

STUDY & EVALUATION SCHEME FOR  
TWO YEAR DIPLOMA COURSE IN HOME SCIENCE  
(Effective from the session 2009-2010 )

I YEAR

Curriculum					S U B J E C T	Scheme of Examination									
Periods Per Week						Theory			Practical			Grand Total			
Lecture	Tutorial	Drig.	Lab.	Work Shop		Examination	Sess.	Total	Examination	Sess.	Total				
					Dur.	Marks	Marks	Dur.	Marks	Marks					
3	-	-	2	--	5	1.1 Professional Communication	2.5	50	20	70	3	20	10	30	100
3	-	-	3	--	6	1.2 Physiology & First Aid.	2.5	50	20	70	3	55	25	80	150
2	-	-	6	--	8	1.3 Fundamentals of Art. & Design	2.5	50	20	70	4	60	30	90	160
4	-	-	4	--	8	1.4 Child Development	2.5	50	20	70	3	60	30	90	160
3	-	-	5	--	8	1.5 Food And Nutrition	2.5	50	20	70	4	60	30	90	160
3	-	-	5	--	8	1.6 Fundamental of Textile & Clothing	2.5	50	20	70	4	60	30	90	160
2	-	-	3	--	5	1.8 Extension Education	2.5	50	20	70	3	60	30	90	160
20	-	-	28	--	48	<-----TOTAL----->	--	350	140	490	--	375	185	560	1050
Games/NCC/Social and Cultural Activity + Discipline (30 + 20)											50				
											1100				

- NOTE:
- (i) Each period will be of 50 minutes duration.
  - (ii) Each session will be of 32 weeks.
  - (iii) Effective teaching will be atleast 25 weeks.
  - (iv) Remaining periods will be utilised for revision etc.
  - (v) 4 weeks structured & supervised, branch specific, task oriented industrial/extension Edu. to be organised during summer vacation. Students will submit a report .There will be 50 marks for this exposure .These marks will be awarded by project examiner in the final year ( Examination marks: 30, Sess. marks: 20).
  - (vi) Field visits and extension lectures are to be organized and managed well in advance at institute level as per need.

STUDY & EVALUATION SCHEME

for

TWO YEAR DIPLOMA COURSE IN HOME SCIENCE

(Effective from the session )

II YEAR

Curriculum						Scheme of Examination													
Periods Per Week						Theory			Practical			Grand Total							
Lecture	Tutorial	Dr. g.	Lab.	Work Shop	Total	Examination	Sess.	Total	Examination	Sess.	Total								
Dur.	Marks	Marks	Marks	Marks	Marks	Dur.	Marks	Marks	Marks	Marks	Marks								
1			3		4	2.1	Computer Application For Engineering	-	-	-	-	3	60	30	90	90			
2					2	2.2	Environmental Education(*) And Disaster Management	2.5	50	--	--	--	--	--	--	--			
				6	6	2.3	I. Project II. Field Exposure (Any Two Groups Should be chosen From Below Four Groups)	-	-	-	-	viva Viva	80 30	40 20	120 50	120 50			
4	1		4	--	9	2.4	Home Management	2.5	50	20	70	3	60	30	90	160			
3	1		5	--	9	2.5	Interior Decoration and Kitchen Management	2.5	50	20	70	4	60	30	90	160			
4	1		4	--	9	2.6	Diet Planning & Therapy	2.5	50	20	70	4	60	30	90	160			
3			6	--	9	2.7	Institutional Food Service Management	2.5	50	20	70	3	60	30	90	160			
3	1		5	--	9	2.8	Early Childhood Education & Management	2.5	50	20	70	3	60	30	90	160			
4	1		4	--	9	2.9	Entrepreneurship in child Care services	2.5	50	20	70	3	60	30	90	160			
3	1		5	--	9	2.10	Textile Design	2.5	50	20	70	4	60	30	90	160			
3	1		5	--	9	2.11	Costume Design	2.5	50	20	70	4	60	30	90	160			
					48	<-----TOTAL----->					--	200	80	280	--	410	210	620	900
												Games/NCC/Social and Cultural Activity + Discipline (30 + 20)			50				
												Total:			950				
												Carry over from Ist Year 50%			550				
															1500				

- NOTE: (i) Each period will be of 50 minutes duration.  
(ii) Each session will be of 32 weeks.  
(iii) Effective teaching will be atleast 25 weeks.  
(iv) Remaining period will be utilized for revision etc.  
(v) Field visits and extension lectures are to be organized and managed well in advance at institute level as per need.  
(vi)(\*) It is compulsory to appear & to pass in examination, But marks will not be included for division and percentage of obtained marks.  
(vii) From the above four groups any two groups should be chosen by the students.

## CONTENTS

S.NO.	PARTICULARS	PAGE NO.
	Study and Evaluation Scheme.	
	Main Features of the Curriculum.	1
	List of Experts.	2-6
	Need Analysis.	7
	Profile Development.	8
I	Job Potential.	9-10
II	Job Activites.	11
III	Activity Analysis.	12-13
IV	Curriculum Objectives.	14
V	Deriving Curriculum Areas From Course Objectives.	15
VI	Change In Syllabus	16
VII	Detailed Course Contents.	
I Year		
1.1	Professional Communication	17-21
1.2	Physiology and First Aid.	22-24
1.3	Fundamentals of Art & Design	25-26
1.4	Child Development	27-28
1.5	Food & Nutrition	29
1.6	Fundamental of Textile & Clothing	30-32
1.7	Extension Education	33
II Year		
2.1	Computer Application For Engineering	34-35
2.2	Environmental Education & Disaster Management	36-38
2.3	Project	39
Group-I		
2.4	Home Management	40-41
2.5	Interior Decoration & Kitchen Management	42-43
Group-II		
2.6	Diet Therapy & Planning	44
2.7	Institutional Food Service Management	45
Group-III		
2.8	Entreprenurship In Child Care Service	46
2.9	Early Childhood Education & Management	47
Group-IV		
2.10	Textile Design	48
2.11	Costumen Design	49
VII.	Staff Structure & Qualification	50-51
VIII.	Space Requirement.	52-53
IX.	List of Equipment.	54-59
X.	Learning Resource Materials	60
XI.	Annexure -I Field Exposure	61
XII	Annexure - II Questionaire.	62-64

### Main Features of The Curriculum

Title of The Course	:-	Diploma in Home Science.
Duration of The Course	:-	Two Years
Pattern of The Course	:-	Annual System
Intake of The Course	:-	60
Type of The Course	:-	Full Time Institutional.
Entry Qualification	:-	10 +
Mode of Admission	:-	Trhough Joint Exterance Exam.

## LIST OF EXPERTS

1. Dr. Miss M. Wellington Head Deptt of Home Science  
C. S. A. University, Kanpur.
2. Dr. Mrs S.P. Rahgir Proffessor & Director, Dean,  
Faculty of Home Science,  
Institute of Home Science Agra  
Univercity, Khandery Lane Agra.
3. Dr. Mrs T.Verma Dean, I.C. College of Home  
Science Haryana Agriculture  
University, Hissar.
4. Dr.Mrs.Ravi Sandhu Head Home Science Deptt.  
Dayalbagh Deemed University,  
Agra.
5. Smt Asha Robin Lecturer/Reader, Home Science  
Deptt., Dayal Bagh Deemed  
University, Agra.
6. Shri S. P. Singhal Director, Seth Jai Prakash  
Mukundlal Women Polytechnic,  
Ghaziabad
7. Mrs. G.Verma Lecturer Home Science Deptt.  
A.N.D.Mahila Degree College  
Kanpur.
8. Miss Saroj Gureja Head of Deptt, Seth Jai  
Prakash Mukund Lal Women  
Polytechnic, Ghaziabad
9. Mrs. S. Benedict Lecturer, Deptt. of H. S.  
C.S.A. University, Kanpur.
10. Mrs.Lalita Tyagi Lecturer,Seth Jai Prakash  
Mukund Lal Women  
Polytechnic, Ghaziabad.
11. Mrs. Rewa Sharma Lecturer, Seth Jai Prakash  
Mukund Lal Women Poly.,  
Ghaziabad.
12. Mrs Renu Mohan Lecturer, Seth Jai Prakash  
Mukund Lal Women Poly.,  
Ghaziabad.
13. Mrs Chandra Kanta Lecturer, Seth Jai Prakash  
Mukund Lal Women Poly.,  
Ghaziabad.
14. Miss Renu Soni Lecturer, Seth Jai Prakash  
Mukund Lal Women Poly.,  
Ghaziabad.
15. Sri G.S. Bhist Secretary Board Of Technical  
Education U.P. Lucknow.
16. Smt Sushma Gaur Asst. Professor, Board Of  
Technical Education U.P.,  
Lucknow.
17. Shri B. Lal I. R. D. T., U. P., Kanpur.
18. Shri M. R. Khurana I. R. D. T., U. P., Kanpur.

#### LIST OF EXPERTS

The curriculum as developed, was reviewed by the following committee (constituted as per Govt. Letter No. 1471/92-Pra. Shi.-3-1992 Lucknow Dated-8/12 May 1992).

1. Dr. M. Wellington                      Professor and Head of Deptt. of Home Science, University of Agriculture, Kanpur
2. Dr. (Mrs) Poonam Agrawal           Associate Professor, Foods and Nutrition, Deptt. of Home Science University of Agriculture, Kanpur
3. Sri M. N. Bhargava                    Principal, Govt. Food Science Training Centre, Kanpur
4. Mrs. B. K. Bakshi                     Head of Home Science Deptt. A. N. D. College, Kanpur
5. Sri P.C. Dikshit                       Director, I.R.D.T. U.P., Kanpur
6. Smt. Sushma Gaur                    Asst. Professor, Board of Technical Education U.P., Lucknow

The members of the committee recommended its being adopted after a few ammendments which have been incorporated in the curriculum.

## LIST OF EXPERTS

List of experts who contributed in converting the revised curriculum of Two Year Diploma course in Home Science into Semester System.

