



Pravara Rural Education Society's
WOMEN'S COLLEGE OF HOME SCIENCE AND BCA

A/p-Loni Kd , Tal-Rahata, Dist-Ahmednagar. Pin- 413 713

Accredited by NAAC with 'A' Grade

Affiliated to Savitribai Phule Pune University, Pune

(ID No.PU/AN/SC/141/2016)

AISHE No: C-44342



Office : (02422) 273989,
E-mail : homesciencebca@pravara.in

Principal : (02422) 272065
Web: www.pravarahomesciencebca.org.in

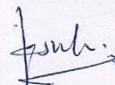
1.2.2 Number of Add on /Certificate programs offered during the last five years

Syllabi of Add-on/Certificate(Skill Development) courses

Index


1.2.2 Number of Add on /Certificate programs offered during the last five years

Sr. No.	Program Code	Program Name	Name of program introduced during last five years	Year of Introduction
1.	--	Certificate Course	Fashion Designing	2018-19
2.	HS03	Add-on Course	Personality Development	2018-19
3.	CA03	Add-on Course	Intellectual Property Rights	2018-19
4.	CA04	Add-on Course	Cyber Law	2018-19
5.	FAD706	Certificate Course	Tie and Dye Specialists	2017-18
6.	HS02	Add-on Course	Premarital Counseling	2017-18
7.	CC04	Certificate Course	Food Adulteration	2017-18
8.	CA02	Add-on Course	VB .NET	2016-17
9.	HS01	Add-on Course	Value Addition of Traditional Recipes	2016-17
10.	CC03	Certificate Course	Entrepreneurship Development Through FSN	2016-17
11.	CC02	Certificate Course	Processing of Fruits and Vegetables	2015-16
12.	--	Certificate Course	Beauty Parlor	2014-15
13.	401105	Certificate Course	Preservation of Fruits & Vegetables	2014-15
14.	CA01	Add-on Course	Computer Literacy for Home Science Students	2014-15
15.	CC01	Certificate Course	Food Product Development	2014-15


Dr. S. R. Kuchekar

Principal
Women's College of Home Science and RC
At/Po. Loni Tal. Rahata, Dist. Ahmedn.
Pin. 413713

Certificate Course in Fashion Designing

 भारत सरकार पुरस्कृत
केंद्रीय मनुष्यबल विकास मंत्रालय, शालेय शिक्षण व साक्षरता विभाग, नवी दिल्ली
भारत सरकार
जन शिक्षण संस्थान, अहमदनगर
दातरंगे मळा, नालेगाव, अहमदनगर. फोन / फॅक्स नं. (०२४१) २३२५४२८

कटींग टेलरींग / ड्रेस प्रशिक्षण (३ महिने)

- ❖ लाभार्थी ओळख व जन शिक्षण संस्थेची माहिती
- ❖ मॅशिनची माहिती व लागणा-या साहित्याची माहिती
- ❖ मॅशिन चालविण्यास शिकविणे
- ❖ मोजमाप घेण्याची पद्धत/ माहिती
- ❖ शिलाई / टिपा मारण्यास शिकविणे :
दोरा ओवणे, बॉबीन केस भरणे, रॉडची माहिती
- ❖ पेंपर कटींग
- ❖ पेटिकोट
- ❖ फ्रॉक
- ❖ साधा ब्लाऊज
- ❖ कटोरी ब्लाऊज, प्रिन्स कट ब्लाऊज
- ❖ ब्लाऊजचे वेगवेगळे प्रकार शिकविणे
- ❖ पंजाबी ड्रेस
- ❖ कुडता, सलवार
- ❖ वेगवेगळे ड्रेस शिकविणे
- ❖ शाळेचा ड्रेस

संचालक,
जन शिक्षण संस्थान, अहमदनगर.

Duration of the Course: Three months

Scheme of Study: Theory- 30% Practical- 70%

Number of Times offered in a year: Once

Fees: 1500/-

Maximum No. of Students: 30

Certification: All successful students shall be awarded certificates

Department of Home Science
Value Added Course

Personality Development

Class: FYBSc(I)

Subject Code: HS03

COURSE OBJECTIVES:

1. To create awareness about personality
2. To develop emotional maturity for well being of personality

Course content:

Unit 1 Personality: Meaning and different personality traits

Unit 2 Leadership: Introduction to Leadership, Leadership Power, Leadership Styles, Leadership in Administration.

