NATIONAL COUNCIL FOR HOTEL MANAGEMENT AND CATERING TECHNOLOGY

(Under Ministry of Tourism, Government of India)

A – 34, Sector – 62, NOIDA

NCHMCT

Norms for
Food Craft Institute

INTRODUCTION

National Council in association with Principals of Foodcraft Institute, New Delhi, Faridabad, Tiruchirapalli and Udaipur drafted the Norms and Standards for Foodcraft Institutes. The Council further consolidated and updated the space norms and equipment norms contained in this document.

This document shall be a guide for planners in Ministry of Tourism, Boards, heads of Institutions and departments in planning the allocation of resources for human resource development in hospitality sector.

The revised document is presented as a general yard-stick, having in-built scope for expansions. This will, however, be subjected to periodical review and revisions, as need be, with a view to take into account any changes in Curricula, technological advances, change in industrial practices and procedures or change in industrial delivery system, etc.

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The following Programmes would be primarily offered by the Foodcraft Institutes :

1. **Diploma in Food Production**
2. **Diploma in Food & Beverage Service**
3. **Diploma in Bakery & Confectionery**
4. **Diploma in House Keeping**
5. **Diploma in Front Office Operation**
6. **Craft in Food Production and Patisserie**
7. **Craft in Food and Beverage Service**

The Institute generally run 5 programs out of above.

Initial Intake for each programme shall not exceed 30 students.

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SALIENT FEATURES OF FOODCRAFT INSTITUTE WITH AN INTAKE OF 150 STUDENTS

Courses Offered (Sample only)

Diploma in Food Production

Diploma in Bakery Arts

Diploma in Housekeeping Operations

Diploma in Food & Beverage Service

Diploma in Front Office Operation, or

Intake	:	Food Production/Cookery	-	30
		Bakery	-	30
		Food & Beverage Service	-	30
		Accommodation Operation/Housekeeping	-	30
		Front Office Operation	-	30

				150

Total strength of students   :   150 students

Total strength of faculty   :   10 including Principal excluding part time/ contractual staff & leave reserve. However, 20% of required faculty can be filled by Teaching Associate

Faculty to student ratio   :   Desirable 1:15

| Total land area | : | Minimum | - | 2 Acres |
| | | Desirable | - | 5 Acres |

Note: In metropolitan cities, where land is scarce, the respective land norm of 2 or 5 acres may be reduced as per local conditions ensuring space as per plinth area norms.

| Carpet area of the Institution excluding Hostels and staff residence | : | 29000 Sq.Ft.; | 26175 Sq.Ft.(Min.) |

| Carpet area per student | : | 193 Sq.Ft.(17.93 Sq.Mtr); |
| | | 175 Sq.Ft.(16.26 Sq.Mtr) |

| Plinth area | : | Desirable : 40600 Sq.Ft. = 3773 Sq.Mtr. |
| | | Minimum : 36645 Sq.Ft. = 3405 Sq.Mtr. |

| Plinth Area per student | : | 25.15 Sq.Mtr.; | 22.70 Sq.Mtr. |

| Total number of Technical Supporting staff | : | Maximum 10 and minimum 8 subject to the condition that one Attendant is available per facility/lab i.e. Kitchens, Restaurants, Pantries, Bakery, Confectionery, Food Science, Housekeeping, Laundry, Stores, when the facility/lab is functioning/operational. |

OVERVIEW OF CARPET AREA :
NORMS FOR SPACE

The challenge of allocating space for specific work areas will be to allow enough functional efficiency without excess space to be added on building resulting in higher operating and maintenance costs. Space allowance in relation to investment should be balanced in term of:

(a)   Proposed permanence of the faculty
(b)   Essentials for operating efficiency
(c)   Desirable standards in terms of appearance, sanitation and quality training
(d)   Immediate and future costs, depreciation, upkeep and maintenance.

It is good to block out space allowances according to functions that the facility is to perform and calculate area requirements in terms of:

(a)   No. of students undergoing training at one time in one lab/class
(b)   Amount and size of equipment/furniture to be used
(c)   Space needed for supplies (stores)
(d)   No. of covers for food service at one time (food service area)
(e)   Suitable traffic area (large in case of training institute).

Norms for space have been determined based on the functional requirements. To effectively meet such requirements, institutions should comply with the minimum norms prescribed.   Provisions less than the minimum would have adverse effects on instructional and administrative functions, amenities and services and other essential co-curricular activities.

In the planning of new institutions or expansion of existing institutions, the desirable norms should be adopted. This would facilitate marginal adjustments in intake in future and add to flexibility.

General space allocations are given in the following pages based on requirements for a commercial hospitality enterprise with allowances to facilitate quality training.

CLASSIFICATION OF BUILDING AREAS

Keeping in mind the functional utility, the space requirements in Foodcraft Institute are classified into instructional, administrative and residential area amenities.

Instructional area comprises of class rooms, laboratories for Food Production, Bakery, Restaurant Service, Laundry, Accommodation Operations, Front Office Operations, Computer Lab., Language Lab., Maintenance Workshop, Library, instructional resources centre and examination hall/auditorium. In addition is the dry rations store and the cold room.

The Administrative area comprises of the Principal's office, PA's room, Administration and Accounts section, Record room, etc.

The area for support services include students (boys & girls) lounge and locker room, faculty lounge and locker rooms, indoor games hall, bank extension counter, substation, generator room and pump house.

The campus facilities includes play grounds (wherever possible) for short space games, car, scooter/cycle parking areas and area for future expansion.

Residential areas include staff quarters, students hostels alongwith Warden's residence.

INSTRUCTIONAL AREA

The requirements of space for instructional activity of different types-classroom lecture, tutorial, laboratories – of the curriculum in terms of the instructional time for each type of instructional activity has to be determined initially.

The number of rooms required for each type of instructional activity is calculated applying the following relationship.

N = $(N_s/C_s) \times (H/H_w) \times (1/f_u)$, where

N = Number of rooms required for each type (N may be N_c, N_t or N_l depending on type of activity

N_c = Number of classrooms for lecture

N_t = Number of rooms for tutorial

N_l = Number of Laboratories

N_s = Total number of students in all years / semesters / discipline taking instruction in the specified class size (C_s)

Cs	=	Class size
H	=	Number of hours per week of classroom lecture, tutorial or Practical as the class may be (Hc, Ht, Hd)
Hw	=	Number of working hours per week (usually 35)
Fu	=	Utilisation factor – (taken as 0.75- in educational institutions, the maximum attainable utilisation factor can be improved by making use of working time spread over long periods)

TOTAL PLINTH AREA

	Optimum	Minimum
	(In Sq. Ft.)	
Main Institute Building	29000	26175
Add 40%	11600	10470
	-------	-------
	40600	36645
	-------	-------
Residential Area	12980	12980
Add 40%	5192	5192
	-------	-------
	18172	18172
	-------	-------

CARPET AREA AT A GLANCE : (for Foodcraft Institute with 150 strength)

		Optimum	Minimum
		(In Sq.Ft.)	
1.	Teaching Area	23190	20715
2.	Support	2980	2680
3.	Administrative Area	2830	2780
		--------	--------
		29000	26175
		--------	--------

Optimum	:	29000 Sq.Ft.	=	2695 Sq.Mtr.
Minimum	:	26175 Sq.Ft.	=	2695 Sq.Mtr.

CARPET AREA (RESIDENTIAL)

		Desirable	Minimum
		(In Sq.Ft.)	
1.	Principal and Essential Staff	5200	5200
2.	Hostel (Boys & Girls) with common lounge	7780	7780
		--------	--------
		12980	12980
		--------	--------

Optimum / Minimum   -   12980 Sq.Ft. = 1206 Sq.Mtr.

TOTAL PLINTH AREA OF INSTITUTE BUILDING : (Carpet Area + 40%)

		Optimum	Minimum
		(In Sq. Ft.)	
1.	Teaching Area	23190	20715
2.	Support Service Area	2980	2680
3.	Administrative Area	2830	2780
		--------	--------
	Total Teaching Area	29000	26175
	+ 40% of the Total	11600	10470
		--------	--------
	Total Plinth Area in Sq.Ft.	40600	36645
		--------	--------
	Total Plinth Area in Sq.Mt.	3773	3405

RESIDENTIAL PLINTH AREA :

		Optimum	Minimum
		(In Sq.Ft.)	
1.	Principal & Essential Staff Only	5200	5200
2.	Hostel for 50% student strength	7780	7780
		-------	--------
	Total Residential Area	12980	12980
	Plinth Area = Carpet + 40%	5192	5192
		--------	--------
	Total Residential Area in Sq.Ft.	18172	18172
		--------	--------
	Plinth Area (Residential) in Sq.Mtrs.	1688	1688

A. TEACHING AREA :

	Optimum	Minimum
	(In Sq.Ft.)	
1. FOOD PRODUCTION	5900	4900
2. FOOD & BEVERAGE	3845	3620
3. ACCOMMODATION OPERATION (HOUSEKEEPING)	3000	2950
4. FRONT OFFICE LAB.	400	400
5. COMPUTER LABS.	750	750
6. FOOD SCIENCE OR QUALITY CONTROL	375	375
7. AUDIO VISUAL LABS.	450	450
8. LIBRARY RESOURCE CENTRE	1500	1000
9. LANGUAGE LAB.	600	600
10. MAINTENANCE ENGINEERING LAB.	450	450
11. CLASSROOMS	2420	2420
12. MULTIPURPOSE HALL	2700	2000
13. CONFERENCE ROOM	800	800
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TEACHING AREA TOTAL :	23190	20715
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B.	SUPPORT SERVICES AREA	2980	2680
C.	ADMINISTRATIVE AREA	2830	2780
D.	RESIDENTIAL AREA :		
	(i) STAFF (Essential)	5200	5200
	(ii) STUDENTS (Boys & Girls)	7780	7780

OVER VIEW OF AREA (CARPET AREA)

DESCRIPTION :

TEACHING AREA LABORATORIES–FOR MINIMUM 15 STUDENTS IN A GROUP

I. FOOD PRODUCTION :

PURPOSE : To demonstrate and conduct hands-on training in processing raw material into ready to serve finished dishes, evaluating pre-processing and testing finished dishes.

			Optimum	Minimum
				(In Sq.Ft.)
A.	TRAINING KITCHEN : 01 No. Max. area required 60 Sq.Ft./student Min. 50 Sq.Ft./student + Store space of 200 Sq.Ft.		1200	950
B.	* QUANTITY FOOD KITCHEN : 01 No. Max. area required 60 Sq.Ft./student Min. 50 Sq.Ft./student + Store space of 200 Sq.Ft.		1200	950
C.	BAKERY : 01 No. Max. area required 60 Sq.Ft./student Min. 50 Sq.Ft./student .		900	750
D	*CONFECTIONERY : 01 No. Area required (Group Work) 25 Sq.Ft./student		600	600
E.	*LARDER KITCHEN : 01 No. Area required 40 Sq.Ft./ Student		600	600
F.	DEMONSTRATION KITCHEN : 01 No. Area required (Group Work) 40 Sq.ft. / Student + 30 Sq.Ft./student		600	450
G.	COLD AND DRY FOOD STORES		800	600

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TOTAL AREA REQUIRED FOR FOOD PRODUCTION
A + B + C + D + E + F + G          =                  5900      4900
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II.   FOOD & BEVERAGE :

PURPOSE : To demonstrate and conduct hands-on training in Foods & Beverage
Service skills.

