



GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP  
DIRECTORATE GENERAL OF TRAINING

**COMPETENCY BASED CURRICULUM**

# **FOOD PRODUCTION (GENERAL)**

(Duration: One Year)

**CRAFTSMEN TRAINING SCHEME (CTS)**

**NSQF LEVEL- 3.5**



**SECTOR – FOOD INDUSTRY**



Directorate General of Training

# FOOD PRODUCTION (GENERAL)

(Non-Engineering Trade)

(Revised in March 2023)

Version: 2.0

**CRAFTSMEN TRAINING SCHEME (CTS)**

**NSQF LEVEL – 3.5**

Developed By

Ministry of Skill Development and Entrepreneurship

Directorate General of Training

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## 1. COURSE INFORMATION

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During one-year duration of “Food Production (General)” trade, a candidate is trained on Professional Skill, Professional Knowledge and Employability Skill related to job role. In addition to this, a candidate is entrusted to undertake project work, extracurricular activities and on-the-job training to build up confidence. The broad components covered under Professional skill subject are as below: -

The trainee learns about elementary first-aid, firefighting, environment regulation and housekeeping, etc. The trainee identifies trade tools, kitchen equipment and kitchen operation process. He understands the importance of personal hygiene, cleanliness of kitchen/ cooking utensils, food handling and hygiene protective clothing. He practices safe handling of kitchen knives and other hand tools. He identifies basic ingredients, spices, condiments, herbs, pulses, vegetables, fruits, continental vegetables and various meat products, etc. The trainee understands and practices various cuts of vegetables viz. Julienne, jardinière, brunoise, and passion cuts, etc. The trainee learns preparing mise-en-place and practices various cooking methods viz. Blanching, sautéing, steaming, stewing, roasting, grilling, braising, baking, etc. He prepares and practices basic Indian foods like dal, vegetables, chutney, raita, Indian bread etc. The trainee learns to prepare ala carte menu for breakfast/ buffet.

The trainee learns to prepare, season and cook soup, meats, vegetable and other food stuff. He learns to make varieties of exotic Indian foods based on regional cuisine/ ethnic royal cuisine and various continental/ Chinese food. The trainee learns to work in the Garde manger and prepares various salads, salad dressings, sandwiches, canapés, fruit juice and other cold foods, etc. The trainee learns to work in a bakery and prepares various desserts and sweet dishes viz. breads/ bread rolls, soup sticks, pastries, jam tort, swiss roll, puff, patties, cookies and cakes, etc. The trainee learns to cook varieties of Indian and continental chicken and meat recipes. It is also demonstrated to the trainee via presentation about the activities which are not feasible to be practiced at the Institute viz. non-seasonal ingredients, various cuts; lamb, beef, mutton, pork and game bird, etc. The trainee also undergoes two weeks on-the- job training in various hotel industries at the end of year which gives them more practical exposure to industrial environment.

## 2. TRAINING SYSTEM

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### 2.1 GENERAL

The Directorate General of Training (DGT) under Ministry of Skill Development & Entrepreneurship offers a range of vocational training courses catering to the need of different sectors of economy/ Labour market. The vocational training programmes are delivered under the aegis of Directorate General of Training (DGT). Craftsman Training Scheme (CTS) with variants and Apprenticeship Training Scheme (ATS) are two pioneer schemes of DGT for strengthening vocational training.

‘Food Production (General)’ trade under CTS is one of the popular courses delivered nationwide through a network of ITIs. The course is of one-year duration. It mainly consists of Domain area and Core area. The Domain area (Trade Theory & Practical) imparts professional skills and knowledge, while the core area (Employability Skills) imparts requisite core skills, knowledge, and life skills. After passing out the training program, the trainee is awarded National Trade Certificate (NTC) by DGT which is recognized worldwide.

#### **Candidates broadly need to demonstrate that they are able to:**

- Read and interpret parameters/documents, plan and organize work processes, identify necessary materials and tools;
- Perform tasks with due consideration to safety rules, accident prevention regulations and environmental protection stipulations;
- Apply professional skill, knowledge & employability skills while performing jobs.
- Document the parameters related to the task undertaken.

### 2.2 PROGRESSION PATHWAYS

- Can join industry as Cook and will progress further as Senior Cook, Supervisor and can rise up to the level of Manager.
- Can become Entrepreneur in the related field.
- Can join Apprenticeship programs in different types of industries leading to a National Apprenticeship certificate (NAC).
- Can join Crafts Instructor Training Scheme (CITS) in the trade for becoming an instructor in ITIs.
- Can join Advanced Diploma (Vocational) courses under DGT as applicable.

## 2.3 COURSE STRUCTURE

Table below depicts the distribution of training hours across various course elements during a period of one year: -

S No.	Course Element	Notional Training Hours
1.	Professional Skill (Trade Practical)	840
2.	Professional Knowledge (Trade Theory)	240
3.	Employability Skills	120
	<b>Total</b>	<b>1200</b>

Every year 150 hours of mandatory OJT (On the Job Training) at nearby industry, wherever not available then group project is mandatory.

On the Job Training (OJT) / Group Project	150
Optional Courses (10th/ 12th class certificate along with ITI certification or add on short term courses)	240

Trainees of one-year or two-year trade can also opt for optional courses of up to 240 hours in each year for 10th/ 12th class certificate along with ITI certification, or, add on short term courses.

