



SWAMI VIVEKANAND
SUBHARTI
UNIVERSITY
UGC Approved Meerut



AN ISO 21001: 2018 ORGANIZATION

OFFICE OF THE REGISTRAR

Gp Capt M Yakoob

M-in-D (Retd.), M.Tech.

REGISTRAR

registrar@subharti.org

Ref.No.U-508(i)/SVSU/2024/1080

Date:20.12.2024

NOTIFICATION

It is hereby notified for information of all the concerned that the Academic Council in its 33rd meeting held on 29-12-2023 vide resolution No.33(49) has approved the revised syllabus (as per CBCS scheme) of the following ordinances:

1. **Ordinance No.V-29(B)**, relating to Diploma in Food & Beverage Service (DFBS).
2. **Ordinance No.V-74(B)**, relating to Diploma in Food Production & Bakery (DFPB).
3. **Ordinance No.V-75(B)**, relating to Bachelor of Hotel Management & Catering Technology (BHMCT).
4. **Ordinance No.V-103(B)**, relating to Master of Hotel Management & Catering Technology (MHMCT).
5. **Ordinance No.V-119(B)**, relating to Bachelor of Science in Culinary Arts (B.Sc.CA).
6. **Ordinance No.V-120(B)**, relating to Bachelor of Travel & Tourism Management (BTTM).
7. **Ordinance No.V-122(B)**, relating to Bachelor of Vocational Course in Hospitality & Tourism (B.Voc in H&T).

The copies of all above are enclosed and shall be applicable from Academic Session 2023-24 onwards.

This issues with the approval of the Hon'ble Vice Chancellor.

Ref.No.U-508(i)/SVSU/2024/1080

Copy forwarded to information of:

1. Hon'ble Vice-Chancellor
2. Controller of Examination
3. Dean-Academics
4. Director-IQAC
5. Principal/HOI-Hotel Management College (for compliance please)
6. CTO (with a request to upload the ordinance on University website)
7. Additional Registrar-Academics
8. Guard File

[Signature]
20.12.2024
Registrar

Date: 20.12.2024

[Signature]
20.12.2024
Registrar



0121 6678000

Subhartipuram, NH-58, Delhi-Haridwar Bypass Road, Meerut-250005 (U.P.) INDIA

Ordinance No. V-119(B)

Bachelor of Science in Culinary Arts

(B.Sc. C.A)



**College of Hotel Management
Faculty of Management and Commerce**

**SWAMI VIVEKANAND SUBHARTI UNIVERSITY,
MEERUT**

Ordinance No. V-119(B)

ORDINANCE RELATING TO BACHELOR OF SCIENCE IN CULINARY ARTS (B.Sc.CA)

(Revised Syllabus 2023-24 as per CBCS)

1. INTRODUCTION

Bhikaji Cama Subharti College of Hotel Management (BCSCHM) has been established in 2009 under Swami Vivekanand Subharti University (SVSU), Meerut with the vision to **produce highly qualified skilled, trained, competent professionals for hospitality and tourism services.**

- Mission to establish the BCSCHM was specifically centralized to focus on:
- To provide quality education and skilled professional
- To promote research and development in respective field
- To groom every student to be an excellent professional who follows Indian Culture, loving Moral values and the dictum “Atithi Devo Bhav”

Bhikaji Cama Subharti College of Hotel Management (BCSCHM) has started with following programmes:

- a) Ph.D. in Hotel Management (Ph.D)
- b) Masters of Hotel Management and Catering Technology (MHMCT)
- c) Bachelors of Hotel Management and Catering Technology (BHMCT)
- d) Diploma in Food Production and Bakery (DFPB)
- e) Diploma in Food and Beverage Service (DFBS)

i. PROGRAMME OBJECTIVES:

- To develop the culinary skills amongst students and to prepare them ready for Catering and Hospitality Industry
- To understand the importance of team work and manage internal and external human resources.
- To inculcate expertise and knowledge (both theoretical & practical) that will lead to creation of prospective chefs in the hotel industry.
- To enriches the capabilities of students through intricately devised Practical work so as to acquire skills and knowledge in the major department of food production.
- Develops essential culinary skills and knowledge to an applied level in a range of patisserie and bakery disciplines.

ii. PROGRAMME OUTCOME:

After successful completion of the programme, an individual will be able to:

- Establish and maintain high standards of sanitation and food safety.
- Demonstrate proficiency in basic terminology and techniques for culinary arts and baking and pastry arts to include food preparation, presentation, and service.
- Identify and demonstrate the concepts of recipe costing, purchasing, receiving, and issuing practices in food service operations.
- Communicate clearly and professionally, both verbally and in writing.
- Develop strategies to improve business performance using creativity and problem solving skills, based on operational theory and procedures.
- Develop skills integral to success in the industry including guest service, supervisory management, the ability to work with others, and handling multiple tasks simultaneously.
- Develop and apply ethical and sustainable hospitality industry policies.
- Identify principles of menu and food service facility layout and design.
- Demonstrate and discuss the differences in cuisines and ingredients used around the world.
- Prepare regional, international, and classical cuisine dishes and demonstrate an understanding of how they are utilized in the contemporary food service industry.
- Analyze the functions of ingredients used in producing baked goods and pastries.
- Produce and evaluate a variety of baked goods, including but not limited to cakes, pies, breads, and confections.
- Utilize fundamental techniques to creatively modify standard recipes and develop new recipes.

2. RULES AND REGULATIONS FOR ADMISSION in B.Sc.CA

1. For admission in Bachelor of Science in Culinary Arts programme, the applicant should have passed with a minimum aggregate of 45% (40% for SC/ST) Intermediate examination or equivalent of a recognized board.
2. (i) The applicants may be required to appear at an entrance test followed by group discussion, interview and counseling before admission.
(ii) The reservation and relaxation for SC/ST/OBC/PWD and other categories shall be as per the rules of the Central Government/State Government, whichever is applicable.

3. CURRICULUM/ STRUCTURE OF PROGRAMME OF B.Sc.CA

3. The programme shall be spread over three academic years, spread over six semesters comprising actual teaching for a minimum of 90 days in each semester and Industrial Training for 6 Months in the third year.
 - i. Choice Based Credit System has been introduced and the total number of credits required for the award of BSc.CA degree is 148credits.
 - ii. The curriculum offers a total of45courses, the details of which are divided into 3 categories, i.e. Compulsory subjects, ability enhancement subjects and skills enhancement subjects

- iii. Of the 45 courses offered, in all the students have to complete 42 courses. The students can opt for choices in Compulsory Elective courses, Ability Enhancement courses and Skills Enhancement courses.
- iv. Industrial Training of 6 months is offered in the 6th semester. The students are expected to train in Hotels of category 4 star and above. The training will be as per the schedule mentioned in the curriculum. The students are expected to maintain a log book on a daily basis. At the end of the Industrial training the student shall submit a training report along with the log book and a performance appraisal from the hotel. The training report is to be prepared by the student and to be submitted to the Training and Placement Officer within the stipulated time for assessment.

The academic calendar shall be as follows:-

1st, 3rd & 5th Semester	Session - 1st Aug. to 30th Nov Exam - 1st Dec. to 15th Dec
2nd & 4th Semester	Session - 1st Jan. to 10th May Exam - 1st May to 15th May
6th Semester	Industrial Training- May to Nov. (6 months)

4. EXAMINATION AND EVALUATION

ATTENDANCE

The students are expected to attend all the classes and should not have less than 75 % attendance in theory as well as in practical classes, wherever held, to become eligible to appear for the university examination. Short fall in attendance can, however be condoned in deserving cases to the extent of 10% by the Principal. If the short fall is more than 10% but not more than 15%, the Principal may recommend deserving cases to the Vice Chancellor for condonation. The order of the Vice Chancellor in this regard shall be final.

EXAMINATION

The examination in each semester shall be conducted in two parts:

- a) **Internal assessment** will be of **30 marks** as under:-
 - i. Midterm written test / practical including in-between snap tests if any shall carry **20 marks** independently in each subject.
 - ii. A maximum of **10 marks** in each subject shall be awarded for attending classes (theory / practical) as per the following norms:

85% or more attendance	10 Marks
80% or more but less than 85% attendance	9 Marks
75% or more but less than 80% attendance	8 Marks
70% or more but less than 75% attendance	7 Marks
65% or more but less than 70% attendance	5 Marks
60% or more but less than 65% attendance	3 Marks
51% or more but less than 60% attendance	2 Marks
50% attendance	1 Mark
Less than 50% attendance	0 Mark

- b) **University Examination** carrying 70 marks.

The entire programme has to be completed within a maximum of Six years from the date of original admission in the programme.

PAPER SETTING, EVALUATION & RESULTS

The work of setting the End semester examination papers, conduct of the End semester and Annual examinations, Evaluation and declaration of results shall be as per the laid down Examination policies / latest University Notifications.

POWER TO MODIFY

In the event of any emergent situation, if any deviation is considered necessary, the Hon'ble Vice Chancellor is authorized to modify the Ordinance, subject to subsequent ratification by the Executive Council.

Curriculum Structure

The study and evaluation scheme of the programme shall be as given below:

Subject Code	Subjects	Choice	Theory / Practical	Teaching Load per week				Subject Credit	Marks		Total Marks offered per Subject
				L	T	P	Total		Internal	External	
SEMESTER I											
B.Sc-cul 101	Introduction to Hospitality Industry	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 102	Basics of Food Production	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 103	Basics of Food & Beverage Service	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 104	Introduction to Front office and Accommodation	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 105	Communication Skills	Compulsory	Theory	2	-	-	2	2	30	70	100
B.Sc-cul 106P	Culinary Skills I	Compulsory	Practical	-	-	4	4	2	30	70	100
B.Sc-cul 107P	Baking Skills I	Compulsory	Practical			4	4	2	30	70	100
B.Sc-cul 108P	Restaurant Service	Compulsory	Practical	-	-	2	2	1	30	70	100
	Rashtra Bodh*										
	Total			14	4	10	28	23	240	560	800
*Note: As per the University Academic Council the syllabus of Rashtra Bodh will be taught.											
SEMESTER II											
B.Sc-cul 201	Indian Cuisine	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 202	Regional & Staple Food	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 203	Food & Beverage Studies	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 204	Fundamentals of Information Technology	Compulsory	Theory	2	-	-	2	2	30	70	100
B.Sc-cul 205	Nutrition & Food Science	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 206P	International Culinary Art	Compulsory	Practical	-	-	4	4	2	30	70	100
B.Sc-cul 207P	Indian Culinary Art	Compulsory	Practical	-	-	4	4	2	30	70	100

B.Sc-cul 208P	Baking Skills II	Compulsory	Practical	-	-	4	4	2	30	70	100
B.S.Sc-cul 209	Indian Food & Fashion	Compulsory	Ability Enhance ment	3	1	1	3	3	30	70	100
Total				17	4	12	33	27	270	630	900

SEMESTER III

B.Sc-cul 301	Eastern Indian Cuisine and Culture	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 302	Beverage Studies	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 303	Food & Beverages Cost Controls	Compulsory	Theory	2	-	-	2	2	30	70	100
B.Sc-cul 304	Larder & Charcuterie	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 305	Gastronomy	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 306P	Regional Indian Cuisine (Quantity)	Compulsory	Practical	-	-	4	4	2	30	70	100
B.Sc-cul 307P	Intermediate Bakery & Confectionary	Compulsory	Practical	-	-	4	4	2	30	70	100
B.Sc-cul 308P	Larder & Short Order Cookery	Compulsory	Practical	-	-	4	4	2	30	70	100
Total				14	4	12	30	24	240	560	800

SEMESTER IV

B.Sc-cul 401	Advanced Food Production	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 402	Food Legislation	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 403	Human Resource Management	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 404	PAN Asian Cuisine	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 405	Research Methodology	Any- 1	Theory	2	-	-	2	2	30	70	100
B.Sc-cul 406	Marketing of Services										
B.Sc-cul 407P	Techniques of Pan Asian Cuisine	Compulsory	Practical	-	-	4	4	2	30	70	100
B.Sc-cul 408P	Contemporary European Cuisine	Compulsory	Practical	-	-	4	4	2	30	70	100
B.Sc-cul 409P	Advanced Techniques of Baking & Pasty	Compulsory	Practical	-	-	4	4	2	30	70	100
Total				14	4	12	30	24	240	560	800

SEMESTER V

B.Sc-cul 501	Kitchen Facilities Planning	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 502	Environmental Consciousness	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 503	Entrepreneurship & Restaurant Start up	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 504	Food safety Management	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 505	Food Photography & Presentation	Any- 1	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 506	Institutional, Hospital & Industrial Catering										
B.Sc-cul 507	Confectionary, Chocolaterie & Sugar Craft										
B.Sc-cul 508	Principles of Management	Compulsory	Theory	3	1	-	4	4	30	70	100
B.Sc-cul 509P	Art of Garde Manger	Compulsory	Practical	-	-	4	4	2	30	70	100
B.Sc-cul 510P	Food & Beverage – Alcoholic & Non Alcoholic	Compulsory	Practical	-	-	4	4	2	30	70	100
Total				18	6	8	32	28	240	560	800

SEMESTER VI

B.Sc-cul 601	Industrial Exposure	Compulsory	Training	-	-	48	48	24	120	280	400
B.Sc-cul 602	Log Book & Presentation	Compulsory	Training Report (Dissertation)	-	-	2	2	1	30	70	100
Total							50	25	150	350	500

SYLLABUS

INTRODUCTION TO HOSPITALITY INDUSTRY			Course Code : B.Sc-cul 101
Semester : I	L/T/P (Per week)	3/1/0	Credits : 04

Objective Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Introduction to the Hospitality Industry: The Nature of the Hospitality Industry ; Characteristics of the Hospitality Industry ; Relationship between the Hospitality Industry and Tourism ; Career Prospect of the Hospitality Industry	9	3
Unit 2	Introduction to the Accommodation Sector: Classification of Accommodation Establishment; Hotels and Their Classifications; Types of Accommodation; Common Types of Hotels ; Special Hotels Worldwide; Hotel Rating Systems Types of Hotel Guests; Types of Guest Requests	6	2
Unit 3	Introduction to the Hotel Operations: Hotel Departments ; Organogram; Rooms Division; Front Office Department ; Housekeeping Department; Food and Beverage Department; Non Operational Departments; Coordination between Departments	9	3
Unit 4	Food and Beverage Principles: Basic Knowledge of Menus; Basic Knowledge of Food and Beverage Services ; Restaurant Design and Layout ; Kitchen Layout for Different Food and Beverage Services	9	3
Unit 5	Front Office and Housekeeping Operations: Front office operations - Organisation chart, staffing, scheduling, work shifts, job specifications & job descriptions of Front office personnel; Types of guest rooms and suites, executive floors or club floor concept Types of room rates, basis for charging room rates Meal plans - Types, needs and use of such plans Types of guests - FIT, Business travelers, GIT, Special Interest Tours, domestic, foreign; Meaning and definition- Importance of Housekeeping; • Responsibility of the Housekeeping department; Organizational framework of the Department(large/Medium/Small Hotel); • Role of Key Personnel in Housekeeping	12	4
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Food & Beverage Service: Dennis Lillicrap • John Cousins • Professional Management of Hotel Operations: Thomas J.A. Jones Feinstein and John M. Stefanelli 		
E-Resources	<ul style="list-style-type: none"> • www.slideshare.net • www.allthatcooking.com • www.tutorialspoint.com/food_production_operations/food_production_operations_introduction_to_cookery.htm • http://bieap.gov.in/Pdf/HOPaperI.pdf 		
Course	At the end of the course the students would be able to:		

