

COURSE OUTCOME MAPPING

2022-2023

MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

COURSE TITLE: Research Methodology

COURSE CODE: MFSN20202

CREDITS: 5

DEPARTMENT: M.Sc. FOOD SCIENCE AND NUTRITION

PROGRAMME OUTCOMES Or POS(MDS):

PROGRAM OBJECTIVES (POs)

PO 1: Demonstrate knowledge of the scientific method, purpose, and approaches to research.

PO 2: Explain research design and research cycle.

PO 3: Prepare key elements of a research proposal.

PO 4: Explain ethical principles, issues and procedures.

PROGRAMME SPECIFIC OUTCOME:

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Understand the concept of different food service units.

PSO2: Fundamentals of research designs

PSO3: sources of data

PSO4: data processing and report writing and presentation.

PSO5: Data collection

PSO6: sampling

	COURSE OUTCOMES	BLOOM'S TAXONOMY LEVEL
CO1	Evolution of food service industry	II (UNDERSTAND)
CO2	Hypothesis research design	II (UNDERSTAND)
CO3	Data collection	IV (ANALYZE)
CO4	Sampling	III (APPLY)
CO5	Attitude measurement data processing report	IV (ANALYZE)

TABLE 1: CO, PO, PSO MAPPING

outcomes	PO1	PO2	PO3	PO4	PO5	PS01	PSO2	PS03	PSO4	PSO5	PSO6	PSO7	PSO8
C01	H	H	S	S				S	H	S	S	H	H
C02	H	H	S	H		H	H	S	H	H	S	H	H
C03	H	H	S	H	S	S	H	S	H	H	S	S	H
C04	H	H	S	S		S			H	S		S	H
C05	H	H	S	H		S	H	H	H	S		S	S

H: Highly Supportive
S: Supportive

Table 2: COURSE OUTCOME ATTAINMENT

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	100.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	100.0	3.0	3.0	97.0	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	97.0	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	97.0	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	97.0	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	97.0	3.0	3.0	3.0

