

**MAHATMA GANDHI UNIVERSITY
KOTTAYAM**



**B.VOC. DEGREE PROGRAMME
CULINARY ARTS AND
HOSPITALITY MANAGEMENT**

**REGULATION AND SCHEME
(2020 ADMISSION ONWARDS)**

FACULTY OF SCIENCE

REGULATION AND SCHEME FOR B.VOC. PROGRAMME UNDER MAHATMA GANDHI UNIVERSITY

(2020 admissions onwards)

We are facing unprecedented challenges – Skill and knowledge, the driving forces of economic growth and social development for any country. Presently, the country faces a demand – supply mismatch, as the economy needs more ‘skilled’ workforce than that is available. In the higher education sphere, knowledge and skills are required for diverse forms of employment in the sector of education, health care manufacturing and other services. Potentially, the target group for skill development comprises all those in the labour force, including those entering the labour market for the first time, those employed in the organized sector and also those working in the unorganized sector. Government of India, taking note of the requirement for skill development among students launched National Vocational Education Qualification Framework (NVEQF) which was later on assimilated into National Skills Qualifications Framework (NSQF). Various Sector Skill Councils (SSCs) are developing Qualification Packs (QPs), National Occupational Standards (NOSs) and assessment mechanisms in their respective domains, in alignment with the needs of the industry.

The University Grants Commission (UGC) has launched a scheme on skills development based higher education as a part of college/university education, leading to Bachelor of Vocation (B.Voc.) Degree with multiple exits such as Diploma/Advanced Diploma under the NSQF (National skill Qualifications framework). The B.Voc. programme is focused on universities and colleges providing undergraduate studies which would also incorporate specific job roles along with broad based general education. This would enable the graduates completing B.Voc. to make a meaningful participation in accelerating India’s economy by gaining appropriate employment, becoming entrepreneurs and creating appropriate knowledge. The proposed vocational programme will be a judicious mix of skills, professional education related to concerned vocation and also appropriate content of general education.

The Mahatma Gandhi University gave a strong momentum to the

initiatives of UGC-NSQF in the very beginning itself. This University provides opportunities to its affiliating colleges since Academic Year 2014-15 to start skill based vocational Graduate programmes strictly under the guidelines of UGC and NSQF.

1. TITLE

These regulations shall be called “**MAHATMA GANDHI UNIVERSITY REGULATIONS FOR B.VOC PROGRAMME 2018**”.

2. SCOPE

Applicable to all regular B.Voc Programme conducted by the University with effect from 2018 admissions onwards, except for B.Voc. Programmes, having scheme and syllabus already approved by MGU under 2014 regulation and scheme.

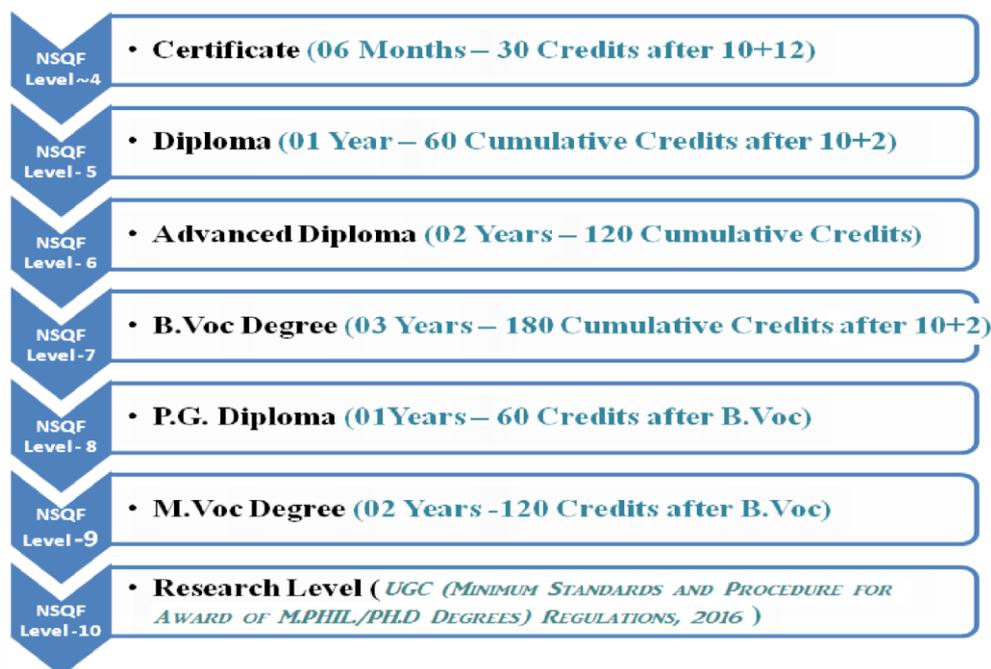
During the academic year 2019-20 admission onwards, all regular B.Voc Programme in affiliating colleges under MG University should strictly follow *Mahatma Gandhi University Regulations For B.Voc Programme 2018*.

3. ELIGIBILITY FOR ADMISSION AND RESERVATION OF SEATS

Eligibility for admissions and reservation of seats for various Undergraduate Programmes shall be according to the rules framed by the University and UGC in this regard, from time to time. The eligibility is plus two or equivalent.

4. Type of Courses and Awards:

There will be full time credit-based modular programmes, wherein banking of credits for skill and general education components shall be permitted so as to enable multiple exit and entry.



The multiple entry and exit enables the learner to seek employment after any level of Award and join back as and when feasible to upgrade qualifications / skill competencies either to move higher in the job profile or in the higher educational system. This will also provide the learner an opportunity for vertical mobility to second year of B.Voc degree programme after one year diploma and to third year of B.Voc degree programme after a two year advanced diploma. The students may further move to Masters and Research degree programmes mapped at NSQF Level 8 – 10.

5. Curricula and Credit System for Skill Based Courses

In order to make education more relevant and to create ‘industry fit’ skilled workforce, the institutions recognized under B.Voc Degree programme offering skill based courses will have to be in constant dialogue with the industry and respective Sector

Skill Councils (SSC's) so that they remain updated on the requirements of the workforce for the local economy. These institutions should also preserve and promote the cultural heritage of the region, be it art, craft, handicraft, music, architecture or any such thing, through appropriately designed curriculum leading to gainful employment including self-employment and entrepreneurship development.

The curriculum in each of the semester/years of the programme(s) will be a suitable mix of general education and skill development components. The General Education Component shall have 40% of the total credits and balance 60% credits shall be of Skill Component.

The institution(s) shall prepare draft curriculum as per the UGC guidelines for Curricular Aspects Assessment Criteria and Credit System for Skill based Vocational Courses and place it for vetting by the UGC Advisory Committee constituted under these guidelines.

The Curriculum shall be finally approved by the Board of Studies (BoS) and Academic Council of the University / Autonomous College. The Universities where BoS for Vocational subjects has not yet been constituted, the curriculum may be considered by the BoS in allied subject area or an ad-hoc BoS may be constituted till the time regular BoS is notified in the university. The BoS should consider the programme wise curriculum based QP for skill component and relevant general education subjects *i.e.* the curricula for programmes in one broad subject area may vary from institution to institution in case the different progressive QPs are mapped with the programmes being offered. The choice of different progressive Job roles for a course may also be enabled under CBCS. It includes Executive chef, Sous chef, Chef de partie, commis –I, Commis II, Commis-III, Receptionist, Information Desk, Lobby Manager, Executive House keeper, Floor Supervisor, Hostess, Assistant F & B Manager.

6. Structure of the Programme

6.1 Skill Development Components - 60% Weight age

6.2 General Education Component - 40% Weight age

The B.Voc Programme should comprise 60% Skill Development Components (60 % of total Credit) and 40% General Education Component (40% total Credit) as per guidelines of UGC and NSQL.

As an illustration, awards shall be given at each stage as per Table 1 below for cumulative credits awarded to the learners in skill based vocational courses.

Table 1

7. SCHEME AND SYLLABUS

NSQF Level	Skill Component Credits	General Education Credits	Total Credits for Award	Normal Duration	Exit Points / Awards
7	108	72	180	Six Semesters	B.Voc Degree
6	72	48	120	Four semesters	Advanced Diploma

5	36	24	60	Two semesters	Diploma
4	18	12	30	One semester	Certificate

7.1 B.Voc Programme should include (a) General Education Component, (b) Skill Education Component

7.2 The B.Voc Programme should followed Credit and Semester System of MGU.

7.3 A separate minimum of 30% marks each for internal and external (for both theory and AOC) and aggregate minimum of 40% are required for a pass for a course. For a pass in a programme, **Grade P** is required for all the individual courses.

If a candidate secures **F Grade** for any one of the courses offered in a Semester/Programme, **only F grade** will be awarded for that Semester/Programme until he/she improves this to **P Grade** or above within the permitted period.

8. Assessment and Evaluation by MG University.

General Education Components and Skill Development Components shall be assessed and evaluated by MG University as per University Norms and UGC-NSQF guidelines.

9. Assessment and Certification by Sector Skill Council (SSC)

The affiliated colleges should make necessary arrangements for the simultaneous assessments and certification of Skill Development Component by aligned SSC having the approval of National Skill Development Corporation of India (NSDC).

10. EXAMINATIONS

10.1 The evaluation of each paper shall contain two parts:

- (i) Internal or In-Semester Assessment (ISA)
- (ii) External or End-Semester Assessment (ESA)

10.2 The internal to external assessment ratio shall be 1:4.

Both internal and external marks are to be rounded to the next integer.

All the courses (theory & AOC), grades are given **on a 7-point scale** based on the total percentage of marks, (*ISA+ESA*) as given below:-

Percentage of Marks	Grade	Grade Point
95 and above	O (Outstanding)	10
90 to below 95	A+ (Excellent)	9
80 to below 90	A (Very Good)	8
70 to below 80	B+ (Good)	7
60 to below 70	B (Above Average)	6
50 to below 60	C (Average)	5
40 to below 50	P (Pass)	4
Below 40	F(Fail)	0
	Ab (Absent)	0

10.3 CREDIT POINT AND CREDIT POINT AVERAGE

Credit Point (CP) of a paper is calculated using the formula:-

$$CP = C \times GP, \text{ where } C \text{ is the Credit and } GP \text{ is the Grade point}$$

Semester Grade Point Average (SGPA) of a Semester is calculated using the formula:- $SGPA = TCP/TC$, where TCP is the Total Credit Point of that semester.

Cumulative Grade Point Average (CGPA) is calculated using the formula:-

$$CGPA = TCP/TC, \text{ where } TCP \text{ is the Total Credit Point of that programme.}$$

Grade Point Average (GPA) of different category of courses viz. Common Course I, Common Course II, Complementary Course I, Complementary Course II, Vocational course, Core Course is calculated using the formula:-

$$GPA = \frac{TCP}{TC}, \text{ where } TCP \text{ is the Total Credit Point of a category of course.}$$

TC is the total credit of that category of course

Grades for the different courses, semesters and overall programme are given based on the corresponding CPA as shown below:

GPA	Grade	
9.5 and above	O	Outstanding
9 to below 9.5	A+	Excellent
8 to below 9	A	Very Good
7 to below 8	B+	Good
6 to below 7	B	Above Average
5 to below 6	C	Average
4 to below 5	P	Pass
Below 4	F	Failure

10. MARKS DISTRIBUTION FOR EXTERNAL AND INTERNAL EVALUATIONS

The external theory examination of all semesters shall be conducted by the University at the end of each semester. Internal evaluation is to be done by continuous assessment. For all courses total marks of external examination is 80 and total marks of internal evaluation is 20. Marks distribution for external and internal assessments and the components for internal evaluation with their marks are shown below:

For all Theory Courses

- a) **Marks of external Examination : 80**
- b) **Marks of internal evaluation : 20**

Components of Internal Evaluation	Marks
Theory	
Attendance	5
Assignment /Seminar/Viva	5
Test paper(s) (1 or 2) (1×10 =10; 2×5 =10)	10
Total	20

For all AOC Courses total marks for external evaluation is 80 and total marks for internal evaluation is 20.

For all AOC Courses

- a) **Marks of external Examination : 80**
- b) **Marks of internal evaluation : 20**

Components of Internal Evaluation	Marks
Attendance	5
Record	5
Skill Test	5
Lab Performance / Punctuality	5 5
Total	20

*Marks awarded for Record should be related to number of experiments recorded and duly signed by the teacher concerned in charge.

All three components of internal assessments are mandatory.

11.1 PROJECT EVALUATION

- a) **Marks of external Examination** : **80**
b) **Marks of internal evaluation** : **20**

Components of Internal Evaluation	Marks
Punctuality	5
Experimentation/Data Collection	5
Skill Acquired	5
Report	5
Total	20

*Marks for dissertation may include study tour report if proposed in the syllabus.

Components of External Evaluation	Marks
Dissertation (External)	50
Viva-Voce (External)	30
Total	80

(Decimals are to be rounded to the next higher whole number)

11.2 INTERNSHIP

After the completion of every even semester, the student will undergo a minimum of two weeks Internship Programme in an Industry, having a good exposure in the concerned skill (Established at least two years prior), capable of delivering the skill sets to the students. At the end of the Internship, the students should prepare a comprehensive report.

11.3 Attendance Evaluation for all papers

Attendance Percentage	Marks
Less than 75 %	1 Mark
75 % & less than 80%	2 Marks
80% & less than 85%	3 Marks

85% & less than 90%	4 Marks
90% & above	5 Marks

(Decimals are to be rounded to the next higher whole number)

11.4 ASSIGNMENTS

Assignments are to be done from 1st to 4th Semesters. At least one assignment per course per semester should be submitted for evaluation.

11.5 INTERNAL ASSESSMENT TEST PAPERS

Two test papers are to be conducted in each semester for each course. The evaluations of all components are to be published and are to be acknowledged by the candidates. All documents of internal assessments are to be kept in the college for one year and shall be made available for verification by the University. The responsibility of evaluating the internal assessment is vested on the teacher(s), who teach the course.

11.6 GRIEVANCE REDRESSAL MECHANISM

Internal assessment shall not be used as a tool for personal or other type of vengeance. A student has all rights to know, how the teacher arrived at the marks. In order to address the grievance of students, a three-level Grievance Redressal mechanism is envisaged. A student can approach the upper level only if grievance is not addressed at the lower level.

Level 1: Department Level:

The Department cell chaired by the HOD, Department Coordinator, Faculty Advisor and Teacher in-charge as members.

Level 2: College level

A committee with the Principal as Chairman, College Coordinator, HOD of concerned Department and Department Coordinator as members.

Level 3: University Level

A Committee constituted by the Vice-Chancellor as Chairman, Pro-ViceChancellor, Convener - Syndicate Standing Committee on Students Discipline and Welfare, Chairman-Board of Examinations as members and the Controller of Examination as member-secretary.

The College Council shall nominate a Senior Teacher as coordinator of internal evaluations. This coordinator shall make arrangements for giving awareness of the internal evaluation components to students immediately after commencement of first semester

The internal evaluation marks/grades in the prescribed format should reach the University before the 4th week of October and March in every academic year.

11.7 EXTERNAL EXAMINATION

The external examination of all semesters shall be conducted by the University at the end of each semester.

- Students having a minimum of 75% average attendance for all the courses only can register for the examination. Condonation of shortage of attendance to a maximum of 10 days in a semester subject to a maximum of 2 times during the whole period of the programme may be granted by the University on valid grounds. This condonation shall not be counted for internal assessment. Benefit of attendance may be granted to students attending University/College union/Co-curricular activities by treating them as present for the days of absence, on production of participation/attendance certificates, within one week, from competent authorities and endorsed by the Head of the institution. This is limited to a maximum of 10 days per semester and this benefit shall be considered for internal assessment also. Those students who are not eligible even with condonation of shortage of attendance shall repeat the **semester** along with the next batch after obtaining readmission.

- Benefit of attendance may be granted to students attending

University/College union/Co-curricular activities by treating them as present for the days of absence, on production of participation/attendance certificates, within one week, from competent authorities and endorsed by the Head of the institution. This is limited to a maximum of 10 days per semester and this benefit shall be considered for internal assessment also.

- Those students who are not eligible even with condonation of shortage of attendance shall repeat the course along with the next batch.

- There will be no supplementary exams. For reappearance/ improvement, the students can appear along with the next batch.

- Student who registers his/her name for the external exam for a semester will be eligible for promotion to the next semester.

- A student who has completed the entire curriculum requirement, but could not register for the Semester examination can register notionally, for getting eligibility for promotion to the next semester.

- A candidate who has not secured minimum marks/credits in internal examinations can re-do the same registering along with the University examination for the same semester, subsequently.

11. PATTERN OF QUESTIONS

Questions shall be set to assess knowledge acquired, standard and application of knowledge, application of knowledge in new situations, critical evaluation of knowledge and the ability to synthesize knowledge. The question setter shall ensure that questions covering all skills are set. She/he shall also submit a detailed scheme of evaluation along with the question paper. A question paper shall be a judicious mix of short answer type, short essay type /problem solving type and long essay type questions.