Outcome	<ol style="list-style-type: none"> 1. Describe the nature of hospitality industry 2. Classify different types of hotels 3. Understand the operational work in Hotel 4. Explain Food & Beverage Service and Food Production Operations. 5. Understand Front Office and Housekeeping Operations.
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BASICS OF FOOD PRODUCTION			Course Code : B.Sc-cul 102
Semester : I	L/T/P (Per week)	3/1/0	Credits : 04

Objective	The objective of this course is to give an introduction to kitchen with all the basic requirements to work in a professional kitchen. This course aims to prepare the students to cater to the needs of the industry. It would inculcate in them sound knowledge of the principles of Food Production so that they can be put to use in an efficient & effective way.
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Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Origin of modern cookery; Continental cuisine: Indian cuisine; Various sections of kitchen: Levels of skills: Attitude and behaviour in the kitchen: Uniform and protective clothing; Classification of equipments; Care and maintenance.	6	2
Unit 2	Hierarchy & Functioning: Classical brigade; Role of executive chef; Duties and responsibilities of various chefs; Modern staffing; Coordination between various sections of kitchen; Coordination between Food Production and other departments.	9	3
Unit 3	Introduction to Cookery: Aims and objectives of cooking food; Various textures; Techniques used in pre-preparation; Techniques used in preparation. Methods of heat transfer; Classification; Moist heat methods; Dry heat methods; Medium of fat. Personal Hygiene; Environmental Hygiene; Food storage and causes of contamination; Food borne illnesses; Food poisoning; Garbage disposal.	12	4
Unit 4	Classification of vegetables; Types of stock; Components of sauces; Mother sauces or basic sauces; Soups-Classification with examples; Structure of egg; Selection of an egg; Uses of eggs; Commodities Types & Uses: Fats and Oils, Sugar, Salt, Raising Agents, Thickening Agents, Herbs, Flour, Rice, Cereals, Pulses, Milk and Milk Products	9	3
Unit 5	Method of making breads; The Function of Eggs in the Baking Process ; Basic Custards: Crème Anglaise / Pastry Cream; Creaming and Muffin Method; Quick Breads - Biscuit Method / Fats and Oils; Cake and Icing Assembly; Leavening Agents; Chocolate Handling Chocolate Tempering - Seeding Method Ganache The Function of Chocolate in The Baking Process	9	3
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Theory of Catering, Mrs. K.Arora, Frank Brothers • Modern Cookery for Teaching & Trade Vol. I, Ms. Thangam Philip, Orient Longman • Chef Manual of Kitchen Management, Fuller, John • The Book of Ingredients, Jane Grigson 		
Course Outcome	At the end of the course the students would be able to:		
	6. Describe aims and objectives of cooking, duties and responsibilities of kitchen		

	personnel. 7. Classify different kitchen equipment and fuel with their usage. 8. Differentiate various methods of cooking. 9. Categorize different types of ingredients while preparing menu. 10. Organize themselves as per kitchen standards and practice safety measures.

BASICS OF FOOD & BEVERAGE SERVICE			Course Code : B.Sc-cul 103
Semester : I	L/T/P (Per week)	3/1/0	Credits : 04

Objective	This course gives an over view of Food & beverage industry in India & abroad with reference to its history and importance in current economy along with familiarization with Food service equipment and services		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Departmental Organisation & Staffing: Organisation of F & B Department of a Hotel ; Typical hierarchy of a dining room brigade (English & French); Attributes & Competencies of F & B Personnel ; Duties and responsibilities of F & B Staff	6	2
Unit 2	FOOD AND BEVERAGE SERVICE EQUIPMENT : Tableware & Service ware (Glassware, crockery & china, hollowware, flatware, tongs); Special equipment and Miscellaneous equipment and wares with their uses; Care & maintenance of equipment; Furniture (Tables, Chairs, Trolleys, Dumb Waiter, hostess desk) ; Linen ; Mis-en-place, Mis-en-Scene	9	3
Unit 3	DINING SERVICES METHODS, TECHNIQUES & STYLES: Table service: Silver service/ English service; American/ Plated; Family; Russian; Butler; Gueridon Bar Counter ; Assisted Service: Carvery; Buffets Self Service : Cafeteria : - Straight Line; Free-flow; Echelon; Supermarket Single point service: Take-away; Drive through; Fast food; Vending ; Kiosk; Food court; Bar Specialized (in-situ) : Tray; Trolley; Home delivery; Lounge; In Room ; Drive in	12	4
Unit 4	Dining Room Operations : Typical Restaurant / Coffee Shop Layout ; The Concept of stations, numbering the tables and covers at a table; Reservation Systems in Restaurants; Records & Registers maintained by a Restaurant; Rules to be observed while laying and waiting at the table. Dos & don'ts of wait staff in a dining room operations; Organizing the staff for service – The Team Approach and the Individual Service Approach	12	4
Unit 5	Non Alcoholic Beverages: Classification, Types and service	6	2
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Food & Beverage Service – Dennis R.Lillicrap. & John A. Cousins. Publisher: ELBS • Food & Beverage Service Management – Brian Varghese • Food & Beverage Service – Vijay Dhawan • Food & Beverage Service Training Manual – Sudhir Andrews, Tata McGraw Hill. • Food & Beverage Service Lillicrap& Cousins, ELBS 		

Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Summarize various catering establishments 2. Identify various equipment and linen used in F&B Service and their uses 3. Design organizational structure and relate F&B Service department with other department of hotel 4. Distinguish different types of service 5. Apply billing methods and its measures
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INTRODUCTION TO FRONT OFFICE AND ACCOMMODATION			Course Code : B.Sc-cul 104
Semester : I	L/T/P (Per week)	3/0/0	Credits : 04

Objective	The course familiarizes students with operations of Housekeeping & Front Office department, its various controls and personnel along with its relationship with other departments.		
Course Outline	Topic	Practical Hours	
		Lecture	Tutorial
Unit 1	THE HOTEL GUEST ROOM :Layout of guest room (Types) Layout of corridor and floor pantry Types of guest rooms Furniture/Fixtures/Fittings/Soft Furnishings/Accessories/Guest Supplies/Amenities in a guest room (to be dealt in brief only)	9	6
Unit 2	HOUSEKEEPING PROCEDURES :Briefing, Debriefing, Gate pass Indenting from stores- Inventory of Housekeeping Items; House keeping control desk, Importance, Role, Co-ordination, check list, key control Handling Lost and Found Forms, Formats and registers used in the Control Desk; Paging systems and methods Handling of Guest queries, problem, request General operations of control desk Role of control desk during Emergency	9	6
Unit 3	Front office Organisation Front office operations - organisation chart, staffing, scheduling, work shifts, job specifications & job descriptions of Front office personnel	9	6
Unit 4	Reservation methods; Pre-registration activities; Registration activity; Front office communication; Interdepartmental communication; Cashiering; Night Audit	9	6
Unit 5	SAFETY AWARENESS AND FIRST AID • Concept and Importance • Safety: Accidents, Fires (Cause, Procedure, Accident report form) • Security: Security of guest/Staff/Public areas/Rooms/Back office areas • First Aid: Concept and Emergency Procedures (Heart Attack, Fits, Burns, Fainting, Fractures, Scalds, Artificial respiration)	9	6
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Hotel Hostel and Hospital Housekeeping – Joan C Branson & Margaret Lennox (ELBS). • Hotel House Keeping – Sudhir Andrews Publisher: Tata McGraw Hill. • Hotel Housekeeping Operations & Management – Raghubalan, Oxford University Press. 		

	<ul style="list-style-type: none"> • Housekeeping and Front Office – Jones • Security Operations By Robert McCrie, Publisher: Butterworth – Heinemann • The Professional Housekeeper – Tucker Schneider,; Wiley Publications
Course Outcome	<p>At the end of the course the students would be able to:</p> <ol style="list-style-type: none"> 1. Describe importance and responsibility of housekeeping department and design layout of housekeeping department 2. Discuss duties and responsibilities of housekeeping staff 3. Classify different types of guest rooms, supplies and amenities 4. Compare different sections of Front office, meal plans, room rates and different types of key and its control 5. Design layout of guest room and recognize various furniture & fixtures

COMMUNICATION SKILLS			Course Code : B.Sc-cul 105
Semester : I	L/T/P (Per week)	2/0/0	Credits : 02

Objective	Communication is an essential life skill, and a professional pre-requisite in the hospitality industry. This course provides theoretical inputs backed with practice sessions, in order to communicate effectively. The course aims at enhancing listening, speaking, reading and writing skills.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Nature and the Process of Communication <ul style="list-style-type: none"> • Introduction to Communication – meaning and scope • Objectives and Principles of Communication • Features of Communication • Process of Communication 	4	0
Unit 2	Types of Communication Categories of communication a) Interpersonal communication b) Mass communication Forms of communication a) Verbal communication <ul style="list-style-type: none"> • Oral communication • Written communication b) Non-verbal communication <ul style="list-style-type: none"> • Introduction to body language • Understanding body language Formal and Informal Communication <ul style="list-style-type: none"> • Vertical communication v/s Horizontal communication 	8	0
Unit 3	Barriers to effective communication <ul style="list-style-type: none"> • Defining Barriers to communication • Types of Barriers– <ol style="list-style-type: none"> a) Physical or Environmental barriers b) Semantic and Language barriers c) Personal barriers d) Emotional or Perceptual Barriers e) Socio-psychological barriers f) Physiological or Biological Barriers 	6	0

	g) Cultural Barriers h) Organizational Barriers		
Unit 4	Written communication skills <ul style="list-style-type: none"> • Meaning, Importance, Advantages and Disadvantages of written communication • Letter writing - (letters of inquiry and booking of a banquet or a room, complaint, apology, leave and appreciation) 	6	0
Unit 5	Oral communication skills <ul style="list-style-type: none"> • Meaning, Importance, Advantages and Disadvantages of oral communication • Essential qualities of a good speaker • Extempore, Debate and Elocution 	6	0
Total Hours		30	00
Reference Books	<ul style="list-style-type: none"> • Business English. Department of English University of Delhi. Pearson. • Communication Skills – Sanjay Kumar. Oxford. • Improve your writing – V.N. Arora. Oxford. • Business Communication. Basic Concepts and Skills. J. P. Parikh. Orient BlackSwan • Communicative English – E. Suresh Kumar. Orient BlackSwan. • Business Communication. Second Edition – Meenakshi Raman. Oxford. • Communication Skills – B.V. Pathak • Business Communication – Urmila Rai. Himalaya Publishing House. • Business Communication – K.K. Sinha. Galgotia Publication. 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Discuss features and process of communication 2. Classify various types of communication 3. Solve barriers to effective communication 4. Assess their written communication skills 5. Evaluate their oral communication 		

CULINARY SKILLS I			Course Code : B.Sc-cul 106P
Semester : I	L/T/P (Per week)	0/0/4	Credits : 02

Objective	This course enables students to familiarize with kitchen and prepare very basic items used in different cuisines.	
Course Outline	Topic	Practical Hours
	<ul style="list-style-type: none"> • Equipments – Identification, Description, Uses & handling • Hygiene – Kitchen etiquettes, Practices & knife handling • Safety and security in kitchen 	4
	<ul style="list-style-type: none"> • Vegetables – classification • Cuts – julienne, jardinière, macedoines, brunoise, payssane, mignonnete, dices, cubes, shred, mirepoix ; 	4
	<ul style="list-style-type: none"> • Basic Cooking methods and pre-preparations • Blanching of Tomatoes and Capsicum • Preparation of concasse • Boiling (potatoes, Beans, Cauliflower, etc) • Frying – (deep frying, shallow frying, sautéing) Aubergines, 	12

	<ul style="list-style-type: none"> Potatoes, etc. • Braising – Onions, Leeks, Cabbage • Starch cooking (Rice,Pasta, Potatoes) 	
	<ul style="list-style-type: none"> • Stocks – Types of stocks (White and Brown stock) • Fish stock • Emergency stock • Fungi stock 	8
	<p>Sauces – Basic mother sauces</p> <ul style="list-style-type: none"> • Béchamel • Espagnole • Veloute • Hollandaise • Mayonnaise • Tomato 	12
	<p>Egg cookery – Preparation of variety of egg dishes</p> <ul style="list-style-type: none"> • Boiled (Soft & Hard) • Fried (Sunny side up, Single fried, Bull’s Eye, Double fried) • Poaches • Scrambled • Omelette (Plain, Stuffed, Spanish) • En cocotte (eggs Benedict) 	8
	<ul style="list-style-type: none"> • Simple Salads & Soups: Cole slaw, Potato salad; Beet root salad, Green salad, Fruit salad, Consommé • Simple Egg preparations: Scotch egg, Assorted omelletes, Oeuf Florentine, Oeuf Benedict, Oeuf Farci, Oeuf,Portugese, Oeuf Deur Mayonnaise • Simple potato preparations Baked potatoes, Mashed potatoes, French fries, Roasted potatoes, Boiled potatoes, Lyonnaise potatoes, Allumettes. • Vegetable preparations Boiled vegetables, Glazed vegetables, Fried vegetables, Stewed vegetables 	12
Total Hours		60
Course Outcome	<p>At the end of the course the students would be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate food pre- preparation and cooking methods. 2. Illustrate different methods of mixing 3. Develop basic Indian menu 4. Prepare continental dishes 	

BAKING SKILLS			Course Code : B.Sc-cul 107P
Semester : I	L/T/P (Per week)	0/0/4	Credits : 02

