

Curriculum of Matric Tech
Fundamentals of Cooking II
GRADE X
2020



GOVERNMENT OF PAKISTAN
Ministry of Federal Education and Professional Training ISLAMABAD
In Collaboration with
National Vocational and Technical Training Commission

Contents

Introduction.....	3
Rationale	4
Aims and Objectives	5
Objectives.....	5
Grade –X.....	6
Assessment and Evaluation	12
Formative (Internal) Assessment	12
Methods for Internal/Formative Assessment	12
Summative /External Assessment	13
1) Theory Assessment /Written examination:	13
2) Practical Assessment/Practical examination:	13
Guidelines for Writing a Textbook.....	13
Guideline for planning and writing a chapter	14
Guidelines for Writing Learner Workbook.....	15

Introduction

Pakistan is a developing country with 5th largest population in the world. 64% of our population is below 30 years of age which makes it second youngest country in South Asia. This “youth bulge” provides unique challenges as well as opportunities for the country’s social and economic development. The only remedy is to develop youth of Pakistan through education and training. To control the increasing un-employment, promoting entrepreneurship (self-employment), alleviate poverty and provide skilled manpower for industrial/economic growth, The Govt. of Pakistan has decided to introduce Technical Scheme at SSC Level. For this a stream of technical subjects has been selected including Fundamentals of Cooking as one of the elective subjects.

The curriculum of Fundamentals of Cooking is designed to produce middle level human resources equipped with knowledge, skills and attitudes related to the field of culinary arts so as to meet the demand of such workforce in the country and abroad to contribute to the national streamline of poverty reduction of Pakistan.

Professional Cooking is one of the most popular area of hospitality trades with the highest demand in the overall Hospitality job-market. “Chef” means a person who performs all phases of kitchen activities including the preparation and presentation of vegetables, soups, sauces, meat, fish and poultry, cold kitchen items; desserts, baking, pastry; basic menu planning/costing as well as knowledge of safety, sanitation and food storage, and who has a knowledge of human and customer relations.

The field is of an utmost importance and is assisting individual along with employer around the globe. Moreover, on individual level one can also be certified with various levels of Professional cooking certification which is an industry recognized credential that can get an individual to excel in chef career, benefitting both individual and employer. Certification provides reliable validation of skills and knowledge and would lead to accelerated professional development, improved productivity, and enhanced credibility.

In connection with job market demand, there is a critical need to strengthen and promote productive working relationship between the training provider and industry to enhance quality of training delivery, Personal & professional grooming, and access to attractive employment. The program of study involves learning skills and techniques related to preparing food as a chef. Whether you are preparing a cup of coffee at a small café or an event for 500, there are basic skills you will need to be efficient when handling various types of foods and preparing dishes for your customers and patrons. While deciding on a career to pursue, job outlook is something that needs attention. And as the Bureau of Labor Statistics predicts a 10 percent job growth until 2026 in Culinary Arts. Employment of chefs and head cooks is projected to grow 11 percent from 2018 to 2028, much faster than the average for all occupations.

Income growth will result in greater demand for high-quality dishes at a variety of dining venues. As a result, more restaurants and other dining places are expected to open to satisfy consumer desire for

Main elements in the development of this qualification consists of competency standards, course structure, credit hours, tools and equipment as per National Vocational Qualification Framework (NVQF) development manual.

Rationale

The culinary arts is a profession that is increasingly getting attention in Pakistan, not only among the youth seeking to enter the industry but also among adults who wish to polish their skills to develop a career out of it. The influx of food-based TV channels, Chef and the increasing demand for home catering has been a pivotal reason for home-based cooks to hone their natural skills and to develop a professional career out of something that they are passionate about.

On completing the curriculum, students should have acquired a set of knowledge and concepts, and have developed a range of technical, personal, interpersonal, organizational and generic skills, that can be applied in various contexts, both within and related to culinary arts domain. Furthermore, this course will stimulate the learners towards entrepreneurship in the industry. Cooking skill interventions can have a positive effect on food literacy, particularly in improving confidence on cooking and fruit and vegetable consumption, with vulnerable, low-socio economic groups gaining more benefits. Consistency across study designs, delivery and evaluation of outcomes both at short and long terms are warranted to draw clearer conclusions on how cooking programs are contributing to improve diet and health.

