



VELLALAR COLLEGE FOR WOMEN (AUTONOMOUS), ERODE-12

College with Potential for Excellence | An ISO 9001:2015 Certified Institution

Re-accredited with 'A+' Grade (CYCLE IV) by NAAC & Affiliated to Bharathiar University, Coimbatore



Skill Based Subjects - I

Name of the Department	Subject Code	Name of the Course
English	21LTUS301	English for Life Skills
History	21HIUS301	Elements of Journalism
Mathematics	21MSUSP01	ICT Tools for Teaching and Learning
Physics	21PHUS301	Energy Management
Chemistry	21CHUS301	Chemistry of Milk and Milk Products
Botany	22BOUS301	Herbs and Health Care
Zoology	21ZOUS301	Ornamental Fish Culture
Nutrition And Dietetics	21NDUS301	Food Chemistry
Computer Science	21CSUSP01	Data Analysis for Biological Applications Lab
Commerce	21COUS301	Women Entrepreneurship Development

PG & Research Department of English

Skill Based Subject

Semester III

CODE	COURSE TITLE
21LTUS301	Skill Based Subjects I ENGLISH FOR LIFE SKILLS

Category	CIA	ESE	L	T	P	Credit
Core	25	75	35	10	-	03

Aim

To enable the students to improve their accent and pronunciation in English

Objective

To train the students to engage themselves in interpersonal communication and prepare them for career opportunities

Syllabus

UNIT – I(Listening) – Instructor led Module – Classroom activity. **9 Hrs**

Stage 1 – Listening to the teacher/student narrating and describing events; to be followed by comprehension questions (Oral Skill)

Students need to answer orally and through the written mode which will strengthen their vocabulary and grammar.

UNIT – II (Reading and Writing) **9 Hrs**

Reading Basics and strategies.

Brainstorming Collocations

Discussing of reports

Role play

(Through the reading skill, speaking skill is strengthened)

Writing

Report Writing

Note-taking/making

UNIT - III (Non-verbal Language) 9 Hrs
Personal appearance
Posture
Gestures
Facial Expression

UNIT – IV Job Skills – Role Play 9 Hrs
Career plans
Dream Job
Describing your company
Product profiles

UNIT – V (Speaking) Instructor led Workshop – Role Play 9 Hrs
Sounds of English

Note:

Questions would be from Units II –V only

Unit I meant for class room activity only

TOTAL 45 Hrs

BOOKS FOR REFERENCE:

1. **Dr. PRAKASH C. L.,** *An Advanced Course in Communication and Media Awareness*, Cambridge University Press, New Delhi, 2007.
2. **KRISHNA MOHAN & MEERA BANERJI,** *Developing Communication Skills*, Macmillan, India, 2009.
3. **SASIKUMAR V., et al.,** *Oral Communication Skill*, Foundation Books, Cambridge University Press, New Delhi, 2009.

PG & Research Department of History

Skill Based Subject

Semester III

CODE	COURSE TITLE
21HIUS301	SKILL BASED SUBJECT I: ELEMENTS OF JOURNALISM

Category	CIA	ESE	L	T	P	Credit
SBS I	50	50	40	5	-	3

Objectives: On successful completion of the course, the students should have understood the knowledge regarding the theory and practice of Journalism.

Unit -I **(9 Hrs.)**

Journalism – Definition – History of Journalism – History of Press in India – Lord Lytton and press.

Unit -II **(9 Hrs.)**

Characteristics of Journalist – Qualifications – Journalism as a Career – Structure of Newspaper Organisation.

Unit -III **(9 Hrs.)**

Reporting – Quality of Reporters – Beats – Kinds of Reporting- Functions and Responsibilities of a Reporter - SMCR Model (Source Mass media Communication Receiver).

Unit –IV **(9 Hrs.)**

Principles of Editing –Editing Techniques – Editor and his Responsibilities- Editorial policy – Changing role of Editors –Editorial Freedom.

Unit –V **(9 Hrs.)**

Role of Press in freedom movement –Ethics and Principles of Journalism - News Agencies – Recent trends in Press.