Objective	This module provides practical foundation in Baking practices. It includes selection of ingredients, Proper mixing and Baking techniques involved in preparation of Breads, Cakes, Flour Pastry, Cookies and Icing.		
Course Outline	Topic	Practical Hours	
	<ul style="list-style-type: none"> • Equipments Identification • Uses and handling • Ingredients – Qualitative and quantitative measures 	4	
	BREAD MAKING <ul style="list-style-type: none"> • Demonstration & Preparation of Simple and enriched bread recipes • Bread Loaf (White and Brown) • Bread Rolls (Various shapes) • French Bread • Brioche 	12	
	SIMPLE CAKES <ul style="list-style-type: none"> • Demonstration & Preparation of Simple and enriched Cakes, recipes • Sponge, Genoise, Fatless, • Swiss roll • Fruit Cake • Rich Cakes • Dundee • Madeira 	16	
	<ul style="list-style-type: none"> • SIMPLE COOKIES Demonstration and Preparation of simple cookies like (Nan Khatai, Golden Goodies, Melting moments, Swiss tart, Tri colour biscuits, Chocolate chip, Cookies, Chocolate Cream Fingers, Bachelor Buttons) 	12	
	HOT / COLD DESSERTS <ul style="list-style-type: none"> • Caramel Custard, • Bread and Butter Pudding • Queen of Pudding • Soufflé – Lemon /Pineapple • Mousse (Chocolate Coffee) • Bavaroise • Diplomat Pudding, Apricot Pudding, Steamed Pudding – Albert Pudding, Cabinet Pudding. 	16	
Total Hours		60	
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Demonstrate cake making 2. Illustrate different icings and decoration technique 3. Prepare various types of pastries 4. Describe bread making methods 		

RESTAURANT SERVICE			Course Code : B.Sc-cul 108P
Semester : I	L/T/P (Per week)	0/0/2	Credits : 01
Objective	This course introduces student to various catering institutions and the equipment and tools frequently used & other operational menu along with their implementation in food and beverage industry keeping in mind various styles of service & techniques in trend.		
Course Outline	Topic	Practical Hours	
	<ul style="list-style-type: none"> • Familiarization with Food & Beverage Service Equipment & their Usage 	4	
	<ul style="list-style-type: none"> • Standard phrases used in food & beverage service outlets (Role play) 	8	
	<ul style="list-style-type: none"> • Napkin Folds 	8	
	<ul style="list-style-type: none"> • Stocking of Side Stations ; Wiping of glassware and wiping of crockery 	4	
	<ul style="list-style-type: none"> • Dining Room Practices & Operating Procedures 	2	
	<ul style="list-style-type: none"> • Accepting & Confirming a Telephonic Reservation of a Guest 	4	
	Total Hours	30	
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Recognize different napkins folds 2. Demonstrate different table layouts 3. Perform restaurant service etiquettes and rules to be observed while waiting at the table 4. Handle service gear and other equipments 5. Demonstrate various types of service 		

Rashtra Bodh Syllabus

Indian Cuisine			Course Code : B.Sc-cul 201
Semester : II	L/T/P (Per week)	3/1/0	Credits : 04

Objective	The course aims to provide knowledge of different cuisines prevailing in India.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Introduction to Indian Cuisine: Introduction; Growth of Indian cuisine; Introduction to various styles of Indian cookery; Development of Indian cuisine.	9	3
Unit 2	History of Indian Cuisine : History, Ancient, Medieval and modern history of Indian cuisine	9	3
Unit 3	Equipments and Fuels used in the Indian Kitchen: Classification of Indian equipments; drawings; Care and maintenance.	9	3
Unit 4	Indian Culture and Food: Festival food, Culture related to food Importance of Indian herbs and spices, Influence of foreign food culture on Indian cuisine	9	3
Unit 5	Pastes, Gravies and Masalas: Various pastes, masalas and basic gravies prepared in Indian cuisine.	9	3
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Theory of Catering, Mrs. K.Arora, Frank Brothers • Modern Cookery for Teaching & Trade Vol. I, Ms. Thangam Philip, Orient Longman • Chef Manual of Kitchen Management, Fuller, John • The Book of Ingredients, Jane Grigson • Indian and neighboring countries Food, K.T.Achaya, Oxford / Food around the world, Margaret • McWilliams, Pearson 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Explain different regional cuisine of India Classify various types of communication 2. Recall key ingredients of different regions of India 3. Memorize popular dishes of theregion 4. Discuss Indian sweets anddesserts 5. Describe other foods such as jain food, parsifood,etc 		

Regional & Staple Foods			Course Code : B.Sc-cul 202
Semester : II	L/T/P (Per week)	3/1/0	Credits : 04

Objective	The course aims to provide knowledge of different cuisines prevailing in India.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	History; Staple foods of Indian cuisine; Ingredients	9	2
Unit 2	Regional Indian Cuisines: North and South India	9	3
Unit 3	Regional Indian Cuisines: East India, North East and Western India	9	3
Unit 4	Fusion Cuisine: Indian Chinese; Malaysian Indian; Indian Singaporean; Anglo Indian	9	3

Unit 5	Desserts, Alcoholic and Non Alcoholic Beverages; Eating Habits	9	3
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Modern Cookery for Teaching & Trade Vol. I, Ms. Thangam Philip, Orient Longman • The Book of Ingredients, Jane Grigson • Indian and neighboring countries Food, K.T.Achaya, Oxford • Food around the world, Margaret McWilliams, Pearson 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Differentiate between South Indian & North Indian cuisine 2. Recall key ingredients of East India, North East and Western India 3. Memorize popular dishes of different region of India 4. Discuss Fusion cuisine 5. Describe Alcoholic and Non Alcoholic Beverages 		

Food & Beverage Studies			Course Code : B.Sc-cul 203
Semester : II	L/T/P (Per week)	3/1/0	Credits : 04

Objective	This subject aims to provide intrinsic knowledge of Food and Beverage menus with purpose and necessity in various types of meals. It enables students to apply the knowledge and skills required to advise and serve customers in food service outlets and analyse the food service operations of in room dining.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Types of Meals <ul style="list-style-type: none"> • Breakfast – Introduction, Types, Service Methods • Elevenses and Brunch • Full afternoon tea and Hi – Tea • Lunch /Dinner • Supper • Late night snacks / round the clock meals 	9	2
Unit 2	Menu knowledge <ul style="list-style-type: none"> • Introduction • Types –A la Carte & Table d' hôte • Menu Planning, considerations and constraints • Classical French Menu • Classical Foods & its accompaniments with cover • Definition of Menus - Children, Diet, Working • Lunch, Banquet, Take Away, Cyclic, Combination, Poolside, Trendy snacks /Fast Foods. 	9	3
Unit 3	Tobacco <ul style="list-style-type: none"> • Introduction, types • Cigar –Parts, manufacturing, sizes, strengths, brands, service procedure 	9	3

	<ul style="list-style-type: none"> • Cigarette – Manufacturing, brands, service procedure 		
Unit 4	Special Foods <ul style="list-style-type: none"> • Sandwiches–types, service procedure • Salads –Types (Green, Vegetable, Main Course, Fruit)Dressings (Lemon, Vinaigrette, French, English, Cream) • Frozen Food - Ice-Creams, Parfaits, Sundaes, Granites, Gelato, Spoom • Fondue –types, service and procedure 	9	3
Unit 5	Room Service/ In room dining service <ul style="list-style-type: none"> • Introduction, General Principles • Cycle of Service, Scheduling and Staffing • Forms and Formats • Order Taking, Suggestive Selling, Breakfast Cards • Time management -lead time from order taking to clearance • IRD Layouts and special equipment, Mini bar 	9	3
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Food & Beverage Service – Dennis R.Lillicrap. & John A. Cousins. Publisher: ELBS • Food & Beverage Service Management – Brian Varghese • Food & Beverage Service – Vijay Dhawan • Food & Beverage Service Training Manual – Sudhir Andrews, Tata McGraw Hill. • Food & Beverage Service Lillicrap& Cousins, ELBS 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Discuss different types of meals 2. Explain various menu 3. Memorize different tobacco products and classify non- alcoholic beverages 4. Describe special foods 5. Design layout of in room dining and practice in room dining procedure 		

Fundamentals of Information Technology			Course Code : B.Sc-cul 204
Semester : II	L/T/P (Per week)	2/0/0	Credits : 02

Objective	The subject aims to give a basic knowledge about Computers and its operations. It enables students to operate Computers and its allied Hardware and Software. It also gives insight in Internet, Email and other social media.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Computer Fundamentals <ul style="list-style-type: none"> • Computer definition, Features of ComputerSystem • Block Diagram of ComputerSystem • Input and Output Units of ComputerSystem <ul style="list-style-type: none"> ➤ Input devices (Keyboard, Pointing devices - Mouse, Joystick, Touch Screen, Light Pen, Stylus) Scanning devices (Optical Scanners, Bar Code readers, MICR, OCR, OMR),Image capturing devices(Digital Camera, Digital video camera),Audio input names 	9	2

	<ul style="list-style-type: none"> ➤ Output devices : Monitors Printers (Inkjet printer, Laser printer, Thermal printer, Dot matrix printer, Plotter, Photo printer) Audio output device – (Speakers,Headphones) • CPU, RAM,ROM • Software – System, ApplicationS/W • Networks – Types - LAN, MAN, WAN &Topology • Viruses – Types,Precautions <p>E-Commerce and ERP</p> <ul style="list-style-type: none"> • Concepts of B-to-B, B toC • ERP concept, SAPConcepts 		
Unit 2	<p>WINDOWS</p> <ul style="list-style-type: none"> • WindowsFeatures • Terminologies - Desktop, Desktop Properties (Popup Menu), Windows, Wallpaper, Icons, File, Folder • Windows Explorer- (Assignment with files,folders) • Accessories – Paint, Notepad, Calculator, Remote DesktopConnection <p>DOS – (Disk Operating System)</p> <ul style="list-style-type: none"> • Introduction &Features • Internal Commands – DIR, CLS, VER, VOL, DATE,TIME, COPY, TYPE, REN, DEL, CD, MD, RD • External Commands - , ATTRIB, SCANDISK,TREE, MORE,EDIT • Wildcards (question mark?, asterisk*) 	9	3
Unit 3	<p>MS-WORD</p> <ul style="list-style-type: none"> • File Menu: Save, Save As, Print, PageSetup • Home Menu: Cut, Copy, Paste, Find, Replace, Format Painter, Bullets & Numbering, ChangeCase • Insert Menu: Table, Pictures, Shapes, Smart Art, Chart, Hyperlink, Header & Footer, Text Box, Drop Cap,Symbol • Page Layout: Margins, Page Break, Indent, Line Spacing • Mailings Menu: Mail Merge • Special Tools: Spelling & Grammar check, Word Count <p>MS-EXCEL</p> <ul style="list-style-type: none"> • File Menu: Save, Save As, Print, PageSetup • Home Menu: Drawing, Find andReplace • Insert Menu: Table, Pictures, Charts, Filter, Hyperlink, WordArt • Page Layout Menu: Print area, Cell Width,Height, Scale • Formulas Menu: Insert function, AUTOSUM,AVG, PER, MAX, MIN, COUNT, IF, Date & Time, Round • Review Menu : Protectsheet 	9	3
Unit 4	<p>MS-POWERPOINT</p> <ul style="list-style-type: none"> • File Menu: Save, Save As, Print, PageSetup 	9	3

	<ul style="list-style-type: none"> • Home Menu: Cut, Copy, Paste, Find, Replace, Format Painter, Bullets & Numbering, ChangeCase • Insert Menu: Table, Pictures, Shapes, Smart Art, Chart, Hyperlink, Header & Footer, Video, Audio, Symbol • Design Menu: Themes, Variants,Customize • Transitions: Slide,Timing • Animations: Add Animation, Effects • Slide Show: Start slide show, Setup,Monitor <p>MS-ACCESS</p> <ul style="list-style-type: none"> • Table Creation, Fields, DataType • Primary KeyConcept • Add, Edit, and Deleterecords 		
Unit 5	<p>INTERNET / E-MAIL</p> <ul style="list-style-type: none"> • History • Pre-requisites for Internet, Role ofModem • Services – Emailing, Chatting, Surfing,Blog • Search Engines, Browsers, Dial Up, Domains, www, HTTP,URL • Broadband, Concepts of Web uploading, downloading,Skype • Threats – Spyware, Adware,Spam <p>Cloud computing & Social Media</p> <ul style="list-style-type: none"> • What is cloud computing? One drive, Create Hotmail/outlook/ live.in account, Sway presentation (using Hotmail /outlook/live.in) • What is Social Media and its usage/ advantages and disadvantages (Whatsapp/Facebook) • Define Twitter and itsusage. 	9	3
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Computer Fundamentals – P.K.Sinha • A First Course In Computers – SanjaySaxena • DOS Guide – PeterNorton • Mastering MS-OFFICE – Lonnie E. Moseley & David M. Boodey, (BPB Publication) 		
Course Outcome	<p>At the end of the course the students would be able to:</p> <ol style="list-style-type: none"> 1. Recognize different components of computer and their uses 2. Identify different operating system 3. Recall importance of MSOffice 4. Describe the role of internet and social media in hospitality industry 		

Nutrition & Food Science			Course Code : B.Sc-cul 205
Semester : II	L/T/P (Per week)	3/1/0	Credits : 04

Objective	The subject aims to develop the knowledge and awareness about hygiene, nutrition & balanced diet in Hotel Industry. It also helps to understand the relation between food and human health.		
Course Outline	Topic	Hours	

Unit 1	Introduction to Food Nutrition <ul style="list-style-type: none"> • Define Food, Nutrients , Nutrition • Carbohydrate – Definition, sources, functions, effect of Heat, Dietary Fiber • Protein - Definition, sources, functions, effect of Heat • Fat - Definition, sources, functions, effect of Heat • Vitamins – Definition, classification, sources, functions, deficiency • Minerals – Classification, sources, functions, deficiency (Sodium, Iron, Calcium, Iodine) • Ways to prevent nutrients loss while cooking food 	9	3
Unit 2	Food Adulteration <ul style="list-style-type: none"> • Food Standards in India (Compulsory – Fruit product order, Meat product order, milk & milk product order, Solvent extracted Oils and Vegetable products control order and Standards on weights and measures. Voluntary – Bureau of Indian Standards and Agmark) • Common food adulterants and the test to detect them in following Food Stuffs: Milk, Sugar, Turmeric, Chilli Powder, Tea, Coffee, Semolina, Ghee, Butter and Oil 	9	3
Unit 3	Food Additives <ul style="list-style-type: none"> • Definition • Types of Food Additives Food Preservation and Storage <ul style="list-style-type: none"> • General guidelines and rules for storage of all types of foodstuffs • Different storage area (Dry, Refrigerated, Freezer) <ul style="list-style-type: none"> ➤ Requirements of each ➤ Pasteurization, Canning 	9	3
Unit 4	Personal Hygiene for Food Handlers <ul style="list-style-type: none"> • Necessity of personal hygiene • Good health of Staff • Sanitary practices while holding and cooking food • Protective clothing Microbiology <ul style="list-style-type: none"> • Harmful and useful micro-organisms In Food Industry (Bacteria, Yeast, Mould, Fungi) • Difference between food poisoning and food infection 	9	3
Unit 5	Hygiene and Sanitation in Food Production and Service area <ul style="list-style-type: none"> • Danger Zone • Cross Contamination • Protective display of food • Pest Control (Importance and control measures for common pest in Hotel Industry) • Food Spoilage (Detection and Prevention) • HACCP (Importance and Usage) 	9	3
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Hand book of Food and Nutrition- by M.Swaminathan • Nutrition and Dietetics - by Shubhangini Joshi • Food Hygiene and Sanitation - by Sunetra Roday • Food Science and Nutrition - by Sunetra Roday 		

Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Memorize different nutrients component of food 2. Choose right control measures for food adulteration 3. Classify food additives and follow guidelines and rules for storage of food 4. Apply sanitary practices while preparing food and maintain personal hygiene 5. Discuss importance of HACCP
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International Culinary Art			Course Code : B.Sc-cul 206P
Semester : II	L/T/P (Per week)	0/0/4	Credits : 02

Objective	The course gives an overview of International cuisine and intends to develop specialized culinary skills amongst the students to prepare them for the industry.	
Course Outline	Topic	Practical Hours
	British Cuisine <ul style="list-style-type: none"> • Popular preparations like Yorkshire pudding, Cockaleekie soup, Scotch broth, Irish stew, Welsh rarebit, Fish and Chips, Jugged meat, Cornish pasties, Steak and Kidney pie, Shepherd's pie, Toad in the Hole, Haggis, Kippers and Sweet dishes like Fool, Trifle, Crumpet and Lemon curd. 	12
	Italian Cuisine <ul style="list-style-type: none"> • Rice preparations like varieties of Risotto, varieties of Pasta, Anti pasto, Gnocchi, Bruschetta, Cacciatora, Soups like Minestrone and Ossobucco, Insalata, Calabrese, Fritata, Friccacea, Cassata, Tiramisu and Zabaglione. 	12
	French Cuisine <ul style="list-style-type: none"> • Popular preparations like Quiche Lorraine, Meat Bourguignon, Coq au vin, Ratatouille, Meat Casserole, Bouillabaisse, French Onion soup, Chicken Normandy, Vegetable crepes, Pommes parsley, Vegetable Au gratin, Bouquetiere legumes, Chicken ala king, Consomme, Riz Pilaf, Pommes lyonnaise, Pommes Duchesse, Steak sauté Bercy, Waldorf Salad, Ouefsfarcischimay, Grilled fish with Hollandaise, Crepe Suzzete and Crème Caramel 	12
	Spanish Cuisine: <ul style="list-style-type: none"> • Gazpacho, Sopa De Ajo Caldo Verde, Cocido Madrilenio, Paella, Churros, Pollo En Pepitoria, Fritata De Patata, Pastel De Manzana, Sangria 	12
	Mediterranean Cuisine <ul style="list-style-type: none"> • Recipes from Spain, France, Greece (Avgolemono, Dolmades, Moussaka, Spanakopita, Greek Salad) 	12
	Total Hours	60
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Design international A la carte and TDH menu 2. Demonstrate various international dishes 3. Recall various recipe of international desserts Describe special foods 	

4. Recognize different international cuisine

Indian Culinary Art			Course Code : B.Sc-cul 207P
Semester : II	L/T/P (Per week)	0/0/4	Credits : 02

Objective	This course aims to provide practical knowledge and skills in preparing different Indian dishes.	
Course Outline	Topic	Practical Hours
	Preparation of three course simple Indian menus: Including starters, Main course dishes including meat and fish, accompaniments like rice preparations and dal preparations, dessert preparations	12
	Preparation of Indian snacks / high tea items – Indian snacks which should include North Indian, South Indian West and East Indian popular items	12
	Preparation of Indian breakfast –Indian breakfast which should include North Indian, South Indian West and East Indian popular items.	12
	Preparation of Indian Sweets and Confectionary products – Indian breakfast which should include North Indian, South Indian West and East Indian popular items.	12
	Preparation of Gravies - Indian basic gravies which should include Vegetarian and non-vegetarian popular items	12
	Total Hours	60
Course Outcome	At the end of the course the students would be able to: 1. Demonstrate various dishes preparation of different regional cuisine 2. Illustrate preparation of Indian desserts 3. Recall the key ingredients of the regional cuisine 4. Memorize the recipe of popular dishes	

Baking Skills II			Course Code : B.Sc-cul 208P
Semester : II	L/T/P (Per week)	00/4	Credits : 02

Objective	This module provides practical foundation in Baking practices. It includes Selection of ingredients, Proper mixing and Baking techniques involved in preparation of Breads, Cakes, Flour Pastry, Cookies and Icing.	
Course Outline	Topic	Practical Hours
	<ul style="list-style-type: none"> • Jam tart • Lemon tart • Meringue tart • Coconut tart • Onion focaccia • Capsicum focaccia • Croissant • Danish pastry • Chocolate mousse • Coffee mousse • Strawberry mousse • Choux pastry • Chocolate éclair • Profit roll • Croquembush • Pizza margarita • Chicken pizza • Pizza calzon • Vegetable puff pastry • Chicken puff pastry • Egg puff pastry • Vol-au-vent • Apple pie • Apple crumble • Apricot and almond flan • Soft roll and hard roll • Sandwich bread • Multigrain bread 	60
	Total Hours	60
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Explain the different ingredients used in confectionery 2. Differentiate different cake mixing methods 3. Define and explain different pastries and derivatives 4. Demonstrate working knowledge of Chocolate and Sugar confectionery 	

Indian Food & Fashion			Course Code : B.Sc-cul 209
Semester : II	L/T/P (Per week)	3/0/0	Credits : 03

Objective	The objective of the course "Indian Food & Fashion" is to provide students with a comprehensive understanding of the cultural, historical, and social significance of Indian cuisine and fashion.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Introduction to Indian Culture and Heritage <ul style="list-style-type: none"> • Overview of Indian culture, history, and traditions • Understanding the importance of food and fashion in Indian society • Exploring regional diversities and influences in Indian cuisine and fashion. 	9	0
Unit 2	Indian Cuisine <ul style="list-style-type: none"> • Introduction to Indian spices, herbs, and ingredients • Traditional cooking techniques and utensils • Regional cuisines of India: North Indian, South Indian, East Indian, West Indian • Popular Indian dishes: biryani, curry, dosa, samosa, etc. • Vegetarian and non-vegetarian cuisine in India • Culinary practices and rituals associated with Indian food 	12	0
Unit 3	Indian Fashion <ul style="list-style-type: none"> • Evolution of Indian fashion through the ages • Traditional Indian garments: saree, salwarkameez, lehenga, dhoti, etc. • Influence of Indian fashion on global trends • Famous Indian fashion designers and their contributions • Textiles and craftsmanship in Indian fashion • Bridal fashion and wedding attire in India 	12	0
Unit 4	Contemporary Indian Food and Fashion <ul style="list-style-type: none"> • Fusion and modern interpretations of Indian cuisine • Street food culture in India • Fashion trends in Bollywood and popular culture • Sustainable and ethical practices in Indian fashion industry • Exploring emerging trends and future directions in Indian food and fashion 	12	0
Total Hours		45	0
Reference Books	<ol style="list-style-type: none"> 1. "Indian Cookery" by Madhur Jaffrey: A comprehensive guide to Indian cuisine, featuring authentic recipes and insights into the cultural and regional diversity of Indian cooking. 2. "The Spice Companion: A Guide to the World of Spices" by Lior Lev Sercarz: This book provides a deeper understanding of spices, including those commonly used in Indian cuisine, their origins, flavors, and how to use them effectively in cooking. 3. "Fashion India: Spectacular Capital of the Fashion Industry" by Phyllida Jay: A visual journey through the vibrant world of Indian fashion, showcasing the works of renowned designers and highlighting the country's fashion industry. 4. "Patterns of India: A Journey Through Colors, Textiles, and the Vibrancy of Rajasthan" by Christine Chitnis and Martin Morrell: This book explores the textiles, patterns, and traditional craftsmanship of Rajasthan, offering insights into the rich heritage of Indian textiles and their influence on fashion. 5. "Indian Fashion: Tradition, Innovation, Style" by Arti Sandhu: A comprehensive guide to Indian fashion, covering its historical roots, traditional garments, contemporary trends, and the impact of Bollywood and global influences. 		
E-resources			
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Demonstrate knowledge of the historical, social, and cultural aspects of Indian food and fashion. 2. Apply the understanding of Indian spices, ingredients, and cooking techniques to prepare traditional Indian dishes. 3. Recognize and distinguish different regional cuisines of India. 		

	<p>4. Analyze the evolution of Indian fashion through different periods and its impact on global trends.</p> <p>5. Recognize the influence of Indian culture and traditions on contemporary food and fashion practices.</p>
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Eastern Indian Cuisine and Culture			Course Code B.Sc-cul 301
Semester : III	L/T/P (Per week)	3/1/0	Credits : 04

Objective			
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Seven sister states (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland & Tripura)	9	3
Unit 2	Bengali Cuisine	9	3
Unit 3	Odiyan , Assamese and Bihari Cuisine	9	3
Unit 4	Major Food Culture of the Region	9	3
Unit 5	North Eastern cuisine	9	3
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> 1. Pollan, M. 2006. The Omnivore's Dilemma. New York: Penguin. [Part 1, Pp 15-109]. 2. Holmes. S. (2013). Fresh Fruit: Broken Bodies. Berkeley, CA: University of California Press 		
Course Outcome	<p>At the end of the course the students would be able to:</p> <ol style="list-style-type: none"> 1. Explain the different eastern India Cuisine 2. Understand various cultures 3. Identify various food ingredients used by eastern states of India 4. Demonstrate practical skills related to eastern India Cuisine 		

Beverage Studies			Course Code : B.Sc-cul 302
Semester : III	L/T/P (Per week)	3/1/0	Credits : 04

Objective	The course will give comprehensive knowledge on various distilled & fermented alcoholic beverages used in the Hospitality Industry. It will also help in understanding the classification, manufacturing process and the various styles, along with technical and specialized skills in the service of the same. It will familiarize students to bar profile.		
Course Outline	Topic	Practical Hours	
		Lecture	Tutorial

Unit 1	Alcoholic Beverages <ul style="list-style-type: none"> • Definition • Classification of Alcoholic Beverages Bar <ul style="list-style-type: none"> • Types of Bar • Bar Equipment (Light equipment and Heavy equipment) 	9	3
Unit 2	Fermented Beverages <ul style="list-style-type: none"> • Beer • Wine • Other Fermented and Brewed beverages(Sake, Cider,Perry) • Aperitifs & fortified wine; Matching wine and food 	9	3
Unit 3	Introduction to Spirit <ul style="list-style-type: none"> • Definition of spirit • Alcoholic Strength: Proof (British and American) • Classification of Distilled Beverages and their examples • Distillation process: <ul style="list-style-type: none"> ➤ Pot Still ➤ Patent Still 	9	3
Unit 4	Cocktails <ul style="list-style-type: none"> • History and definition • Methods of making cocktails: Stirred, Shaken, Built-up, Layered and Blended Traditional mixes preferred with Alcoholic beverages • Golden rules for making cocktails • Cocktail Bar equipment and their uses <ul style="list-style-type: none"> ➤ Light and heavy equipment ➤ Garnishes, decorative accessories 	9	3
Unit 5	Banquets <ul style="list-style-type: none"> • Definition • Types of Banquet functions: Formal & Informal • Hierarchy and Duties & Responsibilities of Banquet Staff • Banquet booking procedure • Banquet Function Prospectus (Lay out only) • Off Premise / Out-door catering Buffet <ul style="list-style-type: none"> • Introduction & Definition • Types of Buffet • Buffet equipment • Points to be considered while arranging buffet 	9	3
Total Hours		45	15
	<ul style="list-style-type: none"> • Food & Beverage Service – Dennis R.Lillicrap. & John A.Cousins. Publisher:ELBS • Food & Beverage Service Management – Brian Varghese • Food & Beverage Service – Vijay Dhawan • Food & Beverage Service Training Manual – Sudhir Andrews, Tata McGraw Hill. • Food & Beverage Service Lillicrap & Cousins, ELBS 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Explain spirits and different types of distillation 2. Classify spirits and their manufacturing process 		

	<ol style="list-style-type: none"> 3. Describe liqueurs 4. Name classic cocktails with their recipe 5. Classify types of banquet and buffet
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Food & Beverages Cost Control			Course Code : B.Sc-cul 303
Semester : III	L/T/P (Per week)	2/0/0	Credits : 02

Objective	The student will gain comprehensive knowledge on various aspects of control procedures, adopted by the Food and Beverage department.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Cost and Sales Concept <ul style="list-style-type: none"> • Introduction • Cost Concepts • Sales Concepts • Cost to Sales Ratio: Cost Percent Control Process <ul style="list-style-type: none"> • Introduction • Control • The Control Process • Control Systems • Cost Benefit Ratio 	6	0
Unit 2	Control Cycle <ul style="list-style-type: none"> • Purchasing • Receiving • Storing • Issuing Menu Engineering & Analysis <ul style="list-style-type: none"> • Introduction • Menu Engineering • Menu Analysis 	6	0
Unit 3	Controlling Food Sales <ul style="list-style-type: none"> • Introduction • The goals of sales control • Optimizing the number of customers • Maximising the profit • Controlling Revenue • Revenue Control using manual means • Revenue Control using computers 	6	0
Unit 4	Beverage Control <ul style="list-style-type: none"> • Beverage Purchasing, Receiving, Storing and Issuing Control • Beverage Production Control • Inventory turnover • Beverage Sales Control • Guest Checks and Control 	6	0
Unit 5	Labour Control <ul style="list-style-type: none"> • Labour Cost Considerations • Establishing Performance Standards • SOP 	6	0

	<ul style="list-style-type: none"> • Standard Staffing Requirements • Preparing job descriptions • Training of Staff • Monitoring Performance • Taking Corrective action to address discrepancies between standards and performance 		
Total Hours		30	00
Reference Books	<ul style="list-style-type: none"> • Food and Beverage Control - Richard Kotas & Bernard Davis • Food and Beverage Management - Bernard Davis & Sally Stone • Theory of catering - Ronald Kinton, Victor Ceserani, David Foskett 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Understand the complexities of controlling the Cost, Food & Beverage products, 2. Labour and revenue in Food & Beverage operations and maximizing profit without sacrificing the quality or quantity of the food or beverage which goes to the guest. 		