Within this qualification relating to cooking interventions in schools, there are important interventions that integrated within school settings. The purpose of this qualification is to strengthen connections between schools and trade, and drawing on the concept of the sociotechnical network, theories the interactions between the relevant market and school contexts.

Low education attainment, low income and high socioeconomic deprivation are main factors associated with poor diet. These factors tend to increase the likelihood of inadequate food access, low food and nutrition literacy and lack of practical cooking skills in economically deprived households. Currently, there is growing evidence linking home cooking with healthier dietary choices, particularly for higher intakes of fruits, vegetables, and whole grains; whilst eating outside the home has been associated with an increased consumption of ready-to-eat meals and calorie-dense convenient foods. Considering that ‘not knowing how to cook’ stands as barrier to healthful food preparation, the delivery of community cooking skill programs has gained attention in public health agendas as a vehicle to improve and promote confidence, well-

being, and enhance meal quality and preparation practices. These programs have increased and continue to increase in popularity because they offer a valuable channel to engage with vulnerable groups via inclusive social activities, whilst positively impacting their dietary profiles and health outcomes.

Professional Cooking, matric tech (9th&10th)

Aims and Objectives

The specific objectives of developing these qualifications are as under:

- Provide students with a smooth transition to work.
- Develops job-readiness & enhance students' trade-specific employable skills and provide opportunities for the development of new skills.
- Provide students with the opportunity to obtain from Level II -IV technical training certification or equivalent in a given trade.
- To set high profile standard professions for the industry to generate standard outputs.
- To validate an individual skill, knowledge and understanding regarding relevant occupations.
- Provide flexible pathways and progressions in training and assessment field.

Objectives

After completing this, the students will be able to:

- develop values and attitudes about the dynamic nature of the culinary arts and the importance of being a self-motivated problem solver and life-long learner
- understand workplace structure and function to utilize this knowledge in hotel industry
- apply the acquired knowledge, values, and skills in the field of hospitality
- start small size entrepreneurship
- progress to higher levels of studies in the field of culinary arts.
- develop a range of technical, personal, interpersonal, organizational, and generic skills that can be applied in various contexts, both within and beyond the workplaces.

Grade -X

Ch. 1 Introduction to Worldwide Cuisines (X)			Theory : 8 Periods Practical: 6 Periods		
Themes	Students' Learning Outcomes	Activities	Duration	Tools	Workplace
History of Modern Cookery	the students will be able to: <ul style="list-style-type: none"> • learn need & importance of modern cookery • understand elevation of modern cookery with the passage of time • distinguish between classic & modern cookery 	<ul style="list-style-type: none"> • Visualization on history of modern cooking and Auguste Escoffier 	Periods (T) Periods (P)		Classroom
Food Trends Around the World	<ul style="list-style-type: none"> • learn why food trends are popular around the world • know different types of food trends i.e club food, fast food, street food 	<ul style="list-style-type: none"> • enlist various countries along with their most famous foods 	Periods (T) Periods (P)		Classroom
Cooking and Science (Molecular Gastronomy)	<ul style="list-style-type: none"> • learn introduction of food science • know about molecular gastronomy • understand basic principles of cooking <ul style="list-style-type: none"> ○ gelatinization, ○ caramelization, ○ coagulation etc. 		Periods (T)		Classroom
Ch. 2 Pakistani/Mughlai Cuisine (X)			Theory: 7 Periods Practical : 21 Periods		
Themes	Students' Learning Outcomes	Activities	Duration	Tools	Workplace
History and Trends	the students will be able to: <ul style="list-style-type: none"> • learn basic history of Pakistani/Mughlai region & their cuisines • understand the dining trend of Pakistani/Mughlai region • know various styles of cooking methods, tools & equipment used in Pakistani/Mughlai cuisine 	<ul style="list-style-type: none"> • enlist various local cities along with their most famous foods • Gather and present Pakistani spices and herbs 	Periods (T) Periods (P)		Classroom
Basic Spices, Sauces and Staples	<ul style="list-style-type: none"> • learn about basic spices, sauces and staples used for 	<ul style="list-style-type: none"> • Prepare Chapati/naan/m 	Periods (T) Periods	Kitchen equipment, oven and	Classroom/ Kitchen lab