REFERENCE BOOKS:

1. **Ahuja, B.N.& Chabbra, S.S.** Principles and Techniques of Journalism, Surjeet Publications, New Delhi, 2008.
2. **Kamath, M.V** Professional Journalism, Vikas Publishing House Pvt Ltd, Noida, 2006.
3. **Pant, N.C** Modern Journalism, Kanishka Publishers, Distributors, New Delhi, 2002.
4. **Puri, G.K.** Journalism, Competition Review Pvt Ltd, New Delhi, 1994.
5. **Shrivastava, K.M** News Reporting and Editing, Sterling Publishers Pvt Ltd, New Delhi, 1987.

Department of Mathematics

Skill Based Subject

SEMESTER - III

CODE	COURSE TITLE
21MSUSP01	ICT TOOLS FOR TEACHING AND LEARNING

Category	CIA	ESE	L	T	P	Credit
Skill Based Subject - I	50	50	15	-	30	3

Objectives:

- To help students to become competent and confident users of ICT tools in teaching and learning
- To prepare students for the world of tomorrow
- To apply their ICT skills and knowledge to their learning in other areas
- To use their ICT skills to develop their language and communication skills
- To equip students with the skills necessary to use technology to become independent learners

Syllabus

UNIT I

(9 Hrs.)

Google Classroom: Hands-on with Google Classroom – Introduction to Google Classroom – Creating your Classroom – Understanding the Interface – Adding Teachers and Students – Structuring your Course Contents – Adding Course Material – Adding and Evaluating Assignments - Creating and Evaluating Quizzes

UNIT II

(7 Hrs.)

Google Docs: Introduction to Google Docs – Working with Google Docs – Eight Utilities of Google Docs – **Google Forms:** Hands-on with Google Forms – Introduction to Google Forms – Working with Google Forms

UNIT III

(11 Hrs.)

Google Sites: Hands-on with Google Sites – Introduction to Google Sites – Working with Google Sites – **Video-conferencing Tool:** Hands-on– Introduction– Working with Video-conferencing Tool–**Creating E-Content** – **Videos:** Open Broadcaster Software (OBS)– Introduction to OBS – Hands-on with OB

UNIT IV

(10 Hrs.)

Creating E-Content – Videos OpenShot – Introduction to OpenShot – Hands-on with OpenShot– Uploading Videos on YouTube –**Creating E-Content - Visualization Tools:** Creating Live Charts – Step by Step Process to create Live Charts– Creating Diagrams – Step by Step process to create Flowcharts and Diagrams

UNIT V

(8 Hrs.)

Creating E-content - Concept Visualization: Mind Maps– Hands-on with Mind Maps–**Creating E-Content – Animated Videos:**Art of creating Animated Videos with Render forest– Hands-on with Render forest.

Pedagogy

- Lecture, PPT, Quiz, Group Discussion and Seminar

Web Resources

- classroom.google.com
- docs.google.com
- [docs.google.com › forms](https://docs.google.com/forms)
- sites.google.com
- meet.google.com
- <https://obsproject.com/>
- <https://www.openshot.org/>
- <https://lvcharts.net/>
- <https://live.amcharts.com/>
- <https://www.mindmapping.com/>
- <https://www.renderforest.com/>
- <https://www.owllabs.com/blog/video-conferencing-tools>
- <https://getvoip.com/blog/2016/11/21/free-web-conferencing/>
- <https://www.g2.com/categories/video-conferencing/free>

Department of Physics

Skill Based Subject

SEMESTER - III

CODE	COURSE TITLE
21PHUS301	ENERGY MANAGEMENT

Category	CIA	ESE	L	T	P	Credit
SBS	50	50	41	4	-	3

Preamble

The main goal is to achieve and maintain optimum energy procurement and utilization for managing the energy consumption of house hold appliances. Also to create awareness to minimize energy costs without affecting production and quality.

Unit I: (9 Hrs)

Conventional Energy Sources:

Introduction-An initial idea of energy in science-Types of conventional energy-thermal energy-hydro thermal energy-Nuclear energy (Qualitative Analysis only).

