

SENGAMALA THAYAAR EDUCATIONAL TRUST WOMEN'S COLLEGE (AUTONOMOUS)

(Affiliated to Bharathidasan University, Tiruchirappalli)
Accredited by NAAC-An ISO 9001:2015 Certified Institution
SUNDARAKKOTTAI, MANNARGUDI-614016.
TAMILNADU, INDIA.

M.Sc.,FOOD SERVICE MANAGEMENT AND DIETETICS CHOICE BASED CREDIT SYSTEM - LEARNINIG OUTCOME BASED CURRICULUM FRAMEWORK (CBCS-LOCF)

(For the candidates admitted in the academic year 2023-2024)

CHOICE BASED CREDIT SYSTEM

The credit based semester system provides flexibility in designing curriculum and assigning credits based on the course content and hours of teaching. The choice based credit system provides a 'cafeteria' type approach in which the students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning. Our College hasmoved to CBCS and implemented the grading system.

OUTCOME-BASED EDUCATION (OBE) LEARNING OUTCOME-BASED CURRICULUM FRAMEWORK (LOCF)

The fundamental premise underlying the learning outcomes-based approach to curriculum planning and development is that higher education qualifications are awarded on the basis of demonstrated achievement of outcomes (expressed in terms of knowledge, understanding, skills, attitudes and values) and academic standards expected of graduates of a programme of study. Learning outcomes specify what graduates completing a particular programme of study are expected to know, understand and be able to do at the end of their programme of study. The expected learning outcomes are used as reference points that would help to formulate graduate attributes, qualification descriptors, programme learning outcomes and course learning outcomes which in turn will help in curriculum planning and development, and in the design, delivery and review of academic programmes. They provide general guidance for articulating the essential learnings associated with programmes of study and courses with in a programme, maintain national standards and international comparability of learning outcomes and academic standards to ensure global competitiveness, and to facilitate student/graduate mobility and provide higher education institutions an important point of reference for designing teaching-learning strategies, assessing student learning levels, and periodic review of programmes and academic standards.

Some important aspects of the Outcome Based Education

Course: is defined as a theory, practical or theory cum practical subject studied in a semester.

Course Outcomes (COs): are statements that describe significant and essential learning that learners have achieved, and can reliably demonstrate at the end of a course. Generally three or more course outcomes may be specified for each course based on its weightage.

Programme: is defined as the specialization or discipline of a Degree.

Programme Outcomes (POs): Programme outcomes are narrower statements that describe what students are expected to be able to do by the time of graduation. POs are expected to be aligned closely with Graduate Attributes.

Programme Specific Outcomes (PSOs): PSOs are what the students should be able to do at the time of graduation with reference to a specific discipline.

Some important terminologies repeatedly used in LOCF.

Core Courses (CC): A course, which should compulsorily be studied by a candidate as a core requirement is termed as a Core course. These are the courses which provide basic understanding of their main discipline. In order to maintain a requisite standard certain core courses must be included in an academic program. This helps in providing a universal recognition to the said academic program.

Discipline Specific Elective Courses (DSE): Elective course may be offered by the main discipline/subject of study is referred to as Discipline Specific Elective (DSE). These courses offer the flexibility of selection of options from a pool of courses. These are considered specialized or advanced to that particular programme and provide extensive exposure in the area chosen; these are also more applied in nature.

Generic Elective Courses: An elective course chosen generally from an unrelated discipline/subject, with an intention to seek exposure is called a Generic Elective. Generic Elective courses are designed for the students of other disciplines. Thus, as per the CBCS policy, the students pursuing particular disciplines would have to optGeneric Elective courses offered by other disciplines, as per the basket of courses offered by the college. The scope of the Generic Elective (GE) Courses is positively related to the diversity of disciplines in which programmes are being offered by the college.

Non Major Elective (NME): A student shall choose at least two Non-major Elective Courses (NME) from outside his/her department.

Skill Enhancement Courses (SECs): These courses focus on developing skills or proficiencies in the student, and aim at providing hands-on training. Skill enhancement courses can be opted by the students of any other discipline, but are highly suitable for students pursuing their academic programme. These courses may be chosen from a pool of courses designed to provide value-based and/or skill-based knowledge.

Field Study/Industrial Visit/Case Study: It has to be completed during the fifth semester of the degree programme. Credit for this course will be entered in the fifth semester's marks statement.

Internship: Students must complete internship during summer holidays after the fourth semester. They have to submit a report of internship training with the necessary documents and have to appear for a viva-voce examination during fifth semester. Credit for internship will be entered in the fifth semester's mark statement.

Extra Credit Courses: In order to facilitate the students, gaining knowledge/skills by attending online courses MOOC, credits are awarded as extra credits, the extra credit are at three semesters after verifying the course completion certificates. According to the guidelines of UGC, the students are encouraged to avail this option of enriching their knowledge by enrolling themselves in the Massive Open Online Courses (MOOC) provided by various portals such as SWAYAM, NPTEL, etc.

Postgraduate Programme:

Programme Pattern: The Post Graduate degree programme consists of **FIVE** vital components. They are as follows:

Part –A : Core Course (Theory, Practicals) Core Industry Module, Core Project

Part-B (i) : Elective courses

Part-B (ii) : Non Major Elective, Skill Enhancement course, Professional Competency course

Part-B (iii) : Internship
Part -C : Extension activity

EXAMINATION

Continuous Internal Assessment (CIA):

PG - Distribution of CIA Marks

Passing Minimum: 50 %

Assignments -3 = 30%Tests- 2 = 50%Seminar = 10%Attendance = 10%

Question Paper Pattern

Part A: includes two subsections

Part A 1 (10X1=10 marks)

One word question/ Fill in/ True or False/ Multiple Choice Questions Two Questions from Each unit

Part A 2(5X2=10 marks)

Match the following

Short Answers

One question from Each unit

Total Marks - 20

Part B: (5X5=25 marks)

Paragraph Answers

Either/ or type, One Question from each unit

Part C: (10X3=30) Essay Type Answers Answer 3 out of 5 Questions One Question from each unit

Part A: K1 Level

Part B: K2, K3 and K4 Level **Part C**: K5 and K6 Level

Knowledge levels for assessment of Outcomes based on Blooms Taxonomy

S.No.	Level	Parameter	Description
1	K1	Knowledge/Remembering	It is the ability to remember the previously learned
2	K2	Comprehension/ Understanding	The learner explains ideas or concepts
3	K3	Application/Applying	The learner uses information in a new way
4	K4	Analysis/Analysing	The learner distinguishes among different parts
5	K5	Evaluation/Evaluating	The learner justifies a stand or decision
6	K6	Synthesis/Creating	The learner creates a new product or point of view

WEIGHTAGE of K -LEVELS IN QUESTION PAPER

(Cognitive Level)	Lower (ower Order Thinking			Higher Order Thinking				
K-LEVELS →	K1	K2	К3	K4	K5	K6	Total		
END SEMESTER	20		25			30	75		
EXAMINATIONS (ESE)									
Continuous Internal Assessment	20		25			30	75		
(CIA)									

QUESTION PATTERN FOR END SEMESTER EXAMINATION/ Continuous Internal Assessment							
PART		MARKS					
PART –A I. (No choice, One Mark)TWO questions from each unit	(10x1=10)	20					
II. (No choice, Two Mark) ONE question from each unit	(5x2=10)						
PART – B (Either / or type,5-Marks) ONE question from each unit	(5x5=25)	25					
PART –C (3 out of 5) (10Marks) ONE question from each unit	(3x10=30)	30					
	Total	75					

BLUEPRINT OF QUESTION PAPER FOR END SEMESTER EXAMINATION									
DURATION: 3.00 Hours.					N	Iax M	ark :75		
K-LEVELS	K1	K2	K3	K4	K5	K6	Total		
PART							Marks		
PART –A(One Mark, No choice) (10x1=10)	10						10		
(2-Marks, Nochoice) (5x2=10)	10						10		
PART –B(5-Marks) (Either/or type) (5x5=25)		5	10	10			25		
PART –C (10 Marks) (3 out of 5) (3x10=30)					20	10			
Courses having only K5,K6 levels, K5 level- 3							30		
Questions, K6 level- 2 Questions									
(One K6 level question is compulsory)									
Total	20	05	10	10	20	10	75		

EVALUATION

GRADING SYSTEM

Once the marks of the CIA and the end-semester examination for each of the courses are available, they will be added and converted as final mark. The marks thus obtained will then be graded as per the scheme provided in Table-1.

Grade Point Average (GPA) will be calculated from the first semester onwards for all semester. From the second semester onwards, the total performance with in a semester and the continuous performance starting from the first semester are indicated by semester Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA) , respectively. These two are calculated by the following formulae:

$$\begin{array}{c|c} & \sum C_{i}^{n}G_{i} & \sum C_{i}M_{i} \\ \hline & \sum C_{i}M_{i} & \\ \hline & \sum C_{i} \\ \hline & \sum C_{i} \\ \hline & I=1 & \\ \hline & WAM(Weighted Average Marks)= \stackrel{i=1}{=} \\ \hline & & \sum C_{i} \\ \hline & & \sum C_{i} \\ \hline & & \\$$

G_iis the Grade Point obtained by the student for the Coursei

M_iis the marks obtained for the coursei and

n is the number of Courses **Passed** in that semester.

CGPA: Average GPA of all the Courses starting from the first semester to the current semester.

CLASSIFICATION OF FINAL RESULTS:

- i. The classification of final results shall be based on the CGPA, as indicated in Table-2.
- ii. For the purpose of Classification of Final Results, the candidates who earn the CGPA 9.00 and above shall be declared to have qualified for the Degree as 'Outstanding'. Similarly the candidates who earn the CGPA between 8.00 and 8.99, 7.00 and 7.99, 6.00 and 6.99 and 5.00 and 5.99 shall be declared to have qualified for their Degree in the respective programmes as 'Excellent', 'Very Good', 'Good', and 'Above Average' respectively.
- iii. Absence from an examination shall not be taken an attempt.

Table- 1: Grading of the Courses

Marks Range	Grade Point	Corresponding Grade
90 and above	10	О
80 and above and below 90	9	A+
70 and above and below 80	8	A
60 and above and below 70	7	B+
50 and above and below 60	6	В
Below 50	NA	RA

NA- Not Applicable, RA- Reappearance

The candidates performance in every current semester is indicated by **Semester Grade Point Average (SGPA)** and from the second semester onwards, the continuous performance including previous semester/s is indicated by **Cumulative Grade Point Average (CGPA)**

Table-2: Final Result

CGPA	Corresponding Grade	Classification of Final Result
9.00 and above	0	Outstanding
8.00 to 8.99	A+	Excellent
7.00 to 7.99	A	Very Good
6.00 to 6.99	B+	Good
5.00 to 5.99	В	Above Average

^{*}The candidates who have passed in the first appearance and within the prescribed duration of the PG Programme are eligible. If the candidate's Grade is O/A+ with more than one attempt, the performance is fixed as "Very Good"

Vision

Providing value based education in Nutritional Sciences, Dietetics and Public Health Nutrition to the rural women students to construct the healthy and blooming society.