12.1 Pattern of questions for External examination – Theory paper

Question Type	Total no. of questions	Number of questions to be answered	Marks of each question	Total marks
Very short answer type	12	10	2	20
Short answer (Not to exceed 60 words)	9	6	5	30
	4	2	15	30
Long essay TOTAL	25	1		80

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12.2 Pattern of questions for external examination – AOC

Question Type	Total no. of questions	Number of questions to be	Marks of each question	Total marks
Theory Assessment- Short Answer Type	8	5	4	20
Skill Assessment- Practical	1	1	60	60
TOTAL	9	6		80

12.3 Mark division for external AOC/ LAB examination

Record	Theory/ Procedu re/ Design	Activity / Neatnes s	Result	Viva	Total
10	10	20	10	10	60

12. RANK CERTIFICATE

The University publishes rank list of top 10 candidates for each programme after the publication of 6th semester results. Rank certificate shall be issued to candidates who secure positions from 1st to 3rd in the rank list. Candidates who secure positions from fourth to tenth in the rank list shall be issued position certificate indicating their position in the rank list.

Candidates shall be ranked in the order of merit based on the CGPA scored by them. Grace marks awarded to the students should not be counted fixing the rank/position. Rank certificate and position certificate shall be signed by the Controller of Examinations.

13. Mark cum Grade Card

The University shall issue to the students grade/marks card (by online) on completion of each semester, which shall contain the following information:

- Name of University
- Name of the College
- Title & Model of the B. VOC Programme
- Semester concerned
- Name and Register Number of student
- Code, Title, Credits and Max. Marks (Int, Ext & Total) of each course opted in the semester
- Internal marks, External marks, total marks, Grade, Grade point (G) and Credit point in each course in the semester
- Institutional average of the Internal Exam and University Average of the External Exam in each course.
- The total credits, total marks (Max & Awarded) and total credit points in the semester (corrected to two decimal places)
- Semester Credit Point Average (SCPA) and corresponding Grade
- Cumulative Credit Point Average (CCPA)

The final Grade/mark Card issued at the end of the final semester shall contain the details of all courses taken during the entire programme and shall include the final grade/marks scored by the candidate from Ist to 5th semester, and overall grade/marks for the total programme.

14. READMISSION

Readmission will be allowed as per the prevailing rules and regulations of the university.

There shall be **3 level monitoring** committees for the successful conduct of the scheme.

They are:

1. Department Level Monitoring Committee (DLMC), comprising HOD and two senior-most teachers as members.
2. College Level Monitoring Committee (CLMC), comprising Principal, Dept. – Co-Ordinator and A.O/Superintendent as members.
3. University Level Monitoring Committee (ULMC), headed by the Vice – Chancellor and Pro–Vice – Chancellor, Convenors of Syndicate subcommittees on Examination, Academic Affairs and Staff and Registrar as members and the Controller of Examinations as member-secretary.

16. TRANSITORY PROVISION

Notwithstanding anything contained in these regulations, the Vice Chancellor shall, for a period of one year from the date of coming into force of these regulations shall be applied to any programme with such modifications as may be necessary.

B.VOC. CULINARY ARTS AND HOSPITALITY MANAGEMENT

Programme specific outcomes:

- Develop advanced culinary skills that can be applied in various food service operations
- Develop in-depth knowledge of the various cuisines of the world
- Develop skill in hospitality management
- Impart business management skills to be a good entrepreneur in food sector.
- Impart technical skills in various aspects of food processing and preservation.
- Discuss the relationship of art and science in culinary preparation.
- Provide an employment in food processing and cookery.
- Acquire knowledge of chemical, biological and physical principles which underlie food processing and storage.
- Provide experience through internships at various local, national and international hotels and resort establishments.

SEMESTER – I		Diploma in Culinary Arts & Hospitality Management					
Sl.No	Course Code & NSQF Level	Title	Duration Gen Education credits	Skill component credits	Theory Hours	Practical Hours	Total hours
1	BOCG101	Listening and speaking skills in English	4 credits		72	Nil	72
2	BOCG102	Information technology for business	4 credits		54	Nil	54
3	CAHC101	Foreign Language (French)	4 credits		54	Nil	54
4	CAHC102&AOC	Perspectives of food science-I		6 credits	54	36	90
5	CAHC103&AOC	Introduction to Culinary arts 1		6 credits	36	54	90
6	CAHC104&AOC	Food Production and Patisserie Theory I		6 credits	36	54	90
			12	18	306	144	450

SEMESTER – II		Diploma in Culinary Arts & Hospitality Management					
Sl. No	Course Code & NSQF Level	Title	Duration Gen Education credits	Skill component credits	Theory Hours	Practical Hours	Total hours
1	BOCG201	Presentation skills in English	4 credits		72	Nil	72
2	CAHC201	Foundation course in computer Application	8 credits		54	72	126
3	CAHC202	Nutrition and sanitation		3 credits	36	Nil	36
4	CAHC203&AOC	Food Safety and Hygiene -I		4 credits	36	36	72
5	CAHC204&AOC	Garde Manger		5 credits	36	36	72
6	CAHC205&AOC	On Job training		6 credits	Nil	90	90
			12	18	216	234	450

SEMESTER – III Advanced Diploma in Culinary Arts & Hospitality Management

Sl.No	Course Code & NSQF Level	Title	Duration Gen Education credits	Skill component credits	Theory Hours	Practical Hours	Total hours
1	BOCG301	Principles of Management	4 credits		72	Nil	72
2	CAHC301	Foreign Language (Hotel French)	4 credits		54	Nil	54
3	CAHC302	Food packaging	4 credits		54	Nil	54
4	CAHC303	Food Microbiology-1		5 credits	36	36	72
5	CAHC304&AOC	Food production and Exhibition		8 credits	54	72	126
6	CAHC305&AOC	Housekeeping		5 credits	36	36	72
			12	18	306	144	450

SEMESTER – IV Advanced Diploma in Culinary Arts & Hospitality Management

Sl.No	Course Code & NSQF Level	Subjects	Duration Gen Education credits	Skill component credits	Theory Hours	Practical Hours	Total hours
1	BOCG401	Soft skills and personality development	4 Credits		72	Nil	72
1	CAHC401	Hotel Accountancy	4 credits		36	18	54
2	CAHC402	Sales and Marketing Management	4 credits		54	Nil	54
3	CAHC403	Food Quality and Assurance		3 credits	36	Nil	36
4	CAHC404&AOC	Food Production		6 credits	36	54	90
5	CAHC405&AOC	Introduction to hospitality industry		4 credits	54	Nil	54
6	CAHC406&AOC	On Job training		5 credits	Nil	90	90
			12	18	270	180	450

SEMESTER – V**B.Voc in Culinary Arts & Hospitality Management**

Sl.No	Course Code & NSQF Level	Subjects	Duration Gen Education Credits	Skill Component Credits	Theory Hours	Practical Hours	Total Hours
1	BOCG501	Environmental studies	4credits		72	Nil	72
2	CAHC501	Human Resource Planning and development	8credits		108	Nil	108
3	CAHC502&AOC	Industrial, Air lines and fast food catering (T) Banquets and Buffets(P)		6 credits	36	54	90
4	CAHC503	Food Analysis and adulteration		2 credits	36	Nil	36
5	CAHC504&AOC	Advanced Bakery and Confectionary		6 credits	36	54	90
6	CAHC506&AOC	Functional Foods and Nutraceuticals		4 credits	18	36	54
			12	18	306	144	450

SEMESTER – VI							
B.Voc in Culinary Arts & Hospitality Management							
Sl.No	Course Code & NSQF Level	Subjects	Duration Gen Education Credits	Skill Component Credits	Theory Hours	Practical Hours	Total Hours
1	BOCG601	Entrepreneurship development	4credits		72	Nil	72
2	CAHC601&AOC	Foundation course in front office	4credits		18	36	54
3	CAHC602&AOC	Food Preservation	4 credits		18	36	54
4	CAHC603&AOC	Art of Food & Beverage Service I		4 credits	36	36	72
5	CAHC604	Food Additives and Flavour Technology		6 credits	54	nil	54
6	CAHC605&AOC	Food waste Management		4 credits	18	36	54
7	CAHC606&AOC	Internship/Project		6 credits		90	90
			12	18	306	144	450

B.Voc in Culinary Arts and Hospitality Management - Diploma

Objectives:

- To discuss the relationship of art and science in culinary preparation.
- To discuss the importance of sanitation in food preparation.
- Identify the ten common classical cuts.
- To recognise the measurement systems.

Curriculum and Structure: SEMESTER I

NSQF LEVEL 5

Baker & Confectioner performs and supervises workers while baking and confectionery tasks, weighing, mixing of ingredients, adding flavour and colour to dough or paste, moulding, shaping, cutting and wrapping of soft or hard stuff of finished bakery or confectionery products. Ensures quality and rate of production and maintains cleanliness during operations.

SEMESTER – I		Diploma in Culinary Arts & Hospitality Management					
Sl.No	Course Code & NSQF Level	Title	Duration Gen Education credits	Skill component credits	Theory Hours	Practical Hours	Total hours
1	BOCG101	Listening and speaking skills in English	4 credits		72	Nil	72
2	BOCG102	Information technology for business	4 credits		54	Nil	54
3	CAHC101	Foreign Language (French)	4 credits		54	Nil	54
4	CAHC102& AOC	Perspectives of food science-I		6 credits	54	36	90
5	CAHC103&AOC	Introduction to Culinary arts 1		6 credits	36	54	90

6	CAHC104&AOC	Food Production and Patisserie Theory I		6 credits	36	54	90
			12	18	306	144	450

SEMESTER – I

BOCG101: LISTENING AND SPEAKING SKILLS IN ENGLISH

(Credits – 4, Total hours-72 hours)

4 hours/week

Course outcomes:

1. Understand the fundamentals of communicative english and english grammar
2. Develop the speaking skills.
3. Develop the listening skills.

MODULE – I

Speech Sounds: Phonemic symbols – Vowels – Consonants – Syllables – Word stress – Stress in polysyllabic words – Stress in words used as different parts of speech – Sentence stress – Weak forms and strong forms – Intonation

Sample activities:

1- Practice reading aloud. Use a variety of texts including short stories, advertisement matter, brochures, etc 2- Read out a passage and ask the students to identify the stressed and unstressed syllables.

MODULE – II

Basic Grammar: Articles - Nouns and prepositions - Subject-verb agreement -

Phrasal verbs - Modals - Tenses - Conditionals – Prefixes and suffixes – Prepositions -Adverbs – Relative pronouns - Passives - Conjunctions - Embedded questions - Punctuation –Abbreviations-concord- collocations-phrasal verbs- idiomatic phrases

Sample activities:

1- Ask students to write a story/report/brochure, paying attention to the grammar.

MODULE – III

Listening: Active listening – Barriers to listening – Listening and note taking – Listening to announcements – Listening to news on the radio and television.

Sample activities:

1- Information gap activities (e.g. listen to a song and fill in the blanks in the lyrics given on a sheet) 2- Listen to BBC news/ a play (without visuals) and ask the students to report what they heard.

MODULE– IV

Speaking- Fluency and pace of delivery – Art of small talk – Participating in conversations – Making a short formal speech – Describing people, place, events and things – Group discussion skills, interview skills and telephone skills.

Sample activities:

- 1- Conduct group discussion on issues on contemporary relevance.*
- 2- Ask students to go around the campus and talk to people in the canteen, labs, other departments etc. and make new acquaintances.*
- 3- Conduct mock interviews in class.*
- 4- Record real telephone conversations between students and ask them to listen to the recordings and make the corrections, if any are required.*

MODULE – V

Reading: Theory and Practice – Scanning – Surveying a textbook using an index – reading with a purpose – Making predictions – Understanding text structure – Locating main points – Making inferences – Reading graphics – Reading critically – Reading for research.

References:

- 1- V.Sasikumar, P KiranmaiDutt and GeethaRajeevan, .*Communication Skills in English*.Cambridge University Press and Mahatma Gandhi University.
- 2- Marilyn Anderson, Pramod K Nayar and Madhucchandra Sen. *Critical Thinking, Academic Writing and Presentation Skills*. Pearson Education and Mahatma Gandhi University.

For Further Activities

1. *A Course in Listening and Speaking I & II*, Sasikumar, V.,KiranmaiDutt and Geetha

Rajeevan, New Delhi: CUP, 2007

2. *Study Listening: A Course in Listening to Lectures and Note-taking* Tony Lynch New Delhi: CUP,2007.

3. *Study Speaking: A Course in Spoken English for Academic Purposes*. Anderson, Kenneth, Joan New Delhi: OUP, 2008

BOCG102: Information Technology for Business (AOC)

(Credits-4 , Total hours:54) 3 hours/week

Course outcome:

1. Understand the fundamental parts of a computer
2. Analyse different soft wares .
3. Explain information technology and its applications.

Module – I

10hours

Introduction to Information Technology: Information and Communication Technology (ICT), Information systems E-World - Computer Architecture: Input Hardware - Processing & Memory Hardware, Storage Hardware, Output Hardware, Communication Hardware - Concept of operating system - Understanding your computer customization configuring screen, mouse, printer.

Module – II

11hours

Word Processing Package: Introduction - Features - Word User Interface Elements; Creating new Documents; Basic Editing, Saving a Document; Printing a Document; Print Preview, Page Orientation - Viewing Documents; Setting tabs - Page Margins; Indents; Ruler, Formatting Techniques; Font Formatting, Paragraph Formatting; Page Setup; Headers & Footers; Bullets and Numbered List; Borders and Shading; Find and Replace; Page Break & Page Numbers; Mail Merging- Spelling and Grammar Checking; Tables; Formatting Tables;

Module – III

11hours

Spreadsheet Package: Introduction, Excel User Interface, Working with cell and cell addresses, Selecting a Range, Moving, Cutting, Copying with Paste, Inserting and Deleting cells, Freezing cells, Adding, Deleting and Copying Worksheet within a workbook, Renaming a Worksheet. Cell Formatting Options, Formatting fonts, Aligning, Wrapping and Rotating text, Using Borders, Boxes and Colors, Centering a heading, Changing row/column height/width, Formatting a Worksheet Automatically, Insert Comments, Clear contents in a cell. Using print Preview, Margin and Orientation, Centering a Worksheet, Using header and footer.

Module – IV

11hours

Advanced Features of Spreadsheet Package: All Functions in Excel, Using Logical Functions, Statistical functions, Mathematical etc. Elements of Excel Charts, Categories, Create a Chart, Choosing chart type, Edit chart axis - Titles, Labels, Data series and legend, Adding a text box, Rotate text in a chart, Saving a chart.

Module – V

11hours

Presentation Package: Ms-PowerPoint: Advantages of Presentation Screen layout creating presentation inserting slides adding sounds & videos-formatting slides -slide layout views in presentation -slide transition Custom animation Managing slide shows - using pen Setting slide intervals

References

1. Foundations of Information Technology Coursebook 9: Windows 7 and MS Office 2007 (With MS Office 2010 Updates) Paperback – 2013
2. by Sangeeta Panchal (Author), Alka Sabharwal (Author)Microsoft® Office Professional 2010 Step by Step 1st Edition by Joan Lambert (Author), Joyce Cox (Author), Frye D., Curtis (Author)

3. Practical Guide to PC and Microsoft Office 2010: Word, Excel, PowerPoint Paperback – August 9, 2012 by Sergey K Aityan

4. Foundations of Information Technology Class 10: Windows 7 and MS Office 2013 Paperback – 2016 5. by Sangeeta Panchal (Author), Alka Sabharwal (Author)

CAHC101: FOREIGN LANGUAGE FRENCH

(Credits 4, Total Hours: 54) 3hours/week

Course outcome:

- Enhance the communication skills in French required of a Culinary Professional
- Frame grammatically correct sentences in French
- Apply the correct conjugation of verbs in sentences

Module I

27 hours

About the Language • Alphabet • Accents • Orthographic sign • Linking • Final consonants • Syllable • Pronunciation • Use of Capital Letters • Article • Gender depending on the meaning of the word • Common French words • Names of days, months, & seasons • Cardinal • Ordinal • Colour • Hour • Auxiliary Verb • Vegetable • Fish • Shell Fish • Meat • Fruit • Poultry & game • Restaurant • Equipment • Miscellaneous • Phrases • Feminine of nouns and objectives • Nouns of two genders • Formation of plural of nouns and adjectives • French words • Translations • Common French terms related to the hotel industry.

Module II

27 hours

French Days, Months, Numbers, Seasons Plan a Five Course menu in French Newspaper reading – Current Affairs Comprehension Précis Writing Paragraph Writing Conversation / Role Play Public Speaking.

Make Negative, Make Plurals, Conjugate in the Present tense ; avoir, entrée, Faire, Manger, Boire, Mettre.

Reference:

Essential Guide for Students (StudySkills), SAGE Publishers.

