### As Per NEP 2020

### University of Mumbai



Syllabus for				
Basket of Open Elective (OE)				
Vertical 3				
Faculty of Humanities				
Board of Studies in Culinary Arts				
UG First Year Program				
Semester	1			
Title of Paper	Food Safety (Theory)			
Credits	2			
From the Academic Year	2025-26			

# University of Mumbai Syllabus for Open Elective (OE) (Semester – I)

#### Food Safety (Theory) (C-2)

Title of Paper - Food Safety (Theory)				
Course Code -				
Sr. No.	Heading	Particulars		
1	Description of the course:	This course is to familiarize students with the critical importance of hygiene and food safety within the hospitality industry. Students will learn the fundamental principles of maintaining cleanliness, preventing contamination, and ensuring the safe handling, storage, and preparation of food. Emphasizing industry standards and best practices, the course aims to equip students with the knowledge and skills needed to uphold high hygiene standards, protect guest health, and comply with regulatory requirements. By the end of the course, students will understand the vital role food safety plays in delivering quality service and safeguarding both guests and staff in hospitality settings.		
2	Vertical: Major/Minor/Open Elective /Skill Enhancement / Ability Enhancement / Indian Knowledge System (Choose By √)	√ Open Elective.		
3	Type:	Theory		
4	Credit:	2 credits (1 credit = 15 Hours for Theory or 30 Hours of Practical work in a semester)		
5	Hours Allotted:	30 Hours		
6	Marks Allotted:	50 Marks Internal Exam 20 marks External Exam 30 marks		
7	Course Objectives: Objective of this course and Food Safety in the	e is to familiarize the students with the importance of hygiene Hospitality Industry.		

#### 8 Course Outcomes:

On completing this unit students will be able to:

- Define microbes and conditions for growth of microbes
- List the importance and basic principles of HACCP
- List common microorganisms and their sources
- Define Food Adulteration and adulterants
- Identify the presence of adulterants
- State the types and uses of Food Additives
- State the importance of Hygiene
- Safely dispose garbage
- Identify pests in the premises and take appropriate control measures.

#### 9 MODULES: -

#### **MODULE 1: INTRODUCTION TO FOOD SAFETY AND HYGIENE**

#### INTRODUCTION TO FOOD SAFETY AND HYGIENE

- Importance of Food Safety in Hospitality Industry.
- Personal Hygiene.
- Classification of Microorganisms and their characteristics- Beneficial and Pathogenic.
- Factors affecting bacterial growth Temperature danger zone
- Time and temperature control.
- Cross contamination.
- Cleaning & Sanitation- Methods of cleaning & Sanitizing.
- Good hygiene practices in the catering operations.
- Introduction to Hazard analysis critical control point (HACCP) and maintenance of documents.

#### **MODULE 2: FOOD BORNE DISEASES**

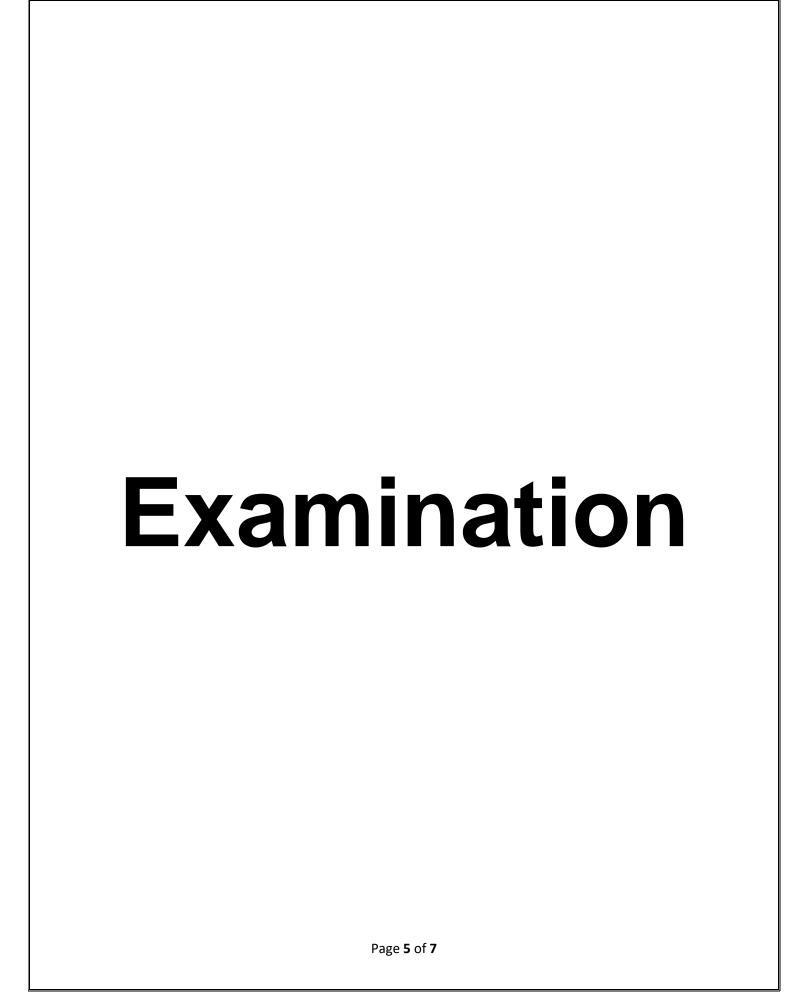
#### **FOOD BORNE DISEASES**

- Classification of Food Borne Diseases- Food Borne Illness, Food Poisoning (Intoxication), Food Infections.
- Common microbes causing food infections- Staphylococcus, Salmonella, Escherichia Coli, Listeria monocytogenes, Clostridium Botulinum, Clostridium Perfringens, Bacillus Cereus, Vibrio-Cholera, Shigella, Ameoba, Trichinella, Food Borne Viruses, Protozoans, Helminths, Prions
- Natural Toxins (Kesari Dal, Potatoes, Mushroom, Seafood)
- Chemical Toxins (Tin, Copper, Lead, Arsenic)