Mission

- Mentoring the students by imparting skill based knowledge to suit hospital and hospitality
- Industry requirements and promote a healthy society Conscientise the students on food, nutrition and diet and to develop entrepreneurial skills for self employment

PROGRAMME OUTCOMES FOR M.Sc., DEGREE PROGRAMMES

PRU	DGRAMME OUTCOMES FOR M.Sc., DEGREE PROGRAMMES
PO.No	Programme Outcomes
	(Upon completion of the M.Sc., Degree Programme, the Post graduate will be able to)
	Disciplinary Knowledge : demonstrate in-depth knowledge and understanding of
PO-1	theories, policies, and practices in one or more disciplines that form a part of a Post
	Graduate program of study in Master of Science.
	Critical Thinking and Problem Solving: apply analytic thought to a body of knowledge,
	analyse and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence, identify
PO-2	relevant assumptions or implications, formulate coherent arguments, critically evaluate practices,
102	policies and theories by following scientific approach to knowledge development: solve problems
	and extrapolate the same to real life situation
	Information/digital literacy and Communication Skills: use ICT in a variety of learning
	situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources,
PO-3	and use appropriate software for analysis of data: communicate thoughts and ideas analytically and
	effectively in writing and orally using appropriate media, and present complex information in a clear
	and concise manner to different groups.
	Research-related skills: conduct independent inquiry in a chosen scientific discipline, demonstrate
	sense of inquiry and capability for asking relevant/appropriate questions, problematising, synthesizing
PO-4	and articulating; recognize cause-and-effect relationships, define problems, formulate hypotheses, test
	hypotheses, analyse, interpret and draw conclusions from data, establish hypotheses, predict cause-and-effect relationships; plan, execute and report the results of an experiment or investigation.
PO-5	Scientific reasoning and Reflective Thinking: analyse, interpret and draw conclusions from
	quantitative/qualitative data and critically evaluate ideas, evidence and experiences from an
	open-minded and reasoned perspective; critically and sensibly evaluate life experiences, with self awareness and reflexivity of both self and society.
	Multidisciplinary Approach, Innovation and Entrepreneurship: propose novel ideas of
70.6	interdisciplinary approach in providing better solutions and new ideas for the sustainable
PO-6	developments; identify opportunities, entrepreneurship vision and use of innovative ideas to
	create value and wealth for the betterment of the individual and society.
	Moral and ethical awareness/reasoning: embrace moral/ethical values in conducting one's
	life, formulate a position/argument about an ethical issue from multiple perspectives, and use
	ethical practices in all work, demonstrate the ability to identify ethical issues related to one's
PO-7	work, avoid unethical behavior such as fabrication, falsification or misrepresentation of data or
	committing plagiarism, not adhering to intellectual property rights, appreciate environmental
	and sustainability issues, and adopt objective, unbiased and truthful actions in all aspects of
	work.
PO-8	Self directed Learning: work independently, identify appropriate resources required for a
	project, and manage a project till completion.
	Lifelong Learning: engage in continuous learning for professional growth and development,
PO-9	acquire knowledge and skills, adapt to changing environment and to changing trades and
	demands of work place through knowledge/skill development/reskilling.
DO 10	Multipultural Competence Cocial Intersection and Effective Citizenskins and sectoral discrete
PO-10	Multicultural Competence, Social Interaction and Effective Citizenship: understand the values and beliefs of multiple cultures, global perspectives, engage and interact respectfully with diverse groups and
	elicit views of others, mediate disagreements and help reach conclusions in group settings, and
	demonstrate empathetic social concern and equity centred national development
	A A A A A A A A A A A A A A A A A A A

PROGRAMME SPECIFIC OUTCOME (PSO)

PSO No.	Program Specific Outcomes (M.Sc., Food service Management and Dietetics)
PSO1	Placement:
	To prepare the students who will demonstrate respectful engagement with others' ideas, behaviors, beliefs and apply diverse frames of reference to decisions and actions
PSO2	Entrepreneur:
	To create effective entrepreneurs by enhancing their critical thinking, problem solving, decision making and leadership skill that will facilitate startups and high
	potential organizations
PSO3	Research and Development:
	Design and implement HR systems and practices grounded in research that comply with employment laws, leading the organization towards growth and development.
PSO4	Contribution to Business World:
	To produce employable, ethical and innovative professionals to sustain in the
	dynamic business world.
PSO5	Contribution to the Society:
	To contribute to the development of the society by collaborating with stakeholders for mutual benefit

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M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS COURSE STRUCTURE UNDER CHOICE BASED CREDIT SYSTEM - LEARNING OUTCOME BASED CURRICULUM FRAMEWORK (CBCS - LOCF)

(Applicable to the candidates admitted form the academic year 2023-2024)

ELIGIBILITY: Those who have completed UG Degree in Home Science, Nutrition and Dietetics, Food and Nutrition, Food Science and Nutrition, and other related disciplines in home Sciences viz, Clinical Nutrition and Dietetics, Food Service Management and Dietetics, with not less than 50 % marks in aggregate for Part III from a recognized University rules.

Se	Part	Course	Course Code	Title of the Course	Ins. Hours		Ins.	Hours Week	′	Credit	Exam Hours	N	Iarks	Total
m				Course	/ Week	L	Т	P	S		Hours	CIA	ESE	
	Part A		P23ND101	Advances in Food Science	6	4	1	-	1	5	3	25	75	100
		Core Course –II	P23ND102	Biochemical Changes in Diseases	6	4	1	-	1	5	3	25	75	100
		Core Practical– I	P23ND103P	Advances in FoodScience	6	-	-	6	-	3	3	25	75	100
I	Part B (i)	I	P23NDE11A / P23NDE11B	Applied Food Microbiology/ Nutrition through Life Span	5	5	-	-	-	3	3	25	75	100
		Elective Course - II	P23NDE12A/ P23NDE12B	Management in Food Service Operations/ Nutritional Assessment	5	4	1	-	-	3	3	25	75	100
	Part B (ii)	Non Major Elective-I			2	2	-	-	-	2	3	25	75	100
				TOTAL	30	19	03	06	2	21	-	-	-	600
тт		Core Course –III	P23ND204	Advanced Dietetics	6	4	1	-	1	5	3	25	75	100
II		Core Course-IV	P23ND205	Applied Human Physiology	6	4	1	-	1	5	3	25	75	100
	Part A	Core Practical— II	P23ND206P	Advanced Dietetics	6	-	-	6	-	3	3	25	75	100
	Part B (i)	Elective Course –I	P23NDE23A/ P23NDE23B	Functional Foods and Nutrigenomics/ Interior Design	5	5	-	-	-	3	3	25	75	100
		Elective Course - IV	P23NDE24A/ P23NDE24B	Hospital Administrat Nutrition in Emergency and Disaster Managemen	5	4	1	-	_	3	3	25	75	100
	Part B (ii)	Non Major Elective-II			2	2	-	-	-	2	3	25	75	100
	Part B(iii)	Internship Di	etary / Catering -	- Dietary Internship**	-	-	-	-	-	-	-	-		-
		Т	OTAL		30	19	03	06	2	21	-	-	-	600

III		Core Course –V	P23ND307	Quantity Food Production and service	6	4	1	-	1	5	3	25	75	100
		Core Course –VI	P23ND308	Research Methodology and Statistics	6	4	1	-	1	5	3		75	100
	Part A	Core Practical-III	P23ND309P	Quantity Food Production and Service	6	-	-	6	-	3	3	25	75	100
		Core Industry Module	P23NDI31	Food Processing and Preservation	5	4	1	-	-	3	3	25	75	100
	Part B (i	Elective Course –V	P23NDE35A/ P23NDE35B/ P23NDE35C	Dietary Guidance and Counseling/ Sports Nutrition/ Clinical Nutrition	5	4	1	-	-	3	3	25	75	100
	Part B (ii)	Skill Enhancement Course – I	P23SEND31	Nutrition in Clinical Critical Care	2	2	-	-	-	2	3	25	75	100
	Part B	Internship - Dieta	ry / Catering – C	Catering Internship **	-	-	-	-	-	-	-	-	-	-
	(iii)	Dietary Int	ternship and Cate	ering Internship	-	-	-	-	-	2	-	-	-	-
	TOTAL				30	18	04	06	2	23	-		-	600
IV	Part A	Core Course –VII	P23ND410	Advanced Food Service Management	5	4	1	-	-	5	3	25	75	100
		Core Course-VIII	P23ND411	Food Product Development	5	4	1	-	-	5	3	25	75	100
		Core Practical–IV	P23ND412P	Food Product Development	6	-	-	6	-	3	3	25	75	100
		Core Project	P23NDPW	Project with VivaVoce	8	2	2	4	-	7	3	25	75	100
	Part B (i)	Elective Course – VI	P23NDE46B/	Food Safety and Quality Control/Front office management/ Food and Beverage Service	4	3	1	-	_	3	3	25	75	100
	Part B (ii)	Professional Competency Course	P23PCND41	Professional Development for Home Science	2	2	-	-	_	2	3	25	75	100
	Part C		Extens	ion Activity		-	-		_	1	-	-	-	_
		TOTAL		30	15	05	10		26	-	-	-	600	
				GRAND TOTAL	120	71	15	28	6	91				2400
		Extra Credit	MOOC/SWA Value Added		-	-	-	_	-	2	-	-	-	-
			(At least one /		-	-	-	-	-	2	-	-	-	-

L-Lecture T-Tutorial P-Practical S-Seminar

CREDIT DISTRIBUTION FOR M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

S.No	Course Details	No. Of	Credit
		Courses	
	Core Course	8	40
D A	Core Practical	4	12
Part A	Project Work with Viva Voce	1	07
	Core Industry Module	1	03
Part B (i)	Elective Course	6	18
	Non Major Elective	2	04
Part B (ii)	Skill Enhancement Course	1	02
	Professional Competency Course	1	02
Part B (iii)	Internship	1	02
Part C	Extension Activity	1	01
	Total Credit	26	91

Part A component and Part B (i) will be taken into account for CGPA calculation for the postgraduate programme and the other components of Part B and Part C have to be completed during the duration of the programme as per the norms, to be eligible for obtaining the PG degree.

NON MAJOR ELECTIVE (NME) OFFERED BY THE DEPARTMENT

Semester	Part	rt Course Code		Title of the Course
I		NME-I	P23NMEND11	Community Nutrition
II	Part B (i)	NME-II	P23NMEND22	Food Packaging

(AUTONOMOUS)

SUNDARAKKOTTAI. MANNARGUDI - 614016.

(For the candidates admitted in the academic year 2023-2024)

DEPARTMENT OF NUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

Semester – III CC – V: Quantity Food Production and Service

Ins. Hrs. /Week: 6 **Course Credit: 5** Course Code: P23ND307

UNIT- I: Menu planning

(20Hours)

Definition, classifications of menu, techniques of writing a menu, menu presentation, menu evaluation, menus for different types of quantity food outlets. Courses of menu, Designing menu cards using ICT tools, uses of menu cards, Review of mechanics of menu planning. Menu format. Purchase and storage procedures. Procurement, product selection, specification, method of purchasing, purchasing procedures, receiving, storage and inventory control.

