

MANONMANIAM SUNDARANAR UNIVERSITY, TIRUNELVELI

UG COURSES – AFFILIATED COLLEGES

M.Sc. Hotel Management and Catering Science with Applied Nutrition

(Choice Based Credit System)

(Effective from the academic year 2021-2022 onwards)

1. Vision of the University

To provide quality education to reach the un-reached

2. Mission of the University

- To conduct research, teaching and outreach programmes to improve conditions of human living
- To create an academic environment that honours women and men of all races, caste, creed, cultures and an atmosphere that values intellectual curiosity, pursuit of knowledge, academic freedom and integrity
- To offer a wide variety of off-campus educational and training programs, including the use of information technology, to individuals and groups.
- To develop partnership with industries and government so as to improve the quality of the workplace and to serve as catalyst for economic and cultural development
- To provide quality/inclusive education, especially for the rural and un-reached segments of economically downtrodden students including women, socially oppressed and differently abled.

3. Vision of the Department

Excellent education in Hotel Management and Catering Science to bring forth intellectual, professional and social wellbeing.

4. Mission of the Department

- Provide healthy learning environment to imbibe comprehensive knowledge, skills and values to bridge academia, industries and society.
- Promote research and open scientific platforms that transform students proficient and globally competent.
- Nurture moral values among students and help them grow as socially sensible and responsible persons.

5. Preamble

Hotel management deals with the study of healthy Food production, hygienic, cleanliness of the hotel and good relationship with guest. Hotel management holds promises in areas of Healthy food and Agriculture. The M.Sc. Degree programme aims at providing in-depth knowledge and understanding of the core principles of hotel management and their practical aspects in order to pursue higher studies and employment. The Learning Outcome Based Curriculum Framework (LOCF) for B.Sc. Biochemistry programme has been framed as per the guidelines prescribed by University Grants Commission (UGC) under Choice Based Credit System (CBCS).

6. Programme Educational Objectives (PEOs)

The M.Sc.Hotel Management and Catering Science programme is proposed to

PEO1: Provide the fundamental knowledge on different branches of Hotel Management and Catering Science.

PEO2: Impart the theoretical and practical skills in basic and modern techniques in Hotel Management and Catering Science and related subjects.

PEO3: Motivate the students for critical thinking and self-reflection to draw conclusions

PEO4: Inculcate moral values and help them to grow as good citizens.

PEO5: Enable the students with profound understanding in various field of applications and make them competent.

7. Programme Outcomes (POs)

On completion of M.Sc. Hotel Management and Catering Science programme, the student shall be able to

PO1: Discover proficiency in Catering Science in terms of National and International perspective and stay competent in the area of Hospitality Industries.

PO2: Apply critical thinking and scientific knowledge to design, carryout, record and analyze Catering Science investigations effectively.

PO3: Develop various communication skills such as reading, writing, listening, speaking etc. to expose novel ideas in Culinary.

PO4:Inference the problems related to Catering Science disciplines and think systematically and independently to draw a logical conclusion.

PO5: Interpret effectively as part of a team to solve problems, debate different points of view and interact productively with a diverse group of team members in academic world, work place and research.

PO6: Formulate a lifelong learner with moral and ethical values in all aspects of work and day to day life.

8. Programme Specific Outcomes (PSO)

On completion of B.Sc.Hotel Management and Catering Science programme, the student shall be able to

PSO1: Summarize comprehensive knowledge and skills in Culinary Art, Culinary Science, Beverages, Cleanliness, Analytical, Physical, and Hotel Industry.

PSO2: Develop effective communication of the fundamental concepts of Culinary Preparation, Servicing, Cleanliness, and Guest Relationship through enhanced reading of textbooks, library usage, presenting seminars, writing assignments etc.

PSO3: Solve problem solving ability by utilizing the conceptual knowledge and bioanalytical techniques, to solve problems.

PSO4: Discover critical thinking skill and laboratory skills in Catering Science for designing, carrying out and interpreting experiments applied in culinary preparation, Beverage service, Cleanliness, Guest Relationship.

PSO5: Decide to share and impart in-depth knowledge about Catering Science and facilitate to pursue post-graduation in related fields in life sciences and inculcate the research aptitude.

PSO6: Build effectively in the development of ethical practices and societal contributions leading to responsible and competent professionals.

9. Eligibility for admission to the course and examination

Candidates shall be admitted to the course provided he/she has passed under graduation in Hotel Management, Science subject that may be considered as equivalent by the M.S. University.

10. Duration of the Course

The students shall undergo the prescribed course of study for a period of not less than three academic years (Four semesters). Each semester contains 90 working days.

11. Medium of instruction and examination

The medium of instruction as well as examination will be in English.

12. Theory examination

The external evaluation will be based on the examination to be conducted by the university at the end of each semester.

13. Practical examination

Practical examinations will be conducted at the end of each semester.

14. Evaluation

A. Each paper carries an internal component

B. There is a pass minimum of 40% for external and overall components

Theory External: Internal Assessment = 75:25

Practical External: Internal Assessment = 50:50

C. Internal Assessment

Internal marks for Theory shall be allocated in the following manner.

The average of the best two tests from three compulsory tests	20 Marks
Assignment	05 Marks
Total	25 Marks

Note: Each test will be of one hour duration.

D. Practical

Internal marks for Practical shall be allotted in the following manner.

Experimental work	20 Marks
Record	10 Marks
Model Test	20 Marks
Total	50 Marks

E. Project Work

Components	Marks
Project Report	75 Marks
Viva –Voce	25 Marks
Total	100 Marks

Note:

- i) Students should carry out group project in major subject.
- ii) Project report will be evaluated by Central valuation and Viva-Voce will be conducted by both the External examiner and the Guide at the end of the 4th semester.

15. Grading System

The performance of the student is indicated by the Seven Points Scale Grading System as per the UGC norms given below

Grade	Grade point	Percentage of marks	Performance
O	9.5 and above	95-100	Outstanding
E	8.5 and above	85-94	Excellent
D	7.5 and above	75-84	Distinction
A	7 and above	70-74	Very Good
B	6 and above	60-69	Good
C	5 and above	50-59	Average
RA	0	Up to 49	Re-Appear

The overall performance level of the candidates will be assessed by the following formulae:

$$\text{Cumulative weighted average of marks} = \frac{\Sigma(\text{marks} + \text{credits})}{\Sigma \text{credits}}$$

$$\text{Cumulative weighted average grade points} = \frac{\Sigma(\text{Grade points} \times \text{credits})}{\Sigma \text{credits}}$$

16. The question paper pattern for all theory papers shall be as follows.

Duration of Exam: 3Hours

Section	Type of questions	Mark
Part-A	Multiple choice question (Two question from each unit compulsory)	1×10=10 Marks
Part-B	Internal Choice questions (One question from each unit: either/or)	5×5=25 marks
Part-C	Internal Choice questions (One question from each unit: either/or)	8×5=40 marks
	Total	75 Marks

17. The question paper pattern for all practical papers shall be as follows.

Duration of Practical Exam: 3 hours

1	Major experiment	25
2	Minor Experiment	15
3	Spotters	05
4	Record	05
	Total	50 Marks

MODEL

Subject name

TIME: THREE HOURS

SUB CODE: PHCM11

PART A (10x 1=10)

Answer ALL the questions.

Choose the correct answer:

1. One pound is equal to _____ ounces.
a) 6 b) 10 c) 16 d) 20
2. Coagulation of protein begins at _____ °C.
a) 54 b) 64 c) 74 d) 84
3. During fermentation yeast produces alcohol and _____.
a) CO₂ b) H₂O₂ c) NO₂ d) CO
4. Rich dough contains high proportion of _____.
a) Fat and sugar b) essence c) flour d) salt
5. _____ is used in preparation of wedding cake.
a) Fondant icing b) butter icing c) royal icing d) glaze icing
6. _____, _____ and liquid glucose are commonly used in preparation of fondant icing.
a) Water, sugar b) jaggery, water c) palm sugar, water d) brown sugar
7. _____ are used in black forest cake.
a) Pine apples b) cherries c) strawberries d) apples
8. Cookies are prepared in _____ shape.
a) Even b) uneven c) equal d) square
9. Ratio of flour and margarine in full puff paste is _____.
a) 2:1 b) 1:2 c) 3:1 d) 1:1
10. Tempering of chocolate takes place at _____ °C.
a) 6 b) 16 c) 26 d) 36

PART – B (5 x 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b), each answer should not exceed 250 words.

11. a) Write about Baker's percentage.

OR

b) What are the stages of baking process?

12. a) What is rolled – in dough? Write its uses.

OR

b) Write the procedure of sponge method.

13. a) Write short notes on types of sponge cake.

OR

b) What is stencils? Write its uses.

14. a) Write the recipe of fudge icing.

OR

b) What are the fillings used in pie?

15. a) What is truffles? Write its uses.

OR

b) What is petit fours? Give examples.

PART C – (5 x 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b), each answer should not exceed 600 words.

16. a) Explain the method for adjusting gluten development.

OR

b) Explain:

(i) Staling.

(ii) Techniques used in slow staling.

17. a) What are the techniques involved in controlling fermentation?

OR

b) Write the recipe of Brioche.

18. a) What is Glazes? Write the types of Glazes.

OR

b) Write the procedure of assembling layer cakes.

19. a) Write the recipes of ice box cookies.

OR

b) What are the common problems of fruit pies?

20. a) Write the recipes of puff pastry.

OR

What are the types of chocolate? Explain.

