



MUSLIM ARTS COLLEGE

(Autonomous)

(Accredited by NAAC with B+ grade & Affiliated to Manonmaniam Sundaranar University,
Tirunelveli; Recognized US 2(f) 12 (B) of UGC Act.)

Thiruvithancode, Kanyakumari District, Tamil Nadu - 629174.

DEPARTMENT OF HOTEL MANAGEMENT AND CATERING SCIENCE

CBCS SYLLABUS

Learning Outcome-based Curriculum Framework for

HOTEL MANAGEMENT (M.Sc.)

*Applicable for students admitted from June 2026 as per the Resolutions of the Academic Council Meeting held
on 01.06.2026*

Vision

- To be a leader in developing skilled professionals in hospitality management, nurturing future leaders who meet the demands of the global hospitality industry.

Mission

- To provide quality education and practical training in hospitality management
- To prepare globally competitive professionals and managers
- To strengthen collaboration with the hospitality industry
- To develop skills, professionalism, and service excellence

Academic and Professional Attributes of the Graduates

1. **Advanced Hospitality Knowledge**
Demonstrate comprehensive knowledge of hotel management, food production, food and beverage service, accommodation operations, hospitality marketing, tourism, and hotel engineering.
2. **Professional and Technical Competence**
Apply advanced technical skills, operational expertise, and managerial competencies required for hospitality and catering industries.
3. **Leadership and Managerial Skills**
Exhibit leadership, decision-making, team management, problem-solving, and organizational abilities in diverse hospitality environments.
4. **Research and Innovation**
Apply research methodologies, critical thinking, and innovative approaches to improve hospitality operations, customer service, and sustainable business practices.
5. **Communication and Interpersonal Skills**
Communicate effectively with guests, colleagues, industry professionals, and stakeholders through oral, written, and digital communication.
6. **Ethics and Professional Responsibility**
Uphold ethical values, professional integrity, food safety standards, environmental sustainability, and legal compliance in hospitality operations.
7. **Global Perspective and Cultural Competence**
Appreciate cultural diversity, international hospitality standards, and global tourism trends while delivering quality guest experiences.
8. **Entrepreneurship and Business Acumen**
Develop entrepreneurial skills, financial management abilities, and strategic planning competencies for establishing and managing hospitality enterprises.
9. **Digital and Technological Competence**
Utilize modern hospitality technologies, property management systems, digital marketing tools, and information technology to enhance operational efficiency.
10. **Lifelong Learning and Professional Development**
Demonstrate commitment to continuous learning, professional certification, innovation, and career advancement in the dynamic hospitality industry.

PROGRAMME EDUCATIONAL OBJECTIVES (PEOs)

PEOs	Upon completion of the M.Sc. Hotel Management and Catering Science Degree Programme, graduates are expected to	Mapping with Mission
PEO1	Demonstrate advanced knowledge and professional competence in hotel management, food production, food and beverage service, hospitality operations, tourism, and related disciplines.	M1 & M2
PEO2	Apply critical thinking, research skills, innovation, and modern hospitality technologies to solve operational and managerial challenges in the hospitality industry.	M2 & M3
PEO3	Exhibit leadership, communication, ethical values, customer service excellence, and managerial abilities to perform effectively in national and international hospitality organizations.	M3 & M4
PEO4	Pursue lifelong learning, entrepreneurship, professional development, and sustainable hospitality practices to contribute to the growth of the hospitality and tourism sectors.	M2 & M4

Programme Outcomes (POs)

POs	Upon completion of the M.Sc. Hotel Management and Catering Science Degree Programme, students will be able to:	Mapping with PEOs
PO1: Advanced Disciplinary Knowledge	Demonstrate advanced knowledge of hotel management, food production, food and beverage service, accommodation operations, tourism, hospitality marketing, and hotel engineering.	PEO1
PO2: Critical Thinking and Problem Solving	Analyze hospitality-related problems and apply critical thinking, managerial principles, and innovative solutions to improve operational efficiency and guest satisfaction.	PEO1, PEO2
PO3: Research and Innovation	Conduct research, analyze hospitality data, and apply innovative practices and emerging technologies for continuous improvement in the hospitality industry.	PEO2
PO4: Professional Competence	Demonstrate professional, technical, and managerial competencies required for leadership roles in hotels, resorts, tourism organizations, and catering establishments.	PEO1, PEO3
PO5: Communication Skills	Communicate effectively with guests, colleagues, industry professionals, and stakeholders through oral, written, interpersonal, and digital communication.	PEO3
PO6: Ethics and Social Responsibility	Practice professional ethics, legal compliance, food safety, environmental sustainability, and social responsibility in hospitality operations.	PEO3, PEO4
PO7: Digital Competence	Utilize modern hospitality technologies, property management systems, digital marketing tools, and information systems for efficient hospitality management.	PEO2, PEO4