		Optimum	Minimum
			(In Sq.Ft.)
*	TRAINING RESTAURANT	1440	1440
*	AREA REQUIRED FOR 60 COVERS AND PANTRY – 1/3 OF DINING AREA	480	480
	BEVERAGE LAB. FOR 15 STUDENTS WITH BUILT-IN BAR AREA OF 200 Sq.Ft.	800	800
	STUDENTS/STAFF DINING 15 Sq.Ft. (Max.) - 75 students per shift 12 Sq.Ft. (Min.) - 75 students per shift	1125	900
	TOTAL AREA REQUIRED FOR F&B :	3845	3620

III.   ACCOMMODATION OPERATIONS HOUSE KEEPING :

a)	* LAUNDRY ROOM (30 Sq.Ft./ Student)	450	450
b)	* LINEN ROOM	200	150
c)	H.K.PRACTICAL LAB (30 Sq.Ft./Lab)	450	450
d)	DEMONSTRATION LAB	400	400
e)	* GUEST HOUSE / MOCKUP ROOMS	1500	1500
TOTAL AREA REQUIRED FOR H.K. TEACHING :		3000	2950

IV.   FRONT OFFICE LAB :   1 No.

FRONT OFFICE CLASS ROOM WITH DESK FOR RECEPTION, INFORMATION&CASHIER RESERVATIONS, PABX, TELEFAX	400	400
V. COMPUTER LAB (50 Sq.Ft./Student) AND BATCH OF 15 STUDENTS WITH 15 COMPUTER TERMINALS Min.90 Sq.Ft./STUDENT	750	750
VI. FOOD SCIENCE LAB FOR QUALITY CONTROL 40 Sq.Ft./STUDENT FOR 15 STUDENTS	450	450

VII.	AUDIO VISUAL LAB		
	Max. 30 Sq.Ft. / Student	900	750
VIII.	LIBRARY AND RESOURCE CENTRE		
	(1500 Sq.Ft. upto 500 Students) FOR EVERY		
	ADDITIONAL STUDENT 0.21 Sq.Mtr.	1500	1000
IX.	LANGUAGE LAB (40 Sq.Ft./per Student		
	(Max) WITH 15 IN EACH GROUP	600	600
X.	MAINTENANCE / ENGINEERING LAB.		
	30 Sq.Ft./ Student WITH 15 IN EACH GROUP	450	450

CLASSROOMS

PURPOSE   :   To lecture, demonstrate, conduct tutorials and evaluations.
STRENGTH   :   Minimum 30 students/theory class (desirable 40).

NORMS :

15-20 Students to a Room : Norm is 1.20 Sq.Mtrs./12.91 Sq.Ft. Say 13 Sq.Ft./ Student.

30-40 Students to a Room : Norm is 1.10 Sq.Mtrs./ Students 11.84 Sq.Ft. say 12 Sq.Ft. = 480 Sq.Ft. Say 500 Sq.Ft.

Minimum Size of the Class Room for 40 Students = 480 Sq.Ft. Say 500 Sq.Ft.

		Optimum	Minimum
a)	6 Classrooms of 360 Sq.Ft.	5600	5600
b)	1 Tutorial – 260 Sq.Ft. each	260	260
		-------	-------
		2420	2420
		------	------

EXAMINATION / MULTIPURPOSE HALL   :   01 No.

Requirement Norms	:	2.5 Sq.Mt. / Student
Capacity	:	100 Students
Space Requirement	:	2.5 Sq.Mt. X 100 Students = 250 Sq.Mt. i.e. 2690 Sq.Ft.
		SAY 2700 Sq.Ft. x 1 = 2700 Sq.Ft. (Min. 2000 Sq.Ft.)

* CONFERENCE ROOM (Desirable)

Capacity	:	50 Persons
Space Required Norms	:	16 Sq.Ft. / Person = 800 Sq.Ft.

NORMS FOR SUPPORT SERVICES

PURPOSE : To provide health care, catering and other commercial services to staff and students.

AREA NORMS :

-       Students locker room to be provided for a minimum of 50% total student strength at 10 Sq.Ft. per student optimum and 8 Sq.Ft. per student minimum.

-       Practical staff locker room to be provided for all staff.

	Optimum (Sq.Ft.)	Minimum (Sq.Ft.)
LOCKER ROOM – GIRLS (30% OF 150 INTAKE) :		
10 Sq.ft. per Student (10x 45 Girls)	450	
08 Sq.ft. per Student (08x 45 Girls)		360
LOCKER ROOM – BOYS (70% OF 150 INTAKE) :		
10 Sq.ft. (10 x 105 Boys)	1050	
08 Sq.ft. (08 x 105 Boys)		840
PRACTICAL STAFF LOCKER 4 X 50 =	200	200
	-------	-------
	1700	1400
	------	-------
DOCTORS ROOM 80 Sq.ft.	80	80
DRESSING ROOM	200	200
SUB-STATION *	400	400
GENERATOR ROOM *	400	400
PUMP HOUSE	200	200
	------	------
	1280	1280
	------	------
TOTAL SUPPORT AREA	2980	2680

NOTE :   The Institute dining hall shall be used for hostel catering services also. Wherever hostels are not in the campus norms of 1.5 Sq.Mt. per student may be adhered to for providing the catering facilities for hostlers.

ADMINISTRATIVE AREA NORMS

PURPOSE : To provide administrative support to the academic activities of the Institute.

a) PRINCIPAL'S OFFICE   =   25 Sq.Mtr. =   322.8 Sq.Ft. SAY 325 Sq.Ft.

b) STENO to PRINCIPAL   =   14 Sq.Mtr. SAY 150 Sq.Ft.

	Optimum (Sq.Ft.)	Minimum (Sq.Ft.)
PRINCIPAL'S OFFICE	300	250
STENO TO PRINCIPAL	150	150
GUEST LOUNGE	200	200
SEPARATE CABIN FOR EACH LAB FACULTY 100 Sq.Ft. FOR EACH FACULTY	1000	1000
ADMINISTRATIVE SECTION (HALL)	400	400
CASHIER'S CABIN	80	80
RECORDS ROOM	500	500
TELEPHONE OPERATOR ROOM *	100	100
SECURITY GUARD ROOM *	100	100
	------	------
	2830	2780
	------	------

RESIDENTIAL AREA NORMS

STAFF RESIDENCES :

i)   Minimum accommodation that should exist in the Campus or very near the Campus, should be as follows :
-       Principal's residence
-       Residences for 50% OF Faculty i.e. 7 Facualty
-       Residences for 3 essential staff (caretaker, electricity, driver, water supply)

ii)   DESIRABLE :

Acute problem of scarcity of teaching staff has necessitated many efforts. One such major effort stipulated in the Programme of Action of National Policy is the provision of residential accommodation which would facilitate attracting and retaining of competent personnel. The norm is :

a)   Accommodation for 50%-60% faculty and supporting staff.
b)   In highly urbanised and industralised areas, where housing is an acute problem, accommodation could be provided for 100% of faculty and staff.

The provision of housing could be accomplished in the following ways :

a)   Constructing houses in the campus and/or
b)   Leasing houses in the vicinity and/or
c)   Providing liberal house building loans to enable faculty to construct their own houses.

Area Norms :				Essential
1500 Sq.ft. for Principal	x	1	=	1500 Sq.ft.
800 Sq.ft. for Sr. Lecturer/Lecturer or equivalent	x	2	=	1600 Sq.ft.
600 Sq.ft. for non-teaching/teachnig/ technical supporting staff	x	2	=	1200 Sq.ft.
300 Sq.ft. for Security and Engineering staff	x	3	=	900 Sq.ft.

TOTAL ESSENTIAL				5200 Sq.ft.

Note: Staff Accommodation can also be outsourced, however, campus should provide accommodation for security and essential services staff.

RESIDENTIAL AREA : NORMS

Student Hostel :

50% OF TOTAL STUDENTS STRENGTH TO BE PROVIDED WITH HOSTEL ACCOMMODATION I.E. 75 STUDENTS.

70% BOYS   =   54   =   18 Rooms (Two separate Blocks)

30% GIRLS   =   21   =   7 Rooms

SINGLE ROOM NORM   = 9 Mt. x 10.76 Sq.Ft. = 97 Sq.Ft. per Student

DOUBLE SEATER ROOM = 15 Mt. x 10.76 Sq.Ft. = 161.50 Sq.Ft. per 2 Students

TRIPLE SEATER ROOM   = 20 Mt. x 10.76 Sq.Ft. = 215.20 Sq.Ft. per 3 Students

TOTAL INTAKE   = 150 STUDENTS

50% of 150 Triple Seater @ 215.20 Sq.Ft.   =   25 Rooms Say 5380 Sq.Ft.

30% for Girls   =   1506 Sq.Ft. on triple sharing basis
70% for Girls   =   3874 Sq.Ft. on triple sharing basis

Total Carpet Area for Student – Residents   =   8200 Sq.Ft.

	Optimum	Minimum
Girls Hostels 30%	1506 Sq.Ft.	1506 Sq.Ft.
Common Room	300 Sq.Ft.	300 Sq.Ft.
Warden's Accommodation	800 Sq.Ft.	800 Sq.Ft.
Boys Hostel	3874 Sq.Ft.	3874 Sq.Ft.
Common Rooms for hostels	500 Sq.Ft.	500 Sq.Ft.
Hostel Warden	800 Sq.Ft.	800 Sq.Ft.
	-------------	-------------
	7780 Sq.Ft.	7780 Sq.Ft.
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Note : Hostel accommodation can also be outsourced, however campus should provde for security and essential services staff.

NORMS FOR CAMPUS FACILITIES

The teaching, administrative, amenities and residential area are usable (carpet) areas. Provision is to be made for corridors, stairs, entrance, foyer, toilets, stores for cleaners, gardeners and sweepers. An average of 50% of carpet area is suggested for these. Such a provision is not necessary for staff quarters and guest house as the norms suggested for them are in terms of plinth area.

SCOOTER STAND	:	3 Sq.Mtrs./ Scooter	=	30 Sq.Ft. (Desirable)
CAR PARKING	:	25 Sq.Mtrs./ Car	=	250 Sq.Ft. (Desirable)
CYCLE STAND	:	1.1 Sq.Mtrs./ Cycle	=	11 Sq.Ft. (Desirable)
BUS PARKING	:	55 Sq.Mtrs./ Bus	=	550 Sq.Ft. (Desirable)
BUS GARAGE	:	60 Sq.Mtrs./ Bus	=	600 Sq.Ft. (Desirable)
PLAY GROUND	:	15000 Sq.Mtrs.	=	150000 Sq.Ft.(Desirable) (if available)

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STAFF NORMS

The staff salaries account for about 60% to 70% of the recurring expenditure of Institute of Hotel Management. The effective and efficient deployment of staff members will improve the quality of instruction and ensure better output, growth and development of the Institutions.