Unit 3 Interpersonal Relations: Introduction to Interpersonal Relations, Analysis Relations of different ego states, Analysis of Transactions, Analysis of Strokes, Analysis of Life position

Unit 4 Communication: Introduction to Communication, Flow of Communication, Listening, Barriers of Communication, How to overcome barriers of communication.

Unit 5 Stress Management: Introduction to Stress, Causes, types and impact of stress, Managing Stress

Unit 6 Group Dynamics and team building: Importance of groups in organization, and Team Interactions in group, Group Building Decision Taking, Team Building, Interaction with the Team, How to build a good team?

Unit 7 Conflict: Introduction to Conflict, Causes of Conflict, Management Managing Conflict

Unit 8 Performance Appraisal: Introduction to Performance Appraisal, Appraisal Vertical Appraisal, Horizontal Appraisal, 360° Time Management, Methods of improving Techniques of Performance Appraisal.

Unit 9 Time Management: Time as a Resource, Identify Important Time Management Wasters, Individual Time Management Styles, Techniques for better Time Management.

Unit 10 Motivation: Introduction to Motivation, Relevance and types of Motivation, Motivating the subordinates, Analysis of Motivation

Methodology:

Lecture-cum-discussion

Group Discussion

Management Games

Case Studies

Duration of the Course: Thirty Hours

Scheme of Study: Theory- 100%

Number of Times offered in a year: Once

Fees: Free

Maximum No. of Students: 30

Department of BCA
Value Added Course

Intellectual Property Rights(IPR)

Class: TYBCA(V)

Subject Code: CA03

COURSE OBJECTIVES:

1. To create awareness about the rights for the protection of the invention
2. To increase the knowledge regarding patents, copy right, trademarks, design, domain name & SCPA.

Syllabus:

Unit No.	Subject Content	No .of Lectures
1.	<ul style="list-style-type: none">• Intellectual Property Rights: Introduction, objectives, activities in IPR, types of IPR• Copyright(Ownership and Enforcement): Objectives, understanding copyright law, copyright protection, rights, copyright infringement, defenses for infringement, transfer of Copyright	06
2.	<ul style="list-style-type: none">• Patents(Ownership and Enforcement): Objectives, types of Patents, Patent protection, Patent application procedure, drafting of a patent specification, rights of Patentee, assignments, infringement, defenses in case of infringement, remedies	07
3.	<ul style="list-style-type: none">• Trademark(Ownership and Enforcement): Introduction, trademark symbols, functions of Trade Mark, rights, protection of good will, infringement, defenses in case of infringement ,Passing off	09

	<ul style="list-style-type: none"> • Designs: Introduction, types of design rights, protection, infringement, defenses in case of infringement 	
4.	<ul style="list-style-type: none"> • Domain Name Protection: Introduction, domain name and intellectual property, registration of domain names • Protection of Semi-conductor Chips: Semiconductor chip product, mask work, subject matter of protection, Semiconductor Chip Protection Act(SCPA), WIPO Copyright Treaty • Practical aspects of Licensing: IP Licensing Agreement, benefits, clauses of licensing 	08

References:

1. Licensing Art & Design by Caryn R. Leland, Allworth Press
2. A Professional's Guide to licensing and Royalty Agreements by Caryn R. Leland, Allworth Press
3. Web sites: online information and hand outs

Duration of the Course: Thirty Hours

Scheme of Study: Theory- 100%

Number of Times offered in a year: Once

Fees: Free

Maximum No. of Students: 50

Department of BCA
Value Added Course

Cyber Law

Class: TYBCA

Subject Code: CA04

Course Objectives:

1. To introduce the **cyber** world and **cyber law**
2. To clarify the Intellectual Property issues in the **cyber** space and the growth and development of the **law** in this regard.

Syllabus:

Unit No.	Subject Content	No .of Lectures
1.	Basic Concepts of Technology and Law: Understanding the technology of Internet, scope of Cyber laws, Cyber crime Law of Digital Contracts: Science of Cryptography ,Digital Contracts, system of Digital Signatures, role and function of Certifying Authorities	10
2.	Information Technology Act 2000: Information Technology Act 2000(Sec 1 to 94)	05
3.	Intellectual Property Issues in Cyber Space: Copyright in Digital Media, Patents in Cyber World Rights of netizens and E-Governance: Privacy and freedom issues in Cyber World, E- Governance, Cyber Crimes and Cyber Laws, Ethical hacking	07
	Cyber Law Issues for Management: Cyber Law Issues in E-business Management, major issues in	08