UNIT- II: Production, Planning and Standardization of recipes

(18Hours)

Production forecasting, production scheduling, standardization of recipes, portion control, cost control, menu pricing. Standardization of recipes, recipe files and adapting recipes. Quantity Food Transportation and buying-Transportation, receipt and handling of foods .Storage of foods (dry & refrigerated) Review of food selection, methods of buying, specifications, use of processed and convenience foods.

UNIT III Quantity food production and Quantity control

(20Hours)

Methods of production, product standards, effective utilization of leftovers, waste disposal, service management and service equipments. Food preparations - main dishes and accompaniments. Soups, salads and salad dressings. Common sauces and chutneys. Dishes for special catering- Functions and festivals.

UNIT- IV: Food Service

(18 Hours)

Food Service techniques- Types of service-self service, waiter service, assisted service, vending, online food delivery apps. Styles of table service -silver, crockery, glassware, stainless steel, plastics and melamine ware. used Preparation of service- Linen - table cloths, table mats, napkins, flowers for the table, rules for laying a table, rules for waiting at a table, carving at a table, food and beverage service for special catering functions, like wedding receptions and outdoor catering.

UNIT- V: Service systems

(14 Hours)

Style of food service system - Conventional, Commissary Ready Prepared Assembly, North Indian, South Indian, Chinese, Italian, Mexican cuisines- role and influence of culture, ingredients and special equipments, Traditional, Commissary, Ready prepared - Cook chill, cook freeze, assembly serve.

Total lecture Hours-90

COURSE OUTCOME:

The students will be able to,

- 1. Formulate the menus planning and design
- 2. Gain knowledge on Standardization of recipes and portion control,
- 3. Understand the Methods of food production and quality control
- 4. Plan and implementation of large scale production and service
- 5. Understand the different food and beverage service system

TEXT BOOK(S)

- Negi J. 2000. Professional Hotel Management. S.Chand and Company Limited, NewDelhi.
- 2. Palacio JP. Harger V. Shugari G. 2001. West and Woods Introduction to Food Service. Mac Millan Pub Co., New York.
- 3. Krishna Arora 2005. Theoryof cookery. Fronk Bros and co. Publishers, New Delhi
- 4. Vijay Dhawan 2007.Food & BeverageService. Frank Bros&co,New Delhi.
- 5. Singaravelavan R.2006. Food & Beverage Service. Oxford University press.

REFERENCE BOOK(S)

- 1. Cessarani V.Kinton R.2002.PracticalCookery.seventh edition.Hodder and Stoughtonpublishers.
- 2. Khan MA.2003.Food Service Operations.AVI Publications Co., Connecticut.
- 3. Thangam Philip 2005. Modern Cookery. Orient Longmam Limited. Third edition.
- 4. Sethi M.and Malhan S.M .2007.Catering Management-An Integrated Approach.Wiley Eastern Limited, Mumbai.
- 5. TharunBansal 2015. Hotel Facility Planning, Oxford University Press

E-RESOURCES

- 1. https://www.ihmbbs.org/upload/CHAPTER-%20(MEALS%20&%20MENU%20PLANNING).pdf
- 2. https://psu.pb.unizin.org/hmd329/chapter/chapter-6-standardized-recipes/
- 3. https://dpi.wi.gov/sites/default/files/imce/school-nutrition/pdf/recipe-standardization-steps.pdf
- 4. file:///C:/Users/svharishram/Downloads/Unit-7.pdf
- 5. https://psu.pb.unizin.org/hmd329/chapter/ch1/
- 6. https://opentextbc.ca/foodsafety/chapter/storage-temperatures-and-procedures/
- 7. http://www.searo.who.int/entity/world_health_day/2015/whd-what-you-should-know/en/

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MANNARGUD

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(For the candidates admitted in the academic year 2023-2024)

DEPARTMENT OF NUTRITION AND DIETETICSM.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

SEMESTER -III- CC-VI: Research Methodology and Statistics

Ins. Hrs. /Week: 6 Course Credit: 5 Course Code: P23ND308

UNIT- I: Research Ethics

(20 Hours)

Philosophy- definition, nature, scope and concept. Ethics- definition, moral philosophy, nature of moral judgments and reactions. Ethics with respect to science and research - Scientific misconducts falsification, fabrication, and plagiarism- Use of plagiarism software - Turnitin, Urkund and other open source software tools. Redundant publications- duplicate and overlapping publications. Publication ethics- definition and importance. Publication misconduct- definition, concept, problems that lead to unethical behavior, types, Violation of publication ethics, authorship and contributor ship. Software tool to identify predatory publications developed by SPPU. Subject ethical issues- authorship, Conflicts of specific interest.

UNIT-II: Introduction to Research

(16 Hours)

Introduction to Research and types of research- Definition, Objectives and characteristics of research. Different Types of Research, Basic components of any research design.

Data and methods of data collection -Types of data-Primary and secondary data. Data sources. Primary data collection methods- direct personal investigation, indirect oral investigations, schedules and questionnaires. Interviews and Type of Interviews. Pre-testing and Pilot study, Editing and coding of data.

UNIT-III: Tools of data collection and Sampling Techniques

(18 Hours)

Classification of data: types of classification, Formation of discrete and continuous probability distributions. Tabulation of data: parts of a table, general rules of tabulation, types of tables, Diagrammatic representation of data, Graphic representation of data.

Sampling Design - Census and sample survey- Steps in sampling design, Sample size and its determination, Types of sampling: Random Sampling, Simple random sampling, Stratified random sampling, Systematic sampling, Cluster sampling, Non random sampling methods: Judgment sampling, Convenience sampling, quota sampling, Benefits of sampling, Sampling errors, Non sampling errors

UNIT-IV: Statistical Methods

(18 Hours)

Measures of central tendency: mean, median and mode, their relative advantages and disadvantages, Measures of dispersion: Mean deviation, standard deviation, Coefficient of variation, percentile, Types of correlation, coefficient of correlation and its interpretation-Rank correlation, Regression equations and predictions, Analysis of variance, Contingency tables ,Chi-square test, *t*-test -Student's *t*-test, paired *t*-test ,unpaired *t*-test, F-'test.

UNIT -V: Sampling Statistics and Introduction to Statistical Package for Social Sciences (SPSS) and Report Writing (18 Hours)

Sampling Statistics and Introduction to Statistical Package for Social Sciences (SPSS), Introduction to Statistical Package for Social Sciences (SPSS), Interpretation and Report writing, Meaning of Interpretation, need of Interpretation, Technique of Interpretation, precaution in Interpretation. Significance of report writing, Different steps in writing Report, Layout of the Research Report, Types of Report, Oral Presentation, Mechanics of writing a Research Report, Precautions for writing Research Reports, Conclusions.

Total lecture Hours-90

COURSE OUTCOME:

The students will be able to,

- 1. Comprehend the Research ethics and different types of research
- 2. Translate the knowledge on types and tools of data collection in compiling editing and coding of data and hypothesis.
- 3. Perform Statistical analysis.
- 4. Interpret and justify the research findings.
- 5. Design, execute and document a research. Prepare the research report by using appropriate research methods and statistical tool s/w toget solution to the existing problem based on research ethics.

TEXT BOOK (S)

- 1. Devadas RPA. 2000. Handbook on methodology of Research. Sri Ramakrishna Vidyalaya, Coimbatore.
- 2. Grumani N.2014. Research Methodology for Biological Sciences. First Edition ,MJPPublishers
- 3. Kothari GR. 2004. Research Methodology, Methods and Techniques. Wiley EasternLimited, Second Revised Edition .New Delhi,
- 4. Saravanavel P.2013.Research Methodology. Kitab Mahal Allahabad
- 5. Wasserman L.2010.All of statistics. A concise course in statistical Inferences.springer, Newyork.

REFERENCE BOOK(S)

- 1. Gosh BN. 2017 .Scientific Methods and Social Research. Sterling Publishers Pvt.ltd.,NewDelhi.
- 2. Kulbir Singh Sidhu, 2006. Methodology of Research in Education. Sterling Publishers Pvt.Ltd., New Delhi.
- 3. Gupta SP.2002. Statistical Methods. Sultan Chand & Sons, New Delhi,
- 4. Srivastava ABL and Sharma KK. 2003. Elementary Statistics in Psychology and Education, Sterling Publishers Pvt.ltd.
- 5. Ramadas P and Wilson A. 2014. Research and writing. MJP publishers.

E-RESOURCES:

- 1. http://shodhganga.inflibnet.ac.in/bitstream/10603/2019/8/08 chapter-1.pdf
- 2. https://swayam.gov.in/courses/5143-research-methodology
- 3. http://southcampus.uok.edu.in/Files/Link/DownloadLink/RM%20U2%20P2.pdf
- 4. https://www.sheffield.ac.uk/polopoly_fs/1.96442!/file/graphical-presentation-06-07.pdf
- 5. https://www.examrace.com/Study-Material/Research-Methodology/Types-of-Research-Methodology/Types-of-Research-Methodology/Types-of-Methods-YouTube-Lecture-Handouts.html

(AUTONOMOUS)

SUNDARAKKOTTAI. MANNARGUDI - 614016. (For the candidates admitted in the academic year 2023-2024)

DEPARTMENT OFNUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

SEMESTER -III- CP-III: Quantity Food Production and Service Practical Ins. Hrs. /Week: 6 Course Credit: 3 Course Code: P23ND309P

COURSE CONTENT:

- Standardization of recipes,
- Portion control and Pricing.
- Planning and Preparation of South Indian cuisine
- Planning and Preparation of North Indian cuisine
- Planning and Preparation of Western cuisine
- Planning and Preparation of Chinese cuisine
- Planning and Preparation of Thai cuisine and
- Planning and Preparation of Continental cuisines
- Table Setting and Napkin folding

TEXT BOOK(S):

- 1. Krishna Arora 2005. Theoryof cookery, Fronk Bros and co. Publishers, New Delhi.
- 2. NegiJ, 2000.Professional Hotel Management. S.Chand and Company Limited, New Delhi.
- 3. Palacio JP, Harger VG, Shugari M.2001. West and Woods. Introduction to Food Service.Mac Millan PubCompany, New York.
- 4. Singaravelavan R.2006.Food and Beverage Service. Oxford University press.
- 5. VijayDhawan 2007.Food and Beverage Service. Frank Bros and company, New Delhi.

REFERENCE BOOK(S):

- 1. Cessarani and Kinton.R, 2002.PracticalCookery, odder and Stoughton. Publishers
- 2. Mohini Sethi and Malhan. S.M, 2007, Catering Management An Integrated Approach,
- 3. Thangam Philip, 2005. Modern Cookery. Orient Longman Limited, Bangalore Wiley Eastern Limited, Mumbai.