Depending on the nature of the work, the members of the staff are grouped as follows:

- Principal and Teaching Staff
- Supporting Staff (skilled & non-skilled)
- Administrative and Ministerial Staff

NORMS FOR STAFF REQUIREMENTS

While developing the norms for staff requirements, the factors like students intake, disciplines offered, changes in curriculum and teaching methods, contact hours, the types of laboratories and workshops required, development and extra curricular activities involved and staff quality improvement programmes are considered. The non-semester system, continuous assessment scheme, mid-term, annual evaluation effective subject and project work have increased the work load of the teachers and this fact has also been taken into consideration.

STAFF STRUCTURE

The faculty consists of the following categories in the Ratio of 1:3:4:2:

1. Senior Lecturers

2. Lecturers

3. Asstt. Lecturers and

4. Teaching Associates

(In case of 10 faculties- SL 1, Lect 3, Asst Lect 4, TA 2)

STRENGTH OF TEACHING STAFF :

The strength of the teaching staff may be worked out on the following basis :

1.	i)	The number of contact hours are taken as 35 clock hours per week.

ii) Strength of students is taken as 25-40 lecture/theory classes and 15-20 in tutorial/laboratory/workshop.

iii) The average teaching load of 16-22 Contact hours per week is used as basis for calculating the staff strength.

iv) The strength of the teaching staff so worked out would come to a staff students ratio of about 1:15.
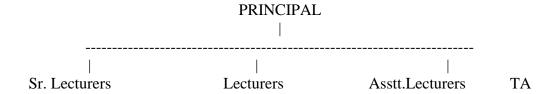
2. WORKLOAD DISTRIBUTION :

Teachers will be required to spend 35 clock hours per week in Institutional activities. Total contact hours (teaching load) is worked out considering the curriculum requirements. The work load distribution for all Institutional activities approximately estimates is furnished below:

Sl.No.	Activity	For Sr.Lect.	For Lect./Asstt.Lect.
		(Hours per week)	
1.	Contact Hours (teaching load)	22	22
2.	Preparation, Assessment and Evaluation work	07	08
3.	Administrative Work	02	01
4.	Counselling & Guidance	02	02
5.	Development activities and Community Services/Research & Development	02	02
		---	---
		35	35
		---	---

3. STAFF POSITION :

Sl.No.	Category of Staff	Pay Scale (Pre-revised)
1.	Principal }	
2.	Sr.Lecturers }	As per the prevalent scale of
3.	Lecturers }	respective State Government.
4.	Asstt. Lecturers }	
5.	Teaching Associate }	

ACADEMIC STAFF ORGANIZATIONAL STRUCTURE FOR 150 INTAKE

PRINCIPAL
|

| | | |
Sr. Lecturers   Lecturers   Asstt.Lecturers   TA

However, wherever in any specialization, the teaching hours work out less than 20 teaching hours per week, no regular faculty should be employed and efforts should be made to utilise the services of part time faculty on hourly basis except in the case of engineering subjects where the concerned faculty could also be responsible for the maintenance work of the building and all equipments. Any faculty member who conducts only theory classes should not in any case have a work load of less than 15 teaching hours per week.

Since staff is to be constantly exposed to the operational environment of the industry, 10% extra staff may be provided over and above the total strength so computed.

The Sr.Lecturer on rotation shall function as Training and Placement Officer and Head of Resource Centre where he/she will maintain constant liaison with the industry and oversee the industrial training and placement of students. This should be rotated amongst HODs after every two years.

ACADEMIC SUPPORT STAFF

Librarian	-	01
Audio-Visual Technician	-	01
Maintenance Assistant	-	01

ADMINISTRATIVE STAFF

Principal	-	01
Office Superintendent	-	01
Accountant	-	01
U.D.C.(Stores)	-	01
Cashier (UDC)	-	01
Stenographer	-	01
UDC (General Pool)	-	01
Clerk Typists	-	01
Driver/Mechanic	-	01
Peon	-	01
Lab Attendants :		
i) Food Production	-	04
ii) House Keeping	-	02
iii) Food & Beverage Service	-	02

Note :   Security, Housekeeping and Horticulture staff to be on contract basis.

PRINCIPAL

SCALE OF PAY   :   As applicable to State Govt.

AGE   :   40 – 50 Years

QUALIFICATION   :   Essential Educational Qualifications:

Post Graduate in Hospitality / Tourism or MBA from a recognized University/ Institute.

And (+)

Full Time Degree / Full time three years Diploma in Hotel Administration / Hospitality Management / Hotel Management/ Hospitality Administration/ Culinary Arts/Culinary Science with minimum of 55% marks in aggregate or its equivalent grade from:

(i) NCHMCT OR NCHMCT affiliated institute. **OR**
(ii) An institute approved by AICTE. **OR**
(iii) An institute approved by the State Board of Technical Education. **OR**
(iv) An Institute affiliated to University duly recognized by UGC. **OR**
(v) Central/State/Deemed to be University recognized by UGC. **OR**
(vi) Equivalent degree / diploma of foreign university/ institution recognized by AIU.

Desirable Qualification : (i) PhD degree (ii) Research papers publication in reputed journals

EXPERIENCE   :   Atleast 15 years of experience in teaching and / or hotel industry including minimum 5 years of regular service after appointment in the grade of Senior Lecturer or equivalent in an Institute affiliated to National Council for Hotel Management & Catering Technology / AICTE/ State Board of Technical Education / Recognised University.

OR
Atleast 15 years total experience (Teaching and Industry together) including Hotel industry experience minimum 5 years in Managerial capacity (One level below GM Level) in 3 star /

Heritage or above category approved hotel, with 3 years experience in Teaching/ Training.

DESIRABLE   :   Teachers Training Diploma; Knowledge of one or More foreign languages;   Experience in Administration and Financial Management;   Computer Literacy.

SENIOR LECTURER

SCALE OF PAY   :   As applicable to State Govt.

AGE   :   30 – 40 Years

QUALIFICATION   :   Essential Educational Qualifications:

Post Graduate in Hospitality / Tourism or MBA from a recognized University/ Institute.

And (+)

Full Time Degree / Full time three years Diploma in Hotel Administration / Hospitality Management / Hotel Management/ Hospitality Administration/ Culinary Arts/Culinary Science with minimum of 55% marks in aggregate or its equivalent grade from:

(i) NCHMCT OR NCHMCT affiliated institute. **OR**
(ii) An institute approved by AICTE. **OR**
(iii) An institute approved by the State Board of Technical Education. **OR**
(iv) An Institute affiliated to University duly recognized by UGC. **OR**
(v) Central/State/Deemed to be University recognized by UGC. **OR**

(vi) Equivalent degree / Diploma of foreign university/ institution recognized by AIU.

Desirable Qualification : (i) PhD degree (ii) Research papers publication in reputed journals

EXPERIENCE   :

For Selection by Promotion: Five years experience in the scale of Lecturer

For Direct Recruitment : At least 10 years of experience in teaching and hotel industry together including minimum 3 years teaching experience as Lecturer or equivalent in an Institute affiliated to National Council for Hotel Management & Catering Technology /AICTE/ State Board of Technical Education / Recognised University.

OR

At least 10 years total experience (Teaching and Industry together) including Hotel industry experience of minimum 3 years in Supervisory capacity in 3 star / Heritage or above category approved hotel, with 3 years experience in Teaching/ Training.

DESIRABLE   :   Teachers Training Degree or Diploma;
Post Diploma in Specialised Hotel Management;
Computer Literacy.

LECTURER

SCALE OF PAY   :   As applicable to State Govt.

AGE   :   25 – 30 Years

QUALIFICATION : Essential <u>Educational Qualifications:</u>

Full Time Degree / Full time three years Diploma in Hotel Administration / Hospitality Management / Hotel Management/ Hospitality Administration/ Culinary Arts/Culinary Science with minimum of 55% marks in aggregate or its equivalent grade from:

(i) NCHMCT OR NCHMCT affiliated institute. **OR**
(ii) An institute approved by AICTE. **OR**
(iii) An institute approved by the State Board of Technical Education. **OR**
(iv) An Institute affiliated to University duly recognized by UGC. **OR**
(v) Central/State/Deemed to be University recognized by UGC. **OR**
(vi) Equivalent degree / diploma of foreign university/ institution recognized by AIU.

<u>Desirable Qualification</u> : Post Graduate in Hospitality / Tourism or MBA from a recognized University/ Institute. PhD degree

<u>EXPERIENCE</u> :

<u>For Selection by Promotion</u>: 5 Years experience in the scale of Asstt. Lecturer Cum Asstt. Instructor**.**

<u>For Direct Recruitment</u>: At least 5 (five) years teaching experience in the grade of Assistant Lecturer or equivalent from an institute affiliated to National Council for Hotel Management & Catering Technology / AICTE/ State Board of Technical Education / Recognized University.
OR
At least 7 years total experience (Teaching and Industry together) including 3 years experience in Teaching/ Training of a 3 star / Heritage or above category approved hotel,

<u>DESIRABLE</u> : Teachers Training Diploma; Post Diploma in Specialised Hotel Management; Computer Literacy**.**

ASSISTANT LECTURER

SCALE OF PAY   :   As applicable to State Govt.

AGE   :   Min. 22 Years

QUALIFICATION: Full Time Degree / Full time three years Diploma in Hotel Administration / Hospitality Management / Hotel Management/ Hospitality Administration/ Culinary Arts/Culinary Science with minimum of 55% marks in aggregate or its equivalent grade from:

(i) NCHMCT OR NCHMCT affiliated institute. **OR**
(ii) An institute approved by AICTE. **OR**
(iii) An institute approved by the State Board of Technical Education. **OR**
(iv) An Institute affiliated to University duly recognized by UGC. **OR**
(v) Central/State/Deemed to be University recognized by UGC. **OR**
(vi) Equivalent degree / diploma of foreign university/ institution recognized by AIU.

AND

Must have qualified **NHTET** with prescribed percentage, conducted by NCHMCT.

Desirable Qualification :
1. Post Graduate in Hospitality / Tourism or MBA from a recognized University/ Institute.

EXPERIENCE   :   At least 2 years practical experience in Hotel industry In 3-star or above category, if not having PG Degree.

DESIRABLE   :   Knowledge of Computers.

TEACHING ASSOCIATE :   As per Teaching Associate Scheme of NCHMCT

ADMINISTRATIVE STAFF

Name of post   :   **OFFICE SUPERINTENDENT**

Scale of Pay   :   As applicable to State Govt.

Age   :   25-35 Years

Qualification   :   Graduate of a recognised University with 5 years Experience in administration and establishment Matters.

Name of post	:	**Accountant**

Scale of Pay	:	As applicable to State Govt.

Method of Recruitment	:	Promotion from PAs/UDCs with minimum of 8 years regular service in the grade failing which by transfer deputation of persons holding analogous posts in offices under C&AG/CGA or by direct recruitment.

Whether post is Selection Or Non Selection	:	Selection

Educational and other quali-Fications and experience Required for direct recruits	:	Graduate in Commerce with 5 years experience in commercial or educational institutions or Government office or SAS Accountant with 2 years experience in establishment matters.

Desirable :

Knowledge of Computers.

Age limit for direct recruits	:	25-35 years

Whether age limits, qualifi-Cations etc. applicable to Promotees	:	Age limit : No Educational Qualifications : Yes.

Appointing Authority for the Post	:	Board of Governors.