Unit II: (9 Hrs)

Need for Non-Conventional Energy Sources:

Constraints in the conventional energy sources - Global energy trends - Global warming and the green house effect-Non-Conventional energy Sources-Energy consumption as a measure of prosperity -World energy futures.

Unit III: (9 Hrs)

General introduction to Non-Conventional Sources:

Introduction - Solar Energy - Wind Energy - Energy from Biomass and Bio Gas – Ocean thermal energy conversion-Tidal Energy-Geothermal energy.

Unit IV: (9 Hrs)

Solar energy applications:

Solar Cooker-Solar water heater-Solar Distillation-Solar space heater-Solar cell

Unit V: (9Hrs)

Energy Audit and Energy Security:

Energy Conservation-Energy audit: Definition, Objectives -Calculation of energy audit

Energy Security: Meaning - Definition - Importance - Energy security threats -short term security-long term security.

Text Books

Sl.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	John Andrews & NickJelley	EnergyScience Principles, Technologies and Impacts”	Oxford University Press, Newyork	2010
2.	G.D.Rai	Non - Conventional Energy Sources	Khanna Publishers, Delhi	1996
3.	Satyesh C.Chakraborty	Energy opportunities &social responsibility	Jaico Publishing House, Mumbai.	2009 & 1 st Edition

Unit V-Study Material: Provided by the Department of Physics.

Reference Books

Sl.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Janet Ramage	Energy, A Guide book	Oxford University Press, New york	1983

WebResources

- <https://www.toppr.com/guides/physics/sources-of-energy/conventional-sources-of-energy>
- https://warmheartworldwide.org/climate-change/?gclid=EAIAIQobChMIjsa855at8gIVs5NmAh08yQYQEAAYASAAEgKCA_D_BwE
- <https://www.irena.org/geothermal#:~:text=Geothermal%20energy%20is%20heat%20derived,harnessed%20to%20generate%20clean%20electricity.>
- <https://www.energy.gov/energysaver/water-heating/solar-water-heaters>
- http://elion.co.in/elion-energy-audit-conservation/?gclid=EAIAIQobChMIRNyan5et8gIVGJ1LBR34cAC9EAAYASAAEgLKwFD_BwE

Pedagogy

- Lecture, PPT, Quiz, Assignment, Group Discussion, Seminar

Department of Chemistry

Skill Based Subject

SEMESTER-III

CODE	COURSE TITLE
21CHUS301	Skill Based Subject I CHEMISTRY OF MILK AND MILK PRODUCTS (CAFETERIA SYSTEM)

Category	CIA	ESE	L	T	P	Credit
Skill Based Subject	50	50	45	-	-	3

Objective: To acquire a comprehensive knowledge on milk and milk products required for practical and systematic quality control programme in dairy plants.

UNIT I

9 Hrs.

Importance Of Dairy Industry: Milk – Definition – Composition of Milk – Water in Milk – Dry Matters – Milk Fat – Milk Protein – Whey Protein – Milk Sugars – Mineral Matters - Minor Constituents – Cholesterol- Pigment- Enzymes- Vitamins- Factors Influencing the Gross Composition of Milk – Variation to Species of Animal – Breed – Stage of Lactation - Seasonal Variations - Interval Between Milking - Effect of Feed Upon Milk.

UNIT II

9 Hrs.

Physical Properties of Milk: Colour - Flavor And Aroma – Acidity – Natural & Developed – Specific Gravity – Recknagel Effect – Viscosity and Conductivity. Physio- Chemical Change Taking Place in Milk Due to Processing Parameters Like –Boiling- Pasteurization – Sterilization and Homogenization - Fermentation of Milk - Souring.

UNIT III

9 Hrs.

Milk Products: Cream – Definition – Composition – Chemistry - Creaming Process Butter – Composition – Process of Manufacture - Ghee – Major Constituents – Common Adulterants Added to Ghee – Rancidity –Paneer and Cheese – Classification – Composition- Ice Cream – Composition of Ice Cream – Role of Stabilizers and Emulsifiers.