1.	Smt. Usha Birjee	Director	I.R.D.T., U.P., Kanpur
2.	Mrs. P. Khanna	Principal	Seth Mukundlal Jay Prakash Mahila Polytechnic Ghaziabad.
3.	Ashraf Ali	Professor	I.R.D.T., U.P., Kanpur
4.	Dr. Neelima Kunwar	Asstt. Prof. Extension	C. S. A. University Kanpur
5.	Miss Sadhhna Vaish	Asstt. Prof. Foods & Nutritions	C. S. A. University Kanpur
6.	Miss Mukta Garg	Asstt. Prof. Child Development	C. S. A. University Kanpur
7.	Miss Rashmi Srivastava	Asstt. Prof. Home Management	C. S. A. University Kanpur
8.	Shri K.M.Gupta	Asstt.Prof.	I.R.D.T., U.P., Kanpur
9.	Shri M.P.Singh	Asstt.Prof.	I.R.D.T., U.P., Kanpur
10.	Smt. Anita Bajpai	Asstt.Prof.	I.R.D.T., U.P., Kanpur
11.	Shri S.K. Srivastava	Asstt.Prof.	I.R.D.T., U.P., Kanpur
12.	Mrs. M. Gureza	Lecturer	Seth Mukundlal Jay Prakash Mahila Polytechnic Ghaziabad.
13.	Mrs. R. Sharma	Lecturer	Seth Mukundlal Jay Prakash Mahila Polytechnic Ghaziabad.
14.	Mrs. L. Tyagi	Lecturer	Seth Mukundlal Jay Prakash Mahila Polytechnic Ghaziabad.
15.	Mrs. R. Mishra	Lecturer	Seth Mukundlal Jay Prakash Mahila Polytechnic Ghaziabad.
16.	Mrs. C. Kanta	Lecturer	Seth Mukundlal Jay Prakash Mahila Polytechnic Ghaziabad.
17.	Miss. Bharti	Lecturer	Seth Mukundlal Jay Prakash Mahila Polytechnic Ghaziabad.
18.	Shri A.P. Singh	Lecturer	I.R.D.T., U.P., Kanpur

## LIST OF EXPERTS

List of experts who contributed in the revision of Home science curriculum on dated 13.08.2003

1.	Dr. Abha Bhatt	Head	Gurunanak Girls P.G. College, Kanpur
2.	Smt. Geeta Mathur	Reader	Juhari Devi Girls P.G. College, Kanpur
3.	Dr. Mukta Garg	Asstt. Prog.	College of Home Science C.S.A. Uni. of Agri.,Knp.
4.	Dr. Kusum Agarwal	Sr. Lect.	Gurunanak Girls P.G. College, Kanpur
5.	Smt. Archana Saxena	Sr. Lect. Neturition	A.N.D. College, Kanpur
6.	Smt. Neera Nagrath	Sr. Lect.	A.N. D. College, Kanpur
7.	Smt. Deepti Suneja	Sr. Lect.	Gurunanak Girls P.G. College, Kanpur
8.	Smt. Sonia Khanna	Lect.	Gurunanak Girls P.G. College, Kanpur
9.	Km. Archana Chaudhary	Lect.	Jwaladevi Vidha Mandir P.G. College, Kanpur
10.	Smt. Geeta Verma	Sr. Lect.	A. N. D. College, Kanpur
11.	Smt. Smriti Tandon		Adhunik Poly., Kanpur
12.	Smt Saroj Gureja	Head	S.J.P.M.Poly., Ghaziabad
13.	Smt Lilata tyagi	Lect.	S.J.P.M.M. Poly. Ghaziabad
14.	Shri S. K. Malviya	Dy. Director	I.R.D.T., U.P. Kanpur
15.	Shri Ashraf Ali	Professor	I.R.D.T., U.P., Kanpur
16.	Shri Yashveer Sing	T.B.O.	I.R.D.T., U.P., Kanpur
17.	Shri K. M. Gupta	Asstt. Prof.	I.R.D.T., U.P., Kanpur
18.	Dr. Anita Bajpai	Asstt. Prof.	I.R.D.T., U.P., Kanpur

List of experts who contributed in the revision of Home science curriculum on dated 23.01.2009 and 25.03.2009

1. Dr. Mrs. Rekha Dayal  
Head Family Resource Management C.S.A. Agricultral Uni.,  
Kanpur
2. Dr. Mrs. Seema Sonker  
Head Food Science & Nutrition C.S.A. Agricultral Uni.,  
Kanpur
3. Dr. Mukta Garg  
Head Child & Human Development C.S.A. Agricultral Uni.,  
Kanpur
4. Dr. Ritu Pandey  
Department of Textile & Clothing C.S.A. Agricultral Uni.,  
Kanpur
5. Dr. R. K. Kushwaha  
Extension Education Nutrition C.S.A. Agricultral Uni.,  
Kanpur
6. Ms. Ranjana Misra  
Faculty Home Science S.J.P. Girls Polytechnic,  
Ghaziabad
7. Ms. Lalita Tyagi  
Faculty Home Science S.J.P. Girls Polytechnic,  
Ghaziabad
8. Mrs. Geeta Verma  
Head, Home Science A.N.D. College, Kanpur
9. Dr. Kusum Agarwal  
Reader, Home Science Guru Nanak Girls Degree  
College, Kanpur
10. Mrs. Ruchi Mittal  
Principal Ruchi Institute Creative  
Art, Allahabad
11. Mrs. Suvedita Katiyar  
Faculty Home Science Juhari Devi Girls College  
Kanpur
12. Shri V. K. Shukla B.T.E., Lucknow
13. Smt. R. P. Alam  
Assistant Professor I.R.D.T., Kanpur

#### NEED ANALYSIS:

Food, House and Clothing are the three essential requirements of man kind. These essential requirements are associated with the house wives who are responsible of these three. They are supposed to keep the house fit and fully decorated, keep the clothing according to need and make food which suits the family. Keeping in view these parameters the curriculum for two years diploma course in Home Science was basically designed to develop knowledge and skill component in girls for domestic applications.

Diploma holders in Home Science may also be exposed with the world of work by sharing responsibilities in the field of Bakery and Confectionery, Interior decoration, Family planning programmes, Laundry and Textile, Child care and Child development, Dress designing and Computers. Many organisations are working in the above fields seeking middle level skilled manpower to take various positions to assist in their working. In metropolitan cities, where there are sufficient working class women, the diploma holders in Home Science may start enterprenural activities by running mother care centres and children homes. They can also run cafeteria and mess in the girls/working class women hostel and girls institutions.

The need for revision of curriculum was felt to equip the diploma holders in Home Science making use of latest technology in the field of Manufacturing, Production, Preservation, Packaging, Marketing, Advertising, Education Enterprenural, Social, Cultural, Child Development, Health and Hygiene etc.

#### PROFILE DEVELOPMENT:

The job of revision of curriculum in Home Science was under taken by the Institute of Research Development and Training U.P. Kanpur to make it more job oriented and need based. Changes and developments on account of technological up gradation in machine and material have been taken into consideration in the revision of curriculum. The input qualification for the course is 10+ with an aptitude test as before.

Following steps were taken in the revision of curriculum..

1. An instrument for getting information about job potential/job opportunities man power assessment both present and projected was designed and sent to various Home Science/Personnels/Teaching institutions.
2. The feed back received was not satisfactory so feed back was collected through mutual interaction with entrepreneurs, experts of the field and business organisations.
3. The feed back was analysed in a work shop and course outline was formulated.
4. The detailed course contents were developed in a workshop by mutual interaction among experts of the field and industry.
5. Effort has been made to increase placement potential by introducing new subject areas in the curriculum.

The following logical sequence has been adopted in the revision of curriculum.

- Listing job potential and activities done in various jobs.
- Analysing activities into knowledge and skill.
- Determining the course objectives.
- Deriving subjects of study from course objectives.
- Horizontal and vertical organisation of curriculum.
- Detailing of course content for each subject.
- Formulation of study and evaluation scheme.
  
- Determination of resource input in terms of human resource (Staff requirement), physical resources (space, equipment) and information resources (Books, Magazines Video films, slides etc.)

It is hoped that this curriculum if implemented in right spirit in polytechnics will produce competent and right type of middle level man power for Home Science and related field.

I. JOB POTENTIAL:

Before taking up the assignment for revision of curriculum a preliminary survey regarding job potential and man power assesment was conducted. It was revealed that diploma pass outs may have opportunities in the following fields.

- Department of Education.
- Nursury Schools.
- Primary Health Centres.
- Angan Bari.
- Entrepreneur.
  - I. Hobby Course on Cookery, Bakery, Handicrafts, Preservation (Achar, Murabba, Jelly, Jaim etc).
  - II. Drawing & Painting Courses.
  - III. Cutting & Tailoring Courses.
  - IV. Manufacture of House Hold Articles (Flower - Pot, Decorative Articles).
  - V. Interior Decoration Courses.
- Orphanage.
- S. O. S. Schools.
- Children Homes.
- Lab Assistants.
- Woman Prisons.
- Sick Rooms.
- Mentally Retarded Children School.
- Deaf And Dumb School.
- Handicapped and Blind Care Centre.
- Artificial Limbs Manufactureing Companies.
- Occupational Therapy.
- Physio Therapy.
- Garment Manufacturing Industries.
- Mess Contractor Girls Hostel.

More over change in life style due to post marriage reasons will enhance their family standard and quality of living in the educated society.

#### ASSESSMENT OF JOB POTENTIAL:

A few years back job opportunities in the field of home science was very limited. Previously the objective of the course was to prepare the girls to become successful house wives. On account of social changes in the living standards of people the house wives have also started to contribute to their counterparts to enhance family income with exposure in the following fields.

Due to increase in the working class ladies in the metropolitan cities child care centres and children homes were started and managed by diploma pass out ladies.

In various girl institutions cafeteria and mess were managed and run by diploma pass out.

The diploma pass outs are also running part time courses in cookery and bakery, confectionery, interior decoration, drawing and painting, knitting and tailoring, dress designing, child psychology and mother craft, laundry and textile, fabric selection, food and nutrition etc..

Some diploma pass outs started their own entrepreneurial units like preparation of Jams, Jelly, Chutani, Achar, Murabba, Papad, Potato chips, Fast foods and Fashion accessories manufacture.

## II. JOB ACTIVITIES

The diploma passouts in Home Science are supposed to perform the following activities related with specific job positions.

### Education:

As a teacher in

- (i) Nursery primary and middle School.
- (ii) S. O. S. School.
- (iii) Deaf & Dumb School.
- (iv) Handicaped & Blind Care Centres.
- (v) Angan Bari.
- (vi) Orphanage.
- (vii) Labour Welfare Centres.
- (viii) School Welfare Centres.

### Health:

- (i) Primary Health Centres.
- (ii) Nursing Homes.
- (iii) Sick Rooms.
- (iv) Hospitals.
- (v) Family Planning Centers.
- (vi) Block Development Offices.
- (vii) Physiotherapy.
- (viii) Occoupatonal Theraphy.

### Enterprenurship:

As a enterprenure in the following fields.

- (i) Production of Achar, Murba, Jam, Jelly, Chips, Pappar, Bari etc..
- (ii) Production of Cookery, Bakery and Confectionery items.
- (iii) Production of Paintings and other decorative items for interier decoration.
- (iv) Mass production fo ready made garments.
- (v) Production of fashion articles.
- (vi) Mass production of woolen pullovers (Jersy) sweater and hand gloves, jackets etc..

### Free Lancing

- (i) Mess contractor in Girls Hostels/Working Ladies Hostels.
- (ii) Writing articles in the Ladies Magazine.
- (iii) Advertisement.
- (iv) Modelling.
- (v) Consultancy.
- (vi) Sales Representative.