Larder & Charcuterie			Course Code : B.Sc-cul 304
Semester : III	L/T/P (Per week)	3/1/0	Credits : 04

Objective	The course gives an overview of Cold kitchen and intends to develop specialized culinary skills amongst the students to prepare them for the industry.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	LARDER LAYOUT & EQUIPMENT <ul style="list-style-type: none"> • Introduction of Larder Work • Definition • Equipment found in the larder • Layout of a typical larder with equipment and various sections 	3	1
Unit 2	TERMS & LARDER CONTROL <ul style="list-style-type: none"> • Common terms used in the Larder and Larder control • Essentials of Larder Control • Importance of Larder Control • Devising Larder Control Systems • Leasing with other Departments • Yield Testing • Functions of the Larder • Hierarchy of Larder Staff • Sections of the Larder • Duties & Responsibilities of larder Chef 	6	2
Unit 3	CHARCUTIERIE & SAUSAGE <ul style="list-style-type: none"> • Introduction to charcuterie • Sausage – Types & Varieties • Casings – Types & Varieties • Fillings – Types & Varieties • Additives & Preservatives • Types of forcemeats • Preparation of forcemeats • Uses of forcemeats 	9	3

Unit 4	<p>BRINES, CURES & MARINADES</p> <ul style="list-style-type: none"> • Types of Brines • Preparation of Brines • Methods of Curing • Types of Marinades • Uses of Marinades • Difference between Brines, Cures & Marinades <p>HAM, BACON & GAMON</p> <ul style="list-style-type: none"> • Cuts of Ham, Bacon & Gammon. • Differences between Ham, Bacon & Gammon • Processing of Ham & Bacon • Green Bacon • Uses of different cuts 	9	3
Unit 5	<p>GALANTINES</p> <ul style="list-style-type: none"> • Making of galantines • Types of Galantine • Ballotines <p>PATES</p> <ul style="list-style-type: none"> • Types of Pate • Pate de foiegras • Making of Pate • Commerical pate and Pate Maison • Truffle – sources, Cultivation and uses and Types of truffle. <p>MOUSE & MOUSSELINE</p> <ul style="list-style-type: none"> • Types of mousse • Preparation of mousse • Preparation of mousseline • Difference between mousse and mousseline <p>QUENELLES, PARFAITS, ROULADES</p> <ul style="list-style-type: none"> • <input type="checkbox"/> Preparation of Quenelles, Parfaits and Roulades 	9	3
UNIT 6	<p>CHAUD FROID</p> <ul style="list-style-type: none"> • Meaning of Chaudfroid • Making of chaudfrod& Precautions • Types of chaudfroid • Uses of chaudfroid <p>ASPIC & GELEE</p> <ul style="list-style-type: none"> • Definition of Aspic and Gelee • Difference between the two • Making of Aspic and Gelee • <input type="checkbox"/> Uses of Aspic and Gelee 	9	3
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Practical Cookery, Victor Ceserani& Ronald Kinton, ELBS • Theory of Catering, Victor Ceserani& Ronald Kinton, ELBS • Theory of Catering, Mrs. K.Arora, Frank Brothers • Modern Cookery for Teaching & Trade Vol. I, Ms. Thangam Philip, Orient Longman • Chef Manual of Kitchen Management, Fuller, John • The Book of Ingredients, Jane Grigson 		
Course Outcome	At the end of the course the students would be able to:		
	1. Distinguish between larder and charcutiere		

	<ol style="list-style-type: none"> 2. Describe cold preparations 3. Identify force meat and its use 4. Recognize food additives and its use
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Gastronomy			Course Code : B.Sc-cul 305
Semester : III	L/T/P (Per week)	3/1/0	Credits : 04

Objective Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Gastronomy: General concepts: a historical timeline of a type of food indicating its importance across history; Terminology. Food heritage.	9	3
Unit 2	Gastronomy: Conquest, Exchange, Middle Ages and Cultural Fusion: Prehistory and human diet. From raw to cooked: Paleolithic and Neolithic; Food and civilization; First Civilizations: Mesopotamia and Egypt; Food in Eastern World: China and India. Silk Route and international trade; Food in ancient Greece From vegetarian to Mediterranean cuisine; Ancient Rome: Heritage and diffusion; Mediterranean food and trade routes.	12	4
Unit 3	Gastro-geography: The environment as determining Human Diet: Food and cultures: Jewish, Muslims, Hindus and Christians; Food contribution by Germanic tribes; Renaissance: Sweet Era; Biography of Brilliant Savarin; Italian and French Gastronomy as gastronomic model in Europe. The start of restaurants; Precolonial food in America; American food to the World	12	4
Unit 4	Technology: From the Health to Molecular food: Creole Food. Ancient and new Peruvian gastronomy; Taverns, Tea rooms and restaurants; Macdonadlization: From Slow food to Fast food; Molecular gastronomy: From “cosmetic” product to health products; Food and globalization	12	4
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Congreso de CocinasAndinas. (2011). V Congreso de CocinasAndinas: haciaunacocina con identidad y suimpacto en el turismo y el empleo. Bogotá-Colombia: Ministerio de Comercio, Industria y Turismo. • MartínezMonzó, J. (2011). Gastronomía y Nutrición. Madrid: Síntesis. • Oxfam. (2011). Pobreza, desigualdad y desarrollo en el Perú: informeannual 2010-2011. Lima: Oxfam • SociedadPeruana de Gastronomía (2013). El boom gastronómicoperuano. Lima: SociedadPeruana de Gastronomía Secondary References: • GinoccioBalcazar, L. (2012). Pequeñaagricultura y gastronomia:Oportunidades y desafios. Lima: APEGA. • Lauer, M. (2010). Bodegón de bodegones comida y artesvisuales en el Perú. Lima: Fondo Editorial Universidad San Martín de 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Understand history of Food 2. Historical food of different parts of the world 3. Understand Gastro-geography 4. Understand Molecular food 		

Regional Indian Cuisine (Quantity)			Course Code : B.Sc-cul 306P
Semester : III	L/T/P (Per week)	0/0/4	Credits : 02

Objective	This course enables students to familiarize with kitchen and prepare very basic items used in different cuisines.		
Course Outline	Topic	Practical Hours	
	Preparation of three course Bengali menu – Including starters, Main course dishes including meat and fish, accompaniments like rice preparations and dal preparations, dessert preparations	10	
	Preparation of three course Goan menu – Including starters, Main course dishes including meat and fish, accompaniments like rice preparations and dal preparations, dessert preparations	10	
	Preparation of three course Tamilnadu menu – Including starters, Main course dishes including meat and fish, accompaniments like rice preparations and dal preparations, dessert preparations	10	
	Preparation of three course Awadhi menu – Including starters, Main course dishes including meat and fish, accompaniments like rice preparations and dal preparations, dessert preparations	10	
	Preparation of three course Kashmiri menu – Including starters, Main course dishes including meat and fish, accompaniments like rice preparations and dal preparations, dessert preparations	10	
	Preparation of three course Punjabi menu – Including starters, Main course dishes including meat and fish, accompaniments like rice preparations and dal preparations, dessert preparations	10	
	Total Hours	60	
	<ul style="list-style-type: none"> • Theory of Catering, Mrs. K.Arora, Frank Brothers • Modern Cookery for Teaching & Trade Vol. I, Ms. Thangam Philip, Orient Longman • Chef Manual of Kitchen Management, Fuller, John • The Book of Ingredients, Jane Grigson • Indian and neighboring countries Food, K.T.Achaya, Oxford / Food around the world, Margaret McWilliams, Pearson 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Demonstrate various dishes preparation of different regional cuisine 2. Illustrate preparation of Indian desserts 3. Recall the key ingredients of the regional cuisine 4. Memorize the recipe of popular dishes 		

Intermediate Bakery & Confectionery			Course Code : B.Sc-cul 307P
Semester : III	L/T/P (Per week)	0/0/4	Credits : 02

Objective	The module reflects the need for a thorough understanding of the preparation, handling and cooking of sponges for gateaux as well as many other product types.	
Course Outline	Topic	Practical Hours
	<ul style="list-style-type: none"> • quichlorraine • mince meat pie • lemon curd tart • celebration cake • fancy cake • walnut brownie • mud cake with vanilla ice • cream and truffle sauce • plum cake • pound cake • pineapple gateaux • black forest • melting moment • lemon butter cookies • butter button • marble cookies • cashewnut cookies • cheese souffle • chocolate mousse • ornagesouffle • baguette • ham and leek quiche • different types petit four • different types fancy breads • cinnamon roll 	60
Total Hours		60
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Explain the different ingredients used in confectionery 2. Differentiate different cake mixing methods 3. Define and explain different pastries and derivatives 4. Operation of different types of oven 5. Define the internal and external characteristics of cakes 	

Larder & Short Order Cookery (Pr.)			Course Code : B.Sc-cul 308P
Semester : III	L/T/P (Per week)	0/0/4	Credits : 02

Objective		
Course Outline	Topic	Practical Hours
Unit 1	Types Of Forcemeats <ul style="list-style-type: none"> • Straight Method • Gratin Method • Country Style • Emulsion 	12
Unit 2	Gallantine	12
Unit 3	Pates and Terrines <ul style="list-style-type: none"> • Pate en croute • Campagne Method • Pate Maison • Pate de Foie Gras 	12
Unit 4	Mousse, Mousseline, Quenelles,, Parfait, Roullade	12
Unit 5	Aspic and ChaudFroid, Gelee	12
Total Hours		60
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Explain the different types of forced meat 2. Understand Gallantine 3. Define and explain Pates and Terrines 4. Understand Mousse, Mousseline, Quenelles,, Parfait 5. Explain the Aspic and ChaudFroid, Gelee 	

Advanced Food Production			Course Code : B.Sc-cul 401
Semester : IV	L/T/P (Per week)	3/1/0	Credits : 04

Objective			
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Kitchen Management <ul style="list-style-type: none"> • Work Flow Layout • Stewarding • Staffing • Stores Management • Indenting • Production Planning • New Product Development • Use Of Internet and other technologies in Food • Production 	9	3
Unit 2	Food Styling	9	3

	<ul style="list-style-type: none"> • General principles, • Modern and special innovative garnishes, accompaniments, • Decorations and concept development 		
Unit 3	Banqueting Preparations <ul style="list-style-type: none"> • Types of banquets, • Themes, • Production, menu preparation • Low calorie food, advantages, disadvantages, menu examples, preparation 	9	3
Unit 4	Out -door Catering <ul style="list-style-type: none"> • Concept, • Principles, • Limitations, • Menus, planning, • Check list and precautions 	9	3
Unit 5	Cook chill systems <ul style="list-style-type: none"> • Purpose of chilling food, • Cook chill process, • Finishing kitchens, • Distribution of cook chill and types of containers to preserve food. • Cook freeze system 	9	3
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • The Professional Pastry Chef, Friberg • The Wilton Ways of Cake Decorations, Hamlyn Publishing • Chocolate, Carolyn Humphries • International Cook Book, Cavendish House • Time - Life Series - The Cooking of Various countries 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Explain the kitchen management 2. Understand Food styling 3. Define and explain Banqueting Preparations 4. Understand Outdoor catering 5. Explain the Cook chill systems 		

Food Legislation			Course Code : B.Sc-cul 402
Semester : IV	L/T/P (Per week)	3/1/0	Credits : 04

Objective	The aim of studying this subject is to acquire the knowledge of basic laws related to the hotel industry and to understand business laws related to day- to- day working.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Business Law <ul style="list-style-type: none"> • The Indian Contract Act,1872 <ul style="list-style-type: none"> ➤ Definition of Contract and essential elements of a contract ➤ Valid, void and voidable contracts ➤ Free Consent and Consideration 	9	3

	<ul style="list-style-type: none"> ➤ Performance and Discharge of Contract ➤ Breach of contract and remedies for breach of contract • The Sales of good Acts,1932 <ul style="list-style-type: none"> ➤ Meaning of contract ofSale ➤ Difference between sale and agreement to sell ➤ Rights and duties of seller and buyer ➤ Unpayseller • The Partnership Act,1932 <ul style="list-style-type: none"> ➤ Nature ofpartnership ➤ Rights and duties ofpartner • The Companies Act,1956 <ul style="list-style-type: none"> ➤ Essential features ofcompany ➤ Legal aspects of corporate social responsibility 		
Unit 2	Industrial Law <ul style="list-style-type: none"> • The Bombay Shops and establisBHMent Act,1948 <ul style="list-style-type: none"> ➤ Provisions applicable to hotelindustry • The Industrial disputes Act,1947 <ul style="list-style-type: none"> ➤ Definition ofindustry ➤ Industrialdisputes ➤ Settlement of industrialdisputes ➤ Strike, lock-out, lay off, retrencBHMent and closure. • Definition and brief description of others industrial laws <ul style="list-style-type: none"> ➤ The Payment of Wages Act,1936 ➤ The Minimum Wages Act,1948 	9	3
Unit 3	The Food Safety And Standards Act, 2006 <ul style="list-style-type: none"> • Duties and Responsibilities of FoodInspector • Food Safety and Standards Authority ofIndia • General Principles of FoodSafety • General Provisions as to Articles ofFood • Provisions Relating toImport • Special Responsibilities as to FoodSafety • Offences andPenalties The Consumer Protection Act, 1986. <ul style="list-style-type: none"> • Who isconsumer? • Consumercomplaint • Remedies for deficiency inservices 	9	3
Unit 4	The Sexual Harassment of Women at Workplace <ul style="list-style-type: none"> • Prevention, Prohibition and Redressal Act,2013. <ul style="list-style-type: none"> ➤ Acts constituting SexualHarassment. ➤ Internal and Local ComplaintsCommittee ➤ Complaint and inquiry intocomplaint ➤ Duties ofemployer 	9	3
Unit 5	Licenses and Permits <ul style="list-style-type: none"> • Licenses and permits required for running Star category of hotels (3 star and above) only ten important licenses to betaken • Procedure for applying and renewal of licenses and permits • Provisions for suspension and cancellation of licenses • By laws for operating Permit Rooms andBar 	9	3
Total Hours		45	15