UNIT IV

9 Hrs.

Non Fermented Milk Products: Condensed Milk - Composition – Methods of condensing - Milk Powder – Definition – Process of Drying Milk - Spray Drying – Drum Drying - Types of Dry Milk – Uses of Dry Milk – Defects of Dry Milk – Marketing of Dry Milk - Dairy Detergents – Definition – Classification – Sanitizers – Chloramin T – Sodium Hypochlorite.

UNIT V

9 Hrs.

Testing of Milk: Significance of Lactose in Milk And Milk Products - Determination of Lactose Content in Milk – Polarimetry Method - Chloramines - Determination of Moisture and Total Solid Content of Milk – Gravimetric Method Determination of Fat and SNF of Milk - Detection of Added Water in Milk –Adulterations in milk and their impact on human health.

REFERENCE BOOKS

1. **Bagavathi Sundari K.**, *Applied Chemistry*, MJP Publishers, Chennai, 1st Edition, 2006.
2. **Clarence Henry Eckles D.S., Willes Barnes com PSMA**, *Milk and Milk Products* , Tata MC Graw-Hill, New Delhi, 1st Edition, 2005.
3. **Ghatak P.K., & Bandyopphay A.K.**, *Practical Dairy Chemistry*, Kalyani Publishers, New Delhi, 1st Edition, 2007.
4. **Jayashree Ghosh**, *Fundamental Concepts of Applied Chemistry*, S.Chand & Co., New Delhi., 1st Edition, 2006.
5. **Mathur M.P., Dattaroy D., Dinakar P.**, *Text book & Dairy Chemistry*, Indian Council and Agricultural Research, New Delhi, Revised Edition, 2005.

PG & Research Department of Botany

Skill Based Subject

SEMESTER - III

CODE	COURSE TITLE
22BOUS301	HERBS AND HEALTH CARE

Category	CIA	ESE	L	T	P	Credit
SKILL BASED SUBJECT -I	50	50	40	5	-	3

Preamble

To acquire knowledge of traditional medicinal systems, medicinal plants and their medicinal uses

Syllabus

UNIT – I 9 Hrs.

Indigenous Medicinal Systems of India – Siddha - Ayurveda — Homeopathy – Unani –Need to preserve the knowledge of the aforesaid systems

UNIT – II 9 Hrs.

Pharmaceutical Uses – Biological Source and medicinal uses of *Ocimum tenuiflorum* - *Emblica officinalis* – *Aloe vera* – *Catharanthus roseus* – *Cissus quadrangularis* - *Piper betle* and *Allium sativum*

UNIT – III 9 Hrs.

Nutraceutical Fruits & Vegetables - Tomato – Carrot – Beetroot - Soya Bean – Pomegranate – Jamun, Guava and Grapes

UNIT – IV 9 Hrs.

Plants for Body care –Tooth Paste -Bath oil - Hair oil – Shampoo and Herbal Perfumes

UNIT – V 9 Hrs.

Herbal Home Remedies – Skin Diseases – Skin pigmentation – Memory power- Gastro intestinal and Kidney stone

Text Books

S. No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Panda ,H.	Hand Book on Herbal Drugs and its Plant Sources	National Institute of Industrial Research Delhi.	2004, 1 st Edition

2.	Panda, H.	Complete Technology Book on Herbal Perfumes and Cosmetics	National Institute of Industrial Research Delhi.	2004, 1 st Edition
3.	Gokhale, S.B., Kokate, C.K. and Purohit, A.P.,	Pharmacognosy	Nirali Prakashan, Pune	2017, 38 th Edition

Reference Books

S. No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Acharya Vipul Rao	Herbs that Heal	Diamond Pocket Books, New Delhi.	2016, Revised Edition
2.	Kokate, C.K, Purohit, A. and Gokhale, S.B.	Pharmacognosy	Nirali Prakashan, Pune	2009, 43 rd Edition

Web Resources

- <https://www.ncbs.res.in/HistoryScienceSociety/content/overview-indian-healing-traditions>
- <https://www.healthline.com/nutrition/10-healthy-herbs-and-spices#section10>
- http://www.academia.edu/35369701/formulation_and_evaluation_of_herbal_toothpaste
- <https://www.saga.co.uk/magazine/health-wellbeing/treatments/herbal-remedies/a-z-herbal-remedies>
- <https://www.livestrong.com/article/273866-how-to-prepare-herbal-hair-oil-of-kerala-at-home/>
- <https://www.medicalnewstoday.com/articles/319418.php>