PO8: Leadership and Entrepreneurship	Demonstrate leadership, teamwork, entrepreneurial skills, financial management, and strategic decision-making for managing hospitality enterprises.	PEO3, PEO4
PO9: Global Perspective and Cultural Competence	Apply global hospitality standards, cultural sensitivity, and customer-centric practices in diverse national and international hospitality environments.	PEO3, PEO4
PO10: Lifelong Learning	Engage in continuous professional development, lifelong learning, innovation, and adaptability to meet the evolving demands of the hospitality and tourism industry.	PEO4

Programme Specific Outcomes (PSOs)

PSOs	Upon completion of the M.Sc. Hotel Management and Catering Science Degree Programme, students will be able to:	Mapping with POs
PSO1	Demonstrate advanced knowledge and practical competence in food production, food and beverage service, accommodation operations, kitchen management, and hospitality administration by applying industry standards and best practices.	PO1, PO2, PO4
PSO2	Apply managerial, operational, financial, marketing, and technological principles to effectively manage hotels, restaurants, resorts, tourism organizations, and other hospitality enterprises.	PO2, PO4, PO7, PO8
PSO3	Conduct research, analyze hospitality trends, utilize digital technologies, and develop innovative solutions to improve service quality, operational efficiency, and sustainable hospitality practices.	PO2, PO3, PO6, PO7
PSO4	Demonstrate leadership, communication, teamwork, customer relationship management, and entrepreneurial competencies required for successful careers in the global hospitality and tourism industry.	PO4, PO5, PO8, PO9
PSO5	Uphold professional ethics, food safety, environmental sustainability, legal compliance, and social responsibility while delivering high-quality hospitality services and pursuing lifelong professional development.	PO6, PO9, PO10

Mapping of Programme Outcomes (POs) and Programme Specific Outcomes (PSOs)

POs / PSOs	PSO1	PSO2	PSO3	PSO4	PSO5
PO1: Advanced Disciplinary Knowledge	3	2	2	2	1
PO2: Critical Thinking and Problem Solving	3	3	3	2	2
PO3: Research and Innovation	2	2	3	2	2
PO4: Professional Competence	3	3	2	3	2
PO5: Communication Skills	2	2	2	3	2
PO6: Ethics and Social Responsibility	2	2	3	2	3
PO7: Digital Competence	2	3	3	2	2
PO8: Leadership and Entrepreneurship	2	3	2	3	2
PO9: Global Perspective and Cultural Competence	2	2	2	3	3
PO10: Lifelong Learning	2	2	2	2	3

•3 – High Correlation

•2 – Moderate Correlation

•1 – Low Correlation

COURSES OFFERED

SEMESTER I

Part	Course Code	Title of the Course	Credits	Hours / Week
Core Course -I	NMHM11	Kitchen Operations And Kitchen Hygiene	5	6
Core Course - II	NMHM12	Advanced Food And Beverage Service	5	6
Core Course - PI	NMHMP1	Kitchen operations and Kitchen Hygiene	2	4
Core Course - PII	NEHM11	Advanced Food And Beverage Service	2	4
Elective Course - I	NEHM11	Tourism And Marketing Management	3	5
Elective Course - II	NEHM12	Hotel Engineering	3	5
Total			20	30

SEMESTER I

CORE COURSE I: ADVANCED KITCHEN OPERATIONS & KITCHEN HYGIENE

Subject Code	Category	L	T	P	S	Credits	Inst. Hours	Marks		
								CIA	External	Total
NMHM11	Core	Y	Y	-	-	5	6	25	75	100

Learning Objectives

The course aims to:

1. Develop advanced knowledge of kitchen organization, planning, and professional kitchen management.
2. Understand menu planning, production systems, purchasing, costing, budgeting, and quality control in commercial food production.
3. Gain comprehensive knowledge of modern kitchen equipment, layout planning, and workflow optimization.
4. Apply scientific principles in kitchen design, storage management, occupational safety, and operational efficiency.
5. Understand food hygiene, sanitation, food safety regulations, and legal requirements governing hospitality establishments.