Name of Post	:	**Stenographer**
Scale of Pay	:	As applicable to State Govt.
Method of Recruitment	:	By promoting from the grade of LDCs having 8 years regular service in the grade having minimum speed of 80 and 40 w.p.m. in English Shorthand and Typing failing which by direct recruitment.
Whether post is Selection or Non Selection	:	N.A.
Educational and other qualifications and experience required for direct recruits	:	Essential: Metric/Higher Secondary with minimum speed of 80 and 40 w.p.m. in English Shorthand and Typing respectively with 3 years administrative and accounts experience. Desirable: Certificate Course in Computers.
Age limit for direct recruits	:	25-30 years
Whether age limits, qualifications etc. applicable to promotees	:	Age limit : No Educational Qualifications : Yes
Appointing Authority for the post	:	Secretary / Principal

Name of Post	:	**Driver-cum-Mechanic**

Scale of Pay : As applicable to State Govt.

Method of Recruitment : By selection from Group 'D' staff failing which by direct recruitment. Employees selected from Group 'D' staff would be treated to have been promoted.

Whether post is Selection or Non Selection : Non-Selection

Educational and other quali-fications and experience required for direct recruits : Middle pass with driving licence for cars and trucks and 3 years experience in driving and maintenance/ repairing of similar vehicles.

Age limits for direct recruits : 25-35 years

Whether age limits, quali-fications etc. applicable to promotees : Age limit : No
Educational Qualification : Yes

Appointing Authority for the Post : Secretary / Principal

Name of Post	:	**UDC**
		(Stores/Cash/Estt./Employees to be posted on rotational basis for a maximum of 3 years)

Scale of Pay	:	As applicable to State Govt.

Method of Recruitment	:	By promotion from the grade of LDC of persons having 8 years regular service in the grade failing which by direct recruitment.

Whether post is Selection or Non Selection	:	N.A.

Educational and other qualifications and experience required for direct recruits	:	Essential: Graduate with atleast 3 years experience in administrative and accounts matters. Desirable: Certificate course in Computers.

Age limit for direct recruits	:	22-30 years.

Whether age limits, qualifications etc. applicable to promotees	:	Age limit : No Educational Qualification – Yes

Appointing Authority for the post	:	Secretary / Principal

Name of Post	:	**LDC** (Stores/Cash/Estt./Employees to be posted on rotational basis for a maximum period of 5 years)
Scale of Pay	:	As applicable to State Govt.
Method of Recruitment	:	Direct Recruitment (10% of post would be earmarked for employees in Group 'D' posts subject to fulfilment of educational qualifications etc. prescribed for direct recruits.
Whether post is Selection or Non-Selection	:	No applicable
Educational and other Qualifications and experience required for direct recruits	:	<u>Essential</u> 10+2 or Higher Secondary School, passing typing of 40 w.p.m. <u>Desirable</u> 1 year experience in Computer applications.
Age limit for direct recruits	:	21-28 years
Whether age limit, qualification etc. applicable to promotees	:	Not applicable
Appointing authority for the post	:	Secretary/Principal

Name of Post	:	**Maintenance Assistant**
Scale of Pay	:	As applicable to State Govt.
Age	:	22-28 Years
Qualification	:	10+2 standard pass with I.T.I. Trade Certificate as a Mechanic/Electrician or both.

Possessing Wireman License essential in addition to the above with 3 years experience.

Name of Post : **Attendant** (in office/lab)

Scale of Pay : As applicable to State Govt.

Method of Recruitment : Direct Recruitment

Whether post is Selection or
Non Selection : Selection

Educational and other
qualifications and experience
required for direct recruits :
Middle Standard

Desirable: Experience of one year

Age limit for direct recruits : 25-35 years

Whether age limits, qualifi-
cations etc. applicable to
promotees : Not applicable

Appointing Authority for
the post : Secretary / Principal

SUPPORT STAFF

Name of Post : **Librarian**

Scale of Pay : As applicable to State Govt.

Method of Recruitment : By Promotion from Assistant Librarian with a minimum service of 8 years in grade failing which by direct recruitment.

Whether post is Selection or
Non Selection : Selection

Educational and other
Qualifications and experience
required for direct recruits :

Essential:
Graduate with Diploma in Library Science and 3 years experience of working in a Library.

Desirable:
Certificate course in Computers.

Age limits for direct recruits : 22-30 years

Whether age limits, qualifi-
cations etc. applicable to
promotees : Age Limit : No
Educational Qualification : Yes

Appointing Authority for
the post : Secretary / Principal

TRAINING KITCHEN

Total area required   :   Desirable 1200 Sq.Ft.   Min.   900 Sq.Ft.
No. of Kitchen   :   01   01
No.of students per lab :   15   15
No.of faculty per lab :   01   01

Sl.No.	Name of the Item	Quantity

Equipment per student :

1.	Work table 100x50x85 cm with overhead shelves with S.S. drawer 1 under shelf at 15 cm ground clearance	1 No.
2.	Cooking range 4 burners LP with oven and grill	1 No.
3.	Sink with DB	1 No.

Table Equipment – per table :

1.	Meat knife }		}	
2.	Fillet knife }	Chefs kit to be procured	}	
3.	Paring knife }	by student.	}	
4.	Scooper }		}	1 No.
5.	Peeler }		}	
6.	Grater		}	
7.	Small whisk		}	
8.	Beater		}	
7.	Round spoon (L)			2 Nos.
8.	Flat spoon		}	
9.	Slicer		}	
10.	Perforated round spoon (frying spoon)		}	
11.	Strainer S.S.		}	
12.	Rolling pin (wooden)		}	
13.	Chopping board (wooden)		}	
14.	Tongs		}	
15.	Palate knife (small)		}	1 No.
16.	Steak hammer		}	
17.	Wooden Spoon		}	
18.	Measuring jug (1/2 Ltr) Enamel		}	
19.	Egg Slicer		}	
20.	Piping bag/nozzle		}	
21.	Lime squeezer		}	

22.   Potato masher SS   }

Pots and Pans per work table :

1.	Brass degchi with lid – 12" dia	}
2.	Brass degchi with lid – 10" dia	}
3.	Brass degchi with lid – 08" dia	}
4.	S.S. degchi with copper bottom – 12"	} 1 No.
5.	S.S. degchi with copper bottom – 10"	}
6.	S.S. degchi with copper bottom - 08"	}
7.	Brass thali – 16" dia	}
8.	Sauce pans 08" dia brass	2 Nos.
9.	Frying pans 10" dia MS	}
10.	Saute pans 08" dia MS	}
11.	Omelette pan 08" dia Copper	} 1 No.
12.	Braising pan with lid Copper	}
13.	Thava with handle	}
14.	Collander SS 08" base	}
15.	Pie dish Aluminium	2 Nos.

Common Equipment :

1.	Traulson 1400 ltrs.	}
2.	Large demonstration table (10x3 ft.)	} 1 No.
3.	Salamander	}
4.	Convection oven (H.D)	}
5.	Griddle	4 Nos.
6.	Hand blender	4 Nos.
7.	Weighing machine (Braun) 2 Kg.	1 No.
8.	Stock pot (20 Ltrs.) SS with handle	2 No.
9.	Soup laddle SS	6 Nos.
10.	Oven tray SS with collar	24 Nos.
11.	Baking trays GI	24 Nos.
12.	Butcher's block	4 Nos.
13.	Meat thermometer	1 No.
14.	Conical strainer SS	1 No.

QUANTITY FOOD KITCHEN

Total area required : Desirable 1200 Sq.Ft.   Min. 900 Sq.Ft.
No.of students   : 15   15
Faculty required   : 01   01

Sl.No.	Name of the Item	Quantity
1.	High pressure/Low pressure burner cooking range (one with 4 LP Burners and one with 4 HP Burners) }	
2.	Deep fat fryer (2 comp.) (15 Ltrs.) Electric/Gas operated }	
3.	Bratt pan 80 Ltrs. }	
4.	Steamer (Combi) }	
5.	Bulk cooker 80 Ltrs. (Tilting type) Electric/Gas operated }	1 No.
6.	Wet grinder 10 Ltrs. }	
7.	Potato peeler (heavy duty) }	
8.	Food Processor (with 6 attachments) }	
9.	Meat mincer (heavy duty) }	
10.	Griddle plate with Chappathi puffer }	
11.	Stock burners	2 Nos.
12.	Convection oven	1 No.
13.	Sink with drain board	4 Nos.
14.	Work table with shelves and lockable sliding door	4 Nos.
15.	Walk in cooler cum freezer 1400 Ltrs.	1 No.
16.	Insecticutter	3 Nos.
17.	High pressure jet spray }	
18.	Weighing machine 10 Kg.(Avery) }	1 No.
19.	Tandoor (large) Gas }	
20.	Butchers block	3 Nos.
21.	Waste boiler	1 No.
22.	Busing trolley	1 No.
23.	Slotted angle racks	As required
24.	Pot wash area 3'x4' with hot & cold tap attachment	-do-
25.	Perforated spoon (wire mesh type)	4 Nos.
26.	Barbeque Sigri	1 No.
27.	Morter and Pestle	3 Nos.
28.	Potato masher	15 Nos.
29.	Egg slicer	15 Nos.
30.	Dosa Tawa	3 Nos.
31.	Idly Steamer	2 Nos.
32.	Gas Tandoor	
33.	Small Moulds (Assorted)	12 Nos.
34.	Lemon Squeezer	6 Nos.
35.	Non Stick Pan	6 Nos.

36.	Wooden Spatula	15 Nos.

Sl.No.	Name of the Item	Quantity

LIGHT EQUIPMENT :

1.	Brass degchi 15" dia	8 Nos.
2.	Brass degchi 20" dia }	
3.	S.S. degchi (thick bottom) 18" dia }	
4.	S.S. degchi (thick bottom) 20" dia }	6 Nos.
5.	S.S. degchi (thick bottom) 24" dia }	
6.	S.S. degchi (thick bottom) 28" dia	3 Nos.
7.	Kadai 18" dia MS	4 Nos.
8.	Kadai 24" dia MS	3 Nos.
9.	Kadai 26" dia MS	4 Nos.
10.	Khurpi 24" length including handle MS }	
11.	Khurpi 42" length MS }	
12.	Laddles (small) Brass }	
13.	Laddles (medium) Brass }	6 Nos.
14.	Laddles (large) Brass }	
15.	Perforated spoons 5" dia MS }	
16.	Perforated spoons 7" dia MS }	
17.	Perforated spoons 9" dia MS }	
18.	Collander (large SS)	3 Nos.
19.	Collender (small SS)	3 Nos.
20.	SS Trays 20"x12"x4"	18 Nos.
21.	Stock pot (medium) SS 14" dia	3 Nos.
22.	Stock pot (large) SS 20" dia	3 Nos.
23.	Knives all purpose	24 Nos.
24.	Cleavers SS	6 Nos.
25.	Grater SS	12 Nos.
26.	Chopping Board wooden	10 Nos.
27.	SS Masala Containers	36 Nos.
28.	Tongs MS	4 Nos.
29.	Tandoor skewers MS	30 Nos.
30.	Baloon whisk SS	1 No.
31.	Meat thermometer	1 No.
32.	Sugar thermometer	3 Nos.
33.	Roasting tray MS large }	
34.	Parats Brass 24" dia }	2 Nos.
35.	Parats Brass 20" dia }	
36.	Plastic storage trays (L)	10 Nos.
37.	Racks (slotted angle) SS	3 Nos.