Pedagogy

- Lecture- Chalk & Talk, PPT, Quiz, Assignment, Seminar

Question Paper Pattern

Choice	Marks	Total
Open Choice (5 out of 8)	5x20= 100	100

Department of Zoology

Skill Based Subject

SEMESTER - III

CODE	COURSE TITLE
21ZOUS301	ORNAMENTAL FISH CULTURE

Category	CIA	ESE	L	T	P	Credit
Skill Based Subject – I	50	50	40	5	-	3

Preamble

To acquire basic knowledge on methods of fish culture, setting up of aquarium, maintenance and management of different ornamental fishes and to provide skills for self sustainability after graduation

Unit: I

10 Hrs

Benefits of ornamental fish culture as a hobby. Designing and Construction of public Fresh water aquarium- Marine aquarium. Aquarium plants - Types - Importance of aquarium plants, Indigenous aquarium plants of Western Ghats. Water quality management.

Unit: II

8 Hrs

Fresh water ornamental fishes - Gold fish - Fighter fish - Guppy - Molly - Zebra fish - Koi carp - Platy - Tiger barb - Angel fish.

Unit: III

9 Hrs

Food and Feeding - Nutritional requirements of ornamental fishes - Types of food - Live food - Artificial food. Live feed culture (Artemia, Infusorians and Spirulina) - Artificial feed preparation - Disadvantage of artificial feed.

Unit: IV

10 Hrs

Breeding of Ornamental fishes - Breeding habits - Pre Spawning - Spawning - Live bearers - Egg layers - Care of eggs, young and spawns. Transport of ornamental fishes. Government participation in aquaculture.

Unit: V**8 Hrs**

Ornamental fish diseases - Fin rot - Columnaris - White spot disease - Velvet disease - Gill rot - Fish louse - Nutritional deficiency diseases.

Reference Books

S. No	Authors	Title of the Book	Publishers	Year of Publication
1	Jhingran U.G	Fish and Fisheries in India	Hindustan Publication	1997
2	Thara Devi.C.S and Jayashree K.V	Home Aquarium	Saras Publication	2015
3	Pandey.K and Shukla.J.P	Fish and Fisheries	Rastogi Publication	2012
4	Ranjit Daniels.R.J	Fresh water Fishes of Peninsular India	Universities Press	2002

You tube videos links:

<https://www.youtube.com/watch?v=jw8j6kQR1Eo>

<https://www.youtube.com/watch?v=3Ilw1p0FmvI>

<https://www.youtube.com/watch?v=IUUbINZzURo>

Department of Nutrition and Dietetics

Skill Based Subject

SEMESTER - III

CODE	COURSE TITLE
21NDUS301	SKILL BASED SUBJECT I – FOOD CHEMISTRY

Category	CIA	ESE	L	T	P	Credit
Skill Based Subject	50	50	43	2	--	3

Objectives

Enable the students to

Gain knowledge on the basic principles in foods chemistry and make the students to utilize the principles in future research work.

Syllabus

UNIT – I

9 Hrs

Role of water in foods and cookery: Structure and properties of water molecule, water activity and absorption phenomena, Types of water in plant and animal tissues, bound water, capillary water and loosely bound water, role of water in food spoilage, moisture content of dehydrated foods and shelf life, role of water in cookery.

UNIT – II

9 Hrs

Carbohydrates: Chemical structures of Glucose, Fructose, Lactose, Sucrose, starch, Cellulose and Glycogen. Effect of dry heat – dextrinisation, Effect of moist heat – gelatinisation, Gel formation, syneresis, retrogradation of starch – Non – enzymatic browning reactions (Maillard reaction) - types and explanation (Chemical reactions not required), Prevention and impairment of nutritional quality.

UNIT – III

9 Hrs

Proteins: Food proteins – Functional properties, animal and plant proteins. Changes in protein properties - Denaturation and renaturation, native and denatured proteins, Colloids – sols, emulsion, gel formation – theories of gel formation, gelatin –properties and preparation, Texturised Vegetable Proteins (soya).