Reference Books	<ul style="list-style-type: none"> • Prevention of Food Adulteration –ShriRohitUpadhyay • Personal Management and Industrial Relations - D.C. Shejwalkar and Adv.ShrikantMalegaonkar • The Law of Contract – DrAvtarSingh • Universal's Practical Guide To Consumer Protection Law – ShriAnup K Kaushal • Social Security Law in India - ShriDebi S.Saini • Commercial and Industrial Law - N. D.Kapor • Principles of Hospitality Law - Michael Boella and AlanPannett
Course Outcome	<p>At the end of the course the students would be able to:</p> <ol style="list-style-type: none"> 1. Recall all the business acts applicable to hotel industry 2. Memorize all the industrial acts 3. Describe all safety and protection acts 4. Discuss the measures taken to prevent sexual harassment of women at work place 5. Identify various licenses and permits required for the hotel

Human Resource Management			Course Code : B.Sc-cul 403
Semester : IV	L/T/P (Per week)	3/1/0	Credits : 04

Objective	The competitive edge of an organization lies in human factors and needless to say as hospitality is the people business so it becomes all the more important. Irrespective of the level or the specialization, HR skills are required by all managers for successful careers. To sustain growth in the hospitality industry, it is crucial to source talented manpower, retain it and keep it motivated and satisfied. Happy and committed employees create goodwill for companies and create delighted customers. Studying Human Resource Management would help students to understand the HR implications in service industry, challenges faced and various competencies required by today's HR professionals.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	<p>Introduction to HRM</p> <ul style="list-style-type: none"> • Introduction to Human Resource Management, definition and evolution • Role , Nature & Characteristics of HR • Need for HRM in the Service Industry <p>Human Resource Planning in Hospitality</p> <ul style="list-style-type: none"> • Manpower Planning- Concepts, techniques and need • Job Analysis, Job Description & Job Specification – format, • Need and importance • Recruitment – sources and modes 	9	3
Unit 2	<p>Human Resource Development</p> <ul style="list-style-type: none"> • Definition and Characteristics • Orientation & Induction • Training – Need & Importance • Training Process, need assessment, training programs • Methods and types of Training – need based and refresher • Training evaluation <p>Performance Management and Appraisal</p>	9	3

	<ul style="list-style-type: none"> • Performance Management – Need and importance • Performance Appraisal – Purpose, Methods and errors • Career management - Promotion & Transfers • Counseling 		
Unit 3	<p>Performance and Job Evaluation</p> <ul style="list-style-type: none"> • Performance evaluation and its objectives • Job Evaluation – concept and objectives, methods and benefits • Limitations of Job Evaluation • Competency matrix- concept , benefits and implementation in Hotels <p>Compensation Administration</p> <ul style="list-style-type: none"> • Objectives of Compensation Administration • Types of compensation – direct and indirect • Factors influencing compensation administration – external and internal, concept of Cost to Company (CTC) • Steps in formulation of compensation • Current trends in compensation – competency and skill based pay , broad banding 	9	3
Unit 4	<p>Incentive and Benefits</p> <ul style="list-style-type: none"> • Objectives of wage incentives • Wage incentive planning process • Types of incentive schemes in brief – straight piece rate, differential piece rate, task and time bonus, merit rating • Organization wide incentive plans – Profit sharing, employee stock ownership, stock option • Fringe Benefits- objectives and forms 	9	3
Unit 5	<p>Grievances & Discipline</p> <ul style="list-style-type: none"> • Grievance Handling – Identifying Causes • Developing Grievance Handling Systems • Discipline – Concept, Causes of Indiscipline • Women grievance committee- importance, role, functions 	9	3
Total Hours		45	15
	<ul style="list-style-type: none"> • Fundamentals of Human Resource Management – Content , Competencies and Applications - Gary Dessler and Biju Varkkey , Pearson • Human Resource Management – Pravin Durai- Pearson • Human Resource Management in Hospitality by Malay Biswas- Oxford • Human Resource Management – A textbook for the Hospitality Industry – Sudhir Andrews - Tata McGraw Hill • Human Resource Management in the Hospitality Industry - Frank M / Mary L Monochello • Human Resource Management & Human Relations – V P Michael • Personnel Management- Arun Monappa & S. Saiyudain- Tata McGraw Hill. • Personnel Management- Edwin B. Flippo, McGraw Hill 		
Course Outcome	<p>At the end of the course the students would be able to:</p> <ol style="list-style-type: none"> 1. Demonstrate various dishes preparation of different regional cuisine 2. Illustrate preparation of Indian desserts 3. Recall the key ingredients of the regional cuisine 4. Memorize the recipe of popular dishes 5. Solve grievances of the staff 		

PAN Asian Cuisine			Course Code : B.Sc-cul 404
Semester : IV	L/T/P (Per week)	3/1/0	Credits : 04

Objective Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Japanese Cuisine Rice preparations like Glutinous rice and Mochi, seafood delicacies like Sashimi, Tempura and Sushi, soups like Dashi and Sulmono, Noodles like Soba and Udon, Vegetable preparations like Tsukemono and Sunomono and Meat preparation like Sukiyaki.	9	3
Unit 2	Chinese Cuisine Characteristic dishes from various schools of cuisine as follows: <ul style="list-style-type: none"> • Cantonese – Chowmein, Dimsum and Char siubao. • Sanghai– Chi paoyu, Soy meat and steamed egg rolls. • Peking – Mongolian Fire Pot, Peking Duck and Moo Shu Pork. • Szechwan – Rice soup, Wonton and Szechuan chicken, Darsaan 	9	3
Unit 3	Korean Cuisine Famous dishes like Sang-chi-sam, Bulgogi, Glass noodles, Chao-mein, Clam casserole, Shrimp soup, Egg soup, Shin sulro, Stir fried rice, Tashima daikon, Sweet rice dessert.	9	3
Unit 4	Southeast Asian Cuisine (Includes cuisine of Thailand, Malaysia, Vietnam, Burma and Srilanka) Rice preparations like Pineapple rice and Coconut rice, Fish preparations like Shrimp Pepper curry and crab rolls, meat preparations like Red Thai curry, Chicken Satay and green curry	9	3
Unit 5	West Asian Cuisine (Includes cuisines from Arabian countries, Iran, Lebanon) Bread preparations like Challah, Pita and Lavosh, Meat dishes like Kibbish, Shawarma, Moussaka and Kabob, Vegetable preparations like Spanakopite, Falafel, Mummus, Tahini, Tabouli, Dolmas and desert like Baklava.	9	3
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • The Professional Pastry Chef, Friberg • The Wilton Ways of Cake Decorations, Hamlyn Publishing • Chocolate, Carolyn Humphries • International Cook Book, Cavendish House • Time - Life Series - The Cooking of Various countries • Food Around The World - Pearson 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Understand various dishes preparation of Japanese cuisine 2. Understand various dishes preparation of Chinese cuisine 3. Understand various dishes preparation of Korean cuisine 4. Understand various dishes preparation of Southeast Asian Cuisine 5. Understand various dishes preparation of West Asian Cuisine 		

Techniques of Pan Asian Cuisine			Course Code : B.Sc-cul 407P
Semester : IV	L/T/P (Per week)	0/0/4	Credits : 02

Objective		
Course Outline	Topic	Practical Hours
	Japanese Cuisine Rice preparations like Glutinous rice and Mochi, seafood delicacies like Sashimi, Tempura and Sushi, soups like Dashi and Sulmono, Noodles like Soba and Udon, Vegetable preparations like Tsukemono and Sunomono and Meat preparation like Sukiyaki.	12
	Chinese Cuisine Characteristic dishes from various schools of cuisine as follows: <ul style="list-style-type: none"> • Cantonese – Chowmein, Dimsum and Char siubao. • Sanghai– Chi paoyu, Soy meat and steamed egg rolls. • Peking – Mongolian Fire Pot, Peking Duck and Moo Shu Pork. • Szechwan – Rice soup, Wonton and Szechuan chicken, Darsaan 	12
	Korean Cuisine Famous dishes like Sang-chi-sam, Bulgogi, Glass noodles, Chao-mein, Clam casserole, Shrimp soup, Egg soup, Shin sulro, Stir fried rice, Tashima daikon, Sweet rice dessert.	12
	Southeast Asian Cuisine (Includes cuisine of Thailand, Malaysia, Vietnam, Burma and Srilanka) Rice preparations like Pineapple rice and Coconut rice, Fish preparations like Shrimp Pepper curry and crab rolls, meat preparations like Red Thai curry, Chicken Satay and green curry	12
	West Asian Cuisine (Includes cuisines from Arabian countries, Iran, Lebanon) Bread preparations like Challah, Pita and Lavosh, Meat dishes like Kibbish, Shawarma, Moussaka and Kabob, Vegetable preparations like Spanakopite, Falafel, Mummus, Tahini, Tabouli, Dolmas and desert like Baklava.	12
Total Hours		60
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Demonstrate various dishes preparation of Japanese cuisine 2. Demonstrate various dishes preparation of Chinese cuisine 3. Demonstrate various dishes preparation of Korean cuisine 4. Demonstrate various dishes preparation of Southeast Asian Cuisine 5. Demonstrate various dishes preparation of West Asian Cuisine 	

Contemporary European Cuisine			Course Code : B.Sc-cul 408P
Semester : IV	L/T/P (Per week)	0/0/4	Credits : 02

Objective		
Course Outline	Topic	Practical Hours
Unit 1	Scandinavian Cuisine: Fishkesuppe, Smorrebrod, Karelian Stew, ArterMedflask, Sillgratin, Lokdolmar, Frikadeller, Lanttulaatikko, Ris al' Amande, Spritsar	12
Unit 2	German Cuisine: German Schnitzel, Lamb Rouladen, Dumplings, Meat Balls, Sauerbraten, Creamed Spinach, Bratkartoffeln, Pfeffernuesse, Zwiebelkuchen	12
Unit 3	Belgian Cuisine: Carbonadeflamandeorstooflees, Sole meunière, Ham and endive gratin, Filet Americain, Moules frites, Stoemp, Belgian Chicken Waterzooi, Paling in'tgroen	12
Unit 4	Austrian Cuisine Wiener Schnitzel, Spaetzle, Wiener Schnitzel, Styrian Breaded Chicken Salad	12
Unit 5	Molecular Gastronomy	12
Total Hours		60
Course Outcome	At the end of the course the students would be able to:	
	<ol style="list-style-type: none"> 1. Demonstrate various dishes preparation of Scandinavian Cuisine 2. Demonstrate various dishes preparation of German Cuisine 3. Demonstrate various dishes preparation of Belgian Cuisine 4. Demonstrate various dishes preparation of Austrian Cuisine 5. Demonstrate various dishes preparation of Molecular Gastronomy 	

Advanced Techniques of Baking & Pastry (Practical)			Course Code : B.Sc-cul 409P
Semester : IV	L/T/P (Per week)	0/0/4	Credits : 02

Objective		
Course Outline	Topic	Practical Hours
	<ul style="list-style-type: none"> • Different types of icing and Celebration cake • Different types bakery sauce and Celebration cake 	12
	<ul style="list-style-type: none"> • Chocolate preparation • Trio of chocolate mousse • Tortacapre • Red velvet swiss roll 	12
	<ul style="list-style-type: none"> • Marzipan fruits • Tiramisu • Oprea pastry • Chocolate log • Clover leaf bread • Black olive ciabatta 	12
	<ul style="list-style-type: none"> • Yule log • Blue berry scone • Baked Alaska • Petit pain au chocolate 	12
	<ul style="list-style-type: none"> • Different types of Meringue product • Different type of flan and tarts 	12
Total Hours		60
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Demonstrate various dishes preparation of Icing & cake 2. Demonstrate various dishes preparation of Chocolate dishes 3. Demonstrate various dishes preparation of Pastry, tiramisu 4. Demonstrate various dishes preparation of Yule log, baked alaska Demonstrate various dishes preparation of Meringue, tarts	

Research Methodology			Course Code : B.Sc-cul 405
Semester : IV	L/T/P (Per week)	2/0/0	Credits : 02

Objective	Research has become an inevitable part of today's academic and professional world. Hospitality industry is no exception to this. This course aims at honing the research skills of the students by exposing them to the research environment and guiding them in the research process.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Fundamentals of Research <ul style="list-style-type: none"> • Meaning and definition of Research • Purpose of Research • Significance of Research Research problem and Designing the Title of research <ul style="list-style-type: none"> • Problem identification and defining problem • Points to be considered while selecting the topic and framing the title • Framing the research questions • Formulation of objectives • Hypothesis- definition, meaning, and framing 	6	0
Unit 2	Research Design <ul style="list-style-type: none"> • Meaning and definition of research design • Approach in research (Qualitative and Quantitative) • Research Process - Defining the research problem - Selection of data collection method – Identifying population - Selection of sample - Selection of method of analysis - Estimate the required resources – Data collection - Data Analysis - Report Drafting 	6	0
Unit 3	Data <ul style="list-style-type: none"> • PrimaryData <ul style="list-style-type: none"> ➤ Definition and significance ➤ Sources ➤ Method / tools of collecting primary data ➤ Types of questions ➤ Essentials of a good questionnaire designing • SecondaryData <ul style="list-style-type: none"> ➤ Definition and importance of sources ➤ Citation (bibliography in APA and MLA style for journal, books, newspapers, magazine) ➤ Writing literature review. ➤ Using . • Data collection methods- Observation, Experimental, Focus group, Case study & Survey <ul style="list-style-type: none"> ➤ Advantages & Limitations of various data collection methods 	6	0
Unit 4	Research Instrument <ul style="list-style-type: none"> • Questionnaire – Advantages & Limitations • Schedule - Advantages & Limitations Sampling Techniques	6	0

	<ul style="list-style-type: none"> • Concept of sampling – Advantages & Limitations • Definitions – Universe, Population, Sample, Sampling unit, Sampling Frame • Sampling Methods – Probability (Simple random, Systematic, Cluster.) • Characteristics of a good sample 		
Unit 5	<p>Processing and analyzing data</p> <ul style="list-style-type: none"> • Data processing (editing, classification, tabulation) • Data analysis (qualitative and quantitative-manual and using a computer) <p>Report Writing</p> <ul style="list-style-type: none"> • Principles of report writing • Stages and steps in report writing • Layout of a Report • Designing the presentation (PowerPoint) • Structure of Report – Introduction, Literature Review, Objectives • Study, Theoretical framework of the topic, Research Methodology, Scope 	6	0
Total Hours		30	00
Reference Books	<ul style="list-style-type: none"> • Research methodology- G.C. Ramamurthy • Research design and Methods- Kenneth s. Bordens and Bruce B. Abbott • Research Methodology- R. Panneerselvam • Project report writing- M.K Rampal and S.L Gupta • Business research methodology – Alan Bryman and Emma Bell. Oxford publishing house • Research methodology in management – Dr. V. P. Michael, Himalaya Publishing house • Business research methodology- J K Sachdeva, Himalaya Publishing house • Research Methodology, methods and technology– C R Kothari and Gaurav Garg, New Age International publication • Business Research Methodology- T N Srivastava and Shailaja Rego, Mc. Graw Hill 		
Course Outcome	<p>At the end of the course the students would be able to:</p> <ol style="list-style-type: none"> 1. Define research and its purpose 2. Explain research process 3. Summarize collected data 4. Choose research instruments 5. Analyze the data and present the report 		