PG COURSES – AFFILIATED COLLEGES

Course Structure for M.Sc. (Hotel Management & Catering
Science with Applied Nutrition)

(Choice Based Credit System)

(with effect from the academic year 2021-22 onwards)

Sem.	Sub. No.	Subject Status	Subject Title	Conta Hrs/ Week	Credits
(1)	(2)	(3)	(4)	(5)	(6)
I	1	Core-1	Advanced Kitchen Operations And Kitchen Hygiene	5	4
	2	Core-2	Advanced Food And Beverage Service	5	4
	3	Core-3	Nutrition And Food Science	4	4
	4	Core-4	Principles Of Tourism And Hospitality Management	4	4
	5	Core-5	Food and beverage operation management – I	4	4
	6	Core-6 Practical-1	Advanced Kitchen operations and Kitchen Hygeine	4	2
	7	Core-7 Practical-2	Advanced Food And Beverage Service	4	2
Subtotal				30	24
II	8	Core-8	Advanced Accommodation Management And Interior Decoration	5	4
	9	Core-9	Advanced Front Office Operation	5	4
	10	Core-10	Computer Application In Hospitality Industry	4	4
	11	Core-11	Food And Beverage operation Management- II	4	4
	12	Elective-1	Bar Management or Hotel Engineering	4	3
	13	Core-12 Practical-3	Advanced Accommodation Management And Interior Decoration	4	2
	14	Core-13 Practical-4	Advanced Front Office Operation	4	2
Subtotal				30	23

Sem.	Sub. No.	Subject Status	Subject Title	Cont Hrs/ Wee	Credits	
(1)	(2)	(3)	(4)	(5)	(6)	
III	15	Core-14	Baking And Food Preservation	4	4	
	16	Core-15	Hotel Financial Management	4	4	
	17	Core-16	Human Resource Management In Hospitality Industry	4	4	
	18	Core-17	Hospitality Law	4	4	
	19	Core-18	Research Methodology	4	4	
	20	Elective-2	Communication And Inter Personnel Skills or Food safety & Microbiology	4	3	
	21	Core-19 Practical-5	Baking And Food Preservation	4	2	
	22	Core-20	Mini Project	2+2*	27	
Subtotal				30	25	
IV	23	Core-21	Major Project(Internship Training)	30+2	16	
	Subtotal				30	16
	Total				120	90

*Extra hours for Project

For the project, flexible credits are b/w 5-8 & Hours per week are b/w 10-16.

Total number of credits ≥ 90 : 90

Total number of Core Courses : 21(14T + 5P + 2Prj)

Total number of Elective Courses : 2

MSU/2021- 22 /PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester I/ Core 1

ADVANCED KITCHEN OPERATIONS & KITCHEN HYGIENE

Objectives:

1. To understand kitchen organization, planning, and staffing.
2. To understand kitchen management process ,menu planning, budgeting and safety
3. To understand kitchen equipment's
4. To translate knowledge into new context on kitchen design.
5. To translate knowledge into new context hygiene sanitation.

Unit I

Kitchen Organization

- a) Kitchen Planning – Model Kitchen Organization
- b) Kitchen staff - Duties & Responsibilities of Kitchen Staff
- c) Kitchen Staff – Principles, Function, Planning, Direction, Coordinating and Evaluating.

Unit II

Management Process

- a) Kitchen Management –Purchasing Procedures, Supplies, Quantity control,
Calculating cost price, Portion control, Budget planning
- b) Western culinary terms - Food production system & various production process.
- c) Safety procedures – Fire precautions,

Unit III

Equipment Process

- a) Classification, Selection of various kinds, Equipment source or supply, Equipment design, equipment way of operation, purchasing of various kinds of equipment.
- b) Planning of various Menus – Types of menus, construction of various menus.

Unit IV

Kitchen Designing

- a) Designing of kitchen – Size and types of various kitchen, Developing various kitchen plans, various kitchen layouts plants.
- b) Storage spaces- Location and various types of storage spaces
- c) Sanitation, Security & safety of storage spaces.

Unit V

Hygiene and Sanitation

- a) Kitchen Hygiene and Sanitation – Hygiene in food handling & personal hygiene.
- b) Safety measures, Accidents from improper place of various equipment , safety procedures, safety training, some useful safety devices
- c) Legal responsibilities of chef, Laws governing Food Service establishment, Labour laws, Food Standards and Food laws.

Reference:

1. Krishna Arora – Theory of cookery
2. Ronald kinton – Theory of catering
3. Mohini Sethi – Catering Management
4. Thangam E.Philip – Modern Cookery Voll

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core – 1: ADVANCED KITCHEN OPERATIONS & KITCHEN HYGIENE	Cognitive Level
CO1	Describe kitchen organization, planning, and staffing	K2
CO2	Outline of quantity equipment's, Menu planning, and regional cuisines.	K2
CO3	Explain about kitchen equipment's	K2
CO4	Explain about on kitchen design	K2
CO5	Explain about on hygiene sanitation	K2

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core-1 ADVANCED KITCHEN OPERATIONS & KITCHEN HYGIENE												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	2	3	3	3	3	3	2
2	3	2	3	3	3	2	3	2	3	3	3	2
3	3	2	3	3	3	3	3	2	3	3	3	3
4	3	2	3	3	3	2	3	2	3	3	3	2
5	3	2	2	3	3	2	3	2	3	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2021-22/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester I/ Core 2

ADVANCED FOOD AND BEVERAGE SERVICE

Objectives

1. To develop the knowledge and understanding of restaurant service in the hotel and catering industry.
2. To gain knowledge at restaurant and there equipment's and there used.
3. To understand information about Menu and Menu planning.
4. To understand information about Non-Alcoholic and Alcoholic beverage.
5. To understand information about Service & Beverage Control.

Unit I

Introduction

- a) Introduction and Evolution of Hotel Industry
- b) Role of Catering Establishment in the travel/tourism industry
- c) Types of Food & Beverage Operation – (classification) commercial, Residential, Nonresidential.
- d) Different outlets of F & B Service, Coffee shop – restaurant, bar, room service, discotheque. Barbeque, night clubs, banquets, outdoor catering.
- e) Welfare –industrial/institutional/transport (Air, Road, Rail, Sea)
- f) Hierarchy of F & B Outlets, Duties & responsibilities of each level of staff, Attributes of services personal, Inter – Department Relationship, Co-operation & Co-ordination.

Unit II

Restaurant Operation

Classification of equipment:

- a) Familiarization of equipment – Criteria for selection, requirement, Crockery, tableware, cutlery, glassware, silver including furnishings, silverware, Silver cleaning methods.
- b) Other equipment – care & maintenance of equipment

- c) Cover – Definition & Size
- d) Size of table clothes, baize serviettes, Napperons and their uses
- e) Rules for lying a table
- f) Types of Service English, Silver, Russian, American & others
- g) Food Service Rules for waiting at a table (receiving, order taking service & settlement). h)

Operation of K.O.I

- i) Significance of Kitchen Stewarding.
- j) Ancillary Department
- k) Still room – plate room, pantry; Hot section – Food pick up areas, storerooms; linen room – kitchen stewarding.

UNIT III

Menu & Menu Planning

- a) Definition – points to be considered while planning menu
- b) Types of menu - Ala carte, Table d'hote, banquet menu
- c) Types of meals – (Indian/continental) Breakfast, Brunch, lunch, hi-tea,
- d) French classical menu, Menu engineering

Unit IV

Non-Alcoholic and Alcoholic beverage

I. Non-Alcoholic beverages

II. Alcoholic beverages

A) Wine

- a) Stimulating, Refreshing, Nourishing , Tobacco – Ciger, cigarette, pipe tobacco, chewing tobacco
- b) Alcoholic beverage, Introduction, definition , classification types and production of wines
- c) Wine producing countries of the world including India
- d) Food and wine combination
- e) Storage of wine
- f) Service of wine

B. Beer

Introduction, Definition, Types, Bottled & Canned Beer, Draught Beer production, Storage & Service,

C. Sprit:

Introduction, definition, production (Post still & Parent still method), Rum, Whisky, R.Gin, Brandy, Vodka, Tequila, other sprits, Services.

D. Liquates

Definition, History, Production, Categories.

E. Cocktails

Classification, bar equipment, preparation and Service, Method of mixing food and matching drink.

F. Mocktails

Menu terminology, mocktails related to non-alcoholic beverage,

Unit V

Service & Beverage Control

A) Dining Service : Method & Procedure

Mise-en-scene and mise-en place including arrangement of sideboard, laying tables for different meals. Re-laying table cloths and folding serviettes, restaurant reservation system, receiving the guest, method of service, fresh/family, English/silver, buffet, Banquet, room service, trolley.

(B) Non- Alcoholic Beverages

Tea – types

Coffee – types

Juices, soft drinks –mineral and tonic water

Simple control system

Necessity &function of a control system – F & B Control cycle,

Bar, Layouts, Types of Bar – proof system

Beverages Control Measures:

Allocation
 Bar Ledger
 Indent, receipt and issue of Liquors
 Cellular maintenance
 Different measures (ounces)
 Legal points
 Theft control procedure Record keeping

Reference:

1. Food & Beverage services – Dennis R.Lillicarp, John A.Counins
2. Modern Restaurant Service – John Fuller
3. Professional table service – Sylvia Major, Edy Schmid & Christen Supplier
4. Food & Beverage Service – SudsierAndrews.

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core – 2: ADVANCED FOOD AND BEVERAGE SERVICE	Cognitive Level
CO1	Describe restaurant service in the hotel and catering industry.	K2,K3
CO2	Outline of restaurant equipment's and there use	K2,K3
CO3	Explain about menu and menu planning.	K2,K3
CO4	Explain about Non-Alcoholic and Alcoholic beverage.	K2,K3
CO5	Explain about Service & Beverage Control	K2

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core – 2: ADVANCED FOOD AND BEVERAGE SERVICE												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	2	3	3	3	3	3	2
2	3	2	3	3	3	2	3	2	3	3	3	2
3	3	2	3	3	3	3	3	2	3	3	3	3
4	3	2	3	3	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	3	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

**MSU/2021-22/PG colleges/ (M.Sc. Hotel Management & Catering Science with
Applied Nutrition) Semester I/ Core 3**

NUTRITION AND FOOD SCIENCE

Objective:

1. To obtain knowledge of different food groups and various nutrients.
2. To understand the role of nutrition in maintain good health
3. To understand the role of carbohydrate, proteins and fat.
4. To understand the role of vitamins and minerals.
5. To gain knowledge about nutritional deficiency diseases.