4.	Cyber Evidence Management	
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References:

1. Cyber law by VivekSood
2. IT2000 Bill
3. How to register your own copyright by Marx Warda, Sphinx Publishing
4. Websites: online information and handouts

Duration of the Course: Thirty Hours

Scheme of Study: Theory- 100%

Number of Times offered in a year: Once

Fees: Free

Maximum No. of Students: 25

Certificate Course

Tie and Dye Specialists

- 1. ModuleName:** Tie and DyeSpecialist
- 2. Sector:** Fashion Design
- 3. Code:** FAD706
- 4. EntryQualification:** Minimum 7th Standard and 14 years of age
- 5. TerminalCompetency:** After completing the training, the candidate would be able to work as a designer with skill of tie- and-dye and satisfy the customers.
- 6. Duration:** 500 hours.

7. CourseContents:

Practical Competencies	Underpinning Knowledge (Theory)
<ul style="list-style-type: none">➤ Practicing use of tools and equipments in a safe manner.➤ Fabric test. (Burning test)➤ Stain Removal.➤ Techniques followed for Tie and Dye – Resist Printing,➤ Dyeing with Tie and Dye method	<ul style="list-style-type: none">➤ Introduction to Textiles.➤ Classification of Textile.➤ Fibre, Fabric and their properties.➤ Different types of dyes and their affinity to different fibres➤ Types of Printing.➤ Stain Removal.➤ Preparation for Tie and Dye➤ Tie and Dye

Duration of the Course: Five Hundred Hrs

Scheme of Study: Theory- 30% Practical-70%

Number of Times offered in a year: Once

Fees: Free

Maximum No. of Students: 30

Certification: All successful students shall be awarded certificates

Department of Home Science
Value Added Course

Premarital Counseling

Class: S.Y.BSc(III)

Subject Code: HS02

Objectives:

1. To create awareness about reproductive health of both gender
2. To create awareness about marital adjustments

Course content:

1. Self-awareness and personality development

- Self-knowledge / self-awareness and transparency-openness and daringness
- Self-esteem and courage
- Inborn qualities and creativity
- Self-confidence and realistic mentality
- Social awareness and sensitivity
- Moral consciousness and solidarity feelings
- Integral personality: physical-emotional-social –moral maturity.

2. Communications in the family

- Caring for the other- respect emotions/ opinions/interest
- Avoid parallel communication, hidden communication, defects in communication
- Control of the tongue/ ability to forgive and forget
- Importance of family counseling

3. Men-women biology

- Body structure of men and women
- Theology of body and sexuality
- Sexual illness – sexual deflection or deviation
- AIDS awareness

4. Psychology of women & men

- Ability of both men and women to analyze and take decision
- Swiftiness in expressing emotions
- Interpersonal and social relationship
- Variations in sexual reaction and implications for spiritual and prayer life
- Psychology of men & women at physical, mental and emotional levels and at social, moral and spiritual levels.
- Psychology of men and women: in different ages: during marriage, when becomes a parent, significance of mid- age and the psychology of the aged

5. Sexual adjustment in marital life

- Sexuality as God's gift
- Purity and holiness – marital and moral statutes
- Conjugal life giving surrender–
- Premarital and extra marital affairs
- Sexual disorder and impotency
- Contraceptive techniques
- Abortion: a mortal sin and unethical practices of using modern mechanism for pregnancy.

6. Responsible parenthood

- Value of life and the glory of human beings
- Natural means of family planning
- Pregnancies, delivery, care for children, parenting - physical – mental – and emotional development during infancy, childhood, teenage etc.
- Human and religious formation
- Giving right education and providing the best context for integral growth.
- Other points to remember while bringing up their children

7. Family problems and possible solutions

- Avoid prejudices and suspicion Foster tolerance and harmony
- Face challenges and conflicts in an even mindedness (equanimity)
- Understand the problems of the other if he/she is an employer
- Keep good relationship with in-laws and relatives of the spouse Nuclear family
- Problems in the family due to one man's rule

Theme for group discussion

- a) Signs of a mature person
- b) Ideal husband/ wife; model father /mother
- c) Things to keep in mind before choosing the partner
- d) Main reasons of the family problems
- e) External factors that influence the family today
- f) The necessary articles that should have in a Christian family
- g) Changes in the construction of family; advantage or disadvantage
(Joint family – nuclear family – family of one man's rule)

h) How to face marital family problems

Duration of the Course: Thirty Hrs

Scheme of Study: Theory-100%

Number of Times offered in a year: Once

Fees: Free

Maximum No. of Students: 25

Department of Home Science
Certificate Course

Food Adulteration

Class-T.Y.Bsc(Sem. VI)