CAHC102: Perspectives of food science-I
(Credits 4, Total hours: 54) 3 hours/week

Course outcomes:

1. Understand the basic principles of food science.
2. Understand and analyse different cuisines.
3. Apply the principles to prepare different dishes.
4. Understand the principles of baking and apply it to prepare different dishes.

Module1

15Hours

Kitchen layout- Types of kitchen, General planning & Layout of food production Outlets in a five star hotel, Layout of receiving area. Storage area, Service & Wash up area; Kitchen Equipment- Different types of the kitchen equipment, different types of special equipment, heat generating- Fuel- Heat Transfer principles, Types- Electricity, gas, oil, fire high pressure steam and coal, refrigeration, kitchen machinery, storage tables. Hand tools, weighing and measuring, pot wash, diagrams, uses, maintenance, criteria for selection.; Kitchen organizing- Review of the classical kitchen Brigade, Work planning in the kitchen. kitchen supervision- Supervisory functions: Technical administrative. Functional and social functions; Elements of supervision; forecasting, planning, organizing, commanding, coordinating, controlling; responsibilities of the supervisor; delegating. Motivating. welfare, understanding, communicating.; Kitchen Hygiene Personal hygiene, their importance, food handling & storage, care, sanitation practices, attitude towards work in the kitchen, fumigation. HACCP- Practices in food handling & storage .

Module 2

13Hours

Cuisine- Cuisine Minceur- Indian regional cuisine, Popular international cuisine (an introduction). French, Italian ,Chinese.; Introduction to Indian cuisine- History, characteristics, different ingredients used, regional differences ,equipment used, cooking methods, religious influences; Menu-Characteristics Menu terms, Names of the dishes, popular spices used etc. International and Indian menus, preparations. traditional or classical items, Essential considerations prior to planning the menu, Recipe formation, standard recipe- weighing & costing, portion control, power breakfast & Bunch concept;

Basic preparations- Mise- en- place of all the basic preparations soups, sauces, roux, aspic. glaze, bouquet garni, mirepoix. duxelle, pastes masala, batters, doughs, marinades ,and gravies. Classification of soups, principles, garnishes, accompaniments. International soups. Importance of sauces, mother sauce, thickening agents used in a sauce, rectification of faulty sauces, other popular sauces Breakfast, stocks ,egg preparations .

Module 3

13Hours

Food commodities-Raw materials- introduction .Classification and uses according to their functions and uses in cookery- Cereals ;pulses. vegetables, mushrooms ,fruits, eggs, salt sweetening agent,

fats & leavening agents. Milk, composition of milk and storage. types of milk, cream-foundation ingredients their characteristics and their uses in cookery- Classification with examples and uses in cookery: Pressed meats. smoked meats.classification of milk and milk products including cheese; Classification and international cheese. Purchasing specification for food & Beverage-Principles of food storage- Types of stores. Layout of Dry and cold room. Staff Hierarchy. Guidelines for efficient storage. control procedures. Inventory Procedures. EOQ. Re-order levels. Bin Cards. Form and format function of a stores manager.

Module4

13Hours

Basic bakery and confectionery- principles of baking, uses of different types of oven, role of ingredients used yeast, Shortenings(Fats & Oils) sugar & salt, Raising Agents and role of Sugar and Egg and menu examples, ingredient proportions, various mixes, methods and temperature variations. Bakery flour types, uses and storage, Different methods of Bread making. Methods of cake making, different methods, faults and their remedies; Conversion tables: American, British measures and its equivalents Basic culinary terms- Indian and Western or International.

CAHC102: Perspectives of food science-I (AOC)
(Credits 2, Total hours: 36) 2 hours/week

1. Introduction to various tools and their usage.
2. Introduction to various commodities. (Physical Characteristics, weight & volume Conversion, yield testing, etc.)
3. Food pre-preparation methods
4. Basic Indian masalas & gravies (Dry & wet)
5. Minimum 10 Individual Practical consisting of Indian & Continental Menus.

References:

1. The book of Ingredients- Jane Grigson
2. Theory of Catering- Mrs. K. Arora, Franck Brothers
3. Modern Cookery for Teaching & Trade Vol I- Ms. Thangam Philip, Orient Longman. 4. The Professional Chef (4th Edition)- Le Rol A. Polsom

CAHC103: Introduction to culinary Art -1

(Credits 2, Total hours: 36)

2 hours/week

Course outcomes:

1. Understand the basic concepts and history of Culinary art
2. Define a healthy diet.
3. Understand and apply the Basics of catering industry.
4. Understand and apply the art of plate presentation.

Module 1

9 hours

Introduction to the art of cookery — Culinary history- Development of the culinary art from the Middle Ages to the modern cookery, modern hotel kitchen , Nouvelle;

Module 2

8hours

Aims and objectives of cooking of food- Importance of cooking of food with reference to the catering industry. Principles of balanced and healthy diet- Action of heat on food.

Module 3

9hours

A classic culinary foundation and understanding. Current cuisine is built on the bedrock of earlier professional cooking. Time management and group leadership. Food cost and accounting, Menu planning ,Nutritional science.

Module 4

10hours

Art of plate Presentation: Guidelines for Plating Food, Placing Your Ingredients, Pay Attention to the Details like colour, height etc, Design and Create with Sauces, Use Garnishes Purposefully.

Plating Tools of the Trade: Garnishing Kits, Moulds, Plating and Precision Tongs, Plating Wedges, Shavers, Spoons, Squeeze Bottles

Plating Styles: Classic, Free form style, Landscape plating.

CAHC103: Introduction to culinary Art -1 (AOC)
(Credits 4, Total hours: 54) 3hours/week

ART OF PLATE PRESENTATION :

Balance Flavor, Color, Height, Shapes, Garnish, Textures ,Portions

Plate Presentation Balance and Color

Plate Presentation Shapes

Plate Presentation Textures and Flavors

Plate Presentation Garnish Plate Presentation Portion

Plate Presentation Plate Design

-

References:

1. Practical cookery : Victor Ceserani& Ronald Kinton, ELBS
2. Theory of catering :Victor Ceserani& Ronald Kinton, ELBS
3. Theory of catering :Mrs. K. Arora, Frank brothers
4. Modern Cookery for Teaching & Trade Vol. 1,: Ms. Thangam Philip, Orient Longman
5. Herrings dictionary of Classical & Modern cookery: Walter Bickel
6. Chef Manual of Kitchen Management: Fuller, John
7. The professional chef (4th edition): Le Rol A. Polsom
8. The book of ingredients: Jane Grigson
9. Indian Food : K. T Acharya, Oxford
10. Theory of cookery By K Arora, Publisher : Society of Indian Bakers

CAHC104: Food Production and Patisserie theory I

(Credits 2, Total hours:36) 2 hours/week

Course Outcome:

- Define aims of cooking, draw organization chart of classical kitchen brigade and list the duties of kitchen staff.
- Understand the List ingredients, tools and equipment used in bakery and the methods of bread and cookies making.
- Apply the principles to prepare cakes,breads,cookies,hot and cold drinks,pastries.
- Understand the kitchen, tools, equipments and fuels used in commercial kitchen,Prepreparation, methods and list the methods of cooking food.

Module 1**12 hours**

Overview of the Catering Industry. Kitchen Organizational structure.

Aims and Objects of Cooking – Definition. Classification of raw materials – functions.

Module 2**10hours**

Preparation of Ingredients. Methods of mixing food, movements in mixing, weighing and measuring. Culinary terms.

Module 3**14 hours**

Basic bakery and confectionery- principles of baking, uses of different types of oven, role of ingredients used yeast, Shortenings(Fats & Oils) sugar & salt,

Raising Agents and role of Sugar and Egg and menu examples, ingredient

Proportions, various mixes, methods and temperature variations. Bakery flour types, uses and storage, Different methods of Bread making. Methods of cake making, different methods, faults and their remedies; Conversion tables: American, British measures and its equivalents Basic culinary terms- Indian and Western or International.

CAHC104: Bakery & Patisserie theory- I (AOC)

(Credits 4, Total hours: 54) 3 hours/week

i) Bread making

Demonstration and Preparation of Simple and enriched bread recipes, Bread Loaf (White and Brown), Bread Rolls (Various shapes) French Bread, Brioche.

ii) Simple Cakes

Demonstration and Preparation of Simple and enriched Cakes, recipes Sponge, Genoise, Fatless, Swiss roll, Fruit Cake, Rich Cakes, Dundee, Madeira.

iii) Pastry

Demonstration and Preparation of dishes using varieties of Pastry Short Crust – Jam tarts, Turnovers Laminated – Palmiers, Khara Biscuit, Danish Pastry, Cream Horns Choux Paste – Eclairs, Profiteroles iv) 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.

v) Hot/Cold Desserts

A. Caramel Custard, Bread and Butter Pudding, Queen of Pudding, Soufflé–

Lemon/Pineapple, Mousse (Chocolate Coffee,) Bavaroise, Diplomat Pudding, Apricot Pudding.

B. Steamed Pudding - Albert Pudding, Cabinet Pudding.

References:

1. Practical cookery : Victor Ceserani& Ronald Kinton, ELBS
2. Theory of catering :Victor Ceserani& Ronald Kinton, ELBS
3. Theory of catering :Mrs. K. Arora, Frank brothers
4. Modern Cookery for Teaching & Trade Vol. 1,: Ms. Thangam Philip, Orient Longman
5. Herrings dictionary of Classical & Modern cookery: Walter Bickel
6. Chef Manual of Kitchen Management: Fuller, John
7. The professional chef (4th edition): Le Rol A. Polsom
8. The book of ingredients: Jane Grigson
9. Indian Food : K. T Acharya, Oxford
10. Theory of cookery By K Arora, Publisher : Society of Indian Bakers

SEMESTER – II							
Diploma in Culinary Arts & Hospitality Management							
Sl. No	Course Code & NSQF Level	Title	Duration Gen Education credits	Skill component credits	Theory Hours	Practical Hours	Total hours
1	BOCG201	Presentation skills in English	4 credits		72	Nil	72
2	CAHC201&AOC	Foundation course in computer Application	8 credits		54	72	126
3	CAHC202	Nutrition and sanitation		3 credits	36	Nil	36
4	CAHC203&AOC	Food Safety and Hygiene -I		4 credits	36	36	72
5	CAHC204&AOC	Garde Manger		5 credits	36	36	72
6	CAHC205&AOC	On Job training		6 credits	Nil	72	72
			12	18	234	216	450

BOCG201: PRESENTATION SKILLS IN ENGLISH

(Credits-4, total hours-72)

4 hours/week

Course outcome:

- Understand the fundamentals of letter writing, preparation of CV, job applications.
- Understand academic and business communication.
- Create effective communication skills.

MODULE – I

Letter Writing: Letters - letters to the editor - resume and covering letters - parts and layout of business letters-business enquiry letters offers, quotation-orders and execution-grievances and redressal-sales letters-follow-up letters-status enquiry-collection letters-preparation of power of attorney for partnership- job application letters-resume-CV-reference and recommendation letters-employment letters.

MODULE II

Other types of Academic and business Communication (written):Seminar papers- project reports - notices - filling application forms - minutes, agenda-reports-essays.

MODULE – III

Presentation Skills: Soft skills for academic presentations - effective communication skills – structuring the presentation - choosing appropriate medium – flip charts – OHP – Power Point presentation – clarity and brevity - interaction and persuasion.

**Compulsory activity: PowerPoint presentations to be conducted by each student in class*

MODULE IV

Non-verbal communication-Body language-Kinesics,Proxemics-Para language Channels-Barriers-

Principles of effective communication.

MODULE V

Online writing and Netiquette- Writing e-mails- use of language – writing for blogs – social media etiquette- professional networking online (LinkedIn, E-factor etc.)

Compulsory activity: Each student should create a blog and/or profile in LinkedIn.

References:

- 1- Marilyn Anderson, Pramod K Nayar and Madhucchandra Sen. *Critical Thinking, Academic Writing and Presentation Skills*. Pearson Education and Mahatma Gandhi University.
- 2- Antony Thomas,Business Communication and MIS, Pratibha Publications. Bhatia R.C.Business Communication
- 3- SaliniAgarwal Essential communication skill. Reddy P.N, and Apopannia, Essentials of Business communication.
- 4- Sharma R.C,KRISHNA Mohan, Business Communication and Report writing Leod,M.C.,Management Information system.

CAHC201: Foundation course in computer Application (AOC)

(Credits 4, Total Hours 54)

3 hours/week

Course outcomes: • Demonstrate basic technical skills by customizing the Windows desktop.

- Demonstrate an understanding of the Microsoft operating system by managing windows and computer resources.
- Create professional PowerPoint presentations.
- Analyze and utilize the multimedia features of PowerPoint to enhance the effectiveness of a presentation.
- Develop worksheet to create a grade sheet and calculate grades.
- Design worksheets, display rows and columns, define print areas and print work books.
- Understand, customize and activate tool bars demonstrating efficient use of Microsoft toolbar technology.

Module 1

28 hours

Application & the uses of Information Technology in the Hospitality Industry. Examples of use of Computers in Front/Outlets etc. Introduction to different Computer Related terms/concepts .Different types of Microprocessors & other Hardware Terminology .Hardware & Software – the distinction Introduction to different kinds of OS used in case of standalone PC/ Network . Single user/multi user OS (DOS/UNIX) .Windows 95/NT/Windows 3. File Handling Concepts under DOS/ WINDOW. Concept of Computer File & its storage .Ways of maintaining Files under DOS/Windows. DOS utilities/ File Manager. Overall windows operation Introduction to different windows based packages.

Module 2

26 hours

Internet, coral draw, brochure making and designing

CAHC201: Foundation course in Computer Application Practicals (AOC)

(Credits 4, Total Hours 72)

4hours/week

Utilities / Application of MS-Word • Application of MS office• Familiarize with a PC and identify the various components of a Computer. • Identify the various Input and Output Devices. • Introduction to DOS – Basic DOS commands. • DOS continued - File Management Commands. • DOS commands -External Utilities eg. CHKDISK, EDIT etc. • DOS commands An Introduction to the Wildcard Characters of DOS. • DOS continued - Batch File Processing. • Batch File Processing Continued. • Introduction to Windows as an Operating System. • Getting familiar to Windows Environment. • Introduction to the various packages of MS-Office. • Introduction to the Word Processor. • MS-Word :Entering a document, Editing a Text. • Word continued - Inserting, replacing and deleting characters. Saving a document. • Word continued - Opening an Existing Document, and • changing Page Layout. Practicals in coral draw,brochure designing,internet.

CAHC202: Nutrition and sanitation

(Credits 3, Total Hours 36) 2 hours/week

Course outcomes:

- Understand the functions, importance of all nutrients present in foods.
- Explain the various types of nutrients and their functions in the body. • understand and analyse the recent advances in field of nutrition.
- Understand the different types of newly developed food products.

Module I: Introduction to Nutrition

5hours

Definition of nutrition and health, inter-relationship between nutrition and health. Malnutrition: Definition and types. Reference man and reference women.

Module II: Food and water**7hours**

Definition of food, classification of foods based on origin, pH, nutritive value. Basic five food groups, food guide pyramid. Functions of foods. New concepts of food: health foods, ethnic foods, organic foods, functional foods, nutraceuticals, fabricated foods, extruded foods, convenience foods, junk foods, GM foods and proprietary foods. Water: functions, sources, requirement, water balance, toxicity and deficiency.

Module III: Vitamins**7hours**

Classification, structure, function, sources, general causes for loss in foods, bioavailability, enrichment, fortification and restoration. Units of measurement. Deficiency and toxicity disorders.

Module IV: Sanitation and Health**7hours**

Definition, importance of sanitation, application of sanitation to food industry and food service establishments. Microorganisms and their characteristics, control of microbial growth in food. Food contamination and spoilage, food borne diseases.

Module V: Minerals**5hours**

Classification of minerals. Functions, sources, bioavailability and deficiency of the following minerals- Calcium, Iron, Iodine, Fluorine, Sodium, Potassium.

Module VI: Energy**5hours**

Units of energy, food as a source of energy, basal metabolic rate, factors effecting BMR, total energy Requirement Referencs:

1. James L Groff and Sareen S Gropper, (2009) "Advanced Nutrition and Human Metabolism", Fourth Edition, Wadsworth Publishing Company.
2. Maurice B Shils, Moshe Shike A, Catherine Ross, Benjamin Cabellero, Robert J Cousins, (2006), "Modern Nutrition in Health and Disease", Lippincott Williams al Wilkins.
3. Michael J Gibney, Ian A Macdonald and Helen M Roche (2003) "Nutrition and Metabolism", The Nutrition Society Textbook Series, Blackwell Publishing, First Edition.
4. Marriott, Norman (2013), "Principles of Food Sanitation", Springer Science & Business Media Publishing.
5. Roday S, (2011) (2002), "Food Hygiene and Sanitation", McGraw Hill Publishing Company Limited.

6.H. L. M. Lelieveld, John Holah, David Napper, (2014), “Hygiene in Food Processing: Principles and Practice”, Elsevier Publications.