	cooking in Pakistani/Mughlai food <ul style="list-style-type: none"> • know about different cooking methods involved in Pakistani cuisine • understand the history of Mughlai cuisine • recognize traditional herbs and spices of Pakistani cuisine 	akai roti etc. from Pakistani cuisine <ul style="list-style-type: none"> • Prepare salads from Mughlai Cuisine • Prepare Curries/greens from Mughlai Cuisine • Prepare rice dishes of Mughlai Cuisine • Prepare Desserts of Mughlai Cuisine 	(P)	all kitchen facilities	
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Ch. 3 Arabian Cuisine (X)

Theory: 07 Periods
Practical: 18 Periods

Themes	Students' Learning Outcomes	Activities	Duration	Tools	Workplace
History and Trends	the students will be able to: <ul style="list-style-type: none"> • learn basic history of Arabian/Greek region & their cuisines • understand the dining trend of Arabian region • know various styles of cooking methods, tools & equipment used in Arabian cuisine 	<ul style="list-style-type: none"> • Present the history of Middle Eastern Cuisine 	Periods (T) Periods (P)		Classroom
Basic Spices, Sauces and Staples	<ul style="list-style-type: none"> • learn basic spices, sauces and staples used for cooking in Arabian/Greek food • learn about the different ingredients available for Arabian cuisine • know about different cooking methods involved in Arabian cuisine • understand simple cooking styles of Arabian cuisine 	<ul style="list-style-type: none"> • Prepare Arabian/Greek food using various staple ingredients • Prepare rice dishes of Arabian Cuisine • Prepare Salads of Arabian Cuisine • Prepare Meat items of 	Periods (T) Periods (P)	Kitchen equipment, oven and all kitchen facilities	Classroom/ Kitchen lab

		Arabian Cuisine <ul style="list-style-type: none"> • Prepare desserts of Arabian Cuisine 			
Ch.4 Oriental Cuisine			Theory: 8 periods Practicum: 15 Periods		
Themes	Students' LearningOutcomes	Activities	Duration	Tools	Workplace
History and Trends	the student will be able to: <ul style="list-style-type: none"> • know about the history of oriental cuisine <ul style="list-style-type: none"> ○ asian style cooking • understands the different regional specialties • learn about popular oriental dishes around the world 	<ul style="list-style-type: none"> • Prepare a list different dishes of continental cuisine popular worldwide 	Periods (T) Periods (P)		Classroom
Basic Spices, Sauces and Staples	<ul style="list-style-type: none"> • learn about the basic oriental spices • know about the health benefits of oriental spices • know different types & purpose of oriental sauces <ul style="list-style-type: none"> ○ oyster sauce, chili sauce, fish sauce, etc • learn about the different ingredients of oriental sauces • know about the preparation, & storing different types of oriental sauces 	<ul style="list-style-type: none"> • Prepare appetizers from oriental cuisine • Prepare salads from oriental cuisine • Prepare soups from oriental cuisine • Prepare main fares of oriental cuisine 	Periods (T) Periods (P)	Kitchen equipment, oven and all kitchen facilities	Classroom/ Kitchen lab
Ch.5 Continental Cuisine			Theory : 11 periods Practical: 18 Periods		
Themes	Students' LearningOutcomes	Activities	Duration	Tools	Workplace
History and Trends	the students will be able to: <ul style="list-style-type: none"> • know about the history of continental cuisine 	<ul style="list-style-type: none"> • Enlist different dishes of continental cuisine popular 	Periods (T) Periods (P)		Classroom