Subject Code-CCO4

Course Objectives –

- ✓ To develop Skill in students to detect Food Adulterants in Commonly Consumed foods

Syllabus-

Unit	Detection of Food Adulteration	No. of Lectures
1	Cereals & Cereal Products	06
2	Milk & Milk Products	06
3	Fats & Oil	06
4	Spices	06
5	Miscellaneous, Honey, sweet meals	06

Duration of the Course: Thirty Hrs

Scheme of Study: Practical-100%

Number of Times offered in a year: Once

Fees: Free

Maximum No. of Students: 10

Certification: All successful students shall be awarded certificates

Department of BCA
Value Added Course

VB.Net Syllabus

Class: SYBCA

Subject Code: CA02

Objectives:

- 1) This course teaches the students how to build well architectural application in Microsoft .Net environment
- 2) The students will get a strong foundation on object oriented programming as well as component based programming and learn skill of user interface development

Syllabus:

Sr. No.	Contents	Lectures
1	Introduction To .Net,. Introduction To Visual Studio, Project Basics, Type of Project in .net, IDE of Vb.Net-Menu Bar, Tool Bar, Solution Explorer, Tool Box, Properties Window, Form Designer, Output Window, Object Browser.	05
2	The Environment- Editor Tab, Format Tab, General Tab, Docking Tab, Visual Development & Event drive programming Methods & Events.	02
3	The VB.Net Language -Variable, Declaring Variable, Data type of Variables, Forcing Variable Declaration, Scope,& Life time of Variable, Constants, Array, Type of Array .Control array, Functions, Passing Variable Number of Arguments, Returning Value from Function, Control Flow Statements, Conditional Statements, Loop statements, Msg box,& Input Box.	08

4	Working with forms: Loading, Showing and hiding forms, controlling one form within another. GUI Programming with window form Text Box, Label, Button, list box, Combo box, Checkbox, Pict Box, radio button, Panel, Scrollbar, Timer, List view, Tree View, Toolbar, Status bar, There Properties, Methods and Events, Open file Dialog, Save File Dialog, Font Dialog, Color Dialog, Print Dialog, Link Label, Designing Menue Context Menu, access & Shortcut keys.	10
5	Database Programming with ADO.Net –Overview of ADO, From ADO to ADO.net, Accessing Data Using Server Explorer. Creating Connection, Command, data Adapter and Data Set with OLEDB and SQLDB. Display Data on data bound controls, Display data on data gridFetching Record set & Operation-Insertion, Updation, Navigation, Selection etc. Report Generation(Crystal report or data report or any)	05

References:

- 1) .Net programming by MeenakashiThalorByNiraliPrakashan
- 2) VB.Net by Radhaganesan P.
- 3) .Net 4.0 Programming (6-In-1)Black Book by Kogenet

Duration of the Course: Thirty Hours

Scheme of Study: Practical- 100%

Number of Times offered in a year: Once

Fees: Free

Maximum No. of Students: 20

Department of Home Science
Value Added Course

Value Addition of Traditional Recipes

Class: T.Y.BSc.

Subject Code: HS01

COURSE OBJECTIVES:

3. To gain Knowledge about Traditional Indian Food
4. To Value Addition in Traditional recipes.

SYLLABUS

Unit No.	Subject Content	No .of Lectures
1.	Traditional Indian Food Products History of traditional recipes of different states of the country Value addition of traditional recipes Nutrient composition of traditional v/s value added meals Enlisting traditional recipes of different states of the country Preparation of Recipes of Following states <ul style="list-style-type: none">• Maharashtra• Value addition in• Puranpoli, Pakoda,• Thalipith, Pithale• Gujrat• Value addition in Khaman• Suralivadi,• Dhokala,• Dal Dhokali, Thepala• South Indian Dishes	30
2		

	<ul style="list-style-type: none"> • Value addition in Idli ,Dosa , Sambar • Punjab • Value addition in Chole,Bhatura,Dalmakhani 	
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References

1. Me Cuisine: You Food - Krishan K. Kamra

Duration of the Course: Thirty Hours

Scheme of Study: Practical- 100%

Number of Times offered in a year: Once

Fees: Free

Maximum No. of Students: 10

Department of Home Science
Certificate Course

Entrepreneurship Through Food Science and Nutrition

Class: T.Y.BSc.

