





## வே.வ.வன்னியப்பெருமாள் பெண்கள் கல்லூரி

(விருதுநகர் இந்து நாடார்களுக்குப் பாத்தியப்பட்டது)  
மதுரை காமராசர் பல்கலைக்கழகத்தின் கீழ் தன்னாட்சி உரிமம் பெற்றது  
(தேசிய தரமதிப்பீட்டுக் குழுவின் மறுமதிப்பீட்டில் (முன்றாம் சுற்று) 'A' அந்தஸ்து பெற்றது)  
விருதுநகர் - 626001

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முதுகலை பிறுதுறை□□□□□□□□□□□□ □□□□□□□□ □□□□□□□□□□□□

(2022 -2023 □□ □□□□ □□□□)

பாடக்குறியீடு		நேரம்: 30மணி
22PVTAI01	பேச்சுக்கலை	அகமதிப்பெண்: 100

### கற்றல் வெளிப்பாடு

- ஊழி1 : இன்றைய போட்டி நிறைந்த உலகத்தில் தொடர்புக்கலை இன்றிமையாதது. எனவே இப்பாடத்தை படித்த பின்னர் பிறருடன் தடங்கல் இல்லாமல் தொடர்பு கொள்ள முடியும்
- ஊழி2 : பேச்சு பயிற்சி அளிப்பதால் வேலை வாய்ப்பிற்கான நேர்முகத் தேர்வினை எதிர்கொள்ள இயலும்
- ஊழி3 : பேச்சுக் கலையைக் கற்பதன் வழி மாணவர்கள் ஆளுமை ஆற்றலை வளர்த்துக் கொள்ள உதவும்
- ஊழி4 : பேச்சுக்கலையை ஒரு பாடமாக எடுத்துக் கற்பதால் டேமையில் பேச்சுக் கூடிய திறன் மேம்படும்.
- ஊழி5 : பேச்சுக் கலையைக் கற்பதால் உலகளாவிய வகையில் தொடர்புத்திறன் மேம்பாடடைகிறது

### கூறு 1

பேச்சு ஒரு தலைசிறந்த கலை - மேடைப்பேச்சின் வகைகள் (10 □□□ நேரம்)

### கூறு 2

பேச்சாளரின் தகுதிகள் - மொழி அழிந்து மொழிக - மேடை நாகரீகம்  
(10 □□□ நேரம்)

### கூறு: 3

சொற்பொழிவில் மெய்ப்பாடுகள் - மேடைப்பேச்சில் அங்க அசைவுகள் - சொல்லும் பொருளும் - பேச்சைத் தொடங்குவது எப்படி - பொருள் விரிக்கும் முறை - பேச்சை முடிப்பது எப்படி - அவையறிதல் (10 □□□ நேரம்)

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1. நீங்களும் சொற்பொழிவாளர் ஆகலாம், இளசை சுந்தரமஇ புகழ் பதிப்பகம், மதுரை, முதல்பதிப்பு (14 .1 .2014)
2. நீங்களும் பேச்சாளர் ஆகலாம் - குமரி ஆனந்தன் இவானதி பதிப்பகம்;, சென்னை, ஆறாம் பதிப்பு - 2007
3. பேச்சுக்கலை, திருமலை.ம மீனாட்சி புத்தக நிலையம் , மதுரை, □□□□, 2009 (மு. ப )
4. பேச்சாளராக, பரந்தாமனார். அ.கி அல்லி நிலையம்;, சென்னை, மறு பதிப்பு – 2006



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**VIRUDHUNAGAR - 626 001**

**Department of English**  
**PG Departmental Value Added Course**  
**(2022 - 2023 onwards)**

<b>Course Code: 22PVEND01</b>	<b>Review Writing</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

**COURSE OUTCOMES**

On completion of the course, the students will be able to

- CO1 : understand the purpose and the procedures of review writing.
- CO2 : enrich their creative and critical thinking
- CO3 : develop the art of critiquing books and films
- CO4 : apply the procedures of review writing and analyse books and films effectively.
- CO5 : assess the overall quality of books and films of their choice

**Unit I:**

Review Writing: An Introduction  
Purpose of Review Writing  
Procedures for Review Writing (10 hours)

**Unit II:**

Book Review: An Introduction  
Format of Book Review  
Criteria to Judge a Book  
Process of writing Book Review (10 hours)

**Unit III:**

Film Appreciation: An Introduction  
Film Language: Reading the Visual and Visualizing the Text  
Procedures of Film Review (10 hours)

**Text Book:**

Study Material prepared by the Department of English.

**Reference Books:**

- Elango, N. (2009) *Film- Appreciation for Beginners* Madurai: Manimekala Publishing House.

**Reference e-Links:**

- <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4548566/>
- <https://www.rlf.org.uk/resources/the-structure-of-a-literature-review/>



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VIRUDHUNAGAR - 626 001

Department of

English

PG Interdepartmental Value Added Course

(2022 - 2023 onwards)

<b>Course Code:</b> <b>22PVENI01</b>	<b>Content Writing</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

## COURSE OUTCOMES

On completion of the course, the students will be able to

- CO1 : understand the role of content writing in the field of marketing
- CO2 : increase career prospects
- CO3 : boost up confidence
- CO4 : become a freelance content writer
- CO5 : create content for online marketing

### Unit I

#### Content Writing: An Introduction:

What is Content writing and how to start content writing? - Content writing with a stepwise procedure - Content Writing Tips for Beginners - Best Content Writing Tools - How to improve your Business Writing Skills. (10 Hours)

### Unit II

#### Types of Content Writing:

What are the Types of Content Writing? - What Skills Does a Content Writer Need? - How Do I Figure Out What to Write About? - How Do You Write Content Writing? - How Do I Know if My Content Writing Is Working or Not? (10 Hours)

### Unit III

#### Guidelines for Content Writing:

How to Structure your article? – Punctuation Rules - Effective Content Writing - The 11 Golden Rules of Writing Content for Your Website (10 Hours)

**Text Book:**

1. Study Material prepared by the Department of English.

**References e-Links:**

- <https://www.digitalvidya.com/blog/how-to-start-content-writing/>
- <https://www.masterclass.com/articles/types-of-content-writing>
- <https://www.jimdo.com/blog/11-golden-rules-of-writing-website-content/>



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### Department of History

### PG Departmental Value Added Course

(2022 - 2023 onwards)

<b>Course Code:</b> 22PVHID01	<b>Numismatics</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

### COURSE OUTCOMES

On completion of the course, the students will be able to

- CO1 : identify the significance of Coins through the ages .
- CO2 : reconstruct the history of India with the study of Coins
- CO3 : acquire skill in historical research
- CO4 : illustrate the political, economic and cultural History of India.
- CO5 : assess the importance of Numismatics in History.