Unit I

Introduction to Nutrition and food science

- a) Nature of food study - Aim, Functions, objectives
- b) Definition – Nutrition, Nutrients, Food, Health, Balanced diet, malnutrition-under nutrition, over nutrition.
- c) Classification of nutrients
- d) Basic food groups- Four, Five, Seven
- e) Processed supplementary foods and novel foods

Unit II

Carbohydrate, Proteins and Fat

- a) Carbohydrate - classification, digestion, absorption, metabolism, functions, sources excess and deficiency, daily requirements.
- b) Proteins – Classification, digestion, absorption, metabolism, functions, sources, excess and deficiency, daily requirements
- c) Fat – Classification, digestion, absorption, metabolism, functions, sources, excess and deficiency, daily requirements

Unit III

Vitamins and Minerals

Vitamins: Classifications; Fat Soluble – A, D, E & K Water – Soluble - C and B Complex

- absorption and storage, functions, sources, excess and deficiency, daily requirements

Minerals : Calcium phosphorus, Iron, Copper, Zinc, Iodine, Fluorine & Sodium – their absorption functions Sources, requirements, excess and deficiency

Unit IV

Definition, determination of calorific value of foods, Determination of energy metabolism, daily requirement.

Unit V

Balanced Diet and Water

- a).Balanced Diet : meaning. Basic principles of meal planning
- b) Basic dietary pattern and its modification to suit different economic levels
- c)Water – Importance, water balance, deficiency -oral dehydration, role of water in food preparation, water content of foods.

References :

1. Food Science, Srilakshmi B
2. Wiley Eastern Publications, Mumbai
3. A Text book of foods, Nutrition & Dietetics – Raheena Begam
4. Hand Book of Food & Nutrition – M.Swaminathan
5. Food Science, Chemistry & Experimental foods- M Swaminathan

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core – 3: NUTRITION & FOOD SCIENCE	Cognitive Level
CO1	Describe different food groups and various nutrients.	K2
CO2	Illustrate of the role of nutrition in maintain good health.	K2
CO3	Illustrate of the role of carbohydrate, proteins and fat.	K2
CO4	Illustrate of the role of vitamins and minerals.	K2
CO5	Explain about nutritional deficiency diseases.	K2

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core-3: NUTRITION & FOOD SCIENCE												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	2	3	2	3	3	3	3	3	2
2	3	2	3	3	3	2	3	2	3	3	3	2
3	3	2	3	3	3	3	3	1	3	3	3	3
4	1	2	3	3	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	3	3	3	3

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

**MSU/2021-22/PG colleges/ (M.Sc. Hotel Management & Catering Science with
Applied Nutrition) Semester I/ Core 4**

Principles of Tourism and Hospitality Management

Objective:

1. To understand information about tourism and Tourism industry.
2. To understand information about tour planning.
3. To understand information social and cultural tourism.
4. To understand information on the role Economic.
5. To gain knowledge about management challenges.

Unit I

Introduction:

Concept of management in tourism industry, Role of managers in tourism industry, Tourism as behavior.

Unit II

Importance of Tourism Planning, Nature, Scope, Process, Steps, Types and Limitation of Planning

Unit III

Social and Cultural Dimensions

Societal culture and tourism, Social and Cultural behavior, Interaction and Impacts.

Unit IV

Economic Dimension

Types & components of tourism, Socio- economic importance of tourism, Tools of tourism economics.

Unit V

Management Challenges

- a) Leadership & team management, Decision making Manpower Management.

b) Organization structure, Motivating factors, financial management

Reference:

1. Tourism & Hospitality Industry – Fridge
2. Hotels for Tourism Development – Dr Jagamohan Negi
3. Tourism Management by Akshay kumar
4. Tourism Planning – Gunclare A
5. Tourism Management – P.N. Seth

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core – 4: Principles of Tourism and Hospitality Management	Cognitive Level
CO1	Describe information about tourism and Tourism industry.	K2
CO2	Outline of tour planning.	K2
CO3	Explain about social and cultural tourism.	K2
CO4	Explain about role Economic in tourism.	K2
CO5	Explain about management challenges.	K2

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core – 4: Principles of Tourism and Hospitality Management												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	2	3	3	3	2	3	3	3	3	3	2
2	3	2	3	2	3	2	3	2	3	3	3	2
3	3	2	3	3	3	3	3	2	3	3	1	3
4	2	2	3	2	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	1	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

**MSU/2021-22/PG colleges/ (M.Sc. Hotel Management & Catering Science with
Applied Nutrition) Semester I/ Core 5**

FOOD AND BEVERAGE OPERATION MANAGEMENT – I

Objective:

1. To understand information about bar management.
2. To understand information about mixology.
3. To understand information about menu engineering.
4. To understand information about plate preparation and display.
5. To gain knowledge about Production/Operations Management.

UNIT-I

Bar Management

Bar Management, opening and Closing procedures, up selling,-Laws and regulations, bar and liquor licenses-Catering & Private parties-Latest trends in Bar Management

UNIT-II

Mixology

Bar equipment-Different kinds of glassware-Techniques of Mixology-Garnish preparation-Classic and Contemporary Cocktails

UNIT-III

Menu Engineering

Psychology -Managerial Accounting-Marketing and Strategy-Graphic Design

UNIT-IV

Plate presentation and display

Hot food presentation-Fundamentals of plating-Garnish (edible & non edible)
Cold food presentation-Buffer arrangement and appearance-Buffer Service Hot foods for buffet

UNIT-V

Production/Operations Management

Production/Operations Management - an overview-Production System: Issues & Environment-Total Quality Management (TQM)

Reference:

1. Classic cocktails by Stuart Walton, Suzannah Olivier, Joanna Farrow - Loreriz books
2. Bar & Cocktails by Michael Jackson, Mitchell Beazley
3. The Bartender's guide by Peter Bohrmann - Greenwich edition London
4. International Bartender's Guide - Random house, New York.
5. Professional Cooking 6th edition by Wayne Gisslen- John Wiley & Sons, Inc.
6. Hotel & Tourism Laws - Dr. Jagmohan Negi. Frank Bros, and Co. (Publishers) Ltd., New Delhi - 110 002.

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core – 5: FOOD AND BEVERAGE OPERATION MANAGEMENT – I	Cognitive Level
CO1	Describe what are basis in bar management	K2
CO2	Outline of mixology of Alcohol and cocktails	K2,K3
CO3	Explain information about menu engineering.	K2,K3
CO4	Explain information about plate preparation and display.	K2,K3
CO5	Explain about Production/Operations Management	K2

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core- 5 FOOD AND BEVERAGE OPERATION MANAGEMENT – I												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	2	3	3	3	3	3	2
2	3	2	3	3	3	2	3	2	3	3	3	2
3	3	2	3	3	3	3	3	2	3	3	3	3
4	3	2	3	3	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	3	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2021-22/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester I/ Core 6 Practical-1

ADVANCED KITCHEN OPERATIONS AND KITCHEN HYGIENE

Objectives:

1. To understand quantity equipment's, Menu planning, and regional cuisines.
2. To predict various cuisines and their ingredients.
3. To demonstrate correct usage of various sauces, various gravy.
4. To demonstrate correct usage of raw food items.
5. To demonstrate correct usage of variants cuisines.

1. Identification of cooking materials.
2. Identification different
3. Kitchen equipment.
4. Various vegetable cutting.
5. Various Method of cooking.
6. Identification of various vegetable cutting.
7. Identification of pest and their control measures.
8. Preparation of various stocks and sauces.
9. Identification of pest and their control measures.

To formulate 10 sets of menu consisting of 5 dishes from the following regions:

1. Andhra Pradesh
2. Bengal
3. Chettinad
4. Goa
5. Gujarat
6. Kashmir
7. Karnataka
8. Kerala
9. Maharashtra
10. Punjab
11. Rajasthan
12. Tamil Nadu

Note:the menu should consists of rice, Indian breads, chicken/mutton/fish/salads/vegetable and a sweets More weightage given to chettinad & Kerala.

INTERNATIONAL CUISINE (INDIVIDUAL)

To formulate 10 set of menu consisting of 4 dishes from the following countries mentioned below:

1. American
2. Chinese
3. Greece
4. Holland
5. Indonesia
6. Italian
7. Japanese
8. Malaysian
9. Mexican, Portugal
10. Scandinavian
11. Spain
12. Thai
13. Turkey

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core 6 Practical-1 ADVANCED KITCHEN OPERATIONS & KITCHEN HYGIENE	Cognitive Level
CO1	Apply quantity equipment's, Menu planning, and regional cuisines.	K2, K3
CO2	Make use of cuisines and their ingredients.	K2, K3
CO3	Make use of usage of various sauces, various gravy	K3
CO4	Make use of raw food items.	K3
CO5	Experiment with model of variants cuisines	K3,

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core 6 Practical-1 ADVANCED KITCHEN OPERATIONS & KITCHEN HYGIENE												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	2	3	3	3	3	3	2
2	3	2	3	3	3	2	3	2	3	3	3	2
3	3	2	3	3	3	3	3	2	3	3	3	3
4	3	2	3	3	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	3	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2017-18/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester I/ Core 7 practical 2

ADVANCED FOOD AND BEVERAGE SERVICE

Objectives:

1. To understand various service equipment's, Menu planning, and food and beverage outlets.
 2. To demonstrate various types of services.
 3. To demonstrate how Alcoholic and nonalcoholic beverage served to guest.
 4. To demonstrate how beer served to guest.
 5. To demonstrate how Red wine, white wine and sparkling wine served to guest.
-
1. Identification of cutlery, crockery and glass ware
 2. Laying a relaying of Table cloth (according to menus)
 3. Laying & Relaying of tables cover (Breakfast, A la'carte and Table D' hote)
 4. Different types of napkin folds. (Lunch, Dinner, Breakfast)
 5. Service of Food Tea and Coffee
 - Receiving the Guest
 - Presenting the menu card
 - Taking order
 - Service of food course by course and clearance
 - Raising K.O.T
 - Presentation of Bill
 6. Service of Non-Alcoholic drinks:
 - Tea
 - Coffee
 - Aerated water
 - Juices
 - Mineral water

Non Alcoholic mixed drinks

7. Service of Alcoholic drinks, Mockbar, Bar Service, Setting up a taking order of wine floating bar

Wine – list

Writing order

Service of wine – White and Rose

Red wine & Red wine in basket

1. Taking order of sprits
2. Services of Sprit, Aperitif, Lacquerers, Beer, Cock oil and mixed drink
3. Taking Order of Cocktail
4. Preparation of Cocktail
5. Service of Alcoholic Beverage in room
6. Carving at the table
7. Roast Chicken
8. Roast Leg of Lamp
9. .Banquets - Drawing table plan for Banquets, Compilation of Banquet, menus of Special function menus, Banqueting service procedure, Mock service, Lunch Supervision.