AVERAGE	AVERAGE
3	3

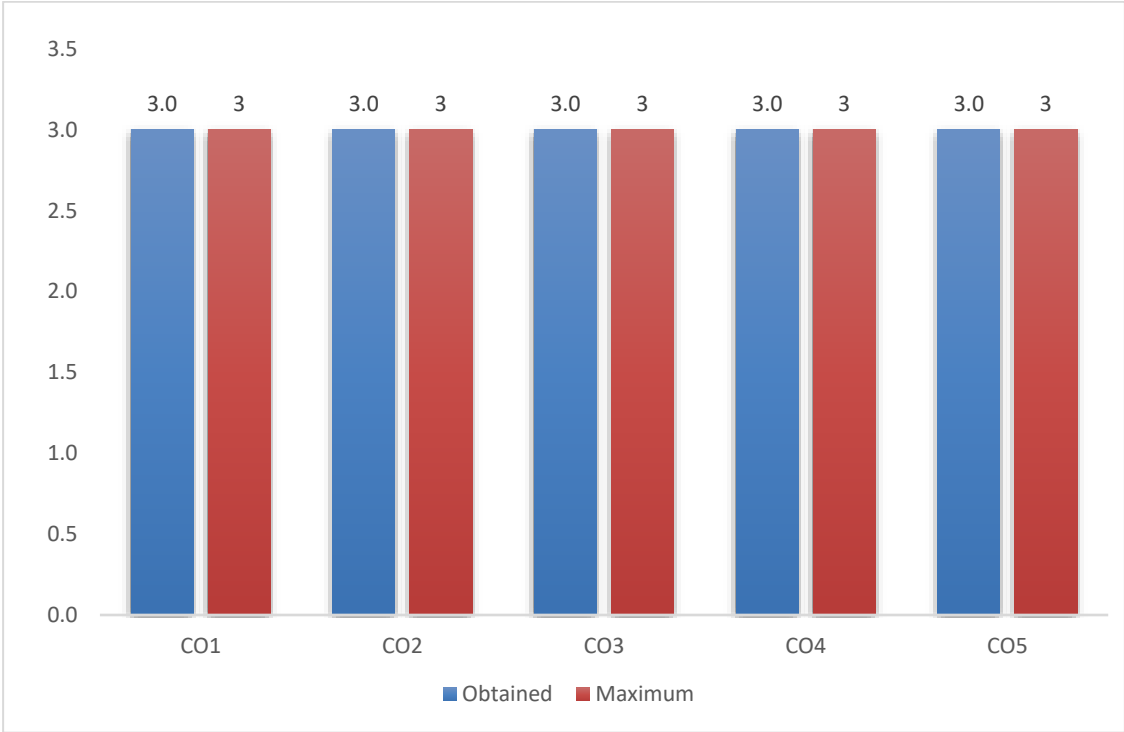


Table 3: PROGRAMME OUTCOME MAPPING

OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	H 3	H 3						
CO2	H 3	H 3		H 3		H 3	H 3	
CO3	H 3	H 3		H 3			H 3	
CO4	H 3	H 3						
CO5	H 3	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							

RESULT ANALYSIS: The Total CO attainment of the course is good.

COURSE OUTCOME MAPPING

MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

<p>COURSE TITLE: ADVANCED FOOD SCIENCE</p> <p>COURSE CODE: MFSN20203</p> <p>CREDITS: 4</p>
<p>DEPARTMENT: M.Sc. FOOD SCIENCE AND NUTRITION</p>
<p>PROGRAMME OUTCOMES Or POS(MDS):</p> <p>PROGRAM OBJECTIVES (POs)</p> <p>PO 1: To understand the principles of food preservation and its applications.</p> <p>PO 2: understand the chemistry of food components like proteins, carbohydrates, and lipids.</p> <p>PO 3 : understand nature of various food products development</p> <p>PO 4 : understand nature of various food products constituents, additives and adulterants.</p>
<p>PROGRAMME SPECIFIC OUTCOME:</p> <p>PROGRAM SPECIFIC OUTCOMES (PSOs)</p> <p>PSO1: Understand the concept of food science, nutrition and dietetics.</p> <p>PSO2: Analyses the relationships between various nutrients and reservation techniques and its applications</p> <p>PSO3: Apply the knowledge of processing and preservation techniques in increasing tie shelf life of food products.</p> <p>PSO4: Combine the knowledge of food science, nutrition and dietetics to overcome food wastage, malnutrition and lifestyle disorders.</p>

	COURSE OUTCOMES	BLOOM'S TAXONOMY LEVEL
CO1	Application of heat	II (UNDERSTAND)
CO2	Effects of cold processing on food	II (UNDERSTAND)
CO3	Preservation of food	IV (ANALYZE)
CO4	Approaches/ Strategies for Improving nutritionstatus and health status of the community	III (APPLY)
CO5	Food additives adulterants and foodenrichment	IV (ANALYZE)

TABLE 1: CO, PO, PSO MAPPING

outcomes	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
C01	H	H		S		H	H	H	S	H	H	S	S
C02	H	H		S		H	H	H	S	H	H	S	H
C03	H	H		S		H	H	H	S	H	H	H	H
C04	H	H		S		H	H	H	S	H	H	S	H
C05	H	H		S		H	H	H	S	H	H	S	S

H: Highly Supportive
S: Supportive

Table 2: COURSE OUTCOME ATTAINMENT

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		
C01	100.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	100.0	3.0	3.0	87.9	3.0	3.0	3.0
C02	100.0	3.0			100.0	3.0			100.0	3.0	100.0	3.0	3.0	87.9	3.0	3.0	3.0
C03	100.0	3.0	100.0	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	87.9	3.0	3.0	3.0
C04			100.0	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	87.9	3.0	3.0	3.0
C05			100.0	3.0	100.0	3.0			100.0	3.0	100.0	3.0	3.0	87.9	3.0	3.0	3.0