### Unit I

Numismatics: Meaning - Definition – Origin of Coins in India - Punch-Marked Coins – Indo-Greek Coins – Coins of Kushas – Coins of Satavahanas – Coins of Guptas (10 Hours)

### Unit II

Coins of the Vardhanas – Coins of Rajput Dynasties – Coins of Western Chalukkyas – Coins of Eastern Chalukkyas – Coins of Cholas – Coins of Pandyas – Chera Coins (10 Hours)

### Unit III

Coins of the Sultans of Delhi – Coins of the Vijayanagar Kings – Mughal Coins – British Coins – Numismatics as a Treasure House of Historical Research. (10 Hours)

### Text Book

1. Commissioner, Government Museum. (1995), Coins of India Through the Ages, Madras:Government Museum.

### Reference Book

1. Anup Kumar. (2018), *A Study of Indian Numismatics*, Delhi:Swastik Publishers &

Distributers.









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VIRUDHUNAGAR - 626 001

Department of Mathematics

PG Departmental Value Added Course

(2022-2023 onwards)

Course Code 22PVMTD01	Mathematics with Python	No. of Hours : 30
		Internal : 100 Marks

## COURSE OUTCOME

On completion of the course, the students will be able to

- CO1 : acquire programming skills in Python
- CO2 : explain basic principles of Python programming language.
- CO3 : solve mathematical problems using Python
- CO4 : write, test and debug Python Programs.
- CO5 : create graphs and write programs in Python.

## Unit I

**Introduction:** Basic Mathematical Operations - Different Kinds of Numbers - Getting User Input - Writing Programs That do the Math.

**Visualisation:** Understanding Coordinate Plane - Working with List and Tuples - Creating Graphs with Matplotlib - Plotting with Formulas (10 Hours)

## Unit II

**Algebra:** Symbols and Symbolic Operations - Working With Expressions - Solving Equations - Plotting using SymPy.

**Calculus:** Limit of the Function - Derivative of the Function - Higher Order Derivatives (10 Hours)

### **Unit III**

Integral of the Function - Probability Density Functions.

**Data Analytics:** Mean - Median - Mode - Measures of Dispersion - Calculating the Correlation Between Two Data Sets - Scatter Plots - Reading Data from Files. (10 Hours)

### **Text Book**

1. Amit Saha, 2015. *Doing Math with Python*, No Starch Press, San Francisco.

### **Reference Books**

1. Peter Norton, Alex Samuel, David Aitel, Eric Foster-Johnson, Leonard Richardson, Jason Diamond, Aleatha Parker, Michael Roberts, 2005. *Beginning Python*, Wiley Publishing, Inc., Indianapolis, Indiana.
2. Wes McKineey, 2013. *Python for Data Analysis*, O'Reilly Media, Inc. USA.



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VIRUDHUNAGAR - 626 001

Department of Mathematics

PG Interdepartmental Value Added Course

(2022-2023 onwards)

<b>Course Code</b> <b>22PVMTI01</b>	<b>Introduction to</b> <b>LATEX</b>	<b>No. of Hours : 30</b>
		<b>Internal : 100 Marks</b>

## COURSE OUTCOME

On completion of the course, the students will be able to

- CO1 : get writing LaTeX in right away
- CO2 : know the basics of how LaTeX works and explain how to get started.
- CO3 : go through examples on how to write a letter
- CO4 : write an article and the report with chapter, sections and sub-sections, along with bibliography.
- CO5 : create Beamer slides, etc..

## UNIT I

Introduction - Preparing an input file - Sentences and paragraphs - Quotation marks - Special symbols - Emphasizing text - Preventing line breaks – Footnotes - Running LATEX. Document class - Page style - Page numbering - Creating lists - Formatting lengths -Parts of the document - Title - Abstract - Dividing the document. (10 Hours)

## UNIT II

Rows and columns - Keeping tabs - Pushing and popping - Simple tables -The basics -Superscripts and subscripts – Roots - Mathematical symbols – Fraction - Single equations - Numbered equations – Matrices - More complex roots. Group of equations – The array environment – Typesetting theorems – Theorems in LATEX – Designer theorems (10 Hours)

### **UNIT III**

The ‘amsmath’ package – Readymade styles. Preparing slides using beamer – Inserting pictures – Letters and notes. The picture environment – Boxes – Straight lines – Arrows – Circles – Ovals and rounded corners – Framing curves – Grids – color. Introduction to bibliographic environment – Basic commands – Multiple citation – The bibtex programme – Bibtex style files – Creating a bibliographic database.  
(10 Hours)

#### **Text Books**

1. LATEX Tutorials A Primer, Indian TEX users group, Trivandrum, India, 2003, September, Editor E.Krishnan.
2. LATEX A document preparation system – User’s guide and reference manual, second edition, Leslie Lamport, Published by Dorling Kindersely(India) Pvt.Ltd., licenses of Pearson Education in South Asia.



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VIRUDHUNAGAR - 626 001

## Department of Physics (SF)

### PG Departmental Value Added Course

(2022 - 2023 onwards)

<b>Course Code</b> 22PVPHD01	<b>Smart Sensors</b>	<b>Hours: 30</b>
		<b>Internal: 100 marks</b>

#### Course outcomes:

On completion of the course students will be able to

- CO 1 : understand about sensors, smart sensors and types of sensors.
- CO 2 : explain the construction and working of smart sensors.
- CO 3 : explain the applications of smart sensors in medical and security systems.

