



Holy Cross College (Autonomous) Nagercoil – 629 004

Affiliated to Manonmaniam Sundaranar University, Tirunelveli
Nationally Accredited with A+ Grade (CGPA 3.35) by NAAC IV Cycle
An ISO 9001:2015 Certified Institution

SSR
2019-2020
to
2023-2024

VALUE ADDED SYLLABUS

Value Added - **APTITUDE AND REASONING**

Course Code	Total Hours	Marks
VAM203	30	100

Objectives:

1. To nurture the fundamental Mathematical skills for preparing and cracking competitive examination.
2. To kindle the problem-solving ability of the students.

Course Outcomes

- To master fundamental mathematical operations, including H.C.F, L.C.M, simplification, and averaging, fostering a strong foundation in mathematical principles.
- To demonstrate proficiency in applying mathematical concepts such as percentages, profit and loss, and time-and-work principles to solve real-world problems efficiently.

Unit I

Numbers-H.C. F and L.C.M of Numbers.

Unit II

Simplification - Square Roots and Cube Roots - Average.

Unit III

Problems on Numbers-Problems on Ages.

Unit IV

Percentage - Profit and Loss.

Unit V

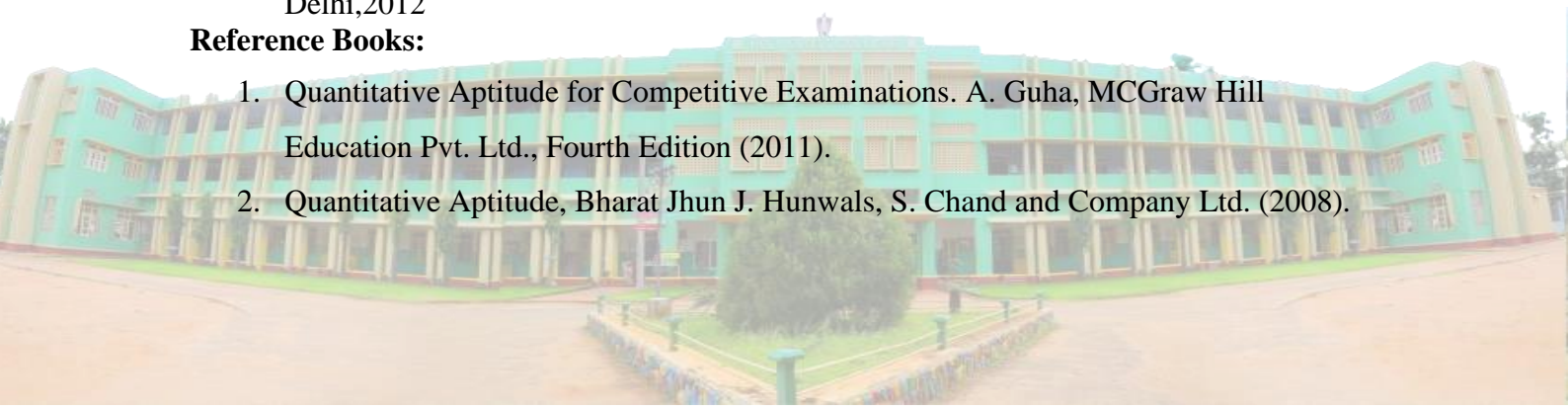
Chain Rule-Time and Work.

Text Book

1. Quantitative Aptitude by R.S.Agarwal, Sultan Chand and Company Ltd, New Delhi,2012

Reference Books:

1. Quantitative Aptitude for Competitive Examinations. A. Guha, MCGraw Hill Education Pvt. Ltd., Fourth Edition (2011).
2. Quantitative Aptitude, Bharat Jhun J. Hunwals, S. Chand and Company Ltd. (2008).



Value Added - NUMBER SYSTEMS AND BINARY CODES

Course Code	Total Hours	Marks
VAM204	30	100

Objectives:

1. To know about Binary, Octal, Hexadecimal and BCD Number System.
2. To get the knowledge of Number Conversion

Course Outcome:

- To grasp the concepts of analog and digital systems, numerical representations in various systems, and the advantages of digital systems succinctly.
- To convert numbers between different systems, perform arithmetic operations, and effectively utilize binary codes in digital systems, enhancing their problem-solving abilities.

Unit I

Introduction- Analog and Digital systems- Advantages of digital Systems-Numerical Representation: Decimal number system- Binary number system- Octal number system- Hexadecimal Number System-Summary of number system.

Unit II

Decimal to other number systems- Binary to other number systems- Octal to other number systems- Hexadecimal to other number systems- Conversation Algorithm- Representation of Binary numbers in digital systems.

Unit III

Octal arithmetic – Hexadecimal arithmetic- Binary arithmetic: Binary addition, Binary subtraction, Binary multiplication, Binary division- Binary arithmetic for signed numbers.

Unit IV

Compliments – Compliments in Decimal System- Compliment - Representation in Binary- Binary arithmetic using Compliments.

Unit V

Binary Codes Introduction- Weighted Binary Codes- Conversions-BCD Arithmetic- Comparison of BCD and Binary- Advantages and Disadvantages.

Text Book:

1. Digital Technology by S. Ramalatha, Lakshmi Publications, (2000)

Reference Books:

1. Digital Circuits and Design by S. Salivahanan, S. Arivazhagan, Vikas Publishing House PVT LTD. (2002)
2. Modern Digital Electronics (Second Edition) by R.P. Jain, Tata McGraw- Hill Publishing Company Limited. (2000)
3. Fundamentals of Logic Design (5th Edition) by Charles H. Roth, Jr. Thomson Books/Cole, (2006)



Value Added - MATHEMATICS FOR ARTIFICIAL INTELLIGENCE

Course Code	Total Hours	Marks
VAM205	30	100

Objectives:

1. To understand the basic concepts of Artificial Intelligence and identify the AI problems and domains.
2. To provide search techniques to solve the problems.

Course Outcomes

- To facilitate effective analysis of AI problems.
- To apply various AI search techniques, including heuristic search and constraint satisfaction, to design and implement solutions for diverse problems.

Unit I

Introduction-AI Problems-AI Techniques-Criteria for Success-Problems.

Unit II

Search: State space search- production System

Unit III

Problem Characteristics- Issues in design of search.

Unit IV

Heuristic Search techniques: Generate and Test-Hill Climbing-Best Fit, Problem Reduction.

Unit –V

Constraint Satisfaction, Means-end Analysis

Text Book:

1. Artificial Intelligence a Modern Approach, Stuart Russell & Peter Norvig, 2nd Edition Perason.

Reference Book:

1. Artificial Intelligence, Elaine Rich and Kelvin Knight, TMH, 2nd Edn, 1991.



Value Added – GENERAL ASTROLOGY AND ASTRONOMY

Course Code	Total Hours	Marks
VAM206	30	100

Objectives:

1. The primary goal of astronomy is to understand the physics of the universe.
2. Astrologers use astronomical calculations for the positions of celestial bodies along the ecliptic and attempt to correlate celestial events (astrological aspects, sign positions) with earthly events and human affairs.

Course Outcomes

- To grasp the fundamentals and historical context of astrology, as well as the essential qualities of an astrologer.
- To gain proficiency in the science and art of astrology, including the interpretation of celestial phenomena and the application of astrological principles to real-life situations.

Unit I

Origin and Introduction to Universe and Astrology - History of Astrology - Astrology and its Orientalist - Sages of Astrology, requisites of an Astrologer.

Unit II

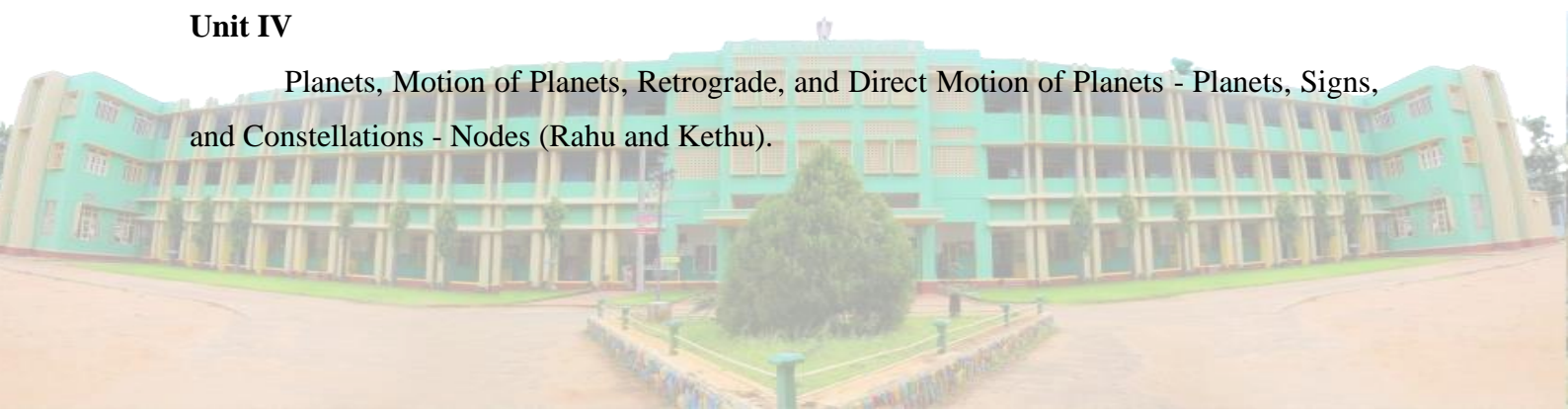
Edifices of Astrology –Science & Art - Importance of Astrology, Siddantha, Samhitha, and Hora.

Unit III

Introduction and importance of Astronomy - Detailed study of the Universe and Galaxies -related to astrology - The Zodiac and the solar system - signs of the Zodiac.

Unit IV

Planets, Motion of Planets, Retrograde, and Direct Motion of Planets - Planets, Signs, and Constellations - Nodes (Rahu and Kethu).



Unit V

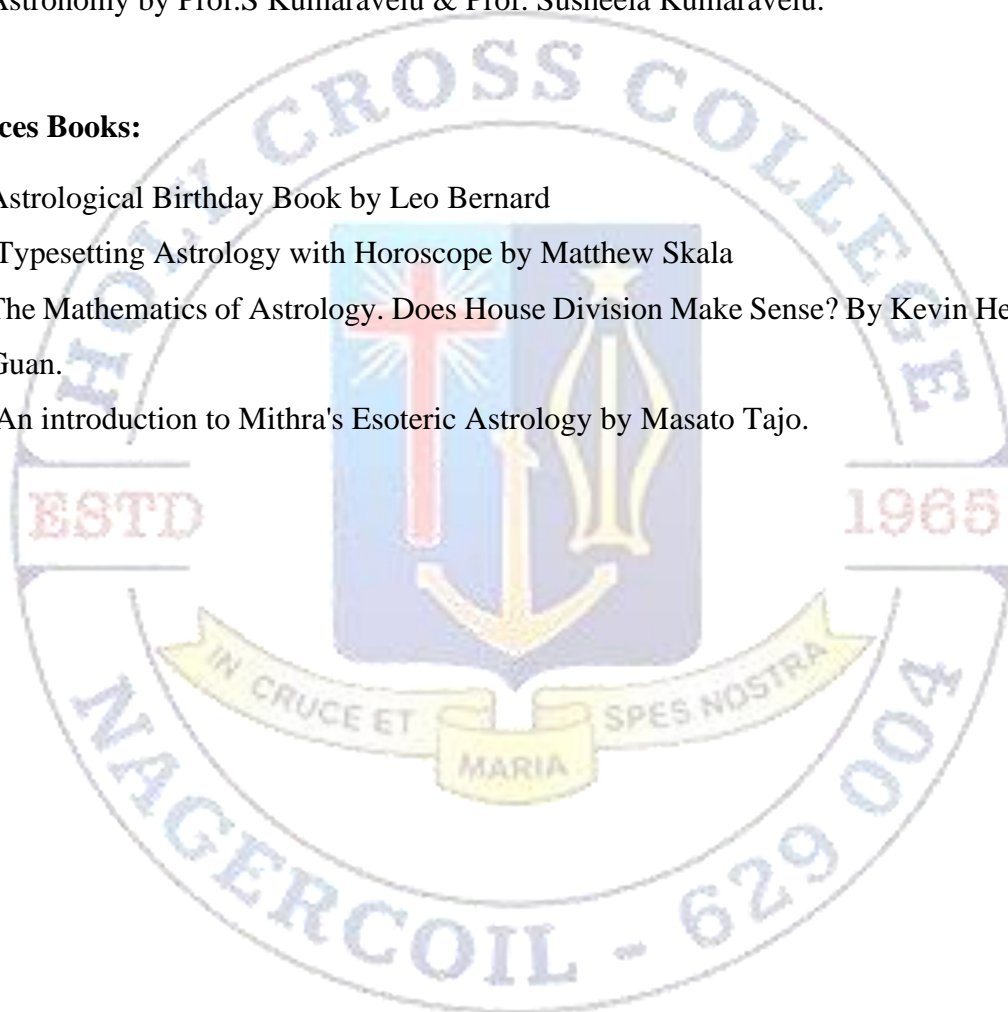
Latitude and Longitudes, Equator, and Ecliptic – Eclipses.

Text Books:

1. Notes on the Signs of The Zodiac the Elements, Triplicities, Quadruplicities, The planets – their aspects and Decanoates With reference to the Sayana or Tropical System by Jyotisha Bharati and Bharatiya Vidya Bhavan.
2. Astronomy by Prof.S Kumaravelu & Prof. Susheela Kumaravelu.

References Books:

1. Astrological Birthday Book by Leo Bernard
2. Typesetting Astrology with Horoscope by Matthew Skala
3. The Mathematics of Astrology. Does House Division Make Sense? By Kevin Heng Ser Guan.
4. An introduction to Mithra's Esoteric Astrology by Masato Tajo.



Value Added – EDUCATIONAL PSYCHOLOGY

Course Code	Total Hours	Marks
VAM207	30	100

Objectives:

1. To study human behavioural patterns and create good relationships in society
2. To develop an understanding of the nature, scope and methods of educational psychology.

Course Outcomes

- To grasp the fundamentals of psychology, including its historical development and application in education.
- To understand human growth, cognition, learning, and intelligence, enhancing their analytical skills in psychological concepts.

Unit I

Nature of Psychology: Introduction – Meaning – Historical development – Definitions – Educational Psychology

Unit II

Human Growth and Development: nature – Nurture – Nature versus Nurture – Role of the Nature and Nurture – Growth – Development – Maturation – Principles of Growth and Development – Characteristics of Growth and Development

Unit III

Cognitive Development: Meaning, definitions and characteristics of Attention – Relationship between Interest and Attention – Kinds of Attention – Factors relating to Attention – Reasoning and Problem solving

Unit IV

Learning: Meaning – Definitions – Characteristics – Nature – Importance – Individual Difference in Learning

Unit V

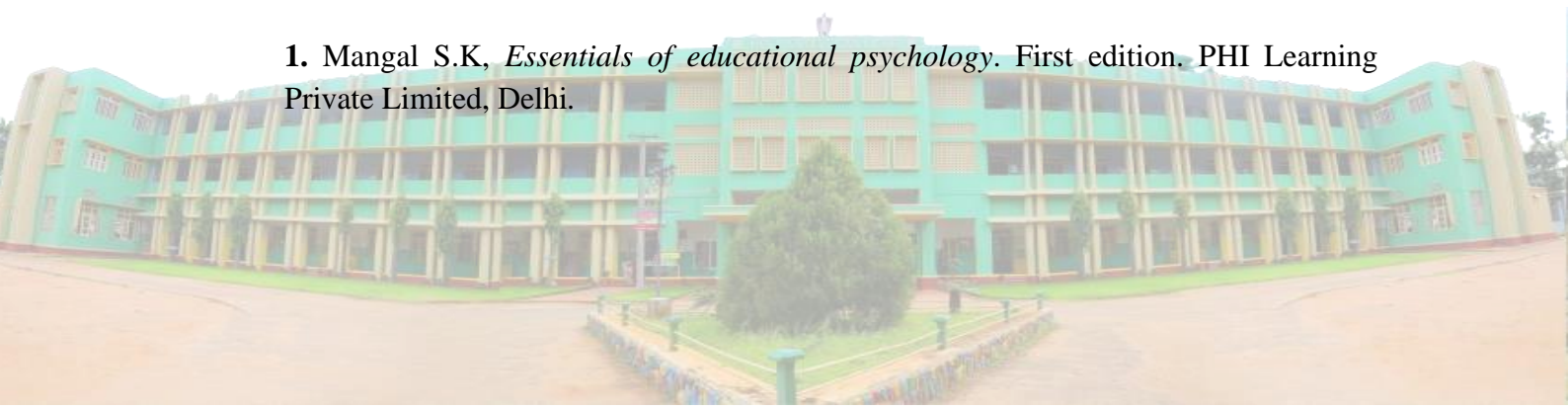
Intelligence and Creativity: Meaning, Definitions and Nature of Intelligence – Individual Differences in Distribution of Intelligence – Meaning, Definitions and Characteristics of Creativity – Types of Creativity – Leadership Traits

Text Book:

1. Meenakshisundaram. A, (2009).re *Psychology of Learning and Human Development*, Third Revised Edition, Kavyamala Publishers.

Reference book:

1. Mangal S.K, *Essentials of educational psychology*. First edition. PHI Learning Private Limited, Delhi.



Value Added – FUNDAMENTALS OF ALGORITHM

Course Code	Total Hours	Marks
VAM208	30	100

Objectives:

1. To identify basic format for writing algorithms.
2. To develop the skill of framing algorithms for simple mathematical problems.

Course Outcomes

- To excel in algorithmic techniques and mathematical tools, enabling efficient problem-solving.
- To demonstrate proficiency in data structure implementation, enhancing computational problem-solving skills.

Unit I

Introduction – Algorithms, Pseudocode for Algorithms, Randomized Algorithms.

Unit II

Mathematics for Algorithms – Mathematical Induction.

Unit III

Mathematics for Algorithms – Analysis of Algorithms, Recurrence Relation – Solving Recurrence Relations (proof of main Recurrence Theorem section is excluded).

Unit IV

Data Structures – Abstract Data Type, Stacks and Queues.

Unit V

Data Structure – Linked Lists, Binary Trees.

Text Book:

1. Algorithms, Richard Johnsonbaugh and Marcus Schaefer, Pearson Education, 2004.

Reference Books:

1. Richard Neapolitan and Kumarss Naimipour. Foundations of Algorithms, Jones and Bartlett Publishers, 2011.
2. Thomas H. Cormen, Charles E. Leiserson, Ronald L. Rivest and Clifford Stein, Introduction to Algorithms, PHI Learning Private Limited, Third Edition, 2001.
- 3.



Value Added - QUICK ARITHMETIC FOR COMPETITIVE EXAMINATIONS

Course Code	Total Hours	Marks
VAM201	30	100

Objectives:

1. To enrich their knowledge and to develop their logical reasoning thinking ability.
2. To accommodate fundamental, mathematical aspects to instill confidence among students.

Course Outcomes

- To gain knowledge about fundamental mathematical operations including simplification, number systems, exponents, and basic arithmetic.
- To apply mathematical concepts such as averages, ratios, percentages, and algebraic principles to solve real-world problems related to finance, measurement, and time.

Unit-1

Simplification, Number system, surfs and indices, cube root, squareroot, HCF and LCM.

Unit-2

Average, ratio and proportion, percentage, problem on ages, partnership.

Unit-3

Men and work, time and work, time and distance.

Unit-4

Mensuration, area, surface area and volume.

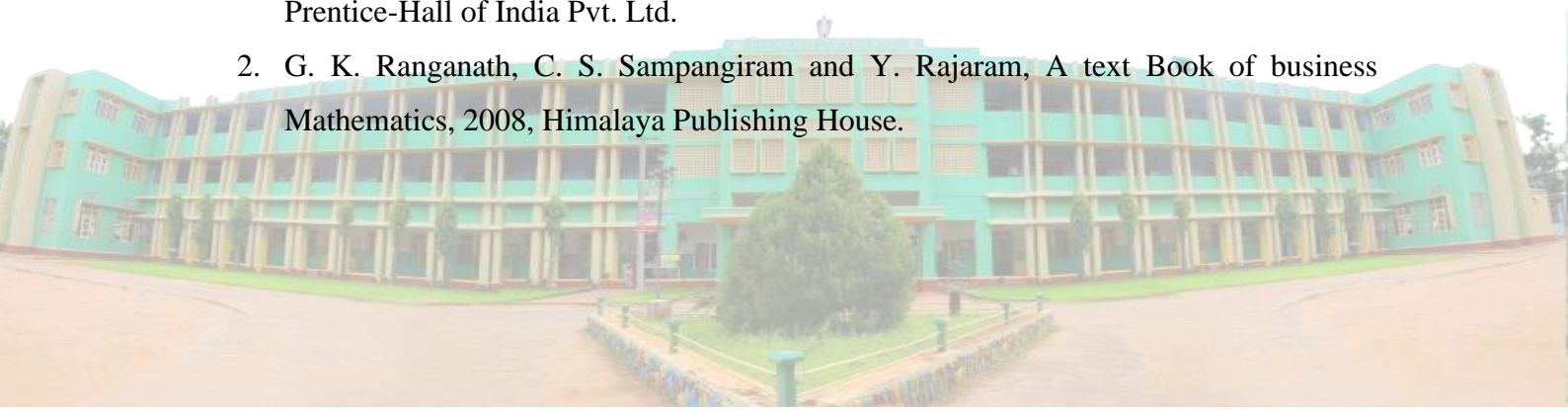
Unit-5

Simple interest, compound interest, profit and loss, basic algebra.

Text Book: Quantitative Aptitude by Agarwal.

Reference Books:

1. R.V. Praveen, Quantitative Aptitude and Reasoning, 2nd Revised Edition 2013, Prentice-Hall of India Pvt. Ltd.
2. G. K. Ranganath, C. S. Sampangiram and Y. Rajaram, A text Book of business Mathematics, 2008, Himalaya Publishing House.



Value Added – PROBABILITY DISTRIBUTION

Course Code	Total Hours	Marks
VAM209	30	100

Objectives:

1. To develop problem solving skills in probability distribution
2. To solve the real world problems using probability distribution

Course Outcomes

- To know a range of probability distributions and to analyze data effectively.
- To apply probability distributions to real-world situations, enhancing their problem-solving skills.

Unit I

Multinomial Distribution and Negative Multinomial Distribution

Unit II

Geometric Distribution and Uniform Distribution

Unit III

Exponential Distribution and Weibull Distribution

Unit IV

Cauchy Distribution and Rectangular Distribution

Unit V

Hypergeometric Distribution

Text Book:

1. Probability Distribution Theory and Statistical Inference, K. C. Bhuyan, New Central Book Agency (P) Ltd; 2010.

Reference Books:

1. Probability and Statistics, Dr. A. Singaravelu, Meenakshi Agency, 120, Pushpa Nagar, Medavakkam, Chennai, New Completely Revised Edition: January 2016.
2. Probability and Queuing Theory, G. Balaji, 2012, Balaji Publishers.
- 3.



Value Added - TRAINING FOR TNPSC AND OTHER GOVERNMENT EXAMINATIONS

Course Code	Total Hours	Marks
VAM202	30	100

Objectives:

1. To face TNPSC group exams, other competitive examinations like SSE etc.
2. To introduce them to various government and private jobs recruited through competitive examinations like MPSC and Banking.

Course Outcome:

- To gain a broad understanding of scientific principles, including laws, instruments, discoveries, and key concepts in physics, chemistry, botany, and zoology.
- To grasp essential aspects of geography, Indian history, culture, polity, and economy, facilitating a holistic understanding of the Indian subcontinent's dynamics.

Unit I: General Science Physics

Universe- general scientific laws - scientific instruments – inventions and discoveries, national scientific laborations – science glossary - mechanics and properties of matter – physical quantities, standards and units – force, motion and energy – electricity and magnetism - heat, light and sound.

Basic Chemistry: Elements and compounds – bases & salts fertilizers – pesticides – insecticides

Botany: Main concept of life science.

Zoology: Blood & Blood circulation- human diseases preventions – communicable diseases

Unit II: Geography

Earth -universe – solar system – rivers in India- forest, wild life – minerals – population density.



Unit III: History & Culture of India

Indian history – culture & heritage of Tamil people – effect of British rule on socio economic factors – social reforms & religious moments – Indian national movement.

Unit IV: Indian Polity & Indian Economy

Constitution of India – preamble – salient features of constitutions- parts. Nature of Indian economy – year plan models – land reform – agriculture – finance commission – planning commission.

Unit V: Mental Ability

Simplification – numbers – ratio and proportion – percentages – profit and loss – averages and mixtures – time and work – simple interest and compound interest- geometry and mensuration – statistics – data interpretation - alpha numeric reasoning – visual reasoning.

Text Books:

1. Manorama Year Book
2. Samacheer school books.

Reference books:

1. Dinesh Khattar - Quantitative Aptitude for Campus Interview Vol-I-Pearson Education (2016)
2. Dinesh Khattar - Quantitative Aptitude for Campus Interview Vol-II-Pearson Education (2016)
3. Jaggan Saneja - Quantitative Aptitude Simplified-Notion Press (2020)
4. Mike Bryon - Verbal Reasoning Test Workbook_ Unbeatable Practice for Verbal Ability, English Usage and Interpretation and Judgement Tests (2008)



Value Added - VEDIC MATHEMATICS

Course Code	Total Hours	Marks
VAM2010	30	100

Objectives:

1. To improve the student's memory and concentration.
2. To train the students for Competitive exams.
3. To increase the mental ability and intelligence.

Course Outcomes

- To improve speed and accuracy
- To improve critical thinking
- To do basic mathematics faster and easier.

Unit I

What is Vedic Mathematics? – Introduction – Sutras of Vedic Mathematics – Advantages of using Vedic Mathematics – Applications of Vedic Mathematics in the Modern World.

Unit 2

Squaring of numbers ending with 5- Squaring of numbers between 50-60- Multiplication of numbers with a series of 9's- Multiplication of numbers with a series of 1's- Subtraction using the rule 'All from 9 and the last from 10'.

Unit 3

Criss-Cross System of Multiplication- The characteristics of Criss-Cross multiplication.

Unit 4

Squaring of numbers using crisscross system- Formula method- Comparison between Traditional Method and Vedic method.

Unit 5

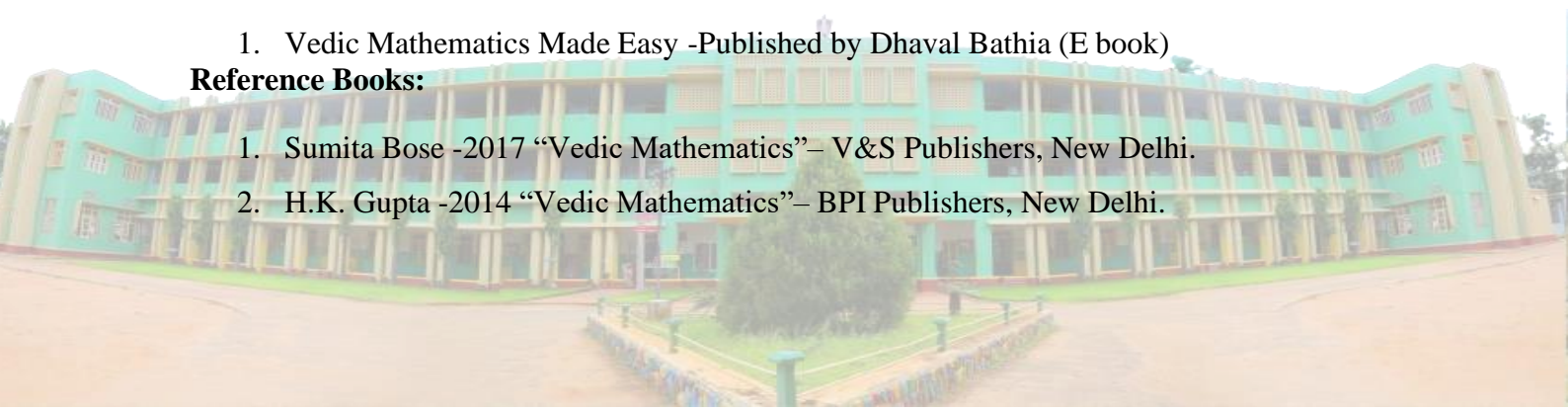
Solving Simultaneous Linear Equations (Anurupye Shunyamanyat & Sankalana Vyavkalanabhyam).

Text Book:

1. Vedic Mathematics Made Easy -Published by Dhaval Bathia (E book)

Reference Books:

1. Sumita Bose -2017 "Vedic Mathematics"- V&S Publishers, New Delhi.
2. H.K. Gupta -2014 "Vedic Mathematics"- BPI Publishers, New Delhi.



Value Added - TEST OF REASONING

Course Code	Total Hours	Marks
VAM2011	30	100

Objectives:

1. To train the students for competitive examinations.
2. To expose the mental ability of the students.

Course Outcomes

- To improve verbal ability skill among students.
- To enhance student's problem-solving skill.
- To prepare for various public and private sector exams and placement drives.

Unit I

Series Completion, Analogy, Classification.

Unit II

Coding- De Coding, Alphabet test, Inserting the missing Character.

Unit III

Series Completion, Analogy, Classification.

Unit IV

Mirror images, Walter-images, Spotting out the embedded figures.

Unit V

Completion of incomplete pattern, Figure matrix, Paper folding, Paper cutting.

Text Book:

1. A modern Approach to verbal and non-verbal reasoning, R.S. Aggarwal, S.Chand and Company Ltd., Ram Nagar, New Delhi (2012).

Reference Books:

1. Quantitative Aptitude for Competitive Examinations, A.Guha, McGraw Hill Education Pvt. Ltd., Fourth Edition (2011).
2. Quantitative Aptitude, Bharat Jhun J.Hunwala, S.Chand and Company Ltd., (2008).



Value Added - PHYSICAL AND MENTAL WELL BEING

Course Code	Total Hours	Marks
VAM2012	30	100

Objectives:

1. To promote good - health and emotional stability among students.
2. To increase relaxation of body and mind.
3. To equip the students with traditional understanding of yogasanas and meditation.
4. To prevent stress-related health problems.

Course Outcomes

- To understand the physical structure of the human body helps individuals tailor exercise routines to support overall health and fitness goals.
- To practice yoga asana not only enhances physical flexibility and strength but also promotes mental relaxation and emotional well-being.
- To gain knowledge about a balanced diet, composed of essential food groups, ensure the intake of necessary nutrients for optimal growth, development, and overall health during adolescence and beyond.
- To nurture relationships, play a pivotal role in maintaining and improving mental health, contributing to overall well-being.
- To incorporate meditation into daily routines facilitates mindfulness, reduces stress.

Unit I Physical Health

Physical Structure of Human Body- Simplified physical exercises- Benefits of physical exercises

Unit II Yogasanas

Introduction to Asana- General benefits of asana-Conductive conditions for asana-Surya Namashkar- Types of asana



Unit III Balanced Nutrients

Balanced diet-using basic food groups for planning balanced Diets-Dietary pattern's in Adolescence-Modifying diet related Behavior-Factor influencing eating Behavior-Eating disorders at adolescence.

