.7	3.0	100.0	3.0			100.0	3.0	58.3	0.0	2.4	66.7	1.0	1.0	1.6
CO4			91.7	3.0	100.0	3.0			100.0	3.0	58.3	0.0	2.3	66.7	1.0	1.0	1.5
CO5			91.7	3.0	100.0	3.0			100.0	3.0	58.3	0.0	2.3	66.7	1.0	1.0	1.5

AVERAGE	AVERAGE
1	1.524



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	H 1.56		H 1.56					
CO2			H 1.5	H 1.5			H 1.5	
CO3			H 1.56		H 1.56			
CO4			H 1.5					
CO5	H 1.5		H 1.5	H 1.5				H 1.5
AVERAGE OF COS FOR POS	1.53		1.524	1.5	1.56		1.5	1.5
AVERAGE OF POS	1.515		1.5168	1.5	1.56		1.5	1.5
AVERAGE	1.5153							

**Conclusion;The pass percentage is98.**

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Food product development and entrepreneurship (SEMESTER-v)  
2020 batch

**COURSE CODE:** FS18505 B  
**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

#### **PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

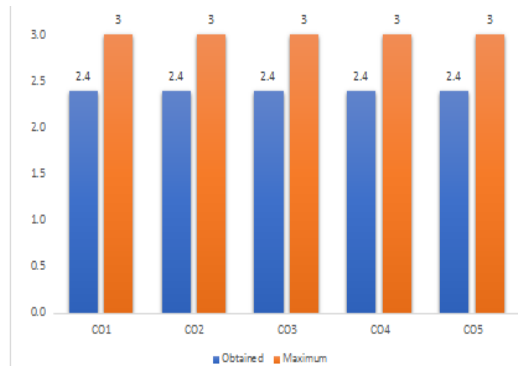
**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	To acquaint the students with the principles involved in development of food products	II (Understanding)
<b>CO2</b>	To understand different steps involved in product development	III (Applying)
<b>CO3</b>	Formulations of new products.	II I(applyng)
<b>CO4</b>	To know markets and various aspects of marketing	II (Understanding)
<b>CO5</b>	To understand entrepreneurship	II(understanding)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03
C01	H		H	S			S	S		S	
C02				H				S			
C03				H	H			S			
C04			H	H	S			S			
C05	H		H	H	S		S	H		H	

H: Highly Supp

S: S



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	96.2	3.0			100.0	3.0	100.0	3.0	100.0	3.0	88.5	3.0	3.0	84.6	2.0	2.0	2.4
CO2	96.2	3.0			100.0	3.0			100.0	3.0	88.5	3.0	3.0	84.6	2.0	2.0	2.4
CO3	96.2	3.0	100.0	3.0	100.0	3.0			100.0	3.0	88.5	3.0	3.0	84.6	2.0	2.0	2.4
CO4			100.0	3.0	100.0	3.0			100.0	3.0	88.5	3.0	3.0	84.6	2.0	2.0	2.4
CO5			100.0	3.0	100.0	3.0			100.0	3.0	88.5	3.0	3.0	84.6	2.0	2.0	2.4

AVERAGE	AVERAGE
2	2.4



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	H 2.4		H 2.4					
CO2				H 2.4				
CO3				H 2.4	H 2.4			
CO4			H 2.4	H 2.4				
CO5	H 2.4		H 2.4	H 2.4				H 2.4
AVERAGE OF COS FOR POS	2.4		2.4	2.4	2.4			2.4
AVERAGE OF POS	2.4		2.4	2.4	2.4			2.4
AVERAGE	2.4							

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Advanced Nutrition (SEMESTER-IV) 2021 batch  
**COURSE CODE:** FS21034  
**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

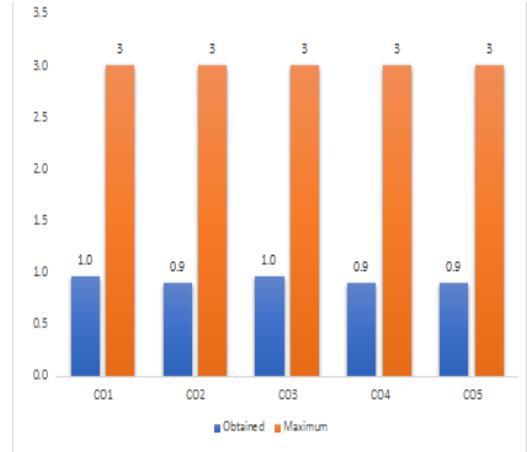
**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The student will be able to understand the energy requirement.	II (Understanding)
<b>CO2</b>	The students will apply knowledge how to assess protein quality.	III (Applying)
<b>CO3</b>	The students will be able to understand the nutrition for gene expression.	II (Understanding)
<b>CO4</b>	The students will be able to assess antioxidants	II (Understanding)
<b>CO5</b>	The students will be able to gain knowledge on sports nutrition	III( Applying)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03	PS04
C01	H		H	S			S	S		S		
C02	H			H			H	S		H		
C03	H				H		H					
C04			H		S		H					S
C05			H		S		S	H		H		H