III. ACTIVITY ANALYSIS/JOB DESCRIPTION:

(A) EDUCATION:

(I) Care Taker:

- (a) Child Psychology.
- (b) Home Management
- (c) Food & Nutrition.
- (d) Health & Hygiene.
- (e) First Aid.
- (f) Child Development.
- (g) Children Games.
- (h) Stories Telling.
- (i) Charming & Humerous Personality.
- (j) Teaching Techniques.
- (k) Knowledge of Language & Basic Sciences.
- (l) Discipline.

(II) Teacher:

- (a) Subject Knowledge.
- (b) Charming Personality.
- (c) Punctual.
- (e) Discipline.
- (f) Subject Skill.
- (g) Demonstration.
- (f) Kind & Generious.
- (g) Dynamic.
- (h) Sympathetic
- (i) Etiquettes.

(B) HEALTH:

- (a) Knowledge of Anotomy & Physiology.
- (b) Knowledge of Pharmaceuticals
- (c) Knowledge of Basic principles of health & hygiene.
- (d) Knowledge of Physiotharaphy.
- (e) Knowledge of Occouptional therapy.
- (g) Knowledge of Faimly Planning Programmes.
- (h) Kind and Generious.
- (i) Soft spoken and Humerous.
- (j) Dynamisms.
- (k) Dedication to Patients.
- (l) Social.
- (m) Publicity of Family Welfare Programmes.

(C) ENTREPRENURSHIP:

- (a) Knowledge of management.
- (b) Supervisory Skills.
- (c) Knowledge of preparation of preservaties, cookery, bakery, confectionary, larder items.
- (d) Enterprenurial Skills.
- (e) Knowledge of consumer co-operatives.

- (f) Knowledge of financial management.
- (g) Knowledge of packaging and labelling.
- (h) Window display.

(D) FREE LANCING:

- (a) Management and supervisory skills.
- (b) Behavioural Science.
- (c) Kitchen management.
- (d) Procurement and knowledge of raw materials.
- (e) Knowledge of table manners.
- (f) Knowledge of home economics.
- (g) Generalism.
- (h) Knowledge of advertising media.
- (i) Modelling skills.
- (j) Fashion presentation.
- (k) Knowledge of garment technology, food production, food processing, health and family planning, teaching subject.
- (l) Dynamics and Personality.
- (m) Presentation and communication skills.

IV CURRICULUM OBJECTIVES:

1. To develop knowledge of Child care and Mother craft.
2. To develop understanding of Health and Family planning schemes.
3. To develop techniques of dress designing and dress making.
4. To acquaint the students with various techniques of business management to acquire the knowledge of managerial and co-ordinating qualities.
5. To impart knowledge in the field of entrepreneurship development.
6. To impart knowledge and skill in the field of food production, food processing and interior decoration.
7. To equip the students with the knowledge and skill in drawing and painting.
8. To develop knowledge in the field of house keeping and home economics.
9. To aware the students in the field of soft ware applications in computers.
10. To develop knowledge of huminites and social sciences.

V. DERIVING CURRICULUM AREAS FROM COURSE OBJECTIVES:

COURSE OBJECTIVES		CURRICULUM AREAS	
1.	Child Development	1.	Food Nutrition-I.
		2.	Food Nutrition-II.
		3.	Child Development.
2.	Health & Family Planning	1.	Physiology & First Aid.
		2.	Child Development.
		3.	Textile & Laundry.
3.	Dress Desiging & Dress Making	1.	Tailoring & Knitting.
		2.	Fundamentals of Arts.
		3.	Interior Decoration
		4.	Extension Education
		5.	Dress Desigining.
		6.	Drawing & Painting.
4.	Business Management & Managerial Qualities	1.	Communication Techniques
		2.	Kitchen Management & Cookery.
		3.	Home Management-II
		4.	Extension Education
5.	Enterprenurship Developmet.	1.	Bakery & Confectionary.
		2.	Home Economics.
6.	Food Production Food Processing Interior Decoration	1.	Bakery & Confect- ionory.
		2.	Kitchen Management & Cookery.
		3.	Food Nutrition-I.
		4.	Food Nutrition-II.
		5.	Home Management-II Interior Decoration.
7.	Drawing & Painting. Interior Decoration	1.	Fundementals of Art. Interior Decoration
		2.	Drawing & Painting.
		3.	Dress Designing.
		4.	Home Management-II
		5.	Interior Decoration.
8.	Home Management & Extension Lect.	1.	Home Management-I
		2.	Extension Education
9.	Application of Computers.	1.	Introduction to Computers.
10.	Communication System	1.	Professional Communication

## CHANGES IN THE SYLLABUS

The whole subject structure with its content has been changed

### I YEAR

1. Old Subject 1.3 (Fundamental of Art and Interior Decoration) and 1.4 (Drawing and Painting) combined to form new subject 1.3 as Fundamental of Art and Design.
2. Old Subject 1.6 (Child Development-I) and Old Subject 2.4 (Child Development-II) combined to form new 1.4 as Child Development with practicals included.
3. Old subject 1.7 (Food and Nutrition-I) and 2.3 (Food and Nutrition-II) combined to form new 1.5 as Food and Nutrition.
4. Old subject 1.9 (Tailoring and Knitting) and Partly 2.6 (Laundry).replaced by 1.6 Fundamentals of Textile and Clothing
5. Old Subject 2.9 (Extension and Population Education) introduced in I year with Population deleted. New practicals introduced covering media method.
6. Field Exposure of 4 weeks introduced during summer vacation.

### II Year

1. New subject 2.3 Project introduced with Field Exposure.
2. All the related subject divided into 4 groups with 2 vocation based subjects in each group with direction to student to choose any 2 groups out of 4 groups.
3. Old 1.8 (Home Management-I) and 2.3 (Home Management-II) combined to form new 2.4 Home Management in Group 1.
4. Old Subject partly 1.3 (Interior Decoration) and 1.5 (Kitchen Management) introduced as 2.5 Interior Decoration and Kitchen Management in Group 1.
5. New subject 2.6 Diet Planning Therapy introduced in Group 2.
6. New Subject 2.7 Institutional Food Service Management introduced in Group 2.
7. New Subject 2.8 Early Childhood Education and Management introduced in Group 3.
8. New Subject 2.9 Entrepreneurship in Child Care Service introduced in Group 3.
9. Old Subject 2.6 Textile and Laundry modified as 2.10 Textile Design in Group 4 with Laundry removed to 1.6 in I year.
10. Old Subject 2.7 (Dress Design) modified as 2.11 Costume Design in Group 4
11. List of practicals modified as theory subject.
12. List of labs and equipment modified as practical subject.

I YEAR

1.1 PROFESSIONAL COMMUNICATION

[ Common to All Engineering/Non Engineering Courses]

L T P  
3 - 2

Rationale:

Communication forms an important activity of diploma holder. It is essential that he/she should be in a position to communicate in writing and orally with superiors, equals and subordinates. This subject aims at providing working knowledge of languages like Hindi and English so as to train the students in the art of communication. It is suggested that maximum attention should be given in developing Communication abilities in the students while imparting instructions by giving maximum emphasis on practice.

Sr.No.	Units	Coverage time		
		L	T	P
1.	Introduction to communication methods meaning, channels & media written and verbal.	5	-	-
2.	Development of comprehension of English & Hindi through study of text material & language exercises.	10	-	-
3.	Development of expression through A. Letters (English & Hindi) B. Report writing (English) Note making and minutes writing	10 10	- -	- -
4.	Paragraph writing, Essey writing, Proposal writing	10	-	-
5.	Composition	10	-	-
6.	Remecial Grammer & Vocabulary Building	20	-	-
		75	-	50

1. PART I : COMMUNICATION IN ENGLISH (40 Marks)

1.1 Concept of communication, importance of effective communication, types of communication, formal, informal, verbal and nonverbal, spoken and written. Techniques of communication, Listening, reading, writting and speaking, Barriers in communication, Modern tools of communication- Fax, e-mail, Telephone, telegram, etc.

1.2 Technical communication Vs. General Communication :  
Development of comprehension and knowledge of English

through the study of text material and language exercises based on the prescribed text book of English.

1.3 Development of expression through:

1.3.1 Paragraph writing, Essay writing, Proposal writing.

1.3.2 Business and personal correspondence (Letters) :

Kinds of letters:-

Official, demi-offical, unofficial , for reply or in reply, quotation, tender and order giving letters. Application for a job, Resume.

1.3.3 Report writing and Note making and minutes writing.

1.4 Functional Grammer : Study of sentences and parts of speech (word class), Preposition, Verb, Articles, Abbreviations.

1.5 Vocabulary Building : Homophones, One word substitution, Idioms and Phrases.

1.6 Composition on narrative, descriptive, imaginative, argumentative, discussion and factual topics.

2. PART II : COMMUNICATION IN HINDI (10 Marks)

2.1 Development of comprehension and knowledge of Hindi usage through rapid reading and language exercises based on prescribed text material developed by IRDT.

2.2 Development of expression through ;

Letter writing in Hindi:

Kinds of letters:-

Official, demi-offical, unofficial , for reply or in reply, quotation, tender and order giving letters, Application for a job, Press release in Hindi, Report writing.

Note: Paper should be in two parts, part I - English and part II Hindi.

REFERENCE BOOKS

1. Bookshelf worksheet of Professional Communication, New Delhi : Bookshelf 2008
2. Functional Skills in language and literature by R. P. Singh, New Delhi : Oxford University Press.
3. Oxford Engilsh Hindi English Dictionary, New Delhi : Oxford 2008

## LANGUAGE LAB PRACTICE

For the practice/exercise the following is suggested :-

- 1.A. Phonetic transcription
- B. Stress and intonation :  
(At least 10 word for writting and 10 word for pronunciation)

2. ASSIGNMENT : (Written Communication)

Two assignment of approximately 400 word each decided by the teacher concerned.

THE FOLLOWING MODEL IS PROPOSED :

1. a picture/photograph
2. an opening sentence or phrase
3. a newspaper/magzine clipping or report
4. factual writting which should be informative or argumentative.

(The students may refer to "Bookshelf worksheet" for technical communication)

3. Oral Conversation:

1. Short speeches/declamation : Bid farewell, Felicitate somebody, Celebrate a public event, Offer condolences
2. Debate on current problems/topics
3. MockInterview : Preparation, Unfolding of personality and Expressing ideas effectively
4. Group discussion on current topics/problems
5. Role Play/ general conversation : Making polite enquiries at Railway Station, Post Office, Banks and other Public places, Replying to such enquiries, enquiring about various goods sold in the market and discussing their prices. Complaining about service at Hotel, restaurant, Offering apologies in reply to such complaints, complain to a company about a defective product you have brought, reply to such complaints.
6. Presentation skill, Use of OHP and LCD.
7. Through drilling of model words involving different phonetic symbols (Vowels, Consonants, Difthongs).