#### Unit I:

Sensors – smart sensors – types of smart sensors – IR sensors – sound sensors – temperature sensors – flow sensors – fluid property sensors – force sensors – humidity sensor – optical sensors – position sensors – pressure sensors – vibration sensors – water level sensors - general applications of smart sensors (10 Hours)

#### Unit II:

Applications of smart sensors in medical field – construction and working of air flow, pressure and temperature sensors – medical sensor requirements. (10 Hours)

#### Unit III:

Applications of smart sensors in security system – IR sensors – Photoelectric beam sensors – microwave sensors – tomographic motion detection sensors – microphones. (10 Hours)

#### Text Book:

1. Study material prepared by Department of Physics (SF)



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VIRUDHUNAGAR - 626 001

Department

of Physics

(SF)

## PG Interdepartmental Value Added Course

(2022-2023 onwards)

<b>Course Code</b> 22PVPHI01	<b>E-Waste Management</b>	<b>Hours: 30</b>
		<b>Internal: 100 Marks</b>

### Course Outcomes

On completion of the course students will be able to

CO1 : identify e-waste and their types

CO2 : describe the impact of e-waste on environment and human health

CO3 : explain the regulations and methods for proper disposal of e-waste

### Unit I

Introduction to e-waste - components of e-waste - categories of e-waste – e-waste around the world – proper disposal of e-waste - Impact of e-waste: environment, society, climate

(10 Hours)

### Unit II

E- waste and toxicity– effects of e-waste on health – exposure and impacts on children –e-waste management – Issues and challenges in e-waste management - regulations on e-waste management

(10 Hours)

### Unit III

Opportunities and solutions for e-waste management- reducing e-waste – preventing hazardous e-waste by design - e-waste recycling – extracting metals through e-waste recycling -simple means to e-waste recycling.

(10 Hours)

### Text Book

1. E-resources and Study material prepared by Department of Physics (SF)





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**VIRUDHUNAGAR - 626 001**

**Department of Chemistry (SF)**

**PG Departmental Value Added Course**

**(2022 - 2023 onwards)**

<b>Course Code:</b> <b>22PVCHD01</b>	<b>Chromatographic Techniques</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

## **COURSE OUTCOMES**

On completion of the course, the students will be able to

- CO1 : develop an understanding of the range and theories of instrumental methods available in analytical chemistry.
- CO2 : develop knowledge pertaining to the appropriate selection of instruments for the successful analysis of complex mixtures
- CO3 : provide practical experience in selected instrumental methods of analysis
- CO4 : extend skills in procedures and instrumental methods applied in analytical tasks.
- CO5 : expand skills in the scientific method of planning, developing, conducting, reviewing and reporting experiments.

## **Unit – I**

### **Liquid Chromatography**

Introduction, Principle & basic theory of chromatography, Column adsorption chromatography, Partition chromatography, Band broadening & column efficiency, Factors affecting, Types of Liquid chromatography, Theory, principle and Instrumentation of HPLC, Various types of detector, Injection system, Isocratic and gradient elution, Normal phase and Reverse phase liquid chromatography, Development of HPLC and UPLC method, Choice of stationary and mobile phase, Difference between HPLC and UPLC, Applications.

(10 Hours)

## **Unit -II**

### **Thin Layer Chromatography and Extraction techniques**

Introduction, Theory, Principle and Instrumentation of TLC, Method for the preparation of thin layers on plates, Application of sample on the chromoplates, Choice of adsorbent, Choice of mobile phase, Detecting reagent, Developing chamber, Developing and detection, Ascending, Descending and two dimensional TLC development, Impurity profiling with the help of TLC, Applications - Principle - procedure- soxhlet extraction -Solvent extraction - Microwave-assisted extraction (10 Hours)

## **Unit – III**

### **Practical-Isolation of organic compounds from Natural sources**

1. Beta carotein from carrot
2. Eugenol from clove
3. Lactose from milk
4. Limonine from citrous
5. Lycopene from tomatoes
6. Piperine from peeper (10 Hours)

### **Text Book**

1. Study Material prepared by the faculty members from the Department of Chemistry

### **Reference Books:**

1. Instrumental methods of chemical analysis – H. willard, L.Merrit, J.A. Dean and F.A. Settle. Sixth edition CBS (1986)
2. Thermal analysis –W.W. Wendlandt, John Wiley, (1986)
3. Fundamentals of analytical chemistry –D.A.Skoog, D.M. West and H.J. Holler sixth edition (1992)



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VAC	<b>Food Adulteration</b>	Total hours : 30
Course Code		Internal : 50
<b>20VCHI01</b>		

### Aim & Objectives

1. To train the students to be competent working professionals in the food industry, in the production of quality food by imparting better nutritional, sanitation & hygiene concepts.
2. To encourage students to the entrepreneurs and develop the capacity for setting up small scale enterprises with respect to food within the country.
3. To organize functions for creating awareness about the importance of safe processed nutritious food.
4. To provide diagnostic analysis of food products.

### Course Outcomes:

After completion of this course, student will be able to

CO1: understanding the basic concepts of Food adulteration and Food Additives

CO2: develop knowledge pertaining of the rules and regulation of Food adulteration

CO3: provide practical experience in testing adulteration in food materials

CO4: extend skills in procedures and experimental methods to analyze adulteration in food materials

CO5: expand skills in the present Laws and Procedures on Food Adulteration, Food Additives and various test for adulteration

### UNIT – I

1. Food adulteration – Introduction of Food adulteration, definition. New adulterants in foods
2. Historical Food legislation in India; Central food laboratory, Municipal laboratories,

**Present Laws and Procedures on Adulteration:** Highlights of Food Safety and Standards Act 2006 (FSSA) –Food Safety and Standards Authority of India–Rules and Procedures of Local Authorities. Role of voluntary agencies such as, Agmark, I.S.I. Quality control laboratories of companies, Private testing laboratories, Quality control laboratories of consumer co-operatives. Consumer education Consumer's problems rights and

responsibilities, COPRA 2019 - Offenses and Penalties – Procedures to Complain – Compensation to Victims.

## **UNIT-II**

### **Food Additives And Adulteration:**

1. Food additives, antioxidants, sequestrants, preservatives, nutrient supplement, emulsifiers, stabilizers and thickening agents, bleaching and maturing agent, sweeteners, humectants and anti-caking agents, coloring and flavoring substance

2. Food adulteration: Types of adulterants- intentional and incidental adulterants, methods of detection. Health hazards and risks

### **UNIT-III Testing adulteration**

Testing adulteration of Milk and products: Adulteration of Milk -Physical Tests: Detergent Test, Filter Test, Flow Test

Testing adulteration of oils and fats:

Testing adulteration of spices and condiments - Coriander powder: Test for starch & horse dung powder. Chilli powder. Test for oil soluble dyes, powdered bran, saw dust and brick powder. Turmeric Powder: Test for metanil yellow and lead chromate polish. Cloves: Test for exhausted cloves. Curry powder: Test for metallic colours. Poppy seeds: Test for Amaranths seeds.