CAHC203: Food Safety and Hygiene (AOC)

(Credits 2, Total Hours 36) 2 hours/week

Course outcomes:

- Understand the principles and applications of sanitation in food industry.
- understand and analyse the various types of Sanitation techniques applicable in the food industry
- Understand food hygiene, sanitation and safety during food processing unit operations.

Module I: Hygiene and food handling

13Hours

Purchasing and receiving safe food, food storage, sanitary procedures in food preparation, serving and displaying of food, special food operations. Personal hygiene, food borne illnesses, proper ways of receiving, storing, and handling of foods and proper cleaning and sanitizing. Hazard Analysis Critical Control Points (HACCP) shall be discussed to enable students to identify and correct/prevent sanitary hazards that may occur in the workplace. Rules and guidelines of the government regarding sanitation in food service establishments shall be included.

Module II: Environmental Sanitation

15Hours

Location and layout of premises, constructional details, sanitary requirements for equipments , guidelines for cleaning equipments , cleaning procedures, pest control, water supply, storage and waste disposal, environmental pollution. Safety Hazards:

Personal Habits of Food Service Worker, Food Safety Hazards Biological Hazards Chemical Hazards Physical Hazards. The Food Product Flow Hazard Analysis and Critical Control Point Cleaning and Sanitizing Operations. Laws and Agencies Relating to Food Safety and Sanitation

Module III: Hygiene Practices in food industry

8 Hours

Introduction, necessity, personnel hygiene, sanitary practices, management and sanitation, safety at work place. Sanitation regulations and Standards. Introduction, regulatory agencies, control of food quality, local health authority. Food storage temperatures and different methods (cold and dry storage). Food sanitation check lists. Procedure for FSSAI certification.

CAHC203: Food Safety and Hygiene –I Practical (AOC)

(Credits 2, Total Hours 36) 2 hours/week

Stain removal. Special decoration .Identification of various formats & registers.

References:

1. Marriott, Norman (2013), “Principles of Food Sanitation”, Springer Science & Business Media Publishing.
2. Roday S, (2011) (2002), “Food Hygiene and Sanitation”, McGraw Hill Publishing Company Limited.
3. H. L. M. Lelieveld, John Holah, David Napper, (2014), “Hygiene in Food Processing: Principles and Practice”, Elsevier Publications.

CAHC204: Garde Manger (AOC)

(Credits 2, Total Hours 36) 2 hours/week

Course outcomes:

- Understand the principles of garde manger
- Understand and apply the preparations of different salads
- Demonstrate proficient levels in the use of all hand tools used in Garde Manger: Chef knife, paring, fruit/vegetable carving knives; and evaluate skills in vegetable and ice carvings.
- Undertstand to Plan and prepare the recipes for a buffet.

Module I

10hours

Definition, Functions, Importance of Garde manger

Its functions and management. Garde manger (Larder) control

Cleanliness of larder and control larder equipment and supplies.

Module II**10hours**

Hors d'oeuvre and salads: Description of various types of Hors d'oeuvre – Hors d'oeuvre varies, Hors d'oeuvre from singulier and Hors d'oeuvre chaud with example.

ModuleIII**10hours**

Classification and description of various salads – simple or plain salads – simple vegetable salads; compound salads – fruit based vegetable based, meat based and fish based compound salads with examples.

Module IV**6hours**

Fish – Types, recognition, presentation, cleaning, preparation, basic cuts and its use and storage.

CAHC204: Garde manger Practical (AOC)

(Credits 3, Total Hours 36) 2 hours/week

Preparation of basic Salads & Horsd' Oeuvre (appetizer)

CAHC205: On Job training (AOC)

(Credits 6, Total Hours 72) 4 hours/week

Students should undergo a training programme in an institute. Every student should submit a detailed report of the topic.

SEMESTER – III Advanced Diploma in Culinary Arts & Hospitality Management							
Sl.No	Course Code & NSQ Level	Title	Duration Gen Education credits	Skill component credits	Theory Hours	Practical Hours	Total hours
1	BOCG301	Principles of Management	4 credits		72	Nil	72
2	CAHC301	Foreign Language (Hotel French)	4 credits		54	Nil	54
3	CAHC302	Food packaging	4 credits		54	Nil	54
4	CAHC303&AOC	Food Microbiology-1		5 credits	36	36	72
5	CAHC304&AOC	Food production and Exhibition		8 credits	54	72	126
6	CAHC305&AOC	Housekeeping		5 credits	36	36	72
			12	18	306	144	450

BOCG301: PRINCIPLES OF MANAGEMENT (credits-4, total hours-72) 4 hours/week

Module – I

Nature and Process of Management: Schools of Management Thought – Management Process School, Human Behavioural School, Decision Theory School, Systems Management School, Contingency School – Managerial Role – Basics of Global Management.

Module – II

Planning: Objectives – Types of plans - single use plan and repeated plan – MBO, MBE– strategic planning and formulation. Decision making - types and process of decision making – forecasting.

Module – III

Organising: Types of organisation - formal and informal, line and staff, functional – organisation structure and design – span of control, delegation and decentralisation of authority and responsibility – organisational culture and group dynamics.

Module – IV

Staffing: Systems approach to HRM – Performance appraisal and career strategy – HRD - meaning and concept.

Module– V

Directing: Motivation – meaning - need for motivation. Theories of motivation - Herzberg and McGregor. Leadership- importance – styles of leadership, Managerial Grid by Blake and Mouton, Leadership as a Continuum by Tannenbaum and Schmidt, Path Goal Approach by Robert House (in brief) **Controlling** - Concept, Significance, Methods of establishing control.

Books for Reference:

1. Moshal.B.S . *Principles of Management*, Ane Books India,New Delhi.
2. Bhatia R.C. *Business Organization and Management*, Ane Books Pvt. Ltd., NewDelhi.
3. Richard Pettinger. *Introduction to Management* , Palgrave Macmillan, New York.
4. **Koontz and O'Donnel.** *Principles of Management* ,Tata McGraw-Hill Publishing Co.Ltd. New Delhi.
5. Terry G.R. *Principles of Management*, D.B.Taraporevala Sons & Co.Pvt.Ltd., Mumbai.
6. Govindarajan.M and Natarajan S. *Principles of Management*, PHI, New Delhi.

7. Meenakshi Gupta . *Principles of Management*, PHI, New Delhi.

CAHC301: Foreign Language: (Hotel French)

(Credits 4, Total Hours 54) 3hours/week

Module I

French grammar and vocabulary (adjectives, regular verbs, irregular verbs, avoir expressions, être expressions, past tense, the imperfect and object pronouns).

Module II

Physical description, the body and toiletry, reflexive verbs, daily routine, physical and emotional feeling). Impressionism and the impressionist art (reading, vocabulary). Prepositions with the infinitive.

Module III

Past and present participles. The Métro (reading, vocabulary, maps). The Phantom of the Opera (reading, vocabulary, activities). The subjunctive. Poetry, hotel, history and travel.

Reference:

Essential Guide for Students (StudySkills), SAGE Publishers.

CAHC302: FOOD PACKAGING

(Credits 4, Total Hours 54) 3 hours/week

Course outcome

- Understand different methods and materials used for packaging.
- Understand the technology behind packaging.
- Apply the technique of packaging.

Module 1- Introduction to food packaging

8 Hrs

Definition, functions and requirements for effective packaging, packaging criteria, Classification of packaging- Primary, secondary and tertiary packaging, Flexible, rigid and Semi- rigid packaging.

Module 2- Materials for food packaging

8Hrs

Paper, Glass, Tin, Aluminium: TFS, Polymer coated tin free steel cans, cellophane, plastics-LDPE, HDPE, LLDPE, HMHDPE, Polypropylene, polystyrene, polyamide, polyester, polyvinyl chloride.

Module 3- Different forms of food containers

8 Hrs

Boxes, jars, cans, bottle. Interaction of packages with foods-Global migration of plastics, packaging requirements for various products- fish, meat, spices, vegetables & fruits, cannedfoods, dehydrated foods.

Module 4- Modern concepts of packaging technology

15Hrs

Aseptic packaging, Form-Fill-Seal packaging, Edible Films, Retort pouch packaging, Easy-Open-End, Boil-In-Bags, Closures, tetra-pack, vacuum-packaging, MAP & CAP,Hyper baric storage, insect resistant packaging, intelligent packaging.

Module 5- Food packaging Laws & Specifications

15 Hrs

Quality testing of packaging materials ,Paper & paper boards-thickness, bursting strength, grammage, puncture resistance, Cobbstest, tearing resistance.Flexible packaging materials (plastics)-yield, density, tensile strength, elongation, impact resistance, WVTR, GTR, Overall Migration Rate, seal strength.

Transportation hazards and testing.Oxygen interactions, moisture interchanges and aroma permeability.

References:

1. Cruess, W.V. Commercial Fruit & Vegetable Products. Allied Scientific Publishers, New Delhi. 2003
2. Davis, E.G. Evaluation of tin & plastic containers for foods. CBS Publishers, New Delhi. 2004
3. Gopal T.K.S. Seafood packaging, CIFT, Matsyapuri Cochin,2007
4. Potter, N. N, Hotchkiss, J. H. Food Science. CBS Publishers, New Delhi. 2000.
5. Sacharow, S., Griffin, R.C. Food Packaging. AVI Publishing Company, West Port, Connecticut. 2000
7. Srilakshmi, B. Food Science. New Age International Publishers, New Delhi, 2003

Microorganisms used in food fermentation, mechanisms of nutrient transport, application in genetics, intestinal bacteria and probiotics, food bio preservatives of bacterial origin, food ingredients and enzymes of microbial origin. Economic importance of microorganisms.

CAHC304: Food Microbiology-I (AOC)

(Credits-3, total hours-36) 2 hours/week

Demonstrations of process of essential oil extraction and oleoresin of different spice . Detection of papaya seeds in black pepper. Detection of powdered bran and sawdust in spices. Preparation of fermented foods. Introduction to the Basic Microbiology Laboratory Practices and Equipments. Functioning and use of compound microscope. Cleaning and sterilization of glassware. Preparation and sterilization of nutrient broth. Preparation of slant, stab and plates using nutrient agar. Standard Plate Count Method. Visit to Meat Products of India.

References

1. Ray , Bibek; Arun Bhunia,(2013), “Fundamental Food Microbiology”, CRC Press
2. Adams,Martin R, Maurice O Moss, Peter McClure (2015), “Food Microbiology”, Royal Society of Chemistry, Cambridge.
3. Jay, James M (2012), “Modern Food Microbiology”, Springer Science & Business Media., Maryland.

CAHC305: Food production and Exhibition (AOC)

(Credits 4, Total Hours 54) 3hours/week

Module 1

10hours

Introduction to Food Production Department.Origin of Modern Cookery practices, Aims & objectives of cooking food.Culinary terms of Continental cuisine& Indian cuisine.Hygiene & safe practices in handling food, HACCP procedure.Types of establishments.Kitchen brigade for large, medium & small hotelDuties & Responsibilities of Executive Chef & other Staff..Co-ordination with other allied department Foundation ingredients. Types of culinary agents with examples.

Module 2

10hours

Kitchen Equipments Classification –Basic Knife skills, kitchen tools,Types of Kitchen Equipments: - Electric Food Pre-Preparation equipments, Refrigeration equipment, Food Holding Equipments, Hot plates & Heated Cupboards Properties, Advantages & Disadvantages of various materials used.Precautions and Care in handling & maintenance of equipment.

Module 3**15hours**

Introduction to Food pre-preparation Washing, Peeling, Paring (fruits), Cutting (cuts of vegetables), Grating (Vegetables), Grinding, Mashing, (vegetables & pulses), Sieving (flours), Marinating (meat, fish, chicken), Sprouting (pulses & legumes), Blanching, Types of cooking. Fish- Classification, selection procedures, cuts, and cooking of fish. Butchery- Selection cuts, size, and uses of lamb, mutton, veal, beef, and pork. Steak- Meaning, Description of fillet steak and sir loin steak. Bacon, ham, gammon. Chicken- Classification, Selection procedures, cuts, and uses Bakery & Confectionery section, Ingredients and equipment identification.

Module 4**9 hours**

Basic food commodities Meaning of herbs, examples & uses. Meaning of spices, condiments with examples and uses Types of Cereals. Types of pulses. Types of Cream. Common nuts used in cookery.

Module 5**10hours**

Basic Food Preparation. Sandwiches- Meaning, types of bread used, different types of sandwiches. Vegetables- Classification, uses. Different styles of potato preparation, Cheese- Preparation, Classification and storage. Principles of food storage. Re-heating of foods- Meaning, points to be observed.

CAHC305: Food production and Exhibition (AOC)

(Credits 4, Total Hours 72) 4 Hours/week

Different methods of Bread making .Yeast raised bread: white brown, French bread & Loaf, Bread Rolls, Bread sticks Basic Cake Demonstration & Preparation: Sponge, Gnoisc, Fatless, Swiss roll Preparation: Biscuits or cookies; melting moment, almonds, chocolate chips etc Short crust: jam tart, lemon tart Varieties of Biscuit Dough, Bread Dough(all methods), Bread rolls(all shapes), enriched bread, Doughnuts, etc., Cake batters(all methods), Puff Pastry Dough and batters, Fruit & rich cakes, Madeira, plum, walnut, Danish pastries .

CAHC306 : Housekeeping (AOC)

(Credits 2, Total Hours 36) 2 Hours/week

Module 1

15hours

Planning staff Recruitment .Process of Job analysis .Job Description .Job specification.

Duty Rosters. Induction Procedures .Training Programs .Capital & Operational Budgets • Planning a H/K budget • Methods of buyingAn overview of the position of H/K in the

Hospitality Industry • List of functions of the H/K Dept. • H/K working towards ‘Customer delight’ • Why is H/K indispensable •

Module 2

15hours

Organisation of the Hotel • Staff Hierarchy, lines of Authority & areas of responsibility • Vertical & horizontal coordination within & outside the Dept. • Areas of responsibility of the H/K Dept. • Essential qualities in H/K staff • Effective communications skills, interpersonal skills & good grooming standards • Duties of staff at the managerial level • Duties of staff at the Operational level • Duties of staff at the supervisory level • Glossary of H/K terms • Abbreviations commonly used in H/K • Types of Rooms & suites • Various status of Rooms

• Amenities provided in standard, superior & deluxe rooms • VIP amenities • Items provided on request • Placement of Supplies in a room •

Module 3

6hours

General principles of cleaning • Cleaning Schedules • Daily, weekly & Spring Cleaning •

Morning & evening service • Second service • Daily cleaning in a Department room • Planning a weekly cleaning schedule • Public area cleaning methods & Schedules

CAHC306: HOUSE KEEPING (AOC)

(Credits 3, Total Hours 36) 2 Hours/week

Equipment handling, Care & Cleaning & Identification of Cleaning Equipments (both manual & Mechanical) .

Pest Control, Laundering & Dry Cleaning of Fabrics, Flower Arrangement, Care of Plants, Contract Cleaning.

References

1. Marriott, Norman (2013), “Principles of Food Sanitation”, Springer Science & Business Media Publishing.

2. Roday S, (2011) (2002), “Food Hygiene and Sanitation”, McGraw Hill Publishing Company Limited.

3.H. L. M. Lelieveld, John Holah, David Napper, (2014), “Hygiene in Food Processing: Principles and Practice”, Elsevier Publications.

SEMESTER – IV Advanced Diploma in Culinary Arts & Hospitality Management							
Sl.No	Course Code & NSQF Level	Subjects	Duration Gen Education credits	Skill component credits	Theory Hours	Practical Hours	Total hours
1	BOCG401	Soft skills and personality development	4 Credits		72	Nil	72
1	CAHC401 & AOC	Hotel Accountancy	4 credits		36	18	54
2	CAHC402	Sales and Marketing Management	4 credits		54	Nil	54
3	CAHC403	Food Quality and Assurance		3 credits	36	Nil	36
4	CAHC404&AOC	Food Production		6 credits	36	54	90
5	CAHC405&AOC	Introduction to hospitality industry		4 credits	54	Nil	54
6	CAHC406&AOC	On Job training		5 credits	Nil	90	90
			12	18	288	162	450

BOCG401: **SOFTSKILLS AND PERSONALITY DEVELOPMENT**

(Credits-4, Total hours-72) 4 Hours/week

Course outcomes:

- Understand the basics of time and stress management.
-
- Create problem solving skills.
-
- Understand the nonverbal communication and apply.
- Execute personality development.

Module – I

Personal Skills: Knowing oneself- confidence building- defining strengths- thinking creatively-personal values-time and stress management.

Module – II

Social Skills: Appropriate and contextual use of language- non-verbal communication interpersonal skills- problem solving.

Module – III

Personality Development: Personal grooming and business etiquettes, corporate etiquette, social etiquette and telephone etiquette, role play and body language.

Module – IV

Presentation skills: Group discussion- mock Group Discussion using video recording - public speaking.

Module – V

Professional skills: Organisational skills- team work- business and technical correspondence-job oriented skills-professional etiquettes.