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core 7 practical 2 ADVANCED FOOD AND BEVERAGE SERVICE	Cognitive Level
CO1	Describe various service equipment's, Menu planning, and food and beverage outlets.	K3
CO2	Explain various types of services.	K3
CO3	Explain how Alcoholic and nonalcoholic beverage served to guest.	K3

CO4	Explain how beer served to guest	K3
CO5	Explain how Red wine, white wine and sparkling wine served to guest.	K3

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

10.

Mapping

Core 7 practical 2 ADVANCED FOOD AND BEVERAGE SERVICE												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	2	3	3	3	3	3	2
2	3	3	3	3	3	2	3	3	3	3	3	2
3	3	3	3	3	3	3	3	3	3	3	3	3
4	3	3	3	3	3	2	3	3	3	3	3	2
5	3	2	3	3	3	2	3	3	3	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2021-22/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester II/ Core 8

ADVANCED ACCOMMODATION MANAGEMENT AND INTERIOR DECORATION

Objectives:

1. To gain various activities to handle in Housekeeping in the Hotel industry.
2. To understand information about housekeeping organization.
3. To understand information about Budgeting and record maintaining in housekeeping.
4. To understand information about linens, uniforms laundering used in hotel industry.
5. To gain knowledge about elements of art and how to apply it in the interiors.

Unit – 1

Introduction:

- a) Planning and Organizing the house keeping departments
- b) Role of Housekeeping (in the hotel and in guest satisfaction and repeat business)
- c) Organization structure of Housekeeping departments in small, medium & large hotels

Area of Cleaning:

- a) Cleaning equipment – Special cleaning
- b) Manual and mechanical equipment -use and care of equipment , selection of cleaning agents, composition, alkalis, acids, salvias, deodorizers, disinfectant, seal polishes, distribution and Control.
- c) Cleaning of Different Surface
- d) Metal, glass, Plastic, ceramics, wood floor finishers – walls finishers – Maids service room – organizing maids frocleg
- e) Keys – Types of Keys, computerized keys & control keys.
- f) Daily cleaning of Rooms
- g) Checkout rooms occupied rooms-vacant rooms evening services, standard supplies
- h) Ordinary VIP's, VVIPS, placement, Guest special requestspecial cleaning programmes.
- i) Tasks- Schedule & records, public area cleaning – Front, back area, work routine, Guest room inspection.
- j)

Unit – II

Housekeeping Management:

- a) House Keeping - Introduction, Duties
- b) The Programme implementation – Executive House keeper
- c) Deputy Home Keeper.
- d) Floor Supervisor (Morning, Late duty, Night Shift, routine duties explaining record maintained)
- e) Desk top supervisor (Routing duties explaining records maintained).
- f) Store Keeper (Task performance & Record Maintained)
- g) House – Routine duties
- h) Linen and laundry staff.

Unit – III

Budgeting and record maintaining

- a) The budget Process – Planning capital budget Planning Operating budget
- b) Operating budget – Controlling expenses income statement.
- c) Purchasing system – methods of buying stock records issuing and control
- d) Record keeping & Dealing with Guest Lost & Found
- e) Housekeeping clerical works- lost of founds register, lost of found enquiry file mixed report, Housekeeping report, handover records, guest special request register, records of special learning, attendance record, rotes stock register, VIP list.

Unit – IV

Laundry

- a) Introduction, Duties & responsibilities of Laundry personnel Flow process of industry laundry Equipment of layout of laundry Equipment of layout of laundry, Dry cleaning & Guest laundry

Hotel Linen

- b) Classification Items classified as bed and baths linen, Items classified as table linen, their sizes, Selection criteria for linen clean (bed sheets, pillow covers, towels and bathmat's table cloth serviettes. Selection criteria and Calculating materials required

- c) for soft furnishing (Curtain, bed sheet, upholstery & costumes) Linen room Activities of Linen room, Layout & equipment used in linen room, Linen room staff Buying of linen and calculation of linen, Procedures & records to be maintained Stock taking procedures records Recycling of Linen, Marking of Menu records

Uniform

- d) Advantages to management and employees, Uniform terms, uniform sets given to employers. Issuing, Storage and Laundering Procedure of Records, Selection and designing. Layout of uniform rooms and duties of uniform room staff.

Unit – V

Interior decoration

- a) Elements, types of principles of design, characteristics of good design, Meaning types of methods of obtaining Harmony, Preparation, Balance, emphasis, Rhythm.
- b) Qualities of colour in interior decoration
- c) Colour and emotion - use of colour in interior decoration
- d) Furniture selection-Care and Selection of furniture in dining room, Office, bed room.
- e) Hotel illumination-function, factors to be considered, types of illumination, planning for various areas.
- f) Flower arrangement-Purpose of Equipment and materials required, Conditioning of plant materials, Types of arrangement, Special occasion decoration, Theme decoration (Suspended, Floor carpet, Centrepiece)

Reference:

1. Home Management – M.A. Varghese, N.N. Ogale, K. Srinivasan
2. Home Management – Arya Publishing House – by Educational Planning Group
3. Hotel, Hostel & Hospital Housekeeping – Joan C. Branson
4. Hotel House Keeping manual – Sudhir Andrews

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core 8 – ADVANCED ACCOMMODATION MANAGEMENT AND INTERIOR DECORATION	Cognitive Level
CO1	Describe activities to handle in Housekeeping in the Hotel industry	K2,
CO2	Discuss information about housekeeping organization.	K2,K3
CO3	Explain about Budgeting and record maintaining in housekeeping	K2,K4
CO4	Explain about linens, uniforms laundering used in hotel industry	K2
CO5	Explain about elements of art and how to apply it in the interiors	K2

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core 8 - ADVANCED ACCOMMODATION MANAGEMENT AND INTERIORDECORATION												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	2	3	3	3	3	3	2
2	3	2	3	3	3	2	1	2	3	3	3	2
3	3	2	3	3	3	3	3	2	3	3	3	3
4	3	1	3	3	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	2	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

**MSU/2021-22/PG colleges/ (M.Sc. Hotel Management & Catering Science with
Applied Nutrition) Semester II/ Core 9**

ADVANCED FRONT OFFICE OPERATION

Objectives:

1. To gain knowledge about hotel industry, its importance, place of front office, task which is carried out by each section.
2. To understand knowledge about registers and forms used in reception.
3. To understand information about advanced Front Office Operation.
4. To understand information about front office accounting.
5. To make the students gain knowledge about types of reservation, computerized revenue yield management.

Unit - I

- a) Hotel – Introduction, Growth, Origin, Opportunities, Types of Hotels
- a) Organization of Hotels - Organization chart of large, medium and small hotels, Organization and layout of front office, Importance of Receptionist and Status of Receptionist as a partner in the hotel industry

Unit – II

a) Front Office

Introduction to front office, Qualities of front office staff, Duties and responsibilities of front office staff, Front office assistant, importance of job description, job description of front office assistant.

b) Front office equipment:

Manual system, Semi-automatic system, Automatic system, Types of rooms, types of plans, tariff structure.

c) Registration

Receiving and greeting the guest, Setting skills, Types of registration, Registration Operating modes, Assignment, Rooming procedure.

d) Group Arrival

Reservation – Importance, Advance reservation office, forecasting room reservation, Over booking, Diaries and charts used in reservation, Whitney rack system, Rights and Liabilities of hotels, travel agencies in room reservation, Reservation Terminology and Cancellation and amendment.

Unit – III

Advanced Front Office Operation

a) Lobby

Stages of guest contacts with the hotel (Pre arrival, arrival during stay departure), Procedures for left luggage, scanty baggage and safe deposit facility, Guest mail handling, Paging

b) Bell Desk Services

Mail services – messages, Keys, Local information, Bell desk activities. Bell captain and Bell Boy – Duties & responsibilities, Errand card.

c) Telephone:

Telephone procedure, telephone manners, telex, layout, - Telex equipment, Fax procedure, Qualities of Good telephone operator, Different telephone code, wake-up call procedure.

Unit – IV

a) Front Office Accounting

Guest accounting system – objective, Job description of front office cashier, Types of Guest Accounting - Flow of Guest, Accounting Process, Records & Ledger maintained by cashiers, Ways of settling bills.

b) Night Auditing

Function of night auditing, Job description of night auditor, Cross checking, Credit monitoring, Cancellation, Daily & Supplementary room rates, Night Audit process, Preparing night audit reports, Closing the folio.

c) Planning & Evaluation

Establishing room rates, Rule of thumb approach & Hubbarts formula, Forecasting room availability, Room revenue analysis, percentage of walk-in, percentage of over stay, percentage of under stay, Break even & pricing analysis, Refining budget plans.

Unit – V

Yield Management:

Concept of yield management & measuring yield - Objectives & benefits of yield management & measuring yield, Potentials average for single & double room rate, Multiple occupancy percentage, Rate spread – potential average, Room rate achievement factor, Yield and logical yield, Equivalent occupancy, Required non-room revenue for guest.

Reference :

1. Hotel Reception – Amald Heinman
2. Hotel Front Office Training Manual – Sudhir Andrews
3. Effective Front Office Operation – M Kesavan
4. Basic Hotel Front Office – Peter Frans Renner

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core 9 ADVANCED FRONT OFFICE OPERATION	Cognitive Level
CO1	Describe about hotel industry, its importance, place of front office, task which is carried out by each section.	K2,K3
CO2	Discuss registers and forms used in reception.	K2
CO3	Explain about advanced Front Office Operation.	K2
CO4	Explain about front office accounting.	K2,K3
CO5	Explain about types of reservation, computerized revenue yield management.	K2,K4

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core 9-ADVANCED FRONT OFFICE OPERATION												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	2	3	3	3	2	3	2
2	3	2	3	2	3	2	2	2	3	3	3	2
3	3	2	3	3	3	3	3	2	3	3	3	3
4	3	2	3	3	3	2	3	2	3	3	3	2
5	3	3	3	3	2	2	3	2	3	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2021-22/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester II/ Core 10

COMPUTER APPLICATION IN HOSPITALITY INDUSTRY

Objectives:

1. To gain knowledge about computer application used in hotel industry.
2. To understand knowledge about MS word.
3. To understand information about MS Excel and Access.
4. To understand information about MS Power Point and Paint.
5. To make the students gain knowledge about computerized, guest mail handling.