Testing adulteration of pulses. - Testing adulteration of sugars & Preserves.- Testing for organic and inorganic matter in dals. Test for kesari dal in other dals. Test for Metanil yellow in dals. Test for lead chromate in dals. Test for kesari flour in besan.

Testing adulteration of Beverages.- Test for chicory tamarind seed powder and starch in coffee powder. Test for artificial colour, iron fillings in tea.

Testing adulteration of sugars & Preserves. Test for extraneous matter, washing soda in sugars. Test for artificial colour and chalk in jaggery. Test for purity of honey.

Testing adulteration of Miscellaneous products: Test for powdered stone or chalk in common salt. Test for non-permitted colour in laddus. Test for rhodamine B in peppermint. Test for colour in biscuits and ice candies. Presence of saccharin in sweets. Test for mineral oil in vinegar.

### References:

1. Detection of the Common Food Adulterants, Edwin Bruce, London Archibald Constable & Co.,Ltd., 2007.
2. Food Adulteration and its Detection, Jesse P. Battershall, New York, 2007.
3. Some forms of food adulteration and simple methods for their detection, Bigelow, Willard Dell, 1866-1939; Howard, Burton J, 2011.

### Reference e Books and Websites:

1. A first course in Food Analysis–A.Y.Sathe,New Age International(P)Ltd.,1999
2. FoodSafety,case studies–Ramesh.V.Bhat,NIN,1992
3. [https://old.fssai.gov.in/Portals/0/Pdf/Draft\\_Manuals/Beverages and confectionary.pdf](https://old.fssai.gov.in/Portals/0/Pdf/Draft_Manuals/Beverages and confectionary.pdf)
4. <https://cbseportal.com/project/Download-CBSE-XII-Chemistry-Project->
5. <https://www.fssai.gov.in/>
6. <https://indianlegalsolution.com/laws-on-food-adulteration/>
7. <https://fssai.gov.in/dart/>
8. <https://byjus.com/biology/food-adulteration/>



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**VIRUDHUNAGAR - 626 001**

**Department of Zoology**  
**PG Departmental Value Added Course**  
**(2022 - 2023 onwards)**

<b>Course Code</b> <b>22PVZYD01</b>	<b>Bee Keeping Practices</b>	<b>No. of Hours : 30</b>
		<b>Internal : 100 Marks</b>

**COURSE OUTCOME**

On completion of the course, the students will be able to

- CO1 : understand the value of beekeeping to become a successful entrepreneur.
- CO2 : make use of theoretical knowledge of beekeeping in practical procedures
- CO3 : analyse the merits of beekeeping and the ways to improve yield.

**UNIT I**

**Introduction:** Scope of Beekeeping, Social life in honeybee, Kinds of bees- Queen bee, Drone bee and Worker bee. Candidate species for beekeeping, Bee pasturage, Life cycle of honeybee. Location and preparation of Apiary, Nutritive and medicinal value of honey. Role of Khadi And Village Industries Commission (KVIC) in promoting Apiculture.

(10 Hours)

**UNIT II**

**Bee colony:** rearing of honeybee – Rearing Appliances – bee hive (primitive and modern hive), queen excluder, smoker, bee brush, comb foundation sheet, bee veil, uncapping knife, honey extractor and storage container. Food of honey bee – nectar and royal jelly. Artificial feeding, Handling of bees. Requeening. Dividing, uniting and shifting of bee colonies. Identification of diseased colonies. preventive and remedial measures to control disease and enemies.

(10 Hours)

**UNIT III**

**Products of beekeeping:** Primary by products –honey and bee wax. Secondary by products- propolis, pollen, royal jelly & bee venom, Extraction, Storage and marketing of honey. Harvesting and Processing of bee wax.Economics of bee keeping. (10 Hours)

**Text Book:**

1. Study Material prepared by the faculty members from the Department.of Zoology.

**Reference e-Links:**

- <http://ecoursesonline.iasri.res.in/mod/page/view.php?id=16251>
- <https://egov.uok.edu.in/elearning/tutorials/1011020512BR15103CR15Apiculture%20Lac%20culture%20and%20%20sericultureapiculture%20lac%20culture%20and%20%20sericulture%20upload.pdf>
- <https://byjus.com/biology/apiculture-beekeeping/>
- <https://www.vedantu.com/biology/apiculture-beekeeping>
- <https://www.aakash.ac.in/important-concepts/biology/apiculture-in-indian>
- <http://ecoursesonline.iasri.res.in/mod/page/view.php?id=16263>
- <https://www.notesonzooology.com/india/apiculture/diseases-of-honey-bee-apiculture/163>
- <https://msme.gov.in/sites/default/files/Beekeeping.pdf>
- [https://www.kvic.gov.in/newhm/cbrti/techbuletin/05-%20TB-05\\_Bee%20Wax.pdf](https://www.kvic.gov.in/newhm/cbrti/techbuletin/05-%20TB-05_Bee%20Wax.pdf)
- <https://www.northumbrianbees.co.uk/simple-wax-processing-for-a-small-scale-beekeeper/>



# V.V.VANNIAPERUMAL COLLEGE FOR WOMEN

(Belonging to Virudhunagar Hindu Nadars)

An Autonomous Institution Affiliated to Madurai Kamaraj University, Madurai  
Re-accredited with 'A' Grade (3<sup>rd</sup> Cycle) by NAAC

**VIRUDHUNAGAR - 626 001**

**Department of Zoology**  
**PG Interdepartmental Value Added Course**  
**(2022-2023 onwards)**

<b>Course Code</b> <b>22PVZYI01</b>	<b>Reproductive Health in Women</b>	<b>No. of Hours : 30</b>
		<b>Internal : 100 Marks</b>

## **COURSE OUTCOME**

On completion of the course, the students will be able to

- CO1 : understand the value of personal hygiene to lead a healthy life.
- CO2 : create awareness on maintenance of reproductive health
- CO3 : analyse the functional abnormalities and symptoms

## **UNIT – I**

**Female reproductive system**-Anatomy, Physiology and functions. Ovulation, Menstrual Cycle, Estrogen and Progesterone, Puberty, Pregnancy, Lactational and menopausal stages – Common problems, diagnosis and remedies. (10 Hours)

## **UNIT –II**

**Reproductive Health**- Introduction and Importance of reproductive health. Infertility problems-Diagnosis and treatment. Role of nutrition in Reproductive Health-impact of malnutrition in women, Personal and genital hygiene, Simple and effective ways to maintain vaginal health. Eugenics, Euthenics and Genetic counseling. (10 Hours)