## 2.4 ASSESSMENT & CERTIFICATION

The trainee will be tested for his skill, knowledge and attitude during the period of course through formative assessment and at the end of the training programme through summative assessment as notified by the DGT from time to time.

a) The **Continuous Assessment** (Internal) during the period of training will be done by **Formative Assessment Method** by testing for assessment criteria listed against learning outcomes. The training institute has to maintain an individual trainee portfolio as detailed in assessment guideline. The marks of internal assessment will be as per the formative assessment template provided on [www.bharatskills.gov.in](http://www.bharatskills.gov.in).

b) The final assessment will be in the form of summative assessment. The All India Trade Test for awarding NTC will be conducted by Controller of examinations, DGT as per the guidelines. The pattern and marking structure is being notified by DGT from time to time. The learning outcome and assessment criteria will be the basis for setting question papers for final

assessment. The examiner during final examination will also check the individual trainee's profile as detailed in assessment guideline before giving marks for practical examination.

### **2.4.1 PASS REGULATION**

For the purposes of determining the overall result, weightage of 100% is applied for six months and one year duration courses and 50% weightage is applied to each examination for two years courses. The minimum pass percent for Trade Practical and Formative assessment is 60% & for all other subjects is 33%.

### **2.4.2 ASSESSMENT GUIDELINE**

Appropriate arrangements should be made to ensure that there will be no artificial barriers to assessment. The nature of special needs should be taken into account while undertaking the assessment. Due consideration should be given while assessing for teamwork, avoidance/reduction of scrap/wastage and disposal of scrap/waste as per procedure, behavioral attitude, sensitivity to the environment and regularity in training. The sensitivity towards OSHE and self-learning attitude are to be considered while assessing competency.

Assessment will be evidence based comprising some of the following:

- Job carried out in labs/workshop
- Record book/ daily diary
- Answer sheet of assessment
- Viva-voce
- Progress chart
- Attendance and punctuality
- Assignment
- Project work
- Computer based multiple choice question examination
- Practical Examination

Evidences and records of internal (Formative) assessments are to be preserved until forthcoming examination for audit and verification by examining body. The following marking pattern to be adopted for formative assessment:

Performance Level	Evidence
(a) Marks in the range of 60%-75% to be allotted during assessment	

For performance in this grade, the candidate should produce work which demonstrates attainment of an acceptable standard of craftsmanship with occasional guidance, and due regard for safety procedures and practices.	<ul style="list-style-type: none"> <li>• Demonstration of good skills and accuracy in the field of work/ assignments.</li> <li>• A fairly good level of neatness and consistency to accomplish job activities.</li> <li>• Occasional support in completing the task/ job.</li> </ul>
<b>(b) Marks in the range of 75%-90% to be allotted during assessment</b>	
For this grade, a candidate should produce work which demonstrates attainment of a reasonable standard of craftsmanship, with little guidance, and regard for safety procedures and practices.	<ul style="list-style-type: none"> <li>• Good skill levels and accuracy in the field of work/ assignments.</li> <li>• A good level of neatness and consistency to accomplish job activities.</li> <li>• Little support in completing the task/job.</li> </ul>
<b>(c) Marks in the range of more than 90% to be allotted during assessment</b>	
For performance in this grade, the candidate, with minimal or no support in organization and execution and with due regard for safety procedures and practices, has produced work which demonstrates attainment of a high standard of craftsmanship.	<ul style="list-style-type: none"> <li>• High skill levels and accuracy in the field of work/ assignments.</li> <li>• A high level of neatness and consistency to accomplish job activities.</li> <li>• Minimal or no support in completing the task/ job.</li> </ul>



### 3. JOB ROLE

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**Cook, Institutional:** prepares, seasons and cooks soups, meats, vegetables, desserts and other foodstuff for consumption in hotels, restaurants and other establishments. Fries, boils, broils, roasts or steams vegetables, meats, fish and other food to prepare dishes listed on menu and prepare salads, sandwiches, cakes, fruit juices and other cold foods. Supervises dish washing and preparing of vegetables and other foodstuff for cooking. May specialize in preparing a particular cuisine such as Indian/Chinese/Continental or specialize in Garde manger/bakery and be designated accordingly.

**Cook, Domestic:** prepares and cooks meals in private households. Plans menu according to own judgment or employer's instructions and prepares soup, salad, breads, lentil, vegetables and meats. Cooks foodstuff according to recipes or own judgment. Cleans or supervises cleaning of kitchen and cooking utensils. May serve meals, perform duties of valet and be designated as COOK-BEARER.

**Cook, Ship** Cook, Ship on board ship. Plans menu taking account of foods in season and local availability. Cooks food stuffs in quantities according to menu and number of persons to be served. Cleans, cuts and cooks meat, fish and poultry and bakes breads and pastry. Washes dishes and cleans galley and galley equipment. May order supplies and maintain record and accounts. May supervise activities of one or more workers who assist in preparing and serving, meals.

**Cooks, Other:** prepare special food or dishes in private households or public eating places and include cooks not elsewhere classified, such as SWEET MASTER plans and prepares general and special sweet dishes, in hotels, restaurants and other such establishments. DIET COOK prepares special diets for people under medical restriction. TEA AND COFFEE MAKER brews and prepares beverages like coffee and tea in hotels, clubs or similar establishments and ensures proper cleanliness of stall.