E-RESOURCES

- https://www.ihmbbs.org/upload/CHAPTER-%20(MEALS%20&%20MENU%20PLANNING).pdf
- 2. https://psu.pb.unizin.org/hmd329/chapter/chapter-6-standardized-recipes/
- https://dpi.wi.gov/sites/default/files/imce/school-nutrition/pdf/recipe-standardizationsteps.pdf
- 4. file:///C:/Users/svharishram/Downloads/Unit-7.pdf
- https://psu.pb.unizin.org/hmd329/chapter/ch1/
- https://opentextbc.ca/foodsafety/chapter/storage-temperatures-and-procedures/
- http://www.searo.who.int/entity/world_health_day/2015/whd-what-you-shouldknow/en/

(AUTONOMOUS)

MANNARQUDI

SUNDARAKKOTTAI. MANNARGUDI - 614016. (For the candidates admitted in the academic year 2023-2024)

DEPARTMENT OFNUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

SEMESTER -III- CORE INDUSTRY MODULE: Food Processing and Preservation Ins. Hrs. /Week: 5 Course Credit: 3 Course Code: P23NDI31

UNIT- I: Food Preservation and Processing

(15 Hours)

Definition and scope of food preservation, principles and role of preservation, preservatives and its types, shelf life of food products, Permitted Preservatives, FPO Specification. Principles of fresh food storage, affect of cold storage and quality – storage of grains – Water activity, spoilage- Types of Spoilage, Factors influencing the spoilage.

UNIT-II: Processing of Cereals and Millets

(15 Hours)

Milling products and by products of wheat, rice, corn, barley, oats, sorghum and whole wheat atta, blended flour, fortified flour, flaked, puffed and popped cereals, malted cereals, processed foods – bakery products, pasta products and value added products.

UNIT-III: Processing of Milk and Milk Products

(15 Hours)

Milk – manufacture of different types of milk, drying of whole and skim milk, cream separation, churning of butter, processing of different types of cheese, Probiotic milk products- yoghurt, dahi and ice-cream, indigenous milk products – khoa, burfi, kalakhand, gulab jamun, rasagola, srikhand, channa, paneer, ghee, lassi

UNIT- IV: High Temperature Processing and Preservation

(15 Hours)

Blanching, pasteurization, sterilization and Ultra High Temperature(UHT) processing, canning, dielectric heating microwave heating, baking, roasting and frying. Retort processing of Ready to Eat (RTE) products.

UNIT-V: Low Temperature Processing and Preservation

(15 Hours)

Refrigeration, Freezing and thawing, Food irradiation: Introduction, freezing point and freezing rate, comparison of Freezing and thawing process; freezing methods: Air freezing, plate freezing, liquid immersion freezing and cryogenic freezing. Freezer selection. Advantages and disadvantages of freezing. Freezing curve and changes in food during freezing storage.

Total Lecture Hours-75

COURSE OUTCOME

The students will be able to

- 1. Integrate knowledge on food preservation and spoilage.
- 2. Understand the fundamental principles of food processing.
- 3. Comprehend the role of milk in indigenous milk products.
- 4. Infer knowledge on high temperature food processing and preservation
- 5. Exemplify the low temperature food storage and preservation

TEXT BOOK(S)

- 1. Avantina Sharma. 2019 Textbook of Food Science and Technology, 3rd edition, CBS publishers, ISBN-10: 9789386478009, ISBN-13:978-9386478009.
- 2. Sivasankar. 2002. Food Processing and Preservation, Prentice Hall India Learning PrivateLimited. ISBN-10: 8120320867; ISBN-13:978-8120320864
- 3. Subbulakshmi G. 2006. Food Processing and Preservation . First edition. New agepublishers; ISBN-10: 8122412831, ISBN-13:978-8122412833
- 4. Vijaya Khader. 2001. Text book of Food Science and Technology. Indian Council of Agricultural Research, New Delh.
- 5. Warris DS. 2020. Food Processing and Preservation .2 –Vol, ISBN-10: 9389688590 ISBN-13:978-9389688597.

REFERENCE BOOK(S)

- 1. Arthey D and Ashurst PR. 1996. Fruit processing, Blackie academic and professional. London.
- 2. Fellows PJ. 2016. Food Processing Technology. Second edition, Principles and Practice, CRC Wood head publishing Ltd, Cambridge.
- 3. Gould GW .1995. New methods of food preservation. Blackie academic and professional.London.
- 4. John, Kingslee. 2014. A professional text to Bakery and Confectionary, New AgeInternational (P) Limited.
- 5. NeelamKhetarpaul,RajBalaGrewalandSudeshJood.2013.Bakery science and cereal technology, Daya publishing house.

E- RESOURCES:

- http://labgraos.com.br/manager/uploads/arquivo/cap--26-handbook-of-foodpreservation-pdf-
- 2. http://www.uop.edu.pk/ocontents/Lecture%20no%202.pdf
- 3. https://www.canr.msu.edu/smprv/uploads/files/Safe_Practices_for_Food_Processes _Chpt._3 Factors that Influence Microbial Growth.pdf
- 4. https://www.medicalnewstoday.com/articles/318630
- 5. https://www.ifst.org/resources/information-statements/food-irradiation

SENGAMALA THAYAAR EDUCATIONAL TRUST WOMEN'S COLLEGE (AUTONOMOUS)

SUNDARAKKOTTAI. MANNARGUDI - 614016. (For the candidates admitted in the academic year 2023-2024)

DEPARTMENT OFNUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

SEMESTER -III- EC-V: Dietary Guidance and Counseling

Ins. Hrs. /Week: 5 **Course Credit: 3** Course Code: P23NDE35A

UNIT- I: Counselling and Role of a Dietician

(15 Hours)

Definition, Goals, Ethics, Scope of diet counseling, Counselling in India, Characteristics of counsellor, types of counselling, objectives of counselling in health care, tools of counselling, sources of counselling, e - resources in counseling.

Role of a dietician in a hospital and community, team approach to nutritional care, ethical code and responsibilities.

Diet Counseling Skill UNIT- II:

(15 Hours)

Tactics and techniques of counseling- evaluating and understanding the clients attitude, identification of clients feelings, utilizing the proper counselling techniques- non verbal behavior, verbal behavior, covert behavior.

UNIT-III: Communication Skills

(15 Hours)

Concepts and principles in communication and their application in developing skills in counseling. Use of communication aids, communication and interviewing skills. Strategies and communication skills, Rapport building and opening techniques, Questioning, listening, reflecting, acceptance, silence, leading reassurance, non-verbal behavior, terminating skills.

UNIT- IV: Therapeutic Relationships and Techniques

(15 Hours)

Psychology of feeding the patients- Assessment of needs, education of the patient and follow up and establishing rapport with the patient and the family member. Therapeutic Techniques -Psychoanalytic therapy, group therapy, psychodrama, behavior therapy, Gestalt therapy Cognitive therapy. Nutrition counselling protocols- Involving phase, Exploration and education, resolving, closing. Exploring the expressions, use of art in therapy.

UNIT- V: **Diagnosis and Assessment**

(15 Hours)

Eliciting clinical information- medical history, assessment of diet profile, techniques of obtaining relevant information; dietary diagnosis- 24 hour recall method, food diary, list of food likes and dislikes, lifestyle; interpreting clinical information, case study assessment and evaluation.

Total lecture Hours-75

COURSE OUTCOME:

The students will be able to

- 1. Understand the psychology of the patient
- 2. Develop diet counseling skills
- 3. Develop the communication and interviewing skills
- 4. Create awareness among the communities about the importance of diet and good health.
- 5. Assess the Nutritional status

TEXT BOOK(S)

- 1. Gopalan S.C Balasubramanian S.V. Ramestri and Visweswara Rao Diet Atlas. 1971, ICMRNew Delhi, India.
- 2. Shubhangini A. Joshi. 2011. Nutrition and Dietetics, 3rd edition, Tata McGraw Hill Education private limited, New Delhi.
- 3. Srilakshmi B.2010. Dietetics, New Age International Publishers, New Delhi.
- 4. Sumati R. Mudambi MV. Rajagopal.2015.Fundamental of food, nutrition and diet therapy.New age international publishers, New Delhi.
- 5. Swaminathan M.1993.Principles of Nutrition and Dietetics. Bappeo 88, Mysore Road, Bangalore.

REFERENCE BOOK(S)

- 1. Davidson & Passmore R & Brock JB.1976. Human Nutriton & dietetics. The English Languages Bood Society & Churchill Living stone.
- 2. Krause M V & Mahan MA.1992.Food Nutrition and Diet Therapy .W.B. Sunders company, Philadelphia London.
- 3. Maurice E. Shils, James A. Olson, Moshe Shike.1994. Modern Nutrition in health and disease. eighth edition, Vol I & II Lea & Febiger Philadelphia, A waverly company.
- 4. Micheal J. Gibney IA. Macdonald and Helan M. Roche. 2004. Nutrition and Metabolism. Blackwell Publishing Company, Bangalore.
- 5. Robinson CH. 2006. Normal and therapeutic nutrition. Macmillan Pub. Company, NewYork
- 6. Robinson CH. Lawles MR. Chenoweth WL. Garwic AE. 1990.Normal and TherapeuticNutrition. The Macmillan Co.

E-RESOURCES:

- 1. https://article1000.com/characteristics-of-counseling/
- 2. https://www.caluniv.ac.in/academic/Education/Study/Techniques.pdf
- 3. https://pubmed.ncbi.nlm.nih.gov/6787227/
- 4. https://www.researchgate.net/publication/332318698_Counselling_Skills_for_a_Dietitian

SENGAMALA THAYAAR EDUCATIONAL TRUST WOMEN'S COLLEGE (AUTONOMOUS)



SUNDARAKKOTTAI. MANNARGUDI - 614016.

(For the candidates admitted in the academic year 2023-2024)

DEPARTMENT OFNUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

SEMESTER -III- EC-V: Sports Nutrition

Ins. Hrs. /Week: 5 Course Credit: 3 Course Code: P23NDE35B

UNIT-I: Fuel Sources for Muscle and Exercise Metabolism

(15 Hours)

Sources of energy for muscle force generation – fuel stores on skeletal muscle – energy pathways regulation of energy metabolism – metabolic response to exercise – metabolic adaptation to exercise training – factors influencing choice of fuels – Components of energy expenditure – energy balance

UNIT-II: Macro and Micro Nutrients in Sports Nutrition

(15 Hours)

Role of carbohydrates before, during and after exercise – carbohydrates loading – protein requirements for exercise – techniques to study protein and amino acid metabolism –effect of protein intake on protein synthesis – amino acids as ergogenic aids – health risks with excessive protein intake – Fat as a fuel during exercise – fat supplementation and exercise supplements that increase after oxidation. Micronutrients – role of antioxidants – essential function of vitamins and minerals for athletes, ergogenic effect.

Water – thermoregulation and exercise in the heat – effect of dehydration in exercise performance – heat illness – fluid guidelines before, during and after exercise.