Subject Code: CC03

COURSE OBJECTIVES:

1. To Understand the concept of Entrepreneurship
2. To Provide Conceptual input regarding Entrepreneurship development in Food.
3. To Sensitize and motivate towards Entrepreneurship development

Syllabus:

Unit No.	Subject Content	No .of Lectures
1.	1. To Enlist Entrepreneurship opportunity in Food Science and Nutrition	30
2	2. Cost Calculation and Accounting. 3. Prepare the Various food Product and Its selling <ul style="list-style-type: none">➤ Chinese Food➤ Punjabi Snacks➤ South Indian Snacks➤ Maharashtrian Snacks➤ Gujrati Snacks	

Duration of the Course: Thirty Hrs

Scheme of Study: Practical-100%

Number of Times offered in a year: Once

Fees: Free

Maximum No. of Students: 15

Certification: All successful students shall be awarded certificates

Department of Home Science
Certificate Course

Processing of Fruits and Vegetables

Class-S.Y.Bsc (Sem IV)

Subject Code –CCO2

Course Objectives

- 1) To make students understand the Preservative food Product as well as an income generating activity
- 2) To develop in students the ability to Preserve foods by laboratory and household

Syllabus:

Unit No.	Subject Content	No. of Lectures
I	Preparation of pickles (on basis of expected shelf life) <ul style="list-style-type: none">• Short and long shelf life pickles• Sweet Pickles• Spicy and Sour Pickles with or without oil	6
II	Sugar Preserves <ul style="list-style-type: none">• Preparation of jam• Preparation of jellies• Preparation of morrabbas• Preparation of fruits Candies• Preparation guava Cheese• Preparation of toffees• Preparation of tomato Sauce	12
III	Sauces <ul style="list-style-type: none">• Preparation of tomato Sauce• Preparation of red Chili Sauce• Preparation of green chili Sauce• Preparation of tamarind Sauce	6
IV		6

	Syrups And Squashes <ul style="list-style-type: none"> • Lemon squash • Orange squash • Pineapple Squash • Grape Squash • Mango Squash 	
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References:

1. Salunke D.K. : Storage Processing and Nutritional Quality of Fruits and Vegetables
2. Home Scale Processing and Preservation of Fruits and Vegetables CFTRI Mysore

Duration of the Course: Thirty Hrs

Scheme of Study: Practical-100%

Number of Times offered in a year: Once

Fees: Free

Maximum No. of Students: 15

Certification: All successful students shall be awarded certificates

Certificate Course in Beauty Parlor

भारत सरकार पुरस्कृत केंद्रीय मनुष्यबल विकास मंत्रालय, शालेय शिक्षण व साक्षरता विभाग, नवी दिल्ली, भारत सरकार जन शिक्षण संस्थान, अहमदनगर दातारंगे मळा, नालेगांव, अहमदनगर. फोन / फॅक्स नं. (०२४१) २३२५४२८	
ब्युटीपार्लर व आरोग्य देखभाल	
अभ्यासक्रम	
विभाग १ (थ्रेडिंग वॉक्सिंग ब्लिचिंग) १. थ्रेडिंग आयब्राज अपरलिप्स फोरहेड साईड ब्लॉक्स चिन थ्रेडिंग २. वॉक्सिंग सिंपल वॉक्सिंग फ्लवर्ड वॉक्सिंग ३. ब्लिचिंग क्रिम ब्लिचिंग पावडर ब्लिचिंग विभाग २ (स्किन केअर) १. स्किन विषयी माहिती स्किन स्किनची चाचणी स्किनचे कार्य स्किनचे प्रॉब्लेम्स २. फेशियल ट्रिटमेंट I) फेशियलचे प्रकार हर्बल फेशियल, गोल्डन फेशियल सिल्व्हर फेशियल, ऑडीनरी फेशियल फ्रुट फेशियल, पर्ल फेशियल नॅचरल (मेंदी) फेशियल II) स्किन ट्रिटमेंट अक्ने/ पिंपल ट्रिटमेंट/ ब्लॅक हेड ट्रिटमेंट आय मसाज (Under Eye dark circle treatment) III) चेह-याचे लेप (घरगुती)	विभाग ३ (नेल ट्रिटमेंट) मॅनिक्युअर, पॅडिक्युअर फ्रेंच मॅनिक्युअर विभाग ४ (हेअर केअर) १. केस केसांचे प्रकार हेअर प्रॉब्लेम्स आणि ट्रिटमेंट (उपचार) हॉट ऑईल मसाज, मेंदी डाय हेअर कलर, हेअर डाय हेअर प्रॉब्लेम्सचे घरगुती उपाय (पॅक) टिप्स (घरगुती) २. हेअर कट U कट, डिप U कट किंवा V कट स्टेप कट, लेअर कट, राउंड कट ३. हेअर स्टाईल्स इन बन हेअर स्टाईल लो बन हेअर स्टाईल टु इन वन हेअर स्टाईल फ्रेंच रोल फ्रॅन्च रोल इन लॉग हेअर विभाग ५ (मेकअप) मेकअप - फेस टाईप, स्किन कलर मेकअपच्या पद्धती Single Base Make up Double Base Make up Bridal Make up साडी स्टाईल्स साधी साडी, गुजराती साडी नऊवारी साडी, बंगाली देवदास साडी सिंगल रॅप साडी
Director Jan Shikshan Sansthan, Ahmednagar	