H: Highly Supportive  
S: Supportive



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	89.6	3.0			100.0	3.0	100.0	3.0	100.0	3.0	45.8	0.0	2.4	47.9	0.0	0.0	1.0
CO2	89.6	3.0			100.0	3.0			100.0	3.0	45.8	0.0	2.3	47.9	0.0	0.0	0.9
CO3	89.6	3.0	100.0	3.0	100.0	3.0			100.0	3.0	45.8	0.0	2.4	47.9	0.0	0.0	1.0
CO4			100.0	3.0	100.0	3.0			100.0	3.0	45.8	0.0	2.3	47.9	0.0	0.0	0.9
CO5			100.0	3.0	100.0	3.0			100.0	3.0	45.8	0.0	2.3	47.9	0.0	0.0	0.9

AVERAGE	AVERAGE
0	0.924



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	H 0.96		H 0.96					
CO2	H 0.9			H 0.9			H 0.9	
CO3	H 0.96				H 0.96		H 0.96	
CO4			H 0.9				H 0.9	
CO5			H 0.9					H 0.9
AVERAGE OF COS FOR POS	0.94		0.92	0.9	0.96		0.92	0.9
AVERAGE OF POS	0.933333		0.906667	0.9	0.96		0.92	0.9
AVERAGE	0.92							



## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Food safety, Quality control and sensory evaluation. (SEMESTER-III)  
2021 batch

**COURSE CODE:** FS22301  
**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3. Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6. Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

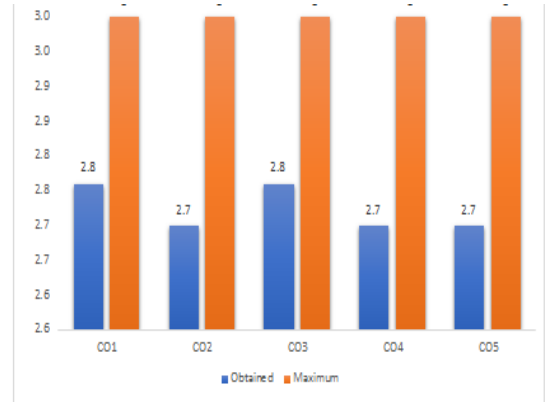
**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students understand the principles of food safety	II (Understanding)
<b>CO2</b>	The students apply knowledge for safe food production.	III (Applying)
<b>CO3</b>	The students will be able to explain various toxicants	II (Understanding)
<b>CO4</b>	The students will identify the chemical toxicants	II (Understanding)
<b>CO5</b>	The students will be able appraise microbial toxin	III( Applying)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03
C01			H	S			S	S		S	
C02			H	H			H			H	
C03					H		H			H	
C04	H				S		H				
C05	H		H	H	S		S	H			

H: Highly Supp



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	96.1	3.0			100.0	3.0	100.0	3.0	100.0	3.0	58.8	0.0	2.4	98.0	3.0	3.0	2.8
CO2	96.1	3.0			100.0	3.0			100.0	3.0	58.8	0.0	2.3	98.0	3.0	3.0	2.7
CO3	96.1	3.0	100.0	3.0	100.0	3.0			100.0	3.0	58.8	0.0	2.4	98.0	3.0	3.0	2.8
CO4			100.0	3.0	100.0	3.0			100.0	3.0	58.8	0.0	2.3	98.0	3.0	3.0	2.7
CO5			100.0	3.0	100.0	3.0			100.0	3.0	58.8	0.0	2.3	98.0	3.0	3.0	2.7

AVERAGE	AVERAGE
3	2.724



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1			H 2.76					
CO2			H 2.7	H 2.7			H 2.7	
CO3					H 2.76		H 2.76	
CO4	H 2.7						H 2.7	
CO5	H 2.7		H 2.7	H 2.7				H 2.7
AVERAGE OF COS FOR POS	2.7		2.72	2.7	2.76		2.72	2.7
AVERAGE OF POS	2.7		2.706667	2.7	2.76		2.72	2.7
AVERAGE	2.714444444							