UNIT – IV**9 Hrs**

Fats & Oils: Classification and chemical properties of fatty acids. Hydrogenation – mechanism & factors affecting. Hydrolysis – enzymatic and alkali. Oil – slipping point, smoke, flash and fire points, Rancidity – types and factors affecting rancidity, changes in fats due to heat during cooking. Emulsions and emulsifiers – Definition, types and examples.

UNIT – V**9 Hrs**

Fruits & Vegetables: Antioxidants – Natural and synthetic, role as free radical scavengers, Pigments and polyphenols, flavour compounds in fruits and vegetables. Effect of heat on colour and flavour, enzymatic browning, Ripening of fruits – chemical changes.

Text Books

Sl.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Parveen garg	Carbohydrates & Energy	Neeraj Publishing House	2018, 1 st Edition
2.	Swaminathan M	Hand Book of Food Science and Experimental Foods	BAPPCO	2011, 3 rd Edition
3.	Chopra H.K. Panesar P.S	Food Chemistry	Narosa Publishing House	2015, 5 th Edition
4.	Lillian Hoagland Meyer	Food Chemistry	CBS Publications	2004, 1 st Edition

Reference Books

Sl.No.	Author Name	Title of the Book	Publisher	Year and Edition
1.	Meenakshi Paul E.D	Experimental Food Chemistry	Gene – Tech Books	2007, 1 st Edition
2.	Gaman P.M. Sherrington K.B	The science of Food, An Introduction to Food Science	Max Well Macmillan Publishers	2013, 2 nd Edition
3.	Iqbal S.A., Mido Y	Food Chemistry	Discovery Publishing House	2008
4.	H.-D. Belitz, W. Grosch, P.Schieberle, M.M. Burghagen	Food Chemistry	Springer	2004, 3 rd Revised Edition
5.	Seema Yadav	Food Chemistry	Cyber Tech Publications	2008, 1 st Edition

Bloom's Taxonomy Based Assessment Pattern

Components of CIA Marks

CIA Tests & Model Examination	Seminar	Assignment	Others (Class Participation/Group Discussion/ Quiz/ Model Preparation)
30(40+40+100=180/6)	5	5	10

Question Paper Pattern for CIA Theory

2 x20 =40(Open choice –any two out of three questions)	40
---------------------------------------------------------	-----------

Question Paper Pattern for Model and End Semester Examination

5 x20 =100(Open choice –any five out of eight questions)	100
-----------------------------------------------------------	------------

Department of Computer Science
Skill Based Subject
SEMESTER III

Skill Based Course I: Data Analysis for Biological Applications Lab
Sub.Code : 21CSUSP01
Max. Marks: 100 CIA: 50; ESE: 50 Credits: 3

Objective: To solve Biological problems using Data management Tool

1. Create a PIE chart to show the Blood Group of 95 Pharmacy students

Category of Blood Group	A	B	AB	O
Number of Students	49	27	15	04

2. For the data given below, calculate relative frequency and draw a bar chart with category in X axis and Relative frequency in Y axis

Blood Pressure Category	Frequency
Normal	1206
Pre-Hypertension	1452
Stage I Hypertension	653
Stage II Hypertension	222

3. Human Phenotype of 10 people is given in the table. Calculate summary statistics for Height, Weight and Age fields and create a Pivot table for the columns Sex and Hair Color.

Id	Height	Weight	Age	Sex	Hair Color
1	163.20	55.71	23	Female	Black
2	164.80	54.26	24	Male	Brown
3	153.72	52.54	21	Male	Brown
4	168.60	51.12	23	Male	Red
5	158.24	54.61	22	Female	Brown
6	151.25	53.72	24	Male	Black
7	156.25	51.22	22	Female	Red
8	168.72	57.21	24	Female	Red
9	159.67	53.75	21	Male	Brown
10	166.39	58.56	22	Male	Black

4. The size of breeding pairs of penguins is tabulated here. Check if there is correlation between the sizes of the two sexes using scatter graph and both correlation coefficients. (Use both Pearson and Spearman Correlation)

Pair	Female	Male
1	17.1	16.5
2	18.5	17.4
3	19.7	17.3
4	16.2	16.8
5	21.3	19.5
6	19.6	18.3

5. The effect of enzyme concentration on rate of a reaction was investigated with the following results.

Enzyme concentration (mM)	0	0.1	0.2	0.5	0.8	1.0
Rate (arbitrary units)	0	0.8	1.1	3.2	6.6	7.2

Plot a graph of these results, fit a straight line to the data, and find the slope of this line.