Course Outcomes (COs)

Upon successful completion of the course, students will be able to:

CO No.	Course Outcomes	BT Level
CO1	Explain the principles of kitchen organization, staffing patterns, and professional kitchen management.	K2
CO2	Apply menu planning, purchasing, costing, budgeting, and production control techniques in commercial kitchens.	K3
CO3	Evaluate the selection, operation, maintenance, and effective utilization of modern kitchen equipment.	K5
CO4	Design efficient kitchen layouts, storage systems, and workflow plans based on operational requirements.	K6
CO5	Apply food safety, hygiene, sanitation standards, occupational safety practices, and food laws in hospitality operations.	K3

Bloom's Taxonomy Levels

K1 – Remember, K2 – Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create

Course Content

Units	Contents	No. of Hours
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.	18
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 processes. c) Safety procedures – Fire precautions.	18
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.	18
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.	18
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.	18
	Total	90

S. No.	Text Book
1	Krishna Arora – Theory of cookery
2	Ronald kinton – Theory of catering
3	Thangam E.Philip – Modern Cookery Vol1.
4	Dechenik, J. A. 2015. Biology of Invertebrates (Seventh Edition). Published by McGraw Hill Education (India) Private Limited, pp-624.

S. No.	Reference Books
1	Cracknell, H. L., Kaufmann, R. J., & Nobis, G. <i>Practical Professional Cookery</i> . 6th Edition, Cengage Learning, 2017.
2	Foskett, David, Ceserani, Victor, & Kinton, Ronald. <i>The Theory of Hospitality and Catering</i> . 13th Edition, Hodder Education, 2019.
3	Gisslen, Wayne. <i>Professional Cooking</i> . 9th Edition, John Wiley & Sons, 2018.

S. No.	Web Resources
1	https://www.fao.org/food-safety
2	https://www.ahla.com
3	https://www.ciachef.edu
4	https://restaurant.org
5	https://www.unwto.org

Mapping with Programme Outcomes

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	2	1	3	2	2	1	2	2	1
CO2	3	3	2	3	2	2	2	2	2	2
CO3	3	3	2	3	2	2	2	2	2	2
CO4	3	3	3	3	2	2	2	3	2	2
CO5	3	2	2	3	2	3	2	2	3	2

3 – Strong, 2 – Medium, 1 - Low

Mapping with Programme Specific Outcomes

CO / PSO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	2	2
CO2	3	3	2	2	2
CO3	3	3	3	2	2
CO4	3	3	3	3	2
CO5	3	2	3	2	3
Weightage	15	13	12	11	11
Weighted Percentage of Course Contribution to PSOs	3.0	2.6	2.4	2.2	2.2

Mapping Scale: 3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation

FIRST YEAR - SEMESTER I

CORE II - ADVANCED FOOD AND BEVERAGE SERVICE

Subject Code	Category	L	T	P	S	Credits	Inst. Hours	Marks		
								CIA	External	Total
NMHM12	Core	Y	Y	-	-	5	6	25	75	100

Learning Objectives

The course aims to:

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.