BAKERY

Total area required   :   Desirable 900 Sq.Ft.   Min.   750 Sq.Ft.
No.of students per lab :   15 (1 per table)   15
No. of faculty   :   01   01

Sl.No.	Name of the Item		Quantity

Equipment required/student per table :

1.	Work table (wooden, box type with marble top) 3x3 ft.	}	
2.	SS bowl (small) 8" dia	}	1 No.
3.	SS bowl (large) 12" dia	}	
4.	SS Parats 18" dia	}	
5.	SS Mug		2 Nos.
6.	Rolling pin wooden	}	
7.	Egg beater	}	1 No.
8.	Wooden spoon	}	
9.	Plastic scraper		2 Nos.
10.	Table spoon SS	}	
11.	Fork SS	}	
12.	Measuring Jug Enamel	}	
13.	SS Tea Spoon	}	
14.	Measuring spoon set	}	
15.	SS Sink with drain board	}	1 No.
16.	SS degchi with flat bottom 12" dia	}	
17.	Wire Whisk	}	
18.	Comb for decoration	}	
19.	SS strainer	}	
20.	SS sieve (full set)	}	
21.	Piping bag with nozzle		1 Set

Common equipment / lab :

1.	HD Convection oven 3 decks	}	
2.	Prooving cabinet	}	
3.	Dough mixer	}	
4.	Bread slicing machine with wrapper	}	1 No.
5.	Refrigerated marble top pastry table	}	
6.	Refrigerator 300 Ltrs.	}	
7.	Cooking range 4 burners LP	}	
8.	Cooling racks trolley		2 No.

Common equipment – Light :

1.	Baking trays large 22"x14" MS	}	
	Baking trays small 11"x6" MS	}	
2.	Bread tins (400 gms)	}	
3.	Cake tins round various size :	}	
	7" dia	}	
	9" dia	}	30 Nos.
	11" dia	}	
4.	Underlining tray	}	
5.	Cake tin Rectangular :	}	
	5"x5"	}	
	7"x7"	}	
	9"x9"		10 Nos.
	11"x11"		10 Nos.
	14½"x 14½"		10 Nos.
6.	Barquette mould 3" length		30 Nos.
7.	Small whisk SS		1 No.
8.	Tartlet mould	}	
9.	Savarin mould	}	
10.	Muffin trays	}	30 Nos.
11.	Brioche mould	}	
12.	Fancy mould assorted		10 Nos.
13.	Doughnut cutter SS		6 Nos.
14.	Vol-au-vent cutter		6 Nos.
15.	Quiche mould		30 Nos.
16.	Chocolate mould assorted		10 Nos.
17.	Egg Slicer	}	
18.	Lemon squeezer	}	
19.	Can opener Heavy duty	}	6 Nos.
20.	Small brass kadai 6" dia	}	
21.	Precision scale electronic		3 Nos.
22.	Round laddle SS		10 Nos.
23.	Grater	}	
24.	Saute pan (small) Brass	}	
25.	Saute pan (medium) Brass	}	6 Nos.
26.	SS Measuring jug	}	
27.	Knives all purpose		10 Nos.
28.	Croquenmouche cone		6 Nos.
29.	Large cast iron halwai kadai		2 Nos.
30.	Jellebi thawa		2 Nos.
31.	Large frying spoon		12 Nos.
32.	Long handled wooden spoon		12 Nos.
33.	Large low level cooking stove		2 Nos.

CONFECTIONERY

Total space required	:	600 Sq.Ft.
Area for two students per table	:	15 Sq.Ft.
No. of students / lab	:	1 student per table
Faculty required	:	01

Sl.No.	Name of the Item	Quantity

Equipment required per each table (2 students) :

Sl.No.	Name of the Item	Quantity
1.	SS bowl (small) 8" dia }	
2.	SS bowl (large) 12" dia }	2 Nos.
3.	SS Parats 16" dia }	
4.	SS Mug }	
5.	Rolling pin wooden	1 No.
6.	Egg beater	1 No.
7.	Plastic scraper	2 Nos.
8.	SS measuring jug	1 No.
9.	Table spoon SS	2 Nos.
10.	Fork SS	2 Nos.
11.	Measuring spoon set	1 No.
12.	Wire whisk	1 No.
13.	SS degchi with flat bottom 12" dia	2 Nos.
14.	Piping bag with nozzle	1 Set
15.	SS strainer }	
16.	SS seive }	
17.	Chopping board wooden }	
18.	Cake stand }	1 No.
19.	Parisienne scoop }	
20.	Lemon Groover }	
21.	Knife all purpose }	
22.	Palate knife }	
23.	Wooden spoon	2 Nos.
24.	Jelly mould	2 Nos.
25.	Mould Savarin	2 Nos.
26.	Easter egg moulds }	
27.	Lemon squeezer }	
28.	Tin opener Heavy duty }	
29.	Round laddle large SS }	1 No.
30.	Grater }	
31.	Wooden spatula }	

Common Equipment :

1.	Ice cream / sorbet machine	1 No.
2.	Refrigerated counter	1 No.
3.	Fat thermometer }	
4.	Sugar meter }	2 Nos.
5.	Saccaro meter }	
6.	Electric cream whipper }	
7.	Traulsen 1400 ltrs. }	
8.	Sugar pulveriser }	
9.	Mixie }	
10.	Cooking range with 4 burners (LP) }	1 No.
11.	Convection oven }	
12.	Proving chamber }	
13.	Cooling rack }	
14.	Dough mixer }	

LARDER

Total space required   :   600 Sq.Ft.
Seating arrangement in theatre style :   15 students
No. of Instructor   :   01

Sl.No.	Name of the Item		Quantity
	Common equipment :		
1.	Walk in cooler and freezer (5000 Ltrs.)		1 No.
2.	Sinks with DB	}	
3.	Thawing tub	}	2 Nos.
4.	Work table	}	
5.	Demonstration table	}	
6.	Meat saw electric	}	
7.	Electric blender	}	
8.	Meat mincer/cutter	}	1 No.
9.	Vegetable slicer	}	
10.	Refrigerated salad counter dressing counter and bain marie	} }	
11.	Ice cube machine	}	
12.	Food storage cabinet		2 Nos.
13.	Special equipment cabinet	}	
14.	Ice Bain marie	}	
15.	Steamer	}	1 No.
16.	Gas range with overhead hoods 4 burner LP	}	
17.	Overhead shelving		2 Nos.
18.	Egg slicer	}	
19.	Pot washing sinc	}	
20.	Force meat filler for sausages	}	1 No.
21.	Carcass hanger	}	
22.	Vacumiser	}	
23.	Weighing scale electronic	}	
	Light equipment :		
1.	Boning knife	}	
2.	French knife	}	
3.	Fillet knife	}	1 No.
4.	Paring knife	}	
5.	Garnishing knife	}	

6.	Carving knife	}	
7.	Fruit knife	}	
8.	Citrous fruit knife	}	
9.	Sharpening grinds hollow, rol, flat, concave	}	
10.	Butter curler	}	1 No.
11.	Metal cutter	}	
12.	Can and wine opener	}	
13.	Aspic cutters	}	
14.	Egg slicer	}	
15.	Mandoline		2 Nos.
16.	Mould – various shapes & sizes	}	
17.	Parisienne scoops 4 sizes	}	
18.	Piping bag with nozzle	}	1 No.
19.	Patty pan	}	
20.	Pastry brush	}	
21.	Spatula SS		2 Nos.
22.	Tweezer	}	
23.	Peeler	}	
24.	Grater SS	}	
25.	Vegetable scorer	}	
26.	Ice pick	}	
27.	Ice crusher	}	
28.	Concentric circle cutter	}	
29.	Chinese flower cutter	}	1 No.
30.	Chinese cleaver	}	
31.	Chinese sculpting tools	}	
32.	Bamboo skewers	}	
33.	Grape scissors	}	
34.	Scissors	}	
35.	Needle nose plier	}	
36.	Pate mould	}	
37.	Terrine mould	}	
38.	Food mirror (various sizes)		10 Nos.
39.	Rolling pin wooden	}	
40.	SS degchi 12" dia	}	1 No.
41.	SS degchi 10" dia	}	
42.	Fish poacher		2 Nos.

DEMONSTRATION KITCHEN

Total space required	:	600 Sq.Ft./ 450 Sq.Ft.
No. of students	:	15 students
Area per student	:	40 Sq.ft.
No. of Instructor	:	01

Sl.No.	Name of the Item	Quantity

Equipment :

1.	Heinged Mirror	}
2.	Demonstration working table	}
3.	Two sinks with drain board	}
4.	Cooking range 4 burner with oven	}
5.	Salamander	}
6.	Basin – marie with hot case each	} 1 No.
7.	Refrigerator	}
8.	Racks/micro wave oven	}
9.	Geyzer	}
10.	Griddle plate	}
11.	Deep fet frayer (electric)	}

Tools :

1.	Degchis assorted - 8", 12", 14"	}
2.	Karai (Big & Small)	}
3.	Sauce pan	}
4.	Frying pan	}
5.	Non sticking pan	}
6.	Thalis (steel)	}
7.	Trays (steel)	}
8.	Rolling pan	}
9.	Fish slicer	}
10.	Flat spoon	} As per requirement
11.	Conical strainer SS	}
12.	Round spoon	}
13.	Peeler	}
14.	Knives (set)	}
15.	Grater	}
16.	Potato mesher	}
17.	Wooden spoons	}

18.	Roasting fork	}	
19.	Carving knife	}	
20.	Carving fork	}	
21.	White chopping board	}	As per requirement
22.	Soup strainer (mesh wire)	}	
23.	Mugs SS	}	

Presentation equipment and tools :

1.	Display mirrors	}	
2.	Platters	}	
3.	Entree dishes	}	As per requirement
4.	Dessert salvan	}	
5.	Porcelin, glass and wooden bowls, assorted	}	

COMPREHENSIVE LIST OF STANDARD EQUIPMENT FOR GENERAL STORES

OVERALL SIZE : 800 Sq.Ft. / 600 Sq.Ft.