Books for Reference:

1. Matila Treece: Successful communication: Allyun and Bacon Pubharkat.
2. Jon Lisa Interatid skills in Tourist Travel Industry Longman Group Ltd.
3. Robert T. Reilly – Effective communication in tourist travel Industry Dilnas Publication.
4. Boves. Thill Business Communication Today Mcycans Hills Publication.
5. Dark Studying International Communication Sage Publication.
6. Murphy Hidderandt Thomas Effective Business Communication McGrawHill.

CAHC401&AOC: Hotel Accountancy (AOC)

(Credits 4, Total Hours: 54) 3 hours/week

Course Outcome:

- Understand various principles of accounting
- Execute the production and keep an accurate set of month-end accounts
- Develop the ability of Comparing profit to previous periods and forecasts
- Impart knowledge of Preparing budgets and business planning
- Execute Financial statement and balance sheet production
-

Module 1: Introduction to Accounting

Meaning and Definition, Types and Classification, Principles of accounting, Systems of accounting, Generally Accepted Accounting Principles (GAAP)

Module 2: Primary Books (Journal) & Secondary Book (Ledger)

Primary Books (Journal): Meaning and Definition, Format of Journal, Rules of Debit and Credit, Opening entry, Simple and Compound entries, Practical
Secondary Book (Ledger): Meaning and Uses, Formats, Posting, Practical

Module 3: Subsidiary Books & Cash Book

Subsidiary Books: Need and Use, Classification Purchase Book, Sales Book
Purchase Returns, Sales Returns, Journal Proper Practical Cash Book:
Meaning, Advantages, Simple, Double and Three Column, Petty Cash Book
with Imprest System (simple and tabular forms) , Practical

Module IV: Trial Balance:

Meaning,

Methods, Advantages, Limitations, Practical

Module V: Final Accounts :

Meaning, Procedure for preparation of Final Accounts, Difference between
Trading Accounts, Profit & Loss Accounts and Balance Sheet ,

Adjustments (Only four) Closing Stock Pre-paid Expenses Outstanding Expenses
Depreciation

Module VI: Food and Beverage Accounts

Cost concepts, Nature of food & beverage business, recipe costing, Menu costing, Cost
sheet

Module VII: Uniform System of Accounts For Hotels 15hours

Introduction to Uniform system of accounts, Contents of the Income Statement,
Practical Problems, Contents of the Balance Sheet (under uniform system),
Practical problems, Departmental Income Statements and Expense statements
(Schedules 1 to 16), Practical problems

Module VIII: Internal Audit And Statutory Audit:

5hours

Internal Audit And Statutory Audit: An introduction to Internal and
Statutory Audit, Distinction between Internal Audit and Statutory Audit,
Implementation and Review of internal audit

Departmental Accounting: An introduction to departmental accounting,
Allocation and apportionment of expenses, Advantages of allocation, Drawbacks
of allocation. Basis of allocation F. Practical problems

Note: Use of Calculator is permitted

Reference Books:

Book keeping in the Hotel & Catering Industry - Richard Kotas.

A uniform system of accounts for hotels- hotel association of New York.

Financial & Cost Control Techniques - Dr. Jag Mohan Negi.Dr. Jag Mohan Negi.

Elements of Hotel Accountancy H.K.S. Books International.T,S, Grawal,

‘Double Entry Book Keeping’, Sultan Chand & Sons New Delhi C.Mohan Juneja, Chawla, Saksena.

‘Double Entry Book Keeping’, Kalyani Publication, New Delhi Gupta & Radhaswamy,

‘Advanced Accountancy’ SC Gupta,

‘Advanced Accountancy’, Sultan Chand & Co. New Delhi Joseph A Wiseman & James A Cashin,

“Advanced Accountancy’ Mc Graw Hill Publishers

CAHC402 : HOTEL SALES AND MARKETING

(Credits 4, Total Hours 54) 3 hours/week

Course Outcome

- Understand about hotel sales and marketing
- Develop co-ordination skill for co-ordinating marketing and promotional activities
- Understand the needs and attitudes of hotel’s customers

Module I:

3hours

Introduction – hospitality industry – A profile – size – uniqueness – complementary role of hospitality industry with other industry – major participants in organized sector – key factors for success – contribution to Indian economy – growth potential.

Module II:

5hours

Marketing – basic concepts – needs, wants, demand, exchange, transaction, value and satisfaction in hospitality industry – marketing process – marketing philosophies – related application of concept in hotel service industry.

Module III: 5hours

Marketing information system – concepts and components – internal record system result area) – marketing intelligence system – scope in hospitality business – processes and characteristics – managerial use – MIS with special reference to rooms, restaurants – banquets and facilities.

Module IV: 6hours

Marketing environment – a basis for needs and trend analysis and marketing effectiveness – SWOT analysis for hospitality industry of Micro and Macro environment

Module V: 8hours

Product – defining the hospitality products – difference between good and services product – levels of product – generic, expected, augmented, potential tangible and intangible products – product mix in hospitality business.

Module VI: 5hours

Branding basic concepts – brand equity – branding of hotels.

Module VII: 4hours

Pricing of hospitality – concepts and methodology

Module VIII: 8hours

Integrated marketing communication – SMMR model – steps in developing effective communication plan – communication mix – direct marketing – tele marketing – advertising – sales promotion and publicity.

Module IX: 5hours

Principles and practice of hospitality selling – Selling process – AIDA model – ORAM – guest as sales force.

Module X: Marketing arithmetic–ratio–planning AID sales. 5hours

CAHC403 : Food Quality Assurance

(Credits: 3, Total Hours: 36) 2 hours/ Week

Course Outcome:

- Understand the principles and framework of food safety.

- Understand food laws and regulations governing the quality of foods.
- Apply preventive measures and control methods to minimize microbiological hazards and maintain quality of foods.
- Analyse the wide variety of parameters affecting food quality.
- Understand about Intellectual property rights.

Module I: Concept of quality 4 hours
 Quality attributes- physical, chemical, nutritional, microbial, and sensory; their measurement and evaluation; Sensory vis-à-vis instrumental methods for testing quality.

ModuleII: Concepts of quality management 8hours

Objectives, importance and functions of quality control, Quality management systems in India, Sampling procedures and plans, Food Safety and Standards Act, 2006, Domestic regulations, Global Food safety Initiative, Various organizations dealing with inspection, traceability and authentication, certification and quality assurance - PFA, FPO, MMPO, MPO, AGMARK, BIS; Labelling issues, International food standards.

ModuleIII: HACCP system 6 hours

Hazard analysis Critical Control Point: Definition, principles, Guidelines for the application of HACCP system.

Module IV: Food Quality Laws and Regulations 10 Hours
 Quality assurance, Total Quality Management, GMP/GHP, GLP, GAP, Sanitary and hygienic practices, HACCP, Quality manuals, documentation and audits; Indian & International quality systems and standards like ISO and Food Codex, Export import policy, export documentation, Laboratory quality procedures and assessment of laboratory performance, Applications in different food industries, Food adulteration and food safety.

ModuleV: Intellectual Property Rights 8hours

IPR – Introduction, History in India, Laws related to IPR, Copyright, patent, trademark, designs, geographical indications of food, World Intellectual Property Organization (WIPO), Commercialization of Intellectual Property Rights (IPR), important websites.

References:

1. Yong-Jin Cho, Sukwon Kang.(2011), “Emerging Technologies for Food Quality and Food Safety Evaluation”,CRC Press.
2. Alli Inteaz, (2003), “Food Quality Assurance: Principles and Practices”, CRC Press.
3. Vasconcellos J. Andres, (2003), “Quality Assurance for the Food Industry: A Practical Approach”,CRC Press.

CAHC404: Food production (AOC)

(Credits-2 Total hours-36hours) 2 hours/week

Course outcome:

- Understand the basic principles of food production.
- Understand the fundamentals of icing, pastries, salads, sandwiches. Create different dishes using the principles.

Module I

10hours

Culinary Terms • Indian & Western Rechaufe cookery • Basic principles • Types of salads & different salad dressings Sandwiches • Different types.

ModuleII

12hours

Definition. Preparation. Spreads. Colour pigments. Types, Effect of Heat Poultry, games and birds • Cuts, Selection, Preparation, Menu Example & garnishes Meat • Pre- slaughtering steps, Structure, Factors Beef Cookery

Module III

14hours

Selection,Cuts&joints, Steak Cookery Pork • Selection,Cuts,Ham,Bacon,Salami, Saucages Lamb &Mutton • Classification, joints • Use, menu examples •Selection Bakery theory • Principles, Bread making, Faults & remedies • General idea of cakes,pastries, sponge & icing. Basic pasta • Manufacturing types, Description &use • Convenience food , types & advantages Food preservation • Long & short term preservation Milk &milk products.

CAHC404: ADVANCED FOOD & BEVERAGE PRODUCTION – I (AOC)

(credits -4,Total hours 54) 3hours/week

I. FRENCH MENU

MENU 1 Consommé Carmen,Poulet Saute Chasseur,Pommes
Lorette,Haricots Verts,Salade de Betterave,Brioche,Baba au Rhum

MENU 2 Bisque D'ecrevisse,Escalope De Veau Viennoise,Pommes Battaille,Courge
Provencale,Epinards au Gratin,Gateau De Peche

MENU 3 Crème Dubarry,Darne De Saumon Grille,Sauce Poloise
Pommes Fondant,Petits Pois A La Flammande,French Bread, Tarte au
fruit

MENU 4 Veloute Dame Blanche,Cote De Pore Charcuterie,Pommes De
Terre A La Crème,Carottes Glace Au Gingembre,Salade Verte,Harlequin
Bread
Chocolate Cream Puffs

MENU 5 Cabbage Chowder,Poulet A La Rex,Pommes
Marquise,Ratatouille,Salade De Carottes et Celeri,Clover Leaf Bread,Savarin
Des Fruits

MENU 6 Barquettes Assort is,Stroganoff De Boeuf,Pommes
Persilles,Salade De Chou-Cru,Garlic Rolls,Crepe Suzette

MENU 7 Duchesse Nantua,Poulet Maryland,Croquette Potatoes,Salade Nicoise,Brown
Dread,Pate Des Pommes

MENU 8 Kromeskiies,Filet De Sole Walweska,Pommes
Lyonnaise,Funghi Marirati,Bread Sticks,Soufflé Milanaise

MENU 9 Vol-Au-Vent De Volaille et Jambon,Homard
Thermidor,Salade Waldorf,Vienna Rolls,Mousse Au Chocolate

MENU 10 Crabe En Coquille,Quiche Lorraine,Salade de Viande,Pommes Parisienne,Foccacia,Crème
Brulee

II. CHINESE MENU

- MENU 1** Prawn Ball Soup,Fried Wantons,Sweet & Sour Pork,Hakka Noodles
- MENU 2** Hot & Sour soup,Beans Sichwan,Stir Fried Chicken & Peppers Chinese Fried Rice
- MENU 3** Sweet Corn Soup,Shao Mai,Tung-Po Mutton,Yangchow Fried Rice
- MENU 4** Wanton Soup,Spring Rolls,Stir Fried Beef & Celery,Chow Mein,
- MENU 5** Prawns in Garlic Sauce,Fish Szechwan,Hot & Sour Cabbage Steamed Noodles

INTERNATIONAL MENU

SPAIN **Gazpacho**,Pollo En Pepitoria,Paella,Fritata De Patata
Pastel De Manzana

ITALY Minestrone

Ravioli Arabeata,Fettocine Carbonara,Polo Alla
,acciatore Medanzane Parmigiane,Grissini,Tiramisu

GERMANY **Linsensuppe**,Sauerbaaten,Spätzale,German Potato
Salad,Pumpernickle,Apfel Strudel

U.K. Scotch Broth ,Roast Beef,Yorkshire Pudding,lazed
Carrots &,Turnips,Roast Potato,Yorkshire Curd Tart,Crusty Bread

GREECE Soupe Avogolemeno,Moussaka A La,Greque,Dolmas
Tzaziki,Baklava,Harlequin Bread

CAHC405: Introduction to the Hospitality Industry

(Credits-4 Total hours-54)

3hours/week

Course outcome:

- Develop better understanding of the instructions from supervisors among the staff members
- Understand of the latest technology used by hotels
- Develop boosted confidence to approach guests
- Develop Positive attitude towards the workplace and higher level of understanding between the department heads

Module I:

3hours

The Hospitality Industry: Introduction 2. Definition of Hotels 3. History of Hotels & accommodation industry 4. Development & growth in India

Module II: **3hours**

Classification of Hotels 1. Based on Size 2. Based on location 3. Based on facility & level of service 4. Based on length of guest stay 5. Based on tariff & plan 6. Based on ownership 7. Based on affiliation 8. Based on market segment 9. Supplementary & alternate lodging facility

Module III: **4hours**

Hotel Organisation: Importance of organisation 2. Purpose of organisation 3. Modals of Organisation 4. Organisation Chart 5. Areas, division, sub division & coordination with FO 6. Organisation of large hotels

Module IV: **3hours**

FO Organisation 1. F O & F O usages 2. Various sections of F O 3. Organisational Chart of F O – Small hotels 4. Organisational Chart of F O – Medium hotels 5. Organisational Chart of F O – large hotels 6. Lobby 7. Equipments & other things

Module V: **3hours**

Lobby 1. Introduction 2. Size of the lobby 3. Bell desk 4. Travel Desk 5. Job description of bell boy 6. Job description of bell captain 7. Job description of Concierge 8. Job description of lobby manager 9. Handling of VIP 10. G.R.E

Module VI **3hours**

Personal 1. Qualities of FO employee 2. Job description of F O Manager 3. Job description of Assistant F O Manager 4. Job description of Reservation assistant 5. Job description of Registration assistant 6. Job description of Information assistant

Module VII: **3hours**

F O Operations 1. Guest cycle 2. Stages of guest cycle 3. Tariff & basis of tariff charging 4. Different types of room rates 5. Different types of rooms

Module VIII: **3hours**

F O responsibility 1. Emergency situation 2. Hotel & guest security 3. Different types of complaints 4. Handling with a complaint 5. Safe deposit facility & lost & found

Module IX: **7hours**

Reservation 1. Advance room reservation 2. Reservation section of F O 3. Reservation form
4. Functions of reservation section 5. Modes of reservation
6. Types of reservation
7. Channels of reservation 8. Handling reservation requests 9. Various systems
of reservation 10. Group reservation 11. Forecasting reservation 12. Over
booking 13. Preventing common reservation problems 14. Cancellation

Module X: 3hours

Registration 1. Pre registration 2. Guest arrival 3. Registration Procedure 4. G.
R. C 5. Systems of registration 6. Rooming & Key issuing 7. Groups & crew
8. C form 9. No – Show 10. Guest history

Module XI: 3hours

Information 1. Information section 2. Duties of Information assistant 3.
Paging 4. Handling mail 5. Handling message 6. Types of information

Module XII: 3hours

Check out & account settlement 1. Departure Procedure 2. Method of
settlement 3. Late check out 4. Express check out 5. Self check out 6. Duties
of F O cashier 7. Presentation & settlement of bill

Module XIII: 3hours

Telephones 1. Equipment 2. Telephone skills 3. Qualities of Telephone operator 4.
Telephone manners – do's & don't's

Module XIV: 10hours

Yield Management 1. Strategies & Techniques 2. Occupancy ratios 3.
Productivity Activity 4. Market share index 5. Weekly forecasting 6. Yield
Management XV. Night auditing 1. Purpose 2. Job description of Night Auditor
3. Operating Modes 4. Night auditing process.

CAHC406 : On the Job Training (AOC)

(Credits-5, Total hours-90) 5hours/week

Students should undergo a training programme in an institute. Every student should submit a
detailed report of the topic.

SEMESTER – V							
B.Voc in Culinary Arts & Hospitality Management							
Sl. No	Course Code & NSQF Level	Subjects	Duration Gen Education Credits	Skill Component Credits	Theory Hours	Practical Hours	Total Hours
1	BOCG501	Environmental studies	4 credits		72	Nil	72
2	CAHC501	Human Resource Planning and development	8 credits		108	Nil	108
3	CAHC502&AOC	Industrial, Air lines and fast food catering (T) Banquets and Buffets(P)		6 credits	36	54	90
4	CAHC503	Food Analysis and adulteration		2 credits	36	Nil	36
5	CAHC504&AOC	Advanced Bakery and Confectionary		6 credits	36	54	90
6	CAHC505&AOC	Functional Foods and Nutraceuticals		4 credits	18	36	54
			12	18	306	144	450

AIM • To bring in proper awareness among the students on Environmental Issues

OBJECTIVES • To build a pro-environmental attitude and a behavioral pattern in society based on sustainable lifestyles • To impart basic knowledge on pollution and environmental degradation.

MODULE I

Introduction to Environment Science : Development and Environment, Human Population and the Environment : Population growth, variation among nations-Population explosion – Case Studies .Sustainable Development – Concept, Policies, Initiatives and Sustainability strategies, Human Development Index, Gandhian Principles on sustainability.