#### Reference NCO-2015:

- (i) 5120.0200 – Cook, Institutional
- (ii) 5120.0300 – Cook, Domestic
- (iii) 5120.0400 – Cook, Ship
- (iv) 5120.9900 – Cooks, Other

#### Reference NOS: -

- |                |                 |               |
|----------------|-----------------|---------------|
| i) FIC/N9416   | v) FIC/N9420    | ix) FIC/N9424 |
| ii) FIC/N9417  | vi) FIC/N9421   | x) FIC/N9425  |
| iii) FIC/N9418 | vii) FIC/N9422  | xi) FIC/N9426 |
| iv) FIC/N9419  | viii) FIC/N9423 |               |

## 4. GENERAL INFORMATION

<b>Name of the Trade</b>	<b>FOOD PRODUCTION (GENERAL)</b>
<b>Trade Code</b>	DGT/1042
<b>NCO - 2015</b>	5120.0200, 5120.0300, 5120.0400, 5120.9900
<b>NOS Covered</b>	FIC/N9416, FIC/N9417, FIC/N9418, FIC/N9419, FIC/N9420, FIC/N9421, FIC/N9422, FIC/N9423, FIC/N9424, FIC/N9425, FIC/N9426
<b>NSQF Level</b>	Level-3.5
<b>Duration of Craftsmen Training</b>	One Year (1200 Hours+150 hours OJT/Group Project)
<b>Entry Qualification</b>	Passed 10 <sup>th</sup> class examination
<b>Minimum Age</b>	14 years as on first day of academic session.
<b>Eligibility for PwD</b>	LD, CP, LC, DW, AA, LV, HH, DEAF, AUTISM, SLD, ID
<b>Unit Strength (No. of Student)</b>	24 (There is no separate provision of supernumerary seats)
<b>Space Norms</b>	96 Sq. m
<b>Power Norms</b>	5.0 KW
<b>Instructors Qualification for:</b>	
<b>(i) Food Production (General) Trade</b>	<p>B.Voc/Degree in Hotel Management/ Catering Technology from UGC recognized university with one-year experience in the relevant field.</p> <p style="text-align: center;"><b>OR</b></p> <p>Diploma (Minimum 2 years) in Hotel Management/ Catering Technology from a recognized board of education or relevant Advanced Diploma (Vocational) from DGT with two-year experience in the relevant field.</p> <p style="text-align: center;"><b>OR</b></p> <p>NTC/ NAC passed in the trade of “Food Production (General)” with three-year experience in the relevant field.</p> <p><b><u>Essential Qualification:</u></b> Relevant Regular / RPL variants of National Craft Instructor Certificate (NCIC) under DGT.</p>

	<b>Note:</b> Out of two Instructors required for the unit of 2(1+1), one must have Degree/Diploma and other must have NTC/NAC qualifications. However, both of them must possess NCIC in any of its variants.
<b>(ii) Employability Skill</b>	<p>MBA/ BBA / Any Graduate/ Diploma in any discipline with Two years' experience with short term ToT Course in Employability Skills.            (Must have studied English/ Communication Skills and Basic Computer at 12th / Diploma level and above)</p> <p style="text-align: center;"><b>OR</b></p> <p>Existing Social Studies Instructors in ITIs with short term ToT Course in Employability Skills.</p>
<b>(iii) Minimum Age for Instructor</b>	21 Years
<b>List of Tools and Equipment</b>	As per Annexure – I

## 5. LEARNING OUTCOME

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*Learning outcomes are a reflection of total competencies of a trainee and assessment will be carried out as per the assessment criteria.*

### 5.1 LEARNING OUTCOME

1. Maintain hygiene and cleanliness of kitchen, kitchen equipment's and cooking utensils following safety precautions. (NOS: FIC/N9416)
2. Work with head cook in menu planning and menu engineering. (NOS: FIC/N9417)
3. Undertake various vegetable cuts which will help in cooking to a specific perfection as desired by the industry. (NOS: FIC/N9418)
4. Work with head cook in preparation of mise-en-place and foods, prepare, season and cook soup, meat, vegetable and another foodstuff. (NOS: FIC/N9419)
5. Plan and prepare basic Indian food recipes. (NOS: FIC/N9420)
6. Prepare foods for breakfast buffet/ ala carte menu. (NOS: FIC/N9421)
7. Work in the Garde manger of various food preparing organizations and prepare salads, sandwiches, fruit juices and other cold foods. (NOS: FIC/N9422)
8. Prepare exotic Indian foods and plan menu according to own judgment or as per instructions. (NOS: FIC/N9423)
9. Carry out duties associated with preparation of meals. (NOS: FIC/N9424)
10. Work in the bakery of various food preparing organizations and prepare various desserts and sweet dishes. (NOS: FIC/N9425)
11. Prepare foods in continental/ Chinese kitchen of various food preparing organizations. (NOS: FIC/N9426)