	<ul style="list-style-type: none"> understands the different regional specialties learn about popular continental dishes around the world 	in Pakistan			
Basic Spices, Sauces and Staples	<ul style="list-style-type: none"> learn about the basic continental spices know different types & use of continental sauces know about 5 mother sauces <ul style="list-style-type: none"> Béchamel, Velouté, Espagnole, Hollandaise Tomato. learn about the different ingredients of continental sauces know about the preparation & storing of continental sauces learn about the basic staple foods i.e., pasta know about the percentage of staple food in average diet know about the production and processing of staple food 	<ul style="list-style-type: none"> Prepare 5 Mother sauces Prepare appetizers from continental cuisine Prepare salads from continental cuisine Prepare main fares of continental cuisine Prepare desserts from continental cuisine 	Periods (T) Periods (P)	Kitchen equipment, oven and all kitchen facilities	Classroom/ Kitchen lab

Ch. 6 Baking (X)			Theory : 05 Periods Practical : 12 Periods		
Themes	Students' Learning Outcomes	Activities	Duration	Tools	Workplace
Types of Baking Products	the student will be able to: <ul style="list-style-type: none"> describe types and categories of baked products & its uses 	<ul style="list-style-type: none"> Prepare a list of basic types of breads and present them Draw a chart on 	Periods (T) Periods (P)		Classroom

	<ul style="list-style-type: none"> ○ bread and dough products ○ cakes and pastries ○ biscuits and cookies ● know standard process to prepare baked products <ul style="list-style-type: none"> ○ panning ○ baking ○ cooling 	different types of cakes, pastries, biscuit and cookies			
Baking Techniques	<ul style="list-style-type: none"> ● Know different baking techniques for different items ● understand appropriate methods & temperatures to store baked products ● understand how to finish, garnish and present different baking products 	<ul style="list-style-type: none"> ● Identify tools and equipment to prepare baked products correctly ● Prepare different baking items <ul style="list-style-type: none"> ○ Cakes ○ Biscuits ○ Pies and tarts ○ Puff pastry products ○ Breads ○ Pizza ○ Filo pastry 	Periods (T) Periods (P)	Kitchen equipment, oven and all kitchen facilities	Classroom/ Kitchen lab

Ch. 7 Food & Nutrition (X)

Theory : 6 periods

Practical : 15 Periods

Themes	Students' Learning Outcomes	Activities	Duration	Tools	Workplace
Importance of Nutrition	<p>the student will be able to:</p> <ul style="list-style-type: none"> ● learn about the basic principles of importance of nutrition ● understand different types of nutrition 	<ul style="list-style-type: none"> ● Enlist nutritional components available in various food 	Periods (T) Periods (P)		Classroom
Nutrition and age groups	<ul style="list-style-type: none"> ● learn about basic requirements of nutrition for various age groups ● understand the nutritional effects on different age groups 	<ul style="list-style-type: none"> ● Group discussion on effects of nutrition on different metabolism of human body ● Draw and present a nutrition chart 	Periods (T) Periods (P)		Classroom
Basic dietary	<ul style="list-style-type: none"> ● recognize the significance 	<ul style="list-style-type: none"> ● Presentation on 	Periods (T)		Classroom