Natural systems -Earth –structure, soil formation- factors affecting, soil types, Atmosphere – structure and composition, Hydrosphere – Oceans, rivers, estuaries, Lakes etc., Physical environment of aquatic systems Resource utilization and its impacts on environment -Renewable and non-renewable resources, Forest resources : Use and over-exploitation, Timber extraction, mining, dams and their effects on forest and associated biota., Water resources : Use and over-utilization of surface and ground water, conflicts over water, River valley projects and their environmental significance- Case studies – Sardar Sarovar, Mineral resources : Use and exploitation, environmental impacts of extraction and use of mineral resources, case studies – sand mining, metal mining, coal mining etc

Food resources : World food issues, changes caused by - overgrazing, effects of modern agriculture, fertilizer-pesticide problems, water logging, and salinity. Case studies Energy resources : Growing energy needs, renewable and non renewable energy sources, use of alternate energy sources. Case studies. Land resources : Land as a resource, land degradation, soil erosion and desertification.

MODULE II

Ecosystems Concept of an ecosystem-Structure and function of an ecosystem-Producers, consumers and decomposers-Energy flow in the ecosystem-Ecological succession-Food chains, food webs and ecological pyramids. Ecological interactions Types, characteristic features, structure and function of the following ecosystem : Forest, Grassland, Desert, Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries). Significance of wetland ecosystem – Classification, Ecology and Biogeochemistry. Threats and Management .Biodiversity and its conservation Introduction – Definition : genetic, species and ecosystem diversity, Biogeographical classification of India, Value of biodiversity : consumptive use, productive use, social, ethical, aesthetic and option values, Biodiversity at global, National and local levels, India as a mega- diversity nation Hot-spots of biodiversity, Threats to biodiversity : habitat loss, poaching of wildlife, man-wildlife conflicts., Endangered and endemic species of India, Conservation of biodiversity : In-situ and Exsitu conservation of biodiversity. People's participation in biodiversity conservation- Biodiversity Register;Global Climate change and Biodiversity.

MODULE III

Environmental Pollution Air pollution: sources- mobile, stationary, fugitive; type of pollutants- primary and secondary air pollutants, Smog- classical smog and photochemical smog, Acid rain; Ozone depletion; impacts of air pollutants on environment; control measures.

Water pollution: Sources- Point and non-point sources; Types – chemical, biological and physical; impacts on the environment; water quality – water quality standards ; control measures. Soil pollution: sources and impacts Noise pollution: sources, impacts on health, management strategies Thermal pollution and Nuclear pollution - sources and impacts Solid wastes – types, sources, impacts on Environment. Municipal Solid waste Management: Essential steps- source segregation , collection , Processing and Disposal of residues. Environmental Pollution - case studies Natural and anthropogenic Disasters and their management : floods, earthquake, cyclone and landslides.

MODULE IV

History of environment protection

Silent spring, Ramsar Convention, Stockholm conference, Montreal protocol, Kyoto protocol, earth summit, Rio+10, Rio+20, Brundtland commission Report, Sustainable development Environmental movements in India, Global initiatives for Environmental protection Environmental education – basics ,Tbilisi conference, Environment Management Systems Environment Information Systems, Environmental Impact assessment (EIA) – definition and significance, EIA notification; National and state level Authorities; role of public in EIA of a development project Social Issues and the Environment Environmental movements From Unsustainable to Sustainable development-Urban problems related to energy- Water conservation- Rain water harvesting; Watershed management Environmental ethics : Issues and possible solutions. Environmental Economics, Green house effect and Climate change Natural and Anthropogenic disasters .Disaster Management ,Wasteland reclamation-Consumerism and waste products- Environmental Laws – General introduction; Major laws in India.Environment Protection Act- Air (Prevention and Control of Pollution) Act-Water (Prevention and control of Pollution) Act-Wildlife Protection ActForest Conservation Act-Issues involved in enforcement of environmental legislation-Public awareness

TEXT BOOK

Textbook for Environmental Studies For Undergraduate Courses of all Branches of Higher Education – Erach Bharucha for University Grants Commission

Further activities

- Field work
- Visit to a local area to document environmental assets river/forest/grassland/hill/mountain
- Visit to a local polluted site-Urban/Rural/Industrial/Agricultural/ Solid waste dump yards
- Study of common plants, insects, birds.
- Study of simple ecosystems-pond, river, hill slopes, etc. (Field work Equal to 5 lecture hours)

CAHC 501 : HUMAN RESOURCE PLANNING AND DEVELOPMENT

(Credits : 8 Total hours-108)

6hours/week

Course outcomes:

- **Understand the basic concepts of human resource planning**
- **Analyse the methods and techniques of job evaluation**
- **Understand the human resource audit and accounting**

Module I

- Concepts and process of Human Resource Planning
- Macro-level scenario of Human Resource Planning
- Methods & techniques – demand forecasting
- Job evaluation – concepts, scope & limitation
- Job Analysis & job descriptions
- Job evaluation methods

Module II

- Human Resource Information Systems
- Human resource Audit
- Human resource Accounting
- Human resource development – an overview
- Human resource development systems
- Task Analysis
- Human Resource development in service industry
- Organizing for Human resource Development
- Emerging trends & perspective

CAHC502: INDUSTRIAL, AIRLINES AND FAST FOOD CATERING (AOC)

(Credits-2 Total hours: 36 hours) 2 hours/week

Module I: 6hours

Types of food service facilities and their functions b. Importance of transport catering

ModuleII: 6hours

Importance of vending machine and disposables in mobile catering b. Packaging – type and trends

Module III: 6hours

Industrial canteen – Role and importance b. Types of menu c. Planning and layout d. Cost control in Industrial canteens

Module IV: 9hours

Flight catering – Introduction b. Flight food production planning c. Flight food production operation – Ground, on-board d. Storage, re-generation and service

Module V: 9hours

Fast food catering - Introduction b. Planning and layout c. Equipment d. Menu planning e. Advantages and disadvantages

CAHC502: BANQUETS AND BUFFETS Practical (AOC)

(Credits -3, Total hours-54) 3 hours/week

- I. Banquet food a. Pre-preparation b. Cooking c. Presentation d. Service of food e. Re-generating of food
- II. Categories of food a. Salads b. Classical starters c. Canapés d. Pates & terines
- e. Mousses & soufflés f. Mirror and platter presentation

CAHC503: FOOD ANALYSIS AND ADULTERATION TESTING

(Credits -2, Total hours-36 hours) 2 hours/week

Course outcome:

Enable the students

- To Understand different sampling techniques employed in chemical analysis of foods.
- To Classify various chemical methods of food analysis.
- To Analyse adulteration test used for quality control

Module 1- Introduction to food analysis 6Hrs

Proximate principles and analysis of food, official methods of analysis.

Module 2- Sampling techniques 8Hrs

Population and sampling, importance of sampling, types of sampling, sampling plan, preparation of samples, problems in sampling.

Module 3- Chemical analysis of moisture, carbohydrates and protein 8 Hrs

Moisture assay – oven drying methods, Karl Fischer titration, Toluene distillation method
Carbohydrate- starch, crude fiber Protein- Kjeldhal method, Biuret method, Lowry's method, Blast chilling method.

Module 4- Chemical analysis of fat, vitamin C and minerals 6Hrs

Fat- soxhlet method, gerber method. Analysis of vitamin C. Estimation of minerals by ashing - dry, wet and low temperature plasma ashing.

Module 5- Food adulteration 8Hrs

Definition, classification – intentional & incidental, health hazards caused by various adulterants and the critical level of metals in various foods, common adulterants in food and their testing.

Reference books:

1. Kalia, M. Food Analysis and Quality Control. Kalyani Publishers, New Delhi. 2002.
2. Winton, A.L and Winton, K.B. Techniques of food analysis. Allied Scientific Publishers, New Delhi. 1999.
3. Nielsen, S.S. Introduction to the chemical analysis of foods. Jones and Bartlett Publishers, Boston, London. 2003.

4. Connell, J.J. Control of fish quality. Blackwell Scientific Publications, Cambridge.
2000.
5. PFA ACT.

CAHC504&AOC : ADVANCED BAKERY AND CONFECTIONARY (AOC)

(Credits -2, Total hours-36hours (T) +54 (P)) 5hours/ week (2T+3P)

Course outcome:

- Understand the various recipes and methods of preparation of pastries,breads,frozen creams,chocolates
- Apply the principles to prepare pastries,bread,chocolates,frozen desserts,pastry creames

Module I: 15hours

Bakery - Recipes and methods of preparation

1. Short Crust pastry
2. Laminated pastry
3. Choux pastry
4. Hot Water/Rough Puff pastry
5. Care to be taken while preparing pastry
6. Role of each ingredient
7. Temperature of baking pastry

Module II: Breads 10hours

1. Principles of bread making
2. Simple yeast breads
3. Role of each ingredient in bread making
4. Baking temperature and its importance

Module III: Pastry Cream 10hours
1. Basic pastry creams
2. Uses in confectionery

Module IV: Icing and Toppings 10hours

Module V: Frozen Desserts 10hours

Module VI: Chocolates 10hours

Module VII: Demonstration of: 25hours - Decorated Cakes.

- Gateaux
- International Breads
- Sorbets
- Parfaits
- Hot/Cold Desserts
- Gum pastry

Practical Professional cookery – Crokneil, McMillon

- Prashad – Cooking with Indian Masters– Kalra, Elite Publishers
- International confectioner–Virtur and Co.
- The Professional French Pastry
- Larouse Gastronomy, Hamlyn Publishing
- Taste of India, Madhur Jaffrey, Rupa Publication
- Principles of Baking – Nayne – Wiley •

CAHC505&AOC: FUNCTIONAL FOODS AND NEUTRACEUTICALS (AOC)

(Credit: 4, Total hours-54) (18T+36P)

3 hours/week(1T+2P)

Course Outcome:

- Understand the basics of nutraceuticals and functional foods.
- Understand the significance of nutraceuticals and their role in disease prevention. □
Identify new strategies for marketing of traditionally known nutraceuticals.

Module 1-

Nutraceuticals: Historical Teleological Aspects and Classification 12hours

Introduction – Historical Reviews - Teleology of nutraceuticals -Organization models for nutraceuticals – Classification of Nutraceuticals based on the sources–Animal, Plant and

Microbial – Nutraceuticals in specific foods - Mechanism of Action -Chemical nature.

Module 2-

Flavonoids and Carotenoids as Antioxidants 12 Hours

General background on phytochemicals as antioxidants – Flavonoids and Lipoprotein oxidation – Evidence for specific Antioxidant mechanisms of Flavonoids – Anticancer and Cholesterol-lowering effect of citrus flavonoids – Dietary carotenoid and carotenoid absorption – Approaches to measurement of absorption – Metabolism of Carotenoids –Carotenoids as anticancer agents.

Module 3- Omega – 3 Fatty Acids and CLA 12hours

Introduction to Lipoprotein metabolism - PUFA and Cardiac Arrhythmias - Preventative role of n-3 fatty acids in cardiac arrhythmias – Mechanism, of action on n-3 PUFA's - ω – 3 fish oils and their role in Glycemic control- ω – 3 fatty acids and rheumatoid arthritis – Chemistry and Nomenclature of CLA – Analysis of CLA in food and biological samples – CLA in food products and biological samples –Biological actions and potential health benefits of CLA –Mechanisms of CLA action – Potential adverse effects of CLA.

Module 4- Lycopene, Garlic, Olive Oil, Nuts, Probiotics and Prebiotics 15 Hrs

Lycopene overview – lycopene and disease - Garlic – Chemistry – Implication in Health - Olive oil – CHD – Cancer - Nuts – Nutrient components and Composition - NutConsumption and CHD epidemiological evidence, Human nutritional studies on nutconsumption and serum lipid changes, Mechanism of action- Probiotics- criteria – products on market – probiotic products –Microbiology of the gastrointestinal tract - Prebiotics –future for probiotics and Prebiotics.

Module 5-

Herbs as Functional Foods, Stability Testing and Marketing Issues for Nutraceuticals and Functional Foods

15 Hrs

Herbal medicine – Herbs as ingredients in functional foods – actions of herbal and evidence of efficacy - Kinetic modelling of chemical reactions – Accelerated shelf life testing – Cruciferous vegetables and cancer prevention – Dietary fiber and coronary heart disease Evolution of marketing environment for Functional foods and nutraceuticals - Regulatory background - Introduction to consumer marketing issues for nutraceuticals - Potential product positioning.

References:

1. Robert E.C Wildman. Handbook of Nutraceuticals and Functional Foods, Ed., Robert E.C. Wildman, CRC Press LLC. ISBN – 0849387345, 2001.
2. Srilakshmi, B. Food Science (3rd edition), New Age International (P) Limited Publishers, New Delhi, 2003.

SEMESTER – VI							
B.Voc in Culinary Arts & Hospitality Management							
Sl.No	Course Code & NSQF Level	Paper with Code	Duration Gen Education credits	Skill component credits	Theory Hours	Practical Hours	Total hours
1	BOCG601	Entrepreneurship development	4 credits		72	Nil	72
2	CAHC601&AOC	Foundation course in front office	4 credits		18	36	54
3	CAHC602&AOC	Food Preservation	4 credits		18	36	54
4	CAHC603&AOC	Art of Food & Beverage Service I		4 credits	36	36	72
5	CAHC604	Food Additives and Flavour Technology		4 credits	54	Nil	54
6	CAHC605&AOC	Food waste Management		4credits	18	36	54
7	CAHC606&AOC	Internship/Project		6 credits		90	90
			12	18	234	216	450

BOCG601 : ENTREPRENEURSHIP DEVELOPMENT

Course Credits:4

4 hrs/week

Course outcome:

- **Understand the basics of entrepreneurship.**
- **Analyze the classification and role of entrepreneurs.**
- **Understand the basics of finance and capital. □ Create project reports for business.**

Module – I

To make the students understand about entrepreneurs and different classifications. Entrepreneur and entrepreneurship - Definition; traits and features; classification; Entrepreneurs; Women entrepreneurs; Role of entrepreneur in Entrepreneurs in India.

Module – II

Create an awareness about EDP. Entrepreneurial development programme concept; Need for training; phases of EDP; curriculum & contents of Training Programme; Support systems, Target Groups; Institutions conducting EDPs in India and Kerala.

Module – III

General awareness about identification of project financing new enterprises. Promotion of a venture; opportunity Analysis Project identification and selection; External environmental analysis economic, social, technological and competitive factors; Legal requirements for establishment of a new unit; loans; Overrun finance; Bridge finance; Venture capital; Providing finance in Approaching financing institutions for loans.

Module – IV

To identify different Discuss opportunities in small business. Small business Enterprise - Identifying the Business opportunity in various sectors - formalities for setting up of a small business enterprise - Institutions supporting small business enterprise - EDII (Entrepreneurship Development Institute of India), 0 SLDO (Small Industries Development Organization NSIC (National small Industries Corporation Ltd. (CNSIC) NIESBUD (National Institute for Entrepreneurship and small Business Development) Sickness in small business enterprise causes and remedies.

Module – V

To understand about a project report relating to a small business. Project formulation - Meaning of a project report significance contents formulation planning commissions guidelines for

formulating a project report - specimen of a project report, problems of entrepreneurs case studies of entrepreneurs.

Books for Reference:

1. Clifton, Davis S. and Fyvie, David E., Project Feasibility Analysis, John Wiley, New York, 1977.
2. Desai A. N., Entrepreneur and Environment, Ashish, New Delhi, 1990.
3. Drucker, Peter, Innovation and Entrepreneurship, Heinemann, London, 1985
4. Jain Rajiv, Planning a Small Scale Industry: A guide to Entrepreneurs, S.S. Books, Delhi, 1984
5. Kumar S. A., Entrepreneurship in Small Industry, Discovery, New Delhi, 1990

McClelland, D. C. and Winter, W. G., Motivating Economic Achievement, Free Press, New York, 1969

CAHC601: Foundation Course in Front office (AOC)

(Credits:1, Total Hours-18)

1 hours/week

Course outcome

- Understand the basics of front office management
- Understand importance and duties of a front office manager.
- Create organisation chart.
- Analyse different types of hotels.

Module I

10hours

Introduction to Hotel Industry • To Define Target Market & explain intangibility of service and potential • Advantages & Disadvantages of different types of Hotel Ownerships & Affiliations to describe the Introduction of Automation of Hotels • To define mission and create organization charts • Classify the Hotel's functional areas and discuss • The nature and uses of Job Description/Specification •

Module II

8hours

Classification of Hotels • To Describe the various F.O Dept and describe how the organization is likely to differ in large and small hotels • Types of Rooms • Tariff Structure & plans • Sections of F.O and their Importance.