UNIT-III: Weight Management and Body Composition

(15 Hours)

Weight management- Ideal body weight and composition – weight loss – making weight and rapid weight loss strategies. Eating disorders – types, prevalence, risk factors, effect on sports performance, treatment and prevention Body composition analysis-importance of body composition, different techniques-normative values for comparison.

UNIT- IV: Practical Sports Nutrition

(15 Hours)

Pre event and post event meal- preparing for competition, dealing with cramps, stitch GI distress electrolyte balance-sports drinks Eating for anaerobic power-aerobic power timing of meals and snacks-guidelines for the travelling athlete-recovery food. Food for power sports, endurance sports, combined power. Nutrition for special population: child athlete, ageing athlete, athletic diabetes, vegetarian and disabled athlete.

UNIT- V: Ergogenic aids and supplements

(15 Hours)

Overview of supplements and sports foods – use of performance enhancing substances among athletes – finding proof of efficacy of supplements and sports foods-anabolic steroids-sports foods (cereal bar, sports drinks, carbohydrate gels, liquid meal replacements, vitamins)-different types of protein supplements, creatine, glutamine, BCAA, HMB, caffeine, glycerol, bicarbonate, citrate – WADA-Anti doping rules and regulations.

Total lecture Hours-75

COURSE OUTCOME:

The students will be able to

- 1. Understand the exercise metabolism and fuel sources
- 2. Gain knowledge on the role of macro and micro nutrients in Sports Nutrition
- 3. Assess and interpret the body composition and weight management
- 4. Plan diets for athletes involved in aerobic and anaerobic sports.
- 5. Understand the need of supplements and sports foods in exercise

TEXT BOOK(S)

- 1. Anita Bean 2022 The Complete Guide to Sports Nutrition (9th Edition)Bloomsbury Publishing ,Australia
- 2. Chandrasekar, K 2005 Fitness, Health and Nutrition Khel Sahitya Kendra New Delhi.
- 3. Vastrad, B G Ed.,2003 Encyclopaedia of Sports Science and Medicine Khel Sahitya Kendra New Delhi .
- 4. Shrawan Kumar Ed.,2009 Ergonomics for Rehabilitation for Rehabilitation Professionals CRC Press Boca Raton .
- 5. Gleeson, Jeukendrup (2004), Sports Nutrition: An Introduction to Energy Production and Performance, Human Kinetics.

REFERENCE BOOK(S)

- 1. Bean, Anita (2006), 5th Ed, Sports Nutrition
- 2. Benardot, Dan (2000), Advanced Sports Nutrition, Human Kinetics
- 3. Bourns, Fred (2002), Essentials of Sports Nutrition, 2nd Ed. John and Wiley.
- 4. Burke, Louise (2007), Practical Sports Nutrition, Human Kinetics
- 5. Deakin, Burke (2006), 3rd Ed, Clinical Sports Nutrition, McGraw-Hill Australia.
- 6. Gleeson, Jeukendrup (2004), Sports Nutrition: An Introduction to Energy Production and Performance, Human Kinetics
- 7. Suzanne Girard Eberle (2000), Endurance Sports Nutrition, Human Kinetics.

E-RESOURCES:

- 1. https://openoregon.pressbooks.pub/
- 2. http://www.aco.org.nz/pdf/nutrition-for-sports
- 3. https://www.researchgate.net/publication/258630492 Sports Nutrition Book2013http://t hemedicalbiochemistrypage.org
- 4. https://www.betterhealth.vic.gov.au/health/healthyliving/sporting-performance-and-food
- 5. https://stillmed.olympics.com/media/Documents/Athletes/Medical-Scientific/Consensus-Statements/2018 dietary-supplements-high-performance-athlete.pdf

SENGAMALA THAYAAR EDUCATIONAL TRUST WOMEN'S COLLEGE (AUTONOMOUS)



SUNDARAKKOTTAI. MANNARGUDI - 614016.

(For the candidates admitted in the academic year 2023-2024)

DEPARTMENT OFNUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

SEMESTER -III- EC-V: Clinical Nutrition

Ins. Hrs. /Week: 5 Course Credit: 3 Course Code: P23NDE35C

UNIT- I: Nutritional Assessment and Care of Patients

(20 Hours)

Nutrition care process- Nutritional screening and assessment of o patients — out patient and hospitalized , Tools for screening - Nutritional interpretation of routine medical and laboratory data Nutrition care plan and implementation, Monitoring and follow up , Ethical issues Dietary Counselling, Nutrition Support: Enteral Nutrition.

UNIT- II: Medical Nutrition Therapy in metabolic diseases

(10 Hours)

Diabetes Mellitus – Type 1, Type 2 and Gestational diabetes Endocrine disorders – Polycystic ovary disease, thyroid

Unit –III: Coronary Heart Diseases

(15 Hours)

Etiopathophysiology, metabolic & clinical aberrations, diagnosis, complications, treatment, MNT, dietary counselling and recent advances in o Hypertension, dyslipidemia, Congestive heart failure.

UNIT-IV: Gastrointestinal Tract Disorders

(15 Hours)

Etiopathophysiology, metabolic & clinical aberrations, diagnosis, complications, treatment, MNT, dietary counselling and recent advances in GERD, peptic ulcer, dyspepsia, flatulence, celiac disease, inflammatory bowel disease, diverticular disease, hernia, hemorrhoids, intestinal surgery, bariatric surgery. Nutrition for oral and dental disorders.

Unit -V: Overview of Some Degenerative Disorders

(15 Hours)

Cancer – General and specific cancers, effect of cancer therapy on MNT, Role of diet in etiology and management, Chronic Obstructive Pulmonary Disease- Systemic Lupus Erythematosis. Nutrition for bone health.

Total lecture Hours-75

COURSE OUTCOME:

The students will be able to,

- 1. Understand the importance of nutritional assessment in the care of patients.
- 2. Gain knowledge about causative factors and metabolic changes in various diseases/disorders and the associated principles of diet therapy.
- 3. Learn principles of dietary counseling.
- 4. Comprehend the rationale of prevention of various diseases/disorders
- 5. Understand the Some Degenerative Disorders

TEXT BOOK (S)

- 1. Gibney MJ, Elia M, Ljungqvist &Dowsett J. (2005) Clinical Nutrition. The Nutrition Society Textbook Series. Blackwell Publishing Company
- 2. Gibson SR. (2005). Principles of Nutritional Assessment. 2nd Edition. Oxford University press
- 3. Joshi YK. Basics of Clinical Nutrition. 2nd Edition. Jaypee Brothers Medical Publishers.
- 4. Lee RD & Neiman DC. (2009) Nutritional Assessment. 5th Edition. Brown & Benchmark.
- 5. Mahan, L. K. and Escott Stump. S. (2016) Krause's Food& Nutrition Therapy 14th ed. Saunders-Elsevier

REFERENCE BOOKS (S)

- 1. Shils, M.E., Shike, M, Ross, A.C., Caballero B and Cousins RJ (2005) Modern Nutrition in Health and Disease 10th ed.
- 2. Lipincott, William and Wilkins. Williams, S.R. (2001) Basic Nutrition and Diet Therapy. 11th ed. Times Mirror Mosby College Publishing
- 3. World Cancer Research Fund & American Institute for Cancer Research (2007) Food, Nutrition, Physical Activity and the Prevention of Cancer- A Global Perspective. Washington E.D. WCRF.

E-RESOURCES

- 1. https://www.slideshare.net/slideshow/screening-nutrition-care-process-49914962/49914962
- 2. https://www.aarc.org/wp-content/uploads/2014/11/nutrition_guide.pdf.
- 3. https://my.clevelandclinic.org/health/diseases/17069-heart-failure-understanding-heart-failure
- 4. https://emedicine.medscape.com/article/162449-overview
- 5. https://assets.publishing.service.gov.uk/media/5bab9d1640f0b605084c9543/Diet_and_Coronar y_Heart_Disease__1974_.pdf

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SUNDARAKKOTTAI. MANNARGUDI - 614016. (For the candidates admitted in the academic year 2023-2024)

DEPARTMENT OFNUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

SEMESTER -III- Skill Enhancement Course-I: Nutrition in Clinical Critical care
Ins. Hrs. /Week: 2 Course Credit: 2 Course Code: P23SEND31

UNIT- I: Nutritional care of hospitalized patients

(5 Hours)

Metabolic response and adaptation to stress, starvation, infection, trauma, sepsis and surgery.

UNIT- II: Screening and Nutritional assessment of critically ill patients (5 Hours)
Anthropometry, Biochemical parameters, Clinical and Dietary, Subjective Global assessment.

UNIT –III: Nutritional Support system

(7 Hours)

- a. Enteral nutrition types, routes, composition of feeds, precautions in feeding and complications.
- b.Parenteral nutrition types, composition, precautions in feeding and complications. Refeeding syndrome.
- c. Immune suppressants and Special diets in critical care

UNIT- IV: Nutrient requirements in critically ill patients

(6 Hours)

Understanding of special nutritional requirements, nutritional management in critical illness – Stress, sepsis, trauma, burns, surgery and cancer.

UNIT- V: Nutritional support in natural calamities

(6 Hours)

Nutritional support in flood, cyclone, earthquake and drought

Total lecture Hours-30

COURSE OUTCOME:

The students will be able to,

- 1. List the types of infection.
- 2. Explain nutritional assessment methods for critically ill patients
- 3. Predict complications of enteral and parenteral nutrition.
- 4. Diagnose nutritional status of critically ill patients.
- 5. Evaluate role of nutrients in critical care
- 6. Design the nutritional requirements for natural calamities.

TEXTBOOK(S)

- 1. Luc A. Cynober, Frederick A. Moore 2003 Nutrition and critical care Karger Medical and Scientific Publishers.
- 2. Peter Faber, Mario Siervo 2014 Nutrition in critical care Cambridge University Press.
- **3.** RajkumarRajendram, Victor R. Preedy, Vinood B. Patel 2015 Diet and nutrition in critical care Springer New York,

REFERENCE BOOK(S)

- 1. Gail A. Cresc 2016 Nutrition support for critically ill patient CRC Press
- 2. Krause M V & Mahan MA.1992.Food Nutrition and Diet Therapy .W.B. Sunders company, Philadelphia London.
- 3. Maurice E. Shils, James A. Olson, Moshe Shike.1994. Modern Nutrition in health and disease. eighth edition, Vol I & II Lea & Febiger Philadelphia, A waverly company.
- 4. Micheal J. Gibney IA. Macdonald and Helan M. Roche. 2004. Nutrition and Metabolism. Blackwell Publishing Company, Bangalore.
- 5. Pierre Singer 2013 Nutrition in Intensive Care Medicine: Beyond Physiology Karger Medical and Scientific Publishers

E-RESOURCES:

- 1. http://medind.nic.in/jac/t14/i3/jact14i3p205.pdf
- 2. https://www.aarc.org/wp-content/uploads/2014/11/nutrition_guide.pdf
- 3. http://www.ccmpitt.com/ebm/nutrition/0105.pdf
- 4. https://www.slhd.nsw.gov.au/rpa/neonatal%5Ccontent/pdf/guidelines/tpn.pdf



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SUNDARAKKOTTAI. MANNARGUDI - 614016.