Duration of the Course: Two months

Scheme of Study: Theory + Practical

Number of Times offered in a year: Once/ Twice

Fees: Rs.1000/-

Maximum No. of Students: 30

Certification: All successful students shall be awarded certificates

Department of Home Science

Certificate Course

Preservation Of Fruits and Vegetables

MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATION, MUMBAI -51

1	Name of Syllabus	C.C. IN PRESERVATION OF FRUITS AND VEGETABLES (401105)																																									
2	Max.Nos of Student	25 students.																																									
3	Duration	6 Month																																									
4	Type	Part Time																																									
5	Nos Of Days / Week	6 Days																																									
6	Nos Of Hours /Days	4 Hrs																																									
7	Space Required	Workshop = 400 Sq feet Class Room = 200 Sq feet TOTAL = 600 Sq feet																																									
8	Entry Qualification	7 th passed																																									
9	Objective Of Syllabus/ introduction	There are enough fruits and vegetables available in our agricultural oriented country. Many fruits and vegetables are wasted due to lack of knowledge techniques transport facilities etc So this can prove a good course to avoid wastage as well as provide job opportunities to needy people students can also start a small unit of preservation after completion of this course and self employ themselves.																																									
10	Employment Opportunity	A) Self- Employment :- Small scale/ Cottage Industry of Food Preservation. E.g. Tomato Production Sauce, Ketchup, Pickles , chutney, jam and jelly etc. B) Wage-Employment :- Worker in food industry such as food industry of pickle , jam etc.																																									
11	Teacher's Qualification	B. Sc Home science																																									
12	Training System	Training System Per Week <table><tr><td>Theory</td><td>Practical</td><td>Total</td></tr><tr><td>6 Hours</td><td>18 Hours</td><td>24 Hours</td></tr></table>							Theory	Practical	Total	6 Hours	18 Hours	24 Hours																													
Theory	Practical	Total																																									
6 Hours	18 Hours	24 Hours																																									
13	Exam. System	<table><tr><td>Sr. No.</td><td>Paper Code</td><td>Name of Subject</td><td>TH/PR</td><td>Hours</td><td>Max. Marks</td><td>Min. Marks</td></tr><tr><td>1</td><td>40110511</td><td>Method of Preservation</td><td>TH-I</td><td>3 hrs</td><td>100</td><td>35</td></tr><tr><td>2</td><td>40110521</td><td>Fundamental of Food Processing & Preservation</td><td>PR-I</td><td>6 hrs</td><td>200</td><td>100</td></tr><tr><td>3</td><td>40110522</td><td>Fruit, Beverage and Other Preparation</td><td>PR-II</td><td>3 hrs</td><td>100</td><td>50</td></tr><tr><td colspan="5">Total</td><td>400</td><td>185</td></tr></table>							Sr. No.	Paper Code	Name of Subject	TH/PR	Hours	Max. Marks	Min. Marks	1	40110511	Method of Preservation	TH-I	3 hrs	100	35	2	40110521	Fundamental of Food Processing & Preservation	PR-I	6 hrs	200	100	3	40110522	Fruit, Beverage and Other Preparation	PR-II	3 hrs	100	50	Total					400	185
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Sr. no.	THEORY - I Method of Preservation
1	History and development of Food Industry (Particular fruit and vegetable Preservation Industry) in India.
2	Availability of seasonal fruits and vegetables and their use and scope.
3	Microbiology- Moulds, yeast, Bacteria characteristics and in identification. Importance in preservation of fruits and vegetables.
4	Sanitary standards, personal hygiene
5	Principles of food preservation methods of food preservation.
6	Fruit Beverages- selection of fruit Principles and methods of preservation used. Used. Proportion of ingredients and their role in preservations. Precautions to be take while preparation preparation, Filling, Sealing and storing o Following products :- Squash, Syrup, Cordial, Crush, Nector.
7	Jams, Jellies, Marmalades- selection of fruit Principles and methods of preservation used. Proportion of ingredients precautions- Preparation, Preparation filling, sealing storing Different tests of doneness Faults in jam, jelly, marmalades making and remedies.
8	Candied peels, fruit toffee, crystaaised fruits , Glaced fruits, fruit cheese – Simple methods of preservation.
9	Sauces and wet chutneys- selection of fruit or vegetable Principles and Methods of food preservation applied Proportion of ingredients and their role precautions preparations preparation filling sealing storing Tomato, ketchup, puree.
10	Pickles – selection of fruit and vegetable Principles and methods of food preservation used. Classification . a) short duration b) Long duration precautions – preparation reparation filling packing storing, curing techniques , defects & remedies.
11	Dry chutneys and masalas – section of fruits vegetable spices and condiments principles and methods of preservation applied Raw material and their role in preservation Different methods of prepetition packaging and storing . their use in daily food preparation.
12	Dehydration- Classification- Natural Artificial Principles and Methods of preservation used preparation Tech niques storage of dehydrated products and its microbiology freezing – Techniques.
13	Food Additions a) Use of artificial colours and Flavourings b) use of other substitutes c) use of chemical preservatives d) merits and demerits of all three. Food grades and standards F. P. O. agg Mark.
14	Food Adulteration - ;identification, Food Laws. Prevention of food Adulteration Act.
15	Types of spoilages in preserved production causes control
16	Planning of food preservation production unit sources of finance specification and lay out of plang. Government licenses and other conditions required.