Unit I

Introduction to Computer

1. . Computer system- Part of the computer
2. . Advantages and disadvantages
3. . Origin and history
4. . Various types
5. . Network (LAN\MAN\WAN)
6. . Linking (Timesharing/Ring/Bus/Star)

Unit II

MS Word

1. Introduction to word
2. Formatting text and Documents.
3. Working with Footer and foot notes- Tabs, Tables and Sorting
4. Working with Graphics, Templates, Wings and sample documents writers, tool Macros, customer's tool bars, key board, short cuts and menus.
- 5 Mail merge, Labels.

Unit III

MS Excel and Access

1. Introduction to Excel
2. Rearranging worksheets- formatting worksheets- functions
3. Excel chart features.
4. Working with Graphics in Excel.
5. Excel command Macros- using worksheets as databases.
6. Automating-'' what is projects''.
7. Create tables in Access using design view, wizard, entry data, import table from Excel to Access, Link table, Queries, Queries Link table, Form wizard, Auto form, Filter, Reports Chart wizard, Label wizard.

Unit IV

MS Power Point and Paint

1. Introduction to power point
2. Creating presentations related to hotel management and catering science
3. Working with text in power point
4. Working with Graphics in power point related to hall arrangement, wall decoration and room colors
5. Introduction to MS paint – study about toolbox – draw pictures, cut, copy, and paste and save.

Unit V

MS mail and internet

1. Introduction to mail – MS mail and office applications
2. Introduction to internal concepts internet protocols – TCP/IP, FTP, HTTP.
E-mail, WWW and web page – HTML pages, web browser.

Reference:

1. Ws 4 manual
2. MS office 2000
3. MS office 97 Nelson – Tata McGraw Hill
4. The Internet in easy steps-Chris, Russell, Dreamtech Press
5. Working in Microsoft Office Tata McGraw Hill

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core 10 - COMPUTER APPLICATIONS IN HOTEL MANAGEMENT AND CATERING SCIENCE	Cognitive Level
CO1	Describe about computer application used in hotel industry.	K2
CO2	Outline of about MS word which is used in hotel industries.	K2
CO3	Explain about MS Excel and Access used in hotel industries.	K2
CO4	Explain about MS Power Point and Paint applied in charting.	K2
CO5	Explain about computerized, guest mail handling used in reception.	K2

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core 10 - COMPUTER APPLICATIONS IN HOTEL MANAGEMENT AND CATERING SCIENCE												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	2	3	3	3	3	3	2
2	3	2	3	3	3	2	3	2	3	3	3	2
3	3	2	3	3	3	3	3	2	3	3	3	3
4	3	2	3	3	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	3	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

**MSU/2021-22/PG colleges/ (M.Sc. Hotel Management & Catering Science with
Applied Nutrition) Semester II/ Core - 11
FOOD AND BEVERAGE OPERATION MANAGEMENT – II**

Objectives:

1. To gain knowledge about function catering in hotel industry.
2. To understand knowledge about Event Management.
3. To understand information about Monitoring, control and evaluation of events in banquet hall.
4. To understand information about Yield testing and recipe balancing in banquets.
5. To make the students gain knowledge about Operations Management Planning.

UNIT – I: Function Catering

Types of functions-Function booking, staffing-Menu planning, Preparation
Service during formal functions-Function equipment, Food Service equipment,-
Table setup

UNIT-II: Event Management

Concept of event Management-Type and size of event-Designing and developing the
concept-Prepare an event proposal,-Making use of planning tools-Staffing, prepare
organization charts, job descriptions-Training and briefing of staff.

UNIT-III: Monitoring, control and evaluation of events

Monitoring and Control systems-Operational Monitoring and Control Evaluation-
Broad Impact of events.

UNIT-IV: Yield testing and recipe balancing

An exploration of standard units of measure and unit conversion estimation, percent,
ratios, Yield tests, recipe scaling, and recipe costing as they relate to the food
industry. Students will develop projections and analyze costs in yield tests and
recipe pre-costing. Standardization of recipe and recipe balancing

UNIT-V: Operations Management Planning

Issues in materials management-Independent demand system-Dependent demand system -Total productive maintenance-Advanced manufacturing system-Computers in planning/ operations management Reference:

1. Catering management by Nancy Loman Scanlon-John Wiley & Sons, Inc.
2. Dining Room & Banquet Management- Dy Anthony J Strianese and Pamela P Strianese- Thomson Delmar Learning
3. Marketing your event planning Business by Judy Allen, John Wiley & Sons, Canada

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core – 11-FOOD AND BEVERAGE OPERATION MANAGEMENT – II	Cognitive Level
CO1	Illustrate function carting in hotel industry.	K2
CO2	Outline of Event Management which are happen in hotel.	K2
CO3	Explain about Monitoring, control and evaluation of events in banquet hall.	K2
CO4	Explain about Yield testing and recipe balancing in banquet.	K2
CO5	Explain about Operations Management Planning used in banquet.	K2

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core – 11-FOOD AND BEVERAGE OPERATION MANAGEMENT – II												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	2	3	3	3	3	2	2
2	3	2	3	3	3	2	3	2	2	3	3	2
3	2	3	3	3	3	3	3	2	3	3	3	3
4	3	2	3	3	3	2	3	2	3	3	3	2
5	2	2	3	3	3	2	3	2	3	2	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

**MSU/2021-22/PG colleges/ (M.Sc. Hotel Management & Catering Science with
Applied Nutrition) Semester II/ Elective-1**

BAR MANAGEMENT

Objectives:

1. To gain knowledge about Beverage Management in hotel industry.
2. To understand knowledge about Bar Service Procedures in hotel industry.
3. To understand information about Guest Relation and Sales Analysis.
4. To understand information about Cocktails in bar.
5. To make the students gain knowledge about Safety preparations.

Unit I

Beverage Management

- a) Food and Beverage outlets- Responsibilities of food and beverage management.
- b) Objectives of food and beverage control, fundamentals of control, beverage controlling, calculation of beverage cost, methods of beverage control, control checklist, beverage service methods.

Unit II

Bar Service Procedures

- a) Service industry introduction- Bar Equipment, Bar preparation, Bar service, taking orders various types of cocktails.
- b) Alcoholic and non-alcoholic liquors - Introduction to liquors, manufacture and service procedure, hard and fruit liquors, storage methods to be followed in bar.

Unit III

Guest Relation and Sales Analysis

Customer relations, personal presentations, customer contact, wine list, Fire E emergencies, fire extinguishers, control and pest, cleaning schedules, laws affecting food and beverage

operations, energy management, automatic data procedures, management information system, sales analysis.

Unit IV

Cocktails

Introduction to cocktails, preparing and serving cocktails, receiving, storing and returning of drinks, keg management and drink dispense lines, maintaining cellars, providing a table service

Unit V

Safety preparations

Maintaining safe and secure working environment, on-events of fire, on events of accidents, professional and hygiene appearance, maintaining customer's care, dealing with customer complaints, dealing with various incidents.

Reference

1. Management training – Neal J.Scott
2. Principles of food beverages and labour cost controls, 5th edition- Paul R.Dittmer
3. How to manage a successful bar- Christoher Egerton- Thomas
4. Bar (Management & Control) – Dr. B.K.Chakravarthi
5. Profitable Food and beverage Management – Richard Kotas & Chandana Jayewardene

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Elective-1 -BAR MANAGEMENT	Cognitive Level
CO1	Describe about Beverage Management in hotel industry.	K2
CO2	Outline of Bar Service Procedures in hotel industry.	K2,K3
CO3	Explain about Guest Relation and Sales Analysis.	K2,K3
CO4	Explain about Cocktails in bar.	K2,K3
CO5	Explain about Safety preparations inside the bar.	K2

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Elective-1 -BAR MANAGEMENT												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	2	3	3	3	1	2	3	3	2	3	3	2
2	3	2	3	3	3	2	3	2	3	3	2	2
3	3	1	3	3	3	3	3	2	2	3	3	3
4	3	2	3	3	3	2	3	2	3	3	3	2
5	1	2	3	3	3	3	3	2	3	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2021-22/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester II/ Elective-II

HOTEL ENGINEERING

Objectives:

1. To Learn information about hotel industries maintenance,
2. To understand information about plant units methods, electricity.
3. To understand information about Water quality, water management.
4. To illustrate information about Refrigeration, Walk- in coolers and freezers.
5. To understand information about transport system, pollution control and fire fighting in hotel interstices.

UNIT –I

Role and important of Maintenance Department in hotel industries with emphasis on its relation with other department of the hotel. Organization chart of maintenance department. Duties and responsibilities of maintenance department.

Maintenance- Preventive and Break – down maintenance.

Fuel in catering industry: types of fuel used in catering industries, calorific value, comparative study of different Fuels, calculation of amount of fuel requires and cost.

UNIT – II

Gas: hear terms and units methods of transfer, LPG and its properties ; precaution to be taken while handling gas; low and high pressure burners, corresponding heat output, care and service of gas equipment, gas meter reading.

Electricity: importance and its use. Meaning of ampere, volt, ohms and their relations, ohms law, AC & DC their difference, Importance of NEC (National Electric Code), under writer's laboratory, lay of circuits of power requirements, meter reading and bill calculations. Electric power rate schedule.

Earthing: meaning and its importance. How it is done?

UNIT –III

Water system Management: sources of water and its quality, distribution of water supply system and its storage. Hardness in water and its removal methods, Elements of water system.

Sanitary systems: sink, basins, WC, inspection chambers, soiled Pipers, water taps.

Waste disposal: soil and liquid waste, sullage and sewage, disposal of solid waste, sewage treatment.

UNIT- IV

Refrigeration: principals and uses of refrigeration in catering industry. Basic scientific principles of different types of refrigeration systems and refrigerates. Walk- in coolers and freezers. Care and maintenance of refrigeration systems.