Unit IV Mental Health

Definition-Mental illness -Improve the mental health- Mental health issues-Be Active-Get enough sleep and enjoy healthy relationships.

Unit V Meditation

Mind- Mental Frequency-Need for Meditation -Types of Meditation-Importance of Meditation- Benefits of Meditation.

Text Book:

Value Education - Vision for Wisdom World Community Service Centre, Aliyar.

Reference books:

1. Handbook on Yoga-N.C. Narayanan
2. Simplified Physical Exercises - ThathuvagnaniVethathiri Maharishi
3. Mind - ThathuvagnaniVethathiri Maharishi
4. Yoga for Modern age - ThathuvagnaniVethathiri Maharishi.
5. Yogasanas-- Vision for Wisdom World Community Service centre, Aliyar.
Physical Health- Vision, Vethathri Publication (Blended – Web Based)
6. Mental Health- Vision, Vethathri Publication (Blended – Web Based)
7. Thirukkural- Rev. Dr. G.U.Pope



Value Added – MULTIMEDIA TRAINING (PHOTOSHOP, PREMIER PRO)

Course Code	Total Hours	Marks
VAP201	30	100

Objectives:

1. To create images for web design, logos, graphics, layouts, imagetouch-ups and color enhancement.

Course Outcomes

- To use photoshop confidently and effectively.
- To gain the skills and abilities to use photoshop that make them employable.
- To create and edit images.
- To use a range of tools and filters in *photoshop*

Unit I Starting Photoshop CS2

Getting Started with Photoshop CS2 – Opening an Existing File – The photoshop Program Window – Guidelines for Working with Toolbox – Screen Modes – Creating a New File – Saving Files – Removing Files – Closing File.

Unit II Working with Images

Vector and Bitmap Images – Opening Recently used Files – Image Size – Image Resolution – Editing Images – Opening Files Created in Illustrator or Freehand – Color Modes – Setting a Current Foreground and Background Colors – File Formats.

Unit III Making Selections

Making Selection – The Grow and Similar Commands – Moving a Portion of an Image – Editing Selections – Copying a Selection into another Image – Filling a Selection – Transforming Selections.



Unit IV Painting, Drawing and Retouching Tools

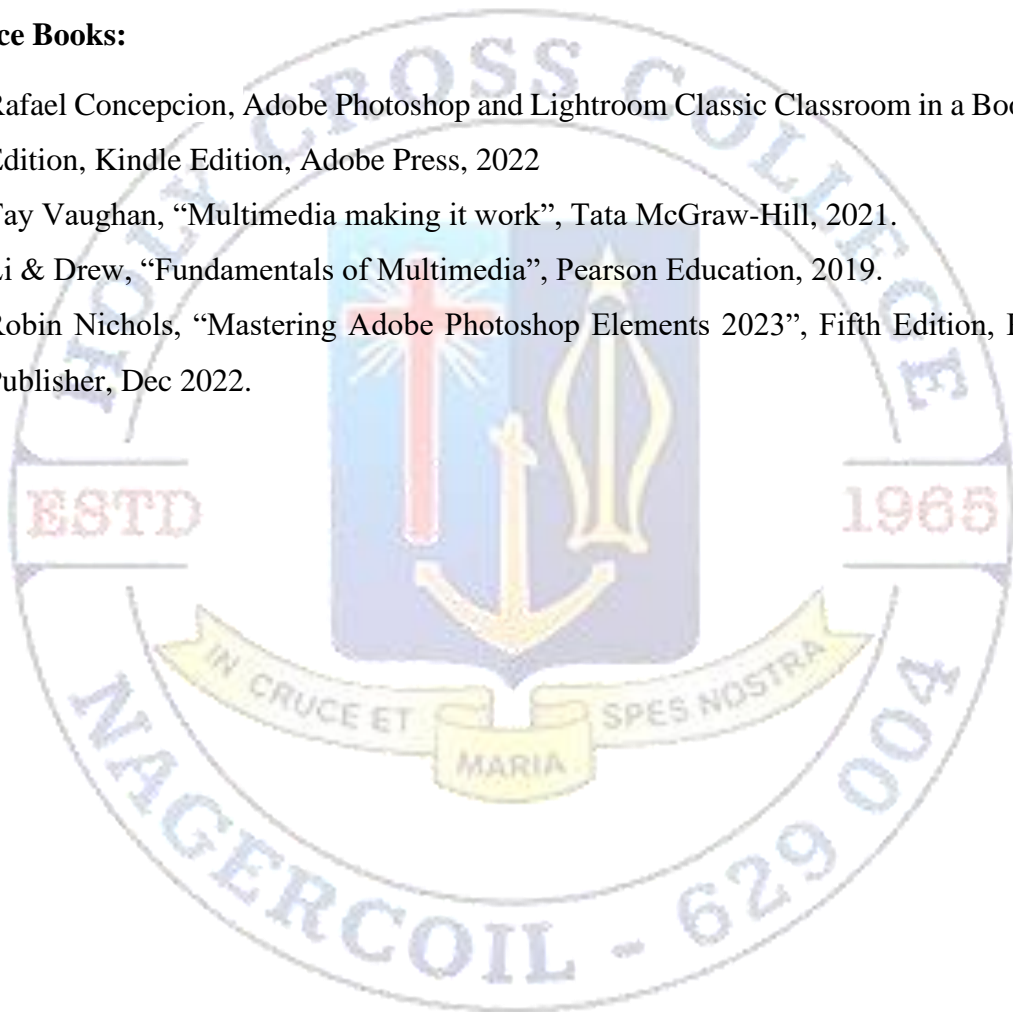
The painting Tools – The Drawing Tools – The Retouching Tools – Layers – Layers Palette – Working with Layers

Unit V Filters

The Filter Menu – Filter Gallery – Extract Filter – Liquify Filter - Vanishing Point Filter – Artistic Filters – Blur Filters – Brush Stroke Filters.

Reference Books:

1. Rafael Concepcion, Adobe Photoshop and Lightroom Classic Classroom in a Book 3rd Edition, Kindle Edition, Adobe Press, 2022
2. Tay Vaughan, “Multimedia making it work”, Tata McGraw-Hill, 2021.
3. Li & Drew, “Fundamentals of Multimedia”, Pearson Education, 2019.
4. Robin Nichols, “Mastering Adobe Photoshop Elements 2023”, Fifth Edition, Packet Publisher, Dec 2022.



Value Added - DOMESTIC APPLIANCES AND SERVICE

Course Code	Total Hours	Marks
VAP202	30	100

Objectives:

1. To understand the working principles of different household domestic appliances.
2. To check the electrical connections at house-hold
3. To learn the skill to repair the electrical appliances for the general troubleshoots and wiring faults

Course Outcomes:

- To explore the physics of home appliances and their functionality
- To understand key elements of electrical and electronics appliances.
- To understand the basic safety and servicing measures during the technical check.
- To do technical checks with electronic appliances

Unit I Electrical Connections

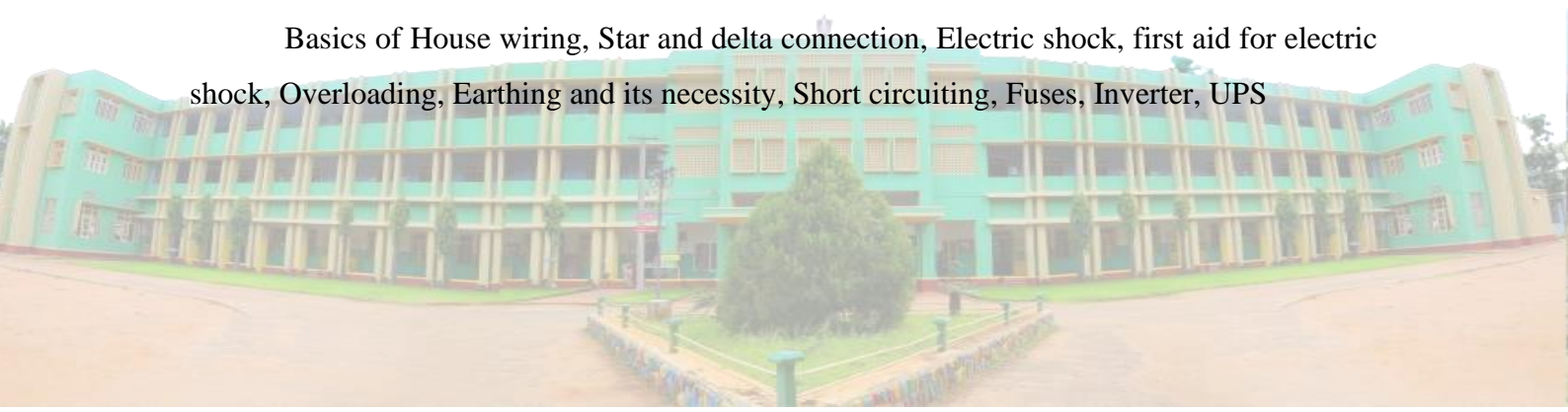
Voltage, Current, Resistance, Capacitance, Inductance, Electrical conductors and Insulators, Ohm's law, Series and parallel combinations of resistors, Connectors, Cables, Fuses, switches & Relays

Unit II Current

Galvanometer, Ammeter, Voltmeter, Multimeter (Analog & Digital) Transformers, Electrical energy, Power, Kilowatt hour (kWh), consumption of electrical power, direct current and alternating current, Single phase and three phase connections

Unit III Electric Shock

Basics of House wiring, Star and delta connection, Electric shock, first aid for electric shock, Overloading, Earthing and its necessity, Short circuiting, Fuses, Inverter, UPS



Unit IV Electrical Appliances

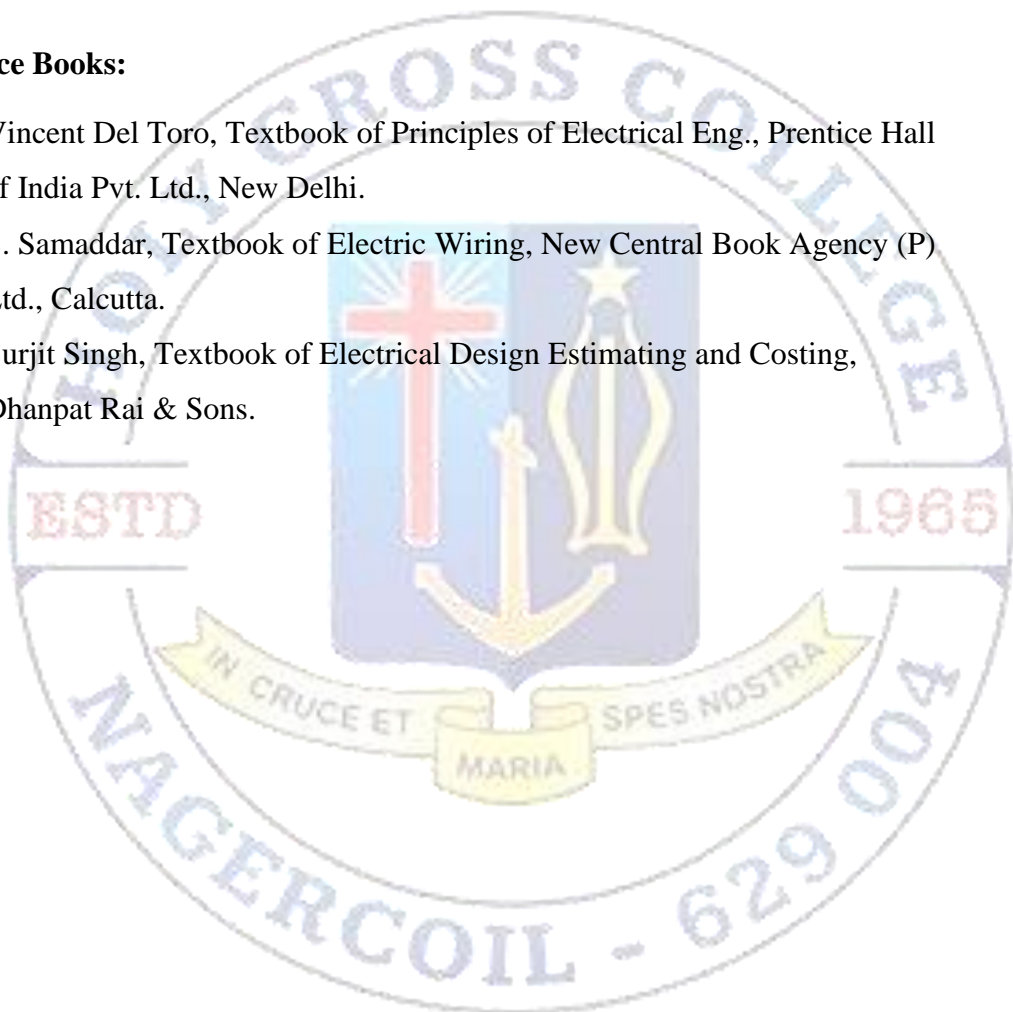
Principle, working and servicing of Electric fan, Electric Iron box, Water heater, Electric Mixer, Grinder and Blender, Microwave oven, Refrigerator

Unit V Bulbs

Concept of illumination, Electric bulbs, CFL, LED lights, Energy efficiency in electrical appliances

Reference Books:

1. Vincent Del Toro, Textbook of Principles of Electrical Eng., Prentice Hall of India Pvt. Ltd., New Delhi.
2. S. Samaddar, Textbook of Electric Wiring, New Central Book Agency (P) Ltd., Calcutta.
3. Surjit Singh, Textbook of Electrical Design Estimating and Costing, Dhanpat Rai & Sons.



Value Added - COMPUTER HARDWARE TRAINING

Course Code	Total Hours	Marks
VAP203	30	100

Objectives:

1. To learn basic computer hardware and software installation procedures
2. To learn various hardware components
3. To learn different kinds of memory and storage devices.

Course Outcomes

- To understand various hardware components, including CPUs, RAM, storage devices, motherboards, power supplies, and peripheral devices.
- To diagnose and repair hardware-related issues.
- To understand error codes using diagnostic tools and applying problem-solving techniques to fix hardware problems.
- To understand how different hardware components, work together and their importance of compatibility.

Unit I PC Hardware and Components

Fundamentals of Hardware, handling, testing and troubleshooting of personal computer problems

Unit II PC Architecture

Diagnose and repair problems of Desktop/Laptop/Mobiles

Unit III Advanced Networks and Networking Peripherals

Types of internet connections, network services, network security and General troubleshooting & maintenance of Networks and networking peripherals.

Unit IV Operating System, Software & Tools

Introduction of OS, File System, Memory Management, System Backup and Restore, Viruses and Anti Viruses, Knowledge of inbuilt Diagnostic Tools

Unit V Devices and Applications

Identify existing configuration of the computer and peripherals and to troubleshoot common problems

Reference Books:

1. PC Hardware: The Complete Reference, First Edition (2017), Craig Zacker and John Rourke, McGraw Hill Education
2. Learning PC Hardware Second Edition (2012), Ramesh Bangia, Khanna Publishers
3. NETWORKING for Beginners, First Edition (2019), Dylan Mach.



Value Added – COMPUTER MAINTENANCE

Course Code	Total Hours	Marks
VAP204	30	100

Objectives:

1. To analyse problems associated with PC components.
2. To provide solutions to troubleshoot and isolate the problems.

Course Outcomes

- To understand the basic components of a computer.
- To install different types of operating systems.
- To assemble and disassemble a personal computer.
- To troubleshoot the problems.

Unit I Computer Hardware

Introduction to Computer Hardware - Parts of Computer - Motherboard: Block Diagram- Types -Identification of Ports, Chip, Slot, Connector - Computer Assembling & Disassembling - How to Upgrade Computer.

Unit II Computer Software

Introduction to windows, Identification of windows - Windows Installation (win 7, 8, & 10) without data loss - Driver Installation (offline / online) - Software Installation - Hard Disk Partition - Windows Backup & Restore

Unit III Soldering and Desoldering

Removing component from motherboard - Fixing component from motherboard - Changing Port & Slot from motherboard - Removing& fixing all ICs from motherboard

Unit IV Fault Finding and Repairing in External Hardware

Keyboard Problem - Mouse Problem- Battery Problem - Overheating Problem - Hard Disk Problem - USB Problem - LAN Problem - Monitor Problem - Display White Problem - Blue Screen Problem - Shorting Problem

Unit V Fault Finding and Repairing Computer Internal

Windows Problem - Software Problem - Network Problem - Virus Problem – Antivirus - RAM Problem - Slow Working Problem - Hang Problem – Restart Problem - Control Panel Setting- Data recovery -Password Breaking.

Reference Books:

1. PC Hardware: The Complete Reference, First Edition (2017), Craig Zacker and John Rourke, McGraw Hill Education
2. Learning PC Hardware Second Edition (2012), Ramesh Bangia, Khanna Publishers
NETWORKING for Beginners, First Edition (2019), Dylan Mach.



Value Added - HOUSE WIRING

Course Code	Total Hours	Marks
VAP205	30	100

Objectives:

1. To learn basic wiring installation procedures
2. To learn various wiring components
3. To learn different kinds of wiring devices.

Course Outcomes:

- To understand domestic wiring and layout.
- To know the fundamental principles behind the electrical circuits
- To know the basics of electrical instruments and measurements
- To repair and do maintenance of the LED Bulbs, switches etc.,

Unit I Introduction to the House wiring

House Wiring, Employment opportunities; Dangers from misuse of electrical appliances and equipment; Responsibilities of Electrician and Wiremen

Unit II Introduction to Electricity and Electric Power

Definitions and Units; Static and Dynamic Electricity; Direct Current (DC) and Alternating Current (AC); Voltage Levels in AC; Advantages of AC

Unit III Common Electrical Appliance

Principles of AC Generators and Motors; Various Electrical Appliances; Measurement Methods of Electrical Parameters; Measuring Instruments of Electrical Parameters

Unit IV Safety Requirement

Safety and Precaution, General steps to ensure safety, Safety Sign, Electrical Safety, Extension Cord, Rules and Regulations; Hazards of Electricity: Fire Hazard, Electric Shock.

Unit V Electrical Wiring and Tools

Wiring and its Types: Cleat Wiring, Batten Wiring, Casing Capping Wiring, Conduit Wiring; Wiring Diagrams; Tools: Screw driver, Files, Chisel, marking punch, Calipers, Gauge, Hacksaw, Bench vice, Hammer, Taps, Wrench, Crimping tool, Drilling machine.

Reference Books:

1. Ramakant, A. Gayakwad. (2015) Basic Electrical House Wiring - Pearson Education: Fourth Edition.
2. Mehta, V.K. (2001) Principles of Electronics. 6th Revised Edition, S.Chand and Company.
3. David A. Bell. (2007) Electronic Devices and Circuits. 4th Edition, Prentice Hall.



Value Added - IMAGE PROCESSING

Course Code	Total Hours	Marks
VAP206	30	100

Objectives:

1. To learn transformation of an image into digital form and obtain specific models
2. To learn the image enhancement techniques
3. To learn image restoration and compression procedures

Course Outcomes:

- To understand the fundamental concepts of Colour image Processing
- To understand the fundamental concepts of image processing, including image acquisition, representation, enhancement, and analysis
- To acquire hands-on experience with popular image processing tools like MATLAB and Python-based framework
- To gain insights into how image processing is used in various industries such as medical imaging, computer vision, remote sensing and entertainment.

Unit I Digital Image

Introduction: Digital Image Fundamentals: Brightness, Adaptation and Discrimination, Pixel adjacency connectivity

Unit II Image Restoration

Image Restoration: Image Degradation, Noise Restoration Filters. Image Compression: JPEG.

Unit III Colour Models

Colour Image Processing: Colour models, Colour transformation and segmentation.

Unit IV Morphological Operations

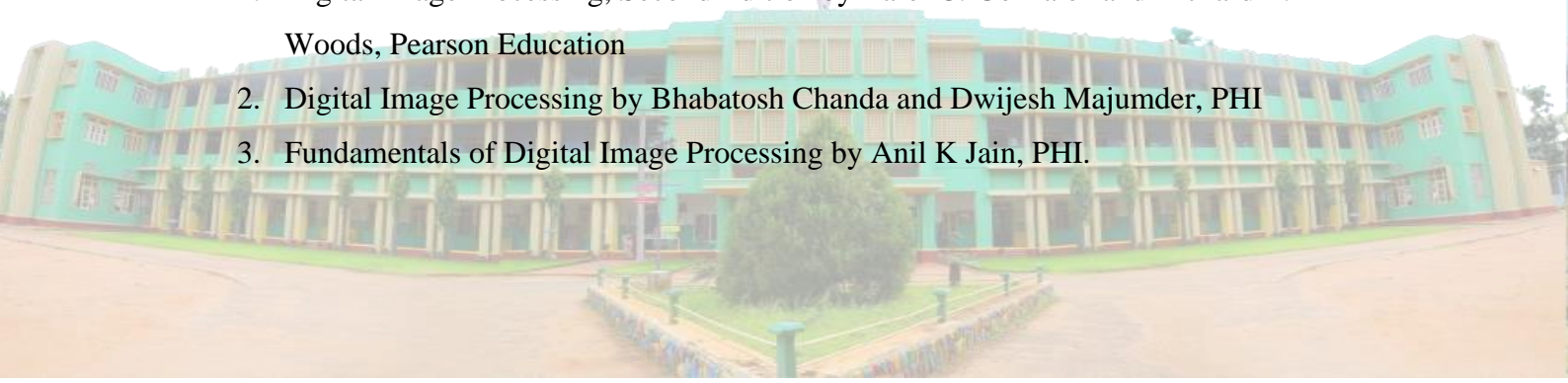
Morphological Image Processing: Erosion, Dilation, Opening, Closing.

Unit V Segmentation

Image Segmentation: Point, Line and Edge Detection, Thresholding.

Reference Books:

1. Digital Image Processing, Second Edition by Rafael C. Gonzalez and Richard E. Woods, Pearson Education
2. Digital Image Processing by Bhabatosh Chanda and Dwijesh Majumder, PHI
3. Fundamentals of Digital Image Processing by Anil K Jain, PHI.



Value Added - MOBILE PHONE SERVICE

Course Code	Total Hours	Marks
VAP207	30	100

Objectives:

1. To assemble and disassemble the parts of the mobile phone
2. To send and receive information wirelessly
3. To operate internal data storage.

Course Outcomes:

- To understand the mobile technology
- To know the components of mobiles and troubleshooting methods
- To reassemble the repaired mobiles and do the troubleshooting
- To diagnose and fix Smartphone issues

Unit I Fundamentals of Mobile Phone

Introduction to GSM/CDMA - Working of GSM/CDMA Cellular Technologies - Information of Cell Sites & Base Station - Call Processing of a GSM –Smart Phones - APPs - GPRS - Mobile Software (PC suite)

Unit II Chip Level Study

Block Diagrams - Chip Level Information of Mobile Phones - BGA -SMD Reworking Station - Soldering lead -Soldering paste - De- Soldering wire - Identification of IC's - Assembling &Disassembling of Smart Phones.

Unit III Trouble Shooting

Causes for various problems & Troubleshooting of Problems in a Smart Phone - Network Problems - Display Problems –Touch Problems - Sim Card Problems – Charging problems - Battery Problems - Software Problems - IMEI information - Sim Card problems



Unit IV Practical 1

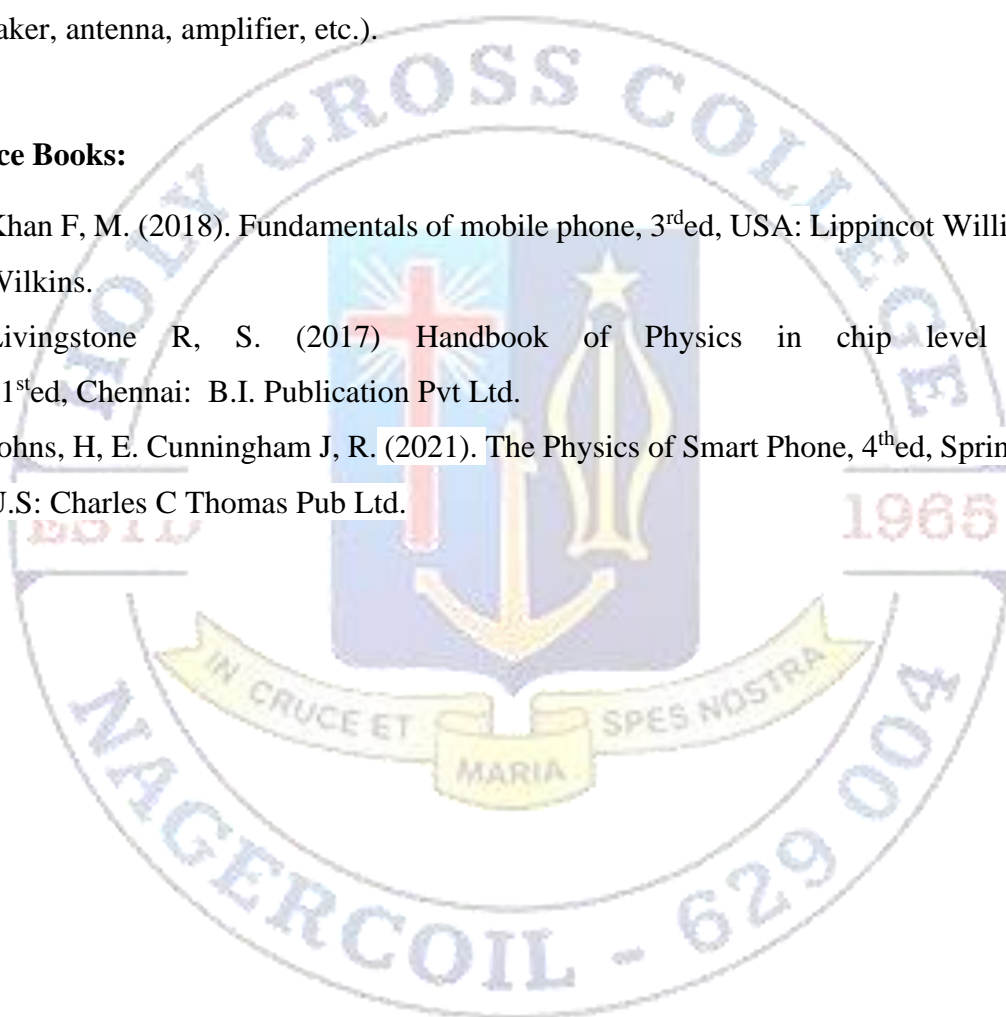
Tools and Test Equipment - Disassembling the cell phone –Testing of Battery, Display, Touch, Antenna, Mic, Speaker, Ringer, Charger, Vibrator and headset - SMD soldering.

Unit V Practical 2

Software Unlocking - User lock, SPC, MSL, FSC, OTKSL, Flashing - Downloads of logos and Ring tones - Hand set problems –Replacement of modules (display, touch screen, mic, speaker, antenna, amplifier, etc.).

Reference Books:

1. Khan F, M. (2018). Fundamentals of mobile phone, 3rded, USA: Lippincot Williams & Wilkins.
2. Livingstone R, S. (2017) Handbook of Physics in chip level study . 1sted, Chennai: B.I. Publication Pvt Ltd.
3. Johns, H, E. Cunningham J, R. (2021). The Physics of Smart Phone, 4thed, Springfield, U.S: Charles C Thomas Pub Ltd.



Value Added - UTILIZATION OF SOLAR ENERGY

Course Code	Total Hours	Marks
VAP208	30	100

Objectives:

1. To acquire knowledge on solar radiation principles with respect to solar energy estimation.
2. To get familiarised with various collecting techniques of solar energy and its storage.
3. To learn the solar photovoltaic technology principles and different types of solar cells for energy conservation and different photovoltaic applications.

Course Outcomes

- To understand the principles of solar cells.
- To understand the benefits of harnessing solar power and efficient conversion of solar cells.
- To set up photovoltaic solar cell.
- To facilitate the sustainable development of energy related devices.

Unit I Solar Energy

Sun as a source of energy – Solar energy importance –Storage of Solar energy – Solar ponds – Uses of Solar energy

Unit II Solar Radiation

Solar radiation - Solar radiation at the Earth's surface - Measurement of Solar radiation – Prediction of available Solar radiation – Sunshine Recorder

Unit III Solar Thermal Systems

Principles of conservation of solar radiation into heat – Collectors used for solar thermal conservation – Flat plate collectors and concentrating collectors

Unit IV Solar Photovoltaic Systems

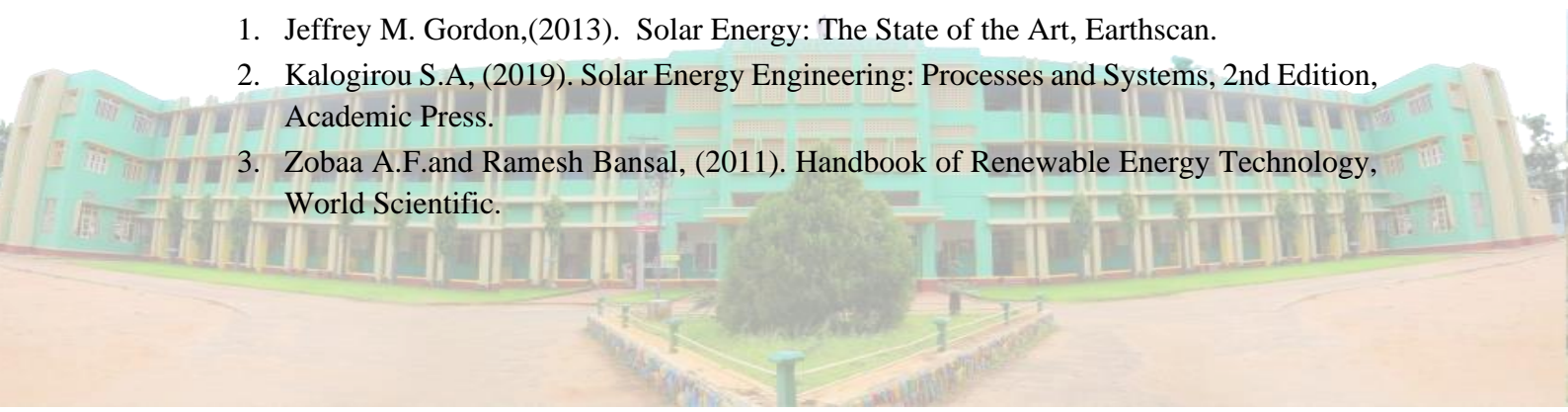
Conservation of solar energy into electrical energy – Photovoltaic effect – Solar photovoltaic cell and its working principle – Different types of solar cells

Unit V Applications of Solar Energy

Solar Thermal Plant – Solar Cookers – Solar hot water systems - Solar dryers - Solar distillation - Solar green house

Reference Books:

1. Jeffrey M. Gordon,(2013). Solar Energy: The State of the Art, Earthscan.
2. Kalogirou S.A, (2019). Solar Energy Engineering: Processes and Systems, 2nd Edition, Academic Press.
3. Zobaa A.F.and Ramesh Bansal, (2011). Handbook of Renewable Energy Technology, World Scientific.