Course Outcomes

Upon successful completion of the course, students will be able to:

CO No.	Course Outcomes	BT Level
CO1	Describe restaurant service in the hotel and catering industry.	K2
CO2	Outline of restaurant equipment's and there use.	K4
CO3	Explain about menu and menu planning.	K2
CO4	Explain about Non-Alcoholic and Alcoholic beverage..	K4
CO5	Explain about Service & Beverage Control.	K5

Bloom's Taxonomy Levels

K1 – Remember, K2 – Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create

Course Content

Units	Contents	No. of Hours
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, Non-residential. 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.	18
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	18

	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, stories; linen room – kitchen stewarding.	
III	Menu & Menu Planning a) Definition – points to be considered while planning menu b) Types of menu - Ala carte, Table d'hôte, banquet menu c) Types of meals – (Indian/continental) Breakfast, Brunch, lunch, hi-tea, d) French classical menu, Menu engineering	18
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	18
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	18

	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	
	Total	90

S. No.	Text Book
1	Food & Beverage services – Dennis R. Lillicrap, John A. Cousins
2	Modern Restaurant Service – John Fuller
3	Professional table service – Sylvia Major, Edy Schmid & Christen Supplier
4	Food & Beverage Service – Sudsier Andrews.

S. No.	Reference Books
1	Lillicrap, D. R., Cousins, J. A., & Weekes, S. <i>Food and Beverage Service</i> . 10th Edition, Hodder Education, 2016.
2	Singaravelavan, R. <i>Food and Beverage Service</i> . Oxford University Press, 2019.
3	Davis, Bernard, Lockwood, Andrew, Alcott, Peter, & Pantelidis, Ioannis. <i>Food and Beverage Management</i> . 6th Edition, Routledge, 2018.
4	Walker, John R. <i>Introduction to Hospitality Management</i> . 8th Edition, Pearson, 2021.
5	Cousins, John, Lillicrap, Dennis, & Weekes, Suzanne. <i>Essentials of Food and Beverage Service</i> . Hodder Education, 2017

S. No.	Web Sources
1	https://www.ahla.com
2	https://restaurant.org
3	https://www.fssai.gov.in
4	https://fostac.fssai.gov.in
5	https://www.who.int/health-topics/food-safety

Mapping with Programme Outcomes

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	2	1	3	3	2	1	2	3	1
CO2	3	3	2	3	2	2	2	2	2	2
CO3	3	3	2	3	2	2	2	2	2	2
CO4	3	3	3	3	2	2	2	2	3	2
CO5	3	3	3	3	2	3	2	3	3	2

3 – Strong, 2 – Medium, 1 – Low

Mapping with Programme Specific Outcomes

CO / PSO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	2	1	2	2
CO2	3	3	2	2	2
CO3	3	3	2	3	2
CO4	3	3	3	3	2
CO5	3	3	3	3	3
PSOs	PSO1	PSO2	PSO3	PSO4	PSO5
Weightage	15	14	11	13	11
Weighted Percentage of Course Contribution to PSOs	3.0	2.8	2.2	2.6	2.2

Mapping Scale: 3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation

FIRST YEAR - SEMESTER I

CORE COURSE PI– ADVANCED KITCHEN OPERATIONS & KITCHEN HYGIENE

Subject Code	Category	L	T	P	S	Credits	Inst. Hours	Marks		
								CIA	External	Total
NMHMP1	Core	-	-	Y	Y	2	4	25	75	100

Learning Objectives

The course aims to:

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.

Course Outcomes

Upon successful completion of the course, students will be able to:

CO No.	Course Outcomes	BT Level
CO1	Apply quantity equipment's, Menu planning, and regional cuisines.	K2
CO2	Make use of cuisines and their ingredients.	K5
CO3	Make use of usage of various sauces, various gravy.	K2
CO4	Make use of raw food items.	K4
CO5	Experiment with model of variants cuisines.	K2

Bloom's Taxonomy Levels

K1 – Remember, K2 – Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create

Course Content

S.No	Contents	No. of Hours
	PRACTICAL 1. Identification of cooking materials. 2. Identification of different Kitchen equipment. 3. Various vegetable cutting. 4. Various Method of cooking. 5. Identification of various vegetable cutting. 6. Identification of pest and their control measures. 7. Preparation of various stocks and sauces. 8. To formulate 10 sets of menu consisting of 5 dishes from the following regions: a) Andhra Pradesh b) Bengal c) Chettinad d) Goa e) Gujarat f) Kashmir g) Karnataka h) Kerala i) Maharashtra j) Punjab k) Rajasthan l) Tamil Nadu Note: the menu should consist of rice, Indian breads, chicken/ mutton/fish/salads/vegetable and 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	60
	Total	60