## 6. ASSESSMENT CRITERIA

LEARNING OUTCOMES	ASSESSMENT CRITERIA
1. Maintain hygiene and cleanliness of kitchen, kitchen equipments and cooking utensils following safety precautions. (NOS: FIC/N9416)	Demonstrate safety practices to be observed in kitchen.
	Demonstrate use of personal protective dresses.
	Demonstrate procedure to maintain personal hygiene, care of skin, hand, feet, food handlers etc.
	Demonstrate disposal procedure of waste materials.
	Demonstrate use of hygienic protective clothing.
2. Work with head cook in menu planning and menu engineering. (NOS: FIC/N9417)	Identify commonly used raw vegetables.
	Demonstrate and identify commonly used pulses & fruits.
	Demonstrate and identify commonly used Continental vegetables.
	Demonstrate and identify commonly used spices, condiments & herbs.
	Demonstrate and identify commonly used Meat products.
3. Undertake various vegetable cuts which will help in cooking to a specific perfection as desired by the industry. (NOS: FIC/N9418)	Demonstrate julienne cuts of vegetables.
	Demonstrate jardinière, brunoise cuts of vegetables.
	Demonstrate macedoine cuts of vegetables.
	Demonstrate payssane cuts of vegetables.
	Demonstrate mirepoix cuts of vegetables.
	Demonstrate shredding cuts of vegetables.
4. Work with head cook in preparation of mise-en-place and foods, prepare, season and cook soup, meat, vegetable and other foodstuff. (NOS: FIC/N9419)	Demonstrate any one of the cooking methods: Blanching - tomatoes, vegetables, Sautéing – vegetables, Frying - shallow and deep, fat frying.
	Demonstrate any one of the cooking methods: Steaming, Stewing - mutton & vegetables, Poaching - fish & egg, Roasting/searing - potatoes & chicken.
	Demonstrate any one of the cooking methods: Grilling – vegetables & fish, Braising – chicken & vegetables, Baking, Broiling of spices, grinding processes.
	Prepare any one of the stocks White stock, Brown stock, Fish stock.
	Prepare any 2 international soups.
	Prepare any one of the basic mother sauce along with its 2 derivatives.
	Prepare any one variety of purees.
	Prepare any one variety of creams.
	Prepare any one variety of compound butter.

	Prepare any 2 varieties of vegetables recipes.
	Prepare any 2 varieties of potatoes recipes.
5. Plan and prepare basic Indian food recipes. (NOS: FIC/N9420)	Plan and demonstrate menu preparation. Make plan for purchasing ingredients for specific menu. Choose different spices and ingredients for specific menu. Prepare any 2 varieties of dal. Prepare any 2 varieties of vegetables. Prepare any 2 varieties of chutney. Prepare any 2 varieties of raita. Prepare any 2 varieties of rice. Prepare any 2 varieties of Indian bread.
6. Prepare foods for breakfast buffet/ ala carte menu. (NOS: FIC/N9421)	Prepare breakfast of any 2 varieties using egg viz. boiled, omelet, poached, steamed, fried (sunny side up), scrambled etc. Prepare any 2 egg cookerries. Prepare any 2 classic egg recipes.
7. Work in the Garde manger of various food preparing organizations and prepare salads, sandwiches, fruit juices and other cold foods. (NOS: FIC/N9422)	Prepare different types of simple salad. Demonstrate various accompaniments/ garnishing. Prepare different compound salad. Prepare salad dressing recipes. Prepare any two varieties of sandwiches. Prepare any two varieties of Canapés.
8. Prepare exotic Indian foods and plan menu according to own judgment or as per instructions. (NOS: FIC/N9423)	Plan menu, choose spices and ingredients for the recipes. Follow safety norms and maintain proper hygiene while preparation of food. Prepare any 2 varieties of festive menus based on regional cuisine. Prepare any 2 varieties of ethnic royal cuisine.
9. Carry out duties associated with preparation of meals. (NOS: FIC/N9424)	Plan menu, choose spices and ingredients for the recipes. Follow safety norms and maintain proper hygiene while preparing of food. Prepare any one of the fish dishes –snacks, Indian main preparation, Continental preparations. Prepare any one of the meat dishes – Indian, Continental, Snacks. Prepare any one of the chicken recipes – Indian, Continental.
10. Work in the bakery of various foods preparing	Plan menu and ingredients for the recipes. Prepare any 2 recipes - Bread, Bread rolls, Garlic breads.

organization. Prepare various desserts and sweet dishes. (NOS: FIC/N9425)	Prepare any one recipe - Soup Sticks, Cheese sticks.
	Prepare any 3 recipes- Pastries, Jam tort, Lemon tort, Swiss roll, Puff, Pastries/ Vegetables, Patties, Cookies and Cakes.
11. Prepare foods in Continental/ Chinese kitchen of various food preparing organizations. (NOS: FIC/N9426)	Plan menu, choose spices and ingredients for the recipes.
	Follow safety norms and maintain proper hygiene while preparation of food.
	Prepare any one of the Farinaceous dishes - Spaghetti, Marconi, Penne etc.
	Prepare any 2 of the Chinese recipes- Soups, Noodles, Rice, Meat, Vegetables, etc.