(For the candidates admitted in the academic year 2023-2024)

DEPARTMENT OF NUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

Semester - IV CC - VII: Advanced Food Service Management

Ins. Hrs. /Week: 5 Course Credit: 5 Course Code: P23ND410

UNIT-I: Food Service Industry- Classification and regulatory requirements

(20 Hours)

- a) Classification of food services based on food production systems:
- (i) Conventional
- (ii) Commissary
- (iii) Ready prepared (Cook chill/ cook freeze)
- (iv)Assembly/ serve foods service systems
- (v) Cloud kitchens.

b) Classification based on market segment/ Food service style

- c) Commercial and non commercial food services.
- d) Catering in hotels and specialty restaurants, clubs, café/coffee shop, dhaba, fast food outlets (Quick Serve Restaurants) food trucks, food carts and stands, meals on wheels, food vending machines, take away, online app based delivery.
- e) Catering transport services Air, railway, cruise ships, space missions. f) Catering in hospital and educational institutions.
- g) Industrial catering and community feeding (Places of worship), Social catering (weddings, functions).
- h) Franchise, chain, contract and outdoor catering services. i) Current trends in facility design, regulatory requirements and special considerations for each specific type of food services.

UNIT-II: Organization and Management

(10 Hours)

- a) Organization Definition and types.
- b) Approaches to management classical, neo classical, systems approach, behavioral and human relations approach, contingency approach, JIT (Just in time) approach.
- c) Principles, functions and tools of management and their application in the food service industry.

UNIT-III: Equipment design, selection, installation and use

(15 Hours)

- a) Classification of equipment equipment for food storage, pre-preparation, cooking, holding, serving, dishwashing and auxiliary equipment.
- b) Equipment design, construction and finishes.
- c) Factors influencing selection of equipment; Trends in equipment available in the market.
- d) Installation, principles of operation and care of major equipment.

UNIT-IV: Hygiene and Sanitation in the Food Service

(15 Hours)

- a) Personal hygiene of employees Employee health and personal hygiene, proper food handling precautions for safe food production.
- b) Hygiene of plant and equipment Principles of cleaning and sanitation. Dishwashing types and uses. Protocol according to FSSAI for food production.

UNIT-V: Safety and Sustainability

(15 Hours)

a) Safety in Food Service Units – causes and prevention of accidents, 3Es of safety and action for emergencies.

- b) Sustainable practices and green initiatives
- i.Conservation of natural resources water and energy conservation.
- ii.Green design and energy saving in electrical equipment.
- iii.Integrated solid waste management sources, reduction, reuse/up cycle and recycle; facility waste assessment; pest control.

Total lecture Hours-75

COURSE OUTCOME:

The students will be able to,

- 1. Recall the classification of food services, distinguish between different food service systems, explain current trends in food service facility design and regulations for specific food service types.
- 2. Define the different types of organization; Explain the approaches, principles, functions and tools of management, apply the tools of management to the various management functions
- 3. Classify equipment based on type and order of use, explain the different finishes, design and construction features of equipment, develop SOP for selection, operation and care of major equipment.
- 4. Ascertain the principles of cleaning and sanitation, create a checklist to ensure personal hygiene of food handlers, evaluate the causes of food hazards and suggest solutions based on principles of HACCP.
- 5. Identify the causes for accidents and suggest methods for prevention; Analyze methods of conserving energy, conserving resources and ensure zero waste. Evaluate strategies for conserving natural resources, energy saving and facility waste assessment and management.

TEXT BOOK (S):

- 1. Arora R K. (2007). Food Service and Catering Management. A.P.H Publishing Corporation. New Delhi.
- 2. Malhotra R.K.(2005). Food Service and Catering Management. Anmol publications Pvt Ltd. New Delhi.
- 3. West, B.B., Wood, L., Harger, V.F. and Schugart Food Service in Institutions, JohnWiley & Sons., N.Y., 1972.
- 4. Glow, G., 'Catering Equipment and systems Design' Applied Science Publishers Ltd., London 1977. John Wilel and Sons.
- 5. Kotschevar and Terrel (1977), 'Food Service Planning, Layout and Equipment'2ndEdition

REFERENCE BOOK(S)

- 1. Negi J. (2006). Food and Beverage: Management and Cost control. Kanishka publishers distributors
- 2. Payne-Palacio J and Theis M. (2019). Food Service Management-Principles and Practices. Pearson India Education Services Pvt. Ltd. Noida, India.
- 3. Sethi,M.(2016). Institutional Food Management, (2 nded). New Age International Pvt. Ltd., New Delhi.
- 4. West B.B, Wood L, Harger V.P. (2006). Food Service in Institutions. John Willey and Sons, Inc., New York.
- 5. PalamE.R.Sc. Steedler.J.A. (1986), 'Preparing for the food service industry' an introductoryapproach' AVI Publishing Co., West Port.

E RESOURCES:

- 1. https://legaldocs.co.in/blog/food-safety-and-hygiene-norms-in-india
- 2. https://www.brainkart.com/article/Definition-and-Types-of-Equipment_35155/
- 3. https://www.wiley.com/enus/Foodservice+Facilities+Planning%2C+3rd+E dition-p- 9780471290636
- 4. http://www.ignouhelp.in/ignou-mscdfsm-study-material/
- 5. https://books.google.co.in/books/about/Foodservice_Facilities_Planning.html?id=lx3bB QmP9W sC&redir_esc=y
- 6. https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=Cdnwi2LUCCLzrJZ76d/o1A==
- 7. https://www.mooc-list.com/course/innovation-food-industry-futurelearn
- 8. https://www.tutorialspoint.com/food_and_beverage_services/food_and_beverage_s ervices_hygiene_and_safety.htm

SENGAMALA THAYAAR EDUCATIONAL TRUST WOMEN'S COLLEGE (AUTONOMOUS)



SUNDARAKKOTTAI. MANNARGUDI - 614016.

(For the candidates admitted in the academic year 2023-2024)

DEPARTMENT OF NUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

SEMESTER -IV- CC VIII: Food Product Development

Ins. Hrs. /Week: 5 Course Credit: 5 Course Code: P23ND411

UNIT-I:Introduction, Consumer needs and preferences of New Product Development (15 Hours)

Definition, significance of product development, food needs and consumer preferences. Steps involved in food product development, Basic principles and concept of food product development, Trends in food consumption pattern. Economical, psychological and sociological dimensions of food consumption patterns. Trends in social change as a base for new product development. Scope of growth in future, principles and purpose of new product development, product design and specifications. Developing a Product to Meet the Requirements. Product life cycle. Creating brand value for the Product. The SWOT analysis

UNIT- II: Product Development

(15 Hours)

Product Development use of traditional recipe and modification, involvement of customer, selecton of materials and ingredients for specifc purpose, cost effectiveness, nutritional needsor uniqueness, use of novel food ingredients and novel processing technologies. Steps in product development, standardization methods involved in product development. Portion size and portion control; Calculation of nutritive value, evaluation procedure of developed food products, Development of Score Card and analysis and interpretation of data, Cost of production, shelf life of packaging and storage stability.

UNIT- III: Formulation of new food product

(15 Hours)

Formulation of new food products for infants, preschool children, adolescents, pregnant and nursing mothers, old age, sports persons, armed sources personnel and its related therapeutic uses. Convenience foods, Ready-to-eat(RTE), Ready-to- Serve (RTS), extruded foods, Intermediate moisture foods (IMF) foods, specialty products, health foods, nutritional supplements, functional foods, nutraceuticals and designer foods, sports foods, foods for defense services, space foods. General guidelines on giving declarations – Food Safety and Standards Authority of India (FSSAI). Approval for proprietary products.

UNIT- IV: Financial Assistance and Product Commercialization (15 Hours)

Institutional support (Training and Finance) for entrepreneurship development. Financial Institutions (Central and State Government) banks/ funding agencies, Centralized Online Real-time Exchange (CORE) financial accounting procedures, book keeping/ record keeping system.

Product Commercialization ,Launch ,Evaluation

a.Outcomes and activities in product commercialization, Steps in product launch, Evaluation of the Launch, product performance testing, developing test market strategies,

UNIT- V: Concept of market and marketing

(15 Hours)

Approaches of marketing and marketing functions, market structure, marketing efficiency and

market integration, Role of Government in promoting agricultural marketing. Market promotion and positioning of food products. Role of advertisement and technologies in promotion of new products. Conditions for sale, license and identification and quality processing, conditions for distribution, storage and sanitation, Role of export promoting agencies, Economic feasibility of new products.

Total Lecture Hours -75

COURSE OUTCOME

The students will be able to,

- 1. Understand and develop better ideologies towards the elements of food product
- 2. Learn the steps involved in food product development and understand the development cycle of the food product.
- 3. Apply and analyze the screening and feasibility tests for a products potential launch.
- 4. Better evaluate the financial resources and commercialization of the product.
- 5. Distinguish profitable ideas and market opportunities by assessing the saturation of regional market.

TEXTBOOK (S):

- 1. Aaron L.Brody, John B.Lord 2005. Developing New Food Products for a ChangingMarket Place. 2nd Edition, Publisher: CRC Press
- 2. Avantina Sharma 2006. Textbooks of Food science and technology. International bookdistributing Company.
- 3. Gordon W. Fuller 2011. New Food Product Development. From Concept to Marketplace, Third Edition, Publisher: CRC Press
- 4. Shakunthala Manay N. Shadaksharaswamy M. 2008.Food Facts and Principles. New Age International Publishers, New Delhi.
- 5. Sunetra Roday 2012. Food Hygiene and Sanitation. Tata Mc Graw HillEducation Private Limited, New Delhi.

REFERENC BOOK (S):

- 1. Debasis Bagchi and Sreejayan Nair 2016. Developing New Functional Food and Nutraceutical Products. ISBN-13: 978-0128027806 Academic Press.
- 2. Fuller Gordon 2005. New Food Product Development. 2nd Edition, CRC Press,Boca Raton, Florida,
- 3. Rao DG.2016. Fundamentals of Food Engineering. PHI Learning Private Limited, New Delhi
- 4. Robert C Baker 1988. Fundamentals of New Food Product Development (Developments in Food Science). Elsevier Science Ltd. ISBN-13: 978-0444429155
- 5. Schaffner DJ. Schroder WR.2000.Food Marketing and International Perspectives. Web/McGraw Hill Publication.

E-RESOURCES:

- 1. https://nzifst.org.nz/resources/foodproductdevelopment/Chapter-3.htm
- 2. https://nzifst.org.nz/resources/creatingnewfoods/documents/CreatingNewFoodsCh5.pdf
- 3. https://cwsimons.com/steps-in-food-product-development/
- 4. https://www.eufic.org/en/food-production/article/processed-food
- 5. https://www.destechpub.com/wp-content/uploads/2015/01/Methods-for-Developing- New-Food-Products-preview.pdf



(AUTONOMOUS)

SUNDARAKKOTTAI. MANNARGUDI - 614016.