Value Added - WEB DESIGNING

Course Code	Total Hours	Marks
VAP209	30	100

Objectives:

1. To know fundamentals of Internet
2. To identify the principles of web design.
3. To construct basic websites using HTML and Cascading Style Sheets.

Course Outcomes:

- To understand the fundamental concepts of HTTP and XHTML Protocol
- To upgrade their skills in the production and maintenance of websites, including web graphic design, interface design, user experience design, and search engine optimization.
- To inculcate better web designing which makes information more accessible to a wide range of users ensuring inclusivity.
- To understand the basic concepts in creating links with the images, audio and video

Unit I Introduction

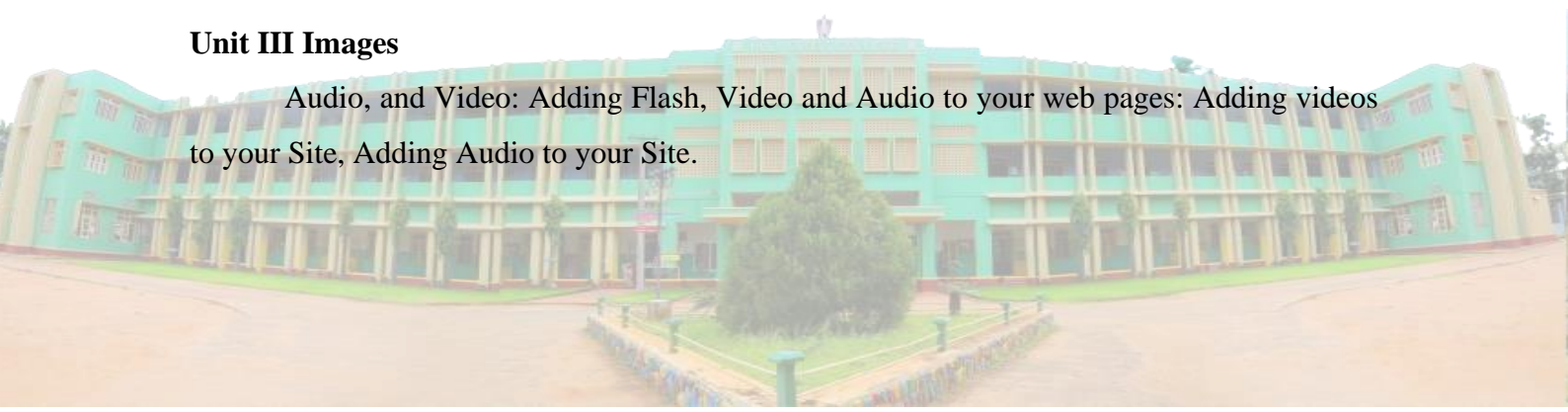
Concept of WWW, Internet and WWW, HTTP Protocol: Request and Response, Web browser and Web servers, features of latest version of Web. Introducing HTML and XHTML - Basic Text Formatting - Presentational Elements–Phrase Elements - Lists - Core Elements and Attributes.

Unit II Links and Navigation

Basic Links - Creating Links with the <a> Element. Images, Audio, and Video: Adding Images Using the Element - Using Images as Links - Image Maps.

Unit III Images

Audio, and Video: Adding Flash, Video and Audio to your web pages: Adding videos to your Site, Adding Audio to your Site.



Unit IV Server

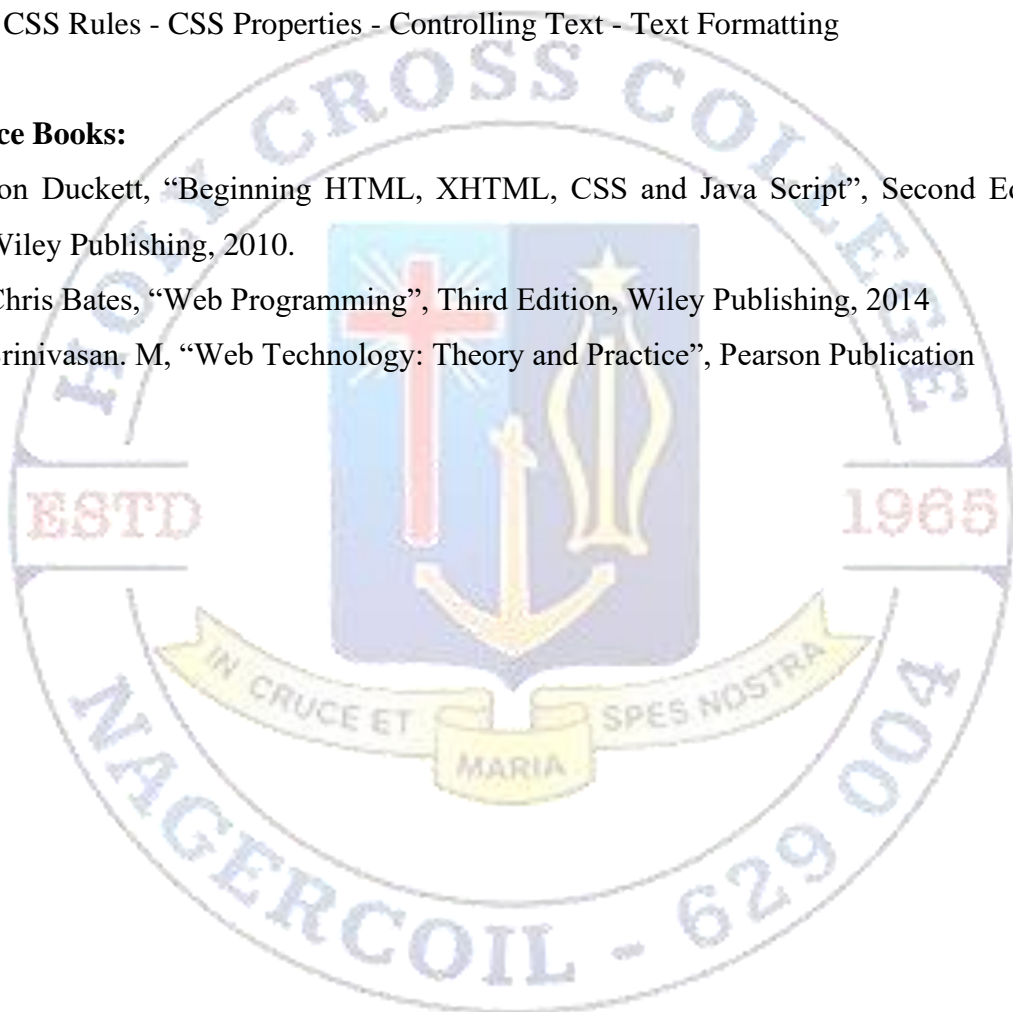
Introducing Tables–Basic Table Elements and Attributes – Adding a caption to a Table - Grouping Section of a Table - Nested Tables. Forms: Introducing Forms - Form Controls - Sending Form Data to the Server.

Unit V Frames

Introducing Frameset – The <frameset> Element–The <frame> Element - Creating Links Between Frames - Nested Framesets. Cascading Style Sheets: Introducing CSS - Where you can Add CSS Rules - CSS Properties - Controlling Text - Text Formatting

Reference Books:

1. Jon Duckett, “Beginning HTML, XHTML, CSS and Java Script”, Second Edition, Wiley Publishing, 2010.
2. Chris Bates, “Web Programming”, Third Edition, Wiley Publishing, 2014
3. Srinivasan. M, “Web Technology: Theory and Practice”, Pearson Publication



Value Added – WIND MILL TECHNOLOGY

Course Code	Total Hours	Marks
VAP2010	30	100

Objectives:

1. To learn the energy production for a wind turbine from wind speed distribution.
2. To analyse wind resources
3. To explain the basic principles of wind energy conversion

Course Outcomes:

- To acquire knowledge on basic principles of wind energy conversion
- To understand the design of windmill technology
- To comprehend the latest knowledge on windmill designing
- To *apply the principles to adopt wind power technology and provide practical solutions*

Unit I Wind Energy

History: early wind power, technical development, influence of society and science
 Winds: physical background, energy content, variation in time and in space, geographical resource distribution, influence of terrain, measurement methods, statistical analysis

Unit II Turbines

Turbines: free flow, principles of drag and lift, aerodynamics, design of turbine blades, horizontal and vertical axis wind turbines, Betz' and Glauert's turbine theories, the BEM method.

Unit III Electric Generation

Electric generation: synchronous/ asynchronous generators, winding/ permanent magnetized generators, constant/ variable speed, transformers, power electronics, power converters
 Design: horizontal and vertical axis wind turbines, blades, control mechanisms, drive train, tower and nacelle.



Unit IV Control

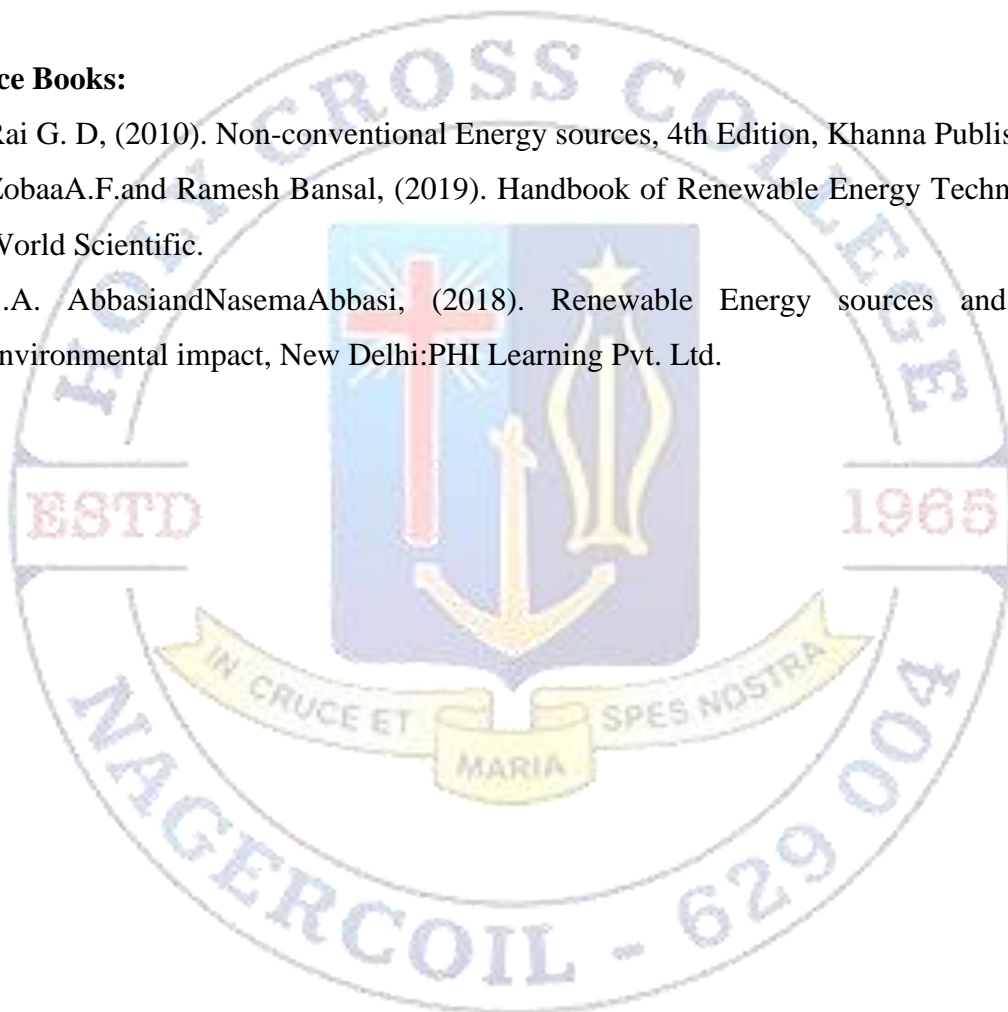
Control: control targets, system modelling, control strategies (pitch and stall regulation), hardware Systems: wind power parks, transports, erection, grid connection, operation, maintenance

Unit V Environmental Issues

Society: environmental issues, law, forms of government support, technical aspects of environment Small scale wind power: technology, economy, paths of development

Reference Books:

1. Rai G. D, (2010). Non-conventional Energy sources, 4th Edition, Khanna Publishers.
2. ZobaaA.F.and Ramesh Bansal, (2019). Handbook of Renewable Energy Technology, World Scientific.
3. S.A. AbbasiandNasemaAbbasi, (2018). Renewable Energy sources and their environmental impact, New Delhi:PHI Learning Pvt. Ltd.



Value Added - CHEMICALS OF EVERYDAY USE

Course Code	Total Hours	Marks
VAC202	30	100

Objectives:

1. To develop skill in preparing chemicals of everyday use.
2. To know about the ingredients of perfumes and fixatives.

Course Outcomes

- To know the ingredients of soaps and detergents.
- To understand the procedure for the preparation of household articles.
- To prepare the house hold articles.
- To analyse the chemical composition of soaps and detergents.
- To evaluate chemical constituents, present in cosmetics.

Unit I

Soaps: Types of soaps-toilet and washing and transparent soap, shaving soaps, liquid soap- methods of preparation, cleaning action of soaps. **Detergents** Cationic, anionic and non-ionic detergents – detergents containing enzymes. Eco-friendly detergents.

Unit II Cosmetics: I

Chemistry of face creams, cold cream, vanishing creams, toilet powders, hand lotion and creams, nail bleach, nail lacquer, nail lacquer removers, lipstick, eye-makeup, eye lid, hair oils, hair creams, hair dyes, hair removers, hazards of cosmetics.

Unit III Cosmetics: II

Perfumes-definition- classification as natural and synthetic-composition or ingredients. Fixatives: Name of the oil, source, components.

Unit IV Preparation and uses of the following

Tooth paste, tooth powder, boot polish, gum paste, sealing wax, phenoyle, moth balls, liquid blues, chalk crayons, inks, agarpattis and camphor tablets.

Unit V Vital chemicals at home:

Preparation, properties and uses of washing soda, baking powder, vinegar, bleaching powder, shampoo, washing powder and sugar.

Text Book:

1. Text book of Allied Chemistry by Dr. T. Syed Ismail, Aashiq Publications, 2011.

Reference Books:

1. Applied Chemistry by D.M. Yusuff, Nisa Publications, 2010.
2. Cosmetic Chemistry by Thankamma Jaccob- Macmillan Company, 1979.
3. Chemistry and manufacture of Cosmetics by Mitchell Schlossman, Science, Edition, 2008.



Value Added - CLINICAL CHEMISTRY

Course Code	Total Hours	Marks
VAC203	30	100

Objectives:

- To give an awareness on safety measures in the lab.
- To enable the students to aware of the various common diseases and their control measures.
- To know the composition of blood and blood grouping.

Course Outcomes

- To remember the safety measures in clinical laboratory.
- To understand the causes and treatment of disease.
- To apply the safety protocols.
- To analyse the composition of blood and treatment of diseases.
- To determine the glucose in urine and blood.

Unit I

Safety in laboratory – importance, personal protection – dangers to avoid – chemical hazards – acid burns – acid and alkali on eye, poisoning by strong acids, caustic alkali. Hazards of carbon monoxide.

Unit II

First-aid box- Rules of first aid, first aid for accidents, cuts, bruises. bleeding, fracture, burns, fainting and poisonous bites.

Unit III

Composition of blood – blood grouping - identification of blood groups and matching. Determination of glucose in serum, Tests for salts in serum and urine.

Unit IV Diseases and treatment - I

Common diseases – causes and treatment of insect borne diseases – malaria and filariasis. Air borne diseases – diphtheria, whooping cough and tuberculosis. Water borne diseases – cholera, typhoid and dysentery.

Unit V Diseases and treatment –II

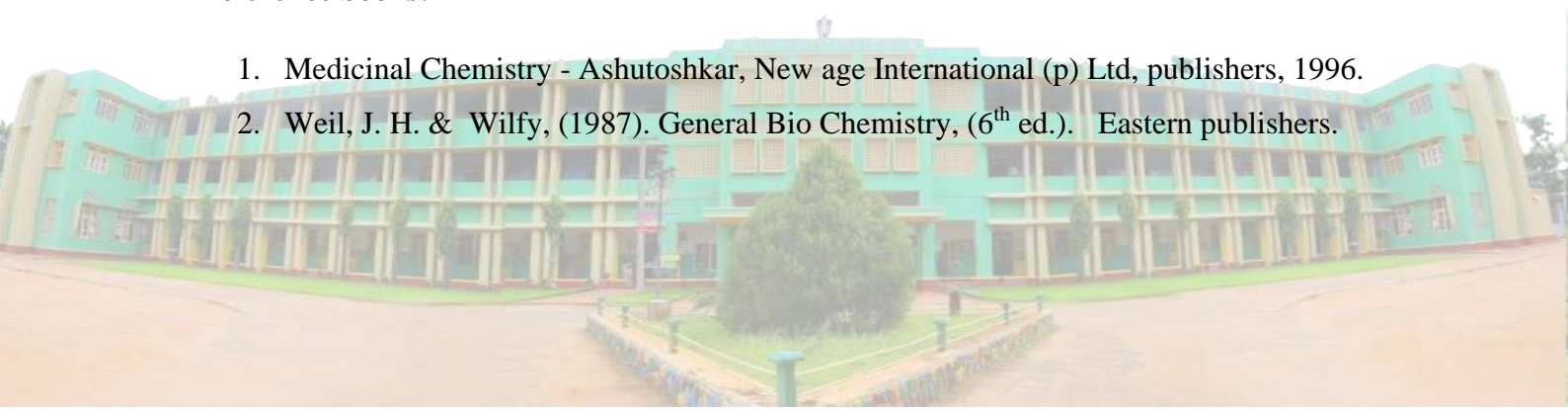
Diabetes – control, dosage and uses of insulin, oral and hypoglycemic drugs. Cardiac diseases – cardio vascular drugs. Hyper tension – anti hypertensive drugs.

Text Book:

1. Text book of Pharmaceutical Chemistry- Jaya Shree Gosh, Sultan Chand & Co. S. Chand and Company. Ram Nagar, N. Delhi, 1992.

Reference books:

1. Medicinal Chemistry - Ashutoshkar, New age International (p) Ltd, publishers, 1996.
2. Weil, J. H. & Wilfy, (1987). General Bio Chemistry, (6th ed.). Eastern publishers.



Value Added - DAIRY CHEMISTRY

Course Code	Total Hours	Marks
VAC204	30	100

Objectives

1. To gain knowledge on pasteurization of milk.
2. To understand the preparation of special milk and dairy products.
3. To learn the common milk adulterants, preservatives and detergents.

Course Outcomes

- To remember the composition of milk and its processing.
- To understand the physio-chemical properties, pasteurization process and manufacture of milk and milk products.
- To apply the procedure for milk processing and determine the adulterants present in dairy products.
- To analyze the ingredients, nutritive values and manufacture of special milks and dairy products.
- To evaluate fat, specific gravity, acidity, pH, surface tension, viscosity and physio-chemical properties of milk and milk products.

Unit I Properties of milk

Milk - definition - composition, Factors affecting composition of milk - food and nutritive value. Milk constituents – water, fat, proteins, lactose and mineral matter. Adulterants in milk – definition, common adulterants and their detection. Preservatives in milk – definition, common preservatives and their detection.

Unit II Pasteurization of milk

Pasteurization – definition, objectives and requirements of pasteurization. Methods of pasteurization – in-the-bottle pasteurization, batch / holding pasteurization or Low-Temperature – Long Time pasteurization (LTLT), High Temperature – Short Time pasteurization (HTST), Ultra-High Temperature pasteurization (UHT) - Dairy detergents – definition – different types.



Unit III Special Milks

Sterilized milk – definition, advantages and disadvantages and method of manufacture. Homogenized milk – definition, merits and demerits, method of manufacture. Flavoured milks – definition, purpose, types of flavoured milks, method of manufacture. Chocolate flavoured milk, Fruit flavoured milk and vitaminized milk.

Unit IV Milk Proteins and Vitamins

Milk Proteins: Physical properties of milk proteins - hydration of proteins, solubility - effect of heat on milk proteins.

Milk vitamins: Water soluble vitamins and fat soluble vitamins in milk - importance of the vitamins with respect to physiological activity - effect of heat treatments and exposure to light radiation.

Unit V Milk products

Ice cream: Definition – classification – composition – food and nutritive value – defects in ice cream, their causes and prevention.

Cheese: Introduction – definition – classification – composition – food and nutritive value –

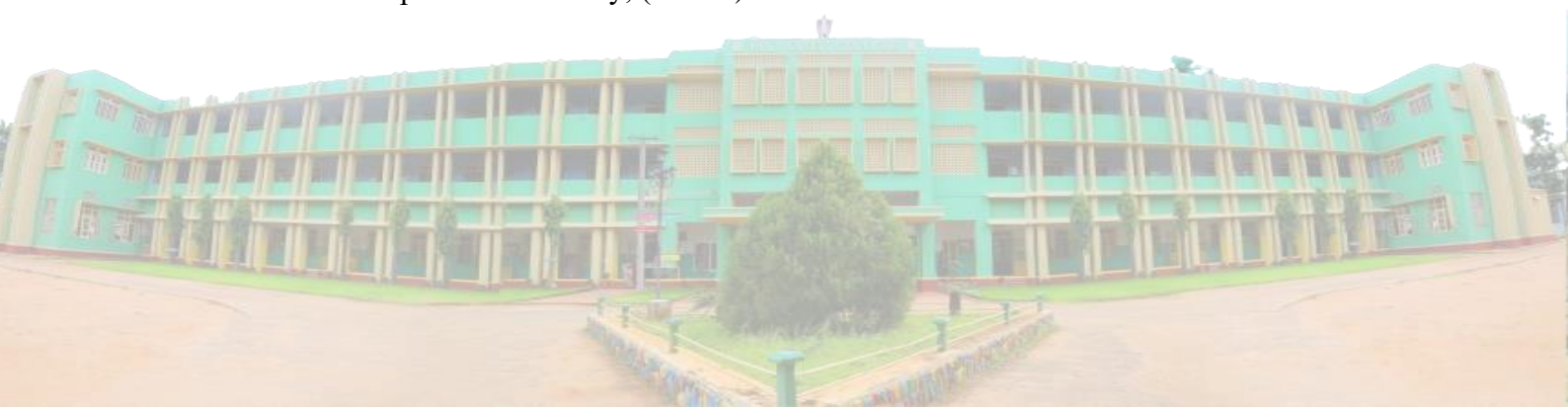
Dairy Sweet: Preparation of peda, gulabjamun, rossogolla and kheer paneer.

Text Book:

1. Sukumar De. (1991). Outlines of Dairy Technology, (1st ed.). Oxford University Press.

Reference Books:

1. Webb Johnson & Alfond, Fundamentals of Dairy Chemistry. Delhi: C.B.S. Publishers and Distributers.
2. Rangappa, K.S & Achaya, K.T. (1974). Indian Dairy products, Bombay: Asia Publishing House.
3. Webb, B.H. & Whittier, E.O. (1970). By-products from Milks, Westport, Connecticut: A.V.I. Publ. Co. Inc.,
4. Srinivasan, M. R. & Anantkrishnan, C.P.: (1957). Milk Products of India, ICAR Animal Husbandry Series No. 4, New Delhi.
5. Murray, R.K., Granner, D.K., Mayes, P.A. & Rodwell (1990). V.W.Harper's Biochemistry, (21st ed.). McGraw-Hill.



Value Added - POLYMER CHEMISTRY

Course Code	Total Hours	Marks
VAC205	30	100

Objectives

1. To know about the different types of polymerization reactions.
2. To understand the importance and the biomedical application of polymers.

Course Outcomes

- To remember the types of polymers.
- To understand the basic concepts of polymers and its characterization techniques.
- To apply the uses of polymer in industrial and medicinal field.
- To analyse the special features of commercial polymers.
- To evaluate the characteristics of polymers.

Unit I

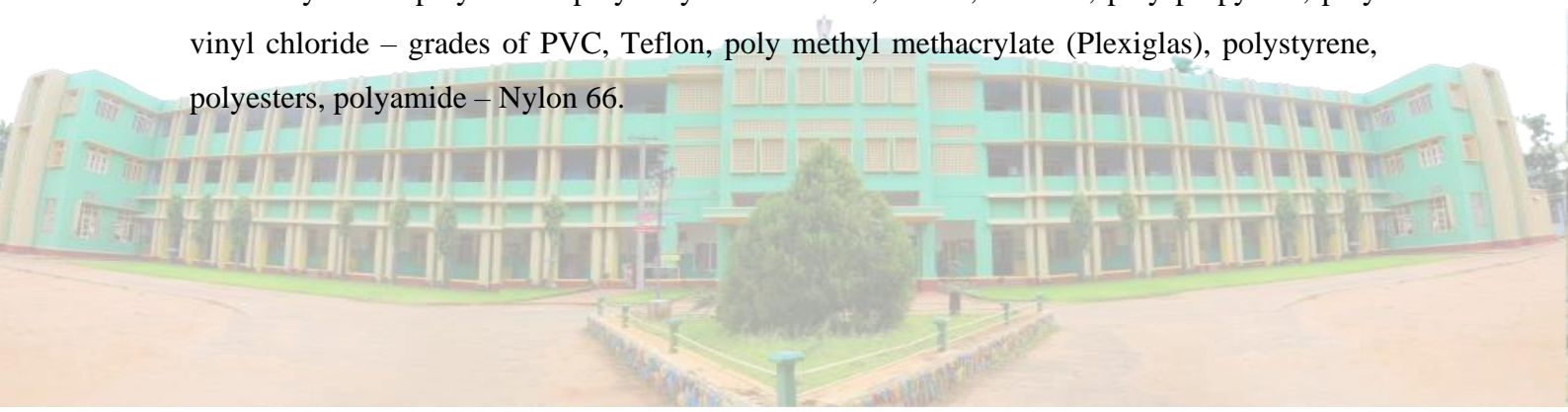
General Characteristics of polymers. Homo, hetero polymers, copolymers- block and graft copolymers. Thermosetting and thermoplastics. Linear, branched and cross-linked polymers. Type of polymerization – addition, condensation and co-polymerization. Initiators and inhibitors.

Unit II

Synthesis, properties and application of the following polymers. Phenol- formaldehyde resin, Melamine-formaldehyde resin, Polyurethanes, Epoxy resins-grades, curing processes and its importance.

Unit III

Synthetic polymers – poly ethylene – HDPE, LDPE, LLDPE, poly propylene, poly vinyl chloride – grades of PVC, Teflon, poly methyl methacrylate (Plexiglas), polystyrene, polyesters, polyamide – Nylon 66.



Unit IV

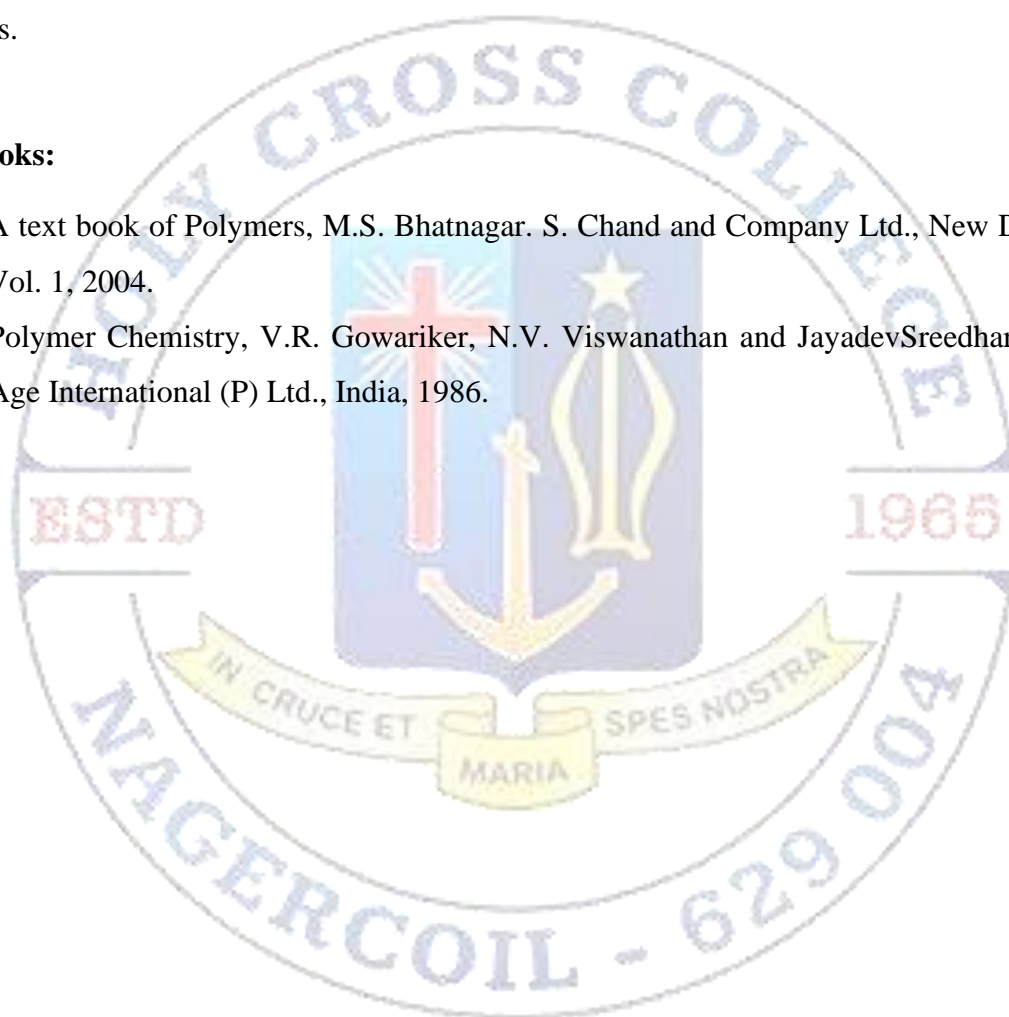
Natural rubber – vulcanization - synthetic rubber – styrene rubber, nitrile rubber, butyl rubber, polysulphide rubber and neoprene. Natural polymers – cellulose, starch, silk, wool, cellulose acetate and cellulose nitrate.

Unit V

Polymer processing – compression moulding, injection moulding, transfer moulding, extrusion moulding, casting, extrusion of fibres and spinning. Biomedical applications of polymers.

Text Books:

1. A text book of Polymers, M.S. Bhatnagar. S. Chand and Company Ltd., New Delhi – Vol. 1, 2004.
2. Polymer Chemistry, V.R. Gowariker, N.V. Viswanathan and JayadevSreedhar, New Age International (P) Ltd., India, 1986.



Value Added - CHEMISTRY OF COSMETICS

Course Code	Total Hours	Marks
VAC206	30	100

Objectives:

1. To know the preparation of Cosmetics.
2. To understand harmful effects of the ingredients in Cosmetics.

Course Outcomes

- To know the ingredients of cosmetics.
- To understand the procedure for the preparation of cosmetics.
- To prepare the cosmetics.
- To analyse the chemical composition of cosmetics.
- To evaluate chemical constituents, present in cosmetics.

Unit I

Face creams – types – cold cream – basic formula – preparation – special additives – uses – vanishing cream – formulation – preparation and uses. Face powders – types – composition – hand lotion and creams – making a simple hand lotion and cream.