guidelines	<ul style="list-style-type: none"> of dietary guidelines understand the concept of dietary guidelines approved by health authorities 	<ul style="list-style-type: none"> dietary guidelines Draw a chart to explain significance of dietary guidelines 	Periods (P)		
Ch. 8 Service skills			Theory : 11 periods Practical : 12 Periods		
Themes	Students' Learning Outcomes	Activities	Duration	Tools	Workplace
Introduction to Food & Beverage Services	<ul style="list-style-type: none"> the student will be able to: learn about basic concept of services understand relation between cooking & services know the significance of professional service skills 	<ul style="list-style-type: none"> Presentation on significance of professional service skills 	Periods (T) Periods (P)		Classroom
Food & Beverage Services Operation	<ul style="list-style-type: none"> learn about food service operations comprehend the difference between food preparation operations & food service operations 	<ul style="list-style-type: none"> Draw a chart to explain difference between: <ul style="list-style-type: none"> food preparation operations & food service operations 	Periods (T) Periods (P)		Classroom
Types of Dining Services	<ul style="list-style-type: none"> understand various types of F&B services <ul style="list-style-type: none"> Russian services English service etc recognize to choose a suitable service style learn the usage of cutlery & crockery used in service 	<ul style="list-style-type: none"> Presentation on basic layouts of dining table & clearance of dining tables 	Periods (T) Periods (P)	Kitchen crockery, cutlery set, silverware, services tools	Classroom
Table Layouts	<ul style="list-style-type: none"> understand basic layouts of dining table learn about group service etiquettes with respect to age & gender identify the holding, carrying & loading the service trays 	<ul style="list-style-type: none"> Group activity to recognize group service etiquettes with respect to age & gender 	Periods (T) Periods (P)	Kitchen crockery, cutlery set, silverware, services tools	Classroom

Assessment and Evaluation

Assessment is the practice of collecting evidence of student learning. It aims at improving learning and teaching as well as recognizing the achievement of students. It determines students' progression through their learning experiences and enables them to demonstrate that they have achieved the intended learning outcomes. The assessment is aligned with curriculum aims, design and learning processes.

Evaluation is an integral part of teaching-learning process. It involves gathering information through various assessment techniques, making valuable judgment and sound decisions. Assessment provides information and teaching about students' achievement in relation to learning objectives. With this information, the teacher makes informed decisions about what should be done to enhance the learning of students or to improve teaching methods. Assessment must be:

- mainly open-ended, allowing for discussion and revision of new understanding.
- tolerant of divergent thinking of students and promote the notion of no "one right answer".
- presented in alternative mode, not just paper-and-pencil responses to limiting questions.
- designed to foster analysis, comparison, generalization, prediction, and modification according to the grade and development level.
- capable of promoting collaboration and team effort in demonstration of competence.
- ongoing and cumulative, showing growth over time.

Formative (Internal) Assessment

Internal assessment refers to the assessment practices employed as part of the learning and teaching process. It is an ongoing process throughout the session and uses Test — Feedback — Adjust cycle repeatedly to improve students' performance and efficiency in learning and teaching. In designing internal assessment for the subject, teachers should maintain a proper balance between the formative and summative functions of assessment. It should be comprehensive to cover all the objectives as per curriculum. A diversity of assessment modes should be adopted so that students are given opportunities to develop and demonstrate the full range of learning outcomes of the curriculum, including those of knowledge, skills and values and attitudes.

Methods for Internal/Formative Assessment

Following tasks can help in formative assessment;

- assignments • quizzes • tests • group discussions • oral/multimedia presentations • worksheets • online interactive activities • role play

- demonstration ● practical exercises

Feedback on students' work in all of the above tasks must be prompt, effective, and efficient. Assessment should have questions setting that specifically help in finding out knowledge, understanding and skills.

Summative /External Assessment

Summative assessment will be managed by concerned Board of Intermediate and Secondary Education. It will be composed of two parts;

1) Theory Assessment /Written examination: The theory examination is suggested to consist of a wide variety of questions. Its overall weight age should be 40 %. It should be based on the curriculum rather than textbook. The assessment should be designed to examine the candidate's understanding of the whole syllabus and should test the range of abilities according to Bloom Taxonomy.

2) Practical Assessment/Practical examination: This is designed to test Practical skills of students. Its overall weight age should be 60%. It will comprise of written exam (10%), practical (70 %) and viva/oral exam (20%).

A standards-referenced approach will be adopted for grading and reporting student performance. The purpose of this approach is to recognize what each student can do in the subject at the end of the 2-year secondary school level education. The performance of each student will be matched against a set of performance standards, rather than comparing to the performance of other students. It makes the implicit standards explicit by providing specific indication of individual student performance. Descriptions will be provided for the set of standards.