4. Aural :

Listening to conversation/talk/reading of short passage and then writting down the relevant or main points in the specified number of words and answering the given questions

The assignments/project work are to be evaluated by the internal/ external examiner. The distribution of 30 marks e.g.

10 marks for assignment (Given by subject teacher as sessional marks)

10 marks for conversation and viva-voce

10 marks for phonetic transcription

STRUCTURE OF THE PAPER OF PROFESSIONAL COMMUNICATION

Distribution of Marks

Theory Paper : 50 Marks  
Sessional : 20 Marks  
Practices : 30 Marks

Q1. Question based on the topics of the prescribed syllabus will be set for testing candidates ability to understand the content, explain words and phrases, making sentence of given words and ability to summarise will be included. All questions will have to be answered.

A. from English Text Book 10 Marks  
B. from Hindi Text Book 5 Marks

Q2. Candidates will be required to write one letter (English) and one letter in (Hindi) from a choice of two -

A. English Letters 5 Marks  
B. Hindi Letters 5 Marks

Q3. Report Writting on given outlines 5 Marks

Q4. There will be a number of short answer questions to test the candidates knowledge of functional grammer, structure and usage of the language. All the items in this question will be compulsory. The grammar questions has four parts -

(Total Part: A For 5 Marks, B For 3 Marks, C For 3 Marks and D For 4 Marks)

A. This part of the question has to do with the transformation of sentences. English uses several patterns of sentence formation and the same meaning can be expressed by several patterns e.g. Active to Passive voice and vice versa, Direct to Indirect and vice versa, Reframing sentences by changing part of speech e.g Noun to Adjective, Interchanging degree of comparison.

Interchanging Moods - Affirmative to Negative, Assertive to Interrogative or to exclamatory

B. The second part usually requires blanks in a sentence to be filled in with a suitable preposition and articles.

C. The third part is usually an exercise on tenses.

D. The fourth part concerns with one word substitution and abbreviation, uses of idioms and Phrases, Homophones.

Q5. COMPOSITION : (About 300 Words) (5 marks)

Candidates will be required to select one composition topic

from a choice of five. The choice will normally include narrative descriptive, argumentative, discussion and factual topics. The main criteria by which the composition will be marked are as follows

- A. the quality of the language employed, the range and appropriateness of vocabulary and sentence structure the correctness of grammatical construction, punctuation and spelling.
- B. The degrees to which candidate have been successfully in organising both the composition as a whole and the individual paragraphs.

## 1.2 PHYSIOLOGY AND FIRST AID

L	T	P
3	-	3

### Rationale:

The study of Physiology of human body is the an important requirement of a student of diploma in Home Science. She can look and take care of the family and society and guide accordingly. She should be well aware of First Aid to be given to injured person. To take care into account the curriculum is designed for.

Sr. No.	Units	Coverage Time		
		L	T	P
<hr/>				
(A)	Physiology			
1.	Definition & Terminology	3	-	-
2.	Cell: Structure, Type and an Idea about tissue & organs	4	-	-
3.	Elementary Physiology of Following Name of organs & function of following	25	-	-
	- Circulatory System			
	- Reproductive System			
	- Respiratory System			
	- Digestive System			
	- Excretory System			
4.	Elementary Knowledge about	6	-	-
	- Musculo-Skeletal System			
	- Endocrine System			
	- Sense Organ			
5.	Immunity : Type of Immunity, Immunisation Schedule	4	-	-
(B)	First Aid			
1.	Principles of First Aid	3	-	-
2.	Cuts Wounds	3	-	-
3.	Fracture	3	-	-
4.	Strains & Sprains	3	-	-
5.	Shock	3	-	-
6.	Artificial Respiration	3	-	-
7.	Postures	3	-	-
8.	Burn & Scald	3	-	-
9.	Heat Stroke	3	-	-
10.	Application of Bandages	3	-	-
11.	Foreign Body	3	-	-
		<hr/>	<hr/>	<hr/>
		75	-	75
<hr/>				

DETAILED CONTENTS:

(A) PHYSIOLOGY:

1. Definition and terminology related to physiology
2. Cell:Structure,Type and an Idea about tissue & organs
3. Elementary Physiology of following :  
Name of organs and functions of following -
  - Circulatory System
  - Reproductive System
  - Respiratory System
  - Digestive System
  - Excretory System
4. Elementary Knowledge about :-
  - Endocrine System
  - Sense Organ
5. Immunity : Type of Immunity, Immunisation Schedule.

(B) FIRST AID

- (1) Outlines and principles of first aid.
- (2) Cuts wounds and haemorrhage
- (3) Fracture
- (4) Strains and sprains
- (5) Shock
- (6) Artificial Respiration
- (7) Postures
- (8) Burns and scald
- (9) Heat stroke
- (10) Application of triangular, rolled bandages
- (11) Foreign body in the ear, nose, eye, throat, skin, poisoning.

PRACTICALS:

- (1) Physiology chart
- (2) Recording of temperature
- (3) Pulse palpation
- (4) First aid box
- (5) Application of triangular, rolled bandage

### 1.3 FUNDAMENTALS OF ARTS & DESIGN

L T P  
2 - 6

#### Rationale:

Art is such a subject by knowing it, one can know the art of living a healthy and prosperous life. In this subject the student will know how to draw different types of lines, geometrical figures, colour combination, showing tints and shades.

Sr. No.	Units	Coverage Time		
		L	T	P
1.	Introduction To Art, Materials & Tools	4	-	-
2.	Elements of Art	4	-	-
3.	Principles of Art	15	-	-
4.	Design	12	-	-
5.	Colour & Colour Psychology	15	-	-
		50	-	150

#### DETAILED CONTENTS:

1. Introduction to art material and tools.
2. Elements of art - Line, Form, Colour, Texture, Space, Light and Design.
3. Principles of Art & design :- Harmony, Balance, Rhythm, Emphasis, Proportion, Simplicity, Positive and Negative Space, Contrast, Repetition.
4. Design :- Definition, Types of design - Structural, Decorative and abstract.
5. Colour & Colour Psychology :- Introduction to colour theory, Oswald and Pigment theory.  
Colour Schemes - Primary, Secondary, tertiary analogous, Triadic, Complimentary, Split complimentary, Tints and shades, Warm and cool, Monochromatic, Polychromatic, Neutral colour, Colour Psychology. Textures.

#### PRACTICALS

1. Colour wheel, primary colour, secondary, sub secondary.
2. Make a composition of two figures using warm and cool colours.
3. Show tints and shades of the three primary colours.
4. Depict psychology of colour through collage.
5. Draw different kinds of lines on a sheet in 10 x 10 cm squares.
6. Make compositions with lines shapes and forms.
7. Thick or thin lines, wavy lines, straight lines, horizontal,

- vertical and diagonal lines.
8. Illustrate all the elements and principles of art.
  9. Still life sketching.
  10. Structural, decorative and abstract designs.(5 Each)
11. Sketching:-
- A. Drawing of objects, still life
  - B. Nature Study - Flowers, Leaves, Fruits, Trees, Butterflies.
  - C. Figure Sketching, Stick Figures, Fashion figures.
  - D. Introduction to perspective drawing.
  - E. Pencil sketching.
  - F. Model sketching.
12. Fabric Painting:-
- A. Sofa Back
  - B. Cushion cover
  - C. Table Mats
13. Oil Painting:-
- A. Oil painting on canvas - Figures and flowers.
  - B. Painting on Pots.

## 1.4 CHILD DEVELOPMENT

L	T	P
4	-	4

### Rationale:

Every woman is supposed to be a mother. The essential duties of a mother are not to be taught. Of course a mother knows better how to take care of her infants rather than to teach her. In spite of these techniques of child psychology, child development, mothercraft, care of infants, problems of child behaviour, stages of development during infancy are taken into account.

Sr. No.	Units	Coverage Time		
		L	T	P
1.	Introduction & Scope of Child Development, Principle of Child Development	9	-	-
2.	Mothercraft & Pre Natal Development	20	-	-
3.	Care of Infant	15	-	-
4.	Common Ailments	8	-	-
5.	Development during infancy	9	-	-
6.	Development during Early childhood	15	-	-
7.	Late childhood years	8	-	-
8.	Adolescence	8	-	-
9.	Personality	8	-	-
		100	-	100

### DETAILED CONTENTS:

1. Introduction, Child Development, Basic concepts and importance, Scope of child development. Principle of Child Development.
2. Mothercraft & Pre Natal Development -
  - (a) Fitness for motherhood
  - (b) How life begins.
  - (c) Signs of pregnancy.
  - (d) Stages of growth during prenatal period.
  - (e) Prenatal care, needs and care of mother during pregnancy- Personal hygiene, health, diet and clothing.
  - (f) Preparation for delivery, types of delivery, The birth process, Hazardous
  - (g) Postnatal Care- Care of mother after delivery, diet, rest and sleep.

3. Care of infant -
  - (a) Nutrition for the child -  
Breast and bottle feeding.
  - (b) Bathing ,Clothing & sleeping.
  - (c) Supplimentary & Weaning foods.
  - (d) Immunization schedule.
4. Common ailments of children.
5. Development during infancy (0 - 2 yrs.)
  - (a) physical and motor development
6. Development during early childhood years (2-6 years)
  - A. Physical Development
  - B. Intellectual development
  - C. Language Development
  - D. Social Development
  - E. Importance of Play
7. Late Childhood Years (6-12 years)
  - A. Physical Development
  - B. Intellectual development
  - C. Social Development
8. Adolescence -
  - A. Changes during adolescence
  - B. Problems of adolescence
9. Personality- Definition, Factor effcting personility.

#### PRACTICALS

1. Visit to well baby elinics to observer new barn babies and report preparation.
2. Visit to materinity wards and report preparation.
3. Observation of new born babies and premature babies and report preparation.
4. Demonstration of babies feed, bathing, dressing and bed making and report preparation.
5. Assesment of physical motor and cognitive abilities of school age childern and report preparation.
6. Preparing resource file on different aspects of developments during adolescence.

## 1.5 FOOD AND NUTRITION

L    T    P  
3    -    6

### Rationale:

A human body needs a balanced diet. To know the nutritive value of balanced diet different foods and their nutritive value such as proteins, carbohydrates, fat, minerals, vitamins, calorific value etc. should be known. To cater the above needs the curriculum is designed.

Sr. No.	Units	Coverage Time		
		L	T	P
1.	Topic 1	5	-	-
2.	Topic 2	12	-	-
3.	Topic 3	12	-	-
4.	Topic 4	12	-	-
5.	Topic 5	12	-	-
6.	Topic 6	12	-	-
7.	Topic 7	5	-	-
8.	Topic 8	5	-	-
		75	-	150

### DETAILED CONTENTS:

1. Definition of food, food nutrition and food science.
2. Basic component of food as, Carbohydrate, Protein Fat, Vitamin and Minerals their function, sources & RDA.
3. Balance diet for different stages in life.
4. Composition and nutritive value of cereal, pulse, fruits and vegetable milk and milk product.
5. Food preservation, food poisoning, food adulteration, food hygiene.
6. Therapeutic nutrition and importance, definition of dietetics.
7. Bakery and confectionary (sponge cake and biscuits).
8. Basic food group and their contribution in diet.