## **UNIT –III**

**Diseases in female Reproductive system**- Urinary Tract Infections (UTIs) Polycystic Ovary Syndrome (PCOS) and Sexually Transmitted Diseases or Infections (STDs or STIs).Cancer Breast, Cervical and Ovarian Cancers-Causes, Symptoms, Control measures, Diagnosis and treatment (10 Hours)



**Text Book:**

1. Study Material prepared by the faculty members from the Department of Zoology.

**References:**

- <https://vikaspedia.in/health/women-health/adolescent-health-1/management-of-adolescent-health/nutritional-needs-of-adolescents>
- <https://byjus.com/biology/importance-reproductive-health/#:~:text=It%20helps%20in%20educating%20every,to%20deliver%20a%20healthy%20baby.>
- <https://www.vedantu.com/biology/why-is-reproductive-health-necessary>
- <https://byjus.com/biology/female-reproductive-system/>
- <https://www.netmeds.com/health-library/post/female-hygiene-10-simple-and-effective-ways-to-maintain-vaginal-health>
- <https://medcraveonline.com/MOJWH/reproductive-cycles-in-females.html>



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**VIRUDHUNAGAR - 626 001**

**Department of Biochemistry**

**PG Departmental Value Added Course**

**(2022 - 2023 onwards)**

<b>Course Code:</b> <b>22PVBCD01</b>	<b>Health and Well-Being</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

## **COURSE OUTCOMES**

On completion of the course, the students will be able to

- CO1 : define the Health, Stress, Communicable and Non-communicable Diseases
- CO2 : understand the Health Psychology, Stress, illness, pain, Environment and Health
- CO3 : discover the relationship between health and psychology, Role of Genetics and Major Nutritional problems

### **Unit I**

Introduction to Health Psychology: components of health, relationship between health and psychology, mind and body relationship, goals of health psychology. Well-being: Components of well-being: life satisfaction, affect. (10 Hours)

### **Unit II**

Stress, illness and pain : causes, consequences and coping with stress, pain and illness. Health enhancing behaviours: Implications for well-being: psychology factors: resilience, hope, optimism; exercise, safety, nutrition. (10 Hours)

### **Unit III**

Environment and Health, Communicable and Non-communicable Diseases, Leukoderma and Schizophrenia. Role of Genetics in Health and Disease, Major nutritional problems, National Health Programmes in India. (10 Hours)

### **Text Book:**

1. Sarafino, E.P. (2002). Health psychology: Bio psychosocial interactions (4th ed.).NY: Wiley

### **Reference Books**

1. DiMatteo, M.R. and Martin, L.R.(2002). Health psychology. New Delhi: Pearson.
2. Snyder, C.R & Lopez,S.J.(2007).Positive psychology :The scientific and practical explorations of human strengths. Thousand Oaks, CA: Sage.
3. Taylor, S.E. (2006). Health Psychology (6th ed.). New York: Tata McGraw Hill.



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VIRUDHUNAGAR - 626 001

## Department of Biochemistry

### PG Interdepartmental Value Added Course

(2022 - 2023 onwards)

<b>Course Code:</b> <b>22PVBCI01</b>	<b>Nutraceuticals</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

#### COURSE OUTCOMES

On completion of the course, the students will be able to

- CO1 : Recognize the importance link between nutrition and diseases
- CO2 : Understand the molecular basis of using micronutrients and phytochemicals in prevention of chronic diseases.
- CO3 : Identify major types of health foods and nutraceutical products in the market

#### UNIT I

**Introduction to Nutraceuticals** : An Introduction. Definition; the link between nutrition and medicine; classical nutrients; phytochemicals for disease prevention. Anti-aging Nutraceuticals: Ginkgo biloba and brain function; antioxidants. Food with immunomodulatory Functions: Probiotics and prebiotics; ginseng; garlic.

(10 Hours)

#### UNIT II

**Protection against Cardiovascular Diseases:** Pathogenesis of cardiovascular diseases; soluble fiber: glucan and oat bran; marine lipids: n-3 polyunsaturated fatty acids; role of antioxidants: vitamin E; plant phenols: phenolic acids and flavonoids; tea; wine; soybean. (10

Hours)

#### UNIT III

Cancer & Postmenopausal Symptoms prevention Diet and carcinogenesis; tomato: lycopene; grape: resveratrol; soybean: genistein; cruciferae: isothiocyanates; wheat bran: fiber; onions and garlics: sulfur containing compounds; Chinese herbal medicine. Postmenopausal symptoms; pathogenesis of osteoporosis; calcium and vitamin D rich foods;

selective estrogen receptor modulators (SERM); soybean;flaxseed.

(10 Hours)

**Text Book:**

1. Shi, J. Asian Functional Foods CRC Press 2005

**Reference Books**

1. Webb, G.P. Dietary Supplement and Functional Foods Blackwell 2006
2. Shi, J. Functional Food Ingredients and Nutraceuticals : Processing Technologies CRC Press 2007
3. Bagchi D. Nutraceutical and functional food regulations in the United States and around the world, Elsevier/Academic Press, 2008.
4. Shibamoto T. Functional food and health, Oxford University Press, 2008.
5. Guo M. Functional foods : principles and technology, CRC Press, 2009.



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VIRUDHUNAGAR - 626 001

## Department of Home Science - Nutrition and Dietetics

### PG Departmental Value Added Course

(2022 - 2023 onwards)

<b>Course Code:</b> <b>22PVHSD01</b>	<b>Confectionery</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

### COURSE OUTCOMES

On completion of the course, the students will be able to

- CO1 : analyze the role and functions of confectionery ingredients
- CO2 : find the types of confectionery products and its composition
- CO3 : provide avenues for self-employment

### UNIT I

Confectionery – definition, principles, Ingredients used – starch and its derivatives, fats, colors and flavors, gums, pectin and gelatin, cocoa products. (10 Hours)

### UNIT II

#### Sugar Boiled Confectionery

Sugar cookery -principles of sugar cookery, different stages of sugar cookery, hard ball stage for brittles (Peanut Chikki) soft ball stage (tilladdos), recrystallisation of sugar from syrup (ChenaMurki, sugar – coated sweets), Caramelization (Fondants and Fudge).

(10 Hours)

### **UNIT III**

#### **Chocolate and Indian confectionery**

Chocolate– types, preparation of chocolate-chocolate designs, garnishes and presentations.