Guidelines for Writing a Textbook

A textbook is an important teaching and learning resource and one of the most extensively used resources in classrooms. To reflect national needs and aspirations the needs and aspirations, the textbooks should be written in accordance with this curriculum. This curriculum meets not only the general aims and objectives but also fulfills the specific requirements of the individual subject. As the textbook serves as a framework for teaching, the author/authors should consider the following features:

- A textbook must include an introduction to the textbook, explaining how to use the textbook
- The textbook must be in line with the National Curriculum, covering all SLOs of each theme or concept.
- Content and illustrations must be culturally, contextually and age appropriate.

- All text and material must be accurate, up-to-date and error-free.
- The continuity of the concepts, their integration and logical development should be ensured.
- Horizontal and vertical overlapping of the concepts should be avoided.
- The textbook should be informative and interactive with questions to be put at suitable intervals to provoke the students to think.
- The language used should be simple, clear, straight forward, unambiguous and easily comprehensible by the students of the particular level.
- Simple questions may be asked within the chapter, which requires students to recall, think, and apply what they have just learnt as well as to reinforce the learning of the concepts and principle.
- The examples and applications should be from everyday life and be supportive of our cultural values.
- Photographs and illustrations should be clear, labeled and supportive of the text. Tables, flow charts and graph may be given wherever needed.
- Key points at the end of each chapter should provide a summary of the important concepts and principles discussed in the chapter.
- End-of-the-Chapter exercises must include a variety of assessment styles based on levels of Bloom's Taxonomy. These should encourage students to think, develop skills, and use information for a variety of purposes.
- Textbooks should be free from all kinds of biases including, gender, religion, occupation, social background etc.
- To make the students self-learner use of IT based resources may be encouraged. Relevant internet links and other online resources may be included.
- Glossary of the new vocabulary must be included.

Guideline for planning and writing a chapter

The textbook author may decide the titles of each chapter and can choose to cover students' learning outcomes (SLOs) from any themes in developing the content of the chapter. The textbook author must also keep in mind that a number of SLOs cannot be addressed in the text (as if this is done it would lead students to simply memorize the text and not serve the realization of the curriculum). These SLOs could be realized through questions and practical activities within and at the end of the chapter exercises.

- Learning outcomes must be given at beginning of each chapter.
- Decide on key ideas, facts, concepts, skills and values that can be developed.
- Illustrations must clearly convey the desired concept.

- Activities must demand from students to do inquiry and problem solving according to grade level.
- Ensure that the content is up to date, accurate and developmentally appropriate.
- Contents must be in line with chapter outcomes.
- Language must be consistent, culturally appropriate and grammatically correct (as if talking to a group).
- Language must engage and hold reader's attention.
- Recall previous learning, where possible.
- Structure the writing so that the sentence is simple, paragraphs deal with single ideas etc.
- Interesting information in the form of tidbits, fact file, point to ponder etc. must be given.
- Write a summary/concept map at end of each chapter, reviewing key knowledge and skills.
- End-of-chapter exercises
- Recall and integrate previous learning
- Engage students and develop their creativity
- Move from lower to higher order thinking
- Focus on multiple intelligences
- Keep the text contextually relevant in line with local teaching and learning.
- Provide website links for further research

Guidelines for Writing Learner Workbook

Workbooks are books that contain writing activities and exercises that build upon each chapter in the textbook. Workbook exercises help students to develop conceptual understanding of the concepts dealt with in the text, to develop skills and to apply knowledge to new situations. Basic features of a workbook A workbook should have:

- Various exercises and activities for each chapter, topic, subtopic.
- Exercises and activities that will enable student to develop and practice the content knowledge, skills and higher order thinking.
- Accurate and variety of exercises.
- Clear illustrations/ examples/ explanations to show what students are supposed to do, and/or what product looks like.
- Exercises and activities with a variety of purposeful, stimulating, challenging and innovative items to encourage students to review and practice the knowledge and skills they have learnt.
- Exercises that include both constructed and restricted response items.
- Activities, which requires readily available, acceptable, and affordable materials and resources.