### LIST OF PRACTICALS

1. Preparation of Pickle, Mango, Chili, etc., Tomato sauce and orange squash.
2. Preparation of Sponge cake, Chocolate cake and biscuit.
3. Preparation of at least one dish from each category -
  - a. Breakfast
  - b. Snacks
  - c. Appetisers - Soup and Salad
  - d. Dessert
  - e. Regional India Dish-Vegetarian/Non-vegetarian
  - f. Chinese/Continental Dish - Vegetarian/Non-vegetarian
4. Menu Planning, Standardize the measurement of serving sizes of Cereal, Pulse, Fruit, Vegetable, Milk, Milk Product, Flour.

## 1.6 FUNDAMENTAL OF TEXTILE AND CLOTHING

L	T	P
2	-	6

### Rationale:

A diploma holder of Home Science should be well aware of the basics of textile theory and the practical aspects of printing on fabric. The basics of garment construction and embroidery will also be covered.

Sr. No.	Units	Coverage Time		
		L	T	P
<hr/>				
A.	Textile			
1.	Personal Appearance	6	-	-
2.	Fibre Science	6	-	-
3.	Yarn Construction	4	-	-
4.	Printing Techniques	4	-	-
<hr/>				
B.	Clothing			
1.	Sewing Tools & Equipments	6	-	-
2.	Stitches	6	-	-
3.	Stitched Garment	4	-	-
4.	Embroidery	4	-	-
5.	State Embroideries	6	-	-
6.	Finishing and care of fabrics	4	-	-
<hr/>				
		50	-	125
<hr/>				

### DETAILED CONTENTS:

#### A. TEXTILE

##### 1. PERSONAL APPEARANCE :

Function of clothes in our daily life. Factor influencing clothing and personality, Selection of various fabrics in relation to personality, climate, occupation, cost and up keep. Family clothing and wardrobe planning.

##### 2. FIBRE SCIENCE :

Classification of fibres, Natural fibres : Plant fibres (Cotton, Linen); Animal fibres (Silk, Wool); Man made fibres : (Rayon), Synthetic Fibres : Nylon, Polyester); Source, Identification and utilization of fibres.

##### 3. YARN CONSTRUCTION :

Types of yarns- Brief idea of their characteristics such as strength, twist and evenness

##### 4. TEXTILE PRINTING:

Different types of printing and its significance

B. CLOTHING :

1. Sewing tools and equipment, Manual, Automatic and computerised Sewing machines and its parts, Function and Maintenance, Machine defects and remedies.

2. STITCHES :

Basic Hand and Machine Stitches.

3. STITCHED GARMENT :

Types and elements of stitched garments.

4. EMBROIDERY :

Need, importance and types of embroidery.

5. STATE EMBROIDERIES :

Kantha, Phulkari, Chikankari, Sindhi, Gujrati, Kashmiri.

6. FINISHING & CARE OF FABRICS :

A. FINISHING:-

Finishing of fabrics i.e. mercerisation, glazing, bleaching, dyeing and printing, etc.

B. CARE OF FABRICS: (Laundrying)

Requirements:-

Water: Hardness in water, Difficulties in Laundry, methods of removal.

Soap: Soaps and Detergents.

Washing method: Rubbing and scrubbing, kneading and squeezing, suction washing, machine washing.

Stain removal: Methods of stain removal, uses of javelle water, KMNO<sub>4</sub>, Oxalic acid, H<sub>2</sub>O<sub>2</sub> bleaches.

Dry-cleaning method: Spot cleaning

Dyeing: Dyes used in the home.

LIST OF PRACTICALS

1. Study of Yarn.

2. Printing(Only sample work) - Vegetables printing, Stencil, Block, Screen, Matchstick, Fabric painting, Free hand painting, Batik & Tie and Dye - Cotton and silk.

3.A. Types of stitches- Hand and machine stitches.

3.B. Elements of Sticked Garment - Pleats, Tucks, Gathers, Sheaning, Opening, Drafts, Cuffs, Facing and Piping,

Collars, Peter pan, Tennis, Shirt, Gown, Sleeves Plain, Flared, Magyar, Skirts Straight, Circular, Pannelled.

4. Embroidery Stitches - Stem, Chain, Double chain, Lasy daisy, Cross, Chevron, Feather, Fly, Herringbone, Button hole, Blanket, French knots, Bullion stitch, Satin, Long and short.
5. Applique, Patchwork, Quilting, Smocking.
6. Removal of stains from samples and garments.
7. Washing, raising, stiffening, drying, jolding, iorning and finishing of various fabrics and garments.

## 1.7 EXTENSION EDUCATION

L T P  
2 - 3

- A. EXTENSION EDUCATION :
1. Meaning and importance of Extension Education.
  2. Principles of extension education, Philosophy, Aims and objectives of Extension education.
  3. Role of Home Science in Extension Education.
  4. Extension Teaching Methods :-
    - A. Individual Contact : Personal, Telephonic and other electronic media contact, Home/Official Visits.
    - B. Group Contact : Demonstration, Lecture, Meeting, Workshop, Seminar, Discussion- Group, Panel, Symposium, Audio Visual Aids.
    - C. Mass Contact : Poster, Chart, Folk Method, Television, Radio, News Paper, Exhibition and Internet.
  5. Audio Visual Aids - Meaning, Classification, their importance with projected and non-projected aids.
  6. Programme Planning - Meaning, Definition, objectives, steps of programme planning and meaning, definition and steps of evaluation.

National and International Organisations : UNICEF, WHO, FAO, CARE, ICDS, ICMR. Current welfare programme of the Government and its evaluation.

### LIST OF PRACTICALS

1. Survey work will be done by student under the guidance of institute faculty to observe the environmental condition, life style and problems of family living in different areas such as Slum and Rural areas.
2. Preparation of different teaching aids. At least one practical should be chosen from each -Projected and Non-projected aids
  - 2.1 Non Projected Aids :-
    - A. Poster
    - B. Chart
    - C. Flash Card
    - D. Puppet
    - E. Flannel Graph
    - F. Model
    - G. Specimen
    - H. Graph
    - I. Map
  - 2.2. Projected Aids
    - A. Transparencies
    - B. Slide with Power Point Presentation
3. Preparation of Radio/T.V. Talk.

## 2.1 COMPUTER APPLICATION FOR ENGINEERING

[Common with Civil Engg., Civil (Spl. With Rural), Mechanical Engg., (Specialisation in Production, Automobile, Refrigeration and Air conditioning), Electronics Engg., Instrumentation and Control Engg., Dairy Engg., Leather Technology, Footwear and Leather Goods Tech., Ceramics, Chemical Engg. (Four year Sandwich), Chemical Tech. (Rubber & Plastic), Chemical Tech. (Fertilizer) ]

L T P  
1 - 3

Rationale:

Computers are being used for design and information processing in all branches of engineering. An exposure to fundamentals of computer programming is very essential for all diploma holders. This subject has been included to introduce students in the use and application of computers in engineering.

### TOPIC WISE DISTRIBUTION OF PERIODS

Sl.No.	Units	Coverage Time		
		L	T	P
1.	Introduction to Computer	5	-	-
2.	Introduction To Operating System MS DOS/Windows	3	-	-
3.	Ms-Word	4	-	-
4.	Ms-Excel	3	-	-
5.	Ms-Power Point	3	-	-
6.	Ms-Access	3	-	-
7.	Introduction to Internet	2	-	-
8.	Concept of Programming	2	-	-
		25	-	75

### DETAILED CONTENTS

#### 1. Introduction to Computer:

Block Diagram of Computer, Types Of Computer Central Processing unit (Control unit, A.L.U.) & memory Unit. Types of Input and Output devices and memories. Visual Display Unit, Keyboard, Floppy disk drive, Hard disk drive, CD-ROM Drive, Magnetic & Tape Drive

Number system( Conversion) Binary, Octal, Hexa decimal number system, Conversion from Decimal to Other System and vice-versa Bit, Byte and Word.

#### 2. INTRODUCTION TO OPERATING SYSTEMS (MS-DOS/MS-WINDOWS:)

What is operating system, its significance, Commands of DOS, Features/Application of window.

3. MS WORD:

File : Open, Close, Save, Save as, Search, Send to, Print Preview, Print and Page Setup  
Edit : Cut, Copy, Paste, Office Clipboard, Select All, Find, replace, Goto, etc.  
View : Normal/Web Layout/Print Layout; Tool Bars; Header/Footer; Zoom, etc.  
Insert: Break, Page Number, Date & Time, Symbol, Comment, Reference, etc.  
Format: Font, Paragraph, Bullets & Numbering, Borders & Shading, Column, Change case, Back ground, etc.  
Tools : Spelling & Grammar, Language, Word Count, Letters & Mailing, Options, Customize, etc.  
Table : Draw, Insert, Delete, Select, Auto Format, AutoFit, Convert, Sort, Formula, etc.

4. MS EXCEL:

Introduction, Use of Tools/Icons for preparing simple applications.

5. MS POWER POINT :

Introduction, Use of Tools/Icons for preparing simple presentation on Power Point.

6. MS ACCESS :

Introduction, Use of Tools/Icons for preparing simple applications.

7. Introduction to Internet:

What is Network, How to send & receive messages, Use of Search Engines, Surfing different web sites. Creating Mail ID, Use of Briefcase, Sending./replying emails.

8. Concept of Programming :

Flowcharting, Algorithm techniques, etc.

List Of Practicals

1. Practice on utility commands in DOS.
2. Composing, Correcting, Formatting and Article (Letter/Essay/ Report) on MS Word and taking its print out.
3. Creating, editing, modifying tables in MS ACCESS.
4. Creating labels, report, generation of simple forms in MS ACCESS.
5. Creating simple spread sheet, using in built functions in MS EXCELL.
6. Creating simple presentation on Power Point.
7. Creating mail ID, Checking mail box, sending/replying e-mails.
8. Surfing web sites, using search engines.

## 2.2 ENVIRONMENTAL EDUCATION & DISASTER MANAGEMENT

L T P  
2 - -

### RATIONALE :

A diploma student must have the knowledge of different types of pollution caused due to industrialisation and construction activities, so as he may help in balancing of eco-system and control pollution by providing controlling measures. They should be also aware of the environmental laws for effectively controlling the pollution of environment. The topics are to be taught in light of legislation Para-3.