Indian Confectionery - Milk / khoa based - burfis, gulabjamun, paneerandrasagulla, Flour based –jelabi, Pulse based – besanladdo, boondiladoo and mysorepak.

(10 Hours)

#### **Text Book**

1. Ashokkumar,Y. (2012).Theory of Bakery and Confectionery, 2 nd Edition, TamilNadu: PHI Learning Publishers.
2. Shakuntalamanay,N.(2008). Foods Facts and Principles, Delhi: New Age International (p) Ltd.

#### **Reference Books**

1. MallikaBadrinath, S. (2011). Traditional Sweets, Chennai: Pradeep Enterprises
2. Sri Lakshmi,B. (2020). Food Science, 8 th Edition, New Delhi: New Age International Ltd.



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VIRUDHUNAGAR - 626 001

Department of

Home Science - Nutrition and Dietetics

PG Interdepartmental Value Added Course

(2022 - 2023 onwards)

<b>Course Code:</b> 22PVHSI01	<b>Basic Baking Techniques</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

## COURSE OUTCOMES

On completion of the course, the students will be able to

- CO1 : write the definition and concepts of baking and bakery products.
- CO2 : find the types of bakery equipment, ingredients and composition of bakery products.
- CO3 : analyze the role and functions of bakery ingredients
- CO4 : assess the processing methods of bakery and predict the quality of bakery items.
- CO5 : develop entrepreneurial skills and provide avenues for self-employment.

## UNIT - I

Baking– definition and principles

Cookies - ingredients, principles, types, methods of preparation, faults and their causes.

Preparation of cookies –short bread, melting moments, sweet and salt biscuits. (10 Hours)

## UNIT - II

Cake - ingredients, principles, methods and characteristics of cake, faults and their causes.

Icing - types and importance. Preparation of cakes - plain cake, sponge cake, christmas cake and plum cake.

Icings-butter cream and royal icing (10 Hours)

## UNIT- III

Pastries-principles, ingredients, types, methods of preparing pastries, faults and their causes in each pastry.

Preparation of pastries–puff and danish pastry (10 Hours)

**Text Book**

1. Ashok kumar, Y. (2012). Theory of Bakery and Confectionery, 2 nd Edition, TamilNadu: PHI Learning Publishers.

**Reference Books**

1. John.KJ.(2019). A Professional Text to Bakery and Confectionery, New Delhi: New Age International Publication.





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**VIRUDHUNAGAR - 626 001**

**Department of Computer Science (SF)**

**PG Departmental Value Added Course**

**(2022 - 23 onwards)**

<b>Course Code:</b> <b>22PVCSD01</b>	<b>Data Preprocessing and Visualization</b> <b>using Python</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

## **COURSE OUTCOMES**

On completion of the course, the learners will be able to

- CO1** : understand transformation of data into a format that is easily processed.
- CO2** : prepare data to perform necessary operations.
- CO3** : use Python to prepare, analyze and visualize data.

## **UNIT I**

**Data Preprocessing:** Mounting our Drive to Google Colab – Importing the libraries – Importing the Dataset – Taking care of the missing data: Deleting the observation with the missing value(s) – Mean Imputation – Hot Deck Imputation – Cold Deck Imputation – Regression Imputation – Encoding categorical data – Splitting the Dataset into the training and test sets – Feature scaling. (10

Hours)

## **UNIT II**

**Analyzing Data:** Importing & Exporting Datasets – Data Wrangling – Normalization of Data – One-Hot Encoding – Binning in Python – Exploratory Data Analysis – Over fitting and Under fitting – Using Pandas – Using NumPy.

**Working with Datasets:** Describing the Dataset – Shape of the Dataset – Extracting data from the Dataset – Performing operations around a variable (10 Hours)

## **UNIT III**

**Visualizing Data: Univariate Plots:** Histogram – Density Plots – Box and Whisker Plots.

**Multivariate Plots:** Correlation Matrix Plot – Scatter plot Matrix – Histogram – Density Plots – Box and Whisker Plots. (10 Hours)

**Text Book**

1. Study material prepared by Faculty Members of Department of Computer Science (SF)



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VIRUDHUNAGAR - 626 001

**Department of Computer Science (SF)**  
**PG Interdepartmental Value Added Course**  
**(2022 - 23 onwards)**

<b>Course Code:</b> <b>22PVCSI01</b>	<b>Problems Solving using RAPTOR</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

## COURSE OUTCOMES

On completion of the course, the learners will be able to

- CO1** : understand program execution through flow chart  
**CO2** : create flow chart using Conditional and Iterative statements to solve problems  
**CO3** : use object Oriented Programming Mode to create flowcharts

## UNIT I

**Raptor:** Introduction – Interface Overview – Program Structure – Raptor Statements/Symbols - Raptor Variables – Simple Flowchart Building – Conditional Logic – Loops – Procedure - Comments in Raptor – Object Oriented Programming Mode.

(10 Hours)

## UNIT II

**Create flowchart:** check positive number – check Odd or Even number – display Good morning message based on given time – print A to Z – add two numbers – average of two numbers – convert uppercase letter into Lowercase.

(10 Hours)

## UNIT III

**Create flowchart:** print area of square – convert Length in Feet to Centimeter – find sum of squares of n integers – calculate Simple Interest – find factorial of a number using procedure – find distance between two points using procedure – find volume of a cube in Object Oriented Mode.

(10 Hours)

## Text Book

1. Study material prepared by Faculty Members of Department of Computer Science (SF)



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VIRUDHUNAGAR - 626 001

### Department of Information Technology

### PG Departmental Value Added Course

(2022-2023 Onwards)

<b>Course Code:</b> <b>22PVITD01</b>	<b>Single Page Application Development</b>	<b>Total Hours: 30</b> <b>Internal: 100 Marks</b>
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### COURSE OUTCOMES

On successful completion of the course, the learners will be able to

CO1: demonstrate the purpose of single page application for the creation of web page using Typescript, HTML and CSS and able to apply particular scripting techniques as per the requirements of users.

CO2: outline the Creation of Components, Directives, Forms and configuring bootstrap through designing the real-time applications.

CO3: complete the dynamic web pages using Reactive Forms and custom pipes for developing web applications.