PRACTICALS - I	
Fundamental of Food Processing & Preservation	
1	Introduction of laboratory – Instruction for Working in food preservation laboratory. Rules for observing asepsis in the laboratory. Study of common food processing equipments instruments handling usage care & precautions.
2	Weights and Measures- Conversion of weights and measures.
3	Demonstration of Aseptic handling
4	Study of moulds yeast and bacteria associated with fruits and vegetables preservation through charts.
5	Fruit Beverages- squash, syrup cordial, crush, Juice Nector, Lemon, Orange, Sweet Lime, Pineapple, Mongo, Grapes, Jamun, Pashion fruit, Tomato etc.
6	Jams jellies, Marmalades, marambas, Mixed Fruits, Apple, Pieapple, Mongo, Strawberry, Wood Apple, Guvava, Jamun, Orange etc
7	Candied peels, fruit toffee, crystallized, glazed fruit, fruit cheese.
8	Sauces wet chutneys- Tomato, Chjilli, Tamarind Tomato ketchup, Tomato puree.
PRACTICALS - II	
Fruit, Beverage and Other Preparation	
9	Pickles-Mango, Lemon, Miaxed vegetan;e, chilli and others.
10	Dry chutneys and Masalas- Different varieties
11	Dehydration
12	Freezing
13	Detection of food aduleration
14	Detection of spoilage in foods
15	Visits to food preservation Industries-Report
16	Preparation of layout for a small food preservation un it – as project.

LIST OF TOOLS AND EQUIPMENTS

Sr.No.	NAME AND DISRIPTION OF TOOLS	FOR REQUIRED
1.	Work Tables (either Aluminium or Kadappa)	15
2.	Weighing scale 10 kg. capacity.	02
3.	Refrigerator	01
4.	pulper	01
5.	Juice extracting machine	01
6.	Autoclave	01
7.	Botting Machine	01
8.	Corking Machine	01
9.	Sealing Machine	01
10	refractometer	5 to6
11.	Thermometer (360)	5 to 6
12.	Jetmetres	2
13.	Chemical weighing balance	1
14.	sinks	5
15.	Gas burner	7