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Community Nutrition and Health Education (SEMESTER-V1) 2020  
batch

**COURSE CODE:** FS18602A  
**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

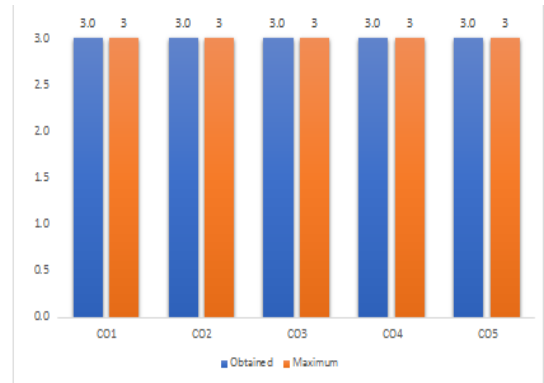
**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	To understand the responsibilities of nutritional counsellor.	II (Understanding)
<b>CO2</b>	To learn the nutritional policies.	III (Applying)
<b>CO3</b>	To know the concepts of food and nutrition security	II (Understanding)
<b>CO4</b>	To understand the levels of health administration	II (Understanding)
<b>CO5</b>	To learn the medical measures taken for employees	III( Applying)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03
C01			H	S			S				
C02				H			H				
C03				H	H		H				
C04	H			H	S		H	S		H	
C05	H		H	H	S		S	H		H	

H: Highly Supportive  
S: Supportive



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	96.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	92.0	3.0	3.0	92.0	3.0	3.0	3.0
CO2	96.0	3.0			100.0	3.0			100.0	3.0	92.0	3.0	3.0	92.0	3.0	3.0	3.0
CO3	96.0	3.0	100.0	3.0	100.0	3.0			100.0	3.0	92.0	3.0	3.0	92.0	3.0	3.0	3.0
CO4			100.0	3.0	100.0	3.0			100.0	3.0	92.0	3.0	3.0	92.0	3.0	3.0	3.0
CO5			100.0	3.0	100.0	3.0			100.0	3.0	92.0	3.0	3.0	92.0	3.0	3.0	3.0

AVERAGE	AVERAGE
3	3



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1			H 3					
CO2				H 3			H 3	
CO3				H 3	H 3		H 3	
CO4	H 3			H 3			H 3	
CO5	H 3		H 3	H 3				H 3
AVERAGE OF COS FOR POS	3		3	3	3		3	3
AVERAGE OF POS	3		3	3	3		3	3
AVERAGE	3							

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Clinical nutrition (SEMESTER-1II) 2021 batch

**COURSE CODE:** FS21303

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

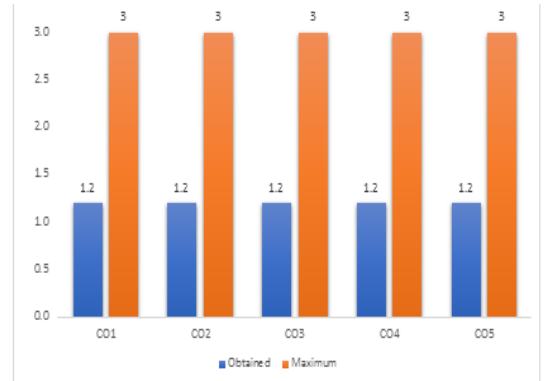
**PSO3.** Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.** Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students will understand the principles of nutrition	II (Understanding)
<b>CO2</b>	The students will learn diet and nutritional counselling	I (remembering)
<b>CO3</b>	The students will be able to create knowledge on clinical diagnosis.	II (Understanding)
<b>CO4</b>	The students will identify various lifestyle diseases	II (Understanding)
<b>CO5</b>	The students will understand various drugs and their interaction with food.	III( Applying)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03
C01	S	S	H	S		S	S		H	S	H
C02	S	H	H	S		S	H	S	S	H	S
C03	H	H	S	S	S				H	H	S
C04	H		S							H	H
C05	S		S		S				S	H	S





co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	97.9	3.0			100.0	3.0	100.0	3.0	100.0	3.0	100.0	3.0	3.0	39.6	0.0	0.0	1.2
CO2	97.9	3.0			100.0	3.0			100.0	3.0	100.0	3.0	3.0	39.6	0.0	0.0	1.2
CO3	97.9	3.0	93.8	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	39.6	0.0	0.0	1.2
CO4			93.8	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	39.6	0.0	0.0	1.2
CO5			93.8	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	39.6	0.0	0.0	1.2