Unit II

Nail preparation – Nail bleach, nail lacquers – film forming substances – plasticizers – solvents – colorants – make up preparation – lipstick – composition – Rouge – types and formulation – eye makeup – mascara.

Unit III

Dentifrices – types – composition – use -detergents in dentifrices – sodium N-lauroylsarcosinate – humectants – binders – flavours – special ingredients in dentifrices – fluoride – sodium sulphoricinoleate – chlorophyll – peroxide – antibacterials.



Unit IV

Shaving soaps – composition – brushless shaving creams – ingredients used, toilet soaps – types – composition – preparation – transparent soaps – special ingredients in toilet soaps.

Unit V

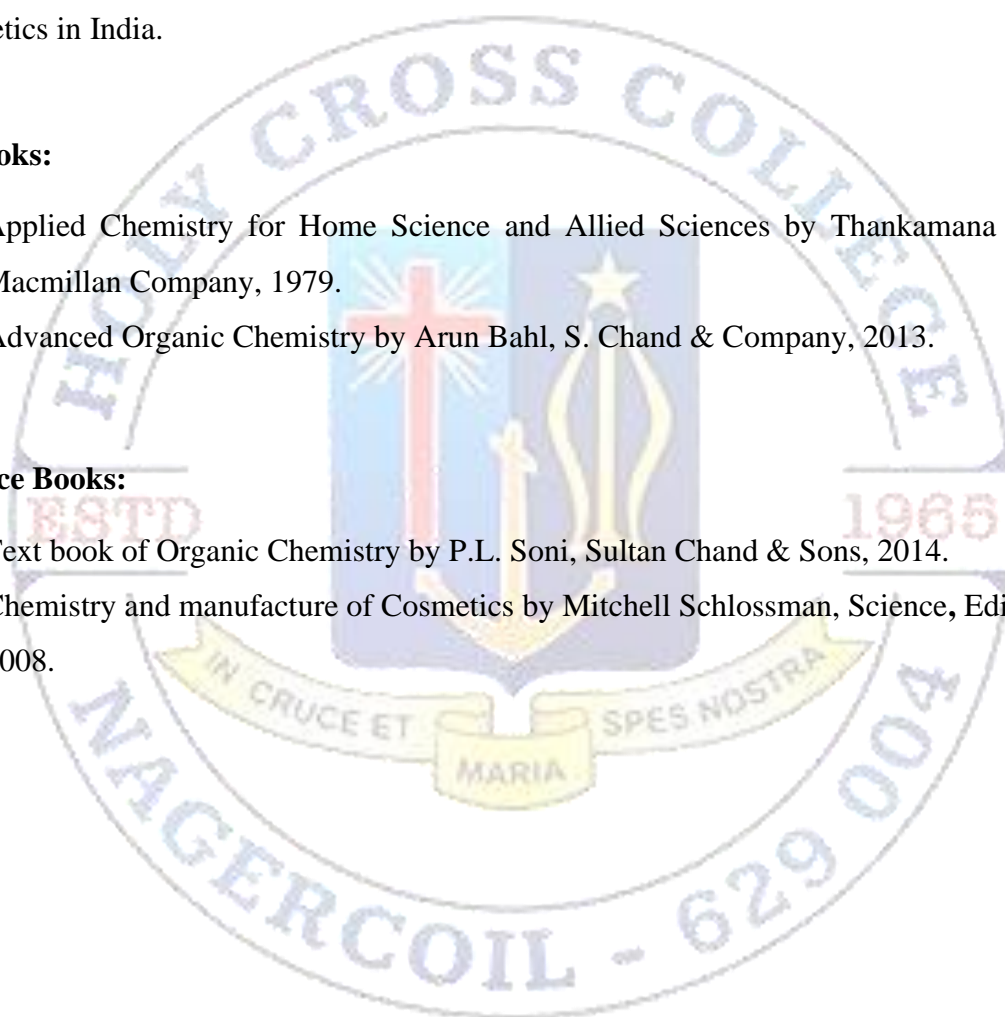
Hair oil – hair tonics – special ingredients in hair oil and tonics – hair creams – shampoos – types - special ingredients in shampoos – hair dyes -shazards of cosmetics – quality control of cosmetics in India.

Text Books:

1. Applied Chemistry for Home Science and Allied Sciences by Thankamana Jacob, Macmillan Company, 1979.
2. Advanced Organic Chemistry by Arun Bahl, S. Chand & Company, 2013.

Reference Books:

1. Text book of Organic Chemistry by P.L. Soni, Sultan Chand & Sons, 2014.
2. Chemistry and manufacture of Cosmetics by Mitchell Schlossman, Science, Edition, 2008.



Value Added - RUBBER TECHNOLOGY

Course Code	Total Hours	Marks
VAC207	30	100

Objectives:

1. To know the preparation of synthetic rubber.
2. To analyze the quality of rubber.

Course Outcomes

- To remember the classification of rubber.
- To understand the importance of rubber in industrial and medicinal field.
- To apply the processing techniques in the manufacture of rubber.
- To analyze the properties of rubber.
- To evaluate the characteristics of rubber.

Unit I

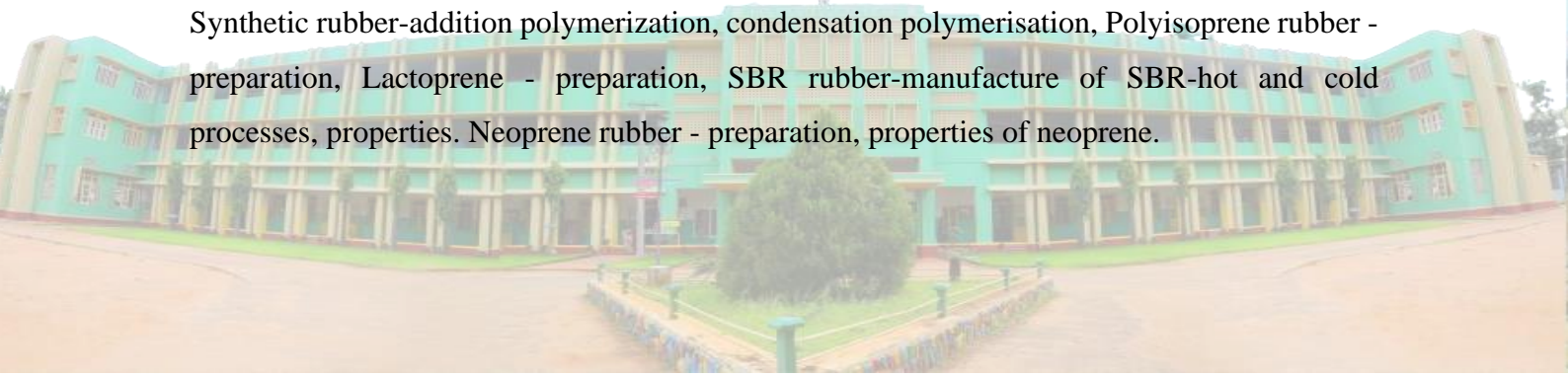
Importance of rubber, Rubber plants. Types of rubber - Chlorinated, oxygenated rubber and cyclo rubber. Latex- Coagulation of rubber, action of coagulating agents, crude natural rubber. Guttaparcha, Guayule rubber, Balata, Refining of crude rubber.

Unit II

Raw rubber - drawbacks, Rubber fabrication-calendering, moulding and extruding. Vulcanisation - types - nonsulphur vulcanisation, sulphur vulcanisation, techniques of vulcanisation - Properties of vulcanised rubber. Physical properties of rubber, Properties of raw rubber and vulcanised rubber.

Unit III

Chemical properties of rubber - solvents for natural rubber. Classification of rubber - Synthetic rubber-addition polymerization, condensation polymerisation, Polyisoprene rubber - preparation, Lactoprene - preparation, SBR rubber-manufacture of SBR-hot and cold processes, properties. Neoprene rubber - preparation, properties of neoprene.



Unit IV

Buna-N rubber-preparation, properties of Buna- N. Butyl rubber-preparation and properties of Butyl rubber, Thiokol rubber -preparation, properties of Thiokol. Silicone rubber -preparation – properties of silicone number, Polyurethane rubber-preparation, properties of urethane rubber. Spandex-preparation, properties and uses.

Unit V

Reclaimed rubber – properties of reclaimed rubber, Advantages of reclaimed rubber, sponge rubber, Foam rubber-chemical foaming, properties of rubber foam. Laminates- types- ply wood, laminated plastics, laminated glass. Rubber cement, Thermocole. Applications of rubber. Rubber derivatives.

Text Books:

1. Sharma, B.K. (2002), Industrial Chemistry, 13th edn. Goel publishing house, Meerut.

Reference Books:

1. Simpson, R.B. (2017), Rubber basics (1stedn.). Sanfoundary publishers.
2. Sharma, B. K (2002) Polymer Chemistry, (1stedn.). Goel publishing house, Meerut.
3. Bhatnagar, M.S. (2004) A text book of polymers(1stedn.). S.Chand publishers.



Value Added - FOOD SCIENCE

Course Code	Total Hours	Marks
VAC201	30	100

Objectives:

1. To know the principles of food preservation.
2. To learn various adulterants in food.

Course Outcomes

- To understand the chemical constituents in food and their calorific value
- To apply various chromatographic techniques to identify pesticides in food products
- To analyse the size, shape, colour, viscosity, texture, taste and flavour in food
- To evaluate the food quality with respect to National and International standards
- To evaluate the food quality with respect to National and International standards

Unit I

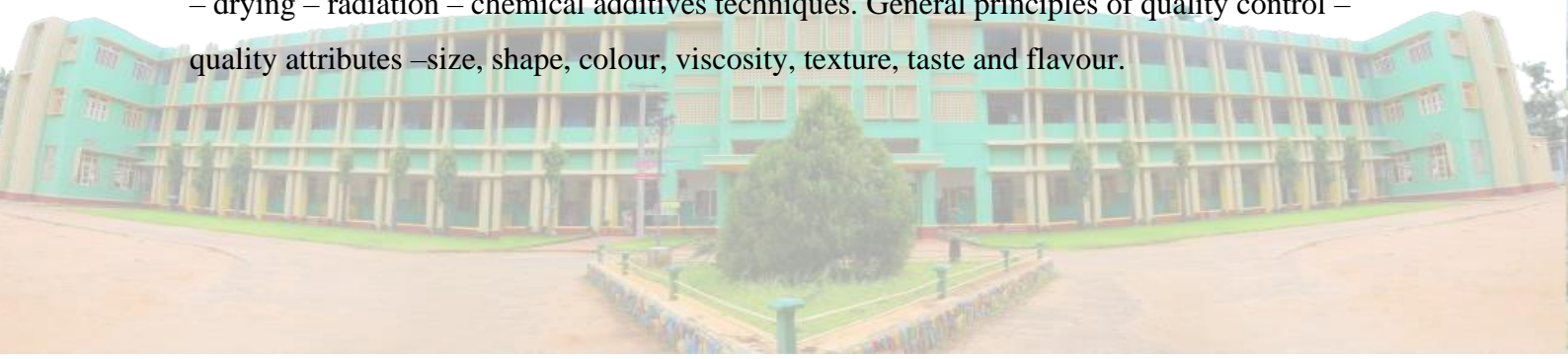
Analysis of foods such as milk, flour, carbohydrates (mono-.di- and polysaccharides) honey, jam, spices, tea, coffee and beverages for their calorific value, fibre, fat, moisture and ash contents.

Unit II

Pesticide analysis in food products – extraction and purification of samples – High performance liquid chromatography – Gas chromatography – Thin layer chromatography for identification of chlorinated pesticides in food products. Analysis of vitamins (A, B₁, B₂, B₆, B₁₂ and C).

Unit III

General principles of food preservation by use of high temperature – low temperature – drying – radiation – chemical additives techniques. General principles of quality control – quality attributes – size, shape, colour, viscosity, texture, taste and flavour.



Unit IV

Common food adulterants – tests to detect food adulterants – Government and trade standards for quality food laws and regulations.

Unit V

Methods of evaluation of food quality – sensory evaluation – objective techniques – microbiological methods. Agencies for evaluation of food quality – National and International.

Text Books:

1. Lewis M.J., *Physical Properties of Food Processing System*, Ellis Horwood Ltd., England.1987.
2. S. Suzanne Nielsen, *Food Analysis*, 4th Edition, 2010.

Reference Books:

1. Giridarilal Sidappa G.S. and Tandan G.I., *Preservation of Fruits and Vegetables*, ICAR, New Delhi.
2. Horace D.Graham, *The Safety of Foods*, 2nd Edition, Air Publishing Co. Inc., West Port,1980.
3. Julie Miller Jones, *Food Safety*, Eagan Press, USA,1992.
4. Lewis M.J., *Physical Properties of Food Processing System*, Ellis Horwood Ltd., England.1987.
5. Picgott J.R., *Sensory Analysis of Foods*, Elsevier Applied Science Publisher, New York,1984.
6. William C.Frazier, Dennis C.Westhoff, *Food Microbiology*, 4th Edition, Tata Mcgraw Hill Publishing Company Ltd., New Delhi.



Value Added - IN VITRO PROPAGATION

Course Code	Total Hours	Marks
VAB203	30	100

Objectives:

1. To learn and apply the general principles of plant tissue culture and ensure adequate training.
2. To understand the various steps in explant and callus culture.

Course Outcomes

- To learn the knowledge and skills necessary to work effectively in the field of plant tissue culture, biotechnology, or conservation.
- To learn various methods of plant propagation in vitro, such as micro propagation (cloning), somatic embryogenesis, organogenesis, and meristem culture.

Unit I

Scope and importance of plant tissue culture, Totipotency of cells-differentiation, dedifferentiation, and redifferentiation.

Unit II

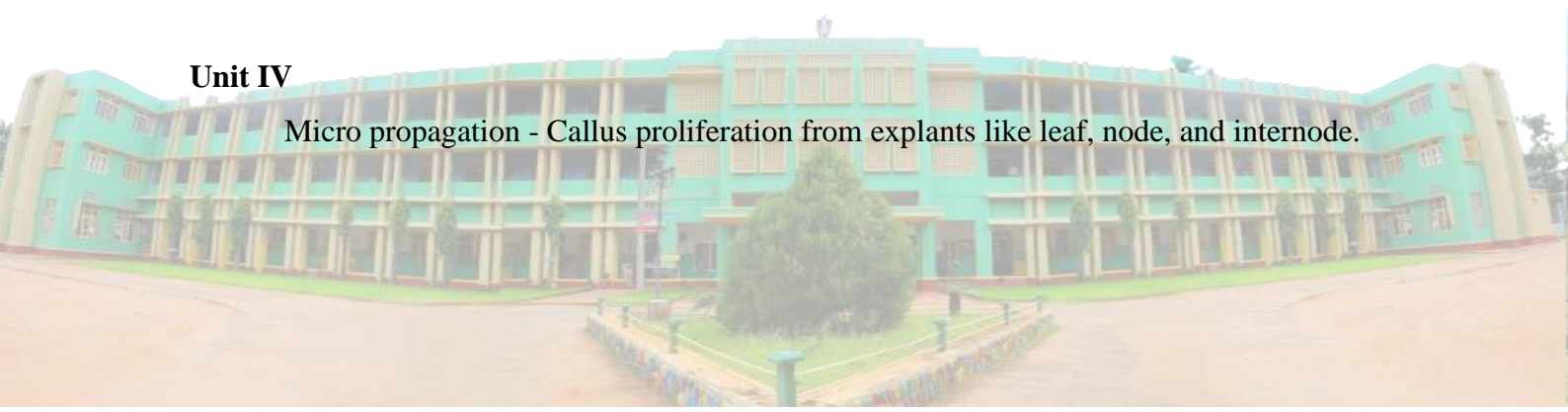
Tissue culture laboratory- organization and requirements, instruments, and glassware. Sterilization techniques: types of sterilization: heat sterilization, chemical sterilization, sterilization by ultraviolet radiation, and surface sterilization.

Unit III

Plant growth Medium: types of the artificial medium; Preparation of MS medium and its composition.

Unit IV

Micro propagation - Callus proliferation from explants like leaf, node, and internode.



Unit V

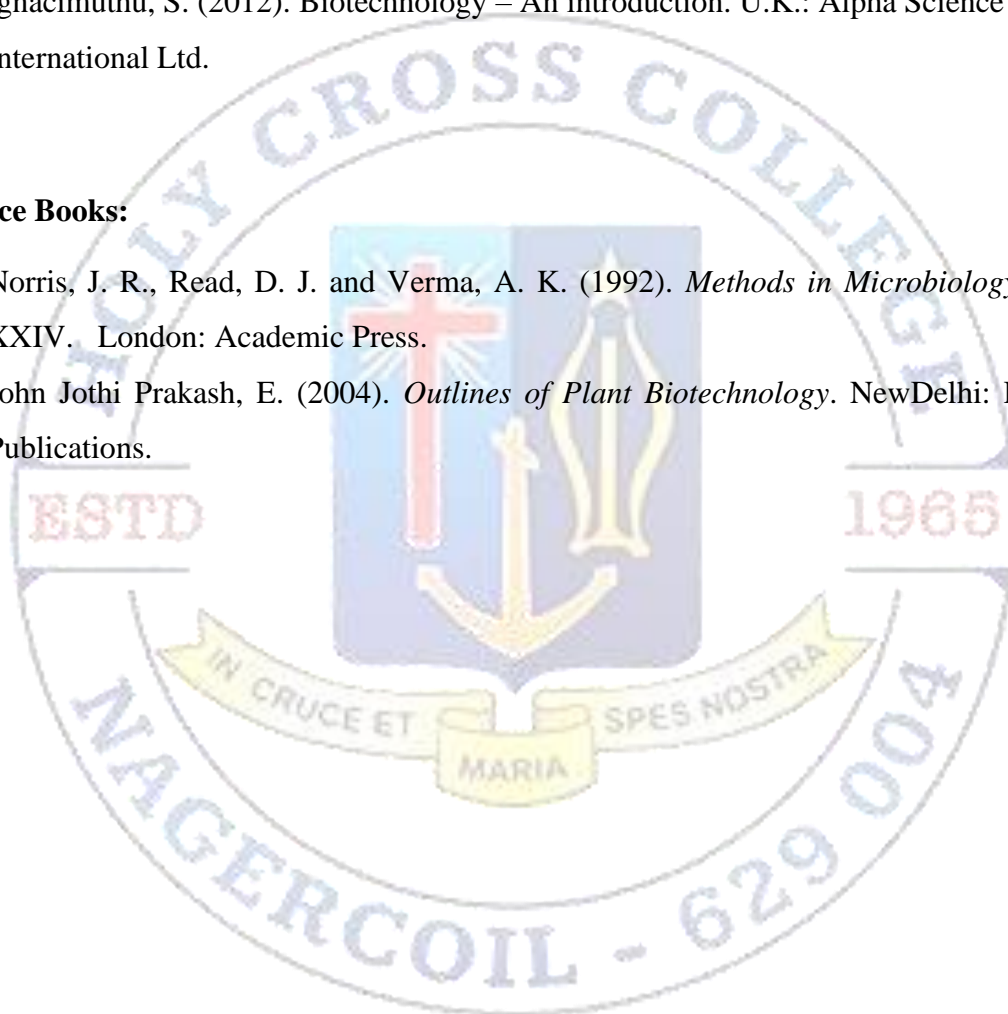
Production of *in vitro* plantlets from nodal explants.

Text Books:

1. Dubey, R.C. (2006). *Text Book of Biotechnology*. New Delhi: S. Chand and Company.
2. Ajoy Paul, (2011). *Text book of Cell and Molecular Biology*. Jaipur: Books and Allied Pvt. Ltd.
3. Ignacimuthu, S. (2012). *Biotechnology – An introduction*. U.K.: Alpha Science International Ltd.

Reference Books:

1. Norris, J. R., Read, D. J. and Verma, A. K. (1992). *Methods in Microbiology*. Vol. XXIV. London: Academic Press.
2. John Jothi Prakash, E. (2004). *Outlines of Plant Biotechnology*. NewDelhi: Emkay Publications.



Value Added - FOOD PRESERVATION TECHNOLOGY

Course Code	Total Hours	Marks
VAB202	30	100

Objectives:

1. To acquire knowledge about the preservation techniques adopted during food preservation
2. To provide hands on training to prepare some healthy food items

Course Outcomes

- To understand the principles underlying different food preservation methods, like freezing, dehydration, fermentation, and irradiation.
- To explore the role of packaging materials and storage conditions in preserving food quality

Unit I

Importance of food preservation, Methods of preservation - low temperature, high temperature, uses of oil, spices, salt and sugar

Unit II

Storage and processing of: sea foods, milk and milk products, ice cream and related products, cheese and related products, reduced fat dairy products

Unit III

Preparation of Pickles – Mango, Lemon, Sauerkraut, Gooseberry

Unit IV

Preparation of Jam – Mixed fruit, Tomato, Pineapple, Carrot

Unit V

Preparation of Jelly – Strawberry, Grapes, Rasp

Reference Books:

1. Sumathi, R.Madanti and Rajagopal,M.V.(2012). *Fundamentals of Food and Nutrition*.Kochi: New Age Publishers.
2. Srilakshmi, B. (2010). *Food Science*. (5th ed.). New Delhi: New Age International Pvt. Ltd.



Value Added - ORGANIC FARMING

Course Code	Total Hours	Marks
VAB204	30	100

Objectives:

1. To acquire knowledge about the cultivation techniques to improve and maintain Organic Farming.
2. To provide hands on training to prepare vermicompost and other biofertilizers using natural sources.

Course Outcomes

- To explore market opportunities for organic products, consumer demand trends, and the economic viability of organic farming enterprises.
- To understand the knowledge and skills necessary to implement and manage organic farming systems.

Unit I Farm Management

Definition and importance, Layout of a farm, Fencing, weed control methods, Organic farming practices for improving soil health

Unit II Irrigation and drainage

Drip irrigation and Border irrigation, drainage systems for parallel field, parallel open ditch and bedding system, sloping areas drainage.

Unit III Manures

Manure preparation methodology - Bulky Organic Manure and Concentrated organic manure, Coir Waste, Vermicompost, FYM, Green Leaf Manure, Applications of manures.

Unit IV Cultivation and Disease of vegetable crops

Brinjal, Tomato, Cucurbits, Ladies finger and Chillies.



Unit V Storage and Marketing:

Storage methods of vegetable crops, Transport of vegetable crops Export of organic products, Marketing methods of farm products. Economic considerations and viability of organic products

Text Books:

1. Sharma, Arun K. (2002). A Hand Book of Organic Farming Agrobios (India), Jodhpur.
2. Singh, R.S. 1989. Diseases of Vegetable Crops, Oxford & IBH Publishing and Company, New Delhi.

Reference Books:

1. Basak, N.N. 1999. Irrigation Engineering. TATA McGraw Hill, New Delhi.
2. Panwar, V.P.S. 2000. Agricultural Insect Pests of Crops and their control. Kalyani Publishers, New Delhi.
3. Chiddha Singh. 1997. Modern techniques of raising field crops. Oxford and IBH Publishing Company Pvt. Ltd., New Delhi.
4. Johl, S.S. and T.R.Kapur, 1992, Fundamentals of Farm Business management, Kalyani publishers, Lundhiana



Value Added - MUSHROOM CULTURE TECHNOLOGY

Course Code	Total Hours	Marks
VAB201	30	100

Objectives:

1. To learn the technique of mushroom culture.
2. To provide self-employment opportunity

Course Outcomes

- To learn about the biology and ecology of mushrooms, including their life cycle, growth requirements, and various species.
- To encompass both theoretical knowledge and practical skills applicable in various contexts, from gardening to commercial production.

Unit I

Introduction, history, morphology, types and life cycle of mushrooms. Identification of edible mushroom. Nutritional and medicinal value of edible mushrooms

Unit II

Cultivation of mushroom – Oyster mushroom (*Pleurotus* sp.) Button mushroom (*Agaricusbisporus*) Paddy Straw Mushroom (*Volvariella* sp.). Isolation, Spawn Production, Substrate for mushroom cultivation. Spawn running and harvesting.

Unit III

Post-harvest technology of mushroom, protection of mushroom from insect pest, nematodes, mites, viruses, fungal competitors and other diseases

Unit IV

Spawn Production technique – Microbiological technique, mother spawn and commercial spawn.



Unit V

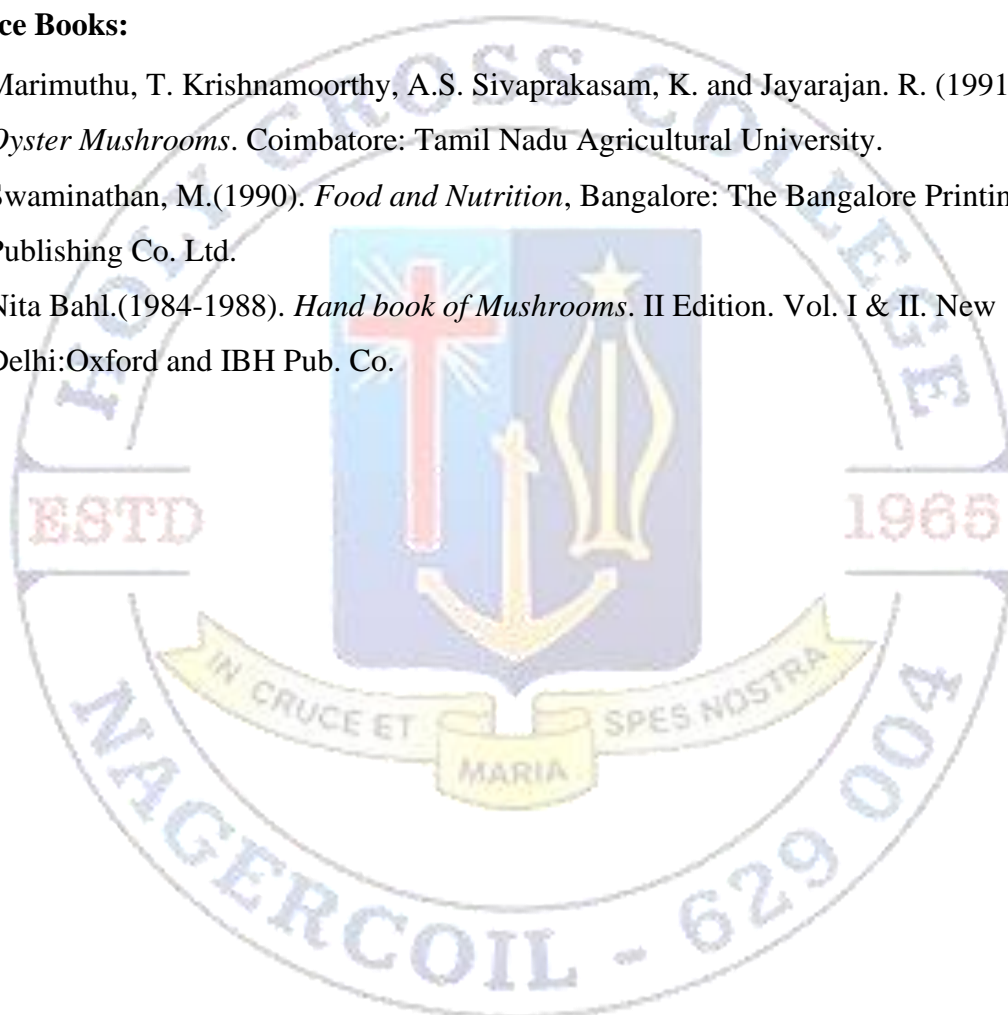
Few recipes, value added Products, packing techniques, marketing in India and abroad, Commercial production- model unit, Banking, Government, Help-Line.

Text book:

1. Tewari Pankaj, Kapoor, S.C. (1988). *Mushroom Cultivation*. Delhi: Mittal Publications.

Reference Books:

1. Marimuthu, T. Krishnamoorthy, A.S. Sivaprakasam, K. and Jayarajan. R. (1991). *Oyster Mushrooms*. Coimbatore: Tamil Nadu Agricultural University.
2. Swaminathan, M.(1990). *Food and Nutrition*, Bangalore: The Bangalore Printing and Publishing Co. Ltd.
3. Nita Bahl.(1984-1988). *Hand book of Mushrooms*. II Edition. Vol. I & II. New Delhi:Oxford and IBH Pub. Co.



Value Added - MICROBIAL TECHNIQUES

Course Code	Total Hours	Marks
VAB205	30	100

Objectives:

1. To train students practically in basic and applied principles of microbiology.

Course Outcomes

- To gain skills in microbial identification methods, including biochemical tests, serological assays and nucleic acid-based techniques.
- To equip with a strong foundation in microbial techniques, laboratory skills, and theoretical knowledge.

Unit I

Sterilization techniques - Moist heat and dry heat sterilization; Autoclave, Hot air oven, Laminar air flow, Membrane filter

Unit II

Preparation of culture media in agar plates, slants and stab culture; Subculturing; Streaking techniques – simple streaking, continuous streaking, quadrant streaking; Serial dilution technique.

Unit III

Isolation of microorganism in Nutrient agar medium, Blood agar medium, Biochemical tests: Indole production test, MR-VP test, Citrate utilization test, Catalase test, Oxidase test.

Unit IV

Staining techniques – Simple staining, Grams staining, Capsule staining, Spore staining, Flagella staining

Unit V

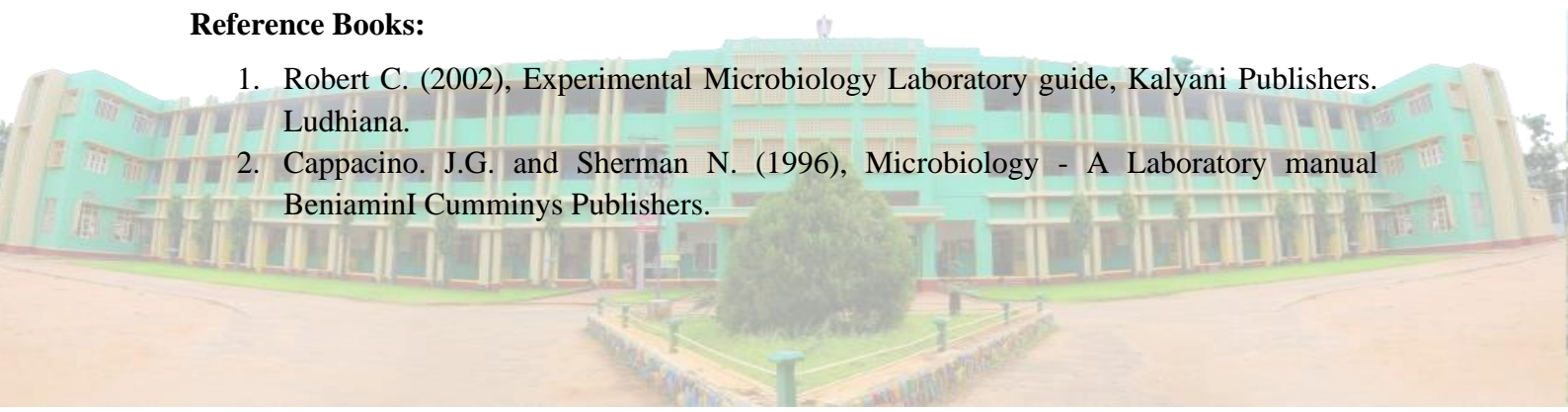
Bacterial Growth Curve Determination, Isolation of coliform bacteria, MPN technique.