AVERAGE	AVERAGE
3	3

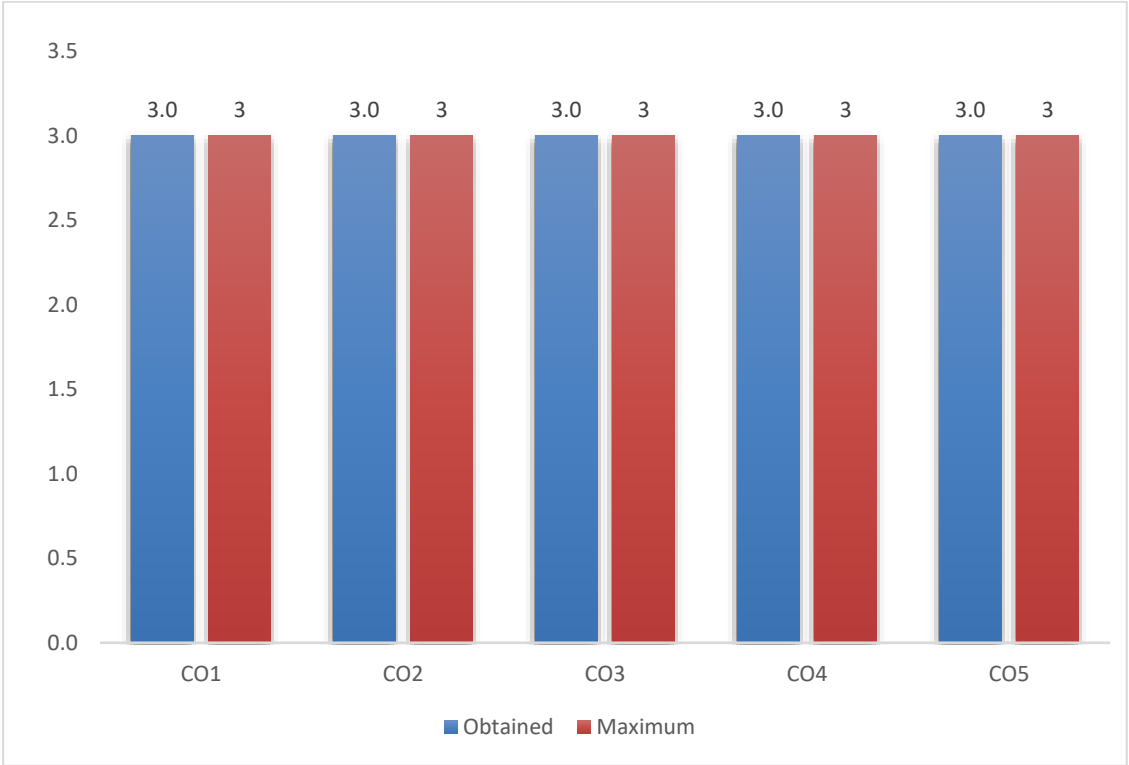


Table 3: PROGRAMME OUTCOME MAPPING

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

RESULT ANALYSIS: The Total CO attainment of the course is good.

COURSE OUTCOME MAPPING

MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

<p>COURSE TITLE: FOOD</p> <p>MICROBIOLOGY AND FOOD SAFETY</p> <p>COURSE CODE: MFSN20204</p> <p>CREDITS: 4</p>
<p>DEPARTMENT: M.Sc. FOOD SCIENCE AND NUTRITION</p>
<p>PROGRAMME OUTCOMES Or POS(MDS):</p> <p>PROGRAM OBJECTIVES (POs)</p> <p>PO 1: Understanding the nature of microorganisms. Involved in food spoilage food infection and intoxications in food biotechnology.</p> <p>PO 2: To gain. Knowledge of principles of various techniques used Prevention & Control of microorganism in foods.</p> <p>PO 3: Understand. Criteria for microbiological safety in various Food operations to avoid public health hazard due to food contamination.</p> <p>PO 4: Understand various. Quality control parameters of food. Through basic prerequisite programmers, national and international food regulations.</p>
<p>PROGRAMME SPECIFIC OUTCOME:</p> <p>PROGRAM SPECIFIC OUTCOMES (PSOs)</p> <p>PSO1: Overview of Basic microbiology.</p> <p>PSO2: Food spoilage and preservation</p> <p>PSO3: Microorganisms. In human welfare</p> <p>PSO4: Food Hygiene</p>

	COURSE OUTCOMES	BLOOM'S TAXONOMY LEVEL
CO1	Overview of Basic microbiology.	II (UNDERSTAND)
CO2	Food spoilage	II (UNDERSTAND)
CO3	Microbes in food biotechnology.	IV (ANALYZE)
CO4	Sources of contamination of food	III (APPLY)
CO5	Public health hazards due to microbial contamination of foods.	IV (ANALYZE)