Conditions for comfort: Air movement, humidity control, ventilation methods, ventilation rates for different rooms. Air- conditioning: types

Energy conservation: Energy conservation barriers; methods of conserving electrical and water energy.

UNIT –V

Transportation systems: Passenger’s elevators, freight Elevators, dumb waiters, escalators, side- walks – Operation and their maintenance.

Fire prevention and fire Protection: meaning of fire, different types of fire, fire hazards, fire extinguishers, fire alarm systems.

Pollution control: Water pollution, thermal pollution and sewage pollution.

REFERENCE:

1. Hotel engineering and Maintenance in Hospitality Industry – Frank M. Borsenik –Van Nostrand Reinhold.
2. Principal of Hospitality Engineering – John D.Palmer- Van Nostrand Reinhold.
3. Theory of catering- Ronald Kinton & Victor Cesarani –ELBS

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Elective-II-HOTEL ENGINEERING	Cognitive Level
CO1	Explain about hotel industries maintenance.	K2
CO2	Outline of plant units methods, electricity.	K2
CO3	Explain about Water quality, water management.	K2
CO4	Explain about Refrigeration, Walk- in coolers and freezers.	K2
CO5	Explain about transport system, pollution control and fire fighting in hotel interstices.	K2

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Elective-II-HOTEL ENGINEERING												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	3	3	3	3	3	3	2
2	1	3	3	3	3	2	3	2	2	3	3	2
3	3	2	3	3	3	3	3	2	3	3	3	3
4	3	2	3	3	3	2	3	2	3	3	3	2
5	3	2	3	1	3	2	3	2	3	1	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

**MSU/2017-18/PG colleges/ (M.Sc. Hotel Management & Catering Science with
Applied Nutrition) Semester II/ Core 12 practical 3**

**ADVANCED ACCOMMODATION MANAGEMENT AND INTERIOR
DECORATION**

Objectives:

1. To demonstrate public area cleaning,
2. To demonstrate use of cleaning equipment's.
3. To demonstrate polishing and cleaning of all surface.
4. To demonstrate stain removing in housekeeping.
5. To demonstrate room cleaning.

1. Area of cleaning

Rooms, Bathrooms, Toilet Wash Basin, Bath, tub, sink, Table, Floor, Water Closet, Staircase, Corridor, Carpet.

2. Identification of cleaning equipment selection, use, mechanism & Maintenance

3. Sequence of Cleaning

Cob web taking

- a) Dusting
- b) Sweeping
- c) -Scrubbing
- d) -Mopping
- e) -Carpet cleaning
- f) -Carpet Shampooing
- g) -Vacuum Cleaning

4. Polishing & Cleaning

Metals, Wood, Plastic, Leather tiles, Brassware, Furniture

5. Register Maintained in House Keeping - Lost and Found

6. Cleaning (Weekly, daily, Spring)

- For cleaning Equipment
- Knowledge of equipment & agents and in House keeping
- Identification of Table lines-Room Linens & Both Linen – Selection, use care and maintenance

Identification of Table lines-Room Linens & Both Linen – Selection, use care and maintenance

4. Stain Removal

- i Identification of stains
- ii Cleaning agents used for removal of stain
- iii Practice on removal of stain, selection of cleaning agent – General – Principles.
- iv Linen items, Uniform items, Floor, Bathroom, Toilet.

6. Duties & Responsibilities of House Keeping Staff

Executive House Keeper

Assistant House Keeper

Floor & Public area Supervisor

Room Attendance

House Men

7. Planning and Execution of a theme

Color Schemes wall- Interior and extension Lighting-Flower arrangement-Obtaining principles of design furniture selection –Visits-Different types of Hotel / Accommodation sector-To study the various housekeeping operation – room layout system & Procedures Interior-Decoration

Industrial Laundry

Workshops of Interior designers / decorators

Furniture – Soft furnishing designers

Xlur series – Horticulture Unit

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core 12 practical 3 - ADVANCED ACCOMMODATION MANAGEMENT AND INTERIOR DECORATION	Cognitive Level
CO1	Show how to clean public are cleaning.	K3
CO2	Outline of use of cleaning equipment's	K3
CO3	Explain how to policing and cleaning of all surface	K3
CO4	Explain strain removing in housekeeping.	K3
CO5	Explain about room cleaning	K3

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core 12 practical 3 - ADVANCED ACCOMMODATION MANAGEMENT AND INTERIOR DECORATION												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	2	3	3	3	3	3	2
2	3	2	3	3	3	2	3	2	3	3	3	2
3	3	2	3	3	3	3	3	2	3	3	3	3
4	3	2	3	3	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	3	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

**MSU/2017-18/PG colleges/ (M.Sc. Hotel Management & Catering Science with
Applied Nutrition) Semester II/ Core 13 practical 4
ADVANCED FRONT OFFICE OPERATION**

Objective:

1. To demonstrate knowledge about reception.
2. To demonstrate knowledge about reservation.
3. To demonstrate understand information about advanced Front Office Operation.
4. To demonstrate about bell desk.
5. To demonstrate about types of reservation, computerized revenue yield management.

1. Reception

- Wishing/greeting the guest.
- Registration & room allotment
- Situation handling
- Register maintained

II. Reservation

- Reservation form – confirmation
- Reconfirmation
- Reservation enquires
- Diaries & Charts used in reservation
- Whitney rack handling
- Knowledge of reservation terminology.

III. Information

- Mail handing
- Receiving / Passing message to guest
- Local information
- Tour arrangement details
- Travel

IV. Telephone Operator

- Handling of telephone
- Receiving / connecting calls to guest/staff
- Wake-up calls

V. Bell Desk

- Luggage handling procedure
- Errand card
- Scanty baggage

VI. Responsibilities of Front Office Staff:

Front Office Lab:

- Floor to change in to marble (or) Tiles
- Wall to be painted with ivory paint (or) colour chosen.
- Front office counters (Reception) to be constructed inside the hall.
- Partition wall to be created between Restaurant and front office room.

Verandah

- Floor to be changed up to the entrance (steps)
- Either grill window (or) glass window to be created on three sides of Verandah.
- An enquiry counter to be created at the corner.
- Wall to be painted with color chosen.

Model Guest Room

Guest room floor to be changed into Marble (or) Tiles.

- Wall to be painted
- Western closet has to be constructed with wash basin and mirror Unit, bath tub (or) cabinet to be created.
- Front office manager
- Front office Assistant
- Receptionist
- Lobby Manager / GRE
- Handling credit card procedures
- Handling Guest messages
- Guest accounts – practice on preparation

- Folios
- Larger in creating & maintenance (manual & automatic)
- Role play on Receiving the guest Registering the FIT, GIT, Crews, VIP

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core 13 practical 4-ADVANCED FRONT OFFICE OPERATION	Cognitive Level
CO1	Describe knowledge about reception.	K3
CO2	Outline of reservation.	K3
CO3	Explain about advanced Front Office Operation.	K3
CO4	Explain about bell desk.	K3
CO5	Explain about reservation, computerized revenue yield management	K3

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core 13 practical 4-ADVANCED FRONT OFFICE OPERATION												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	2	3	3	3	3	3	3
2	3	2	3	3	3	3	3	2	3	3	3	2
3	2	2	3	3	3	3	3	2	3	2	3	3
4	3	2	2	3	3	2	3	2	3	3	3	2
5	3	2	3	2	3	2	3	2	3	3	3	3

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2017-18/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester III/ Core 14

BAKING AND FOOD PRESERVATION

Objectives:

1. To understand information about basic principle of baking.
2. To translate knowledge into new context about bread.
3. To translate knowledge into new context about sponge and cake decorations.
4. To translate knowledge into new context about cookies.
5. To translate knowledge into new context about chocolates.

Unit I

Basic principles of baking

Formulas & Measurement Measurement, procedure for using a bakers balance scale, bakers percentages.

Gluten Meaning, Baker control of gluten

The baking process Formation & expansion of gases, trapping of gases in air cells, coagulation of proteins, gelatinization of starches, evaporation of water, melting of shortenings, browning of the sugar & crust formation.

(12L)

Unit II

Dough formulas & techniques hard rolls & breads, Soft rolls, French breads, white pan bread, rye bread & rolls, brioche, sweet roll dough products.

Make up techniques Hard roll & breads, soft roll dough, sweet dough products, rolled in dough products.

(12L)

Unit III

Sponges: preparation methods, types

Icing: Types (Fondant, butter creams, foam, flat, fudge, royal icings, marzipan, tragacanth, meringues) glazes, fillings.

Assembling a icing cakes: selection of icing, procedure for assembling layer cakes, small cakes and sweet cakes.

(12L)

Unit IV

Cake decoration: color, design, templates, texture, equipment, casting moulds, lettering, monogram, stencils.

Cookies: characteristics & causes, mixing methods, types & make up, panning, baking and cooling, formulas for bar cookies, macarons, lace cookies & sandwich cookies.

Pies: Types, mixing pie dough, pie crusts, procedure for making small fruit tarts, assembling baking & filling, common problems in fruit pies.

(12L)

Unit V

Tarts & tartlets: preparation & types

Puff pastry: preparation & types.

Sweet meats: truffles, Fondants, Glazed petit fours.

Chocolate: manufacture & processing of chocolate, types & uses of chocolate, cocoa butter, white chocolate, liquor chocolates, fondant chocolates & toffies.

(12L)

(Total:60)

Reference

1. Professional Baking WayneGisslen John Wiley & Sons.
2. The New International Confectioner Edited by Wilfred J. Franc
3. Practical baking William J. Sultan.

On completion of the course, the students will be able to

CO. No.	Core-Food Production and Patisserie-IV	Cognitive Level
CO1	What are the basic principle of baking.	K2
CO2	Outline about bread.	K2, K3
CO3	Outline about sponge and cake decorations	K2, K3, K5
CO4	Outline about cookies.	K2
CO5	Outline about chocolates.	K3

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core-Food Production and Patisserie-IV												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	1	3	3	3	3	3	1
2	3	2	3	3	3	2	3	2	3	3	3	2
3	3	2	3	3	3	1	3	2	3	3	3	1
4	3	2	3	3	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	3	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2017-18/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester III/ Core Paper -15

HOTEL FINANCIAL MANAGEMENT

Objectives:

1. To understand information about future of accounts system in hotel industry.
2. To understand about financial Management skills.
3. To interpret facts on planning fanatical facilities in general and for specific needs.
4. To understand about Management skills in relation to budget.
5. To translate knowledge into new context about energy conservation and eco-friendly concept. .