#### WASTE DISPOSAL

- Types of waste and segregation, Garbage management onshore and at sea
- Pest Control- Types of Pests, Inspection of Premises, Pests Prevention and control

10	Textbooks:						
	1. Safe food handling : a training guide for managers, Text Book, CBS Pub. Delhi,						
	Jacob, Michael, 1991,142p.						
	2. The prevention of food poisoning Text Book Stanley London Trickett, Jill, 3rd						
	Ed. 1992 vi, 137p. 0-7487-152						
	3. Industry guide to good hygiene practice Text Book Chadwick London						
	Chadwick 1995 vi,137p. 1-904306-4						
	4. Food microbiology Text Book McGraw-Hill New Delhi Frazier, W C,, 4 <sup>th</sup> Ed.						
	2005 xvi,539p. 0-07-46210						
	5. Food and nutrition Vol-1 Text Book Bappco Bangalore Swaminathan, M,, 2nd Ed. 2005 630p.						
	6. Food microbiology Text Book McGraw-Hill New Delhi Frazier, W C, 4th Ed.						
	2005, xvi,539p., 0-07-46210						
11	Reference Books:						
''	1. A trainee guide for managers of food service establishments, 1991, CBS						
	Publishers & Distributors						
	Safe food handling, Stanley Thomas						
	3. The Prevention of food poisoning, Jill Trickett, 1992						
	4. Catering Management, an integrated approach, Sethi / Mohini, New Delhi,						
	1987, Wiley Eastern Ltd,						
	5. Industry Guide to Good Hygiene Practice: Catering Guide Ships, 2004,						
	Chadwick House Group Ltd., 15, Hatfields, London – SE1 8DJ.						
	6. Catering Management, an integrated approach, Sethi / Mohini, New Delhi,						
	1987,						
	7. Handbook of food & nutrition						
	Food microbiology     Food hygiene & sanitation						
	3. 1 Ood flyglefie & Safillation						
12	Internal Continuous Assessment: 40% External Semester End Examination:						
	(i.e. 20 Marks out of 50 Total Marks)  60%						
	(i.e. 30 Marks out of 50 Total Marks)  Individual Passing in Internal and External Examination: 40%						
13	Continuous Evaluation through:						
	Quizzes, Class Tests, presentation, Select at least 3						
	project, role play, creative writing,						
	assignment, etc.						



## QUESTION PAPER PATTERN (External and Internal)

## Examination Semester I Pattern of Theory Exam Theory Courses Evaluation Scheme for First Year (UG) under NEP

Nature of Examination	Bifurcation of Marks			Time	Total Marks		
I. Internal Evaluation for Theory Courses							
Continuous Internal	Sr. No.	Examination	Modul	Marks	Time	Total Marks	
Assessment (CIA) Assignment	1	Class Test Total 10 Marks Define / Terminologies / Match the Column / Fill in the Blanks / Multiple Choice Questions (1 Marks each) -5 Marks Short Notes / Problem. Attempt anyone Questions out of two (a & b) (5 Marks each) - 5 Marks	Modul I or on Completed syllabus	10 Marks	30 Min	20 Marks	
	2	Assignments / Case Study / Presentations / Project / Group Discussion / Ind. Visit. / Tutorial	1 & 11	10 Marks	Minimum 30 Min per activity.		

II. External Examination for Theory Courses						
Semester End Examination	Que stio n No	Paper Pattern (Note: - Theory question paper pattern: Attempt any two out of four questions)	Modul	Marks	Time	Total Marks
	Q. 1	Define / Terminologies / Match the Column / Fill in the Blanks / Multiple Choice Questions (1 Marks each)	I & II	15 Marks	1 Hr.	30 Marks
	Q. 2	Short Notes / Problem. Attempt any Three Questions out of four. (a, b, c & d). (5 Marks each)	1 & 11	15 Marks		
	Q. 3	Essay Type Questions (Attempt any one out of two)	1	15 Marks		
	Q. 4	Essay Type Questions (Attempt any one out of two)	II	15 Marks		
Note:	<ol> <li>Attempt any two out of four questions.</li> <li>Certified Journal is compulsory for appearing at the time of Practical Exam.</li> <li>To appear examination minimum prescribed attendance is compulsory.</li> </ol>					

Sd/-	Sd/-	Sd/-	Sd/-
Sign of the BOS	Sign of the Offg.	Sign of the Offg.	Sign of the Offg.
Chairman,	Associate Dean,	Associate Dean,	Dean,
Chef Siraj Shaikh,	Dr. Suchitra Naik	Dr. Manisha Karne	Prof. Dr. Anil Singh
Board of Studies in	Faculty of	Faculty of	Faculty of
Culinary Arts	Humanities	Humanities	Humanities