TABLE 1: CO, PO, PSO MAPPING

outcomes	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
C01	H	H		S		H	S	H	S	S	H	H	H
C02	H	H		S		H	H	H	S	S	H	H	H
C03	H	H		S		H	H	H	S	S	H	S	H
C04	H	H		S		H	S	H	S	S	H	S	H
C05	H	H		S		H	H	H	S	S	H	S	S

H: Highly Supportive
S: Supportive

Table 2: COURSE OUTCOME ATTAINMENT

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		
CO1	100.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	33.3	0.0	2.4	87.9	3.0	3.0	2.8
CO2	100.0	3.0			100.0	3.0			100.0	3.0	33.3	0.0	2.3	87.9	3.0	3.0	2.7
CO3	100.0	3.0	100.0	3.0	100.0	3.0			100.0	3.0	33.3	0.0	2.4	87.9	3.0	3.0	2.8
CO4			100.0	3.0	100.0	3.0			100.0	3.0	33.3	0.0	2.3	87.9	3.0	3.0	2.7
CO5			100.0	3.0	100.0	3.0			100.0	3.0	33.3	0.0	2.3	87.9	3.0	3.0	2.7

AVERAGE	AVERAGE
3	2.724

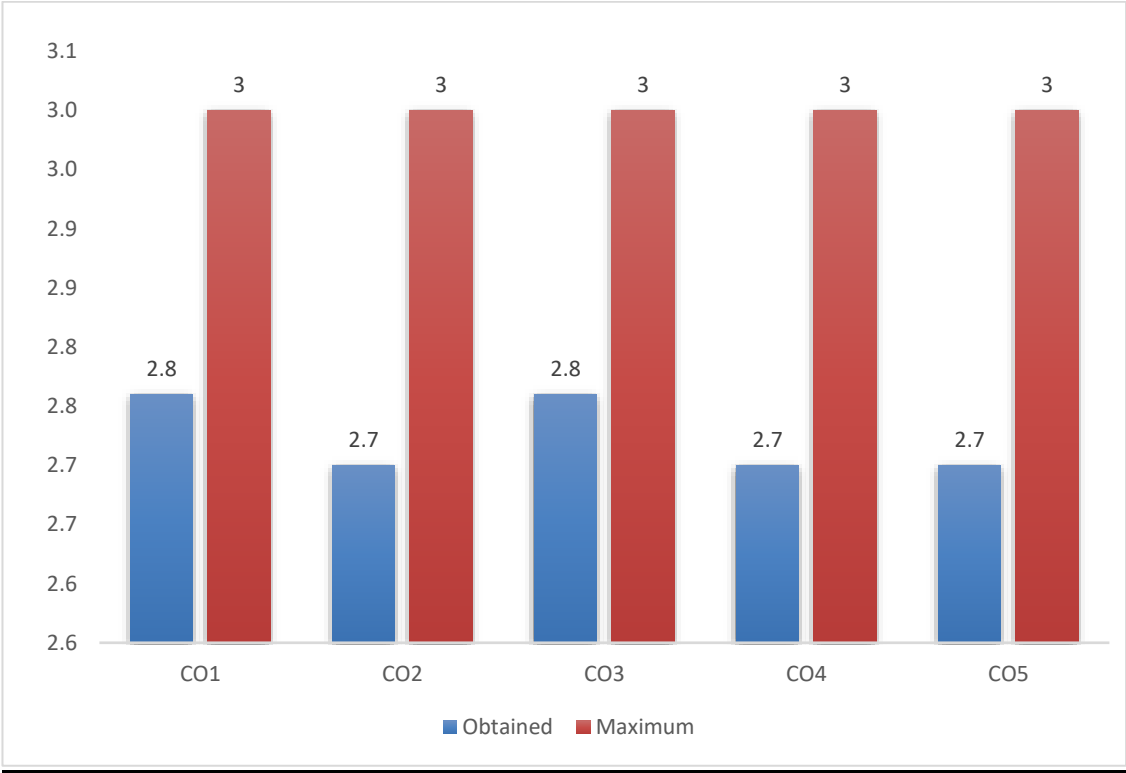


Table 3: PROGRAMME OUTCOME MAPPING

OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1	H 2.76	H 2.76				H 2.76		H 2.76
CO2	H 2.7	H 2.7				H 2.7	H 2.7	H 2.7
CO3	H 2.76	H 2.76				H 2.76	H 2.76	H 2.76
CO4	H 2.7	H 2.7				H 2.7		H 2.7
CO5	H 2.7	H 2.7				H 2.7	H 2.7	H 2.7
AVERAGE OF COS FOR POS	2.724	2.724				2.724	2.72	2.724
AVERAGE OF POS	2.7168	2.7168				2.7168	2.72	2.7168
AVERAGE	2.71744							

RESULT ANALYSIS: The Total CO attainment of the course is good.

COURSE OUTCOME MAPPING

MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

COURSE TITLE: THERAPEUTIC NUTRITION

COURSE CODE: MFSN20205

CREDITS: 4

DEPARTMENT: M.Sc. FOOD SCIENCE AND NUTRITION

PROGRAMME OUTCOMES Or POS(MDS):

PROGRAM OBJECTIVES (POs)

PO 1: the causative factors and the metabolic changes in various diseases and disorders.