Marketing of Services			Course Code : B.Sc-cul 406
Semester : IV	L/T/P (Per week)	2/0/0	Credits : 02

Objective	The subject aims to enable the students to enhance their ability to understand the concepts of Services Marketing with special focus on hospitality marketing and are able to apply it in service business. This course deals with the intricacies of services mix and the importance of
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	customer satisfaction through service quality.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Introduction to services <ul style="list-style-type: none"> • Definition • Characteristics of services • Management strategies for service business • Difference between goods and services • Emerging Scenario of Hospitality sector in India 	3	0
Unit 2	Services Marketing Mix – 7 Ps <ul style="list-style-type: none"> • Product <ul style="list-style-type: none"> ➤ Hospitality products ➤ Service lifecycle ➤ Development of new service product ➤ Product differentiation ➤ Definition and importance of branding • Place <ul style="list-style-type: none"> ➤ Distribution Channels for services ➤ Hospitality intermediaries and their role ➤ Functions of intermediaries in distribution of services • Promotion <ul style="list-style-type: none"> ➤ Tools of promotion in services marketing ➤ Introduction to Personnel selling, Advertising and sales promotion, PR and Publicity, Direct marketing, Social media network. ➤ Concept of e-commerce • Pricing <ul style="list-style-type: none"> ➤ Factors involved in pricing a service product ➤ Methods of pricing for hospitality products • People <ul style="list-style-type: none"> ➤ Key role of service employees in a service business ➤ Services Triad, Service profit chain ➤ Tools of Motivation and empowerment for employees ➤ Importance of internal Marketing • Physical Evidence <ul style="list-style-type: none"> ➤ Importance of physical evidence in service ➤ Elements of physical evidence (Exterior facilities, Interior facilities and other tangibles) • Process <ul style="list-style-type: none"> ➤ Service Encounter (Moment of Truth) ➤ Factors affecting the operations design ➤ Service Blue Print and its advantages 	9	0
Unit 3	Customer satisfaction <ul style="list-style-type: none"> • Customer satisfaction and its importance • Monitoring and measuring customer satisfaction • Service Recovery – Handling complaint effectively • Relationship Marketing and stages of relationship marketing 	6	0
Unit 4	Service Quality	6	0

	<ul style="list-style-type: none"> Define Service quality and its benefits Service quality model- Five Gap Model and strategies to overcome gaps Dimensions of Service quality 		
Unit 5	Managing Demand and Capacity <ul style="list-style-type: none"> Management strategies to manage changing demand Management strategies to manage supply Management strategies to manage productivity 	6	0
Total Hours		30	00
Reference Books	<ul style="list-style-type: none"> Services Marketing – M.K. Rampal & S.L. Gupta- Galgotia publishing concept, Application & Cases Co. New Delhi Marketing for Hospitality & tourism – Philip Kotler, Bouren & Makens Prentice – Hall Inc. Services Marketing – Kenneth Clow, David Kurtz, Big tantra – New Delhi Services Marketing Text and Cases by Steve Baron, Kim Harris, Toni Hilton, Published by Palgrave Macmillan Services marketing – Zeithaml, Bitner, Parashuraman 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> Differentiate between goods and services Explain 7 Ps of marketing Measure customer satisfaction and take necessary actions Discuss service quality Manage demand and supply 		

Kitchen Facilities Planning			Course Code : B.Sc-cul 501
Semester : V	L/T/P (Per week)	3/1/0	Credits : 04

Objective	The subject aims to impart to the student the basic knowledge and practices of Facility Planning.		
Course Outline	Topic	Practical Hours	
		Lecture	Tutorial
Unit 1	ENERGY MANAGEMENT: Background, energy pricing, energy cost control and building systems, reducing guest room energy costs, reducing food and beverage production and service energy costs, reducing boiler and chilling energy costs, energy management and conservation systems.	9	3
Unit 2	BUILDING AND EXTERIOR FACILITIES: Roof, exterior walls, windows and doors, structural frame, foundation elevators, storm water drainage systems, utilities, landscaping and grounds.	9	3

Unit 3	FOOD SERVICE PLANNING AND DESIGN: Concept development, feasibility, regulations, planning layout, receiving areas, storage areas, kitchen, office space, sample blue print.	9	3
Unit 4	KITCHEN AND STORES PLANNING AND DESIGN: Development process, feasibility studies, space allocation programme, operational criteria, budget, preliminary schedule, site design, Hotel design, guest rooms and suites, lobby, food and beverage outlets, function areas, recreational facilities, back of the house areas.	9	3
Unit 5	Perishables and Non Perishables; Hot and Cold Servings	9	3
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Hospitality Facilities management and Design By: David M. Stipanuk, Harold Roffmann Published: Educational Institute, AHMA • How things work-The Universal Encyclopedia of Machines, Volume 1&2 • The Management of Maintenance and Engineering Systems in the Hospitality Industry By: Frank D. Borsenik & Alan T. Stutts Published: John Wiley & Sons Inc. NY • Air Conditioning Engineering By: W.P. Jones Published: English Language Book Society/Edward Arnold 		
Course Outcome	<p>At the end of the course the students would be able to:</p> <ol style="list-style-type: none"> 1. Categorize different types of hotels 2. Design layout of restaurant and bar 3. Plan a kitchen layout and design 4. Discuss factors affecting F&B outlet design 5. Explain space management in Kitchen 		

Environmental Consciousness			Course Code : B.Sc-cul 502
Semester : V	L/T/P (Per week)	3/1/0	Credits : 04

Objective	The course aims to establish the importance of environmental issues. It provides insight on Environment Management in Hospitality Industry. It also helps students to understand the benefits of Eco-friendly practices to have a sustainable environment in daily operations of hotel.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Introduction to environmental studies <ul style="list-style-type: none"> • Multidisciplinary nature of environmental studies; components of environment – atmosphere, hydrosphere, lithosphere and biosphere. • Scope and importance; Concept of sustainability and sustainable development 	9	3
Unit 2	Ecosystems & Biodiversity and Conservation <ul style="list-style-type: none"> • What is an ecosystem? Structure and function of 	9	3

	<p>ecosystem; Energy flow in an ecosystem: food chain, food web and ecological succession. Case studies of the following ecosystems:</p> <p>a) Forest ecosystem b) Grassland ecosystem c) Desert ecosystem d) Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)</p> <ul style="list-style-type: none"> • Levels of biological diversity :genetic, species and ecosystem diversity; Biogeography zones of India; Global biodiversity hot spots • India as a mega-biodiversity nation; Endangered and endemic species of India • Threats to biodiversity: habitat loss, poaching of wildlife, man-wildlife conflicts, biological invasions; Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity. • Ecosystem and biodiversity services: Ecological, economic, social, ethical, aesthetic and Informational value. 		
Unit 3	<p>Natural Resources: Renewable and Non- renewable Resources</p> <ul style="list-style-type: none"> • Land Resources and land use change; Land degradation, soil erosion and desertification. • Deforestation: Causes and impacts due to mining, dam building on environment, forests, biodiversity and tribal populations. • Water: Use and over-exploitation of surface and ground water, floods, droughts, conflicts over water (international & inter- state). • Heating of earth and circulation of air; air mass formation and precipitation. • Energy resources: Renewable and non- renewable energy sources, use of alternate energy sources, growing energy needs, case studies. 	9	3
Unit 4	<p>Environmental Pollution</p> <ul style="list-style-type: none"> • Environmental pollution : types, causes, effects and controls; Air, water, soil, chemical and noise pollution • Nuclear hazards and human health risks • Solid waste management: Control measures of urban and industrial waste. • Pollution case studies. • Climate change, global warming, ozone layer depletion, acid rain and impacts on human communities and agriculture. 	9	3
Unit 5	<p>Environmental Policies , Human Communities, Practices and the Environment</p> <ul style="list-style-type: none"> • Environment Laws : Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act; International agreements; 	9	3

	<p>Montreal and Kyoto protocols and conservation on Biological Diversity (CBD). The Chemical Weapons Convention(CWC).</p> <ul style="list-style-type: none"> • Nature reserves, tribal population and rights, and human, wildlife conflicts in Indian context • Human population and growth: Impact on environment, human health and welfares. • Carbonfoot-print. • Resettlement and rehabilitation of project affected persons; case studies. • Disaster management: floods, earthquakes, cyclones and landslides. • Environmental movements: Chipko, Silent valley, Bishnios of Rajasthan. • Environmental ethics: Role of Indian and other religions and cultures in environmental conservation. • Environmental communication and public awareness, case studies (e.g., CNG vehicles in Delhi). 		
Total Hours		45	15
Reference Books	<ol style="list-style-type: none"> 1. Carson, R. 2002. Silent Spring. Houghton Mifflin Harcourt. 2. Gadgil, M., & Guha, R. 1993. This Fissured Land: An Ecological History of India. Univ. of California Press. 3. Gleeson, B. and Low, N. (eds.) 1999. Global Ethics and Environment, London, Routledge. 4. Gleick, P.H. 1993. Water in Crisis. Pacific Institute for Studies in Dev., Environment & Security. Stockholm Env. Institute, Oxford Univ. Press. 		
Course Outcome	<p>At the end of the course the students would be able to:</p> <ol style="list-style-type: none"> 1. Recall environmental practices and policies in the hospitality industry 2. Create a process for water management 3. Propose measures to control air and noise pollution 4. Discuss the need of materials and waste management 5. Plan guidelines and eco- practices to be implemented in all the departments of the hotel 		

Entrepreneurship and Restaurant Start up			Course Code : B.Sc-cul 503
Semester : V	L/T/P (Per week)	3/1/0	Credits : 04

Objective	The course delves into various aspects of starting business, including idea generation. It highlights the importance of developing a business plan and elaborates the laws and regulations and the social responsibility important for a start-up.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Entrepreneur, Entrepreneurship <ul style="list-style-type: none"> • Definition of an Entrepreneur, Entrepreneurship • Concept of Entrepreneurship - Contribution of Mc Clelland and Joseph Schumpeter 		

	<ul style="list-style-type: none"> • Reasons for growth of Entrepreneurship • Entrepreneurial Characteristics and Skills • Types of Entrepreneur • Entrepreneurial Failure and pitfalls (Peter Drucker) • Entrepreneurs Vs Entrepreneurship 	6	2
Unit 2	<p>Ideas generation and evaluation</p> <ul style="list-style-type: none"> • Sources of business idea • Evaluation of the idea • Analysis of the market • SWOT analysis <p>Emergence of Women Entrepreneurs</p> <ul style="list-style-type: none"> • Definition by GOI (Government of India) • Importance of Women Entrepreneurship • Problems faced by women entrepreneurs • Program for promoting women entrepreneurship – SWASHAKTI, Rashtriya Mahila Kosh, Federation of Indian Women Entrepreneurs 	12	4
Unit 3	<p>The Entrepreneurial Process</p> <ul style="list-style-type: none"> • Identify and Evaluate the Opportunity <ul style="list-style-type: none"> ➤ Establish Vision ➤ Persuade others ➤ Gather Resources ➤ Create new venture/product or market ➤ Change, Adopt with time • Marketing Plan <ul style="list-style-type: none"> ➤ Understanding marketing plan ➤ Characteristics of a marketing plan • Human Resource Plan <ul style="list-style-type: none"> ➤ Manpower Planning ➤ Recruitment, Selection & Training 	12	4
Unit 4	<p>Financing the new venture</p> <ul style="list-style-type: none"> • Sources of Finance <ul style="list-style-type: none"> ➤ Internal or External funds ➤ Personal funds ➤ Family and friends ➤ Commercial Banks ➤ Various Financial Institutions- SIDBI, NABARD, IDBI. <p>Intellectual Property</p> <ul style="list-style-type: none"> • Definition- Intellectual Property, Trademark, Patent, Copyright and Geographical Indication. • Quality Standards – Definition (ISI, Agmark, FDA) 	6	2
Unit 5	<p>Growth and Social Responsibility</p> <ul style="list-style-type: none"> • Growth- Stages of growth (Coming into existence, Survival, Success, Take-off, Consolidation) • Growth strategies- Diversification, launching New Product in Same Market, Joint Ventures, Mergers and Acquisitions, Franchising, E-Commerce • Financial Growth- Internal accruals, contributing own equity, Venture capital, Bank finance, taking on new partners 	9	3

	<ul style="list-style-type: none"> • Reasons for Exiting • Social Responsibility- <ul style="list-style-type: none"> ➤ Definition by European Union ➤ Corporate Social Responsibility (CSR) and Increased focus on CSR ➤ Social Entrepreneur – Definition and Role 		
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Entrepreneurship – Rajeev Roy – Oxford Higher Education • Entrepreneurship Development Small Business Enterprises by Poornima M Charantimath • Entrepreneurship – Excel Books – Madhurima Lal, Shikha Sahai (Chapter 3.4, 5) • Principles of Entrepreneurship – Prof. Satish C. Ailawadi, Mrs. Romy Banerjee.- Everest Publishing House • Entrepreneurship– Robert D Hisrich, Michael P. Peters, Dean A Shepherd Tata McGraw Hill Education Private Limited, New Delhi, Sixth Edition. (Chapter 4.1, 4.2) • Entrepreneurship Management- Prof. Shagufta Sayyed, Nirali Prakashan. (Chapter 1.6) • Entrepreneurship Development- S. Khanka 		
Course Outcome	<p>At the end of the course the students would be able to:</p> <ol style="list-style-type: none"> 1. Differentiate entrepreneur, entrepreneurship 2. Generate and evaluate ideas 3. Identify entrepreneurial process 4. Use source of finance to start entrepreneurship 5. Explain the importance and responsibilities of entrepreneur and entrepreneurship 		

Food Safety Management			Course Code : B.Sc-cul 504
Semester : V	L/T/P (Per week)	3/1/0	Credits : 04