Sl.No.	Name of the Item	Quantity

Furniture :

1.	Steel cup board	1 No.
2.	Filing cabinet 4 drawer	1 No.
3.	Store keeper table	2 Nos.
4.	Chair	2Nos.
5.	Issue counter with under shelves	1 No.
6.	File rack	1 No.
7.	Slotted angle racks	5 Nos.
8.	wooden pallete	11 Nos.
9.	Computer table }	
10.	Printer table }	1 No.
11.	Receiving platform }	
12.	Aluminium platform }	

Equipment :

1.	Platforms scale 300 Kg. }	
2.	Weighing scale 10 kg. }	1 No.
3.	Electronic scale }	
4.	Storage bins	20 Nos.
5.	Onion potato storage bin	1 No.
6.	Plastic containers	As per requirement
7.	Waste bin }	
8.	Sink with DB }	
9.	Exhaust fan }	1 No.
10.	Trolley light weight }	
11.	Aluminium ladder with 4 step}	
12.	Wooden block }	

Storage equipment :

1.	walk in deep freezer 5000 Ltrs.	1 No.
2.	Walk in cooler 7000 Ltrs.	1 No.
3.	Trays for storage of meat in freezer	As per requirement
4.	Plastic crates	-do-
5.	Ladder (metal)	-do-

EQUIPMENT LIST

Department   :   F & B Service

TRAINING RESTAURANT :

Overall Size   :   Max. 1440 Sq.Ft.   Min. 1440 Sq.Ft. + Pantry area of 480 Sq.Ft.
(The restaurant is proposed to have a 60 covers having 15 tables)

No. of Students   :   15
Faculty required   :   01

Sl.No.	Name of the Item	Quantity

FURNITURE :

1.	Table (wooden 3"x3"x2½" H)	15 Nos.
	Instructor's Table	1 No.
2.	Chairs (dining) wooden upholstered	60+5 extra
3.	Side Boards 4'x1.5'x48 H	8 Nos.
4.	White Boards 5'x3'	1 No.

LINEN :

1.	Table cloth	}
2.	Baize cloth	} As per
3.	Napkins	} Requirement
4.	Runners for sideboard (optional)	}

CUTLERY (STAINLESS STEEL) :

1.	Small knife	}
2.	Large knife	}
3.	Large fork	}
4.	Large spoons	}
5.	Dessert spoons	}
6.	Dessert fork	}
7.	Fish knife	}
8.	Fish fork	}
9.	Soup spoons	}
10.	Butter knife	} As per requirement
11.	Tea spoons	}

12.	Coffee spoons	}	
13.	Ice cream spoons	}	
14.	Fruit knife	}	
15.	Fruit fork	}	
16.	Pastry fork	}	As per requirement
17.	Steak knives	}	
18.	Jam spoon	}	
19.	Service spoon	}	
20.	Service fork	}	

CROCKERY :

1.	Large plates (full plates) 10"	}	
2.	Half plates 9"	}	
3.	B&B plates	}	
4.	Soup cups with saucers	}	
5.	Show plate (can be 11" submitted with EPNS)	}	
6.	Cereal bowl 5" dia	}	As per requirement
7.	Breakfast cups/saucers 8 floz	}	
8.	Tea cups/saucers 6 floz	}	
9.	Demitasse/saucers 3 floz	}	
10.	Consomme cups/saucers 8 floz	}	
11.	Egg cups	}	
12.	Ash trays	}	
13.	Budvases	}	
14.	Cruet sets	}	

HOLLOW WARE 7 FLATWARE (Stainless Steel) :

1.	Wager jugs	}	
2.	Tea pot (2 portions)	}	
3.	Tea pot (4 portions)	}	
4.	Milk pot	}	
5.	Hot water jugs	}	
6.	Coffee pots (2 portions)	}	
7.	Coffee pots (4 portions)	}	
8.	Creamer	}	
9.	Sugar bowls	}	As per requirement
10.	Butter dishes	}	
11.	Ice creams cups	}	
12.	Finger bowls	}	
13.	Menu stands	}	
14.	Sauce boats with ladles	}	
15.	Tea strainer/slop basin	}	
16.	Ash trays	}	
17.	Straw holder	}	

18.	Toothpick holder	}
19.	Candle holder	}
20.	Entrée dishes single compt. (2 portions)	}
21.	Entrée dishes single compt. (2 portions)	}
22.	Entrée dishes single compt. (2 portions)	}
23.	Entrée dishes double compt. (4 portions)	}
24.	Platter 2 portions (oval)	}
25.	Platter 4 portions (oval)	}
26.	Platter small (round)	}
27.	Platter medium (round)	} As per requirement
28.	Restaurant trays (small)	}
29.	Restaurant trays (medium)	}
30.	Sugar tongs	}
31.	Ice bucket	}
32.	Ice tongs	}
33.	Toast racks	}
34.	Chill cups with stands	}
35.	Restaurant salvers	}
36.	Mustard spoons	}
37.	Food covers	}

GLASSWARE :

1.	Water tumbler (high ball)	}
2.	Water goblets	}
3.	Juice glasses / pony tumblers	}
4.	Tom collins	}
5.	Jam & mustard pots / chutney bowls	}
6.	Glass bowls	}
7.	Beer goblets	}
8.	Draught beer glass	}
9.	White wine glass	}
10.	Red wine glass	}
11.	Parisian goblets	}
12.	Claret glass	}
13.	Sherry elgin	}
14.	Sherry copita	} As pre requirement
15.	Port wine glass	}
16.	Hock glasses	}
17.	Moselle glass	}
18.	Champagne tulip	}
19.	Champagne flute	}
20.	Champagne saucer	}
21.	Cocktail glass	}
22.	Brandy balloon	}
23.	Liqueur glass (straight)	}

24.	Liqueur glass (standard)	}	
25.	Old fashioned	}	
26.	On the rocks glass	}	
27.	Roly poly	}	
28.	Parfait glass	}	As per requirement
29.	Decanter	}	
30.	Coffee caraffee	}	
31.	Martini glass	}	
32.	Sour glass	}	

SPECIAL EQUIPMENTS :

1.	Soup tureens (single portion)	}	
2.	Horsd'oeuvre tray	}	
3.	Wine bucket stand	}	
4.	Pastry tongs	}	
5.	Nut cracker	}	
6.	Gateaux slicer	}	
7.	Pepper mill	}	
8.	Nutmeg grater	}	
9.	Cigar cutter	}	
10.	Cocktail shaker	}	
11.	Hawthrone straner	}	
12.	Bar spoon	}	
13.	Ice picks	}	
14.	Peg measure	}	
15.	Optic measure	}	
16.	Check-flow pourer	}	
17.	Push up measure pourer	}	
18.	Ice cream scoop	}	As per requirement
19.	Bottle stand	}	
20.	Wine rack	}	
21.	Hydrometer	}	
22.	Avocado dish	}	
23.	Asparagus plate	}	
24.	Asparagus tongs	}	
25.	Egg dish (round ear)	}	
26.	Fish dish (oval eared)	}	
27.	Oyster dish/plate	}	
28.	Oyster fork	}	
29.	Snail dish	}	
30.	Snail fork	}	
31.	Snail tong	}	
32.	Parfait spoon	}	
33.	Salad dish	}	
34.	Cheese knife	}	

35.	Grape fruit knife	}	
36.	Grape fruit spoon	}	
37.	Lobster cracker	}	
38.	Lobster pick	}	
39.	Corn on the cob holder	}	
40.	Grape scissors	}	
41.	Caviar knife	}	
42.	Fondue fork/dish	}	
43.	Carving set	}	
44.	Cheese board	}	
45.	Skewers (stainless steel with wooden handle)}		
46.	Oil & vinegar cruet	}	
47.	Sugar dredger EPNS	}	
48.	Rechaud battery	}	
49.	Fruit basket	}	
50.	Gateaux stand	}	
51.	Chopping board	}	As per requirement
52.	Table numbers	}	
53.	Waiters friend SS	}	
54.	Angels's wings	}	
55.	Crown cap opener	}	
56.	Can opener	}	
57.	Wine craddle	}	
58.	Ice shaver	}	
59.	Broken cork extractor	}	
60.	Corking machine	}	
61.	Citrus squeezer SS	}	
62.	Funnel SS	}	
63.	Bar mixing glass SS	}	
64.	Swizzle stick	}	
65.	Muddler	}	
66.	Cocktail sticks	}	

BEVERAGE LAB WITH BUILT IN BAR AREA OF 200 SQ.FT.

Overall size　：　　　800 Sq.Ft.

| Sl.No. | Name of the Item | | Quantity |

FURNITURE :

No.	Item		Quantity
1.	Bar counter	(size, shape etc. as per requirement)	1 No.
2.	Back bar with display	-do-	1 No.
3.	Bar stools		8 Nos.
4.	Dry storage area		As per requirement

EQUIPMENT :

No.	Item		Quantity
1.	Ice cube machine	}	
2.	Bottle cooler	}	
3.	Ice chest (crushed ice)	}	
4.	Ice chest (cube ice)	}	1 No.
5.	Cocktail blender	}	
6.	High speed mixer blender	}	
7.	Jice extractor	}	
8.	Cocktail shaker (EPNS)		4 Nos.
9.	Hawthrone strainer		4 Nos.
10.	Ice bucket with tongs		6 Nos.
11.	Bottle stand		6 Nos.
12.	Peg measure		2 Nos.
13.	Sink with drain board		1 No.
14.	Citrus squeezer	}	
15.	Cigar cutter	}	2 Nos.
16.	Chopping board	}	
17.	Knife		1 No.
18.	Paring knife		1 No.
19.	Zester		2 Nos.
20.	Wine cooler		6 Nos.
21.	Wine craddle		6 Nos.
22.	Cigar box		2 Nos.
23.	Ice flake machine		1 No.
24.	Glass chilling cabinet		1 No.

GLASSWARE :

No.	Item		Quantity
1.	Brandy balloons 23-28 CL	}	
2.	Champagne flute 18-23 CL	}	
3.	Champagne Saucer 18-23 CL	}	As per requirement
4.	Tom collins 25 CL	}	
5.	Beer mugs & tankard 25, 50 CL	}	
6.	White wine glasses 14 CL	}	

7.	Red wine glass 14-18 CL	}	
8.	Cocktail glass 14-18 CL	}	
9.	Liqueur glass 4,7 CL	}	
10.	Old fashioned glass	}	
11.	On the rocks flass	}	
12.	Martini glass	}	
13.	Wine caraffe	}	As per requirement
14.	Soda caraffe	}	
15.	Water caraffe	}	
16.	Rolly polly	}	
17.	Sherry glass 4,7 cl	}	
18.	Port glass	}	
19.	Hock glass	}	
20.	Mosselle glass	}	
21.	Pool gloves	}	

STUDENTS DINING HALL

Total Area   :   Max. 1125 Sq.Ft.   Min.900 Sq.ft.

No. of students expected to have lunch at a time :   75

Sl.No.	Name of the Item	Quantity

----

1.   Tables 6'x3' (wooden table with laminated topy
                    Heavy duty or steel)   24 Nos.
2.   Dining chairs (wooden or steel with straight back rest)   180 Nos.

3.   Service Counter :
        a) Hot case   }
        b) Display counter   }   01 No.
        c) Dispenser counter for plates & cutlery   }
        d) Tray slide for the entire length   }

4.   Toaster (large industrial model)   01 No.
5.   Compartmental trays (thalis 304 SS Salem Steel 16SWG)   180 Nos.
6.   Dessert spoons   }
7.   Dessert forks   }   360 Nos.
8.   Kattori SS (small SS bowl) }
9.   Tea spoons   180 Nos.
10.   SS water tumbler   180 Nos.
11.   SS water jugs   24 Nos.
12.   Water cooler with Aqua Guard (large industrial model)   03 Nos.
13.   Large round service spoons SS 16 SWG   36 Nos.
14.   SS Soup bowls   180 Nos.
15.   SS   24 Sets

SCULLERY AREA :

1.   Cupboards for storage of cutlery/trays etc.   06 Nos.
2.   Dish landing table   02 Nos.
3.   Pulvariser   01 No.
4.   Conveyor type large dish washing machine   01 No.
        with drying zone with trays   02 Nos.
5.   Trolleys (for carrying food from QFK to Dining Hall)   04 Nos.
6.   Trolleys for stacking dirty plates for washing   06 Nos.
7.   Waste bins   01 No.
8.   Music system

HOUSEKEEPING REQUIREMENT

Dedicated area   :   Laundry   –   450/450Sq.Ft;
                                             Linen Room   –   200/150 Sq.Ft.
                                             Housekeeping Lab   –   450/450 Sq.Ft.
                                             Demo Lab   –   400/400 Sq.Ft.
                                             Guest Room   –   1500/1500 Sq.Ft.