### TOPIC WISE DISTRIBUTION OF PERIODS:

SL. NO.	TOPIC	L	T	P
1.	Introduction	6		
2.	Pollution	3		
2.1	Water Pollution	8		
2.2	Air Pollution	8		
2.3	Noise Pollution	3		
2.4	Radio Active Pollution	4		
2.5	Solid Waste Management	5		
3.	Legislations	3		
4.	Environmental Impact Assessment	4		
5.	Disaster Management	6		
<b>TOTAL</b>		<b>50</b>	<b>-</b>	<b>-</b>

### DETAILED CONTENTS

#### 1. INTRODUCTION :

- Basics of ecology, Ecosystem, Biodiversity Human activities and its effect on ecology and eco system, different development i.e. irrigation, urbanization, road development and other engineering activities and their effects on ecology and eco system, Mining and deforestation and their effects.
- Lowering of water level , Urbanization.
- Biodegradation and Biodegradability, composting, bio remediation, Microbes .Use of biopesticides and biofungicides.
- Global warning concerns, Ozone layer depletion, Green house effect, Acid rain,etc.

#### 2. POLLUTION :

Sources of pollution, natural and man made, their effects on

living environments and related legislation.

#### 2.1 WATER POLLUTION :

- Factors contributing water pollution and their effect.
- Domestic waste water and industrial waste water. Heavy metals, microbes and leaching metal.
- Physical, Chemical and Biological Characteristics of waste water.
- Indian Standards for quality of drinking water.
- Indian Standards for quality of treated waste water.
- Treatment methods of effluent (domestic waste water and industrial/ mining waste water), its reuse/safe disposal.

#### 2.2 AIR POLLUTION :

Definition of Air pollution, types of air pollutants i.e. SPM, NOX, SOX, CO, CO<sub>2</sub>, NH<sub>3</sub>, F, CL, causes and its effects on the environment.

- Monitoring and control of air pollutants, Control measures techniques. Introductory Idea of control equipment in industries i.e.
  - A. Settling chambers
  - B. Cyclones
  - C. Scrubbers (Dry and Wet)
  - D. Multi Clones
  - E. Electro Static Precipitations
  - F. Bog Fillers.
- Ambient air quality measurement and their standards.
- Process and domestic emission control
- Vehicular Pollution and Its control with special emphasis of Euro-I, Euro-II, Euro-III and Euro IV.

#### 2.3 NOISE POLLUTION :

Sources of noise pollution, its effect and control.

#### 2.4 RADISACTIVE POLLUTION :

Sources and its effect on human, animal, plant and material, means to control and preventive measures.

#### 2.5 SOLID WASTE MANAGEMENT :

Municipal solid waste, Biomedical waste, Industrial and Hazardous waste, Plastic waste and its management.

3. LEGISLATION :

Preliminary knowledge of the following Acts and rules made thereunder-

- The Water (Prevention and Control of Pollution) Act - 1974.
- The Air (Prevention and Control of Pollution) Act - 1981.
- The Environmental Protection (Prevention and Control of Pollution) Act -1986. Rules notified under EP Act - 1986 Viz.
  - # The Manufacture, Storage and Import of Hazardous Chemical (Amendment) Rules, 2000
  - # The Hazardous Wastes (Management and Handling ) Amendment Rules, 2003.
  - # Bio-Medical Waste (Management and Handling) (Amendment) Rules, 2003.
  - # The Noise Pollution (Regulation and Control) (Amendment) Rules, 2002.
  - # Municipal Solid Wastes (Management and Handling) Rules, 2000.
  - # The Recycled Plastics Manufacture and Usage (Amendment) rules, 2003.

4. ENVIRONMENTAL IMPACT ASSESSMENT (EIA) :

- Basic concepts, objective and methodology of EIA.
- Objectives and requirement of Environmental Management System (ISO-14000) (An Introduction).

5. DISASTER MANAGEMENT :

Definition of disaster - Natural and Manmade, Type of disaster management, How disaster forms, Destructive power, Causes and Hazards, Case study of Tsunami Disaster, National policy- Its objective and main features, National Environment Policy, Need for central intervention, State Disaster Authority- Duties and powers, Case studies of various Disaster in the country, Meaning and benefit of vulnerability reduction, Factor promoting vulnerability reduction and mitigation, Emergency support function plan.

Main feature and function of National Disaster Management Frame Work, Disaster mitigation and prevention, Legal Policy Frame Work, Early warning system, Human Resource Development and Function, Information dissemination and communication.

### 2.3 PROJECT

L T P  
- - 6

Each student will be assigned two(2) specific task, One each from the chosen two groups by the student such that at least one task will be from one group and other one from the second group.

The project task should be based on the topic covered in any specific subject of that group, taking help from the list of practicals of that subject.

Students should be asked to survey the application area of that subject by herself/himself and choose the task. Guidance should be provided by the teacher is choosing the task for project.

## GROUP-I

## 2.4 HOME MANAGEMENT

L	T	P
4	1	4

## Rationale:

To manage and decorate a house is the essential part of a Home Science student. To get acquainted the knowledge of the same the topic of the subject are decided. It is hoped that the student will be benefited and full fill the knowledge needed.

Sr. No.	Units	Coverage Time		
		L	T	P
1.	Unit-I	40	10	-
2.	Unit-II	25	7	-
3.	Unit-III	35	8	-
		100	25	100

## DETAILED CONTENTS:

1. UNIT-I:
  - A. Home management : Definition, Concepts and importance.
  - B. Factor motivating management : Goal, Values and Standards
  - C. Management Process : Steps and factors in Decision Making- Planning organising, Controlling and Evaluation.
  - D. Resources : Types, Importance, Characteristics, Factors effecting family life cycle.
  - E. Work Simplification, Time and Energy Management
  - F. MUNDEL's Classes of change
2. UNIT-II :
  - A. Family money management
    - i. income and expenditure
    - ii. Budget and family account.
    - iii. Savings and investment.
3. UNIT-III :
  - A. The needs of housing.
  - B. Factors affecting housing.
  - C. Principles of housing - Orientation, grouping, functionalism, circulation, flexibility, premisses and privacy.
  - D. Furniture arrangement-Selection and care of different types of furnitures, space saving multi functional furniture.

#### LIST OF PRACTICALS

1. Making personal and family budget- Family financial record keeping, bank withdrawals, deposits, draft, etc. Function of debit and credit card.
2. Visit to saving and insurance institutions.
3. Making of room/house plans for different income levels. Planning efficient work areas and storage facilities.
4. Arrangement of furniture for different income groups.
5. Drawing floor plan/rooms for different income group.

## 2.5 INTERIOR DECORATION AND KITCHEN MANAGEMENT

L    T    P  
3   2/2   5

Rationale:

Sr. No.	Units	Coverage Time		
		L	T	P
<b>I. Unit I    Interior Decoration</b>				
1.	Art of Decoration	15	5	-
2.	Lighting	15	5	-
3.	Floor Covering	15	5	-
<b>II. Unit II    Kitchen Management</b>				
1.	Kitchen Layout & Organization	15	5	-
2.	Kitchen Equipment	15	5	-
		75	25	125

### DETAILED CONTENTS:

I. Unit I :Interior Decoration :

1. Art of Decoration:-

- A. Illusion - Graphical, Geometrical, By Colour, Optical.
- B. Flower Arrangement and Flower vase decoration
- C. Accessories - Interior accessories - Wall Painting, Murals, Relief Painting, Sculptures, Plant and Planters, Ethnic and Traditional Ornaments, Holders, Pottery and other hand made objects.
- D. Wall Decoration - Paint- Types of Paint and their finishes, Painting, Types of Curtel and Draperies - their selection of colours and pattern as per interior of room, types of valances to enhance curtain decoration, Types of tapestries and method of appliaction and their maintenance.

2. Lighting - Types of lighting - Up lights, Down lights, Pendants, Cove lighting, Conseal lights, Bracket Light. Creating different moods through lighting.

3. Floor Covering - Types of floor covering - Carpet, Rughs, Linoleum, PVC, Quartz, Wooden, etc. Methods of cleaning, Care and Maintenance of floor covering.

II. Unit I :Kitchen Management :

1. Kitchen Layout- different types e.g. L-shape, U-shape.

2. Kitchen organization.

3. Maintenance and care of kitchen equipments.
4. Modern apparatus of kitchen.

#### List Of Practicals

##### A. Interior Decoration

1. Flower Arrangement and Bouquette and Floor Decoration (Rangoli & Alpana).
2. Care and arrangement of furniture for different purpose.
3. Placement of accessories for interior enrichment with the use of different types of curtains/Draperies/Tapestries.
4. Dressing of Furniture - Cushion on Chair and Sofa, Seat Cover, Upholstry, Table Cover - Plastic, Linen, Jute, Bed Covers and accessories, Blanket preparation on bed, etc.
5. Drawing of lighting plan for various activities and areas.
6. Effect of architectural and decorative lighting.
7. To draw a geometric/graphical illusion.

##### B. Kitchen Management

1. Drawing of kitchen layout with wall elevation using all accessories.
2. Planning of all kitchen equipment.
3. Care of kitchen equipment.
4. Study of modern apparatus of kitchen.

GROUP-II

2.6 DIET THERAPY & PLANNING

L T P  
4 2/2 4

Rationale:

Sr. No.	Units	Coverage Time		
		L	T	P
1.	Unit-I	15	3	-
2.	Unit-II	40	10	-
3.	Unit-III	30	8	-
4.	Unit-IV	15	4	-
		100	25	100

DETAILED CONTENTS:

1. Introduction of diet therapy scope and importance.
2. Different disease (Fever, Gastrointestinal disease, Cardiovas, Culur, Diabetes, Kidney diseases, Blood pressure) their ateology factor, treatment and their diet plan).
3. Different type of feeding method of patients.
4. Various types of diets- Liquid, Solid, Semi solid/liquid, Balance diet.

LIST OF PRACTICALS

1. Diet planning for patients of different diseases mentioned in theory paper.
2. Preparation of various types of diets.

## 2.7 INSTITUTIONAL FOOD SERVICE MANAGEMENT

L T P  
3 - 6

Rationale:

Sr. No.	Units	Coverage Time		
		L	T	P
1.	Unit-I	75	-	-
		75	-	150

### DETAILED CONTENTS:

1. PLAN OF FOOD SERVICE FOR FOLLOWING INSTITUTION :
  - A. College
  - B. Canteen
  - C. Hostel
  - D. Hospital
  - E. Nurshing Home
  - F. Occasional Service
  - G. Birthday
  - F. Marriage
  - G. Anniversary
  - H. Official Party

### LIST OF PRACTICALS

Plan of food services for institutions mentioned in theory.

GROUP-III

2.8 ENTREPRENURSHIP IN CHILD CARE SERVICE

L T P  
3 1 5

Rationale:

Sr. No.	Units	Coverage Time		
		L	T	P
1.	Topic 1	25	8	-
2.	Topic 2	25	8	-
3.	Topic 3	25	9	-
		75	25	125

DETAILED CONTENTS:

1. Basic information about child care institution their infrastructure objectives and activities -
  - A. Day care centres
  - B. Creches
  - C. Bal Bhavan
  - D. Orphanages
  - E. Remand Homes
  - F. Aganwadi & Balwadi
  - G. Child Guidance Clinics
2. Different child care services at National and International level their objectives and programmes.
  - A. UNICEF
  - B. ICDS
  - C. CARE
3. Basic steps towards entrepenurship
  - A. Knowledge about funding agencies
  - B. Legal and regulatory processing
  - C. Record keeping.