## 7. TRADE SYLLABUS

SYLLABUS FOR FOOD PRODUCTION (GENERAL) TRADE			
DURATION: ONE YEAR			
Duration	Reference Learning Outcome	Professional Skills (Trade Practical)	Professional Knowledge (Trade Theory)
Professional Skill 40 Hrs.;  Professional Knowledge 12 Hrs.	Maintain hygiene and cleanliness of kitchen, kitchen equipments and cooking utensils following safety precautions.	<ol style="list-style-type: none"> <li>1. Visit main kitchen and understand the process flow.</li> <li>2. Visit various sections of kitchen in the institute.</li> <li>3. Demonstrate &amp; practice the kitchen operation process.</li> <li>4. Identify kitchen service equipment.</li> <li>5. Familiarize &amp; understand the usage of equipment &amp; tools.</li> <li>6. Practice safe methods of using the kitchen knife and hand tools.</li> </ol>	<p>Introduction to catering/ hotel industry. Introduction of kitchen. Objective of Cooking An orientation programme on the course and related job/ career opportunities. Organizational hierarchy of Kitchen Department, Attributes, Duties and responsibilities of kitchen services personnel. Small, medium &amp; large equipment and their handling in kitchen. Safety rules for using different types of knives &amp; other equipment.</p>
		<ol style="list-style-type: none"> <li>7. Practice elementary first aid.</li> <li>8. Demonstrate safety practices to be observed in kitchen.</li> <li>9. Practice use of personal protective dresses.</li> <li>10. Practice on hygiene/ cleanliness and procedure to maintain it.</li> <li>11. Practice disposal procedure of waste materials.</li> <li>12. Identify emergency exit route, practice firefighting and use of fire extinguishers.</li> </ol>	<p>First-aid for cuts/ burns and its importance. Fire hazards, contents of first aid. Personal safety and industrial safety. Personal hygiene &amp; Care of Skin, Hand, Feet, Food handlers. Hygienic protective clothing. Grooming and Etiquettes. Working area hygiene and its importance. Preparedness for emergency situations. Waste management.</p>
Professional	Work with head	13. Identify/ familiarize	Classification of raw materials,



<p>Skill 40 Hrs.</p> <p>Professional Knowledge 12 Hrs.</p>	<p>cook in menu planning and menu engineering.</p>	<p>commonly used raw vegetables.</p> <p>14. Demonstrate and identify commonly used pulses &amp; fruits.</p> <p>15. Demonstrate and identify commonly used Continental vegetables.</p> <p>16. Demonstrate and identify commonly used spices, condiments &amp; herbs.</p> <p>17. Demonstrate and identify commonly used meat products.</p> <p>18. Demonstrate/ video presentation on other raw materials used in kitchen.</p>	<p>Preparation of ingredients, Method of mixing foods, Effect of heat on various foods, Weighing and measures texture of food.</p>
<p>Professional Skill 100 Hrs.</p> <p>Professional Knowledge 24 Hrs.</p>	<p>Undertake various vegetable cuts which will help in cooking to a specific perfection as desired by the Industry.</p>	<p>19. Practice the julienne cuts of vegetables &amp; prepare a dish.</p> <p>20. Practice the jardinière, brunoise cuts of vegetables &amp; prepare a dish.</p> <p>21. Practice the Macedoine cuts of vegetables &amp; prepare a dish.</p> <p>22. Practice the Payssane cuts of vegetables &amp; prepare a dish.</p> <p>23. Practice the Mirepoix cuts of vegetables &amp; prepare a dish.</p> <p>24. Practice the shredding cuts of vegetables &amp; prepare a dish.</p> <p>25. Demonstrate and practice other cuts of vegetables used in the kitchen.</p>	<p>Culinary terms</p> <p>French word for basic food items.</p> <p>Cutting techniques.</p> <p>Yield management/Wastage control</p>
<p>Professional Skill 90 Hrs.;</p> <p>Professional Knowledge 30 Hrs.</p>	<p>Work with head cook in preparation of mise-en-place and foods, prepare, season and cook soup, meat,</p>	<p>26. Practice cooking methods: Boiling - potatoes &amp; rice.</p> <p>27. Practice cooking methods: Blanching-tomatoes, vegetables.</p> <p>28. Practice cooking methods:</p>	<p>Layout of the Kitchen and different Sections.</p> <p>Methods of cooking with special application of meat, fish, vegetables, cheese, pulses and egg etc.</p>