No. of students per session   :   15
No. of guest rooms   :   04
No. of restaurant covers   :   60

ELECTRICAL CLEANING EQUIPMENT :

Sl.No.	Name of the Item	Quantity

----

1.   Vacuum Cleaner (dry pickup industrial model)   2 Nos.

2.   Vacuum Cleaner (wet & dry pickup indl. Model)   1 No.

3.   Scrubbing-cum-Polishing machine   1 No.
         (with suction facility 51cm cleaning path, 38 lt. solution
          tank and 45 lt. Recovery tank)

4.   Carpet shampooing machine   1 No.
         (with suction facility 13 lt. Capacity/13" cleaning path
          1200 RPM brush rotation)

NON-ELECTRICAL CLEANING EQUIPMENT :

1.   Brooms :
         a) Soft   }
         b) Hard   }   As per requirement
         c) Yard broom   }

2.   Brushes : (all are to be made of nylon bristles)
         a) Carpet brush   }
         b) Hand scrubber   }
         c) T-scrubber   }
         d) WC brush   }   As per requirement
         e) Upholstery brush   }
         f) Ceiling broom   }
         g) Washbasin brush   }

3.	Mops :
	a)	with detachable/fixed heads				As per requirement

4.	Squeegees							As per requirement

5.	Box sweeper							1 No.

6.	Containers :

	a)	Buckets – 25 Ltr. Capacity		}
	b)	Mugs					}
	c)	Bowls					}		As per requirement
	d)	Dust bins				}
	e)	Chamber maid's box			}
	f)	Maid's trolley			-------			1 No.
		-	dimensions in mm 1540x575x1385
		-	Light weight frame (net wt. not to exceed 62 kg.)
		-	Average load capacity 100 Kg.
		-	Adjustable shelves – 3 nos.
		-	Space between shelves – 305 mm
		-	With compartmentalised top section using laminated ply
		-	Linen hamper – canvas (100 L cap.) and
			garage hamper – plastic (80 L cap.)
		-	Castor size – 250 mm / 2 fixed and 2 swivel with breaks
		-	Bumpers – wheel type (horizontal)

	g)	Mop wringer trolley		--		As per requirement

	h)	Cleaning trolley			--			-do-
		-	sack holder with cover basked to hold cleaning material
			hooks for dust pan, hand brush etc.
		-	2 buckets (25 Lt. Cap. Each)
		-	Mop wringer attached above one bucket.

7.	Floor signs				--			-do-
	-	24" Ht. 'Caution-Wet Floor'
	-	'Caution-Work Area'
	-	Yellow colored board with black lettering

LAUNDRY EQUIPMENT

Size   :   450 Sq.Ft. + 200 Sq.Ft. Linen Room

Sl.No.	Name of the Item	Quantity
1.	Washer extractor (5 kg. Cap – one, top loading-fully automatic Agitator type with temp. control) (10kg. Cap – one, front loading with temp. control)	2 Nos.
2.	Dryer (capacity 20 Kg.)	1 No.
3.	Calendering machine (with one roller width 100")	1 No.
4.	Steam press (with cuff & collar press hand operated)	1 No.
5.	Iron (light weight – one & heavy duty- one)	2 Nos.
6.	Ironing board (foldable)	1 No.
7.	Sinks (stainless steel with drain board)	2 Nos.
8.	Weighing scale (with a holding basket to weigh upto 25 kg)	1 No.
9.	Linen basket trolley (stainless steel with draining facility 820mm Ht.x 65mm Wx 740 mm L - 4 swivel castors)	3 Nos.
10.	Shelf (for storing chemicals with lockable doors, Particle board laminate finish dimensions 1200mm H x 900 mm L x 600 mm D - 3 shelves adjustable)	1 No.
11.	Exhaust Fan (one above dryer and one above steam press)	- As per requirement
12.	Shelves (for storing linen & uniforms, wood laminated with Sliding lockable ventilated doors) - -do-	
	a) Dimensions – 2100mm H x 600mm D x 2100mm W adjustable shelves – 4 Nos.	2 Nos.
	b) Dimensions – 2100mm x 600mm x 2100mm Shelves – 2 with rods for hanging uniforms	1 No.
13.	Ladder (aluminium A type 1200 mm height)	1 No.
14.	Inspection table (2100mm x 1200mm wood laminate with storage facility underneath with 2 shelves on either side of 600 mm depth)	1 No.

Note :   Linen room be next to Laundry.

TRAINING GUEST ROOM

Double Bed Room : Total area earmarked   -   1500 Sq.Ft.

Sl.No.   Name of the Item   Quantity

FURNITURE PER ROOM:

1.	Bed with side tables		2 Nos.
2.	Single sofa chair with uphosty or		1 No.
	Small size two seater sofa		
3.	Glass top tea table/coffee table		1 No.
4.	Study table		1 No.
5.	Study chairs		2 Nos.
6.	Mirror with dressing table & drawers	}	
7.	Luggage rack	}	1 No.
8.	Wardrobe	}	
9.	Shelf over fridge for glasses & thermos	}	

LIGHT ELECTRICAL EQUIPMENT & PAINTING :

1.	Geyser (20 ltrs.)	1 No.
2.	Table lamp	3 Nos.
3.	Pedestal lamp	1 No.
4.	Color TV with remote	1 No.
5.	Music system	1 No.
6.	Mini fridge	1 No.
7.	2'x1½' painting/wall hangings	3 Nos.
8.	Thermos flask	1 No.

FURNISHING & LINEN :

1.	Shear curtain	1 No.
2.	Heavy curtain	1 No.
3.	Cushions for sofa chairs	4 Nos.
4.	Double bed sheet	2 Nos.
5.	Pillow covers	4 Nos.
6.	Bed cover	1 No.
7.	Bath towel	2 Nos.
8.	Hand towel	2 Nos.
9.	Bath mat	1 Nos.

OTHER ITEMS :

1.	Shower curtain	}	
2.	Towel rack with pull up type cloth lining	}	
3.	Energy saving device system	}	
4.	Electronic locking device on main door	}	1 No.
5.	Telephone (electronic & light weight)	}	
6.	Door bell & Indicator for DND	}	

SUITE ROOM :

1.   Double bed room
2.   Bath room (attached)
3.   Lounge/sitting room/dining area
4.   Carpets, furnishing, furniture & fixtures
5.   Electronic locking system, airconditioning,
       Energy saving device, entertainment systems

FRONT OFFICE REQUIREMENT

Area   :   400 Sq.Ft.

Sl.No.   Name of the Item   Quantity

FURNITURE :

1.   Front Office Counter   1 No.

      6'L x 1½'B x 3½'H with drawer – 3 Nos.
      Cabinets –3 Nos., Top & Sides - laminated
      Reception, Cash & Information sigh boards
      Registration card holder – recessed with 28 slots with
      facility for recessed monitors & sliding key board
      recessed message & key rack at the centre teak wood.

2.   a) Lobby Desk   1 No.
         3'L x 2'B x 2'H with drawer – 1no., cabinet – 1 no. on
         right side, top & sides laminated – teak wood.

      b) Chair (upholstered – teak wood)   3 Nos.

3.   Bell Desk   1 No.
      4' H semi circular, with drawers 2 nos. cabinets –2 nos.
      teak wood.

EQUIPMENT :

1.   Computer – linked by LAN with multi media facility -
      Fidelio Software system

2.   Room Rack (standard specification)   1 No.

3.   Date & Time stamping machine (standard specification)   1 No.
4.   Electric Calling Bell (Standard specification)   1 No.
5.   Telephone :
      a) Operator Console   1 No.
      b) Instruments   1 No.
6.   Postal Scale (digital-1kg.capacity)   1 No.

7.	Folio Bucket (2'L x 2'B x 1'H with slots of ½" teak wood)	1 No.
8.	Bulletin Board (3'L x 2.5'B with baize cover)	1 No.
9.	Public Address System (standard specification)	1 No.
10.	Credit Card Imprinter (Standard specification)	1 No.
11.	Luggage Net – small (Nylon)	1 No.
12.	Guest Folio Tray (Plastic)	1 No.
13.	Printer (80 column)	1 No.
14.	Exchange Rates Board (2'L x 2'B Prestosign type)	1 No.
15.	Box Files	6 Nos.
16.	Safe Deposit Box (standard specification)	1 No.
17.	Paging Board (1'L x ½'B with handle & bells attached, White board, teak wood)	1 No.
18.	Postage Folder (with pockets - leather)	1 No.

RESERVATION OFFICE :

1.	Table 3'L x 2'B x 2'H with drawer-1 No., Cabinet – 1 No. on right side – Top & Sides laminated, with facility for recessed monitors and sliding key board, teak wood.	1 No.
2.	Chair – Swivel type	1 No.
3.	Head set with mouth piece	1 No.
4.	Wall mounted rack (3'L x 2'B x 1'D - Teak wood)	1 No.
5.	Space Availability Board (3'L x 2.5' with pegs for Indicating availability - Particle board)	1 No.

A COMPREHENSIVE LIST OF STATEMENT FOR COMPUTER LAB

Overall size of the Lab   -   750 Sq.Ft.
No. of students   -   15 / Lab
Faculty required   -   01 / Lab

COMPUTER HARDWARE REQUIREMENT :

A.   SERVER :

Sl.No.   Name of the Item   Quantity
----

1.   FILESERVER   1 No.

- Intel Core i9-latest generation
- Desktop Processor 8 Cores up to 5.1GHz 16MB Cache,
- RTX 3060 12GB, 32GB DDR4 3000Mhz,
- 1TB SSD,
- HDD hard disk 10TB (for backup of all computers)
- Win 10 or above,
- DVD Writer
- High Speed Serial Ports
- Keyboard
- Mouse
- Monitor (60.9 cm (24") Screen, IPS Screen or latest, Monitor Format: Full HD,
- Monitor Features: Standard 1 x HDMI Port)

2.   NODES   30 Nos.

- Intel Core i7 latest generation or above
- Desktop Processor 4 Cores or above
- RTX 3060 12GB, 32GB DDR4 3000Mhz,
- 1TB SSD,
- Win 10 or above,
- DVD Writer
- High Speed Serial Ports
- Keyboard
- Mouse
- Monitor (60.9 cm (24") Screen, IPS Screen or latest, Monitor Format: Full HD,
- Monitor Features: Standard 1 x HDMI Port)
- Six machines to have multimedia kit

3.   NODE FOR TEACHER   1 No.

- Intel Core i7 or above confoguation-11th Gen
- Desktop Processor 4 Cores up to 2.3GHz 8MB Cache or above,
- 8GB or above DDR4
- 1TB SSD,
- Win 10 or above,
- DVD Writer
- High Speed Serial Ports
- Keyboard
- Mouse
- Monitor (60.9 cm (24") Screen, IPS Screen or latest, Monitor Format: Full HD,
- Monitor Features: Standard 1 x HDMI Port)
- Multimedia kit

4.   HUBS
      a) 12 Port Hub with BNC/RJ 45 connection} Depending on locational - 2 Nos.
      b)   8 Port Hub with BNC-RJ 47 connection   } requirements.   - 2 Nos.