Text Books:

1. Saha Rumpa. (2005), *Microbiology Practical Manual*, CBS Publishers & Distributors Pvt Ltd, India.
2. Shukla Das and Rumpa Saha. (2020). *Microbiology Practical Manual*, CBS Publishers & Distributors.

Reference Books:

1. Robert C. (2002), *Experimental Microbiology Laboratory guide*, Kalyani Publishers. Ludhiana.
2. Cappacino. J.G. and Sherman N. (1996), *Microbiology - A Laboratory manual* BenaminI Cumminys Publishers.



Value Added - FLOWER, FOLIAGE AND DRY STICK ARRANGEMENT

Course Code	Total Hours	Marks
VAB206	30	100

Objectives:

1. The student will understand the basic principles and elements of floral design.
2. The student will have a working knowledge of the materials and accessories used in basic floral design.

Course Outcomes

- To learn the fundamental principles of floral design, these principles apply to arranging flowers, foliage, and dry sticks.
- To develop their own creative expression and personal style in floral design.

Unit I

Introduction and Brief History of Flower arrangement. Floral Materials -Flowers (Fresh, Dried, Artificial), Accessories and Conditioning

Unit II

Design: Principles of Design, Elements of Design. Colour – Spectrum, Pigment, Dimension – Hue, Value and Intensity, Lighting Effects

Unit III

Linear Design used in Floral Design: Formal, New Convention, Parallel Systems, Western Line

Unit IV

Mass Design: Triangular and Circular, Dried or Permanent Arrangements, Symmetrically-balanced Arrangements, Asymmetrically-balanced Arrangements

Unit V

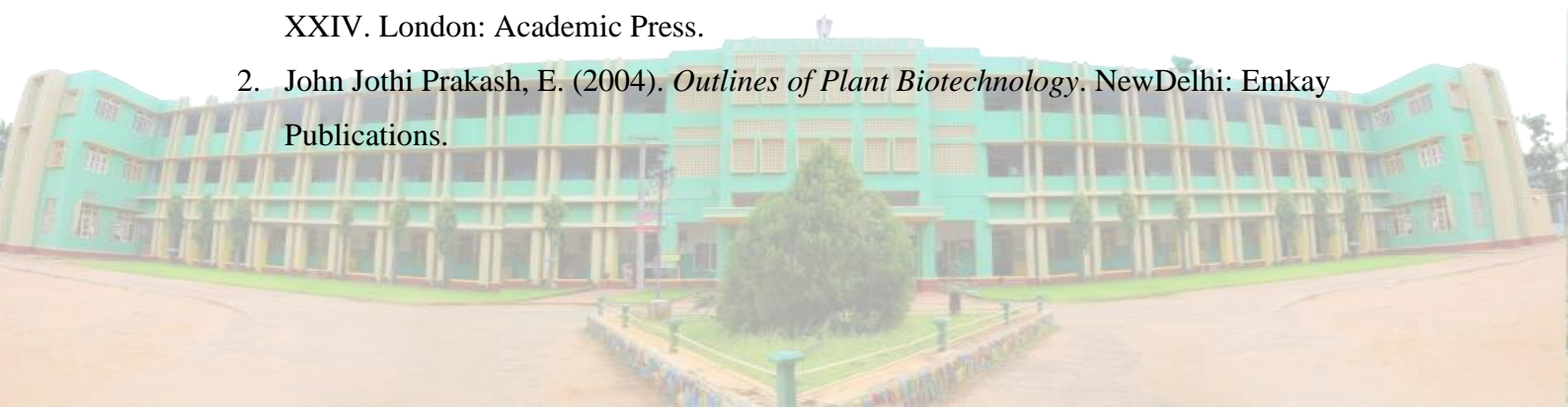
Hand held/ hand tied, Dish Garden/Terrarium Construction, Holiday and Special Occasion Arrangements - Organization and Operation of Retail Florist Shop

Text Books:

1. Dubey, R.C. (2006). *Text Book of Biotechnology*. New Delhi: S. Chand and Company.
2. Ajoy Paul, (2011). *Text book of Cell and Molecular Biology*. Jaipur: Books and Allied Pvt. Ltd.
3. Ignacimuthu, S. (2012). *Biotechnology – An introduction*. U.K.: Alpha Science International Ltd.

Reference Books:

1. Norris, J. R., Read, D. J. and Verma, A. K. (1992). *Methods in Microbiology*. Vol. XXIV. London: Academic Press.
2. John Jothi Prakash, E. (2004). *Outlines of Plant Biotechnology*. New Delhi: Emkay Publications.



Value Added - MEDICINAL PLANTS AND TRADITIONAL MEDICINAL FORMULATIONS

Course Code	Total Hours	Marks
VAB207	30	100

Objectives:

1. To identify and authenticate herbal drugs.
2. To help the students in Selection and processing of herbal drugs as raw materials for herbal drug preparation.

Course Outcomes

- To understand the medicinal properties of plants and traditional methods of preparing and using medicinal formulations.
- To learn herbal remedies to address women's health concerns and reproductive issues.

Unit I

Introduction to Medicinal Plants- Definition, History, Health concepts, Preparation of Medicines, Classification of medicinal plants. Cultivation of medicinal plants – Processing and utilization. Chemical nature of crude drugs - Extraction, Preparation and preservation of crude drugs.

Unit II

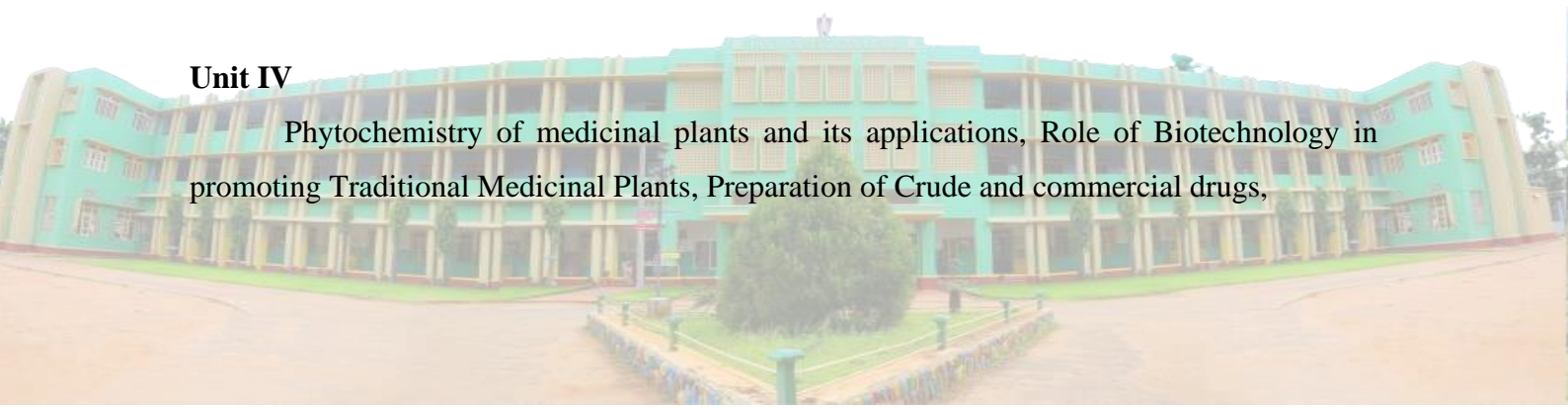
Indian system of Medicines- Herbal formulation. Classification based on method of preparation, Oil, Khasayam, Shampoo. Traditional herbal teas. Herbs for woman, Babies and children

Unit III

Indian system of medicine- Ayurveda, Yoga & Naturopathy, Unani, Homeopathy. Traditional Knowledge and utility of some medicinal plants in day to day life.

Unit IV

Phytochemistry of medicinal plants and its applications, Role of Biotechnology in promoting Traditional Medicinal Plants, Preparation of Crude and commercial drugs,



Unit V

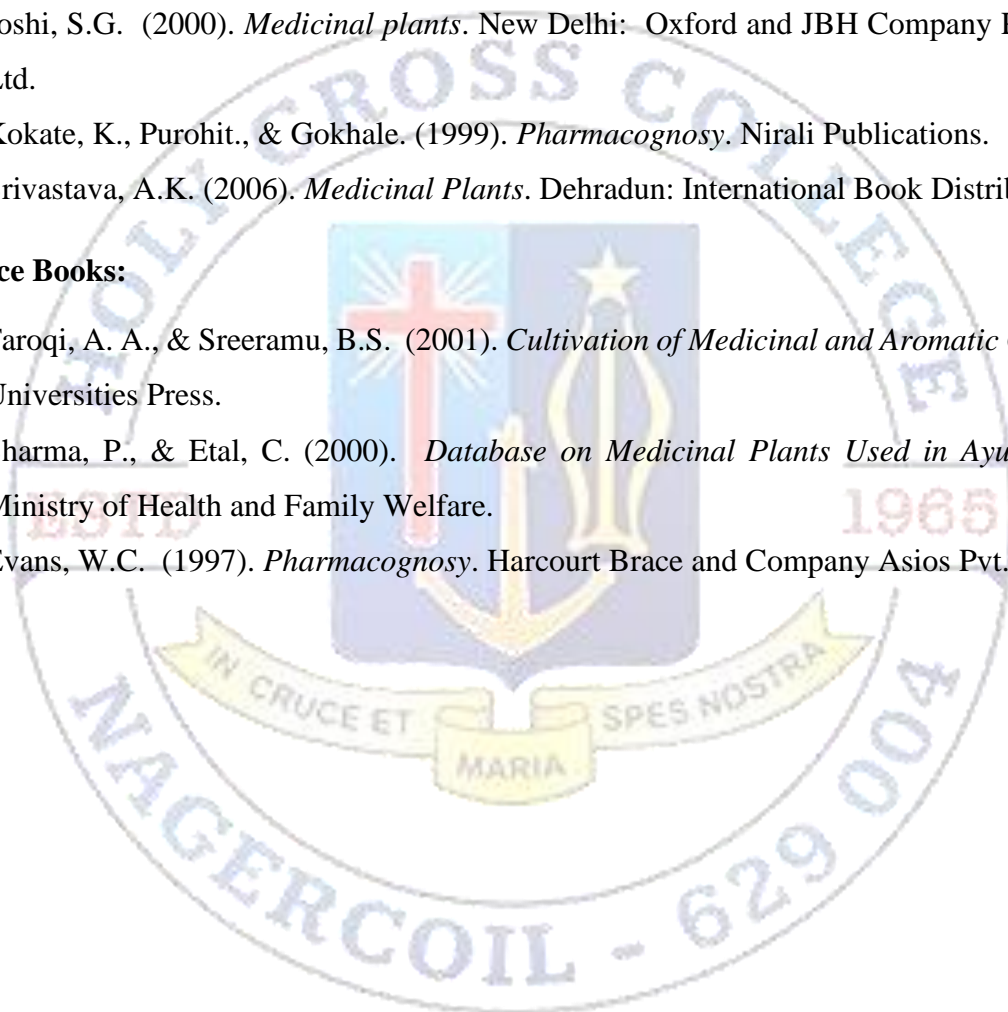
Post-harvest technology in medicinal plants scope and importance. Importance of herbal marketing -Future prospects and constraints of the herbal drug industry - Regulatory status of herbal medicine in India.

Text Books:

1. Bhattacharjee, S.K. (2004). *Handbook on Medicinal Plants*. Jaipur: Pointer Publishers.
2. Joshi, S.G. (2000). *Medicinal plants*. New Delhi: Oxford and JBH Company Private Ltd.
3. Kokate, K., Purohit., & Gokhale. (1999). *Pharmacognosy*. Nirali Publications.
4. Srivastava, A.K. (2006). *Medicinal Plants*. Dehradun: International Book Distributors.

Reference Books:

1. Faroqi, A. A., & Sreeramu, B.S. (2001). *Cultivation of Medicinal and Aromatic Crops*. Universities Press.
2. Sharma, P., & Etal, C. (2000). *Database on Medicinal Plants Used in Ayurveda*, Ministry of Health and Family Welfare.
3. Evans, W.C. (1997). *Pharmacognosy*. Harcourt Brace and Company Asios Pvt., Ltd.



Value Added - HORTICULTURAL TECHNIQUES

Course Code	Total Hours	Marks
VAB208	30	100

Objectives:

1. To create skilled human resources for ornamental plant production.
2. To offers several business opportunities to those who trained in horticulture.

Course Outcomes

- To explore the horticultural techniques is multifaceted, encompassing aspects of productivity, sustainability and aesthetics.
- To understand the techniques such as grafting, rooting cuttings, and seed starting a to propagate plants, creating new individuals for future growth.

Unit I Introduction

Scope and importance, Branches of horticulture; Role in rural economy and employment generation;

Unit II Budding

Types of Budding-T-Budding Chip Budding; Preparing the Stock Preparing the Stock and the Scion Bud, Securing the Bud, Budding Aftercare

Unit III Grafting

Selecting and Handling Scion Wood, Types of Grafting, Cleft Graft, Bark Graft, Side-Veneer Graft, Splice Graft, Whip and Tongue Graft, Saddle Graft, Bridge Graft, Inarch Graft, Tools and Supplies for Budding and Grafting

Unit IV Layering

Types of Layering, Simple layering, Tip layering, compound layering, Air Layering, Mount layering, Natural Forms of Layering



Unit V Bio pesticides

Preparation of Biopesticides, Cow urine extract, Fermented curd water, Dashparni extract, Neem-cow urine extract, Mixed leaves extract, Chili–garlic extract, Broad Spectrum Formulations.

Text Books

1. Manibhusan Rao. (1991). *Text book of Horticulture*. New Delhi: Mac Millan India.
2. Sheela V. (2011). *Fundamentals of Horticulture*. Chennai: MJP Publications.
3. Shukla. R. S. Chandel. (1996). *Cytogenetics, Evolution and plant breeding*. New Delhi: Chand. S. c. Ltd.
4. Edmund Senn – Andrew – Halfacre. (1977). *Propagation of horticultural crops*. New Delhi: Tata McGraw – Hill.

Reference books:

1. Chopra. (2004). *Approaches for Incorporating Drought and Salinity Resistance in Crop Plants*. New Delhi: Salish Book Enterprise.
2. Kader, A.A. (2002). *Post-Harvest Technology of Horticultural Crops*. New Delhi: UCANR Publications.
3. Kumar, N. (2006). *Breeding of Horticultural Crops: Principles and Practices*. New Delhi: Publishing Agencies.
4. Singh, D and Manivannan, S. (2009). *Genetic Resources of Horticultural Crops*. Lucknow: IBDC Publishers.
5. Chahal G. S. and S. S. Gosal. (2002). *Principles and Procedures of plant breeding*. New Delhi: Narosa publishing House.



Value Added - SILKWORM REARING TECHNOLOGY

Course Code	Total Hours	Marks
VAZ205	30	100

Objectives:

1. To know the basic necessities required for silkworm rearing
2. To know the influence of various factors on silkworm growth and development.
3. To understand the methods of silkworm rearing.

Course Outcomes

- To explain the importance of planning sericulture, transportation of egg and larva, methods of rearing early and late stage larvae.
- To analyse the factors which affect the silkworm growth and yields.
- To apply the appliances necessary for rearing, mounting and harvesting.

Unit I

Planning for silkworm rearing: Estimation of leaf yield and quality, brushing capacity; selection of silkworm races / breeds and hybrids.

Unit II

Rearing houses: Types, location and orientation; rearing houses for young (chawki) and grown up (late-age) silkworms; rearing appliances and their uses. Importance of disinfection and hygiene.

Unit III

Egg transportation – time and devices; egg incubation – methods and black boxing; methods of brushing silkworms.

Unit IV

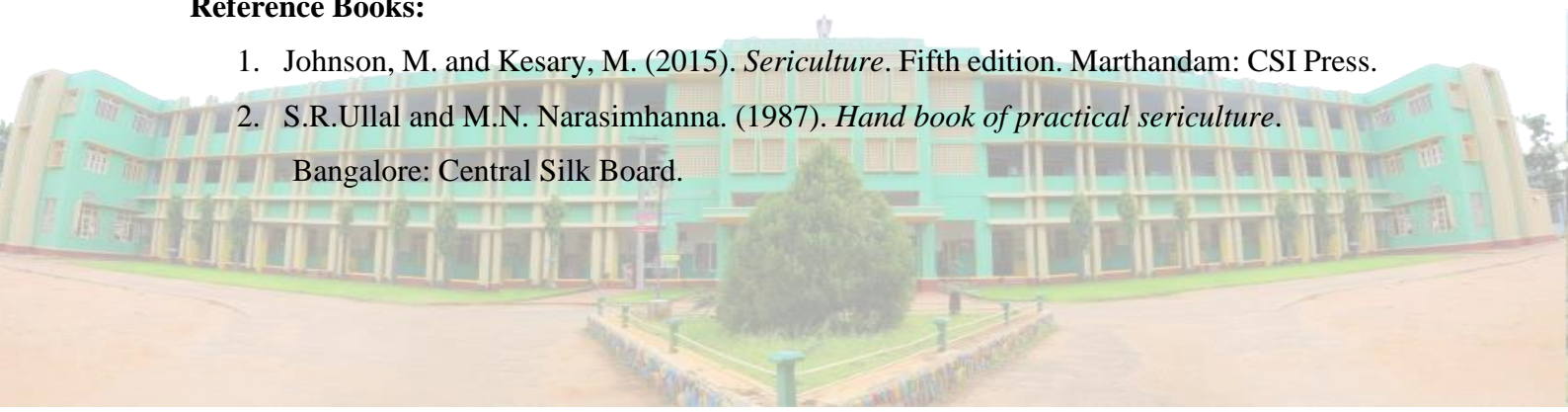
Harvesting, transportation and preservation of mulberry leaves. Chawki silkworm rearing: Rearing methods and operations.

Unit V

Late age silkworm rearing: Rearing methods and operations. Moulting: Characteristic features - before, at and after moult; care during moulting.

Reference Books:

1. Johnson, M. and Kesary, M. (2015). *Sericulture*. Fifth edition. Marthandam: CSI Press.
2. S.R.Ullal and M.N. Narasimhanna. (1987). *Hand book of practical sericulture*. Bangalore: Central Silk Board.



Value Added - HOUSEHOLD WASTE MANAGEMENT

Course Code	Total Hours	Marks
VAZ202	30	100

Objectives:

1. To encourage healthy waste management strategies at home and the environment.
2. To promote technological methods to enhance effective bio-composting at home.

Course Outcomes

- To identify the sources, composition, collection methods, disposal methods and management of wastes.
- To analyse the types, means of transport and disposal, methods of composting and management of wastes.
- To apply vermicomposting technique and biogas production for biodegradable wastes and documentation of waste management strategies.
- To apply waste management strategies in household and locality to create kitchen garden and healthy society.

Unit I Ecosystem and Solid waste

Introduction to Environment - Ecosystem - meaning- types - components- structure. Types of waste - Definition – Solid and Liquid waste; Biodegradable and Non-biodegradable wastes; Sources of waste - Composition and determinants of waste.

Unit II Generation and Collection of wastes

Factors influencing generation- Assessment of solid wastes-Methods of sampling and characterization. Collection and Transfer - Collection of Solid waste - Collection system - Time and frequency of collection - Factors affecting collection.

Unit III Waste Disposal



NAAC V Cycle Self Study Report (SSR)

Disposal of Solid Wastes - Refuse disposal - Various methods - Incinerations - Sanitary landfills - Gas and leachate movement and control. Bio-composting methods for Kitchen waste management.

Unit IV Composting Methods

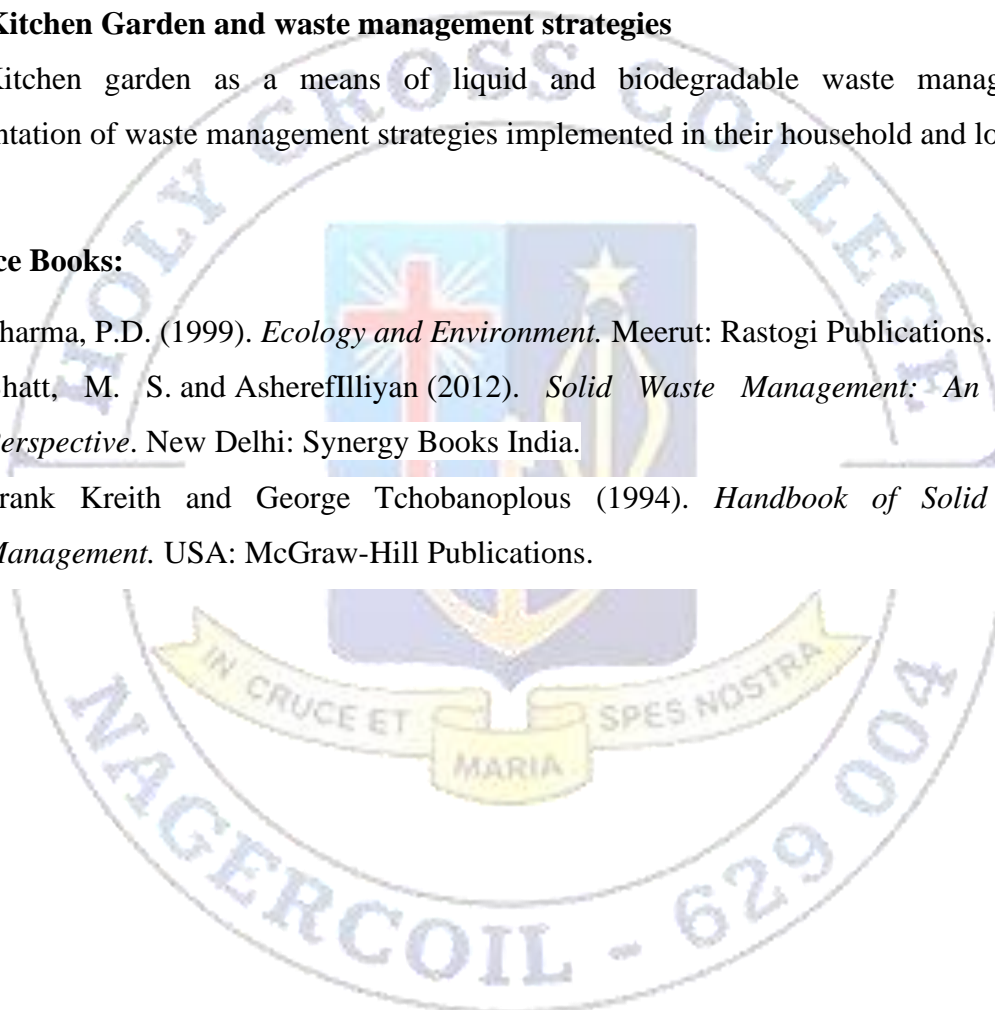
Verm technology for decomposition of House hold wastes. Biogas preparation in house hold waste management systems.

Unit V Kitchen Garden and waste management strategies

Kitchen garden as a means of liquid and biodegradable waste management. Documentation of waste management strategies implemented in their household and locality.

Reference Books:

1. Sharma, P.D. (1999). *Ecology and Environment*. Meerut: Rastogi Publications.
2. Bhatt, M. S. and Asherefilliyan (2012). *Solid Waste Management: An Indian Perspective*. New Delhi: Synergy Books India.
3. Frank Kreith and George Tchobanoplous (1994). *Handbook of Solid Waste Management*. USA: McGraw-Hill Publications.



Value Added - BASICS IN HOSPITAL MANAGEMENT

Course Code	Total Hours	Marks
VAZ209	30	100

Objectives:

1. To encourage healthy short term and long-term medical care towards common goal.
2. To promote technological methods to enhance effective hospital administration.

Course Outcomes

- To explain different types of registration forms, organisation principle and Front office management.
- To analyse different quotations obtained for purchasing equipments.
- To prepare orders for equipments, billing and registration of charts.

Unit I

Introduction to office management- Meaning - Importance. Duties and responsibilities of hospital manager.

Unit II

Essential qualities of office organization – Principles – organization chart – supervisor. Office system – purpose and importance - procedure

Unit III

Purchase related – Quotation – order – Invoice- Dispatch –advice –complaints – Settlement.

Unit IV

Front office management – Reception – Enquiries –Registration of patients – Admission and discharge - billing. Records Management – Meaning – importance – uses.

Unit V

Medical forms – Types – objects and control. Equipment – safeguard – maintenance. Human relations - Need and importance – Discipline – Handling of grievance.

Reference Books:

1. Sethu, S. (1999) Hospital office management, Abirami pvt, Coimbatore.
2. Prasantha G.K., (1995) Office Management, Sulthan chand and sons, New Delhi.
3. Denyer JC (1982) and Josephine Shaw (1985) Office Management, ELBS, London.



Value Added - FIRST AID

Course Code	Total Hours	Marks
VAZ201	30	100

Objectives:

1. To give initial care to a person in distress to save from casualty.
2. To deal with first aid emergencies in any situation.
3. To understand and demonstrate lifesaving skills.

Course Outcomes

- To identify the responsibilities of a First Aider.
- To assess the incident and manage responsive and unresponsive casualty.
- To administer first aid to a casualty with injuries, burns, poisoning, bleeding and cardiac arrest.
- To gain employability as a first aider in institutions.

Unit I Care of the Unconscious

Causes of unconsciousness: Diabetes, Epileptic seizures, head injury, Fainting, heart attack, Cardiac Pulmonary Resuscitation (CPR), electric injury, choking, stroke - principles of treatment - patient approach - call for emergency.

Unit II Bleeding

Hemorrhage - internal, external. Wounds - Amputation-nose bleeds. Principles of treatment - patient approach- call for emergency.

Unit III Burns and Extremes of Temperature

Burns- Causes, signs and symptoms. Hypothermia-hyperthermia.Heat stroke. Principles of treatment- patient approach - call for emergency.

Unit IV Bites and Stings

Types of bites and stings- treatment.Patient approach- call for emergency. Foreign body in eye, ear and nose: Type of foreign body-treatment. Patient approach - call for emergency.

Unit V Injuries and Poisoning

Fractures and injuries: Bone and joint injury- head injury-dislocations-treatment. Patient approach- call for emergency.Poisoning: Chemicals - noxious gasses and food poisoning - treatment.Patient approach- call for emergency.

Reference Books:

1. Hoon, R.S. (1983). *First aid to the Injured*. New Delhi: Published by St. John Ambulance Association, Printed at The Statesman's Press, New Delhi.
2. Norman G. Kirby and Stephen J. Mather (2005). *Bailliere's Handbook of First Aid* (7thed.). Delhi: I.T.B.S. Publishers and Distributors.
3. Eva Roman (2008). *First aid*. New Delhi: Indiana Publishing House.

Value Added - ECOFRIENDLY PRODUCTS OF SERICULTURAL WASTES

Course Code	Total Hours	Marks
VAZ203	30	100

Objectives:

1. To understand the different wastes of sericulture.
2. To make value-added products from the sericulture wastes.
3. To understand the entrepreneurial opportunities in the field of sericulture.

Course Outcomes

- To identify the waste produced during sericulture.
- To classify different waste products on the basis of their uses.
- To using sericulture waste products to prepare vermicomposting, to make handicrafts and cosmetics.

Unit I

Sericulture: Introduction. Wastes of Sericulture

Unit II

Classification of by-products. Wastes of Moriculture: Preparation of compost, methodology, chemical analysis of compost.

Unit III

Wastes of silkworm rearing - by-products - Silkworm oil, manure from Silk worm faeces and litter.

Unit IV

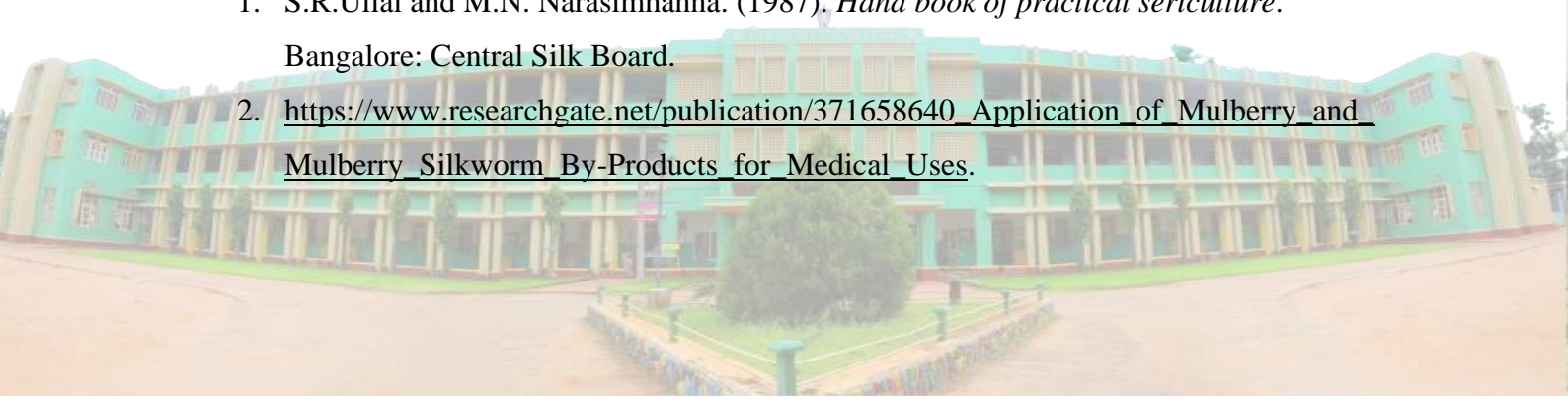
Cocoons wastes - Pupa: nutritional value - food and feed - Cocoon handicrafts. Silk wastes - By-product of silk reeling - silk-based handicrafts.

Unit V

Medicinal and cosmetic uses: Nutraceutical, medicinal and cosmetic uses of mulberry plants, silkworm, pupa and silk moth.

Reference Books:

1. S.R.Ullal and M.N. Narasimhanna. (1987). *Hand book of practical sericulture*. Bangalore: Central Silk Board.
2. https://www.researchgate.net/publication/371658640_Application_of_Mulberry_and_Mulberry_Silkworm_By-Products_for_Medical_Uses.



Value Added - TECHNIQUES IN BIOLOGY

Course Code	Total Hours	Marks
VAZ2010	30	100

Objectives:

1. To enable the students to understand the working principles of instruments used in biological investigations.
2. To enhance the skills to use the tools and techniques in biology.

Course Outcomes

- To outline the principles and working mechanism of specific tools and techniques.
- To explain laboratory procedures, methods, and instrumentation for biological studies.
- To analyze assumed hypotheses and execute experiments by selecting the appropriate research techniques.
- To apply relevant techniques to address medical, social and environmental problems.

Unit I pH Meter and Centrifuge:

Principle, Instrumentation and application of pH Meter and centrifuge.

Unit II

Spectrophotometer and Semi-autoanalyser: Principle, Instrumentation, applications of spectrophotometer and semi-autoanalyser.

Unit III Chromatography

Principle, Instrumentation of Chromatography - Thin Layer, Column and High Performance Liquid Chromatography.