(For the candidates admitted in the academic year 2023-2024)

DEPARTMENT OF NUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

SEMESTER-IV-CP-IV: Food Product Development

Ins. Hrs. /Week: 6 Course Credit: 3 Course Code: P23ND412P

Course Content:

Development of New Product:

Definition, Importance, objectives and Need of product development, Reasons of failure, Types and Steps of product development, Product development Tools and their use.

Each team/group of students would develop a food product on the basis of above-mentioned lines/steps and would submit a project report.

Practical on:

- 1. Market and literature survey to identify the concepts of new products based on special dietary requirements, functionality, convenience and improvisation of existing traditional Indian foods.
- 2. Screening of product concept on the basis of techno-economic feasibility.
- 3. Development of prototype product and Standardization of formulation process.
- 4. Proximate Analysis of New Product
- 5. Packaging, labelling and shelf-life studies
- 6. Cost analysis and
- 7. Final Report & record Submission.

TEXT BOOK (S)

- 1. Aaron L.Brody, John B.Lord 2005. Developing New Food Products for a Changing Market Place. 2nd Edition, Publisher: CRC Press
- 2. Avantina Sharma 2006. Textbooks of Food science and technology. International book distributing Company.
- 3. Gordon W. Fuller 2011. New Food Product Development. From Concept to Marketplace, Third Edition, Publisher: CRC Press
- 4. Shakunthala Manay N. Shadaksharaswamy M. 2008.Food Facts and Principles. New Age International Publishers, New Delhi.
- 5. Sunetra Roday 2012. Food Hygiene and Sanitation. Tata Mc Graw HillEducation Private Limited, New Delhi

REFERENCE BOOK (S)

- 1. Debasis Bagchi and Sreejayan Nair 2016. Developing New Functional Food and Nutraceutical Products. ISBN-13: 978-0128027806 Academic Press.
- 2. Fuller Gordon 2005. New Food Product Development. 2nd Edition, CRC Press, Boca Raton, Florida,
- 3. Rao DG .2016. Fundamentals of Food Engineering. PHI Learning Private Limited, New Delhi
- 4. Robert C Baker 1988.Fundamentals of New Food Product Development (Developments in Food Science). Elsevier Science Ltd. ISBN-13:978-0444429155
- 5. Schaffner DJ. Schroder WR.2000.Food Marketing and International Perspectives. Web/McGraw Hill Publication.

E-RESOURCES

- 1. https://nzifst.org.nz/resources/foodproductdevelopment/Chapter-3.htm
- 2. https://nzifst.org.nz/resources/creatingnewfoods/documents/CreatingNewFoodsCh5.pdf
- 3. https://cwsimons.com/steps-in-food-product-development/
- 4. https://www.eufic.org/en/food-production/article/processed-food
- 5. https://www.destechpub.com/wp-content/uploads/2015/01/Methods-for-Developing-New-Food-Products-preview.pdf

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DEPARTMENT OF NUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

SEMESTER IV: EC-VI Food Safety and Quality Control

Ins. Hrs. /Week: 4 Course Credit: 3 Course Code: P23NDE46A

UNIT- I: Spoilage and Safety

(12 Hours)

Food Spoilage: Food spoilage definition; factors influencing food spoilage; Types of food spoilage such as microbes, enzymes and insects; Changes in food quality due to spoilage; Methods for detection of food spoilage; principles and Concept of food preservation.

Food Safety: Need and importance of food safety in food industries; Factors affecting food safety; Role of kitchen-hygiene, employee health and food plant hygiene in prevention of food spoilage and contamination; Regulatory authorities at local, district and national levels ensuring food safety in food industries.

UNIT-II: Additives and Adulteration

(12 Hours)

Food Additives: Definition; Common food additives and its function and usage; Permissible limits of additives in foods; Implications of additives on consumers health; Food adulteration: Meaning and definition; Types of food adulterants; Methods used for detection of food adulterants.

UNIT- III: Testing of Food Quality

(12 Hours)

Testing of Food Quality: Food Quality meaning and need of food quality testing; Types of evaluation -Subjective and objective. Subjective evaluation methods based on difference rate, sensitivity etc; Objective evaluation methods — tools and instruments used; quality standards for cereal, pulses and legumes, vegetables and fruits, milk, egg and flesh foods, fat and sugar and related products.

UNIT- IV: Food Quality Control and Assurance

(12 Hours)

Current concepts of quality control and assurance; Need and importance of quality control programmes such as quality plan, documentation of records, product standards, Product purchase specifications and process control; Principles of Hazards Critical Control Point(HACCP) and its role in total quality process; Duties and responsibilities of food quality controller.

UNIT -V: Laws and Standards

(12 Hours)

Need and importance; National food legislation such as Food Safety and Standards Authority of India (FSSAI), Essential Commodities Act, Indian Standards Institution (ISI), Bureau of Indian Standards (BIS), AGMARK, Fruit Products Order (FPO) and Prevention of Food Adulteration Act (PFA): International Organization such as Food and Agricultural Organization (FAO), World Health Organization (WHO), Codex Alimentarius, and Agricultural and Processed Food Products Export Development Authority(APEDA).

Total Lecture Hours-60

COURSE OUTCOME:

The students will be able to,

- 1. Be familiar with food safety hazards. and analyze hazards that might contaminate foodsand causes of food borne illnesses.
- 2 Capable of identifying additives and their permissible limit and adulterants.
- 3. Gain better understanding on subjective and objective testing methods on foods.
- 4. Apply the Hazards Critical Control Point (HACCP) system as part of food safety andquality management.
- 5. Emphasize on the importance of food safety, food quality, food laws and regulations infood industry.

TEXT BOOK(S)

- 1. Alok Kumar 2019. Fundamentals of Food Hygiene Safety and Quality. Dreamtech Press,ISBN-13: 978-9389307818.
- 2. Joan K, Loken 1995. The HACCP- Food Safety. Manual Wiley, First Edition, ISBN-13:978-0471056850.
- 3. Pulkit Mathur 2018. Food Safety and Quality Control. The Orient Blackswan, ISBN-13:978-9352873791.
- 4. Suri Malhotra 2013. Food Science, Nutrition and Safety. Pearson Education, India. ISBN-13: 978-8131771105.
- 5. Virag Gupta 2017. The Food Safety and Standards Act, 2006. Commercial LawPublication Pvt. Ltd, India. ISBN-13: 978-9385075605.

REFERENCE BOOK(S)

- 1. Askar A. And Treptow H. 1993. Quality Assurance in Tropical Fruit Processing, Springer Verlag, Berlin.
- 2. Early R. 1995. Guide to Quality Management Systems for the Food Industry. Blackie, Academic and Professional, London.
- 3. Gould WA. and Gould, RW. 1988. Total Quality Assurance for the Food Industries. CTIPublications Inc, Baltimore.
- 4. Hagstad HV. and Hubbert WT. 1986. Food Quality Control, Foods of Animal Origin.LowaState University Press, AMES.
- 5. Pomeranz Y.and Meloan CE. 1996. Food Analysis: Theory and Practice. CBS Publishersand Distributor, New Delhi.
- **6.** Ranganna S. 1986. Handbook of Analysis and Quality Control for Fruit and VegetableProducts. 2nd Edition, Tata Mc Graw hill Publishing Co Ltd, New Delhi.

E-RESOURCES

- https://www.imedpub.com/articles/food-spoilage-microorganisms-andtheir-prevention.pdf
- 2. https://byjus.com/biology/food-adulteration/#:~:text=Food%20Adulteration%20can%20be%20defined,for%20economic%20and%20technical%20benefits.
- 3. http://ecoursesonline.iasri.res.in/mod/page/view.php?id=1034
- 4. https://www.food.actapol.net/pub/7_2_2007.pdf
- 5. http://ecoursesonline.iasri.res.in/mod/page/view.php?id=3857

(AUTONOMOUS)

SUNDARAKKOTTAI, MANNARGUDI - 614016

(For the candidates admitted in the academic year 2023–2024)

DEPARTMENT OFNUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

Semester :IV -EC - VI: Front Office Management

Ins. Hrs. /Week: 4 Course Credit: 3 Course Code: P23NDE46B

UNIT- I: Introduction to Front Office Management.

(12 Hours)

Classification of hotels and other departments and Scope of hospitality industry, Front Office organization, layout, planning, furniture and equipment, staffing pattern-according to sizes and types, rules for Front Office staff, duties and attributes of different level of staff, coordination and communication between the Front Office and the other departments. Linkages of Tourism and hospitality industry.

UNIT- II: Guest Rooms (11 Hours)

Hotel - Definition, Classification based on star Category, size and location. Hotel Organization - Organization Pattern in a large, medium and small sized hotel. Categorizing the guest room - Room types, Room configuration, Room Designations, Room Numbering, Room status reconciliation, Key control systems .

UNIT-III: Room Rates, Room Rate Designations

(13Hours)

Rack rate, Corporate rate Volume account rates, Government rate, seasonal rates weekday / Weekend rates, membership rates, Industry rates, Walk in rates, Premium rates, half day rates, Advance Purchase rates, Package rates, Per person rates, group rates. Paging systems and methods, Handling of Guest queries, problem, request, General operations of control desk

UNIT -IV: Reservation (12 Hours)

Reservation - Definition, modes of room reservation and source of reservation, system of room reservation, Basic reservation procedures, Individual and group reservation, Forecasting, computerized reservation system. Check – in check – out procedures.

Settlement of bills, dealing with walk-in guests with scanty baggage, change of guest rooms, handling of guest mail, key handling and control, use and function of the key rack, handling guest messages and enquiries, calculating room occupancy reports. Role of lobby manager

UNIT -IV Communication and Care of Guest

(12 Hours)

Communications, guest care and billings – Knowledge of PBX, EPABX, handling the telephone, reading of directories, phonograms, method of operation of e-mail, fax, facsimile, mobile phones, public address system and accessing web sites.

Caring for guests-Greeting, Transition, Registration. Accounts and Records, Revenue control – handling of credit cards, travellers cheques, travel agents coupons and airline vouchers, foreign exchange regulations in the hotels regarding payment of hotel bills by foreigners and NRIs, handling of guest valuables.

Total Lecture Hours-60

COURSE OUTCOME:

The students will be able to,

- 1. Identify the independent components of the lodging front desk/front office system.
- 2. Identify and explain the impacts of the front desk/ front office on the overall lodging operation.
- 3. Apply and explain skills necessary to seek employment in front desk/ front office supervision and management.
- 4. Infer knowledge on guest care and communication.
- **5.** Understand and apply the procedures typically in room rates and reservation

TEXT BOOK(S)

- 1. Deepak Singh Negi, and Dr. Shiv Mohan Verma, 2020. Fundamentals of Hotel Housekeeping: Operations and Management. 1st New Edition, Bharti Publications, ISBN-13: 978-9389657210.
- 2. Pralay Ganguly 2019. Housekeeping Management in Hotel and Service Industry.Dreamtech Press, ISBN-13: 978-9388425957.
- 3. Raghubalan G. and Smritee Raghubalan. 2015. Hotel Housekeeping-Operations and Management. 3rd edition, Oxford University Press, India. ISBN-13:978-0199451746.
- 4. Sudhir Andrews 2017. Hotel Housekeeping: A Training Manual. Third edition, McGrawHill Education, ISBN-13: 978-1259004988.
- 5. West and Wood BB. 1996. Food service in institutions. Jonewiley and sons.