PO 2: Gain knowledge of the principles of diet therapy.

PO 3: learn principles of dietary drink counselling.

PO 4: understand the rationale of prevention of various diseases or disorders.

PROGRAMME SPECIFIC OUTCOME:

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Understand the principles of diet therapy and diet counselling.

PSO2: Analyze nutritional interpretation of protein. Medical and laboratory data.

PSO3: Apply the knowledge of

PSO4: Combine the knowledge of Nutrition education and nutrition monitoring.

	COURSE OUTCOMES	BLOOM'S TAXONOMY LEVEL
CO1	Nutritional of a Community.	II (UNDERSTAND)
CO2	Methods to improve Nutritional quality.	II (UNDERSTAND)
CO3	Nutrition deficiency disorders.	IV (ANALYZE)
CO4	Nutrition monitoring and surveillance.	III (APPLY)
CO5	Community nutrition programme planning	IV (ANALYZE)

TABLE 1: OF CO, PO, PSO MAPPING

outcomes	PO1	PO2	PO3	PO4	PO5	PS01	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8
C01	H	H		S	S	H	S		H	H	H	H	H
C02	H	S		S	S	H	H		H	H	H	H	S
C03	H	S		S	S	H	H		H	H	H	S	H
C04	H	S		S	S	H	S		H	H	H	H	H
C05	H	S		S	S	H	H		H	H	H	H	S

H: Highly Supportive
S: Supportive

Table 2: COURSE OUTCOME ATTAINMENT

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	100.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	100.0	3.0	3.0	87.9	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	87.9	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	87.9	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	87.9	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	87.9	3.0	3.0	3.0