### UNIT I:

Create an angular app – run the angular app – install and configure Bootstrap in angular app – creating first component – Interpolation - Property Bindings – Event Bindings and Statements – Two way binding - Hiding and Showing Content with ngIf - Repeating Data with ngFor - Hiding and Showing Content with ngSwitch - Styling Components with ngClass - Styling Components with ngStyle - Reactive Forms - Pipes - Using Built-in Pipes - Creating a Custom Pipe (10 Hours)

### UNIT II: (Practical Session)

1. Creating your own angular application with steps.
2. Creating a component to display the student bio-data.
3. Create a form to add two numbers using Forms Module
4. Create a form to find factorial value of a number using Forms Module
5. Design a web page with Hiding and showing content with ngIf. (10 Hours)

### **UNIT III: (Practical Session)**

1. Create your own application with Angular Bootstrap.
2. Apply ngSwitch directive to print people's names in different colours.
3. Design a Login form using Reactive Forms.
4. Formatting the given data using Built-in Pipes.
5. Creating your own custom Pipe to capitalize the first letter of the given string. (10 Hours)

### **Text Book**

1. Ng-book: The Complete Book on Angular 6 by Nate Murray & Felipe Coury & Ari Lerner & Carlos Taborda.

**Unit I:** Page No: 4 – 30, 65 – 77, 120 – 136

**Unit II:** Lab Exercises

**Unit III:** Lab Exercises



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**VIRUDHUNAGAR - 626 001**

**Department of Information Technology**  
**PG Inter Departmental Value Added Course**  
**(2022-2023 Onwards)**

<b>Course Code:</b> <b>22PVITI01</b>	<b>Designing web Apps using PHP</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

## **COURSE OUTCOMES**

On successful completion of the course, the learners will be able to

CO1: demonstrate the purpose of PHP, variables, operators, able to apply particular scripting techniques as per the requirements of users.

CO2: outline the PHP programming concepts switching flow and looping statements, branching and string handling functions of PHP technologies through designing the real-time applications.

CO3: complete the dynamic web pages using HTML forms for developing web applications.

## **UNIT I**

**Introduction:** Introduction to PHP – Evolving PHP – New Versions of PHP – Importance of PHP - Variables – Data Types – Operators and Expressions – Constants – Switching Flow – Loops - Working with Forms - A Script to Acquire user Input – Combining HTML and PHP Code on a Single Page.

(10 Hours)

## **UNIT II (Practical Session)**

1. To perform Arithmetic Operations
2. To perform String Manipulations
3. To validate Voting eligibility using conditional statement.
4. To check factorial and generate Fibonacci series using control statements.
5. To Design a Registration Form. (10 Hours)

### **UNIT III (Practical Session)**

1. To prepare Student Marksheet application.
2. To perform Electricity bill preparation.
3. To perform Employee Pay bill preparation.
4. To prepare online quiz application.
5. To design a website for Library Management application. (10 Hours)

### **Text Book**

1. Matt Zandstra, *Sams Teach Yourself PHP4*, Sams Techmedia,  
**Unit I:** Page No: 8 – 12, 37 – 53, 58 – 67, 139 – 140, 145, 146  
**Unit II:** Lab Exercises  
**Unit III:** Lab Exercises



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VIRUDHUNAGAR - 626 001

Department of Commerce  
PG Departmental Value Added Course  
(2022 - 2023 onwards)

Course Code: 22PVCOD01	Digital Payments	Total Hours: 30
		Internal: 100 Marks

## COURSE OUTCOMES

On completion of the course, the students will be able to

- CO1 : understand the traditional and modern payment system
- CO2 : identify different payment modes for making payments.
- CO3 : know about the various payment apps in India.

## UNIT 1

**Payment** : Meaning – Definition – **Payment System**: Traditional Modes of Payment – Cash, Cheque, Debit Card and Credit Card – Modern – Digital Currency - Meaning – Characteristics – Types – Advantages – Disadvantages - Digital Vs Virtual Currency – Digital Vs Cryptography – Digital Vs Traditional – Digital Vs Forex. (10 Hours)

## UNIT II

**Digital Payment**: Meaning – Definition - Types – Need for Digital Payments in Business – Benefits of Digital Payments - **Modes of Digital Payment**: Banking Cards, USSD, AEPS, UPI – Mobile Wallets, Banks Pre –Paid Cards, Point of Sale, Internet Banking, Mobile Banking, Micro ATMs. (10 Hours)

## UNIT III

**Distinct Apps for Banks and Financial Institutions**: PhonePe, Google Pay, Paytm, Amazon Pay, Jio Money, BHIM, Mobikwik, Airtel Money, ICICI Pockets, Freecharge, Yono SBI, HDFC Payzapp, Ola Money, PayUmoney, Master Pass, mSwipe, Yes Pay, WhatsApp pay. (10

Hours)

## Text Book

1. Study Material prepared by the faculty from the department of Commerce

## Reference Books



1. Jaspal Singh., (2019). Digital Payments in India: Background, Trends and Opportuniites. New Century Publications.



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VIRUDHUNAGAR - 626 001

Department of Commerce

PG Interdepartmental Value Added Course

(2022 - 2023 onwards)

<b>Course Code:</b> <b>22PVCOI01</b>	<b>Online Stock Marketing</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

## COURSE OUTCOMES

On completion of the course, the students will be able to

- CO1 : understand the various modes of investment and savings
- CO2 : identify the various types of mutual funds.
- CO3 : apply the procedure for making online stock trading.

## UNIT I

**Investment:** Meaning – Nature – Savings – Need for Savings – Types of Savings – Savings Vs Investment – Risk, Return and Benefits of Savings. (10 Hours)

## UNIT II

**Mutual Fund:** Scope - Definition – Origin - Types – Importance – Mutual Funds in India. (10 Hours)

## UNIT III

**Share Market:** Online Trading – Identifying Share for Purchase – Create Portfolio in Money Control Website (Practical Classes). (10 Hours)

## Text Book

1. Study Material prepared by the faculty of Commerce Department.

## Reference Books

1. Gordon, E., & Natarajan, K., (2018). *Financial Markets and Services*, Mumbai: Himalaya Publishing House, 11<sup>th</sup> Edition.
2. Punithavathy Pandian, (2009). *Financial Services and Markets*, Mumbai: Vikas Publishing House.
3. Sasidharan, K., Alex Mathews, K.,(2008). *Financial Services and System*, New Delhi:

Tata

Mc.

Graw

Hill

Co.



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VIRUDHUNAGAR - 626 001

Department of M.C.A.