Unit-I: Accounts for Hotel

Accounting System in Hotels sales Record of Control of Rooms, Food, Alcoholic Beverages Minor, Major Revenue producing Departments Financing Structures of Financial Risk short-term, long term, medium Term, and Equity Finance Factors Influencing the Use of Accounting within An Organization.

Unit-II: Financial Management

Nature & Scope of Financial Management

Meaning, Definition, Scope, Importance & Objectives of Financial Management, Functional Areas of Financial Management, Function of Finance Manager.

Financial Planning (Capitalization)

Meaning of Capitalization, Concept of Capitalization; Fair Capitalization, Over Capitalization, Under Capitalization - Meaning, Effects and Remedies.

Unit-III: Financial Analysis for Hotels

Management Information System and Reporting (With Special reference to Hotel Industry)

Meaning, Significance, Method, Requirements, Kinds, Designing MIS in Hospitality Industry, Meaning of Report, Kinds of Report, Method of Reporting, General Principles of Good Reporting System

Case Studies - On Project Planning in the Hospitality Industry Project Network Techniques in the Hospitality Industry Project financing / Reporting Hospitality Industry

Unit-IV: Cost Analysis for Hotels

Cost Accounting concepts Classifications of Costs Preparation of cost sheet Methods determination Of Room Rates Food and Beverages Pricing, Package Tours and Budgetary control.

Unit-V: Financial Study on Tourism Projects

Long Term Investment Decisions - Working Capital - Components, Working Capital Finance - Financing Tourism projects Fund Management - Types, Benefits, Quality Allocation - Scheduling and Auditing.

Reference:

1. Ozi A. D'cunha&GlesonO.D'cunha, Hotel Accounting & Financial Control, The Dicky's Enterprise, Mumbai.
2. D.K. Mittal & Luv Mittal, Cost Accounting; Galgotia Publishing Company, New Delhi,
3. R.K. Sharma & Shashi K. Gupta, Management Accounting; KalyaniPublishers, H.O. Ludhiana,
4. S.C. Kuchhal, Financial Management; Chaitanya Publishing House Allahabad.

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core- HOTEL FINANCIAL MANAGEMENT	Cognitive Level
CO1	Explain about future of accommodation hotel industry.	K2
CO2	Discuss about fanatical Management skills.	K2, K3
CO3	Interpret facts on planning financial facilities in general and for specific needs.	K2, K4
CO4	Describe about Management skills in relation to budget.	K2, K3, K5
CO5	Differentiate energy conservation and eco-friendly concept.	K3

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core- HOTEL FINANCIAL MANAGEMENT												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	2	3	3	3	3	3	3
2	3	2	3	3	3	2	3	2	3	3	3	2
3	1	2	3	3	3	3	3	2	2	3	3	3
4	3	2	2	3	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	1	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2017-18/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester III/ Core Paper -16

HUMAN RESOURCE MANAGEMENT IN HOSPITALITY INDUSTRY

Objectives:

1. To understand information about future of Human Resource in hotel industry.
2. To understand about Human Resource planning.
3. To interpret facts on planning accommodation facilities in general and for specific needs.
4. To understand about Employee budget.
5. To translate knowledge in Industrial relationship

UNIT 1

Introduction to Human Resource management – Definition – Objectives and functions- Roles and structure of Human & Resource function in Organizations.

UNIT 2

Human Resource Planning – Personnel policy – Characteristics -Need for planning – Job Analysis – Job Design – Job Description – Job Specification.

UNIT 3

The Selection Process – Placement and Induction – Training and development – Promotion – Demotions – Transfer – Separation.

UNIT 4

Employee Compensation – Wage and salary administration – Bonus – Incentives – Fringe benefits – Job evaluation systems – Human resource information system.

UNIT 5

Employee Maintenance and integration – Welfare and Safety – Accident presentation– Employee grievances and their redressal – Administration of discipline.

Industrial relations – Trade Unions – Multiplicity of trade unions – industrial Disputes and settlement – Indian experience on collective bargaining – Workers participation in management.

REFERENCES :

1. Ventraman C.S. Arid B.K. Srivastava, Personnel Management and Human Resources, Tata McGraw Hill, 1991.
2. ArunMonappa, Industrial Relation, Tata McGraw Hill, 1987.
3. Dale Yodder& Paul D. Standohar, Personnel Management & Industrial Relation, Sterling publishers, 1990.
4. David A. Decenzo& Stephen P. Robbins, Personnel / Human Resource Management, Prentice Hall, 1955.

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core- HUMAN RESOURCE MANAGEMENT IN HOSPITALITY INDUSTRY	Cognitive Level
CO1	Explain about future of accommodation industry.	K3
CO2	Discuss about Management skills.	K2, K3
CO3	Interpret facts on planning accommodation facilities in general and for specific needs.	K2
CO4	Describe about Management skills in relation to budget.	K2, K3
CO5	Differentiate energy conservation and eco-friendly concept.	K2, K3,K5

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core- ACCOMMODATION OPERATION												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	2	3	1	3	3	3	3	3	3

2	3	2	3	3	3	2	3	2	3	3	3	2
3	3	2	3	3	3	3	3	2	3	3	3	2
4	3	2	3	3	3	2	3	2	3	3	3	2
5	3	2	1	3	3	2	3	2	3	2	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2017-18/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester III/ Core Paper -17

HOSPITALITY LAW

Objectives:

- 1 To understand information about laws affecting hotels.
- 2 To understand about management concepts.
- 3 To translate knowledge in safety and health act.
- 4 To understand about license and regulation of hotels.
- 5 To translate knowledge into new context about copy rights laws.

UNIT 1

Consumer protection laws affecting hotels - The federal truth-in-lending etc -state laws on credit reporting - State credit card laws - Consumer contracts: Print size and plain language laws - Catering contracts - Posting of rates - No smoking laws - Important points for management - References - Review questions.

UNIT 2

Public health and safety requirements - Building codes - Hotel linens, towels and glasses - Water supplies, sewage systems and drainage - Contagious diseases - Swimming pools - Laws regarding aid to choking victims - Important points for management - References - Review questions.

UNIT 3

Occupational Safety and Health Act - Reporting and record keeping requirements - Posting requirements - Inspections : Employers' and Employees' rights and remedies - State workplace safety and health programs under OSHA -OSHA Regulations on blood borne pathogens - Hazard communication standard - Important points for management - References - Review questions.

UNIT 4

Licensing and regulation of hotels by cities, towns and villages - Types of Regulation - Important points for management - References - Definitions - Review questions.

UNIT 5

Telephone service and resale right - Resale of interstate and international telephone service - Intrastate Calls - Coin-box telephones - Telephone regulations for the hearing - Impaired - Important points for management - References -Definitions - Review questions.

Copyright Laws for Music, Television, Video, and Movies - General Rules - Copyright Associations - Exemptions under Copyright Law of 1976 - Unauthorized interception of cables television broadcasts - Videodisc and videocassette movies -Important points for management references - Definitions - Review questions.

REFERENCES:

1. Jack P. Jefferies, J.D.LL.M.J.S.D. "Hospitality Laws". Third edition (1995) Educational Institute, American Hotel and Motel Association.

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core- HOSPITALITY LAW	Cognitive Level
CO1	Explain about information about laws affecting hotels.	K2
CO2	Discuss about management concepts.	K2, K3
CO3	Assess knowledge in safety and health act	K2
CO4	Describe about license and regulation of hotels.	K2, K3
CO5	Estimate what are the basis of copy rights laws	K2,

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core- HOSPITALITY LAW												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	2	3	3	1	3	3	3

2	3	2	2	3	3	2	3	2	3	3	3	2
3	3	2	3	3	3	3	3	2	3	2	3	1
4	3	2	2	3	1	2	3	2	3	2	3	2
5	3	2	3	3	2	2	3	2	2	3	3	3

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

**MSU/2017-18/PG colleges/ (M.Sc. Hotel Management & Catering Science with
Applied Nutrition)Semester III/core 18
RESEARCH METHODOLOGY**

Objectives

1. Understand the methodology of research and techniques
2. Develop skills in conducting research from planning a study to report writing
3. Apply statistical procedure to analyze numerical data draw inferences
4. Classification of testing.
5. Summarizing of statistics used in research.

Unit I

Methods of Research

- a) Definition of research, characteristics of research, criteria of good research
- b) Merits and demerits of scientific research
- c) Different types of research and characteristics:
 - i. Historical research, Ex-post facto research, laboratory experiments, Field experiments, survey research, evaluative research, Case study research, operational research, participatory research
 - ii. Steps in conducting research
 - iii. Hypothesis: Definition, purpose, types
 - iv. Reporting: Methods of reporting, Technical reports
 - v. Research Abstract: Definition, guidelines for writing abstract
 - vi. Thesis: Definition, parts, steps in writing thesis

Unit II

Sampling Design

- a) Census and sample survey- Steps in sampling design, Sample size and its determination
- b) Types of sampling: Random Sampling, Simple random sampling, Stratified random sampling, Systematic sampling, Cluster sampling
- c) Non random sampling methods:
 - i. Judgement sampling
 - ii. Convenience sampling, quota sampling
 - iii. Benefits of sampling
 - iv. Sampling errors
 - v. Non sampling errors

Unit III

Methods of Data Collection and Classification

- a) Methods of collecting primary data: Questionnaire, Interview, Schedule, Observation, Inventories, Checklists
- b) Scaling techniques
- c) Drafting of questionnaire, training of interviewers
- d) Criteria for evaluation of instruments – reliability and validity
- e) Sources of secondary data, precautions in the use of secondary data
- f) Classification of data: types of classification
- g) Formation of discrete and continuous probability distributions
- h) Tabulation of data: parts of a table, general rules of tabulation, types of tables
- i) Diagrammatic representation of data
- j) Graphic representation of data

Unit IV

Statistical Methods

- a) Measures of central tendency: mean, median and mode, their relative advantages and disadvantages