	vegetable and other foodstuff.	<p>Saut��ing – vegetables.</p> <p>29. Practice cooking methods: Frying-Shallow and deep frying.</p> <p>30. Practice cooking methods: Fat frying e.g. fritters, patties etc.</p> <p>31. Practice cooking methods: Steaming – rice &amp; pudding.</p> <p>32. Practice cooking methods: Stewing-mutton &amp; vegetables.</p> <p>33. Practice cooking methods: Poaching-fish &amp; egg.</p> <p>34. Practice cooking methods: Roasting/searing -potatoes &amp; chicken.</p> <p>35. Practices cooking methods: Grilling – vegetables&amp; fish.</p> <p>36. Practice cooking methods: Braising – chicken&amp; vegetables.</p> <p>37. Practice cooking methods: Baking – potatoes&amp; vegetables.</p> <p>38. Practice cooking methods: Microwave – rice &amp; vegetables.</p> <p>39. Practice cooking methods: Broiling of spices, grinding processes.</p>	<p>Conventional &amp; non-conventional method of cooking:</p> <ul style="list-style-type: none"> <li>- Solar cooking</li> <li>- Microwave cooking</li> <li>- Fast food operation</li> </ul> <p>Variety of fish, meat &amp; vegetable.</p> <p>Cuts of fish, meat etc.</p>
<p>Professional Skill 110 Hrs.</p> <p>Professional Knowledge 24 Hrs.</p>	Plan and prepare basic Indian food recipes.	<p>40. Prepare and practice different menus.</p> <p>(i) Dal -05 variety</p> <p>(ii) Vegetables-10 variety</p> <p>(iii) Chutney-05 variety</p> <p>(iv) Raita-05 variety</p> <p>(v) Rice-05 variety</p> <p>(vi) Indian Bread-05 variety</p>	<p>Balancing of recipes</p> <p>Standardization of recipe</p> <p>Maintaining recipe files</p> <p>Menu planning</p> <p>Brief study of Portion control</p> <p>Purchasing specification, quality control, indenting &amp; costing Rechauffe.</p>
<p>Professional Skill 20 Hrs.;</p> <p>Professional</p>	Prepare foods for breakfast buffet/ ala carte menu.	<p>41. Prepare and practice the Breakfast -egg preparation:</p> <p>(i) Boiled</p> <p>(ii) Omelet</p>	<p>Egg Structure and their correlation to heat.</p> <p>Selection of quality</p>

Knowledge 06 Hrs.		(iii) Poached (iv) Steamed (v) Fried (Sunny side up) (vi) Scrambled etc. 42. Practice egg cookery including classical preparation.	Various ways of cooking eggs with examples in each. Method & prevention of blue ring formation.
Professional Skill 20 Hrs.;  Professional Knowledge 06 Hrs.	Work in the Garde manger of various food preparing organizations and prepare salads, sandwiches, fruit juices and other cold foods.	43. Prepare different types of Simple Salad - 05 varieties.	Salads and their classification  Accompaniments & Garnishes.
Professional Skill 110 Hrs.  Professional Knowledge 36 Hrs.	Work with head cook in preparation of mise-en-place and foods, prepare, season and cook soup, meat, vegetable and other foodstuff.	44. Prepare different stocks: (i) White stock, (ii) Brown stock (iii) Fish stock 45. Demonstrate & prepare Basic mother Sauce along with 5 derivative of each. 46. Prepare & practice compound butter- 3 Nos. 47. Prepare & practice Soups- 5 Nos. 48. Prepare & practice Purees- 2 varieties. 49. Prepare & practice Cream - 3 varieties. 50. Prepare & practice International soups – 5 variety.	Basic stocks, Aspic & jellies. Roux blanc, Roux blonde, Roux burn. Recipes and quantities required to produce 1 ltr of stocks white & brown. Recipes required to produce 1 ltr of the different sauce with the necessary precaution to be observed while preparing. <ul style="list-style-type: none"> <li>- Bechamel Sauce</li> <li>- Tomato sauce</li> <li>- Veloute sauce</li> <li>- Espagnole sauce</li> <li>- Hollandaise sauce</li> <li>- Mayonnaise sauces</li> </ul> Soup:- definition, classification with example in each group, Recipe for one litre consomme, 10 Nos popular consommés with their garnishes. Famous national soups of some countries. Butter: History, types, butter making procedure.
		51. Prepare and practice cooking: (i) Vegetables - 10	Vegetables: Effect of heat on different vegetables Reaction with metal,

		varieties. (ii) Potatoes - 10 varieties.	In acid/ alkaline medium. Method of cooking of different vegetables.
Professional Skill 40 Hrs.;  Professional Knowledge 12 Hrs.	Prepare exotic Indian foods and plan menu according to own judgment or as per instructions.	52. Prepare and practice Festive Menus based on regional cuisine -05 Nos. 53. Prepare and practice - Ethnic royal Cuisine-05 varieties	Larder organization & Lay-Out. Larder control, maintenance & upkeep of Larder equipment & supplies.
Professional Skill 20 Hrs.;  Professional Knowledge 06 Hrs.	Work in the Garde manger of various food preparing organizations and prepare salads, sandwiches, fruit juices and other cold foods.	54. Prepare and practice different Compound salad - 5 varieties 55. Prepare & practice Salad dressing - 05 varieties.	Classification of <i>Horsd'oeuvre</i> . Composition of salads and salad dressings.
Professional Skill 120 Hrs.  Professional Knowledge 36Hrs.	Carry out duties associated with preparation of meals.	56. Demonstrate various cuts of fishes. 57. Prepare and practice fish dishes. (i) Snacks - 4 Nos. (ii) Indian main preparation– 4 Nos. (iii) Continental preparations - 4 Nos.	Fish classification, scaling, cleaning & preparation. Basic cuts and its uses & storage.
		58. Demonstrate various cuts: (i) Lamb, (ii) Mutton 59. Prepare and practice meat dishes. (i) Indian - 4 Nos. (ii) Continental - 4 Nos. (iii) Snacks - 4 Nos.	Butchery cut of beef, Lamb, Mutton & Pork, its uses and weight.
		60. Demonstrate cuts of chicken. 61. Practice preparations of Chicken. (i) Indian - 5 Nos. (ii) Continental - 5 Nos. 62. Demonstrate poultry and Game bird.	Poultry: Classification Preparation, dressing & cuts with its uses. Classification of game birds. Preparation and cuts with its uses.