AVERAGE	AVERAGE
3	3

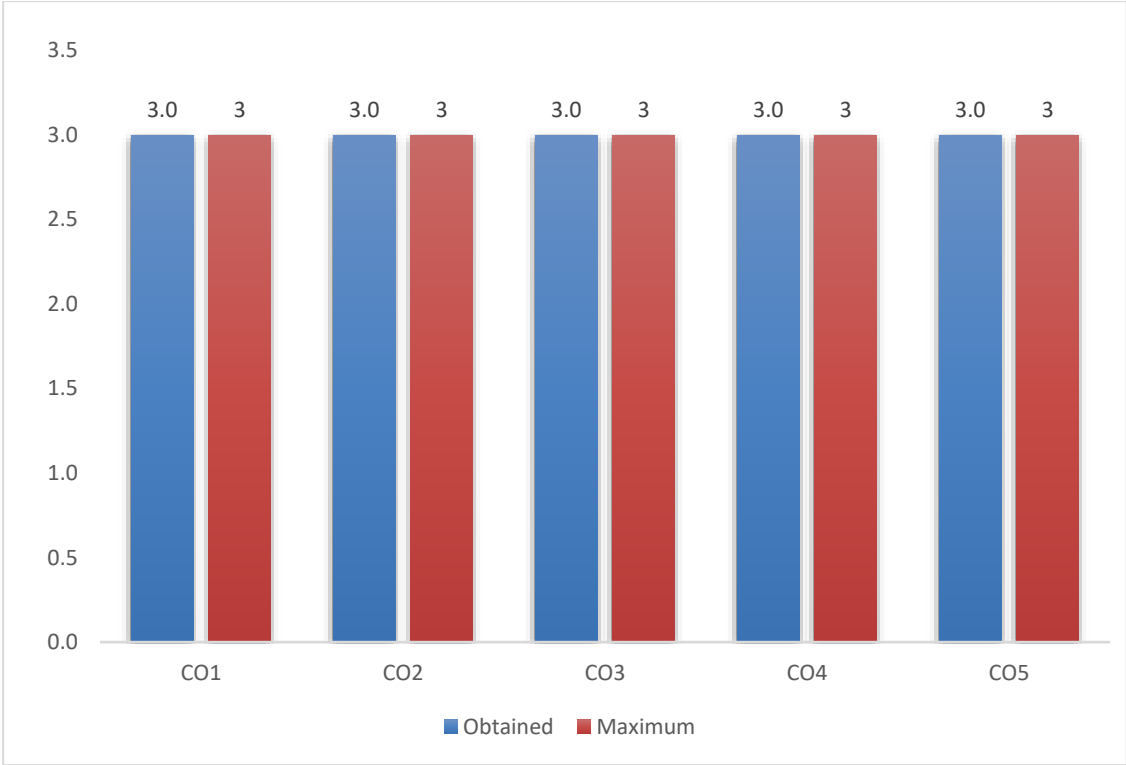


Table 3: PROGRAMME OUTCOME MAPPING

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

RESULT ANALYSIS: The Total CO attainment of the course is good.

COURSE OUTCOME MAPPING

MAPPING COURSE OUTCOMES LEADING TO THE ATTAINMENT OF PROGRAM OUTCOMES:

COURSE TITLE: PUBLIC HEALTH NUTRITION

COURSE CODE: MFSN20206

CREDITS: 4

DEPARTMENT: M.Sc. FOOD SCIENCE AND NUTRITION

PROGRAMME OUTCOMES Or POS(MDS):

PROGRAM OBJECTIVES (POs)

PO 1: Understanding and ability to apply these novel technologies in Food nutritional security.

PO 2: Understanding of novel and innovative development programs in attaining nutrition security.

PO 3 : Describing food labeling and advertising.

PO 4: Enable the students to gain knowledge regarding national policies for improving food and nutrition security.

PO 5: Demographic transition

PROGRAMME SPECIFIC OUTCOME:

PROGRAM SPECIFIC OUTCOMES (PSOs)

PSO1: Understand the concept of food and nutrition security.

PSO2: Analyze the relationship between food and nutrition security.

PSO3: Apply the knowledge of food production and agriculture policies.

PSO4: Impact of Development programs on Nutrition security.

	COURSE OUTCOMES	BLOOM'S TAXONOMY LEVEL
CO1	Public health nutrition and health care system	II (UNDERSTAND)
CO2	Population dynamics	II (UNDERSTAND)
CO3	Public health aspects of undernutrition	IV (ANALYZE)
CO4	Approaches strategies for improving nutrition status and health status of the community	III (APPLY)
CO5	Food and nutrition security	IV (ANALYZE)

TABLE 1: OF CO, PO, PSO MAPPING

outcomes	PO1	PO2	PO3	PO4	PO5	PS01	PSO2	PS03	PSO4	PSO5	PSO6	PSO7	PSO8
C01	S	H		S	H		S		H	H	H	H	H
C02	H	H		S	H		H		H	H	H	H	S
C03	H	H		S	H	H	H		H	H	H	S	H
C04	H	H		S	H		S		H	H	H	S	H
C05	S	H		S	H		H		H	H	H	H	S