LIST OF PRACTICALS

1. Visit to various child care institutions.
2. Preparing a detailed report of the visit on the following guidelines.
  - A. Location land building
  - B. Staff and their salaries
  - C. Budget and funding agencies
  - D. Activities being undertaken
  - E. Record keeping
  - F. Evaluation

## 2.9 EARLY CHILDHOOD EDUCATION AND MANAGEMENT

L    T    P  
3    -    6

Rationale:

Sr. No.	Units	Coverage Time		
		L	T	P
1.	Topic 1	45	-	-
2.	Topic 2	30	-	-
		75	-	150

### DETAILED CONTENTS:

1. Application of theories (Education and Development) in early childhood education; various types of ECE programmes.
2. Brief historical perspective of ECE programme in India and abroad.

### LIST OR PRACTICALS

1. Observation and recording of early childhood programmes.
2. Planning on yearly, monthly, weekly, daily basis.
3. Individual and shared lesson plan, activity plan and flowchart.
4. Preparation and collection of educational material.
5. Implementation of prepared plan.
6. Conducting pre and post session.
7. Arranging and equipping the classroom-different corners.
8. Carry out large and small groups activities.
9. Supervision of transition throughout the day; Feed back of plans and modification.
10. Working with parents; professional behaviour and ethics; Executive support role in the centres.
11. Working on strategies to help children with mild behavioural problems.

Above practicals to be conducted with co-operation and collaboration of any Nursery School.

GROUP-IV

2.10 TEXTILE DESIGN

L	T	P
3	1	5

1. Weaving : principles, Loom and its parts, basic weaves,
2. Knitting- principles and classification.
3. Introduction to dyeing classification of dyes. Methods of dyeing.
4. Introduction to printing Methods of printing.
5. Development of pattern by colour and weave effect.
6. Construction of motif suitable for printing and weaving.
7. Elements and principles of preparing decorative designs for woven and printed fabrics for various uses. Basis of textile design like diamond ogee, curved line half drop, reverse etc. Ways of modifying colours in textiles.
8. Fusion of Design : Fusion of Indian Traditional Design with Western Designs.

LIST OF PRACTICALS

1. Weaving samples of basic weaves.
2. Preparing samples of hand knitted techniques : Plain, Purl, Rib, Tuck stitch and multi coloured stitch.
3. Tie and Dye.
4. Batik printing.
5. Screen printing.
6. Block printing.
7. Stencil printing.
8. Mairame knit.
9. Nail weaving.
10. Canvas work.
11. Development of pattern by colour and weave effect.
12. Construction of motif suitable for printing and weaving.
13. Designs based on theory topic No. 7.
14. Visit to printing unit.

## 2.11 COSTUME DESIGNING :

L	T	P
3	1	5

### 1. CLASSIFICATION OF GARMENTS AND MEASUREMENTS :

Garment classification for men and women (for different age groups), Fabric selection for garments and properties, Eight head theory of human anatomy, Measurements and its importance, Method of taking important body measurements for gents and ladies garments.

### 2. Clothing requirements (Men and Women both) for Childern, adloescent, Adults and Senior citizens.

### 3. Wardrobe planning, Clothing awareness and symbolism, Socialization and self concept.

### 4. Authropometric measurements.

### 5. Basic pattern making- Patterning importance of paper patterns, types of paper patterns, Principles of pattern drafting, Study of pattern making of top and bottom garments, Grading - Study of grading of various components of top and bottom garments ( Two examples of men and women both), Maker planning - Computer Aided Pattern Making and Grading system.

### 6. SEWING TECHNOLOGY :

Stitch, Classification of stitch, Seam, Different types of seams, Sewing aids/tools, Parts of sewing machine, Study of various types of sewing machines such as Lock Stitch, Chain Stitch, Over lock, Flat Lock, Button Holding, Buttoning and computer Controlled Sewing Machines. Timing Diagram for Lock stitch, Trimmings, Selection of Needle and Sewing thread. Study construction of top and Bottom and Garments, Individual and Group Production System.

## LIST OF PRACTICALS

1. Drafting, draping and flat pattern making.
2. Cutting and stikling of different garments.
3. Demonstration layout of different fabrics.
4. Designing and construction of ten to fifteen garments of different age group using different construction and decorative features.
5. Pattern grading.
6. Visit to apparel manufacturing unit.

DIPLOMA IN HOME SCIENCE  
STAFF STRUCTURE

Intake of the students in the course	60
Pattern of the course	Annual System
Staff teaching and supporting	
1. Principal	1
2. H.O.D.	1
3. Lecturer Home Science	4
4. Lecturer Language	1 (part time)
5. Computer Programmer	1
6. Lab Assistant	2
7. Steno typist	1
8. Accountant/Cashier	1
9. Student/Library Clerk	1
10. Store Keeper	1
11. Class IV	6
12. Sweeper	Part Time as per requirement

The posts of Chaukidar and Mali will be sanctioned according to the justification of institution. Services of existing staff in other disciplines of the institute may be utilized, if possible.

Guest lectures may be organised at suitable time. The post of "Computer Programmer" is not needed in the institutions where diploma in "Electronics Engineering" is running.

Note:- Guest lectures may be organised at suitable time by the institute

DIPLOMA IN HOME SCIENCE  
STAFF QUALIFICATION

Revised qualification for the post of head of Department and lecturer for the two year diploma in home science.

---

Sl.No.	Name of post	Qualification
1.	Head of Department	Post Graduate Degree in Home Science with specialisation in Child Development/Food & Nutrition/Clothing and Textile/Family Resource Management/ Extension Education
2.	Lecturer Home Science	Post Graduate Degree in Home Science with specialisation in Child development
3.	Lecturer Home Science	Post Graduate Degree in Home Science with specialisation in Food & Nutrition.
4.	Lecturer Home Science	Post Graduate Degree in Home Science with specialisation in Clothing & Textile.
5.	Lecturer Home Science	Post Graduate Degree in Home Science with specialisation in Home Resource Management
6.	Computer Programmer	Bachelor degree with Physics or Mathematics, Knowledge of operating computer system & Diploma in Electronics.
		OR
		B.Sc. with Mathematics & Physics with 3yrs Experience in Computer Operation.
		OR
		Diploma in Electronics Engg. with 4yrs Experience in concerned field.
7.	Lab Assistant	Diploma In Home Science with 2 Years Experience OR Graduate in Home Science

## SPACE REQUIREMENT

A.	LAND AREA	NO	M2	
B.	Administrative Block			
1.	Principal's Room	1	30	m2
2.	Steno Room	1	6	"
3.	Confidential Room	1	10	"
4.	Office Room	1	80	"
5.	Library (Common with other disciplines)	1	150	"
6.	Common Room	1	80	"
7.	Class Rooms	1+1	75	"
8.	Store	1	100	"
9.	Model room	1	90	"
C.	LABORATORIES BLOCK			
1.	Physiology & First Aid Lab. 4 sqm. per student.	1	60	"
2.	Art & Design Lab	1	120	"
3.	Kitchen & Food Lab 4 sqm. per student.	1	120	"
4.	Textile & Colthing Lab 8 sqm. per student.	1	120	"
5.	Extension Education Lab (Common with Computer Lab and LRDC)	1		
6.	Child Development Lab (No Seperate Lab required)	1		
7.	Computer Lab.	1	60	"
D.	Common Facilities			

1.	Dispensary	1	40	"
2.	Canteen & Tuck shop	1	50	"
3.	Parking space/ Cycle stand with Garrage	1	50 %	students
4.	N.C.C. Block	1	70	"
5.	Guest Room	1	30	"
E.	Residential Facilities			
1.	Hostel for Students	1		for 60 girls
2.	Staff Quarters			
	Principal	1		Type IV
	HOD/Warden	2		Type IV
	Sr. Lect./Lect.	2		Type IV
	Technical/ Ministerial Staff	2		Type II
	Class IV	6		Type I
3.	Play ground (Common with other disciplines)	1		-

### List of Equipments

Only those of the equipments given below which are essentially required for the conduction of practicals mentioned in the curriculum are to be procured by the institutions.

"Machine/Equipments/Instruments of old BTE list which are not included below are to be retained in the Lab/Shop for Demonstration purpose but not to be demanded fresh for purchase."

Sl.No.	Specification of Equipment	Quantity	Cost
1. Physiology and first Aid			
1.	First aid cupboard & box	1	2000.00
2.	Thermometer	4	100.00
3.	Bandages		100.00
4.	Sets of Chart, Models of physiology	2 set	400.00
5.	Cot & Bed Wooden with newar mattress & bed sheets, pillow, P.cases, towels, blankets.	2 set	10,000.00
2. Art & Design Lab			
A. Art & Design Lab			
B. Interior Decoration Studio			
C. Home Management Lab			
1.	Drawing boards and Easle board half imperial size	15	3000.00
2.	Brushes and colour mixing plate	2 set	200.00
3.	Paint/Colours	2 set	500.00
4.	Steel Almirah	1	3000.00
5.	Vases & Flower Pots	6	500.00
6.	Decorative materials- wall hangings, pictures, paintings, Sculpture, Pottery, Plant & Planters, Hand Made Object		25000.00
7.	Steel almirah	1	3000.00
8.	Pin holders	12	500.00
10.	Furnitures of Different Types		100000.00
11.	Dressing of Furniture		10000.00
12.	Curtains, Draperies, Tapestries		25000.00
13.	Different Types of Lighting		25000.00
14.	Floor Covering		25000.00

Sl.No.	Specification of Equipment	Quantity	Cost
15	House hold equipments	1 set	25000.00
16.	Vaccum Cleaner	1 set	5000.00
17.	Heater Electric	2	200.00
18.	Iron of different types - Steam, Electric	1 each	1000.00
19.	Different types of Brooms, Squeeeges, Brushes, mops	1 set	500.00
20.	Geager	1	5000.00
3.	Kitchen & Food Lab		
A.	Kitchen Management Lab		
B.	Food & Nutrition Lab		
C.	Institutional Food Service Lab		
1.	Steel Almirah	3	10000.00
2.	Glass almirah	3	10000.00
3.	Electric Oven	2	15000.00
4.	Pressure Cooker of different sizes(5 lit, 3lit, 1 lit.)	1 each	10000.00
5.	Idli vessel	1	1000.00
6.	Electric Toaster	1	1000.00
7.	Mixer, grinder and juicer (Electric)	2	8000.00
8.	Refrigerator	2	20,000.00
9.	Cooking range (gas)	2	10000.00
10.	Microwave Oven	2	20000.00
11.	Micro range/ cooking range	1	5000.00
12.	Gas oven cum cooling range	10	10,000.00
13.	Electric table oven	5	10000.00
14.	Gas with cylinder (1+2), stove 4 burner - super flame/hot line	3	3000.00
15.	Egg beater electric	2	1000.00
16.	Ulensil, mould cake tins and trays, bucket	1 set	3000.00
17.	Icing bags	6	1500.00
18.	Swiss roll tray	1	500.00