Professional Skill 20 Hrs.;  Professional Knowledge 06 Hrs.	Work in the Garde manger of various food preparing organizations and prepare salads, sandwiches, fruit juices and other cold foods.	63. Practice preparation of the following: (i) Sandwiches -10 varieties (ii) Canapés -10 varieties.	Assembling of: - Cold buffets - Sandwiches - Canapés Proper storage of leftovers. Classification of Cheese and their uses. Variety of pasta and their cooking methods.
Professional Skill 70 Hrs.  Professional Knowledge 18 Hrs.	Work in the bakery of various food preparing organizations and prepare various desserts and sweet dishes.	64. Prepare and practice various type of Bread and Bread rolls. 65. Prepare Soup Sticks/ Garlic breads/ Cheese sticks.	Characteristics & types of Leavening/ Raising agent. Theory of bread Making Bread rolls, Bread Slices, Indian Breads.
		66. Prepare and practice of: (i) Pastries (ii) Jam tort (iii) Lemon Tort (iv) Swiss roll (v) Puff (vi) Pastries/Vegetables (vii) Patties (viii) Cookies (ix) Cakes	Recipes of Pastry; - Short crust pastry, - Puff Pastry, Flaky Pastry, - Choux Pastry, - Danish pastry and their derivatives. Kitchen stewarding & upkeep of equipment& its role.
Professional Skill 40 Hrs.;  Professional Knowledge 12 Hrs.	Prepare foods in Continental/Chinese kitchen of various foods preparing organization.	67. Identify Pasta and prepare Farinaceous dishes. (i) Spaghetti-2 varieties (ii) Marconi-2 varieties (iii) Penne-2 varieties 68. Prepare and practice Chinese dishes. (i) Soups-4 Nos. (ii) Noodle & rice-4 Nos. (iii) Meat dishes- 2 Nos. (iv) Vegetables-2 Nos.	Prevailing food standards in India. Food adulteration as a public health hazard. Sample tests in the detection of common food. HACCP/ISO22001
<b>Project work/ Industrial visit</b> <b>Broad Areas:</b> <ol style="list-style-type: none"> <li>Prepare special meals/medical meals for people under medical restrictions.</li> <li>Prepare special menu for special festive occasions with an ethnic touch.</li> <li>Plan &amp; prepare different types of Oriental/ Continental food according to own judgement.</li> </ol>			

SYLLABUS FOR CORE SKILLS
1. Employability Skills (Common for all CTS trades) (120 hrs.)

1. Employability Skills (Common for all CTS trades) (120 hrs.)

*Learning outcomes, assessment criteria, syllabus and Tool List of Core Skills subjects which is common for a group of trades, provided separately in [www.bharatskills.gov.in/](http://www.bharatskills.gov.in/) dgt.gov.in*



## ANNEXURE-I

List of Tools & Equipment			
FOOD PRODUCTION (GENERAL) (For batch of 24 Candidates)			
S No.	Name of the Tools and Equipment	Specification	Quantity
<b>A. TRAINEES TOOL KIT</b>			
1.	All size Knife	3 varieties of Knife	(24+1) sets
2.	Peeler		(24+1) nos.
3.	Scooper		(24+1) nos.
4.	Chef coat and trouser		(24+1) nos.
5.	Kitchen duster		(24+1) nos.
6.	Apron		(24+1) nos.
7.	Safety Shoe		(24+1) pairs
8.	Chef cap and scarf		(24+1) nos. each
<b>B. SHOP TOOLS &amp; EQUIPMENT</b>			
<b>(i) List of Tools:</b>			
9.	Chopping Boards (Polypropylene)	(i) Green (ii) Red (iii) Yellow (iv) White (v) Blue	06 nos. 01 no. 01 no. 01 no. 01 no.
10.	Butcher Knife		01 no.
11.	Clever		01 no.
12.	L.P. Gas Cooking Range	With Oven & Griller	04 nos.
13.	Cooking Range (High)		01 no.
14.	Dry Store Shelf		01 no.
15.	Gas Tandoor and Skewer		01 no.
16.	Weighing Machine	Up to 5 kg.	01 no.
17.	Frying Pan	(i) Non- Stick (ii) Medium (iii) Small (iv) Large	04 nos. each



18.	Kadai	(i) Large (ii) Small	02 nos. 03 nos.
19.	Palta	Stainless Steel	02 nos.
20.	Heavy Bottom Pan	Medium (10 Ltr)	01 no.
21.	Degchi (Stainless Steel)	(i) 15Ltr (ii) 12 Ltr	02 nos. each
22.	Tawa- General		02 nos.
23.	Wok (Chinese Kadai)		02 nos.
24.	Roiling Pin and Rolling Base		02 nos.
25.	Cooker	(i) 2 Ltr (ii) 5 Ltr	01 no. each
26.	Mandolin Grater		02 nos.
27.	Wooden Spatula		05 nos.
28.	Strainers	(i) Conical (ii) Strainers	02 nos. 04 nos.
29.	Perforated Spoon		05 nos.
30.	Steel Bowls	(i) Small (ii) Medium (iii) Big	12nos. each
31.	Steel Slicer		05 nos.
32.	Probe thermometer	75 - 150°C	01 no.
33.	Cake stand		02 nos.
34.	Colander		03 nos.
35.	Baking Try		05 nos.
36.	Holdes (Togs)		05 nos.
37.	Heat proof gloves		02 pairs
38.	Saucepan		05 nos.
39.	SS Tray		06 nos.
40.	Pie Dish		06 nos.
41.	Mugs (Steel)	Small, Medium, Large	03 nos. each
42.	Steel Plates		12nos.
43.	Steel Spoons		12nos.
44.	Steel Ladle		12 nos.
45.	Balloon Whisk	Small size	05 nos.
46.	Measuring Jars	Up to 1 liter	03 nos.
47.	Containers	(For keeping dry items)	As required
48.	Serving dish		08 nos.