H: Highly Supportive
S: Supportive

Table 2: COURSE OUTCOME ATTAINMENT

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		
CO1	100.0	3.0			100.0	3.0	100.0	3.0	100.0	3.0	72.7	1.0	2.6	87.9	3.0	3.0	2.8
CO2	100.0	3.0			100.0	3.0			100.0	3.0	72.7	1.0	2.5	87.9	3.0	3.0	2.8
CO3	100.0	3.0	100.0	3.0	100.0	3.0			100.0	3.0	72.7	1.0	2.6	87.9	3.0	3.0	2.8
CO4			100.0	3.0	100.0	3.0			100.0	3.0	72.7	1.0	2.5	87.9	3.0	3.0	2.8
CO5			100.0	3.0	100.0	3.0			100.0	3.0	72.7	1.0	2.5	87.9	3.0	3.0	2.8

AVERAGE	AVERAGE
3	2.816

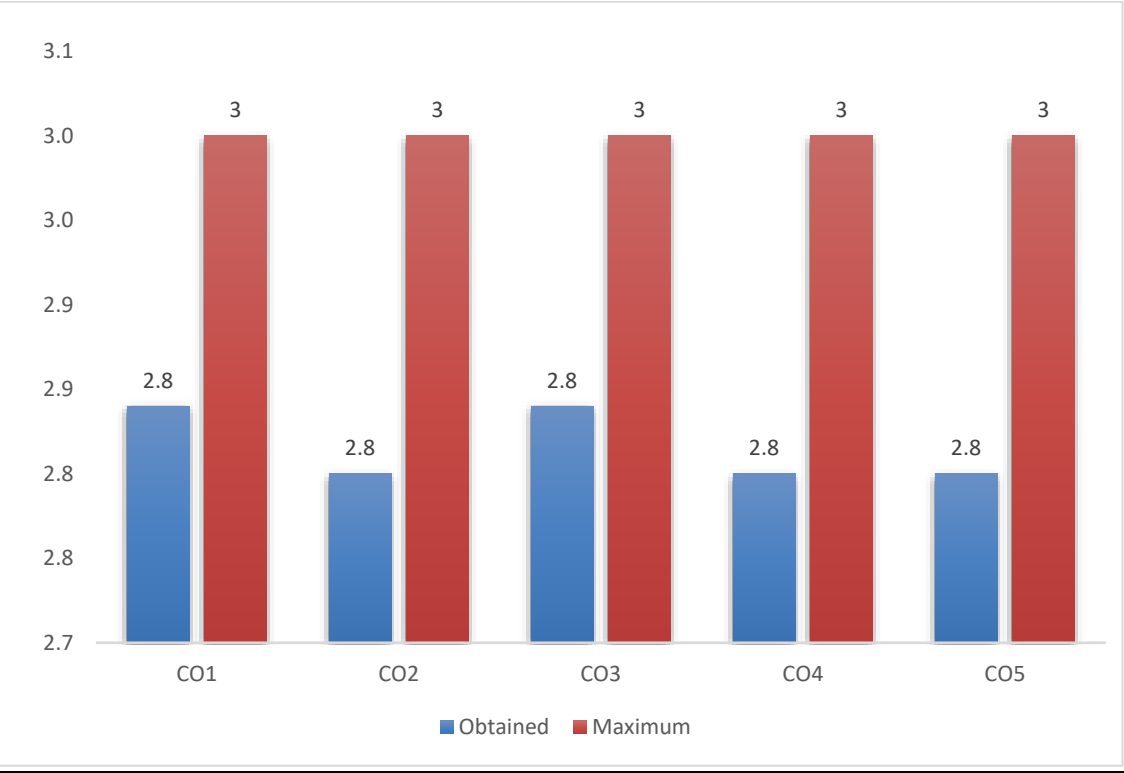


Table 3: PROGRAMME OUTCOME MAPPING

OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8
CO1		H 2.84			H 2.84			
CO2	H 2.8	H 2.8			H 2.8		H 2.8	
CO3	H 2.84	H 2.84			H 2.84	H 2.84	H 2.84	
CO4	H 2.8	H 2.8			H 2.8			
CO5		H 2.8			H 2.8		H 2.8	
AVERAGE OF COS FOR POS	2.813333333	2.816			2.816	2.84	2.813333333	
AVERAGE OF POS	2.813333	2.8112			2.8112	2.84	2.813333	
AVERAGE	2.817813333							

RESULT ANALYSIS: The Total CO attainment of the course is good.