Sl.No.	Specification of Equipment	Quantity	Cost
19.	Cream horns mould		500.00
20.	Ice cream tins	3	600.00
21.	Weighing machine - Balance weighing scale needle type	1	500.00
22.	Thermos, jars, Containers, Ice Buckets, Thermal jars.	1 each	1000.00
23.	Buiscuit cutter	1 set	200.00
24.	Food Processor	1 set	8000.00
25.	Service Trolley	1	3000.00
26.	Utensils & Tawa of different sizes	3 set	15000.00
27.	Steel dinner set	2	4000.00
28.	Cutlery set	2	1000.00
29.	Weighing scale	2	1000.00
30.	Egg cutter	2	100.00
31.	Different types of knives and cutter		100.00
32.	Chopping board	2	100.00
33.	Non stick cook wears	5	5000.00
34.	Bucket and tubs for water storage	2	2000.00
35.	Waste bin (covered with lid)	2	100.00
36.	China dinner set	1	5000.00
37.	Trays for serving	2	500.00
38.	Table cloth, table mats, napkins		1000.00
39.	Crusher	2	2000.00
40.	Containers of all sizes, pearl pet, steel or alluminum or plastic		2000.00
41.	Different types of Jugs & Glass Set		5000.00
42.	Different types of Dessert Set		5000.00
43.	Payment & Token Counter	1	15000.00
44.	Food Service Counter	1	20000.00
45.	Table with 4 Chair	4 Set	20000.00

Item No. 43,44,45 is meant for Institutional Food Service Management.

Sl.No.	Specification of Equipment	Quantity	Cost
46.	Kitchen Sink	1 Set	5000.00
47.	Utensil Stand	1 Set	2000.00
4.	Textile & Clothing Lab		
A.	Textile & Clothing Lab		
B.	Textile Design Lab		
C.	Costume Design Lab		
D.	Laundry		
1.	Sewing machine with foot motor operated/hand operated	15	30,000.00
2.	Fashion makers Simple & Computerised	2 each	2100000.00
3.	Knitting machine	5	25,000.00
4.	Cutting table	4	10000.00
5.	Ironing board	4	10000.00
6.	Scissors tailors	4	1000.00
7.	Iron electric	4	4000.00
8.	Tailoring scales, measuring tape		100.00
9.	Steel almirah	4	20000.00
11.	Washing machine	1	10000.00
12.	Dye bath	6	3000.00
13.	Steam iron	2	5000.00
14.	Microscope Student Model	15	45,000.00
15.	Iron tub, Iron trays for soap making	2 each	1000.00
16.	Gas with gas cylinder	1	2000.00
17.	Glass almirah	3	20000.00
18.	Stain remover machine	1	5000.00
19.	Spirit lamp	15	1000.00
20.	Soap dish	15	100.00
21.	Weighing machine (5 Kg capacity)	1	500.00
22.	Bucket & mugs (2+1)	3	500.00
23.	Steel Large Bagonas	4	500.00
24.	Blocks	5 sets	500.00

Sl.No.	Specification of Equipment	Quantity	Cost
25.	Frame For Batik	30	600.00
26.	Screen Tables	2	2000.00
27.	Frame for Screen Printing	5	500.00
28.	Colour mixing machine	1	2000.00
29.	Steel Stand (For Hanging Cloths)	5	5000.00
30.	Batik Tubs (Enamel 25 liters)	4	4000.00
31.	Stove	15	3000.00
32.	Aluminium Frying Pan Thick	15	1000.00
33.	Batik Brushes	30	300.00
34.	Wodden Spoon	10	100.00
35.	Drums for storing water of 100 ltr. capacity	2	600.00

COMPUTER APPLICATION FOR ENGINEERING (Common to all Trades)

COMPUTER CENTRE

S.No.	DESCRIPTION	QTY.	APPROX. COST (in Rs.)
1	PENTIUM-IV 1.6 Ghz or latest RAM-256 MB or latest HDD-40 GB latest MONITOR COLOUR 17" AGP 16 MB 52X MM KIT( 52x CD Drive, Speaker,sound card) FDD - 1.44 MB Key Board - 107 Keys enhanced Mouse - Microsoft Mouse (3 Button) 32 Bit PCI ETHERNET CARD(10/100) Mbps Pre loaded Windows XP OR WINDOWS 2000 Pre loaded Norton Anti Virus with licence media and manual	16 (15+1Server)	8,000,00=00

OR

Computer of latest Specification

Software :

i.	Noval Netware/NT Latest Version	01	55000
ii.	WINDOWS - XP/WINDOWS 2000 /Windows NT	01	6000
iii.	MS OFFICE XP	01	17000
iv.	Dos latest version.	01	5,000
v.	FoxPro 2.5 or Latest Version	01	
vi.*	Mechanical DeskTop Power Pack (*->Only For Mechanical Engg.)	01	70000

3. Hardware

i.	Internal Modem 56 kbps		
ii.	Hubs-16 port, all accessories related to Networking.		
iii.	Scanner- A4	01	10,000
4.	132 Column 600 CPS or faster 9 Pin dot matrix printer with 500 million character head life	01	15,000
5.	Laser Jet	01	20,000
6.	5 KVA on line UPS with minimum 30 minute battery backup along with sealed maintenance free batteries. Provision for connecting external batteries with network connectivity.	01	1,75000
7.	Window Air Conditioner 1.5 tones capctity with ISI mark alongwith electronic voltage stablizer with over voltage and time delay circuit	04	30,000(EACH)
8.	Room preparation and furniture		LS

LEARNING RESOURCE MATERIALS

1.	Overhead Projector with screen	1	--	20000
2.	35 m.m. Slide cum Film Projector	1	--	50000
3.	Audio CD/Cassette Recorder Cum Player	1	--	15000
4.	V.C.R. with Monitor & Accessories	1	--	35000
5.	Digital Camera (Computer Centre to be used for Printing and other work)	1		250000
6.	Cutting, Binding & Stitching equipment.	1	--	30000
7.	DVD writer cum player	1	--	10000
8.	Colour Television	1	--	10000
9.	Radio with All Band	1	--	2000
10.	Video Camera/Handi Cam	1	--	25000
11.	L.C.D. Projector	1		100000

ANNEXURE - I

FIELD EXPOSURE

The first year students will have a four week Industrial Training in related institutions/ organization during summer vacation. They will incorporate following points in their report.

1. Name and Address of the unit
2. Date of
  - i. joining.
  - ii. Leaving
3. Nature of Industry
  - i. Product.
  - ii. Services
  - iii. Working Hrs.
4. Sections of the unit visited and activities there in.
5. Details of machines/Tools & instruments used in working in the section of the unit visited.
6. Work procedure in the section visited.
7. Specification of the product of the section and materials used.
8. Control of work & Quality.
9. Inspection procedures packing storing and dispatching of products.
10. Use of computer - if any
11. Visit of units store, Manner of keeping store items, Their receiving and distribution.
12. Safety measures on work place & working conditions in general comfortable, convenient and hygienic.
13. Pollution, professional diseases and hazards if any. Precautionary measures.

ANNEXURE-QUESTIONNAIRE

INSTITUTE OF RESEARCH, DEVELOPMENT AND TRAINING U.P. KANPUR -208024

SUBJECT: Questionnaire for ascertaining the job potential and activities of diploma holder in Home Science.

PURPOSE: To design and develop diploma curriculum in Home Science.

NOTE: 1. Please answer the questions to the points given in the questionnaire.  
2. Any other point or suggestion not covered in this questionnaire may be written on a separate paper and enclosed with the questionnaire.

1. Name of the organisation: \_\_\_\_\_  
\_\_\_\_\_

2. Name & Designation of the officer \_\_\_\_\_  
filling the questionnaire \_\_\_\_\_

3. Name of the department/section/ \_\_\_\_\_  
shop \_\_\_\_\_

4. Important functions of the \_\_\_\_\_  
department/section/shop \_\_\_\_\_

5. Number of diploma holder employees \_\_\_\_\_  
under your charge in the area of \_\_\_\_\_  
Chemical Engg.

6. Please give names of modern equipments/machines handled by a diploma holder in Home science.

1. 2. 3.

4. 5. 6.

7. What proficiencies are expected from a diploma holder in Home Science.

1. 2. 3.

4. 5. 6.

8. Mention the approximate percentage of the following desired in Diploma teaching.

- 1. Theoretical knowledge -----%
- 2. Practical knowledge -----%
- 3. Skill Development -----%

9. Do you think "on the job training" / Industrial training should form a part of curriculum. ( Yes/ No)

if yes then

- (a) Duration of training -----
- (b) Mode of training
  - 1. Spread over different semesters
  - 2. After completion of course
  - 3. Any other mode

10. What mode of recruitment is followed by your organisation.

- 1. Academic merit
- 2. Written test
- 3. Group discussion
- 4. Interview
- 5. On the job test.

11. Mention the capabilities/ Qualities looked for while recruiting diploma holder in Home Science.

- (a) Technical knowledge -----
- (b) Practical skill -----
- (c) Etiquettes and behaviour -----
- (d) Aptitude -----
- (e) Health habit and social background -----
- (f) Institution where trained -----

12. Does your organisation have any system for the survey of Home articles of different countries/States. Yes/No

13. Does your organisation conduct field survey to know users views regarding. Yes/No

- 1. Home Articles for different age groups and sex.
  - 2. Effect of climatic conditions
  - 3. Any other
- If yes ; Please give brief account of each.

14. Which type of assignment do you suggest for an entrepreneur in Home Science.

15. In which types of organisations can a diploma holder in Home Science can work or serve.

- |   |   |   |
|---|---|---|
| 1 | 2 | 3 |
| 4 | 5 | 6 |

16. Job prospects for the diploma holder in Home Science the next ten years in the state / country.
17. In your opinion what should be the subjects to be taught to a diploma student in Home Science.

Theory

Practical

18. Kindly mention particulars regarding topics/areas which should be given more emphasis in the curriculum .

Theory

Practical

19. Kindly state whether your organisation can contribute towards improvement of curriculum in above field. Yes/ No  
If yes : Please give names of experts in your organisation to whom contact.
20. Kindly give your valuable suggestions for being considered at the time of finalisation of curriculum.
21. What changes in technologies are to be incorporated in the development of curriculum in Home Science.

( Signature )

Kindly mail the above questionnaire duly filled to:-

Smt. R. P. Alam  
Assistant Professor  
Institute of Research, Development & Training, U.P.  
Govt. Polytechnic Campus  
Kanpur-208024

( Please note that all information in this survey is confidential for the use of curriculum design only )