REFERENCE BOOK(S)

- 1. Bardi JA. 1982. Hotel Front Office Management. Van No strand Reinhold Publishing CompanyLimited, New Delhi.
- 2. Renner PF. 1993. Basic Hotel Front office Procedures. 3rd edition, Van No strand Reinhold, New York.
- 3. Schneider M. and Tucker G. 1985. The Professional Housekeeper. Van No strand Reinhold, New York.
- 4. S.K. Bhatnagar(2005) Front Office Management, Frank Bros. & Co. (Publishers) Limited.
- Ravi Aggarwal (2010). Hotel Front Office Systems & Procedures, sublime publications.
 M.A. khan. (2005). Front Office. Annual Publication Private Limited.

E-RESOURCES

- 1. https://setupmyhotel.com/train-my-hotel-staff/hk/255-hk-dep-chart.html
- 2. https://www.slideshare.net/SunilKumar148/5-cleaning-agents
- 3. https://www.slideshare.net/GautamKumar143/linen-uniform-tailor-room
- 4. https://www.ihmnotes.in/assets/Docs/Sem-2/Accomodation/Ch-2%20AREA%20CLEANING.pdf
- 5. https://www.harpercollege.edu/about/directory/ehs/pdf/Section%2026%20-%20Housekeeping%20Procedures.pdf.

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SUNDARAKKOTTAI, MANNARGUDI – 614016

(For the candidates admitted in the academic year 2023–2024)

DEPARTMENT OFNUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

Semester :IV -EC - VI: Food and Beverage Service

Ins. Hrs. /Week: 4 Course Credit: 3 Course Code: P23NDE46C

UNIT-I: Introduction of Food & Beverage Industry

(15 **Hour**)

Introduction to the Food & Beverage Industry Classification of Catering Establishments (Commercial & Non-Commercial) Introduction to Food & Beverage Operations (Types of F&B Outlets) Restaurant, Coffee Shop, Room Service, Bars, Banquets, Snack Bar, Executive Lounges, Business Centers, Discotheques & Night Clubs. Ancillary department. Food & Beverage Service Equipment Types & Usage of Equipment- Furniture, Chinaware, Silverware & Glassware, Linen, Disposables, Special Equipment, Care & maintenance

UNIT-II: Organization in Food and Beverage service

(15 Hour)

Food & Beverage Service Personnel Food & Beverage Service Organization Structure - Job Descriptions Attributes of Food & Beverage personnel. Basic Etiquettes Interdepartmental relationship Types of Food & Beverage Service Types of Meals, Mise-en-place & Mise-en-scene Table Service – English / Silver, American, French, Russian Self Service – Buffet & Cafeteria Specialized Service – Gueridon, Tray, Trolley, Lounge, Room etc. Single Point Service – Take Away, Vending Kiosks, Food Courts & Bars, Vending machine

UNIT-III: Restaurant Planning & Layout

(15 **Hour**)

Restaurant Planning & Layout, Choosing of Location, Layout Planning, Décor, Furnishing, Fixtures & Fittings, Equipment Selection, Arranging Equipment, Manage stock, Supervisory Skills, Training Staffs, Manage human resource and quality, Manage finances of the facility

UNIT-IV: Beverages in Food Service

(08 Hour)

Alcoholic Beverages Definition Classification of Alcoholic Beverages Fermentation process, Distillation process. Fermented beverages, Distilled Spirits, Liqueurs. Non – Alcoholic Beverages Classification Hot Beverages – Types, Service Cold Beverages – Types, Service

UNIT-V: (08 Hour)

Menu knowledge Introduction Types –A la Carte & Table d'hôte Menu Planning, considerations and constraints Menu Terms. Classical French Menu. Classical Foods & its Accompaniments with Cover.

Total Lecture Hours-60

COURSE OUTCOME

The students will be able to

- 1. Explain the layout of all service areas that they work with and the purpose of the various service areas.
- 2. Identify the roles of the staff working in and responsible for the areas.
- 3. Use equipment in the restaurant.
- 4. Demonstrate knowledge of the entire menu items, alcoholic and non-alcoholic beverages which are on offer in the outlet.
- 5. Perform the correct service requirements of all food and beverage items.

TEXT BOOK (S)

- 1. R. Singaravelavan, Food & Beverage Service, 1st Edition, Oxford University Press 2011.
- 2. Dennis Lillicrap, John Cousins, Food & Beverage Service, 8th Edition, Hodden Education, 2010.
- 3. Vara Prasad, Gopi Krishna, Food & Beverage Simplified, 1ST Edition, Dorling Kindersley, Noida, UP, 2013.
- 4. Sudhir Andrews, Food & Beverage Service A Training Manual, 3rd Edition, Tata Mc Graw Hill Education, Noida, UP, 2015
- 5. Food & Beverage Services by SN Bagchi& Anita Sharma, Aman Publications, New Delhi

REFERENCE BOOK (S)

- 1. Food & Beverage Service by Lilicrap
- 2. Food & Beverage Service by R. Singaravelavan, OUP
- 3. F & B Service Manual by Sudhir Andrews, Tata McGraw Hill
- 4. The Professional Table Service by Dennis Lilicrap.
- 5. Food & Beverage Management & Control by Dr. JM Negi, Kanishka Publications, New Delhi.

E-RESOURCES:

- 1. https://www.uou.ac.in/sites/default/files/slm/BHM-102T.pdf
- 2. https://www.tutorialspoint.com/food_and_beverage_services/food_and_beverage_services_types_of_service.html
- 3. https://groups.google.com/g/le-club-ambrosia/c/d9TxD9aCQiw?pli=1
- 4. https://www.slideshare.net/hotelierjha/food-and-beverage-service-types
- **5.** https://www.ihmnotes.in/assets/Docs/Sem-2/F&b%20DOne/CH-2 % 20prepration %20 for%20service.pdf

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SUNDARAKKOTTAI, MANNARGUDI – 614016

(For the candidates admitted in the academic year 2023–2024)

DEPARTMENT OFNUTRITION AND DIETETICS

M.Sc., FOOD SERVICE MANAGEMENT AND DIETETICS

Semester: IV PCC: Professional Development for Home Science

Ins. Hrs. /Week: 2 Course Credit: 2 Course Code: P23PCND41

Unit-I:Textiles (06 Hours)

Textile terminologies- fibre, yarn, weave, fabric, classification of fibres, yarns and weaves, Identification of fibres and weaves. The manufacturing process of major natural and manmade fibres, properties and their end. Different methods of fabric construction-woven, knitted and non-woven fabrics, their properties. Textile finishes-classification, processing and purposes of finishes.

Unit-II: Apparel Designing

(06 Hours)

Body measurements-procedure, needs, figure types and anthropometry, Equipment and tools used for manufacturing garments-advancements and attachments used for sewing Types of machines used and their parts. Elements and principles of design and its application to apparel. Illustrations and parts of Garments. Fashion-Terminologies, fashion cycle, fashion theories, fashion adoption, fashion forecasting and factors affecting fashion. Pattern making-drafting, draping and flat pattern-making techniques, pattern alteration and dart manipulation techniques..

Unit-III: Family Studies (06Hours)

Dynamics of marriage and family relationships. Family welfare approaches, programmes and challenges, role in national Development. Domestic violence, marital disharmony, conflict, resolution of conflicts. Parent education, positive parenting, community education.

Family disorganization, single parent families.

Unit-IV: Child/Human Development

(06 Hours)

Principles of growth and development, care during pregnancy and prenatal and neonatal development. Theories of human development and behaviour. Early childhood care and education — activities to promote holistic development. Influence of family, peers, school, community and culture on personality development. Family welfare approaches, programmes and challenges, role in national Development. Domestic violence, marital disharmony, conflict, resolution of conflicts. Parent education, positive parenting, community education. Family disorganization, single parent families

Unit-V:Extension Management And Community Development

(06 Hours)

Historical perspectives of extension—genesis of extension education and extension systems in India and other countries, objectives of extension education and extension service, philosophy and principles of extension programme development. Programme management- need assessment, situation analysis, planning, organization, implementation, monitoring and evaluation. Extension methods and materials-interpersonal, small and large group methods, audiovisual aids-need, importance, planning, classification, preparation and field testing, use and evaluation of audio-visual materials. Curriculum development and planning for extension education and development activities, Bloom's taxonomy of educational objectives and learning.

Total Lecture Hours-30

COURSE OUTCOME:

The students should be able to,

- 1. Acquire knowledge about different types of fabric and manufacturing process.
- 2. Analyze the apparel design and manufacturing
- 3. Develop a theoretical understanding of families and children.
- 4. Understand the physical, psychological, and social development of the individual from infancy to old age.
- 5. Understand the extension systems in India and community development.

TEXT BOOK(S):

- 1. Bernard P. Corbman. 2005. Textiles Fiber to Fabric. Sixth edition, McGraw Hill International Editions, New Delhi.
- 2. Addivi, Reddy. 1987. Extension Education. Sree lakshmi press, Andrapradesh.
- 3. Hurlock E.B., (1972). Child Development, New York: McGraw Hill Book company
- 4. Krathwohl, D. R. (2002) A Revision of Bloom's Taxonomy. (PDF) in Theory into Practice. V 41. #4. Autumn, 2002. Ohio State University. Retrieved @
- Ajit K. Singh. 2011. Family and Child Welfare Publisher, Centrum Press ISBN-10:9381293708, ISBN-13:978-9381293706

REFERENCE BOOK(S):

- 1. Gohl EP and vilensky LD. 1983. Textile Science. 2nd Ed., Publishers, NewDelhi.
- 2. Dahama OP and Bhat Nagar OP. 1985. Extension and Communication for Development.Oxford and IBH Publishing Company. New Delhi.
- 3. Varghese MA. Ogale, Srinivasan K.1992. Home Management. Wiley Eastern Ltd.
- 4. McCurdy Karen and Jones, Elizabet. 2000. Supporting Families Lessons from the Field. Sage Publications, USA.
- 5. Mathur, Hari Mohan. 1992. The Family Welfare Programmes in India. Vikas Publishing House, New Delhi.

E- RESOURCES

- 1. https://egyankosh.ac.in/bitstream/123456789/92818/1/Block-2.pdf
- 2. https://egyankosh.ac.in/bitstream/123456789/42204/1/Unit-1.pdf
- 3. https://en.wikipedia.org/wiki/Family_studies
- 4. https://en.wikipedia.org/wiki/Child_development
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