- b) Measures of dispersion: Mean deviation, standard deviation, Coefficient of variation, percentile
- c) Types of correlation, coefficient of correlation and its interpretation-Rank correlation, Regression equations and predictions, Analysis of variance, Contingency tables, Chi-square test, 't' test: student's 't' test, paired 't' test, unpaired 't' test, 'F' test

Unit V

Sampling Statistics and Introduction to Statistical Package for Social Sciences (SPSS)

- a) Statistical inference and central limit theorem
- b) Null hypothesis and tests of significance
- c) The chi-square
- d) Testing difference between mean, proportions, standard deviations and correlations.
- e) Introduction to Statistical Package for Social Sciences (SPSS)

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core- RESEARCH METHODOLOGY	Cognitive Level
CO1	Explain about methodology of research and techniques	K2,K3
CO2	Discuss about skills in conducting research from planning a study to report writing.	K2, K3,K4
CO3	Examine statistical procedure to analyze numerical data draw inferences	K2, K3
CO4	Classifyof testing.	K2, K3
CO5	Differentiatestatistics used in research. .	K2, K3,K4

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core- RESEARCH METHODOLOGY		
CO/PO/PSO	PO	PSO

	1	2	3	4	5	6	1	2	3	4	5	6
1	2	3	3	2	3	3	3	3	3	3	3	2
2	3	2	3	3	3	2	3	2	3	3	3	2
3	3	2	3	3	3	3	3	2	2	3	3	3
4	3	2	1	3	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	2	3	3	1

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2017-18/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester III/ Elective-II

COMMUNICATION AND INTERPERSONAL SKILLS

Objectives:

1. To understand information about interpersonal skills.
2. To understand information about leadership.
3. To understand information about stress management.
4. To compare and discriminate conflict resolution.
5. To make use of decision making.

Unit –I

INTERPERSONAL SKILLS

Gratitude

Understanding the relationship between Leadership Networking & Team work. Assessing Interpersonal Skills Situation description of Interpersonal Skills

Team Work: Necessity of Team Work Personally, Socially and Educationally.

Unit - II

LEADERSHIP

Skills for a good Leader, Assessment of Leadership Skills

Unit- III

STRESS MANAGEMENT

Causes of stress and its impact, how to manage & distress, Circle of control, stress Busters.

Emotional Intelligence

What is Emotional Intelligence, emotional quotient why Emotional Intelligence matters,

Emotion Scales, Managing Emotions,

Unit - IV

CONFLICT RESOLUTION

Conflicts in Human Relations - Reasons Case Studies, Approaches to conflict resolution.

Unit - V

DECISION MAKING

Importance and necessity of Decision Making, Process and practical way of Decision

Making. Weighing Positives & Negatives.

Technical Topic Presentation

REFERENCE:

1. Covey Sean, Seven Habit of Highly Effective Teens, New York, Fireside Publishers, 1998.
2. Carnegie Dale, How to win Friends and Influence People, New York: Simon & Schuster, 1998,
3. Thomas A Harris, I am ok, you are ok, New York - Harper and Row, 1972.
4. Daniel Coleman, Emotional Intelligence, Bantam Book, 2006.

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core- COMMUNICATION AND INTERPERSONAL SKILLS	Cognitive Level
CO1	Explain about interpersonal skills.	K2,K3
CO2	Discuss about leadership skills.	K2, K3,K5

CO3	Defend about stress management	K2, K5
CO4	Describe about discriminate conflict resolution.	K2, K4
CO5	Differentiated decision making.	K2K3,K4,K5

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core- COMMUNICATION AND INTERPERSONAL SKILLS												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	2	3	3	3	3	3	3	3	3	3	3	3
2	3	2	3	3	3	2	3	2	3	3	3	2
3	2	2	3	2	3	3	3	2	3	3	3	3
4	2	2	3	3	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	3	2	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2017-18/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester III/ Elective-II

FOOD SAFETY & MICROBIOLOGY

Objectives:

To Know about importance of safety, Bacteria, Yeast, mold, Hygiene.

Unit – I

Safety: Importance of Safety – Accidents from structural Inadequacies – Accidents from improper placement of equipment in spaces – Accidents due to nature and behaviour of people at work – Accidents from improper selection, installation, maintenance and storage of equipment – Safety procedure – Training – Safety engineering – Enforcement of safety - Safety education.

Unit – II

Introduction to microbiology: Relation of Microbiology to hygiene – classification of micro-organisms, Factors affecting the growth of micro-organism.

Bacteria: Morphology – Size, Shape, Structure, reproduction, beneficial and harmful effects of bacteria.

Yeast: Morphology – Size, Shape, Structure, reproduction, beneficial and harmful effects of Yeast.

Mold: Classification – *Rizzo pus*, *Mucus*, *Aspergillum*, *Pen cilium*, reproduction.

Unit – III

Food & hygiene & General hygiene: Introduction – Types of contamination – Food contamination in meat, Poultry, game, Raw Vegetables & fruits, cereals, dairy Products, Fish – Shellfishes – Destroying micro-organisms in food.

Unit – IV

Food – Borne infection & diseases: Food poisoning by micro-organism. Food intoxication. Botulism – Organism, toxins, foods involved, diseases caused, prevention of outbreaks. Mycotoxins – Aflatoxin its significance in food.

Food Infection: Salmonellosis – sources of salmonella, Foods involved, Prevention of outbreaks. Clostridium perfringens gastroenteritis – Food involved, Prevention of outbreaks. Enter pathogenic Escherichia coli, Shigellosis – effect.

Unit – V

Food Hygiene regulation: Equipment for food premises – Food safety – offence.

Food Sanitation, control & inspection: Inspection of Drinking water , plant water, sewage water, equipments, cleaning, sanitizing.

HACCP: Health analysis – critical control points, health of employees.

Reference

1. Managing Food Hygiene – Nicholas Johns – Macmillan Publication 1991.
2. Food Microbiology – W.C. West off – McGraw Hill 1978.
3. Catering Management An Integrated Approach – Hominy Sothic, Street Manhunt – New age International

MSU/2017-18/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition)Semester III/ core 19 practical 5

BAKING AND FOOD PRESERVATION

Objectives:

1. To understand quantity equipment's, Menu planning.
2. To predict cookies, biscuits.
3. To demonstrate correct usage of cakes, icing.
4. To demonstrate correct usage of bread making.
5. To demonstrate correct usage of jelly.
 1. Preparation of biscuits-salt and sugar biscuits
 2. Preparation of cakes-vanilla cake, black forest cake
 3. Preparation of breads
 4. Demonstration of cake icing
 5. Preparation of jam-mango, pineapple, papaya, sapota
 6. Preparation of jelly-guava
 7. Preparation of pickles-mutton, fish, mixed vegetables
 8. Preparation of squashes –mango, grapes, pineapple, lime

9. Report writing on a visit to bakery and preservation unit

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core Practical BAKING AND FOOD PRESERVATION	Cognitive Level
CO1	Demonstrate quantity equipment's, Menu planning.	K2
CO2	Demonstrate cookies, biscuits	K2, K3
CO3	Demonstrate correct usage of cakes, icing	K2, K3
CO4	Demonstrate correct usage of bread making.	K2, K3
CO5	Demonstrate correct usage of jelly.	K2, K3

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core Practical BAKING AND FOOD PRESERVATION												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	3	3	3	3	3	3	3
2	3	2	3	3	3	2	3	2	3	3	3	2
3	3	2	3	3	3	3	3	2	3	3	3	1
4	3	2	3	3	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	3	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2017-18/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester III/Core-20

MINI PROJECT

Objectives:

1. To understand information about hotels
2. To understand information about various department in hotels.
3. To understand information about various staff in the hotels.
4. To understand information about various rooms in the hotel.
5. To understand information about various food, beverage, cooked inside the hotel

Course Outcomes

On completion of the course, the students will be able to

CO. No.	Core Practical	Cognitive
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	MINI PROJECT	Level
CO1	Define hotel industries	K2
CO2	Explain in details about various department in hotels.	K2, K3
CO3	Explain in details about various staff inside the hotel.	K2, K3
CO4	Explain in details about various rooms inside hotels.	K2, K3
CO5	Explain in details about various food, beverage, cooked inside the hotel	K2, K3

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

Core												
MINI PROJECT												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	3	3	3	3	3	3	3	3	3	3
2	3	2	3	3	3	2	3	3	3	3	3	2
3	3	2	3	3	3	3	3	2	3	3	3	3
4	3	2	3	3	3	2	3	2	3	3	3	2
5	3	2	3	3	3	2	3	2	3	3	3	2

Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)

MSU/2017-18/PG colleges/ (M.Sc. Hotel Management & Catering Science with Applied Nutrition) Semester IV/Core 21

**MAIN PROJECT
(INTERNSHIP TRAINING)**

Objectives:

1. To understand information about hotels
2. To make use of various department in hotels.
3. To make use of various preparation of Food.
4. To make use of cleaning of various rooms in the hotel.
5. To make use of servicing various Alcoholic and nonalcoholic beverage inside the hotel
6. **Course Outcomes**
- 7.
8. On completion of the course, the students will be able to

CO. No.	Core MAIN PROJECT	Cognitive
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		Level
CO1	Define hotel industries	K2
CO2	Demonstrate various department inside hotels	K2, K3,K5
CO3	Demonstrate correct preparation of various Food	K2, K3,K5
CO4	Demonstrate correct usage cleaningrooms inside the hotel.	K2, K3,K5
CO5	Demonstrate correct usage of servicing various Alcoholic and nonalcoholic beverage inside the hotel.	K2, K3K5

Remember (K1); Understand (K2); Apply (K3); Analyze (K4); Evaluate (K5); Create (K6)

Mapping

MAIN PROJECT												
CO/PO/PSO	PO						PSO					
	1	2	3	4	5	6	1	2	3	4	5	6
1	3	3	2	3	3	3	3	3	3	3	3	3
2	2	2	3	3	3	2	3	2	3	3	3	2
3	3	2	3	3	3	3	3	2	3	3	3	3
4	3	2	3	3	3	2	2	2	3	2	3	2
5	3	2	3	2	3	2	3	2	3	3	3	2

9. Strongly Correlated (3); Moderately Correlated (2); Weakly Correlated (1); No Correlation (0)