Unit IV Electrophoresis

Principle, Methods and Application of Polyacrylamide gel Electrophoresis and Agarose gel Electrophoresis.

Unit V Microscopy

Working Principle of microscopes - compound, phase contrast, fluorescence. Photomicrography.

Reference Books:

1. Veerakumari, L. (2006). *Bioinstrumentation*. Chennai: MJP Publishers.
2. Gurumani. N. (2006). *Research Methodology for Biological Sciences*. Chennai: MJP Publishers.



Value Added - DCA(PHOTOSHOP)

Course Code	Total Hours	Marks
VASC203	30	100

Objectives:

1. To enable students to create images for web design, logos, graphics, layouts, image touch-ups and colour enhancement.
2. To develop the skills for manipulating the images creatively.

Course Outcome:

- ❖ To perform essential tasks such as cropping, resizing, retouching, and color correction. Through hands-on exercises, they developed the skills to enhance photographs, remove imperfections, and create visually stunning images.
- ❖ Ability to create captivating graphics and designs using Adobe Photoshop. They learned to leverage features like layers, masks, filters, and blending modes to compose complex compositions, digital artwork, and promotional materials.

UNIT I

Getting Acquainted with Photoshop - The Photoshop Environment, Palettes and the Palette Well, Creating Custom Workspaces, Opening Images, Using the File Browser, Image Magnification, Viewing Document Information, Moving the Image Undoing Mistakes and The History Palette, Displaying Drawing Guides, Making Measurements, Adding Annotations, Setting Preferences. **Basic Image Manipulation** - Bitmap Images, Vector Images, Image Size and Resolution Settings, Scanning Images, Creating New Images, Placing Files.

UNIT II

Color Basics - Color Modes and Models, Color Mode Conversion, Previewing Color Differences Between Operating Systems, Color Management, Foreground and Background Colors, Using the Color Picker, Selecting Colors with the Color Palette, Selecting Colors with the Eyedropper Tool, Selecting Colors with the Swatches Palette. **Painting Tools** - Painting Tools, The Brush Tool, Blending Modes, The Pencil Tool, The Eraser Tool, The Magic Eraser Tool, The Background Eraser Tool, Using the Art History Brush, Using the History Brush. **Brush Settings** - Using the Brushes Palette, Creating Custom Brush Tips by Selection, Creating Custom Brush Tips in the Brushes Palette, Setting Shape Dynamics, Setting Brush Scattering, Setting Brush Texture, Setting Dual Brushes, Setting Color Dynamics, Setting Other Dynamics, Miscellaneous Brush Settings, Clearing Brush Settings,

Saving a Customized Brush, Saving a Customized Brush Library.

UNIT III

Making Selections - Selection Basics, Making Pixel Selections, The Marquee Tools, The Lasso Tools, The Magic Wand Tool, Selecting by Color Range, Adjusting Pixel Selections, The Extract Command, Copying and Pasting Pixel Selections, Saving and Loading Selections. **Filling and Stroking** - Applying Fills, Using the Paint Bucket Tool, Using the Gradient Tool, Using the Gradient Editor, Using Patterns, Using the Pattern Maker, Stroking.

UNIT IV

Layers - Using Layers and Layer Sets, Creating Layers and Layer Sets, Stacking and Linking Layers, Moving Layer Content with the Move Tool, Locking Layers, Common Layer Management Tasks, Merging and Flattening Layers. **Advanced Layers** - Layer Styles, Adjustment Layers and Fill Layers, Clipping Layers, Creating Clipping Groups, Creating Knockouts.

UNIT V

Text - Text Basics, Entering Text, Selecting Text, Editing the Bounding Box, Creating a Type Selection, Applying Effects to Type Layers, Using the Character Palette, Checking for Spelling Errors, Using the Paragraph Palette. **Drawing** - Raster vs. Vector, Shape Layers and Shape Options, Using the Shape Tools, Using the Pen Tools, Using the Anchor Point Tools, Using the Paths Palette, Working with Paths. **Basic Photo Corrections** - Strategy of retouching, Resolution and image size, Getting started, Straightening and cropping an image, Making automatic adjustments, manually adjusting the tonal range, Removing a color cast, Replacing colors in an image, Adjusting lightness with the Dodge tool, Applying the Unsharp Mask filter, Comparing automatic and manual results, Saving the image for four-color printing.

Text Book:

Vikas Gupta, (2009). *Comdex DTP Course Kit*.(2nd edition). New Delhi: DreamTech Press Publications.



Value Added - PYTHON PROGRAMMING

Course Code	Total Hours	Marks
VASC204	30	100

Objectives:

1. To describe the core syntax and semantics of Python programming language.
2. To illustrate the process of structuring the data using lists, dictionaries, tuples and sets.

Course Outcomes

- To gain a solid understanding of basic Python syntax, data types (such as integers, floats, strings, lists, tuples, dictionaries), variables, operators, and basic input/output operations.
- To recognize the python dictionaries set and python built in function and enhance their problem-solving abilities.

Unit I Introduction to Python

What is Python and history of Python? Unique features of Python, Python-2 and Python-3 differences, Install Python and Environment Setup, First Python Program, Python Identifiers, Keywords and Indentation, Comments and document interlude in Python, Command line arguments, Getting User Input, Python Data Types, what are variables? Python Core objects and Functions, Number and Math's.

Unit II Control Statements, List, Ranges & Tuples in Python

if-else, if-elif-else, while loop, for loop, break, continue, assert, pass, return Introduction, lists in Python, more about Lists, Understanding Iterators, Generators, Comprehensions and Lambda Expressions – Introduction, Generators and Yield, Next and Ranges, Understanding and using Ranges, More About Ranges, Ordered Sets with tuples

Unit III Python Dictionaries and Sets, Python built in function

Introduction to the section, Python Dictionaries, more on Dictionaries, Sets, Python Sets Examples Python user defined functions, Python packages functions, defining and calling Function.

Unit IV Input and Output in Python

Reading and writing text files, writing Text Files, appending to Files and Challenge, Writing Binary Files Manually, Using Pickle to Write Binary Files



Unit V Python Object Oriented

Overview of OOP, the self-variable, Constructor, Types of Variables, Namespaces, Creating Classes and Objects, Inheritance, Types of Methods - Instance Methods, Static Methods, Class Methods, accessing attributes, Built-In Class Attributes, Destroying Objects, Abstract classes and Interfaces, Abstract Methods and Abstract class, Interface in Python, Abstract classes and Interfaces.

Text Book:

1. Wesley J. Chun, “Core Python Applications Programming”, 3rd Edition, Pearson Education, 2016

Reference Books:

1. Mark Lutz, (2018). *Learning Python Powerful Object Oriented Programming*. (5th edition). O’reilly Media.
2. Timothy A. Budd, (2011). *Exploring Python*. (1st edition). New Delhi: Tata MCGraw Hill Education Private Limited.
3. John Zelle, (2013). *Python Programming: An Introduction to Computer Science*. (2nd edition), Course Technology Cengage Learning Publications, ISBN 978- 1590282410.
4. Michel Dawson, (2013). *Python Programming for Absolute Beginners*. Cengage Learning Publications, ISBN 978-1435455009.



Value Added - ADVANCED EXCEL

Course Code	Total Hours	Marks
VASC205	30	100

Objectives:

1. To help the students learn the advanced features of Excel.
2. To summarize, analyze, explore, and present visualizations of data in the form of charts, graphs.

Course Outcomes

- To manipulate data, perform intricate calculations, and automate tasks using these advanced features.
- To create insightful visualizations such as interactive dashboards, dynamic charts, and graphs to effectively communicate data-driven insights to stakeholders.

Unit I

Basics of Excel- Customizing common options- Absolute and relative cells- Working with Functions - Writing conditional expressions logical functions - VlookUP with Exact Match

Unit II

Data Validations - Specifying a valid range of values - Working with Templates Designing the structure of a template- Sorting and Filtering Data Filtering data for selected view

Unit III

Creating Pivot Tables Formatting and customizing Pivot tables-advanced options of Pivot tables- Pivot charts- data consolidation feature to consolidate data

Unit IV

More Functions Date and time functions- Text functions- Database functions- Power Functions - Formatting Using auto formatting option for worksheets

Unit V

Charts - Formatting Charts- Bar and Line Chart together- Sharing Charts with PowerPoint / MS Word, Dynamically- New Features of Excel

Text Book:

1. Excel 2019 All-in-One For Dummies – 2018- Greg Harvey

Reference Books:

1. Microsoft Excel 2019 Pivot Table Data Crunching-2019, Bill Jelen and Michael Alexander



Value Added - MICROSOFT PUBLISHER

Course Code	Total Hours	Marks
VASC206	30	100

Objectives:

1. To perform basic tasks in the Microsoft Publisher interface, add content to a publication.
2. To format text and paragraphs, manage text, work with graphics, and prepare a publication for printing and sharing.

Course Outcomes:

- To gain a comprehensive understanding of Microsoft Publisher, including its features, tools, and functionalities for creating professional-quality publications such as flyers, brochures, newsletters, posters, and more.
- To learn how to utilize layout and design elements effectively to produce visually appealing and well-organized documents.

Unit I

Getting Started with Publisher - Starting New Publications - Saving and Closing Publications - Opening and Viewing Publications - Printing Publications - Working with Text Boxes - Working with WordArt.

Unit II

Working with Graphics - Working with Shapes - Working with Pre-Designed Visual Elements - Creating Folded Cards - Creating Postcards - Using Mail Merge

Unit III

Creating Calendars - Working with the Master Page - Creating a Logo - Creating Flyers - Aligning and Stacking Objects.

Unit IV

Creating Brochures - Flowing Text around Objects - Planning Longer Publication - Creating Newsletters.

Unit V

Organizing Content - Working with a Table of Contents - Editing and Proofing Content - Creating a Basic E-Mail Message - Creating and Modifying a Web Site - Adding Text and Graphics to a Web Page.

Text Book:

1. Joyce Cox, Joan Preppernau, Microsoft Office Publisher 2007 Step by Step, Microsoft Press, 2008.

Reference Books:

1. Jim McCarter and Jacqui Salerno Mabin, "Microsoft® Office Publisher 2007 For Dummies", Wiley Publishing, Inc, 2008.



Value Added - .NET PROGRAMMING

Course Code	Total Hours	Marks
VASC207	30	100

Objectives:

1. To enable the students to understand the programming features of .Net Framework using ASP.NET.
2. To develop dynamic web pages and various software applications which inbuilt the entrepreneurship skill.

Course Outcomes

- To develop a deep understanding of the ASP.NET framework, including its architecture, components, and features.
- To recognize ASP.NET for building dynamic, data-driven web applications, understanding concepts such as server controls, state management, authentication, and authorization.
- To learn best practices for structuring, organizing, and maintaining ASP.NET projects to ensure scalability, security, and maintainability.

Unit I

ASP.Net 3.5 Essentials: New Features in ASP.Net 3.5-Overview of Visual Studio 2008-Exploring a sample ASP.Net-Creating a sample ASP.Net Website. **Web Forms: Standard Control:** The Label Control-The Button Control-The Textbox-File Upload Control-The Image Control.

Unit II

Web Forms: Standard Control: The List Box Control-The Drop-Down List Control-The Checkbox Control- The Radio Button Control. **Navigation Control:** The Tree View Control-Creating the Tree View Control-Creating Static Menus-Creating Dynamic Menus.



Unit III

Validation Control: Introduction-The Required Field Validation Control-The Range Validator Control-The Regular Expression Validator Control-The Compare Validator Control-The Custom Validator Control-The Validation Summary Control.

Unit IV

Working with Database Controls: The Grid View Control-The Data List Control-The Details View Control-The Form View Control-The List View Control- The Sql Data Source Control-The Access Data Source Control.

Unit V

Introducing Login Controls: The Login Control-The Login View Control-The Login Status Control- The Login Name Control-The Password Recovery Control.

Text Book:

1. Kogent Learning Solutions Inc., (2011). *NET 3.5 Programming - Black Book*. (New Edition). New Delhi: DreamTech Press Publication.

1. Reference Books:

1. Kogent Learning Solutions Inc., (2010). *C# 2008 Programming - Black Book*. (Platinum Edition). New Delhi: DreamTech Press Publications.
2. Reynald Adolphe, (2016). *Expert Programming in C# and .Net*. (2nd edition). Bangalore: Packt Publication.
3. Richaro Peres, (2016). *Entity Framework Core Cookbook*. (2nd edition). Bangalore: Packt Publication.



Value Added - QUANTITATIVE APTITUDE

Course Code	Total Hours	Marks
VASC208	30	100

Objectives:

1. To improve the quantitative skills of the students.
2. To prepare the students for various competitive exams.

Course Outcomes

- To equip participants with the knowledge and skills required to excel in quantitative aptitude tests commonly used in job interviews, entrance exams, and academic assessments.
- To develop a strong foundation in mathematical concepts and quantitative reasoning, enabling them to solve a wide range of numerical problems encountered in various fields such as finance, engineering, business, and science.

Unit I

Numbers - HCF and LCM of numbers – Decimal fractions - Simplification - Square roots and cube roots.

Unit II

Problems on Ages - Surds and Indices - percentage - profits and loss.

Unit III

Time and work - pipes and cisterns - Time and Distance - problems on trains - Boats and streams - simple interest - compound interest.

Unit IV

Permutation and combination - probability - True Discount - Bankers Discount.

Unit V

Calendar - Clocks - stocks and shares - Data representation – Tabulation.

Text Book:

1. R.S. Aggarwal, 2021. *Quantitative Aptitude*. S. Chand & Company Ltd.

Reference Books:

1. Peeyush Bhardwaj, (2017), Analytical & Logical Reasoning For CAT & Other Management Entrance Tests
2. Ram Mohan Pandey, (2019). CSIR-JRF-NET General Aptitude, Theory and Practice.



Value Added – PUBLIC RELATIONS

Course Code	Total Hours	Marks
VAE201	30	100

Objectives:

1. To understand the basic premises and fundamental concepts of Public Relations
2. To offer a wholesome personality development which leads to professional prospects
3. To acquire skills in using communication tools
4. To understand basic concepts and practices in Marketing

Course Outcomes

- To utilize digital and social media platforms for strategic communication, including content creation and community management.
- To apply ethical principles in public relations practices, including transparency, honest, and respect for diversity and inclusivity.

Unit I: Introduction to Public Relations – Need for PR

Unit II: Effective Writing & Business Communication

Unit III: Public Speaking & Presentation Skills

Unit IV: E- Communication – writing blogs, websites, brochures, pamphlets

Unit V: Skill set for PR Personnel - Qualities of a PR Person - Ethics in PR

Reference Books:

1. Cutlip, S.M., A.H Center and G.M Broom. *Effective Public Relations*. New Jersey: Pearson Education, 2006.
2. Datta. K.B. *Fundamentals of Public Relations*. 2nd Ed. New Delhi: Akansha, 2007.
3. Lesly, P. *Handbook of Public Relations & Communications*. 3rd Ed. Mumbai: Jaico, 2008.



Value Added – VERBAL ABILITY AND APTITUDE

Course Code	Total Hours	Marks
VAE202	30	100

Objectives:

1. To acquire skills in writing and speaking in English, comprehending written and spoken English.
2. To introduce themselves and others, to carry out short conversation, to ask for simple information, and to interact in a basic way.
3. To attend competitive examinations, face interviews and handle real life situations.

Course Outcomes

- To obtain multitude of opportunities in testing and applying grammar, vocabulary, spelling and comprehension resulting in the refinement of the language skills
- To apply the skills for effective communication

Unit I: Phrasal Verbs

Unit II: Miscellaneous Vocabulary - Analogy

Unit III: Collocations – Collocation of Similes, Verb Collocations, Collocations related to time

Unit IV: Writing Dialogues- Greeting, Introducing, Inviting, Making Requests, Seeking Permission, Expressing Gratitude, Apologising, Making Suggestions

Unit V: Sentence Improvement - Sentence Completion

Text Books:

1. Objective English for Competitive Examinations, 2nd Edition by Hari Mohan Prasad and Uma Rani Sinha.
2. Current English Usage: A Practical Reference Book by Dr.K.Hema.
3. Emerald English Grammar and Composition by G. Radhakrishna Pillai.



Value Added – FUNCTIONAL ENGLISH

Course Code	Total Hours	Marks
VAE203	30	100

Objectives:

1. To enable the students, comprehend the spoken form.
2. To develop the student's ability to use English in day to day life.
3. To understand the return texts and able to use skimming and scanning skills

Course Outcomes

- To build a broader vocabulary to discuss a wide range of topics and subjects
- To engage in conversations, discussions, and debates on various topics and actively participating in group activities

Unit I: Listening Skills

- a. Labelling a Diagram
- b. Short answer questions in Comprehension
- c. Dialogue and monologue

Unit II: Speaking Skills

- a. Introducing oneself (Spoken Greetings Requests)
- b. Interview – answers - questions

Unit III: Writing Skills

- a. Letter Writing
- b. General Essay

Unit IV: Reading Skills

- a. Skimming
- b. Scanning

Unit V: Practice Testing

Reference Books:

1. Bhatnagar, R.P. Rajul Bhargava. English for Competitive Examinations, Chennai: Macmillan publishers, 2005.
2. Green, David, Contemporary English Grammar Structures and Composition. Delhi: Macmillan Publishers, 2010.
3. Wren & Martin. English Grammar and Composition. New Delhi: S Chand & company Ltd, 2010.



Value Added – ENGLISH FOR BPO

Course Code	Total Hours	Marks
VAE204	30	100

Objectives:

1. To understand the basics and different stages of BPO.
2. To apply grammar for better business communication.
3. To comprehend and critically apply effective professional writing.

Course Outcomes

- To equip students with the ability to resolve customer issues and answer inquiries efficiently
- To review and assess the works to maintain high quality standards in BPO services

Unit I

- a. BPO - Introduction
- b. Types of BPO Business

Unit II

- a. Phonetic Symbols
- b. Accent and Intonation

Unit III

- a. Variations and types of accents
- b. Neutral Accent

Unit IV

- a. Commonly confused words
- b. Error Analysis

Unit V

- a. Comprehension
- b. Spelling and Vocabulary

Reference Books:

1. Balasubramanian.T. A Textbook of English Phonetics for Indian Students. Macmillan Publishers. India Limited 1981.
2. Bhatnagar, R.P. Rajul Bhargava. English for Competitive Examinations, Chennai: Macmillan Publishers, 2005.
3. Green, David, Contemporary English Grammar Structures and Composition. Delhi: Macmillan Publishers, 2010.
4. Prof. K Chellappan. et al. Pearls in a String English for Communication, Chennai: Emerald Publishers,2008.



Value Added - BUSINESS COMMUNICATION

Course Code	Total Hours	Marks
VAE205	30	100

Objectives:

1. To make the students conversant with the basic forms, formats and techniques of business writing.
2. To equip the students with the ability to use the communication skills required in meetings, group discussions, interviews and presentations.

Course Outcomes

- To develop active listening skills to better, understand colleagues, clients and stakeholders, leading to improved communication and problem solving.
- To enhance verbal communication skills, including public speaking, presentation delivery and the ability to convey ideas confidently.

Unit I

- a. Analysing audience and locale, organizing contents, preparing and outlining
- b. Kinesis, proxemics, para-linguistics, chronemics, understanding nuances of delivery, visual aids

Unit II

- a. Face to face interviews,
- b. Telephonic interview

Unit III

- a. Forms of group discussion, techniques and process
- b. Characteristics and skills of group discussions

Unit IV

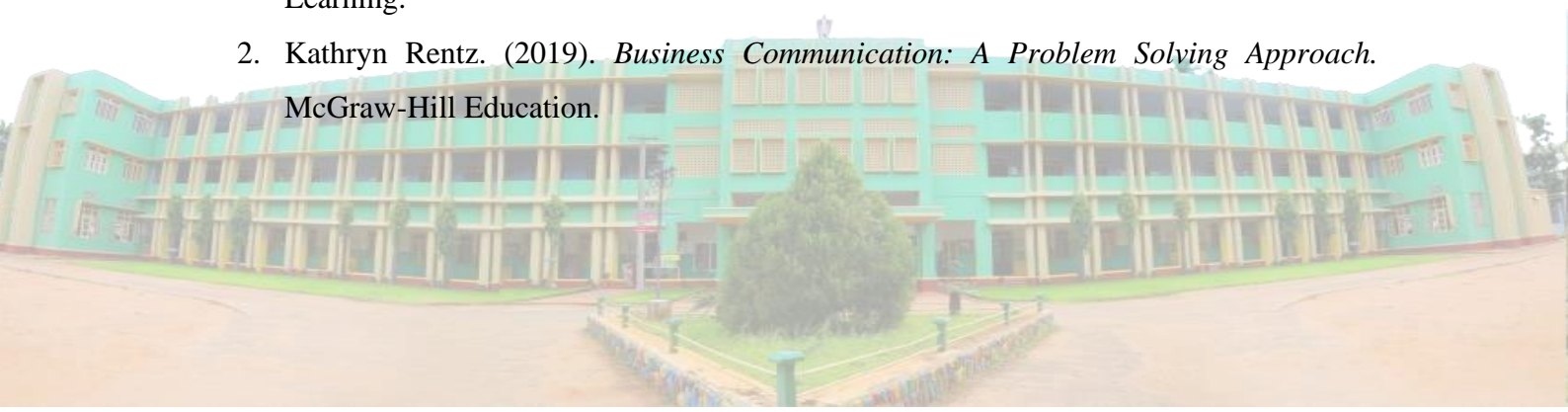
- a. Preparing business letters, memos, emails, reports
- b. Preparation of CV/Resume

Unit V

Practice Testing

Reference Books:

1. Mary Ellen Guffey. (2018). *Business Communication: Process and Product*. Cengage Learning.
2. Kathryn Rentz. (2019). *Business Communication: A Problem Solving Approach*. McGraw-Hill Education.



Value Added – TRANSLATION STUDIES

Course Code	Total Hours	Marks
VAE206	30	100

Objectives:

1. To understand the key concepts and theories of translation.
2. To develop skills in translating texts from different genres and languages.
3. To develop critical thinking skills in analysing translations.

Course Outcomes

- To exhibit a high level of proficiency in the target language, ensuring accuracy, fluency, and adherence to linguistic conventions.
- To understand and respect cultural differences, adapting translations to maintain cultural relevance and authenticity.

Unit I:

- a. Introduction to translation and its overview
- b. Key concepts and theories of translation studies

Unit II:

- a. Different approaches to translation – linguistic, cultural, functional, cognitive
- b. Translation problems and strategies

Unit III:

- a. Translating different genres of texts
- b. Critically analyzing translations

Unit IV:

- a. Identifying translation errors and problems
- b. Translating to different cultural contexts

Unit V

- a. The impact of technology in translation
- b. Translation software and tools
- c. Machine translation and its limitations

Reference Books:

1. Susan Bassnett. (2013). *Translation Studies*. Routledge.
2. Jeremy Munday. (2016). *Introducing Translation Studies: Theories and Applications*. Routledge.



Value Added – CREATIVE WRITING

Course Code	Total Hours	Marks
VAE207	30	100

Objectives:

1. To develop an understanding of the key elements of creative writing.
2. To develop the ability to write creatively in different genres.
3. To develop critical thinking skills in analysing literary works.

Course Outcomes

- To employ poetic devices such as rhyme, meter, symbolism, and figurative language to enhance the importance of poetry.
- To understand various narrative structures and experiment with nonlinear storytelling techniques.

Unit I

- a. Introduction to creative writing and its overview
- b. Introduction to the key elements of creative writing

Unit II

- a. Elements of fiction
- b. Writing exercises and assignments in fiction

Unit III

- a. Elements of poetry
- b. Writing exercises and assignments in poetry

Unit IV

- a. Elements of creative non-fiction
- b. Writing exercises and assignments in creative non-fiction

Unit V

Critically analysing literary works

Reference Books:

1. Stephen King. (2000). *On Writing: A Memoir of the Craft*. Routledge.
2. John Gardner. (1984). *The Art of Fiction: Notes on Craft for Young Writers*. Cengage Learning.



Value Added – COMMUNICATION SKILLS

Course Code	Total Hours	Marks
VAE208	30	100

Objectives:

1. To impart the fundamentals of English as a language
2. To deal systematically with the four aspects of language.
3. To facilitate an improved academic performance.

Course Outcomes

- To understand and appreciate cultural differences in communication styles, adapting communication to diverse cultural contexts respectfully and effectively.
- To apply conflict resolution strategies and techniques to address interpersonal conflicts and challenges in a constructive and collaborative manner.

Unit I

- i) Concept of Effective communication
- ii) Components of Effective Communication
- iii) Types of Communication

Unit II

- i) Good and Bad Listening
- ii) Listening Communication Process
- iii) Advantage of Listening

Unit III

- i) Language and Communication
- ii) General Principles of Writing
- iii) Improving Writing Skills

Unit IV

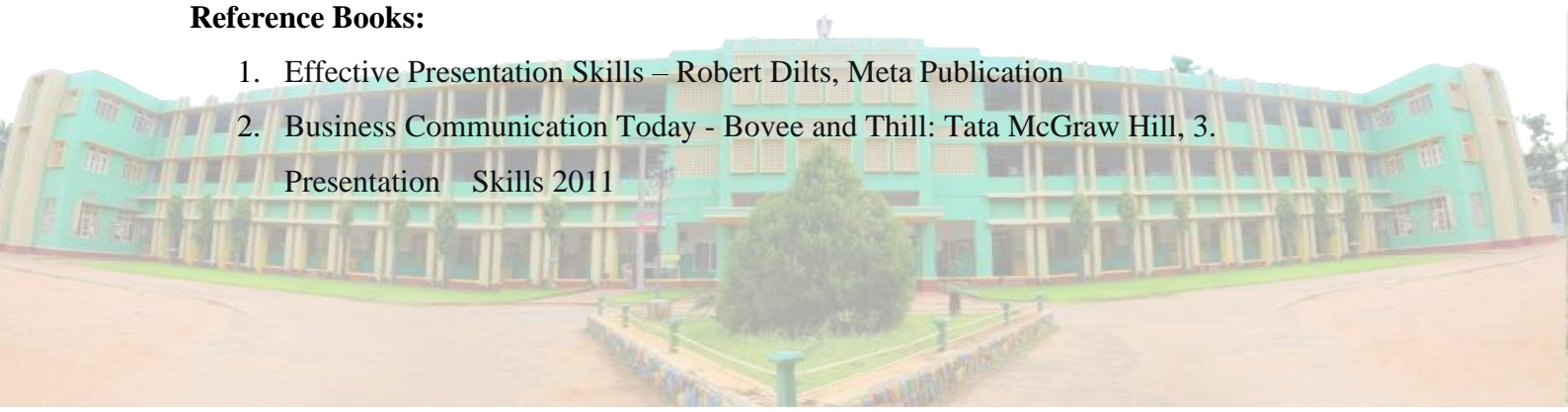
- i) Reading Skill
- ii) Purpose of reading
- iii) Types of Reading

Unit V

- i) Contents of Good Resume
- ii) Guidelines of Good Resume
- iii) Different Types of Cover Letters

Reference Books:

1. Effective Presentation Skills – Robert Dilts, Meta Publication
2. Business Communication Today - Bovee and Thill: Tata McGraw Hill, 3. Presentation Skills 2011



Value Added – MONETIZE YOUR SKILLS

Course Code	Total Hours	Marks
VAE209	30	100

Objectives:

1. To facilitate knowledge about self-growth and self-importance.
2. To impart knowledge on having awareness on nuances of finance sector.
3. To educate the students with technical tools.

Course Outcomes

- To understand the concept of monetization.
- To recognize the importance earning while learning.
- To learn to apply technical tools for various purposes.
- To acquire professional skills in editing and proof reading.

Unit I

Personal Branding - Grooming and Hygiene - Why Monetize?

Unit II

Identifying tutoring niche - Attractive tutoring packages online and offline

Unit III

Graphic Design Tools - Sourcing work opportunities

Unit IV

Editing and Proof Reading - Editing Symbols

Unit V

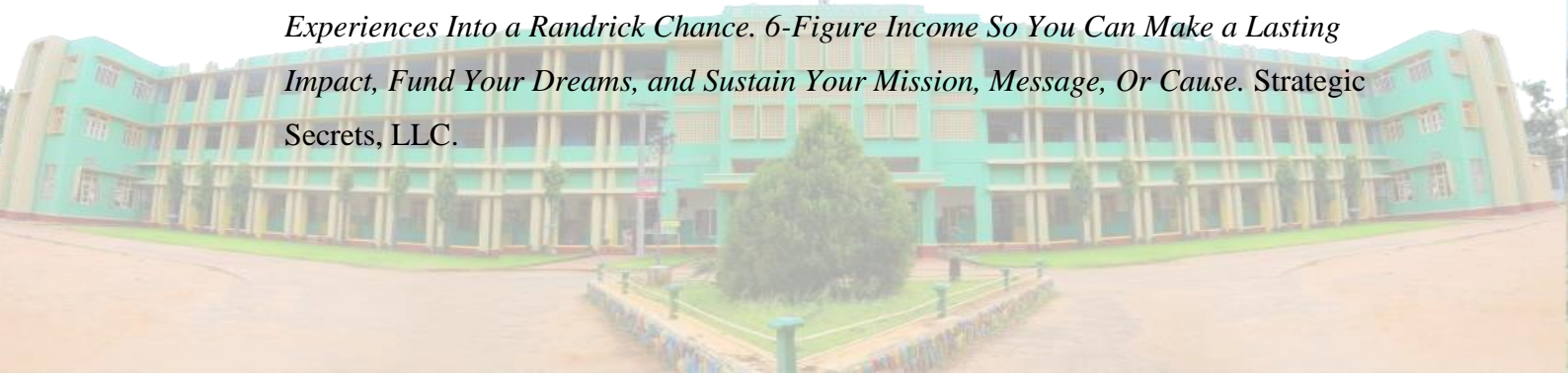
Planning for the money - Micro Manage your finances

Text Book:

1. Elaine Pofeldt . 2018. *The Million-Dollar, One-Person Business: Make Great Money. Work the Way You Like. Have the Life You Want.* Loreana Jones Books, USA.

Reference Books:

1. Gary Vaynerchuk. 2018. *Crushing It!: How Great Entrepreneurs Build Their Business and Influence—and How You Can, Too.* HarperCollins, New York.
2. Monetize Your Skills: 2017. *How to Leverage Your Education, Expertise, and Experiences Into a Randrick Chance. 6-Figure Income So You Can Make a Lasting Impact, Fund Your Dreams, and Sustain Your Mission, Message, Or Cause.* Strategic Secrets, LLC.



Value Added - WRITING FOR BUSINESS

Course Code	Total Hours	Marks
VAE2010	30	100

Objectives:

1. To have verbal talents and demonstrative abilities
2. To gain knowledge on nuances of effective writing
3. To have clarity, precision, and subtlety to express their ideas on various occasions while considering the concepts of appropriateness and accuracy.

Course Outcomes

- To develop a verbal ability and demonstrative abilities.
- To demonstrate the ability to create strategic communication plans that align with organizational goals.
- To excel in writing skill.