49.	Grinding Stone		02 nos.
50.	Bread Moulds		05 nos.
51.	Coconut Grater		02 nos.
52.	Baking equipment	(i) Cake moulds (ii) Muffin moulds (iii) Mixing bowls (iv) Pizza cutter (v) Cookie cutter (5 shapes)	05 nos. 12 nos. 02 nos. 01 no. 02 nos. Each

**(ii) List of Equipment:**

53.	Refrigerator	(i) 365 Ltr.	01 no. each
54.	Chest Freezer		01 no.
55.	Deep fat fryer	05 Ltr (Portable)	01 no.
56.	Sandwich griller/toaster		01 no.
57.	Microwave oven	15Ltr min.	01 no.
58.	Grinder Machine	10 Ltr capacity (min)	01 no.
59.	Blender/Mixer		01 no.
60.	Juicer machine		01no.
61.	Salamander		01 no.
62.	Dough Kneading Maker	With attachments	01 nos.

**D. SHOP FLOOR FURNITURE AND MATERIALS**

63.	Instructor's table		01 no.
64.	Instructor's chair		02 nos.
65.	Locked lockers		02 nos.
66.	White board	(Minimum 4 x 6 feet)	01 no.
67.	Fire Extinguisher CO <sub>2</sub>	2 KG	02 nos.
68.	Fire Buckets	Standard size	02 nos.
69.	Proper Electric & Gas Connections		01 no.
70.	Dustbins	Colour coded	05 nos.
71.	Working table	1 table /5 student	As required
72.	Hand wash basin		05 nos.
73.	Hygiene Kit		05 nos.
74.	Wash Basins		04 nos.
75.	Chart denoting the Do's and Don'ts Kitchen		01 no.

**Note: -**

1. All the tools and equipment are to be procured as per BIS specification.
2. Internet facility is desired to be provided in the class room.

The DGT sincerely acknowledges contributions of the Industries, State Directorates, Trade Experts, Domain Experts, trainers of ITIs, NSTIs, faculties from universities and all others who contributed in revising the curriculum.

Special acknowledgement is extended by DGT to the following expert members who had contributed immensely in this curriculum.

<b>List of Expert Members contributed/ participated for finalizing the course curriculum of Food Production (General) trade held on 06.06.2017 at CSTARI, Kolkata</b>			
<b>S. No.</b>	<b>Name &amp; Designation Sh/Mr/Ms</b>	<b>Organization</b>	<b>Remarks</b>
1.	H. V. Samvatsar Director	CSTARI, Kolkata	Chairman
2.	Sanjay Kumar Joint Director of Training	CSTARI, Kolkata	Member
3.	L. K. Mukherjee Deputy Director of Training	CSTARI, Kolkata	Member
4.	Bharat K. Nigam Training Officer	CSTARI, Kolkata	Member/ Coordinator
5.	K.V.S. Narayana Training Officer	CSTARI, Kolkata	Member/ Coordinator
6.	Shiv Biswal Executive Chef	Taj Sats, Air Catering Ltd., Kolkata	Expert
7.	Sowmya Sengupta Training Manager	Hotel Taj Bengal, Kolkata	Member
8.	Suheli Das HR Executive	Hotel ITC Sonar, Kolkata	Member
9.	Abdul Wahab Chef De Cuisine	Hyatt Regency, Kolkata	Member
10.	Nikhil Rajen Merchant Sr Sous Chef	Hotel ITC Sonar, Kolkata	Member
11.	Shirsendu Karmakar Principal	NIHM Pvt. ITI, Garia, Kolkata	Member
12.	Anurag Vats Training Officer	CSTARI, Kolkata	Member
13.	Akhilesh Pandey Training Officer	CSTARI, Kolkata	Member

### **ABBREVIATIONS**

CTS	Craftsmen Training Scheme
ATS	Apprenticeship Training Scheme
CITS	Craft Instructor Training Scheme
DGT	Directorate General of Training
MSDE	Ministry of Skill Development and Entrepreneurship
NTC	National Trade Certificate
NAC	National Apprenticeship Certificate
NCIC	National Craft Instructor Certificate
LD	Locomotor Disability
CP	Cerebral Palsy
MD	Multiple Disabilities
LV	Low Vision
HH	Hard of Hearing
ID	Intellectual Disabilities
LC	Leprosy Cured
SLD	Specific Learning Disabilities
DW	Dwarfism
MI	Mental Illness
AA	Acid Attack
PwD	Person with disabilities