Use the slope to predict the rate at an enzyme concentration of 0.7mM.

6. In a test of two drugs 8 patients were given one drug and 8 patients another drug. The number of hours of relief from symptoms was measured with the following results:

	3.2	1.6	5.7	2.8	5.5	1.2	6.1	2.9
Drug B	3.8	1.0	8.4	3.6	5.0	3.5	7.3	4.8

Find out which drug is better by calculating the mean and 95% confidence limit for each drug, then use an appropriate statistical test to find if it is significantly better than the other drug.

7. The pulse rate of 8 individuals was measured before and after eating a large meal. Find out if there is any significant change in pulse rate after eating.

Pulse rate		
Person	Before Eating	After Eating
1	105	109
2	79	87
3	79	86
4	103	109
5	87	90
6	74	78
7	73	78
8	82	89

8. The drug was administered to 500 people out of a total of 800 included in the sample to test its efficacy against typhoid. The results are shown below. Find the effectiveness of the drug against the disease using chi-square test Chi-square (χ^2) table value at 5% level is 3.84

Test the Efficiency of Drug	Typhoid	No Typhoid	Total
Administering the drug	200	300	500
Without Administering the drug	280	20	300
Total	480	320	800

PG & Research Department of Commerce

Skill Based Subject

SEMESTER III

CODE	COURSE TITLE
21COUS301	WOMEN ENTREPRENEURSHIP DEVELOPMENT

Category	CIA	ESE	L	T	P	Credit
Skill Based	50	50	45	-	-	3

Objectives

- To impart knowledge on the concept of entrepreneurship and women entrepreneurship development.
- To instill ideas on identification, selection and preparation of projects and to have awareness on the institutions promoting entrepreneurship.

Syllabus

Unit I **10 Hrs.**

Definition of Entrepreneur – Entrepreneurial Characteristics – Functions of Entrepreneurs – Types – Concept of Entrepreneurship - Intra-preneurship – Economic and Social benefits – Barriers to Entrepreneurship – Eco-preneurship – Edupreneurship.

Unit II **10 Hrs.**

Women Entrepreneurship – Concept of Women Entrepreneurs – Features of Women Entrepreneurs – Women Entrepreneurship in India – Growth and Problems of Women Entrepreneurs – Suggestions to Promote Women Entrepreneurship.

Unit III **8 Hrs.**

Rural Entrepreneurship – Meaning, Need and Problems - Small Scale Sector in India – Rationale and Objectives of SSI – Problems of SSI.
Concept of Self-help Group – Role of Government and NGO's in promoting Self – Help Groups – Micro Enterprises.

Unit IV **8 Hrs.**

Meaning of Project – Project Identification and Selection. Guidelines for preparing Project Reports – Meaning and Contents – Feasibility Analysis.

Unit V **9 Hrs**

Institutional Support and Incentives : Need for Incentives , DIC – SIPCOT – TIIC – IFCI – Commercial Banks – Subsidies and Incentives in Tamilnadu.

Text Books

S. No.	Author	Title of the Book	Publisher	Year and Edition
1	Shukla M.B	Entrepreneurship and Small Business Management	KitabMahal Agencies, Allahabad	2009 & 3 rd Edition
2	Gupta C.B. and Srinivasan N.P	Entrepreneurial Development	Sultan Chand and Company, New Delhi,	2021 (Reprint) & 1 st Revised Edition
3.	Khanka S.S	Entrepreneurial Development	Sultan Chand and Company Ltd., New Delhi	2020 (Reprint) & 4 th Edition

Pedagogy

- Lecture, PPT, Quiz, Assignment, Group Discussion, Seminar