Unit I

Introduction to Effective Writing - Effective Writing as an Art - Principles of Effective writing - Types and Stages of Effective writing

Unit II

Notion of Correctness and Appropriateness - Essay Writing - Types of Essays

Unit III

Essentials of Academic Writing - Business Writing and it's Functions - Mechanics of Business Writing

Unit IV

Format of Business Letters and Memos - Types of Business Letter - Sales, Complaint and Adjustment Letters

Unit V

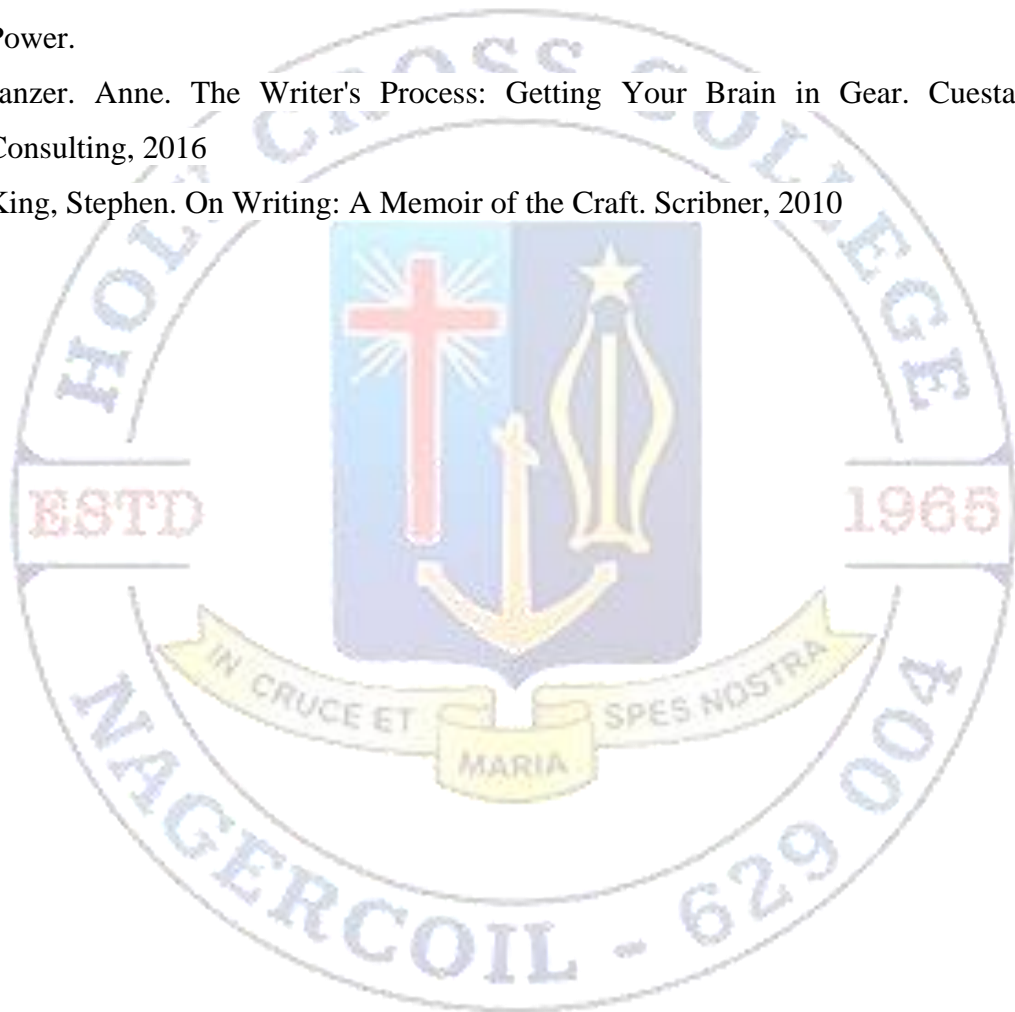
Report Writing - Strategies and Structure of Reports - Style of Report Writing - Creative Writing



NAAC V Cycle Self Study Report (SSR)

Reference Books:

1. Turk, Christopher and John Kirkman. Effective Writing. London and New York: Chapman & Hall. Indian Reprint 2003
2. Pinker, Steven. The Sense of Style: The Thinking Person's Guide to Writing in the 21st Century. Penguin Books, Reprint edition ,2015
3. Seely, John. Oxford Guide to Effective Writing and Speaking. OUP 2nd edition, 2005
4. Goins, Jeff. You Are a Writer (So Start Acting Like One). Tribe Press
5. Brohaugh, William. Write Tight: Say Exactly What You Mean with Precision and Power.
6. Janzer. Anne. The Writer's Process: Getting Your Brain in Gear. Cuesta Park Consulting, 2016
7. King, Stephen. On Writing: A Memoir of the Craft. Scribner, 2010



Value Added - PUBLIC SPEAKING AND PRESENTATION SKILLS

Course Code	Total Hours	Marks
VAE2011	30	100

Objectives:

1. To provide extensive opportunities to practice Public Speaking skills.
2. To enable Personality Development.
3. To build self-confidence.
4. To speak with confidence and flair.

Course Outcomes

- To acquire robust vocabulary to articulate effectively.
- To assimilate proper verbal and non-verbal cues in their presentation.

Unit I Public Speaking skills

What is Public Speaking? - Communication Process– Oral and Written communication
- Types of Speeches - Types of Delivery

Unit II Content Creation

Researching Speech Topics - Preparing Speech outlines - Developing and supporting ideas - Language and Style - Political correctness

Unit III Presentation Skills

Building Group Rapport - Dealing with fear - Building Self-confidence - Effective use of Stage Space - Types and uses of Visual Aids

Unit IV Verbal and Non-verbal Aspects

Voice Modulation - Pitch & Tone - Pauses & Pace – Fluency - Body language– Gestures and Postures

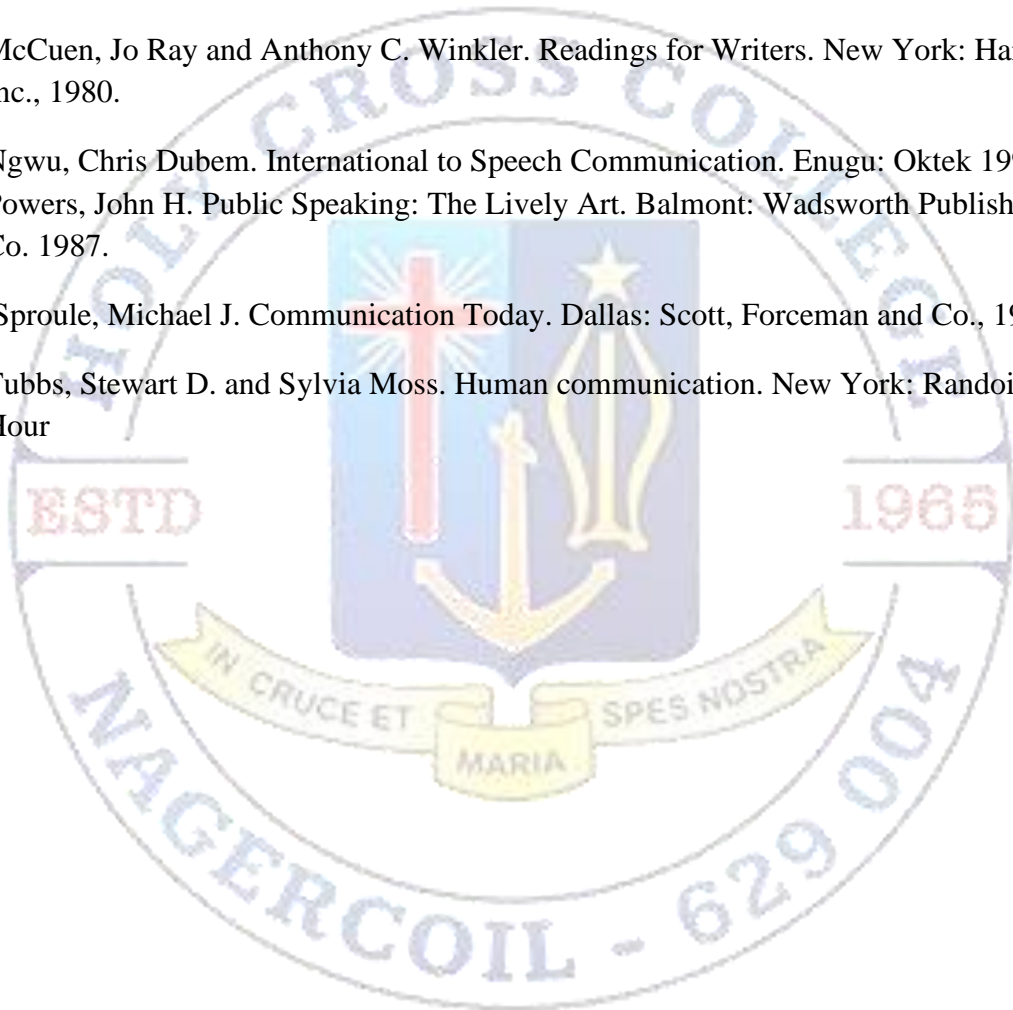


Unit V Practice sessions

Practical Exposure and analysis of Speeches by Eminent personalities - Audio and Video Clips

Reference Books:

1. Ezeukwu Gab E. Essential of Public Speaking. Enugu: Feloks Communications, 2000.
2. Masterson, John T., Steven A. Beebe and Nerman Watson. Speech Communication: Thee—and Practice. New York: C.B.S. College Publishers, 1933.
3. McCuen, Jo Ray and Anthony C. Winkler. Readings for Writers. New York: Harcourt Inc., 1980.
4. Ngwu, Chris Dubem. International to Speech Communication. Enugu: Oktek 1999.
5. Powers, John H. Public Speaking: The Lively Art. Balmont: Wadsworth Publishing Co. 1987.
6. Sproule, Michael J. Communication Today. Dallas: Scott, Forceman and Co., 1981.
6. Tubbs, Stewart D. and Sylvia Moss. Human communication. New York: Randoin Hour



Value Added - ENGLISH FOR COMPETITIVE EXAMINATIONS

Course Code	Total Hours	Marks
VAE2012	30	100

Objectives:

1. To provide ample exposure to varied components of competitive examinations.
2. To improve overall language proficiency.
3. To develop comprehension skills.

Course Outcomes

- To acquire morale and confidence to face competitive examinations.
- To enhance Reading and Writing Skills.

Unit I Introduction

Introduction to competitive examinations - Identifying the components tested in exams
- Pre-test

Unit II Reading

Techniques (Skimming, scanning, summarizing, previewing, predicting, speed reading, choosing appropriate titles etc.) - Comprehension passages

Unit III – Vocabulary

Word groups (Alphabetical wordlist, homonyms, homophones, prefixes, suffix, collective nouns, foreign phrases, words often confused, idioms and phrases) - Mixed exercises

Unit IV- Grammar

Basics of Grammar (Parts of speech, tenses, SVA) - Context based grammar - Elements of a sentence - Error correction

Unit V- Practice

Mock examinations and sample papers - Post-test

Reference Books:

1. Wren & Martin S. English for Competitive Examinations. Chand Publishing, 2021
2. Bhatnagar RP. English for Competitive Examinations; Publisher. Macmillan; Edition. 3; 2012



Value Added - ENGLISH FOR BPO

Course Code	Total Hours	Marks
VAE2013	30	100

Objectives:

1. To understand the basics and different stages of BPO.
2. To apply grammar for better business communication.

Course Outcomes

- To comprehend and critically apply effective professional writing
- To acquire knowledge on the strategies BPO

Unit-I

- a. BPO-Definition
- b. Types of BPO Businesses

Unit-II

- a. Phonetic Transcription
- b. Stress and Intonation

Unit-III

- a. Variations and types of accents
- b. Neutral Accent

Unit-IV

- a. Commonly Confused words
- b. Spotting Error

Unit-V

- a. Comprehension
- b. Spelling and Vocabulary

Reference Books:

1. Balasubramanian.T. *A Textbook of English Phonetics for Indian Students*. Macmillan Publishers. India Limited 1981.
2. Bhatnagar, R.P.Rajul Bhargava. *English for Competitive Examinations*, Chennai: Macmillan publishers, 2005.
3. Green, David, *Contemporary English Grammar Structures and Composition*. Delhi: Macmillan Publishers, 2010.
4. Prof. K Chellappan. et al. *Pearls in a String English for Communication*, Chennai: Emerald publishers,2008.
5. Wren & Martin. *English Grammar and Composition*. New Delhi: S Chand & company Ltd, 2010.



Value Added - TRAVEL AND TOURISM MANAGEMENT

Course Code	Total Hours	Marks
VAH201	30	100

Objectives:

1. To understand the various aspects of Tourism Management.
2. To become an entrepreneur as a tourist guide and Travel agent.

Course Outcomes

- To discuss about the origin and growth of Tourism.
- To explain the concept of domestic and international Tourism.
- To evaluate the function of Travel agencies and Tour operators.
- To create an awareness about how to apply Passport and VISA.
- To discuss about the Resources for planning Travel itineraries.

Unit I

Definition of Tourism - Origin and Growth of Tourism - Types of Tourism-Forms of Tourism – Basic Components of Tourism.

Unit II

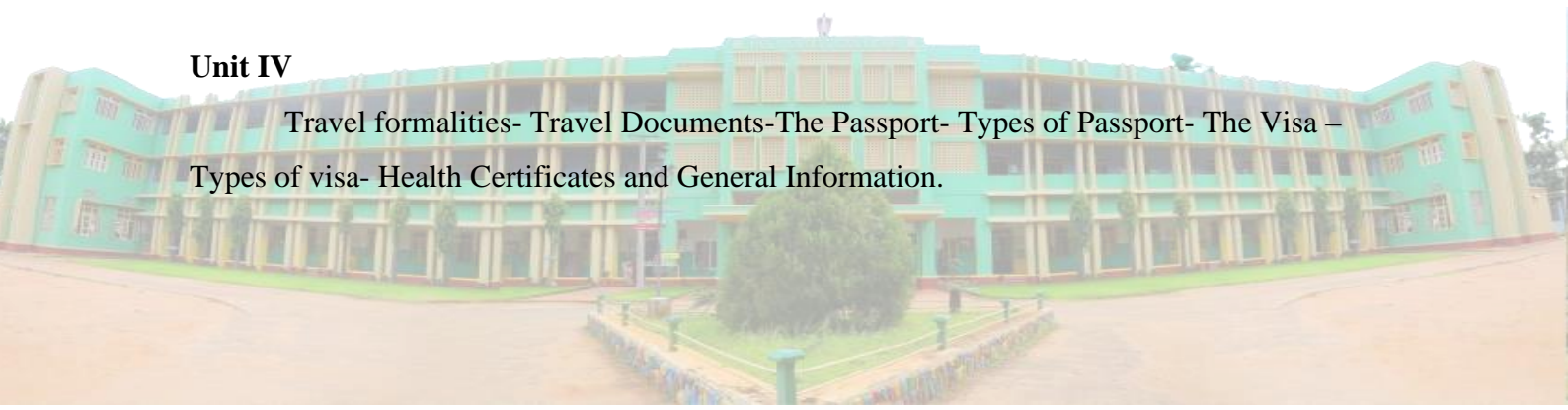
Concept of domestic and international Tourism- Geography of the world- World time difference- International Standard time.

Unit III

Functions of Travel Agency and Tour Operators – Types of Tour packages- Preparation of Tour itinerary- Fares and Ticketing – Important world currencies with its logo – Travel Agents in India-Tourist guides.

Unit IV

Travel formalities- Travel Documents-The Passport- Types of Passport- The Visa – Types of visa- Health Certificates and General Information.



Unit V

Planning Travel Itineraries- Basic steps in planning Itineraries- Planning Travel Itineraries-Resources for Planning Travel Itineraries.

Reference Books:

1. Bhatia, A. K. (2010). *Tourism Development - Principles and Practices*. New Delhi Sterling Publishers Private Limited.
2. Bhatia. A.K. (2006). *International Tourism Management*. New Delhi, Sterling Publishers Private Limited.
3. Bhatia. A. K. (1991). *International Tourism*. New Delhi, Sterling Publishers Private Limited.
4. PranNath Seth, (2008). *Successful Tourism Management*, Vol. I & II, New Delhi, Sterling Publishers Private Limited.
5. Pruthi, R. K. (2004). *International Tourism*. New Delhi, Rajat Publications.



Value Added - EPIGRAPHY

Course Code	Total Hours	Marks
VAH202	30	100

Objectives:

1. To discuss the types of inscriptions and writing materials
2. To have a skill about the important inscription

Course Outcomes

- To define Epigraphy
- To explain the Dating of Inscription
- To discuss Tamil Brahmi Inscription
- To explain the Estampaging of inscription
- To discuss the important inscription

Unit I

Epigraphy- Introduction and Importance – Types of Inscriptions- Writing Materials.

Unit II

Epigraphical contents and conventions- Dating of Inscriptions- Estampaging of Inscriptions.

Unit III

Decipherment of Scripts- Brahmi-Tamil Brahmi Inscriptions-Tamizhi- Vatteluthu-Kharoshti-Grantha Script-Nagari.

Unit IV

Pillar Inscription-AsokanEditcs- Allahabad Inscriptions- Hathikumba Inscriptions-Kuram Copper Plates- Velvikudi Copper Plates- Uttiramerur.

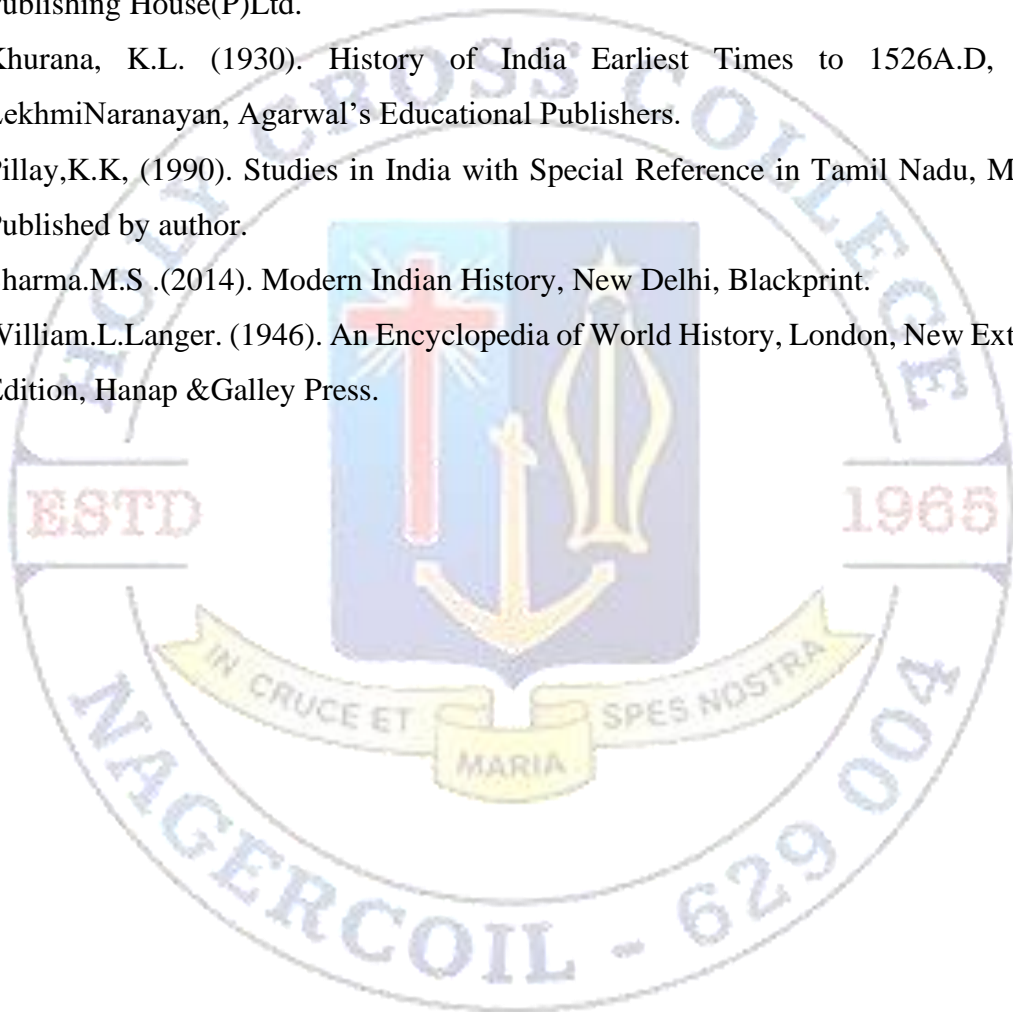


Unit V

Important Inscriptions-AsokaEdits- Allahabad Inscriptions- Hathikumba Inscriptions- Kuram Copper Plates- Velvikudi Copper Plates- Uttiramerur Inscriptions- Kanyakumari Inscriptions.

Reference Books:

1. James Edger Swan, (1947). History of world Civilization, New Delhi, Eurasia Publishing House(P)Ltd.
2. Khurana, K.L. (1930). History of India Earliest Times to 1526A.D, Agra, LekhmiNaranayan, Agarwal's Educational Publishers.
3. Pillay,K.K, (1990). Studies in India with Special Reference in Tamil Nadu, Madras, Published by author.
4. Sharma.M.S .(2014). Modern Indian History, New Delhi, Blackprint.
5. William.L.Langer. (1946). An Encyclopedia of World History, London, New Extended Edition, Hanap &Galley Press.



Value Added - MONTESSORI TRAINING

Course Code	Total Hours	Marks
VAH203	30	100

Objectives:

1. To understand the various aspects of Montessori Methods.
2. To become an expert in Montessori methods of teaching.

Course Outcomes

- To discuss about Montessori method.
- To explain the concept of Montessori Environment.
- To evaluate the function of Child development and Environment.
- To create an awareness about the Montessori Activates.
- To discuss about the Importance of games in Child life.

Unit I

Montessori theory and System of Education- Principals of Montessori method - Characteristics of Montessori teacher- Montessori Classroom.

Unit I

Montessori Environment – Six principals of the Montessori prepared Environment – Benefits of Montessori pre-school – Senses used to teach a Montessori Child.

Unit III

Child development and Environment – Different aspects of growth- Nature of Evolution.

Unit IV

Montessori Activates – Aims of practical life exercises – Exercises and Sensorial Activities.

Unit V

Importance of games in Child life – Indoor Games- Outdoor Games.

Reference Books:

1. Bhatia, A. K. (2010). *Tourism Development - Principles and Practices*. New Delhi Sterling Publishers Private Limited.
2. Bhatia. A.K. (2006). *International Tourism Management*. New Delhi, Sterling Publishers Private Limited.
3. Bhatia. A. K. (1991). *International Tourism*. New Delhi, Sterling Publishers Private Limited.
4. PranNath Seth, (2008). *Successful Tourism Management*, Vol. I & II, New Delhi, Sterling Publishers Private Limited.
5. Pruthi, R. K. (2004). *International Tourism*. New Delhi, Rajat Publications.



Value Added - TRAVEL FARE AND TICKETING

Course Code	Total Hours	Marks
VAH204	30	100

Objectives:

1. To understand the various aspects of Montessory Methods.
2. To become an expert in Montessory methods of teaching.

Course Outcomes

- To define Travel fare construction.
- To explain the methods of Bus ticketing.
- To discuss Seat reservation in Railways.
- To explain the Travel fare in Water ways.
- To discuss Air travel reservation

Unit I

Introduction to Fare Construction: Road Ways- Rail Ways- Water Ways- Air Ways.

Unit II

Ticket Booking for Road Transport: State Owned Transport Corporations- Private- Ordinary- Express- AC -Non AC – Seating- Sleeper -Cabe Booking.

Unit III

Ticket Booking for train: offline- Online-IRCTC-Regular- Takkal.

Unit IV

Ticket booking for Ship Transport: Passanger- Cruiser- National- International- Decks- Ordinary- Delux- Super Delux.

Unit V

Air Ticketing Techniques: Domestic Airline Ticketing –International Airline Ticketing- Types of Air Travel Card- Bank Settlement.

Reference Books:

1. Jagmohan Nagi,(2005) Air Travel Ticketing & Fare Construction, Kanishka, New Delhi.
2. Bhatia A.K.,(1982), Tourism Developmet Principles and Parctices, Sterling publications, New Delhi.
3. Michael, H., (1999), Geography of Travel and Tourism, Routledge Publications, London.
4. Stephen shaw,(2004), Airlines in Shifts at Mgt, Ashgate Pub,USA.
5. Nafees, A., (2001) Development ofTourism in India, Anmol publications, New Delhi



Value Added - ARCHAEOLOGICAL METHODS

Course Code	Total Hours	Marks
VAH205	30	100

Objectives:

1. To understand the various aspects of Montessori Methods.
2. To become an expert in Montessori methods of teaching.

Course Outcomes

- To define Archaeology.
- To explain the methods of Excavation.
- To discuss the digging methods in excavation.
- To explain the Dating methods in Archaeology.
- To discuss preservation methods.

Unit I

Introduction to Archaeology: Definition- Characteristics.

Unit II

Excavation- Large Scale excavation- Vertical- Block method- under water Excavation.

Unit III

Exploration: survey- site map- Digging methods- instruments for digging.

Unit IV

Dating methods: Relative Chronology- Flourine Test- Pollar Analysis- Radio Carbon Dating.

Unit V

Preservation methods- things needed for preservation- Cataloging.

Reference Books:

1. Raman K.V.,(1998), Principles & methods of Archaeology, Chennai, Parthika Publication.
2. Venkatraman, R.(1999), Indian Archaeology, Coimbatore, Ennes Publication, Tirunelveli Printers.
3. Edward Harris,(1989),Principles of Archaeological Stratigraphy, London, Academy Press Ltd.,
4. Hester R. Thomas, Shafer J. Harry and Feeder L. Keeneth, (1997), Field Methods Archaeology, California, USA, Mayfield Publication Company.
5. Philip Barker, (1977), Techniques of Archaeological excavations, London, Batsford Ltd.



Value Added - METHODS OF TEACHING IN HISTORY

Course Code	Total Hours	Marks
VAH206	30	100

Objectives:

1. To discuss the variety of Teaching Learning methods
2. To have a skill about the important of using Teaching Aids in History.

Course Outcomes

- To define Teaching Methods.
- To explain the Teachers & Student centered active learning methods.
- To discuss Methods using Primary and Secondary sources.
- To explain the various methods using Teaching Aids.
- To discuss the different, evaluate methods in learning.

Unit I

Definition – Need for a variety of teaching methods- Characteristics of a good teaching method.

Unit II

Teaching methods in History Learning: Student centered active learning methods- Debate- Simulation-Demonstration- Problem Solving Meth Teacher centered learning method Lecture Method-Story Telling Method- Biographical Method.

Unit III

Methods using Primary Sources: Fieldtrips to Monuments- Study Tours to Archives- Study Tours to Museums. Methods using secondary sources: Teaching using Traditional Libraries- Teaching using Digital Libraries



Unit IV

Methods using Teaching Aids: Graphic Aid Display Three-Dimensional Aids Audio Visual Aids – Projected Aids.

Unit V

Other Methods: Project Method –Peer Tutoring Method –Assignment Method – Supervised Study Method.

Reference Books:

1. Bhatia,R.L.,(2002).Teaching of History(1st ed.).Delhi:Surjeet Publishers.
2. Sreedharan,E.,(2007),A Manual of Historical Research Methodology, Trivandrum: Centre for South Indian Studies.
3. Noushad, P.P., &Sudheeshkumar,P.K.(2011)..Social Studies in the Classroom: Trends & Methods(2nd ed.),Calicut: Scorpio Publishers. Mangal, S.K., & Mangal, Uma. (2015). Teaching of Social Studies, Delhi: PHI Learning Pvt Ltd.
4. Sivarajan, K., Thulasidharan, T.V., Vijayan, N.K., et al. (2008)., Social Science Education: Methodology of Teaching and Pedagogic Analysis, Calicut: Calicut University Central Cooperative Store
5. Aggarwal,J.C.(2007). Teaching of Social Studies: A Practical Approach (4th ed.), New Delhi: Vikas Publishing House Pvt Ltd.



Value Added - VERBAL AND NON-VERBAL REASONING – I

Course Code	Total Hours	Marks
VAFC201	30	100

Objectives:

1. To broaden the analytical skill of the student.
2. To imbibe the technical skills and aptitude for reasoning in order to face competitive exam and find employment.

Course Outcomes:

- To calculate Number, Time, Ranking and directions.
- To identify blood relations, logical sequence and decision-making skill.

Unit I Verbal Reasoning

Analog – Classification – Series completion – Coding – Decoding – Blood relations – Puzzle test – Direction sense test – Logical venn diagrams – Alphabet test – Number, ranging & timesequence test.

Unit II Verbal Reasoning

Mathematical operations – Logical sequence of words – Arithmetical reasoning – inserting the missing character – Data sufficiency

Unit III: Verbal Reasoning

Assertion & reason – Situation reaction test – Verification of truth of the statement.

Text Book:

1. Verbal and Non-verbal Reasoning, Prakash. R. McMillan India, New Delhi, 2004.

Reference Books:

1. Competition Success Review – various issues
2. Competition master – various issues
3. A Modern Approach to Verbal and Non-Verbal Reasoning, Dr. R.S. Aggarwal, S. Chand & Company Ltd, 2010.
4. Quantitative Aptitude, Dr. R.S. Aggarwal, S. Chand & Company Ltd, 2011.



Value Added - MEDICAL ECONOMICS

Course Code	Total Hours	Marks
VAF203	30	100

Objectives:

1. To understand the need for health servicing by Government hospitals.
2. To know about health insurance.
3. To become aware of & utilize the health services offered by the Government.
4. To study about the role of financial institutions in financing health service.

Course Outcomes

- To understand the health determinants and policies
- To describe the resource allocation and insurance
- To evaluate the benefits and provisions
- To analyse the sources and needs for health and health insurance
- To assess the health programmes

Unit – I

Meaning of Health – Determinants – Dimensions of Health – Indicators – National Health Policy – Planning of health.

Unit – II

Resource allocation in the private and government hospitals – Health insurance.

Unit – III

Evaluation of Benefits & Health Services – The provision of Health Services to the Government.

Unit – IV

Analyse of the sources of finance for health – The need for a social health insurance: poor, disabled and the aged.

Unit – V

Health programmes in India: National Programme of Health Care for the Elderly (NPHCE) - District Mental Health Program (NMHP) – National Tobacco Control Program.

Reference Books:

1. Social & Cultural foundation of health services system of India: Banerjee.D
2. National health policy Govt.of India:1983
3. Economic Analysis of health service efficiency: Feldstein
4. The Economics of health: Klarman.H.E
5. Health report: Oxford university Press
6. A premier of health system economics: V. Ramakutty



Value Added - HOME MANAGEMENT

Course Code	Total Hours	Marks
VAF204	30	100

Objectives:

1. To help the students to understand the various aspects of home management and to develop additional skills for entrepreneurship.
2. To adopt the techniques and process of home management and prepare tasty home-made products to sell and earn a living.

Course Outcomes

- To understand the home management process
- To describe the decision-making experience and knowledge
- To evaluate the benefits of home articles
- To identify the techniques of gardening
- To realize the cooking skill

Unit I Home Management

Introduction – Meaning – Steps in Management Process – Types – Role and Responsibilities of Home Maker.