PG Departmental Value Added Course

(2022 - 2023 onwards)

Course Code 22PVCAD01	Angular	No. of Hours : 30
		Internal : 100 Marks

## Course Outcomes:

On completion of the course, the students will be able to

- CO1 : get familiar with client-side Angular framework.
- CO2 : use various Angular features including components and data binding.
- CO3 : make use of Angular directives and services.
- CO4 : validate the components of reactive form.
- CO5 : implement a functional front-end web application using Angular.

## Unit I

**Introduction:** Angular's Basic Architecture – Angular CLI – Create first Angular App.

**Component and Data Binding:** Component – using a component – Data binding – Interpolation – Property binding – Event binding – Two-way data binding. (10 Hours)

## Unit II

**Angular Directives:** Introduction to Directives – Structural Directives – Custom Attribute Directive.

**Template Driven Forms:** Introduction- ngModel, [ngModel], [(ngModel)] – Binding Form to ngForm – Submitting the Form – Handling validation in Template Driven Form. (10 Hours)

### **Unit III**

**Reactive Forms:** Creating Reactive form – Adding Validation – Using FormBuilder – Custom Validators – Passing parameters to a custom validator – Conditional Validation.

**Angular Routing:** Create Route – Routing strategies – Dynamic Route Parameters – Navigate using code – Query Parameter – Child route – Auxiliary route – Route guards.

(10 Hours)

### **Text Book:**

1. Dhananjay Kumar, Angular Essentials: The essential guide to learn Angular, BPB Publications, 2022.

### **Reference e-Links:**

- <https://www.tutorialspoint.com/angular8/index.htm>
- [https://www.tutorialspoint.com/angular\\_cli/index.htm](https://www.tutorialspoint.com/angular_cli/index.htm)
- <https://angular.io/start>
- <https://www.w3schools.com/angular/>
- <https://www.geeksforgeeks.org/angular-8-introduction/>



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Department of M.C.A.

PG Interdepartmental Value Added Course

(2022 -2023 onwards)

<b>Course Code</b> 22PVCAI01	<b>Graphic Designing for Entrepreneurs</b>	<b>No. of Hours : 30</b>
		<b>Internal : 100 Marks</b>

## Course Outcomes

On completion of the course, the students will be able to

- CO1 : get familiar with managing images in Canva.
- CO2 : use various Canva layouts and typography.
- CO3 : design letter, resume and post for social media.
- CO4 : design book cover page, flyer and brochures.
- CO5 : create logos, advertisement designs and animations.

## Unit I

Introduction to Canva - Adding images – Organizing brand images – editing images – Canva layouts – typography – shapes – saving and exporting images. (10 Hours)

## Unit II

Design for social media branding and posts – designing for presentations – design for letters and resumes. (10 Hours)

## Unit III

Design for books and magazines – design for brochures, flyers and other advertisement materials – designing logos – creating animations. (10 Hours)

## Text Book:

1. George Sheldon, Start Your Own Graphic Design Business, Entrepreneur Press, 2008.

## Reference Links:

1. <https://www.canva.com/designschool/tutorials/getting-started/>
2. <https://www.canva.com/learn/a-step-by-step-guide-to-designing-from-scratch/>
3. [https://edu.gcfglobal.org/en/canva/COMPUTER SCIENCE](https://edu.gcfglobal.org/en/canva/COMPUTER%20SCIENCE)
4. <https://louisem.com/7700/how-to-use-canva-infographic>



# V.V.VANNIAPERUMAL COLLEGE FOR WOMEN

(Belonging to Virudhunagar Hindu Nadars)

An Autonomous Institution Affiliated to Madurai Kamaraj University, Madurai

Re-accredited with 'A' Grade (3<sup>rd</sup> Cycle) by NAAC

**VIRUDHUNAGAR - 626 001**

## Department of MBA

### PG Departmental Value Added Course

(2022 - 2023 onwards)

<b>Course Code:</b> <b>22PVBAD01</b>	<b>Hands-on Management Skills</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

### COURSE OUTCOMES

On completion of the course, the students will be able to

- CO1 : identify and understand basic skills required in start-ups and management
- CO2 : utilize and demonstrate the skills in appropriate situations
- CO3 : apply functional knowledge in relevant management situations
- CO4 : analyse various alternatives in management
- CO5 : assess the appropriate course of action

### UNIT I

HR – Recruitment basics, Interview questions, resume preparation, Mock interview

Startup – Registration of business – firm, partnership & company (10 hours)

### UNIT II

Basic of Retail marketing, marketing mix, Marketing promotion, Vyapar (10 hours)

### UNIT III

Accounting & Finance Lab – Introduction to Income tax, Filing of tax forms (simple cases), Financial performance analysis (10 hours)

### Text Book:

1. Drucker, Peter F. (2011). Management: Tasks, Responsibilities, Practices. Routledge – Taylor & Francis Group.



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**VIRUDHUNAGAR - 626 001**

**Department of MBA**

**PG Interdepartmental Value Added Course**

**(2022 - 2023 onwards)**

<b>Course Code:</b> <b>22PVBAI01</b>	<b>Corporate Skills</b>	<b>Total Hours: 30</b>
		<b>Internal: 100 Marks</b>

## **COURSE OUTCOMES**

On completion of the course, the students will be able to

- CO1 : identify certain important skills like problem solving, stress management and emotional intelligence required in corporate life
- CO2 : discuss various factors influencing acquisition of such skills
- CO3 : apply these corporate skills in different business situations
- CO4 : analyse how these skills are being used in handling various business situations
- CO5 : suggest areas of improvement by using these skills

## **UNIT I**

**Problem Solving:** Meaning – steps- Define the problem – Determine the root cause of the problem – Develop alternate solutions – Select a solution – Implement the solution – Evaluate the outcome – Skills required - Creative thinking – meaning – ways to practice

(10 Hours)

## **UNIT II**

**Stress Management:** Introduction to stress – Meaning - Definition - Sources of stress - Impact of stress - Coping Mechanisms - Stress Reduction Techniques

(10 Hours)

## **UNIT III**

**Emotional Intelligence:** Introduction to emotional intelligence-Definition-Pillars of emotional intelligence-Benefits-Models of emotional intelligence-Applications of emotional intelligence in work environment

(10 Hours)

## **Text Books**

1. Bhagtani, Heena T. (2018). Stress Management. First Edition. Himalayas Publishing House, Mumbai
2. Goleman, D. (1996). Emotional intelligence: Why it can matter more than IQ. Bloomsbury Publishing.