S. No.	Text Books
1	Lal, S.S. 2009. Practical Zoology, Rastogi Publications, pp-484.
2	Iuliis G. D. and D. Pulerà, 2007. The Dissection of Vertebrates: A Laboratory Manual. Academic Press, Imprint of Elsevier Publication, pp-416.
3	Verma, P.S. 2000. Manual of Practical Zoology: Chordates, S. Chand Publishing Company, pp-528
S. No.	Reference Works
1	Preeti, G., and C. Mridula, 2000. Modern Experimental Zoology, Indus International Publication.
2	Sinha, J., A. K. Chatterjee, P. Chattopadhyaya. 2011. Advanced Practical Zoology, Arunabha Sen Publishers, pp-1070.
S. No.	Web Sources (URL)
1	https://www.bbc.co.uk/history
2	https://www.bl.uk
3	https://www.parliament.uk/about/living-heritage
4	https://www.britannica.com/topic/history-of-England
5	https://www.nationalarchives.gov.uk

Mapping with Programme Outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10
CO1	3	3	3	3	3	3	3	2	3	2
CO2	2	3	3	3	2	3	3	2	2	2
CO3	3	3	3	2	3	3	3	2	3	2
CO4	3	3	3	3	3	3	3	2	2	2
CO5	3	2	3	3	3	3	3	2	2	3

3 – Strong, 2 – Medium, 1 - Low

Mapping with Programme Specific Outcomes

CO / PO	PSO1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	3	3	3	3	3
CO2	3	3	3	2	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	14	15
Weightedpercentage ofCourseContributio ntoPOs	3.0	3.0	3.0	2.8	3.0

FIRST YEAR - SEMESTER I

CORE COURSE PII– ADVANCED FOOD AND BEVERAGE SERVICE

Subject Code	Category	L	T	P	S	Credits	Inst. Hours	Marks		
								CIA	External	Total
NMHMP2	Core	Y	Y	-	-	2	4	25	75	100

Learning Objectives

The course aims to:

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 non-alcoholic 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.

Course Outcomes

Upon successful completion of the course, students will be able to:

CO No.	Course Outcomes	BT Level
CO1	Describe various service equipment's, Menu planning, and food and beverage outlets.	K2
CO2	Explain various types of services.	K5
CO3	Explain how Alcoholic and nonalcoholic beverage served to guest.	K2
CO4	Explain how beer served to guest	K4
CO5	Explain how Red wine, white wine and sparkling wine served to guest.	K2

Bloom's Taxonomy Levels

K1 – Remember, **K2** – Understand, **K3** – Apply, **K4** – Analyse, **K5** – Evaluate, **K6** – Create

Course Content

S.NO	Contents	No. of Hours
	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.	60
	Total	60

S. No.	Text Books
1	Lal, S.S. 2009. Practical Zoology, Rastogi Publications, pp-484.
2	Iuliis G. D. and D. Pulerà, 2007. The Dissection of Vertebrates: A Laboratory Manual. Academic Press, Imprint of Elsevier Publication, pp-416.
3	Verma, P.S. 2000. Manual of Practical Zoology: Chordates, S. Chand Publishing

	Company, pp-528
S. No.	Reference Works
1	Preeti, G., and C. Mridula, 2000. Modern Experimental Zoology, Indus International Publication.
2	Sinha, J., A. K. Chatterjee, P. Chattopadhyay. 2011. Advanced Practical Zoology, Arunabha Sen Publishers, pp-1070.
S. No.	Web Sources (URL)
1	https://www.bbc.co.uk/history
2	https://www.bl.uk
3	https://www.parliament.uk/about/living-heritage
4	https://www.britannica.com/topic/history-of-England
5	https://www.nationalarchives.gov.uk

Mapping with Programme Outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10
CO1	3	3	3	3	3	3	3	2	3	2
CO2	2	3	3	3	2	3	3	2	2	2
CO3	3	3	3	2	3	3	3	2	3	2
CO4	3	3	3	3	3	3	3	2	2	2
CO5	3	2	3	3	3	3	3	2	2	3