	SMALL EQUIPMENTS :-	
16.	VESSEL – STAINLESS STEEL (WITH LIDS) 20 to 25 lit. capacity 5 lit. capacity 2 lit. capacity. 1 lit. capacity.	02 05 15 15
17.	Stainless steel sieves	07
18	Strainers (s.s. or Plastic) Big	07
19	Knives (s.s. 6" blade)	15
20	Wooden spoons	15
21	Heart shaped s.s.spoons(big)	15
22	Round-" (medium)	15
23	Katories	15
24	Chopping/Cutting boards	07
25	Measuring Glass	07
26	Set of measuring spoons	07
27	S. S. Thalis	07
28	Glass nottles for jam	15
29	Glass bottles for beverages	15
30	S.S.Thalis	15
31	Food Adulteration Kit	01
32	S. S. Pealers	07
33	Greater (S.S)	05
34	Food mixer (Electric)	01
35	Pressure Cooker	01
36	Fruit trays (Plastic)	07
37	Gas lighter	07
38	Beaker	07

• **REFERENCE BOOKS :-**

1. FRAZIER W. C. Food Microbiology TATA 4th Ed Magraw – Hill Publishing Co-Ltd. New Delhi, 1978.
2. Lal Girdhari, et al, Preservation of Fruits and Vegetables Publication & Information Div , IACR, New Delhi 1986.
3. CFTRI Publication, Home Scale Processing & Preservation of Fruits & Vegetables the Wesley Press Mysore 1967.
4. S. C. Bhatai Canning and Preservation of fruits and Vegetables Publication Division, Small Scale Industry Research Industry.
5. Smt. Kukade S. et al Food Preservation manual . S. N. D. T. university Publication 1994.
6. Gopalan Indira & Mohan Ram. Fruits National Institute of Nutrition.
7. Smt. Radha Puri, jam, jelly, Marmalade.
8. Dr. Kadam S. S. & Shree Dhotre Vasant Phal Prakriya – ek Mahatvacha Laghu udyog.
9. Phal Prakriya – Joshi.
10. Sangeeta Pickles, chutneys, soups salads & Sauces.

Department of BCA
Value Added Course

Computer Literacy for Home Science Students

Class: F. Y. B.Sc. (Home Science)

Subject Code: CA01

COURSE OBJECTIVES:

1. The main objective of the course is designed to aim at imparting a basic level appreciation program for the common Student.
2. Computer training classes typically teach students basic skills in computer usage, often required in today's workplace and social exchanges. Learning objectives for these classes state the desired outcomes, such as improved confidence in technology use and increased awareness of opportunities afforded to individuals with computer application skills.

Syllabus:

Unit No.	Subject Content	No .of Lectures
1.	<ul style="list-style-type: none">• Introduction to computer.• Block Diagram of Computer• Components of Computer System	06
2.	<ul style="list-style-type: none">• Classifications of computers• Printer and it's type• Storage Devices• Concepts of Hardware and Software• Programming language• Network devices	07
3.	Introduction to Windows <ul style="list-style-type: none">• What is an operating system and basics of Windows• The User Interface	09

	<ul style="list-style-type: none"> • Windows Setting • Advanced Windows 	
4.	MS Office <ul style="list-style-type: none"> • Microsoft Word • Microsoft Excel • Microsoft PowerPoint 	08

References:

4. P.K Sinha 'Computer Fundamentals', BPB Publications

Duration of the Course: Thirty Hours

Scheme of Study: Practical- 100%

Number of Times offered in a year: Once

Fees: Free

Maximum No. of Students: 20

Department of Home Science
Certificate Course

Food Product Development

Class- T.Y.B.Sc. (Sem VI)

Subject Code –CCO1

Course Objectives

- 1) To make students understand the food Product Development as well as an income generating activity
- 2) To develop skills among the students about marketing for food Products.

Syllabus

Unit No.	Subject Content	No. of Lectures
I	<ul style="list-style-type: none">• Importance and scope of product development.	6
II	<ul style="list-style-type: none">• Market survey of food products and its cost• Study of food labeling and legal requirements.	6
III	<ul style="list-style-type: none">• Study of requirements of food product under BIS and Agmark.• Product Development and Shelf life studies.	6
IV	<ul style="list-style-type: none">• Study of pack house and Export facility centers• HACCP Principles, Decision tree.	6
V	<ul style="list-style-type: none">• Detection of adulterants.• Microbial standards of food products.	6

Duration of the Course: Thirty Hrs

Scheme of Study: Practical-100%

Number of Times offered in a year: Once

Fees: Free

Maximum No. of Students: 10

Certification: All successful students shall be awarded certificates