AVERAGE	AVERAGE
0	1.2



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1			H 1.2					
CO2		H 1.2	H 1.2				H 1.2	
CO3	H 1.2	H 1.2						
CO4	H 1.2							
CO5								
AVERAGE OF COS FOR POS	1.2	1.2	1.2				1.2	
AVERAGE OF POS	1.2	1.2	1.2				1.2	
<b>AVERAGE</b>	<b>1.2</b>							

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Functional foods and nutraceuticals (SEMESTER-1V) 2021 batch

**COURSE CODE:** FS18503

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

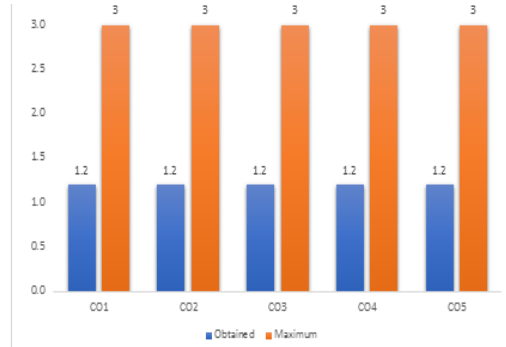
**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	The students understand the basics of functional foods	II (Understanding)
<b>CO2</b>	The students will be able to apply the knowledge of functional foods.	III (Applying)
<b>CO3</b>	The students will understand the metabolism of prebiotics and probiotics	II (Understanding)
<b>CO4</b>	The students will be able to assess phytochemicals	II (Understanding)
<b>CO5</b>	The students will be able to gain knowledge on role and sources of antioxidants.	III( Applying)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03
C01	S	S	H	S		S	S		H	S	H
C02	S	H		S		S		S	S	H	S
C03	H		S	S	S				H	H	S
C04	H		S							H	H
C05	S		S		S				S	H	S

H: Highly Supp  
S: Supportive



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	100.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	100.0	3.0	3.0	43.8	0.0	0.0	1.2
CO2	100.0	3.0			100.0	3.0			100.0	3.0	100.0	3.0	3.0	43.8	0.0	0.0	1.2
CO3	100.0	3.0	97.9	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	43.8	0.0	0.0	1.2
CO4			97.9	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	43.8	0.0	0.0	1.2
CO5			97.9	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	43.8	0.0	0.0	1.2

AVERAGE	AVERAGE
0	1.2



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1			H 1.2					
CO2		H 1.2						
CO3	H 1.2							
CO4	H 1.2							
CO5								
AVERAGE OF COS FOR POS	1.2	1.2	1.2					
AVERAGE OF POS	1.2	1.2	1.2					
AVERAGE	1.2							

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Principles of food science

**(SEMESTER-1I)**

**2021 batch**

**COURSE CODE:** FS21204

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.

**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

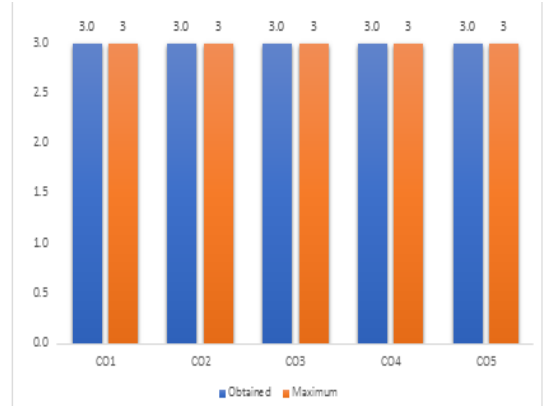
**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	To understand the function of protein, carbohydrates and lipids	II (Understanding)
<b>CO2</b>	To understand the water activity	II (understanding)
<b>CO3</b>	To understand the different enzymes in food	II (Understanding)
<b>CO4</b>	To understand the different pigments	II (Understanding)
<b>CO5</b>	To know about the naturally occurring toxicants	II( understanding)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03
C01	S	S	H	S		S	S		H	S	H
C02	S	H	H	S			H	S	S	H	S
C03	H			S	S				H	H	S
C04	H		S							H	H
C05	S		S		S				S	H	S

H: Highly Supp  
S: Supportive



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	87.5	3.0			100.0	3.0	100.0	3.0	100.0	3.0	100.0	3.0	3.0	85.4	3.0	3.0	3.0
CO2	87.5	3.0			100.0	3.0			100.0	3.0	100.0	3.0	3.0	85.4	3.0	3.0	3.0
CO3	87.5	3.0	97.9	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	85.4	3.0	3.0	3.0
CO4			97.9	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	85.4	3.0	3.0	3.0
CO5			97.9	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	85.4	3.0	3.0	3.0