3 – Strong, 2 – Medium, 1 - Low

Mapping with Programme Specific Outcomes

CO / PO	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3
CO2	3	3	3	2	3
CO3	3	3	3	3	3
CO4	3	3	3	3	3
CO5	3	3	3	3	3
Weightage	15	15	15	14	15
Weighted percentage of Course Contribution to POs	3.0	3.0	3.0	2.8	3.0

SEMESTER I

ELECTIVE COURSE-I (EC-I)

TOURISM AND MARKETING MANAGEMENT

Subject Code	Category	L	T	P	S	Credits	Inst. Hours	Marks		
								CIA	External	Total
NEHM11	Elective-I	Y	Y	-	-	5	3	25	75	100

Learning Objectives

The course aims to:

1. Understand the concepts, scope, and significance of tourism and the hospitality industry.
2. Examine tourism planning, development, and sustainable tourism management practices.
3. Analyze the socio-cultural and economic impacts of tourism at local, national, and global levels.
4. Develop knowledge of hospitality marketing principles, consumer behavior, and service marketing strategies.
5. Apply leadership, financial and marketing management skills for effective tourism and hospitality business operations.

Course Outcomes

Upon successful completion of the course, students will be able to:

CO No.	Course Outcomes	BT Level
CO1	Learn the structure, properties, metabolism, and bioenergetics of biomolecules	K2
CO2	Acquire knowledge on various classes and major types of enzymes, classification, their mechanism of action and regulation	K3
CO3	Understand the fundamentals of biophysical chemistry and biochemistry, importance, and applications of methods in conforming the structure of biopolymers	K3
CO4	Comprehend the structural organization of and proteins, carbohydrates, nucleic acids and lipids	K4
CO5	Familiarize the use of methods for the identification, characterization, and conformation of biopolymer structures.	K3

Bloom's Taxonomy Levels

K1 – Remember, K2 – Understand, K3 – Apply, K4 – Analyse, K5 – Evaluate, K6 – Create

Course Content

Unit	Contents	No. of Hours
I	Introduction: Concept of management in tourism industry, history, tradition and attraction, Tourism as Behaviour.	15
II	Importance of Tourism Planning, Nature, Scope, Process, Steps, Types and Limitations of Planning	15
III	Social and Cultural Dimensions Ancient festival culture and tourism, Social and Cultural Behaviour, Interaction and Impacts, Food tourism accommodation	15
IV	Economic Dimension, Types & Components of tourism, Socio-economic Importance of tourism Tools of tourism economics.	15
V	Marketing Management a) Leadership & team management, Decision making Manpower Management. Organization Structure, Motivating Factors, Financial Management b) Audit inventory, Accounting Fundamentals, Account maintenance, Tracking transactions. c) Qualities of salesmanship, marketing tools, marketing places	15
	Total	75

S. No.	Text Book
1	Berg, J. M., J. L. Tymoczko and L. Stryer 2002. Biochemistry. 5th Ed., W.H. Freeman & Co., New York, pp-1050.
2	Kuchel P.W. and G. B. Ralston. 2008. Biochemistry. McGraw Hill (India) Private Limited, UP, pp-580.
3	McKee T. and J. R. McKee. 2012. Biochemistry: The Molecular Basis of Life. (7th Edition). Oxford University Press, US, pp-793.
4	Nelson D.L. and M.M. Cox. 2012. Lehninger's Principles of Biochemistry. (6th Edition). W. H. Freeman Publishers, New York, pp-1158.
5	Satyanarayana U. and U. Chakrapani, 2006. Biochemistry. (3rd Edition). Books and Allied (P) Ltd. Calcutta, pp-695.

S. No.	Reference Books
1	Buchanan, B.B., W. Gruissem and R.L. Jones. 2015. Biochemistry and Molecular Biology of Plants. John Wiley and Sons Ltd., UK, pp-1280.
2	Murray, R.K., D.K. Granner, P.A. Mayes and V.W. Rodwell. 2003. Harper's Illustrated Biochemistry (26th Edition), The McGraw-Hill Companies, Inc., USA, pp-704.

3	Palmer, T. 2004. Enzymes. Affiliated East-West Press Pvt. Ltd., New Delhi, pp-416.
4	Voet D. and J.G. Voet. 2011. Biochemistry. (4th Edition). John Wiley & Sons (Asia) Pvt. Ltd., pp-1428.