5.   LASERJET PRINTER   2 No.

- Printer TypeLASERJETPRINTER
- Printer Output - Monochrome Compact
- Connectivity - Wi-Fi Support, Network connectivity Support for Reliable.
- Printer cum scanner
- Auto-Duplex Printing

6.   LCD display   1 No.

7.   Airconditioning for Computer Lab (1000 Sq.Ft. 8.5 Tonnes)

8.   5 KVA UPS with battery backup of minimum 4 hours   2 Nos.

9.   Local Area Network aras : Cat-5 WTP.

      1) Principal Office
      2) General Office
      3) Stores
      4) Restaurant
      5) Reception

6) Library
7) All Laboratories (Four)

GENERAL COMPUTER SOFTWARE SPECIFICATION :

1.   Window NT Server with Clint for 30 users (CD).

2.   MS Windows (latest) or higher & Micro Software Office (CD) professional
        version.

3.   Word Star 7.

4.   Fox Pro for Windows.

5.   MS Office (latest Version)

Note : Main server shall be located in the Computer Lab and computers in Stores, Labs,
        Administration, etc. shall be linked by LAN.

        In view of adoption of the Micros Fidelio property management software for
        training by National Council, the configuration of the Hardware given shall be
        able to handle the Micros Fidelio software system.

FOOD SCIENCE LAB/QUALITY CONTROL

Overall Size   :   Max. 450 Sq.Ft.   Min. 450 Sq.Ft.
No. of Students   :   15
Faculty Required :   01

Sl.No.	Name of the Item	Quantity
1.	Clinical Laboratory Table with all fittings including sink	4 Nos.
2.	Stools	15 No.
3.	Instructor's Table	1 No.
4.	Chair	1 No.
5.	White Board	1 No.
6.	Cupboard for equipment	1 No.
7.	Air Conditioner	1 No.

EQUIPMENT :

1.	Autoclave	1 No.
2.	Incubator (bacteriological)	1 No.
3.	Colony Counter	1 No.
4.	Microscope	05 No.
5.	Refrigerator	01 No.
6.	Hot air oven	01 No.
7.	Weighing Balance	01 No.
8.	Hot water bath	01 No.
9.	Centrifugal machine	01 No.
10.	Shaking machine	01 No.
11.	Fermenter	01 No.
12.	Electronic Balance (Monopan Balance)	01 No.
13.	Gas Burner (Binsen burner)	05 No.
14.	Gas Range	02 No.
15.	Water Distillation apparatus	01 No.

TOOLS :

1.	Test Tubes	As per requirement
2.	Petri dishes	100 Nos.

3.	Conical Flasks	30 No.
	-do-	15 No.
4.	Burettes	10 No.
5.	Pipettes	30 No.
6.	Measuring Cylinders	15 No.
	-do-	30 No.
7.	Test Tube Rack	15 No.
	-do-	15 No.
8.	Test Tube Holder	15 No.
9.	Innoculating Loop	15 No.
10.	Glass Slides	06 Pkt.
11.	Cover slips	06 Pkt.
12.	Oil Impression Lense	
13.	Glass marking pencil	02 No.
14.	Mortar	08 No.
15.	Tripod Stand	08 No.
16.	Beakers	15 No.
	-do-	15 No.
	-do-	15 No.
17.	Burette Stand	15 No.
18.	Pipette Stand	15 No.
19.	Procelene Tiles	15 No.
20.	S.S. Degchi	15 No.
21.	Plastic Buckets	02 No.
22.	Waste Bin	02 No.
23.	S.S.Mug	15 No.
24.	Regent Bottles (Dropping Bottles)	30 No.
25.	Regent Bottles (1 Lt.Cap)	12 No.
26.	Tongs	12 No.
27.	Measuring Spoon	02 No.
28.	Spatula	12 No.
29.	Funnels	15 No.
30.	Funnel Big	15 No.

STANDARDISED LIST
AUDIO-VISUAL AND REPRODUCTION EQUIPMENT

For Audio-Visual Lab : Area - 900 Sq.Ft. / 750 Sq.Ft.

Sl.No.	Name of the Item		Quantity

Sl.No.	Name of the Item		Quantity
1.	Overhead Projector	-	fitted in each class
2.	Trolley for OHP	-	-do-
3.	Transparency Sheets	}	
4.	Transparency frames	}	
5.	Marking pens-permanent	}	As per requirement
6.	Marking pens-water soluble	}	
7.	Transparency erasers	}	
8.	Slide Projector		1 No.
9.	Slide Trays (for 50 slides)	-	As per requirement
10.	Carousel Slide Projector	-	-do-
11.	Projection Screen-wall/elling for each less	}	
12.	Video Cassette Recorder	}	
13.	Colour TV / Monitor	}	
14.	Portable Cassette Recorder	}	1 No.
15.	Multi-media	}	
16.	Photocopier	}	
17.	Electronic stencil cutter	}	
18.	Flip Board – Portable - for slip charts	-	As per requirement
19.	Flannel Board – Portable	}	
20.	Magnetic Board – Portable	}	1 No.
21.	Dest Top Publishing Machine	}	

LIBRARY

Minimum / Maximum Size   :   1500 Sq.Ft. / 1000 Sq.Ft.
Desirable Staff   :   Librarian – 1 ;   Asstt. Librarian - 1

Sl.No.	Name of the Item	Quantity
1.	Books	500 Nos.
2.	Periodicals & Journals (International/National)	500 Nos.
3.	Video Cassettes / Video CD ROMs	50 Nos.
4.	Furniture for sitting	
5.	Storewells / Book Racks	
6.	Cabins (10'x10') fitted with computer terminal and Multi media with head phones	2 Nos.
7.	Xerox machine	1 No.
8.	Library Equipment :	

- Computer
- TV
- Printer
- Cutter
- D.V.System
- Catalogue Systems
- Librarian Chair & Table
- Asstt. Librarian Chair / Table

Note   :   Every year min. 50 to 100 books should be added to Library and International/ National Journals should be subscribed.

LANGUAGE LAB

Area   :   Max./Min. 600 Sq.Ft.

The language lab for 15 students is to be provided with a view to improve the communication skills of the students, both verbal and non-verbal.

Sl.No.	Name of the Item	Quantity

Sl.No.	Name of the Item	Quantity
1.	Tape Recorder – Double Deck with provision for high speed dubbing, Radio and CD Player	1 No.
2.	Amplifier 100M	1 No.
3.	Over head Speakers	1 No.
4.	Head phones with socket (one on each seat for every student)	25 Nos.
5.	TV (preferable) home viewing system with Karaoke	1 No.
6.	VCR / VRP	1 No.
7.	Computer	1 No.
8.	Multi media with head phone system	1 No.
9.	Good Audio / Video Cassettes	30 Nos.

(Alternatively, it is suggested that a full fledged language lab with facilities may be installed in institutes)

A COMPREHENSIVE LIST OF STANDARDISED EQUIPMENT
FOR MAINTENANCE DEPARTMENT

MAINTENANCE LAB :

Overall Size   :   450 Sq.Ft.

Sl.No.	Name of the Item	Quantity
1.	Multimeter	1 No.
2.	Tong-tester	2 Nos.
3.	Hydrometer	1 No.
4.	Test lamp	2 Nos.
5.	Hydrolic pump	1 No.
6.	Megger insulation & Earth megger	1 Each

TOOLS :

Sl.No.	Name of the Item	Quantity
1.	Screw driver (flat type)	}
2.	Screw driver (Star)	}
3.	Screw driver	}
4.	Spanner (double and open)	}
5.	Ring spanner	}
6.	Box spanner	}
7.	Hack saw	}
8.	Wood saw	}
9.	Pipe wrench	}
10.	Adjustable spanner	}
11.	Combination pliers	} As per requirement
12.	Nose pliers	}
13.	Wire cutter	}
14.	Skipper or insulation	}
15.	Files flat	}
	Rough	}
	Smooth	}
		}
	Round file	}
	Rough	}
	Smooth	}
		}

	Triangular file	}
	Rough	}
	Smooth	}
		}
16.	Allen key	}
17.	Hammer	}
18.	Chisel (cold)	}
19.	Carpenter chisel	}
20.	Carpenter plainer	}
21.	Pocker	}
22.	Punch	} As per requirement
23.	Drilling machine electric with drill bit set	}
24.	Drilling machine (hand drill)	}
25.	Bench vice	}
26.	Thread making machine with full set with different size of die	}
27.	Bearing puller small	}
28.	Lubricating oil can	}
29.	Oil pump (manual)	}

MAINTENANCE PRACTICAL (DEMO)

1. Earth leakage circuit breaker
2. Miniature circuit breaker
3. ICDP
4. ICTP
5. Kit kar fuse
6. HRC fuse
7. Three phase five core cable
8. Single phase three core cable
9. Bib tap
10. Piller tap
11. Cotta stone
    Cadappa stone
12. Switches :
    a) Flush type
    b) Single way flush type
    c) Three in one
    d) Five in one
13. Three pin
14. Three pin top
15. Plumbing accessories
16. Gas fitting like
17. Practical demo board (wiring)   }
18. Condensor   }   1 No.
19. Boiler   }

OFFICE AUTOMATION EQUIPMENT

Sl.No.   Name of the Item   Quantity

Sl.No.	Name of the Item		Quantity
1.	E-Mail facility and Internet connection	}	
2.	Fax	}	
3.	Xerox	}	
4.	Lamination machine	}	
5.	Comb binder + Paper cutter	}	
6.	Public address system	}	
7.	Telephone answering system	}	Any standard make
	(available with Modi fax)	}	
		}	
8.	Dictaphone	}	
9.	Scanner	}	
10.	Laser Printer	}	
11.	Document Shredder	}	
12.	Computer System through LAN	}	

13. Software :
   a) Accounting & Management Software
   b) Inventory & Stores Management Software
   c) Library Software
   d) Teaching software; CD ROMS; Computer, Power point.

EQUIPMENT FOR EACH CLASS / TUTORIAL ROOM

Sl.No.	Name of the Item	Quantity

1.	Overhead Projector (fitted)		}

	}

2.	White Board		}

	}

3.	Black Board		}

	}			1 No.

4.	Teacher's platform (wooden)		}

	}

5.	Teacher's Chair		}

	}

6.	Teacher's Table		}

7.	Chairs with under shelves with writing board facility

8.	Curtains as per requirement

9.	Facilities to use CD ROMS, Power point etc.

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i)   <u>**Gas Bank**</u> :

Well laid out distribution lines from gas bank as per the conditions laid down in the   Indian Explosives Act.

ii)   <u>**Stand by heavy duty Generator**</u> :

In areas where electricity is in short supply, the appropriate heavy duty Gen set is recommended for installation.