AVERAGE	AVERAGE
3	3



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1			H 3					
CO2		H 3	H 3				H 3	
CO3	H 3							
CO4	H 3							
CO5								
AVERAGE OF COS FOR POS	3	3	3				3	
AVERAGE OF POS	3	3	3				3	
AVERAGE	3							

## COURSE OUTCOME MAPPING

### MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

**COURSE TITLE:** Quantity food production and service (SEMESTER-v1) 2020 batch

**COURSE CODE:** FS18503

**CREDITS:** 4

**DEPARTMENT:** Food Science Nutrition and Dietetics

**PROGRAMME OUTCOMES(BA/BSC/BCOM and BBA)Or POs :**

**PO1. Scientific Knowledge:** Apply the knowledge of Science, Mathematics, Engineering & Technology fundamentals to solve the complex problems.

**PO2. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO3.Problem analysis:** Identify, formulate, research literature, and analyze complex scientific problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO4. Modern tool usage:** Create, select and apply appropriate techniques, resources, modern technology and IT tools to complex science and technological activities.

**PO5. Environment and sustainability:** Understand the impact of professional science and technological solutions in societal and environmental contexts and for sustainable development.

**PO6.Individual and team work:** Function objectively as an individual and as a member in diverse teams.

**PO7. Communication:** Communicate effectively on complex science & technology activities with society at large and able to write effective reports and documentation.

**PO8. Life-long learning:** Recognise the need and ability to engage in independent and lifelong learning in the context of technological change.



**PROGRAMME SPECIFIC OUTCOME ( DEPARTMENT WISE):**

**PSO1.** Understand Concept of food science nutrition and dietetics.

**PSO2.** Analyse the relationship between various nutrients and physiological disorders and various diet therapies.

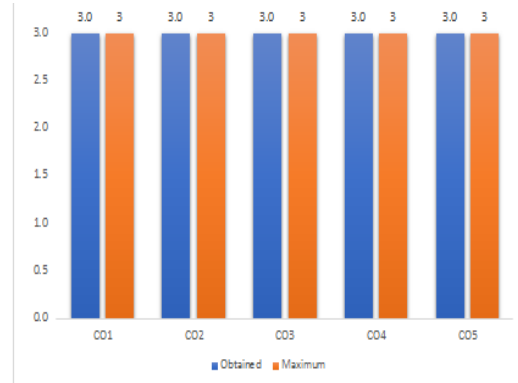
**PSO3.**Apply the knowledge of processing and preservation techniques in increasing the shelf life of food projects.

**PSO4.**Combine the knowledge of food science nutrition and dietetics to overcome food wastage, malnutrition and life style disorders.

	<b>COURSE OUTCOMES</b>	<b>BLOOM'S TAXONOMY LEVEL</b>
<b>CO1</b>	To understand the types and variety of foods available in the market	II (Understanding)
<b>CO2</b>	To understand identifying and planning menus	III (Applying)
<b>CO3</b>	To provide exposure on quality control food production.	II (Understanding)
<b>CO4</b>	To learn various services and delivery of foods	II (Understanding)
<b>CO5</b>	To understand financial management	II( Understanding)

outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PS01	PS02	PS03
C01	S	S	H	S		S	S		H	S	H
C02	S	H	H	S		S	H	S	S	H	S
C03	H	H	S	S	S				H	H	S
C04	H		S							H	H
C05	S		S		S				S	H	S

H: Highly Supp  
S: Supportive



co	mid exam 1		mid exam 2		group discussion		assignment		viva		Attendance		External Exam				
	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	pass%	Attainment level	co wise internal average	pass%	Attainment level	co wise external average	co wise total average
CO1	100.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	88.5	3.0	3.0	100.0	3.0	3.0	3.0
CO2	100.0	3.0			100.0	3.0			100.0	3.0	88.5	3.0	3.0	100.0	3.0	3.0	3.0
CO3	100.0	3.0	96.2	3.0	100.0	3.0			100.0	3.0	88.5	3.0	3.0	100.0	3.0	3.0	3.0
CO4			96.2	3.0	100.0	3.0			100.0	3.0	88.5	3.0	3.0	100.0	3.0	3.0	3.0
CO5			96.2	3.0	100.0	3.0			100.0	3.0	88.5	3.0	3.0	100.0	3.0	3.0	3.0

AVERAGE	AVERAGE
3	3



OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1			H 3					
CO2		H 3	H 3				H 3	
CO3	H 3							
CO4	H 3							
CO5								
AVERAGE OF COS FOR POS	3	3	3				3	
AVERAGE OF POS	3	3	3				3	
AVERAGE	3							