CAHC601: Foundation Course in Front office Practical (AOC)

(Credits 3, Total Hours 36) 2hour/week

The students will have to draw one or two of the following vouchers and according to the question (case study) fill up the vouchers (desk work) • Registration Card • Reservation Form • Amendment Slip • Cancellation Slip • Arrival/departure notification slip • VIP amenities voucher • Miscellaneous charge voucher • Allowance voucher • Paid out voucher • Message slip Telephone etiquettes and manners. Front desk grooming and other essentials – body language, speech modulation which includes articulation, variation control of pitch and tonal quality

CAHC602: Food Preservation and Storage (AOC)

(Credits: 2, Total hours-36) 2 hours/week

Course outcome:

- Understand about the mechanism of spoilage and deterioration in foods, the basic food preservation principles, and methods to preserve foods.
- Analyse different ways in which food spoilage occurs and the techniques to prevent it.
- Analyze different spoilage agents and the ways in which they act on food.
- Understand the principles behind the various methods of food preservation.
- Apply these principles to preserve different types of foods. □Analyze the method of action of different preservatives.

Module I: Food Spoilage

4 Hours

Definition, types of spoilage - physical, enzymatic, chemical and biological spoilage. Mechanism of spoilage and its end products, shelf life determination.

Module II: Preservation by using Preservatives

8 Hours

Food preservation: Definition, principles, importance of food preservation, traditional and modern methods of food preservation. Food additives – definition, types, Class I and Class II preservatives.

Module III: Preservation by use of high temperature

10 Hours

Pasteurization: Definition, types, Sterilization, Canning - history and steps involved, spoilage encountered in canned foods, types of containers used for canning foods. Food irradiation – Principles, merits and demerits, effects of irradiation and photochemical methods.

Module IV: Preservation by use of Low Temperature

8 Hours

Refrigeration - advantages and disadvantages, freezing: Types of freezing, common spoilages occurring during freezing, difference between refrigeration and freezing.

Module V: Preservation by Removal of Moisture

6Hours

Drying and dehydration - merits and demerits, factors affecting, different types of drying, Concentration: principles and types of concentrated foods.

References:

1. Gould, G. W. (2012), “New Methods of food preservation”, Springer Science & Business Media.
2. Manay, N.S. Shadaksharaswamy, M. (2004), “Foods- Facts and Principles”, New age international publishers, New Delhi.
3. Srilakshmi, B.(2003), “Food Science”, New Age International Publishers, New Delhi.
4. Subalakshmi, G and Udipi, S.A.(2001),“Food processing and preservation”. New Age International Publishers, New Delhi.

CAHC602: Food Preservation (Practical) (AOC)

(Credit-1, Total Hours-18) 1 hour/week

1. Preparation of salt preserves – pickles.
2. Preparation of sugar preserves, jam, jelly, marmalade
3. Preparation of tomato sauces
4. Determination of acidity of tomato ketchup
5. Preparation of squashes

References:

- Arsdel W.B., Copley, M.J. and Morgen, A.I. 1973. Food Dehydration, 2nd Edn. (2vol. Set). AVI, Westport.
- Bender, A.E. 1978. Food Processing and Nutrition. Academic Press, London.
- Fellows, P. and Ellis H. 1990. Food Processing Technology: Principles and Practice, New York.
- Jelen, P. 1985. Introduction to Food Processing. Prentice Hall, Reston Virginia, USA. Lewis, M.J. 1990. Physical Properties of Food and Food Processing Systems, Woodhead, UK.
- Wildey, R.C. Ed. 1994. Minimally Processed Refrigerated Fruits and Vegetables, Chapman and Hall, London

CAHC603: ART OF FOOD & BEVERAGE SERVICE – I (AOC)

(Credits-2, Total hours-36) 2hours/week

Module I : Introduction to catering **6hours/week**

Different types of catering establishments, Attributes of a waiter: Personal hygiene, punctuality, personality, attitude towards guests, appearance, salesmanship and sense of urgency.

Module II: Staff organization **8hours/week**

1. The principle staff of different types of restaurants, duties and responsibilities of a restaurant staff. 2. Types of restaurants: overview and key characteristics of coffee shop, continental restaurants, speciality restaurants, pubs, night clubs, discotheques, snack and milk bar.

Module III: Operating equipment **7hours/week**

1. Classification of crockery, cutlery, glassware, hollowware, flatware, special equipment. 2. Ancillary departments: Pantry, still room, silver room, wash-up and hot-plate. 3. Restaurant service: Misen scene, Misen place. Points to be remembered while laying a table, do's and don'ts in a restaurant, dummy waiter and its uses during service.

Module IV: Different types of menu **7hours**

1. Origin of menu, table d'hote menu, a la carte menu, French classical menu. Food and their usual accompaniments. 2. Breakfast: Types, menu for each type, terms used in the service of continental breakfast. Cover laying for continental and English breakfast. 3. Order taking procedures: In-person, telephone and door hangers.

Module V: Types of service **8hours/week**

1. Different styles of service, advantages and disadvantages 2. Floor / Room service: Meaning, Full & Partial room service, Breakfast service in room, tray & trolley set-up for room service. 3. Lounge service: Meaning, organization of lounge service. 4. Tea service: Afternoon tea and high tea, order of service.

CAHC603: FOOD & BEVERAGE SERVICE – I (AOC)
(Credits-2, Total hours-36) 2 hours/week

1. Identification of cutlery, crockery, glassware and miscellaneous equipment.
2. Serviette folds.
3. Laying and relaying of table cloths.
4. Cleaning and polishing / wiping of cutlery, crockery and glassware.
5. Carrying a light tray.
6. Carrying a heavy tray.
7. Carrying glasses.
8. Handling cutlery and crockery.
9. Manipulating service spoon and fork.
10. Service of water.
11. Arrangement of sideboard.
12. Table d'hote cover laying.
13. A la carte cover laying.
14. Practice of simple menu compilation.
15. Receiving the guests, presenting the menu, taking orders.
16. Service of Hors d'oeuvre.
17. Service of soup, fish, pastas.
18. Service of main course.
19. Service of salads.
20. Service of sweet.
21. Service of Cheese.
22. Service of non – alcoholic drinks, tea and coffee.
23. Continental breakfast cover and tray set up.
24. English breakfast cover and tray set up.
25. Changing ashtray during service.
26. Presenting the bill

CAHC604-Food Additives and Flavour Technology (AOC)

(Credits: 4, Total Hours: 54) 3 hours/ Week

Course outcome:

- Understand the importance of food additives in food processing technology also to study the merits and demerits of addition of food additives.
- Analyze the additives that are relevant to food industry
- Understand shelf life extension, processing aids and sensory appeal of additives.
- Understand the isolation of various biopolymers from food resources . □
- Apply the isolation techniques.

Module I: Introduction to Food Additives

10 Hours

Role of Food Additives in Food Processing, functions -Classification -Intentional &Unintentional Food Additives. Safety Evaluation of Food Additives, Beneficial and Toxic Effects. Food Additives - Generally recognized as safe (GRAS), Tolerance levels &Toxic levels in Foods.

Module II: Types of food additives

12 Hours

Preservatives, antioxidants, colours and flavours (synthetic and natural), sequestrants, humectants, hydrocolloids, sweeteners, acidulates, buffering salts, anticaking agents – uses and functions in formulations; indirect food additives.

Module III: Flavour technology

10Hours

Types of flavours, flavours generated during processing – reaction flavours, flavour composites, stability of flavours during food processing, analysis of flavours, extraction techniques of flavours, flavour emulsions; essential oils and oleoresins.

Module IV: Derived food additives

10 Hours

Proteins, starches and lipids as functional ingredient; isolation, modification, specifications, functional properties and applications in foods and as nutraceuticals. Manufacturing and applications of fibres from food sources, fructooligosaccharides.

Module V: Food additives as toxicants

12 Hours

Artificial colours, preservatives, sweeteners; toxicants formed during food processing such as nitrosamines, maillard reaction products acrylamide, benzene, heterocyclic amines and

aromatic hydrocarbons; risk of genetically modified food, food supplements, persistent organic pollutants, toxicity implications of nanotechnology in food.

References :

1. Titus A. M. Msagati, (2012), “The Chemistry of Food Additives and Preservatives”, John Wiley & Sons Publishers.
2. Jim Smith, Lily Hong-Shum (2011), “Food Additives Data Book”, John Wiley & Sons Publishers.
3. Deshpande, S.S. (2002). “Handbook of Food Toxicology”, Marcel Dekker Publishers.

CAHC605: Food Waste utilisation and Management (AOC)

(Credits: 2, Total Hours: 18)

1 Hours/ Week

Course outcome:

- Understand about the ways for effective utilisation of the byproducts obtained after food processing and
- Analyze characterisation of waste products and effluent treatment methods.
- Analyze types of wastes in food industry
- Create methods to utilize the byproduct in the food industry for a sustainable future

Module I: Introduction

3 hours

Classification and characterization of food industrial wastes from Fruit and Vegetable processing industry, Beverage industry; Fish, Meat & Poultry industry, Sugar industry and Dairy industry; Waste disposal methods – Physical, Chemical & Biological; Economical aspects of waste treatment and disposal.

Module II : Waste characterization

4 hours

Temperature, pH, Oxygen demands (BOD, COD, TOD), fat, oil and grease content, metal content, forms of phosphorous and sulphur in waste waters, microbiology of waste, other ingredients like insecticide, pesticides and fungicides residues

Module III: Treatment methods for liquid wastes

3 hours

Treatment methods for liquid wastes from food process industries; Design of Activated Sludge Process, Rotating Biological Contactors, Trickling Filters, UASB, Biogas Plant.

Module IV: Treatment methods of solid wastes: **4 hours** Biological composting, drying and incineration; Design of Solid Waste Management System: Landfill Digester, Vermicomposting Pit. Biofilters and Bioclarifiers, Ion exchange treatment of waste water, Drinking-Water treatment, Recovery of useful materials from effluents by different methods.

Module V: Utilisation from rice mill **4 hours**
Thermal and biotechnological uses of rice husk - pyrolysis and gasification of rice, utilisation of rice bran, citric acid production from fruit waste, Coconut processing – by- product utilization – fuel briquette.

References:

1. Abbas Kazmi, Peter Shuttleworth, (2013), “The Economic Utilisation of Food CoProducts”, Royal Society of Chemistry Publishing.
2. A.M. Martin, (2012), “Bioconversion of Waste Materials to Industrial Products”, Springer Science & Business Media Publishing.
3. Marcos von Sperling,(2007), “Basic Principles of Wastewater Treatment”, IWA Publishing

Suggested readings

1. V. Oreopoulou, W. Russ, (ed), 2007, “Utilization of by-products and treatment of waste in the food industry” Vol, 3.,Springer.
2. K. Waldron, 2007, “Handbook of waste management and co-product recovery in food processing”.CRC.
3. R. Smith, J. Klemes, J-K Kim 2008, “Handbook of water and energy management in food processing.”, CRC.
4. C. Yapijakis , L.Wang, Yung Tse- Hung,2005, . Waste treatment in the food processing industry, H. LO, CRC,
5. Herzka A & Booth RG; 1981, Applied Science Pub Ltd, Food Industry Wastes: Disposal.
6. Fair GM, Geyer JC & Okun DA; 1986, John Wiley & Sons, Inc.
7. Bartlett RE; .Water & Wastewater Engineering; Applied Science Pub Ltd.

8. Green JH & Kramer A; 1979, Food Processing Waste Management; AVI.
- 9.; Rittmann BE & McCarty PL; 2001, Environmental Biotechnology: Principles and Applications, McGraw-Hill International editions.
10. Bhattacharyya B C & Banerjee R; Environmental Biotechnology, Oxford University Press.
11. P. N. Chereminnoff & A.C Morresi, 1976, "Energy from Solid Wastes" 12 .A. Chakravarthy & De, "Agricultural Waste and By Product Utilisation".
13. Bor S. Luli (ed), "Rice Production and Utilisation" 14. E. Beagle, "Rice Husk Conversion to Energy"

CAHC605: Food Waste utilisation and Management (AOC)

(Credits: 2, Total Hours: 36)

2hours/week

1. To find BOD of water sample.
2. To find COD of waste sample.
3. To find the total dissolved solids (TDS) and its volatile and non-volatile components.
4. To find the total suspended solids (TSS) and its volatile and non-volatile components.
5. Flow process chart of food plant Waste utilization processes
6. To find the phenol content of water sample and evolution of parameters.
7. To operate the electro dialysis apparatus.
8. To find the biodegradation constant (K) and the effect of timing on it.
9. To use the membrane separation techniques for salt brine and reverse osmosis process for sugar.

CAHC606&AOC : PROJECT REPORT

(Credits-6, Total hours-90) 5 hours/week

The student will be required to undertake a research on any topic related to hospitality
Formulating The length of the report may be 150 double spaced pages (excused appendices and annexure) 10% variation on either side is permitted.

Guidelines

List of contents of the research

Chapter I - Introduction

Chapter II Scope, Objective, Methodology, and limitation of the research

Chapter III data analysis

Chapter IV results and discussion

Chapter V recommendation

Chapter VI annexure, exhibits, and bibliography.

Submission of the report: Three copies of the report have to be submitted before the due date as specified by the college. The original copies should be submitted to the university through the college concerned. The College copy is to be retained by the college and the personal copy should be duly signed by the faculty guide and Principal or HOD of the Department. The student should carry the personal copy to the Viva Voce.

The Student should also carry the following:

Duly signed personal copy of the project, Examination Hall ticket, College Identity card

NB: Dress code should be formal

MODEL QUESTION PAPER

CAHC102: (Perspectives of food science-I)

Maximum Marks:80

Time: 3 hrs.

1. Answer the following questions in one sentence (10*1=10)

- 1. State two reason for using a workflow plan**
- 2. Difference between cream soup and puree soup**
- 3. Describe the term “crepes”**
- 4. What are the ingredients used in thousand island sauce?**
- 5. What are the different types of milk**
- 6. Hygiene is divided into three for food handlers which are they?**
- 7. What is yeast?**
- 8. Explain contemporary and proprietary sauces**
- 9. What is court bouillon? What is it used for?**
- 10. factors which are included in a recipe**

2. Write short notes on any eight of the follwing not exceed 60 words. (8*2=16)

1 Briefly gives the faults in bread making

- 2 List four reasons why stocks become cloudy?
- 3 Explain the role of spices in Indian cookery
- 4 Give the standard recipe for preparation of bread rolls
- 5 What are the principles /fundamentals step in bread making
- 6 List three safety factors to be considered before using mechanical equipment.
- 7 Explain varieties of flour
- 8 Name the basic /leading /mother sauces giving two derivatives of each with ingredients
- 9 State four main functions of sauces?
- 10 What is the different between fat and oil?

11 Explain the types of cheese

1. Translate the following culinary term into English

- a. Mise- en – Place
- b. Cuisine,
- c. Mire –Poix,
- d. Roux

12 Uses of Eggs in cookery.

3. Short essay any six of the following (120 words) words. (6*4=24)

- 1 List the different types of stores in a hotel and mention its uses?
- 2 Classify cheese with suitable examples with their country of origin
- 3 Explain types of cream with their fat %, processing, characteristics and uses
- 4 What are the main factors to determine the layout of the kitchen
5. Why are stocks started with cold water?
6. Name five soup classifications and give one example of each?
7. Describe the preparation of a roux? Name three basic roux and give one example of the use of each?
8. Leavening agent.
9. Classify kitchen equipment with example.

4. Long essay answer any two from following 15 mark each

1. Explain the kitchen organization with a chart and duties & responsibilities of each staff
2. What is the various type of fuel used in the kitchen and advantage and disadvantage of each type?
3. What is hygiene, why personal hygiene is important in catering establishment? 4. Pre preparation of ingredients

MODEL QUESTION PAPER

CAHC103: Introduction to culinary Art -1

Maximum Marks: 80

Time: 3 hrs.

1. Answer the following questions in one sentence (10*1=10)

1. Who is widely known as the father of modern cuisine?
2. The acronym HACCP stands for:
3. What is an essential tool that helps ensure that food products meet safety standards during receiving?
4. A menu determines.
5. What is plating presentation?
6. What is calculated by dividing the recipe cost by the total number of portions that the recipe yields?
7. **What is Garnish?**
8. What is coagulation in cooking?
9. **Which Common Garnishing Herbs are using for Plating?**
10. **what you mean by” Culinary Art”**

2. Write short notes on any eight of the following not exceed 60 words. (8*2=16)

- 1 What is a good balanced diet?
- 2 What are aims and objectives of cooking?
- 3 What are the five key elements of proper food presentation?
- 4 Chinese cuisine is one of the diverse cuisines of the World. Support the statement with regional specialities.
- 5 A food’s nutritive value, flavor and appearance do not stay the same after cooking why? 6 What are nutrients? Classify them.
- 7 Why cooking is an art and science?
- 8 Why is time management important in the kitchen?
- 9 What skills are needed for culinary arts?
- 10 Yield management
- 11 Quality control
- 12 Classify vitamins and explain the functions and sources of Vitamin D and C.