Objective	Course Outline	Topic		Hours	
		Lecture	Tutorial	Lecture	Tutorial
Unit 1	Standard Operating Procedures Preparing scope, quality policy and quality objectives of food processing company, Defining Standard operating procedure – purpose- Format -developing and implementing, effective writing. SOP for purchasing raw materials, receiving raw materials, storage, cleaning, holding, cooling, freezing, thawing, reheating, personal hygiene, facility and equipments. Systems in laboratory accreditation ; Food as a tourism Product	9	3		
UNIT 2	Audit Check List Preparation of HACCP based SOP checklist - personal hygiene, food preparation, hot holding, cold holding, refrigerator, freezer and milk cooler, food storage and dry storage, cleaning and sanitizing, utensils and equipments, large equipments, garbage storage and disposal and pest control.	9	3		
UNIT 3	Pre-requisite Program Good Manufacturing Practices -Personal hygiene – occupational health and safety specification, Food Plant Sanitation Management - Plant facilities construction and maintenance - exterior of the building- interior of the building-	9	3		

	equipments. Storage, transportation, traceability, recalling procedures, training.		
UNIT 4	HACCP principle Conduct a hazard analysis, CCP identification, establish critical limits for each CCP, establish CCP monitoring procedures, establish corrective actions procedures, establish procedures for HACCP verification and validation, documenting the HACCP Program.	9	3
UNIT 5	Implementation of HACCP and conducting audit HACCP for jam, biscuit, bread, dairy, meat, fish and egg industries. Conducting of open meeting and close meeting in auditing, preparation of audit reports for different departmentaudit exercise	9	3
Total Hours		45	15
Reference Books	<ol style="list-style-type: none"> 1. Andres Vasconcellos J. 2005. Quality Assurance for the Food industry - A practical approach. CRC press. 2. InteazAlli. 2004. Food quality assurance - Principles & practices. CRC Press. New York. 3. Sara Mortimore and Carol Wallace. 2013. HACCP - A practical approach. Third edition. Chapman and Hall, London. 4. Roday, S. 1998. Food Hygiene and Sanitation, Tata McGraw-Hill Education. 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Explain Food safety SOPs 2. Understand HACCP 3. Understand Good Manufacturing & hygiene Practices 4. Explain HACCP hazard analysis 5. Understand HACCP audits 		

Food Photography & Presentation			Course Code : B.Sc-cul 505
Semester : V	L/T/P (Per week)	3/1/0	Credits : 04

Objective	The aim of food photography course is to gain basic knowledge and skills about food styling and food photography.		
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	<ul style="list-style-type: none"> • Intro to Food Photography • Understanding need of food styling • Equipments used for photography • Equipments used for food styling 	6	2
Unit 2	Basics of camera - types of cameras - types of lenses Functions of camera - ISO - Camera Shutter speed - Camera Aperture	9	3
Unit 3	Types of Lighting <ul style="list-style-type: none"> • Natural Lighting • Artificial Lighting • Hard Light & Soft light • Principals of lights 	9	4

Unit 4	Food Styling <ul style="list-style-type: none"> • Photography work area establishment • Shot Plan • Scene Creation & Plate design • Use of props, backgrounds, surfaces and linens • Food styling for capturing tempting images of: <ul style="list-style-type: none"> ➤ cereals with milk for breakfast ➤ chilled fruit juices & cocktails ➤ vegetable salad ➤ ice cream scoops ➤ burger ➤ pull cheeses pizza ➤ panner tikka/gravy dishes ➤ sea food ➤ Biryani/ Meat dishes 	12	3
Unit 5	Picture Processing with Adobe Photoshop <ul style="list-style-type: none"> • File compatibility • Colour corrections and image adjustments • Colour space • Photo manipulation and photo effects • Tricks and tips used in Adobe Photoshop for food photo editing • Backup and storage • Copyrighting 	9	3
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Dujardin, H., “Plate to Pixel, Digital food Photography & Styling”, Wiley Publishing, 2011, ISBN: 978-0-470-93213-1. • Bellingham, L., & Bybee, J. A., “Food styling for photographers: A guide to creating your own appetizing art”, CRC Press, 2008, ISBN 13: 978-0-240-81006-5. • Young Nicole S., “Food Photography: From Snapshots to Great Shots”, Peachpit Press, ISBN 13: 978-0-321-78411-7 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Explain basic photography knowledge and DSLR usage. 2. Create a table composition for photographing the products. 3. Define special shooting techniques for food photography. 4. Apply the use of natural light to photograph tabletop objects with the necessary light settings. 5. Explain the importance of pre-shoot planning in food photography. 6. Apply plate preparation techniques for the camera. 7. Use photo editing techniques in various applications. 		

Institutional, Hospital & Industrial Catering			Course Code : B.Sc-cul 506
Semester :V	L/T/P (Per week)	3/1/0	Credits : 04

Objective Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Introduction to the Catering Industry: <ul style="list-style-type: none"> • History of Catering Industry • Introduction and growth of catering-industry. • Career opportunities in Catering Industry 	9	3
Unit 2	Classification of catering establishments: <ul style="list-style-type: none"> • Commercial • Transport • Welfare • Industrial • Hospital • Institutional Profit oriented, Running on break-even & Subsidized catering	6	2
Unit 3	Planning & organizing Catering establishment <ul style="list-style-type: none"> • Infrastructure • Licenses • Equipments • Transportation • Establishment suppliers • Food purchase storage and handling • Pricing technique • Role of Dietician • Manpower planning 	9	3
Unit 4	Menu Considerations <ul style="list-style-type: none"> • Cyclic menu for regular meals and limited choice in canteens. • Nutritional requirements are kept in mind while planning the menu. • Reasonable prices consistent with the service offered. • Menus are relatively simple, which can be prepared by limited kitchen staff in a limited time.Special menus prepared for a special occasion like festivals, functions, and parties. 	9	3
Unit 5	Hospital Catering <ul style="list-style-type: none"> • Introduction to Hospital Catering • Different Types of Diets • Kitchen Planning • Food Service in Hospital • Menu in Government & Private Hospitals 	12	4
Total Hours		45	15

Reference Books	<ul style="list-style-type: none">• Catering Management: Sethi & Malhan, New Age International Publishers• The Theory of Catering: Ceserani & Kinton, Hodder Headline & Stoughton (Publisher)
E-Content	<ul style="list-style-type: none">• www.slideshare.net
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none">1. Classification of Catering Industry & their scope2. Menu planning in various catering establishments3. Menu Pricing4. Hospital Catering, types of diets for patients.

Confectionary, Chocolaterie & Sugar Craft			Course Code : B.Sc-cul 507
Semester : V	L/T/P (Per week)	3/1/0	Credits : 04

Objective			
Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Confectionary <ul style="list-style-type: none"> • Introduction • Cake Making Methods • Cake Faults Icings <ul style="list-style-type: none"> • Introduction to Icings • Definition & Uses • Classification (Flat & Fluffy) • Ingredients used in preparation of Icings 	9	3
Unit 2	Pastry Introduction Types of Pastries Cold desserts	6	2
Unit 3	Chocolaterie Introduction Chocolate Tampering Chocolate Based Desserts	9	3
Unit 4	Decorative Work <ul style="list-style-type: none"> • Making Marzipan & modeling chocolate decorations • Chocolate cigarettes & fans • Proper Sanitation and correct storage practices for garnishes • Chocolate Candies • Liquor Chocolate • Molded Chocolate • Ganache 	9	3
Unit 5	Sugar Crafting <ul style="list-style-type: none"> • Introduction • Sugar Tampering • Decorative Sugar pieces • Types of Sugar Candies 	12	4
Total Hours		45	15
Reference Books	<ul style="list-style-type: none"> • Textbook of Bakery and Confectionery: Yogambal Ashokkumar, PHI Learning Pvt. Ltd • A Professional Text To Bakery And Confectionary: John Kingslee, New Age International Pvt. Ltd. Publishers 		
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Explain Cake making methods 2. Icings & its uses 3. Pastry categorisation and pastry making 4. Chocolate making, tampering & chocolate desserts 5. Sugar tampering & candies. 		

Art of Garde Manger			Course Code : B.Sc-cul 509P
Semester : V	L/T/P (Per week)	0/0/4	Credits : 02

Objective		
Course Outline	Topic	Practical Hours
	Preparation of various simple and compound Horsd'oeuvres : <ul style="list-style-type: none"> • Simple salads - 5 varieties • Compound Salads: • Fruit based - 5 varieties • Fish based - 5 varieties • Meat based - 5 varieties • Vegetable based - 5 varieties • Preparation of salad dressings – 5 varieties 	20
	Butchery : <ol style="list-style-type: none"> a) Lamb and Mutton – Demonstration of jointing mutton carcasses. b) Deboning of mutton leg and shoulder. c) Curry cuts and boti kababs. 	20
	<ul style="list-style-type: none"> • Pork – Demonstration and preparation of pork chops, deboning of pork leg. • Fish – cuts of fish and its use in cold buffets. • Poultry – Dressing, trussing and deboning. 	20
Total Hours		60
Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Explain Horsd'oeuvres making methods 2. Understand butchery section work 3. Understand meat cookery 	

Food & Beverage – Alcoholic & Non Alcoholic			Course Code : B.Sc-cul 510P
Semester : I	L/T/P (Per week)	0/0/4	Credits : 02

Objective		
Course Outline	Topic	Practical Hours
	Preparation of various Cocktails: <ul style="list-style-type: none"> • Whisky Based - 5 varieties • Rum based - 5 varieties • Gin based - 5 varieties • Vodka based - 5 varieties • Tequila based - 5 varieties 	30
	<ul style="list-style-type: none"> • Mocktails – 10 varieties 	15
	<ul style="list-style-type: none"> • Gueridon Service: Crepe suzette; Banana Flambe; Rum Omelette; Flaring 	15
Total Hours		60

Course Outcome	At the end of the course the students would be able to: <ol style="list-style-type: none"> 1. Explain cocktail making methods 2. Explain mocktail making methods 3. Understand Gueridon Service
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Principles of Management			Course Code : B.Sc-cul 508
Semester : V	L/T/P (Per week)	3/1/0	Credits : 04

Objective	To familiarize the students with the basic concepts and principles of management. The students should clearly understand the definitions of different areas of management. This course will facilitate students to understand and describe specific theories related to perception, motivation, leadership, job design, and organizational change. Also this will help the student to demonstrate effective teamwork behaviour by learning the concept of group dynamics and conflict management. The course will help them evaluate methods of motivating and rewarding individuals & group and integrate individual, group, and organizational level concepts.
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Course Outline	Topic	Hours	
		Lecture	Tutorial
Unit 1	Evolution of Management Thought : <ul style="list-style-type: none"> • Scientific Management • Classical Organization Theory School • Management Science School • Behavioral School • Systems Approach and Contingency Approach. Concept of Management: <ul style="list-style-type: none"> • Definition, Need, Concept and Nature of Management • Skills & Management Levels • Managing in Present Competitive Environment. 	6	2
UNIT 2	Process of Management: <ul style="list-style-type: none"> • Planning • Organizing- departmentalization, Line and Staff relationship • Directing • Coordinating &Controlling • Decision Making • Authority and Responsibility. 	12	4
UNIT 3	Elements of Human Behavior at Work: <ul style="list-style-type: none"> • Definition, Concept, Need, Importance and Foundations of Organizational Behavior • Personality, Perceptual Processes • Management and Behavioral applications of Personality, and Perception 	12	4
UNIT 4	Psychological Variables and Communication Technology: <ul style="list-style-type: none"> • Learning • Values and Attitudes • Motivation • Management and Behavioral Applications of Attitude and Motivation on Performance. 	6	2
UNIT 5	Leadership :	9	3

	<ul style="list-style-type: none"> • Style and Functions of Leader, Transformational - Transactional, Charismatic-Visionary Leadership • Likert's Four Systems of Leadership and Managerial Grid. <p>Organizational Conflict:</p> <ul style="list-style-type: none"> • Concept and classification • Process and conflict resolution strategies <p>Organizational Culture: Concept, Process and Implications of Organizational Culture</p>		
Total Hours		45	15
Reference Books	<ol style="list-style-type: none"> 1. VSP RAO-Managing Organization (EXCEL 1EDITION) 2. Chaturvedi& Saxena -Managing Organization (Himalaya Publication) 3. Stoner, Freeman & Gilbert Jr - Management (Prentice Hall of India,6th Edition) 4. Robbins-Organization Behavior -15 e Prentice hall 5. Koontz Harold &Weihrich Heinz – Essentials of management (Tata McGraw Hill, 5th Edition2008) 		
Course Outcome	<p>At the end of the course the students would be able to:</p> <ol style="list-style-type: none"> 1. Explain scientific management and concept of management 2. Apply process of management in daily operations 3. Recognize human behavior 4. Choose different motivation theories to improve performance 5. Develop leadership qualities 		

Industrial Exposure			Course Code : B.Sc-cul 601
Semester : VI	L/T/P (Per week)	0/0/48	Credits : 24

Objective	Objective of doing the Industrial Training is to learn various section and types of food production areas.	
Course Outline	Topic	Practical Hours
	<p>The student has to observe the following things during Industrial Exposure:</p> <ol style="list-style-type: none"> 1. Area & Layout of the Kitchen 2. Study of Standard Recipes 3. Indenting, Receiving & Storing 4. Preparing of batters, marinating and seasonings 5. All cuts of meat and butchery items (Mutton, poultry, beef, fish etc.) 6. Daily procedure of handover from shift to shift 7. Recipes and methods of preparation of all sauces 8. Quantities of preparation, weekly preparations and time scheduling 9. Stock preparation and cooking time involved 10. Cutting of all garnishes 11. Temperatures and proper usage of all equipment 12. Plate presentations for all room service and a la cart orders 13. Cleaning and proper upkeep of hot range 14. Cleanliness and proper upkeep of the kitchen area and all equipment 15. Yield of fresh juice from sweet lime /oranges 16. Storage of different mise-en-place – (Raw, Semi-Processed) 17. Bulk preparations 18. Finishing of buffet dishes 	

	19. Recipes of at least 10 fast moving dishes 20. Mise-en-place for: A la Carte Kitchen & Banquet Kitchen 21. Rechauffe/ Left over Cooking	
Total Hours		720
Course Outcome	At the end of the course the students would be able to: 1. Get familiarized with various technological trends, approaches and applications. 2. Demonstrate understanding of relevant application oriented subjects in a better perspective 3. Describe the scope, functions and job responsibilities of various staff in the departments 4. Get awareness and exposure to industrial work environment 5. Work upon industrial project in a team.	

Log Book & Presentation			Course Code : B.Sc-cul 602
Semester : VI	L/T/P (Per week)	0/0/2	Credits : 1

Objective	The concept of maintaining the Log Book & Presentation is to prepare presentation skills in the students who have undergone industrial exposure		
Course Outline	Topic	Practical Hours	
	Student will write down observations and daily learning in the log book for systematic learning through observation and documentation.		
Total Hours			30
Course Outcome	At the end of the course the students would be able to: 1. Write a report on what has been observed 2. Create documentation on industrial training 3. Develop observation skills		