S. No.	Web Resources
1	https://www.teachingenglish.org.uk
2	https://www.cambridgeenglish.org/learning-english
3	https://www.bbc.co.uk/learningenglish
4	https://schools.duolingo.com
5	https://quizlet.com

MAPPING OF COURSE OUTCOMES WITH PROGRAMME OUTCOMES (POs)

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	2	1	1	1	2	1	1	2	1
CO2	2	2	3	2	1	2	1	2	2	1
CO3	1	2	3	2	1	2	1	1	3	2
CO4	2	2	3	2	1	2	1	3	2	1
CO5	1	2	2	1	1	2	2	2	3	3

3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation.

MAPPING OF COURSE OUTCOMES WITH PROGRAMME OUTCOMES (POs)

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	2	2	1	1	1	2	1	1	2	1
CO2	2	2	3	2	1	2	1	2	2	1
CO3	1	2	3	2	1	2	1	1	3	2
CO4	2	2	3	2	1	2	1	3	2	1
CO5	1	2	2	1	1	2	2	2	3	3
Weightage	8	10	12	8	5	10	6	9	12	8
Weighted Percentage of Course Contribution to POs	1.6	2.0	2.4	1.6	1.0	2.0	1.2	1.8	2.4	1.6

3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation

FIRST YEAR – SEMESTER I
ELECTIVE COURSE-II: HOTEL ENGINEERING

Subject Code	Category	L	T	P	S	Credits	Inst. Hours	CIA	External	Total
NEHM12	Elective-II	Y	Y	-	-	3	5	25	75	100

Learning Objectives

The course aims to:

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.

Course Outcomes

Upon successful completion of the course, students will be able to:

CO No.	Course Outcomes	BT Level
CO1	Understand the various practices in Poultry farming, needs for Poultry farming and the status of India in global market.	K1
CO2	Able to apply the techniques and practices needed for Poultry farming.	K2
CO3	Know the difficulties in Poultry farming and be able to propose plans against it.	K3
CO4	Implement effective health management and disease prevention strategies.	K3
CO5	Apply principles of poultry reproduction and breeding techniques.	

Course Content

Unit	Contents	No. of Hours
I	Role and important of Maintenance Department in hotel industries with emphasis on its relation with other department of the hotel. Organization charts 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	15

	requires and cost.	
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?	15
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.	15
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.	15
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.	15
	Total	75

S. No.	Text Books
1	Murphy, Raymond. <i>Essential Grammar in Use</i> . 4th ed., Cambridge University Press, 2015.
2	Mohan, Krishna, and MeeraBanerji. <i>Developing Communication Skills</i> . 2nd ed., Macmillan Education India, 2018.

S. No.	Reference Books
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

S. No.	Web Resources
1	http://www.asciindia.com/BooksPDF/SmallPoultryFarmer.pdf
2	https://nsdcindia.org/sites/default/files/MC_AGR-Q4306_Small-poultry-farmer-.pdf
3	http://ecoursesonline.iasri.res.in/course/view.php?id=335
4	https://swayam.gov.in/nd2_nou19_ag09/preview

MAPPING OF COURSE OUTCOMES WITH PROGRAMME OUTCOMES (POs)

CO / PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10
CO1	3	2	2	1	1	2	1	2	2	1
CO2	3	2	2	2	1	2	1	2	2	1
CO3	2	2	3	2	1	2	1	2	3	1
CO4	2	2	3	2	1	2	2	1	3	3
CO5	2	2	2	2	1	2	2	3	3	2

Mapping Scale

3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation

MAPPING OF COURSE OUTCOMES WITH PROGRAMME SPECIFIC OUTCOMES (PSOs)

CO / PSO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6
CO1	3	2	1	1	2	1
CO2	3	2	1	1	2	1
CO3	2	3	2	1	3	1
CO4	2	3	3	1	3	2
CO5	2	3	2	2	3	2
Weightage	12	13	9	6	13	7
Weighted Percentage of Course Contribution to PSOs	2.4	2.6	1.8	1.2	2.6	1.4

Mapping Scale

3 – Strong Correlation, 2 – Moderate Correlation, 1 – Low Correlation