3. Short essay any six of the following (120 words) words. (6*4=24)

- 1 Transport catering plays a vital role in our country”. Explain in detail.
- 2 Principles of food presentation
- 3 What factors would one consider for planning menu for hospital catering? Explain different types of diets.
- 4 The power of food presentation and plating
- 5 What is the difference between chives, scallion and green onion
- 6 What is haute Cuisine?
- 7 Nouvelle cuisine (French, "new cuisine")
- 8 What did Nobles eat in the middle Ages?
- 9 Which station does a saucier oversee in the kitchen?

4. Long essay answer any two from following 15 mark each

1. Aims and objective of cooking
2. History of culinary Art.
3. The evolution of world cuisine
4. Menu planning

MODEL QUESTION PAPER

CAHC104: Food Production and Patisserie theory I

Time: 3 hrs

Total marks: 80

I Answer the following questions in one sentence

(10x1=10)

1. Name the different type of flour.
2. What is stone milling?
3. Name different type of fat.
4. Write the functions of water in cake making.
5. Name the types of sugar.
6. What are the tenderizers?
7. What is purpose of baking?
8. Name some bread making methods.
9. What is a texture?
10. What are the factors required to produce good quality of wheat?

II. Write short notes on any eight of the following not exceed 60 words.

(8x2=16)

12. How does over fermentation occur?
13. Briefly give the faults in bread making.
14. Give the standard recipe for preparation of bread rolls.
15. What are the principles /fundamentals step in bread making?
16. List the safety factors to be considered before using mechanical equipment.
17. Explain varieties of flour.
18. What is the difference between fat and oil?
19. What is pie and flan?
20. Name some cake making methods.
21. How will you find old yeast.
22. How is gluten formed?
23. Define icing sugar.

III Short essay any six of the following (120 words) words.

(6x4=24)

24. How will you check the quality of bread?
25. Name some external bread faults.
26. How will you prepare the choux pastry?
27. What are the differences between royal icing and butter icing?
28. Write the method of melting moment.
29. What are improvers? Give some example for them and explain their function.
30. What is fermentation?
31. What are the products prepared in a confectionary department?
32. What are the principles of making laminated pastry?
33. Aims and objectives of cooking.

IV. Long essay answer any two from following 15 mark each

34. Explain the kitchen organization with a chart and duties & responsibilities of sous chef. 35. Explain the major difference between pastries and give at least two uses of each pastry
36. Classification of raw materials – functions.
37. Explain the classification of raw material for cooking.

MODEL QUESTION PAPER

CAHC202: Nutrition and sanitation

MARKS :80

TIME:3Hrs

- a) **1. Answer the following questions in one sentence (10*1=10)**
- b) To extend the life of fruits they are given a _____ coating on them.
- c) _____ activity causes browning in potato when cut and left open. d) _____ is a stone fruit.
- e) Garlic belongs to _____ category in vegetable classification.
- f) _____ is called as milk sugar.
- g) Seed protein includes _____ and _____ .
- h) From ripe fruits _____ is extracted which is used as thickening agents.
- i) Sugar has _____ and _____ functions.
- j) Red and orange colour of fruits and vegetables is due to the presence of _____ pigment.
- k) _____ is an important mineral for bone formation.
- l) **2. Write short notes on any eight of the following not exceed 60 words. (8*2=16)** m)
- a) Any two vitamins which are fat soluble.
- b) Any two class II preservatives.
- c) Any two pigments present in fruits.
- d) Any two constituents of carbohydrates.
- e) Any proteins obtained from plant source.
- f) Any two artificial flavouring agents used in retaining the flavour in processed foods.
- g) Any two chemicals used to control post harvest diseases in fruits and vegetables.
- h) Define food additives.
- i) Any two substances used to protect the produce from damages while being transported over distances.
- j) Define blanching.

3. Short essay any six of the following (120 words) words. (6*4=24)

- a) Write notes on importance of fruits and vegetables.
- b) Functions of Fats.
- c) Write short notes on fat and its classification with examples.
- d) Define nutrients .Explain the different types of carbohydrates.
- e) Give the classification of fruits.
- f) What are food flavours and colours?
- g) What are food flavours and colours, explain with examples.
- h) Give the Functions of sugar.
- i) How are the fruits and vegetables transported from the field to the food industry, explain.
- j) Explain importance of vitamin A
- k) What are the changes that are seen in cereals and pulses after cooking?
- l) Explain the effect of heat on eggs.
- a) **4. Long essay answer any two from following 15 mark each** What is marinating, explain the preliminary processing methods.
- b) What are nutrients? give the classification.
- c) Give the importance of fibre and water in diet.

MODEL QUESTION PAPER

CAHC203: Food Safety and Hygiene

Maximum Marks: 80

Time: 3 hrs.

1. Answer the following questions in one sentence (10x1=10)

- 1. What are the reasons for using caps while working in the kitchen?
- 2. Why smoking is dangerous for food handlers?
- 3. Write down the type of fire fighting equipment used in the kitchen
- 4. Name three food poisoning bacteria?
- 5. Name two food born diseases?
- 6. Give the names of two chemical food poisoning agents?
- 7. Hygiene can be divided into three, for the food handlers. What are they?
- 8. How do you keep your hands clean for a hygienic cooking?
- 9. Name three types of flies found in a kitchen?
- 10. What are the 3E's of food safety?

II. Write short notes on any eight of the following not exceed 60 words. (8*2=16)

1. Define the term hygiene?
2. What are the essential things required for make one physically fit?
3. What are the qualities required for the cloths used in a kitchen? / Clothing in the kitchen?
4. Chef's jackets are double-breasted. What is the reason?
5. Kitchen flooring?
6. Personal hygiene check list?
7. What are the general health and fitness needed for a food handler?
8. Cleaning of vessels?
9. Cleaning of cutting boards?
10. Use of hot water in cleaning?
11. Kitchen hygiene?
12. What is cross contamination?

III. Short essay any six of the following (120 words) words. (6*4=24)

1. Control techniques of rodents and insects?
2. Waste disposal in a kitchen?
3. Common food adulterants?
4. Food additives?
5. HACCP is an essential form of Quality Assurance. Discuss
6. Requisitions for well planeed stores discuss.
7. What are the ways to control flies in the kitchen?
8. What are the favourable conditions for bacteria to multiply?
9. How do you keep your hands clean for a hygienic cooking

IV. Long essay answer any two from following 15 mark each

1. What are the check lists for keeping maximum personal hygiene?
2. Why is Personal hygiene so important in a catering establishment?
3. What are the causes of chemical food poisoning? How can you prevent this?
4. Neglect in the care and cleaning of any part of the kitchen leads to food infection? Explain?

MODEL QUESTION PAPER

CAHC204: Garde Manger

Maximum Marks:80

Time: 3 hrs.

1. Answer the following questions in one sentence (10*1=10)

11. What is barinometer
12. What is use of Butcher's Hookes
13. Palatte knife is used for

14. Who is in charge of larder department
15. What is Lemon Zester
16. La Dorne is cut of
17. In the traditional garde manger brigade, who cleans, stores and otherwise handles seafood?
18. What is Hors d'oeuvre?
19. Why is spread used for making Sandwiches?
20. **What is Antipasto?**

2. Write short notes on any eight of the following not exceed 60 words. (8*2=16)

- 13 What are the responsibilities of a garde manger?
- 14 What are Compound salads write three examples. ?
- 15 Write in detail what are the points one should bear in mind while procuring equipment for larder
- 16 Explain the principles of HACCP and discuss its importance in food sector.
- 17 Explain the various points a food handler needs to keep in mind for maintaining good personal hygiene
- 18 What is the function of Larder department
- 19 Explain the role of herbs and spices used in cold kitchen 20 What is the responsible chef garde manger
- 21 What is ham and gammon?
- 22 Brief definition of the following culinary terms:
 - a) **Casing** b) **Canapé** c) **Aspic** d) **mayonnaise**
- 23 Name **five** popular sausages one from each country with brief explanation 24 Garde manger Liaison with other department.

3. **Short essay any six of the following (120 words) words. (6*4=24)**

1. Classify herbs. Discuss ideal uses of herbs in cooking with examples. 2. Distinguish between: a) Aspic and Gelee b) Brines and Marinades
3. Explain in detail the method of making chicken galantine.
4. Duties and responsibilities of Chef Garde manger.
5. What is larder or garde manger?
6. What are the main factors to determine the layout of the Kitchen?
7. Classify cheese with suitable examples with their country of origin
8. With the help of a neat diagram, name the various cuts of lamp (English and French), giving the best use of each
9. Write short notes on
 - a) **Chaud-froid** (b) **Quenelles**(c) **Parfaits** (d) **Gammon**

4. **Long essay answer any two from following 15 mark each**
5. Define larder. Draw the lay-out diagram of typical larder and list the equipment Required
6. Discuss in detail functions of larder sections. Explain the essentials of larder control.
 3. What are the parts of a sandwich? Explain various types of sandwiches with examples.
 4. Fish –how to select , presentation, cleaning, preparation, basic cuts and its use and storage.

MODEL QUESTION PAPER

CAHC302:FOOD PACKAGING

MARKS :80

TIME:3Hrs

I. FILL IN THE BLANKS :

[1X 10 = 10]

- a. FPO specification of tomato ketchup is _____.
- b. Red colour of tomato is due to the presence of _____ pigment.
- c. _____ is the temperature at which foods are preserved in cellar storage.
- d. _____ And _____ are two categories at which pasteurisation is carried out.
- e. During fermentation _____ gas is released by microbes.
- f. In _____ solution fruits are dipped before lye peeling.
- g. In canning of pineapples, _____ is the best variety.
- h. Most commonly, _____ gas is produced in cans that lead to swelling.
- i. Discolouration in canned fruits and vegetables can be due to either _____ or _____.
- j. _____ Content of tomatoes is lesser when grown in areas with more sunlight.

2. Write short notes on any eight of the following not exceed 60 words. (8*2=16) Any two low temperature preservation methods

- a. Any two types of peeling methods employed.
- b. Any two commonly used variety of bananas.
- c. Any to types of fermentation methods
- d. Any two types of spoilages found in cans.
- e. Any two types of tomato products.

- f. Any two types of pasteurisation methods used.
- g. Any two common varieties of mangoes canned.
- h. Any two types of vegetables canned commonly.
- i. Any two types of dehydration methods used to increase shelf life of foods.

3. Short essay any six of the following (120 words) words. (6*4=24)

1. Write short notes on sterilization.
2. Define fermentation and the methods of fermentation.
3. What is exhausting and write the advantages of canning.
4. Write any 4 pre preparation methods before canning process.
5. What is blanching? Explain the advantages.
6. Short note on manufacture of tomato juice.
7. Explain the is corrosion.
8. Define ketchup and explain how it's manufactured.
9. Write short note on low temperature methods of preservation.
10. Explain different methods by which fruits are washed before they are canned.

4. Long essay answer any two from following 15 mark each

- a. Explain the various processes involved in canning process in brief.
- b. Explain the types of spoilage found in canned foods.
- c. Explain the various preservation techniques used for preservation of fruits for the past few decades.

MODEL QUESTION PAPER

CAHC304:Food Microbiology I

TIME:3Hrs

MARKS : 80

1. Answer the following questions in one sentence (10*1=10)

- a. Most bacteria prefer _____ Ph for optimum growth.
- b. In a compound microscope , a mirror is used to to adjust the _____ entering the microscope.
- c. _____ is used as a locomotive organ in bacteria.
- d. _____ is a person who prepares food and sells it.

- e. The skin of humans has _____ micro-organisms settled on it.
- f. Reproduction in yeast is through a process called as _____.
- g. Microscope is held using the _____.
- h. _____ is a common name for comma shaped bacteria.
- i. _____ causes pink rots in eggs.
- j. Stiffening of meat after the slaughter is called _____.

2. Write short notes on any eight of the following not exceed 60 words. (8*2=16)

- a. Give any two perishable foods
- b. Give any two microbes causing spoilage in fruits and vegetables.
- c. Name any two food borne diseases.
- d. Define osmosis.
- e. Name any two classifications of bacteria according to the nutritional requirement.
- f. Give any two parts of a compound microscope.
- g. Give any three forms of a bacteria.
- h. Define parasites
- i. Define sanitation
- j. Name the bacteria that require light for its growth

3. Short essay any six of the following (120 words) words. (6*4=24)

a. Process of reproduction in yeast.

- a. Draw and explain the different parts of a bacteria.
- b. Explain the occurrence of microbes in the environment
- c. Importance of health in food handlers.
- d. Explain the importance of temperature that effects the growth of micro-organisms.
- e. Explain good personal habits expected from those who work at food industry.
- f. How is milk spoilt and how can it be prevented.
- g. How are fruits spoilt by microbes and its prevention methods
- h. Oxygen is essential for the growth of some micro- organisms and not for certain. Why?
- i. Explain why food left uncovered in a humid climate is easily contaminated by microbial growth.

4. Long essay answer any two from following 15 mark each

- a. Explain why personal hygiene is important while working in a food industry.
- b. Explain spoilage caused in meat, poultry and eggs.
- c. Explain most important factors that affect growth of bacteria.

MODEL QUESTION PAPER

CAHC305:Food production and Exhibition

Maximum Marks:80

Time: 3 hrs.

1. Answer the following questions in one sentence (10*1=10)

21. Name two types of sandwiches.
22. List four continental Herbs used in cooking.
23. Hygiene is divided into three for food handlers which are they?
24. What is yeast?
25. List the ingredients used in bread making.
26. What is court bouillon? What is it used for?
27. List three safety factors to be considered before using mechanical equipment.
28. Flavouring and seasoning
29. In order to wash hands correctly, what is the first thing a food handler must do?
30. Types of pulses.
31. State two ways by which food can be made free of bacteria.
32. State two reasons for using a workflow plan

II. Write short notes on any eight of the following not exceed 60 words. (8*2=16)

- 25 Write in detail what are the points one should bear in mind while procuring equipment for large scale food production.
- 26 Explain the principles of HACCP and discuss its importance in food sector.
- 27 Explain the various points a food handler needs to keep in mind for maintaining good personal hygiene
- 28 Duties and responsibilities of CDP.
- 29 Briefly give the faults in bread making
- 30 Explain the role of spices in Indian cookery
- 31 Give the standard recipe for preparation of bread rolls 32 What is ham and gammon?
- 33 Uses of Eggs in cookery
- 34 Explain varieties of flour
- 35 What is the difference between fat and oil?
- 36 Brief definition of the following culinary terms:

A. Mise-en -place B. Segment C. Mirepoix D. Buffet

III. Short essay any six of the following (120 words) words. (6*4=24)

10. What are the main factors to determine the layout of the Kitchen?
11. Leavening agent.
12. Explain steaks.
13. Classify cheese with suitable examples with their country of origin
14. Explain types of cream with their fat %, processing, characteristics and uses
15. With the help of a neat diagram, name the various cuts of lamb (English and French), giving the best use of each
16. Give the recipe for short crust pastry
17. What is the role of salt and sugar in salt making
18. presentation and garnish

IV. Long essay answer any two from following 15 mark each

8. Explain the kitchen organization with a chart and duties & responsibilities of each staff
9. Explain the classification of raw material for cooking.
10. What is hygiene, why personal hygiene is important in catering establishment?

Write the different types of cooking method

Model question paper

CAHC306: House Keeping

Maximum Marks: 80

Time: 3 hrs.

1. Answer the following questions in one sentence (10x1=10)

33. Amenities in a VIP guest room
34. Purchase criteria for cleaning equipments
35. Give the classification of cleaning equipment.
36. Advantages of a vacuum cleaner.
37. Give the meaning and definition of Housekeeping.
38. Define heritage hotel?
39. What is a maid cart?
40. Give any two examples of guest room supplies loaded in cart?
41. Expand SOP_____.
42. Another name for sewing kit_____

2. Write short notes on any eight of the following not exceed 60 words. (8*2=16)

1. Draw the organizational structure of housekeeping department small hotel
2. Give the Job Description of Executive House Keeper.
3. Explain the Responsibility of the Housekeeping department.
4. Explain the career in the Housekeeping department
5. Give the classification of cleaning agents
6. What are the standard contents of a guest room?
7. List the Types of Bed?
8. Explain the cleaning of various surfaces.
9. Explain Desk control in detail.
10. Give the Inter departmental Co-ordination of Housekeeping with Stores
11. Explain the registers maintained in Housekeeping Department
12. Explain the role of housekeeping department in hotel?

3.

Short essay any six of the following (120 words) words. (6*4=24)

1. Explain various types of keys.
2. Give the Duties and responsibilities of laundry manager.
3. Explain the Importance and principles of laundry.
4. Give the Classification of linen.
5. Give the Job Description of Floor Supervisor, House men.
6. Explain stock taking – procedure and records
7. Explain the Equipment used in laundry.
8. Give the layout of a linen room.
9. How does housekeeping coordinate with front office and Maintenance

4. Long essay answer any two from following 15 mark each

1. Draw the organizational structure of housekeeping department Large hotel.
2. Explain the Attributes and Qualities of the Housekeeping staff.
3. Explain the Facilities planning and Design of Housekeeping Department
4. Draw the Layout Of Housekeeping department explains the relevant sections.