Unit II Decision Making

Meaning – Process – Types – Individual – Central – Economic decisions – Decision taking due to experience and knowledge

Unit III Home Articles

Household appliances: Mixer – Coffee maker – Grinder – Refrigerator – Pressure Cooker – Gas Stove.

Unit IV Home Gardening

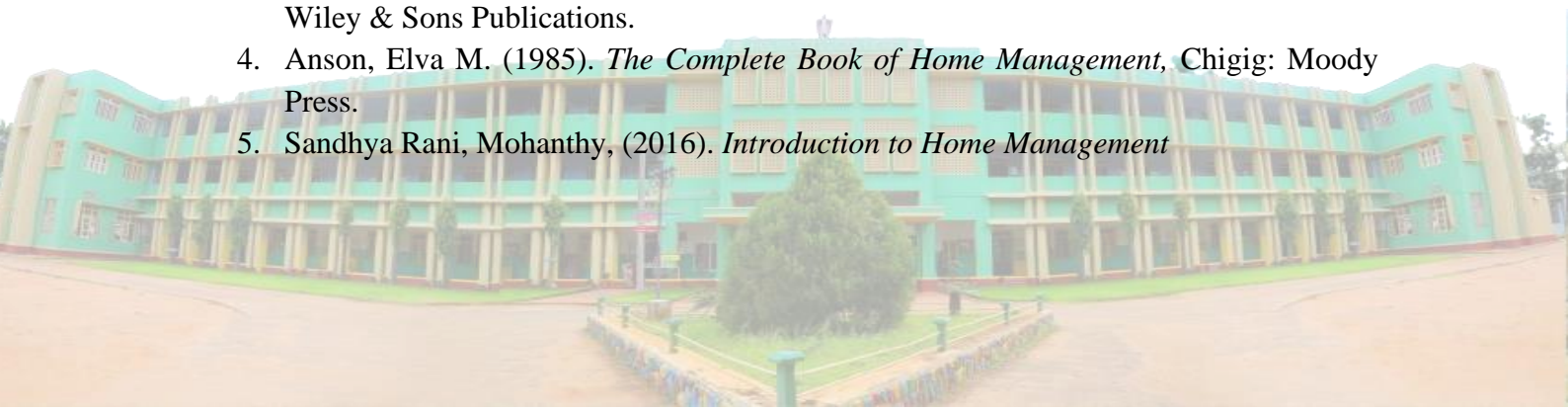
Introduction – Types – Gardening Techniques – Benefits of Gardening.

Unit V Culinary Skills

Tasty Dish from Vegetables – Oil Less Cooking – Healthy Food Preparation – Cooking Without Fire – Fruit Salad – Juices

Reference Books:

1. Clarkson, Potter. (2006). *Home Keeping Handbook: Martha Stewart's The Essential Guide to Caring for Everything in Your Home*,
2. Jenifer, MC Knight. (2010). *Home Economics: Vintage Advice and Practical Science for 21st Century Household*,
3. Paulina Nickell and Jean Muir Dorsey. (1976). *Management in Family living*, John Wiley & Sons Publications.
4. Anson, Elva M. (1985). *The Complete Book of Home Management*, Chigig: Moody Press.
5. Sandhya Rani, Mohanthy, (2016). *Introduction to Home Management*



Value Added - INDIAN POLITY

Course Code	Total Hours	Marks
VAF205	30	100

Objectives:

1. To understand the salient feature of Indian Constitution
2. To know about fundamental rights and duties
3. To learn about state government and state executive

Course Outcomes

- To understand the salient features of Indian constitution
- To explain fundamental rights and duties
- To describe parliamentary procedure
- To analyze the powers of Governor, Chief Minister and Ministers
- To assess the Panchayat Raj system

Unit I Constitution of India

Salient features of Indian Constitution - Union and its Territory

Unit II Fundamental Rights and Duties

Right to Equality; Right to Freedom; Right Against Exploitation; Right to Freedom of Religion; Cultural and Educational Rights and Right to constitutional remedies - Fundamental Duties (FD)

Unit III Parliament

Role and functions of the Parliament - Sessions, Motions, Parliamentary procedure – Summoning, Prorogation, Joint sitting - Lok Sabha and Rajya Sabha, - Bill and law-making procedure

Unit IV State Government and State Executive

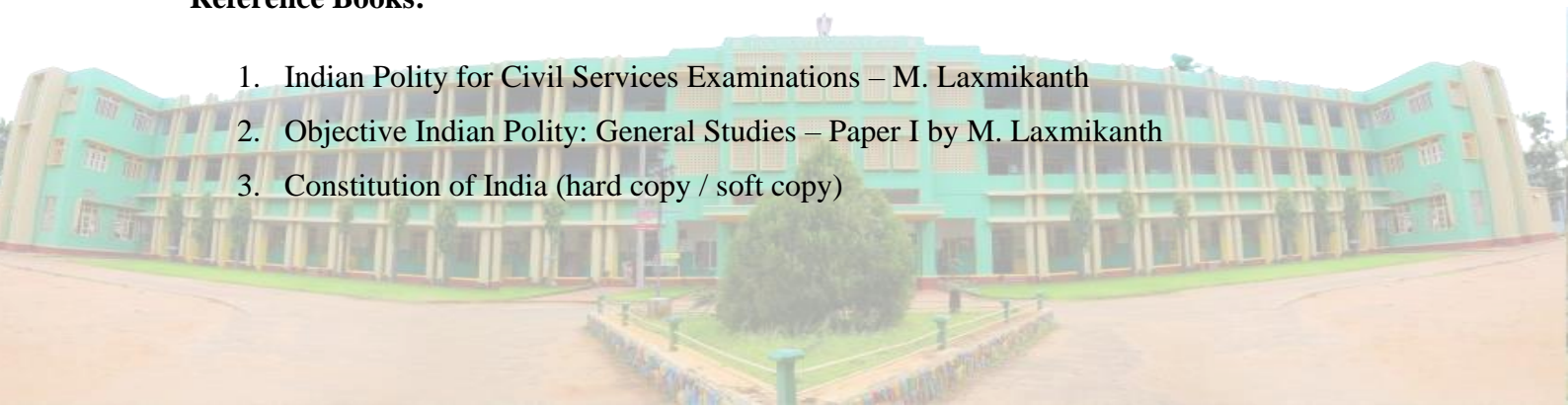
Governor- appointment, removal and special powers - Executive, Legislative, Financial, Judicial powers and discretionary of governor - Chief minister and council of ministers - Power of chief minister

Unit V Panchayat raj and municipalities

Elections, auditing, powers and authority of panchayats - 3 tier structure

Reference Books:

1. Indian Polity for Civil Services Examinations – M. Laxmikanth
2. Objective Indian Polity: General Studies – Paper I by M. Laxmikanth
3. Constitution of India (hard copy / soft copy)



Value Added - PUBLIC ADMINISTRATION

Course Code	Total Hours	Marks
VAF206	30	100

Objectives:

1. To understand the forms and regulation of Public Administration
2. To know about the commission and corporations

Course Outcomes

- To understand significance and evaluation of Public Administration
- To describe the ministries and Department
- To evaluate the forms of public sector
- To analyse the state administration, legislative and financial relation
- To assess the national human rights commissions

Unit I Administration Theory

Meaning, scope and significance of Public Administration, Evolution of the discipline and its present status.

Unit II Organizations of Public Administration

Structure and forms: Ministries and Departments, Corporations, Companies; Boards and Commissions

Unit III Public Sector Undertakings

Public sector in modern India; Forms of Public Sector Undertakings; Problems of autonomy

Unit IV State Government and Administration

Union-State administrative, legislative and financial relations; Role of the Finance Commission;

Unit V Significant issues in Indian Administration

Values in public service; Regulatory Commissions; National Human Rights Commission; Problems of administration in coalition regimes

Reference Books:

1. Basu, D D (2013) Introduction to the Constitution of India (21st Edition). Lexus Nexus: New Delhi
2. A.S. Narang, Indian Government and Politics, Geetanjali Publishing House, New Delhi, (Latest edition)
3. Bidyut Chakrabarty & Rajendra Kumar Pandey, Indian Government and Politics, SAGE, New Delhi, 2014.
4. Maheshwari, S.R., Indian Administration, New Delhi, Orient Longman, 2000.
5. Bhambri, C.P., Indian Politics 2001-2004, Shipra Publishers ,2008.



Value Added – WOMEN ENTREPRENEURSHIP

Course Code	Total Hours	Marks
VAA205	30	100

Objectives:

1. To understand the concept of entrepreneurship and the crucial role of entrepreneurs in the business world.
2. To develop the entrepreneurial skills of women and to know the prominent women entrepreneurs.

Course Outcomes

- To understand the role of women entrepreneurship in different facets of society.
- To know the various livelihood supports for women Employment opportunities.
- To recognize the different phases in the entrepreneurial journey from idea generation to business establishment.
- To identify various types of women entrepreneurs and compare the challenges and opportunities faced by male and female entrepreneurs.

Unit I Entrepreneur

Definition - Characteristics - Functions - Intrapreneur - Entrepreneur Vs Intrapreneur - Types of Entrepreneurs - Entrepreneurial competencies.

Unit II Entrepreneurship

Meaning - Definition - Characteristics - Factors Stimulating Entrepreneurship - Phases of Entrepreneurship Development - Entrepreneurship ad a Career.

Unit III Women Entrepreneurs

Definition - Factors influencing women entrepreneurs - Types of women entrepreneurs - Male Entrepreneurs Vs Women entrepreneurs.

Unit IV Institutions Supporting Women in Entrepreneurship Development in India

FIWE, CWEI, FLO, DWCRA, SIDBI, State Bank of India: Shree Shakti Package, Bank of India: Priyadarshini Yojana, IOB - SME Mahila Plus, FICCI Keiretsu Forum, WISE, TiE Global - AIRSWREE, IIM - WSP, TREAD and Nexus Start-up Hub.

Unit V Scope for Women Entrepreneurs

Problems of women entrepreneurs - Remedial measures - Scope and Opportunities for women entrepreneurs - Start-ups by women - Women Start-ups.

Text Book:

1. Sundar K. (2019). Entrepreneurship Development. (1st edition). Vijay Nichole Imprints Private Ltd.



Value Added - E - FILING OF TAX RETURNS

Course Code	Total Hours	Marks
VAA202	30	100

Objectives:

1. To make the students understand the basic concepts and principles of E - filing of Tax Returns.
2. To help them to prepare E - filing of Tax Returns without errors.

Course Outcomes

- To navigate and utilize electronic tax filing platforms and software effectively.
- To demonstrate proficiency in accurately entering and validating financial and personal information for tax return submissions.

Unit I

Income Tax in India - Introduction -Residential Status and important definitions - Permanent Account Number (PAN) - Heads of Income and Income from Salary - Income from House Property

Unit II

Profits or Gains from Business or Profession -Capital Gains-Income from Other Sources -Deductions -Computation of Total Income

Unit III

TDS, TCS, Advance Tax & Self - Assessment Tax - Slab Rates (Old & New Tax Regime) - Introduction of e - filing portal - Registration Process under e- filing portal.

Unit IV

Income Tax Return – 1 - Income Tax Return – 2 - Income Tax Return - 3 - Income Tax Return – 4 - Income Tax Return – 5 - Income Tax Return – 6 - Income Tax Return – 7.

Unit V

Filing of Original, Revised and Belated Returns - Uploading ITR in the e - filing portal - E- verification of forms - Various Audit forms - Processing of ITR by CPC - Various Tax Authorities - Scrutiny and Response to notices - Bank Validation and Payment of Income Tax through Online - Form 26AS, Annual information statement and Compliance portal.

Text Book:

1. Tripathi P.C., (1991) A text book for Research Methodology in social science, N.D.Sultan Chand and Sons
2. Bharet's, (2004) Income tax act New Delhi: Bharat law house private limited



Value Added – SOCIAL MEDIA ADVERTISING

Course Code	Credit	Total Hours	Marks
VAA204	2	30	100

Objectives:

1. To understand the concept of social media marketing.
2. To understand the concept of blogging and its significance in the digital marketing.

Course Outcomes

- To understand the concept of social media marketing and key tips for effective social media marketing.
- To develop effective approaches for propagating ideas, messages, products, and behaviours across social networks.
- To understand concept of blogging and its significance in the digital marketing.
- To understand the fundamentals of paid advertising on social media platforms
- To develop specific skills for handling posts on major social media platforms, including Facebook, Instagram, Twitter, and LinkedIn.

Unit I Social Media Marketing

Introduction – Social Media Landscape – Best Social Media Marketing tips – Importance of Social Media Marketing.

Unit II Social Media Marketing strategies

Social Media Marketing Goals – Learn about your audience -Research the Competition- Conduct a Social Media Audit – Setup Accounts – Find Inspiration – Test, Evaluate and adjust your strategy.

Unit III Advertising on social media

Introduction – Creation of paid Advertising on social media.

Unit IV Blogging

Introduction – Downsides of Blog – Process of Blog- Creation of Blog.

Unit V Handling post on social media

Facebook – Instagram – Twitter – LinkedIn

Text Book:

1. Anil G.S. (2019). Digital and Social Media Marketing. (1st edition). Himalaya Publishing House.



Value Added – EFFECTIVE COMMUNICATION TRAINING

Course Code	Total Hours	Marks
VAA201	30	100

Objectives:

1. To develop the communicative skills of students.
2. To prepare the students to face the job interview with confidence.

Course Outcomes

- To build a vocabulary to express ideas and thoughts more effectively in both spoken and written English.
- To enhance reading comprehension skills to understand and interpret the content effectively.
- To acquire the skills necessary for writing a letter effectively.
- To acquire effective communication skills during interviews, including body language.

Unit I Speaking and writing correct English

Review of grammar -Remedial study of grammar -Building vocabulary -Phonetics
Public speaking -Conversations

Unit II Developing reading, understanding and express meaningfully

Reading-Comprehension -Short answers -Paragraph writing

Unit III Writing skills

Letter Writing-Resume Preparation-Note making

Unit IV Speaking Skills

Telephonic conversation -Debating -Discussion

Unit V Interview Skills

Before interview – during interview – after interview

Text Book:

1. Urmila Roy & S.M Roy. (2019). Effective Communication skills. (1st edition).
Himalaya Publishing House



Value Added – RETAIL MARKETING

Course Code	Total Hours	Marks
VAA203	30	100

Objectives:

1. To know the conceptual knowledge about the retail marketing.
2. 2. to develop the skill of performing retail marketing.

Course Outcomes

- To understand the fundamental concepts of retail.
- To identify the core functions involved in the retailing process.
- To identify different types of brand loyalty, understanding the advantages of brand building for both retailers and consumers.
- To analyse the impact of promotional campaigns on retail businesses.

Unit I Introduction to Retailing

Definitions – Features – Retailing Transactions with or without Merchandise- Retail Marketing – Need for a strategic Approach.

Unit II Functions and Types of Retailers

Functions of Retailing – Types of Retailers: Store Retailers – Non-Store Retailers – Retail Organisations. Types of Retailers: Itinerant Retailers - Fixed Shop Retailers – Small Scale Retailers – Large Scale Retailer

Unit III Retail Location Strategies

Issue to be considered in site selection – Decision on Geographic Locations of a Retail Store – Regions – Market Area – Trading Zones – Approaches to Geographic Location.

Unit IV Branding in Retailing

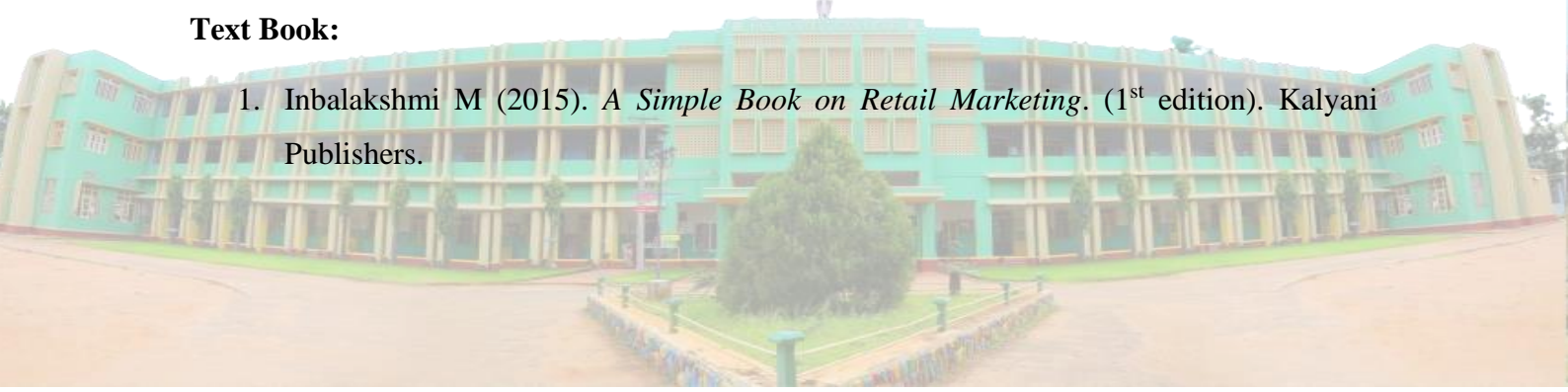
Definition – Role of Brand in Retail Trade – Advantages of Brand Building to Retailers – Advantages to Consumers – Brand Name. Brand Loyalty: Definition – Types.

Unit V Retail Communication and Promotion

Definition– Promotional Objectives – SMARRT Objectives – Approaches to Promotional Budget – Effect of Promotional Campaign.

Text Book:

1. Inbalakshmi M (2015). *A Simple Book on Retail Marketing*. (1st edition). Kalyani Publishers.



Value Added - OFFICE MANAGEMENT

Course Code	Total Hours	Marks
VAA206	30	100

Objectives:

1. To make the students aware of office environment and to appreciate the importance of appropriate office practices in the modern business world.
2. To develop in the students a sense of responsibility in the efficient management of office function.
3. To help the students acquires firsthand knowledge in the use of appliances.
4. To create a bond of dependable and skilled office assistants.

Course Outcomes

- To enhance interpersonal skills to navigate workplace dynamics and foster positive working relationships.
- To manage interactions with internal and external stakeholders, including clients, vendors, and colleagues.

Unit I Office

Meaning – Advantages – Functions – Duties and responsibilities of Office staff

Unit II Record management

Objectives of Record keeping: Filling- steps- Kinds of filling System - Indexing:
Selecting the Appropriate Filling System.

Unit III Document/Report writing

Key points to write a document – Steps in writing workplace document – Quick steps for report writing

Unit IV Supervisory Skills & Communication

Skills of the Supervisor – Functions of Supervisor – Process – types – Communicating tools

Unit V Leadership and Motivation

Meaning and Concept: Importance of Leadership – Qualities of Leaders- Leadership Ethics- Relationships and Differences leadership and Motivation.

Reference Books:

1. Office Management (2008), R.S.N.Pillai, S.Chand Publication.
2. Office Management (2009) BalaChandran, McGraw-Hill Education.



Value Added - AUDITING

Course Code	Total Hours	Marks
VAA207	30	100

Objectives:

1. To give an overview of Auditing
2. To impart knowledge on Vouching, Verification and Valuation of assets and liabilities.

Course Outcomes

- To apply analytical procedures and other auditing techniques to assess the reliability of financial information.
- To utilize technology tools to enhance audit planning efficiency and effectiveness.

Unit I Introduction

Origin of Auditing –Definition – Difference between Book- keeping, Accountancy, Auditing and investigation – Objectives –Qualities of an Auditor – Classifications of Audit.

Unit II Audit Planning

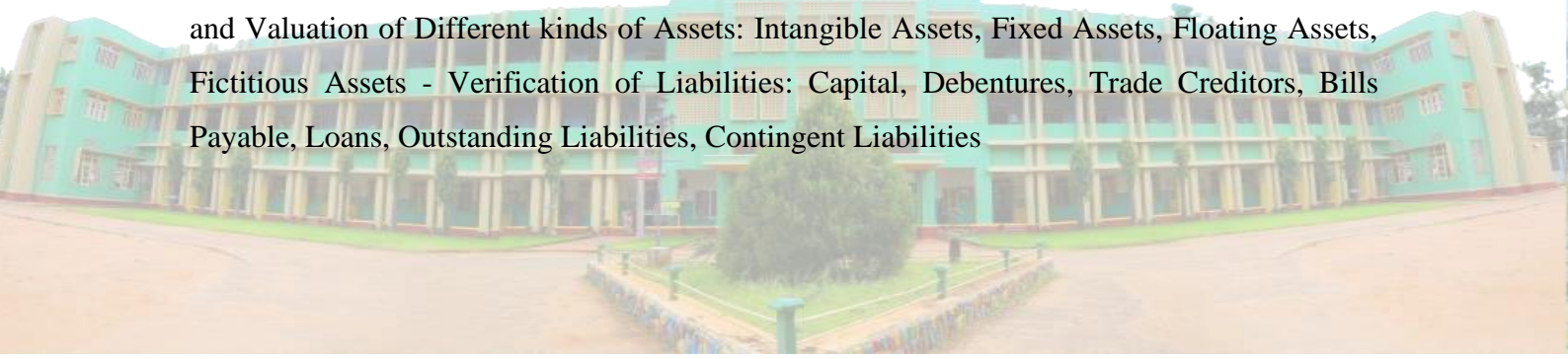
Audit planning – Audit Programme-Internal check, Internal Audit and Internal Control –Audit note book– Audit Working papers – Purpose – Content – Ownership – Procedure of Audit.

Unit III Vouching

Meaning – Objectives – Importance – Voucher – Vouching of Trading Transactions: Purchase book, Purchases return, credits sales, sales return--Vouching of Cash transactions--Cash receipts and Payments

Unit IV Verification and Valuation of Assets and Liabilities

Meaning– Definition – Distinction between Verification and Vouching –Verification and Valuation of Different kinds of Assets: Intangible Assets, Fixed Assets, Floating Assets, Fictitious Assets - Verification of Liabilities: Capital, Debentures, Trade Creditors, Bills Payable, Loans, Outstanding Liabilities, Contingent Liabilities



Unit V Company Auditor and Standards on Auditing

Appointment, Qualification and Disqualification– Rights and Duties – Liabilities
Standards on Auditing--Objectives and Functions – Scope --Standards issued by The Institute
of Chartered Accountants of India (ICAI)

Text Book:

1. Pardeep Kumar, Baldev Sachdeva and Jagwant Singh (2018). Auditing Theory and Practice, (14th edition). Ludhiana: Kalyani Publishers

Reference Books:

1. Tandon B.N., S.Sudharsanam and S.Sundharabahu (2006). A Handbook of Practical Auditing. (4th edition). New Delhi: S.Chand Publishing.
2. Saxena. R.G. (2018). Principles and Practice.of Auditing (7th edition). Chennai: Himalaya Publising House.
3. Sundaram S.M. (2010). Auditing. (6th edition). Karaikudi: Sree Meenakshi Publications.
4. Sundaram, S.M. (2014). Banking Theory Law and Practice. (9th edition). Karaikudi: Sree Meenakshi Publications.
5. Sundar K., K.Paari, (2014). Practical Auditing. (1st edition). Chennai, Vijay Nicole Private Ltd.



Value Added – SERVICE MARKETING

Course Code	Total Hours	Marks
VAA208	30	100

Objectives:

1. To enable the students to gain in-depth knowledge about the services marketing.
2. To impart knowledge on the basic concepts of service marketing.
3. To help the students to develop effective service marketing strategies.

Course Outcomes

- To create and manage service delivery processes that align with customer expectations and organizational goals.
- To identify and address service gaps, ensuring a seamless and positive customer journey.

Unit I Introduction to Service Marketing

Services: concept – Goods and services: A comparative analysis - Features - Reason why marketing of services - Significance of service marketing - Emerging key services.

Unit II Insurance Marketing

Concept – Users of Insurance Services - Market segmentation in insurance organization - Significance - E-Insurance - Insurance Product – Marketing mix in Insurance

Unit III Mutual Funds Marketing

Concept - Mutual funds services - Mutual Funds Marketing - Market segments for Mutual Funds – Marketing Mix for Mutual Funds services

Unit IV Portfolio Services Marketing

Concept – Portfolio Management Services: The Portfolio Managers - Market segmentation - Portfolioservices marketing in Indian perspective

Unit V Mass Communication Marketing

Emerging Trends in Mass Communication – Mass Communication Marketing in Indian Perspective.

Reference Books

1. Jha, S.M. (2011). *Services Marketing*. (1st ed). New Delhi: Himalaya Publishing House.
2. Natarajan, L. (2014). *Services Marketing*. (1st ed). Chennai: Margham Publication
3. Gupta, C.B., Rajan Nair, N. (2009). *Marketing Management*. (13th ed). New Delhi: Sultan Chand & Sons.



Value Added – DIGITAL MARKETING

Course Code	Total Hours	Marks
VAA213	30	100

Objectives:

1. To assess the evolution of digital marketing.
2. To appraise the Digital marketing channels.
3. To analyse latest trends happening in Digital Marketing.

Course Outcomes

- To design and implement email marketing campaigns, considering segmentation, automation, and personalization.
- To utilize social media marketing techniques to build brand presence, engage audiences, and drive business goals.

Unit I Introduction to Digital Marketing

Digital Marketing – Transition from traditional to digital marketing – Rise of internet – Growth of e-concepts – Growth of e-business to advanced e-commerce– Factors for success of digital marketing

Unit II Online marketing mix

Online marketing mix – E-product – E-promotion – E-price – E-place – Consumer segmentation – Targeting – Positioning – Consumers and online shopping issues

Unit III Digital Marketing Channels

Digital Marketing Channels – -Email Marketing-Social Media Marketing-Affiliate Marketing-Mobile Marketing Payment -Advantages and disadvantages of digital marketing channels

Unit IV Online consumer behavior

Online consumer behavior – Electronic consumer relationship management – Goals – Process – Benefits – Role – Next generation CRM.

Unit V Trends in Digital Marketing

Case Studies-Success and Failures-Tools-Innovation

Reference Books:

1. Seema Gupta. (2022). Digital Marketing. (3rd edition), New Delhi: Tata McGraw Hill Publishing Company Limited.
2. Puneet Singh Bhatia. (2019). Digital Marketing. (2nd edition), Pearson Education.



Value Added - BASIC TOOLS IN SPSS

Course Code	Total Hours	Marks
VAA2011	30	100

Objectives:

1. To help students to apply statistical tools in research.
2. To enable students to describe data with descriptive statistics and to perform statistical analysis.

Course Outcomes

- To understand the basic tools in SPSS.
- To explain the primary concepts in descriptive statistics as well as in reliability test.
- To demonstrate the SPSS tools.
- To understand the dependent continuous variable.
- To demonstrate the ability to calculate Correlation and Regression.

Unit I Introduction to SPSS

SPSS- Types of Data and Measurement Scale- Measurement Scales – Hypothesis – Determination of Sample Size – SPSS User Manual

Unit II Reliability Test and Descriptive Statistics

Reliability Analysis - Measures of Reliability – Descriptive Statistics – Interpretation

Unit III T test

One sample – Independent – Paired – T – test for difference of two means dependent samples

Unit IV Chi Square Test

Chi square Test – One tailed - Two tailed – Chi square test for independence of attributes

Unit V Correlation and Regression Analysis

Correlation – Types – Direction of the correlation – Methods of Correlation

Text Book:

1. IBM SPSS® AMOS™ 19 User's Guide – James L. Arbuckle

Reference Books:

1. IBM SPSS Statistics Base 19 User Guide
2. Dharmaraja Selvamuthu , Dipayan Das (2018) Introduction to Statistical methods, Design of Experiments and Statistical Quality Control , ISBN 978-981-13-1736-1 (e book)



Value Added - ENTREPRENEURSHIP DEVELOPMENT

Course Code	Total Hours	Marks
VAA2010	30	100

Objectives:

1. To make the students understand the basic concepts of Entrepreneurship development.
2. To equip them to develop entrepreneurship skill to become successful entrepreneur.

Course Outcomes

- To understand the concept of entrepreneur.
- To gain ideas regarding essential qualities of successful Entrepreneur.
- To identify the problems of women entrepreneur.
- To know steps for launching new business.
- To understand the modern marketing methods for successful enterprises.

Unit 1

Meaning and Definition of an Entrepreneur - Characteristics/ Nature of Entrepreneur - Different types of Entrepreneur

Unit: 2

Essential qualities of successful Entrepreneur - Functions of an Entrepreneur - Entrepreneur vs. Intrapreneur

Unit: 3

Women entrepreneur - Types of Women entrepreneur - Functions of Women entrepreneur - Problems faced by Women entrepreneur

Unit: 4

Steps to launch new business - Small Scale Industries - District Industrial Centers

Unit: 5

Recent trends in Business Start-ups - Modern Marketing Methods for successful enterprises

Text Book:

1. Entrepreneurship Development- Dr. V.M. Selvaraj

Reference Book:

1. Entrepreneurship Development- Dr. S.S. Khanka



Value Added - INVITATION DESIGNING

Course Code	Total Hours	Marks
VAA209	30	100

Objectives:

1. To make the students understand the basic concepts of designing.
2. To help them to design invitations using different tools.

Course Outcomes

- To understand the concept of designing.
- To gain ideas to create invitation.
- To identify the visuals.
- To use modern designing tools.
- To design different invitations.

Unit I Introduction to Design

Meaning - Definition - Concepts – Key Elements.

Unit II Designing the Invitation

Meaning – Importance of Invitation -Tips for Creating Invitation

Unit III Art of Designing

Preparation of Content – Visual Identity: Choice of font colour, style and size – Choice of Image

Unit IV Modern Designing Tools: PPT

Format – Materials – Preparation of Formal and Fancy Invitations

Unit V Modern Designing Tools: Canva, Renderforest

Format – Materials – Preparation of Formal and Fancy Invitations

Text Book:

1. **Wedding Invitation Handbook: Wording, Design, Printing, 2018, Julie Holcomb, Schiffer Publishing Ltd.**

Reference Books:

1. **Graphic Design Theory: Readings from the Field, Helen Armstrong, Princeton Architectural Press**



Value Added - POSITIVE PSYCHOLOGY

Course Code	Total Hours	Marks
VAW201	30	100

Objectives:

1. To encourage students to discover and nurture their character strengths
2. To shift the student's negative outlook to a more optimistic view in order to improve quality of life

Course Outcomes

- To identify the basic premises of Positive Psychology, and analyze criticisms of the field
- To identify different ways to define and measure happiness, as well as variables that are related/unrelated to happiness and well-being.

Unit I Introduction

Definition – Assumptions and Goals – From the negative to the positive – View of human functioning - Eastern and western perspectives – Classifications and measures of strengths and positive outcomes

Unit II Positive Psychology in Context

Developing strengths and living well –Meaning and measure of happiness – Subjective Well Being – Self-Realization – Views of Happiness

Unit III Positive Emotional States & Processes

Principles of pleasure: Understanding positive affect, positive emotions and well-being: Positive Emotions and Health Resources – Positive Emotions and Well – Being – Emotion focused coping – Emotional Intelligence

Unit IV Positive Cognitive States & Processes

Self-Efficacy, Optimism and Hope – Wisdom and Courage: the two universal virtues – Mindfulness, Flow and Spirituality

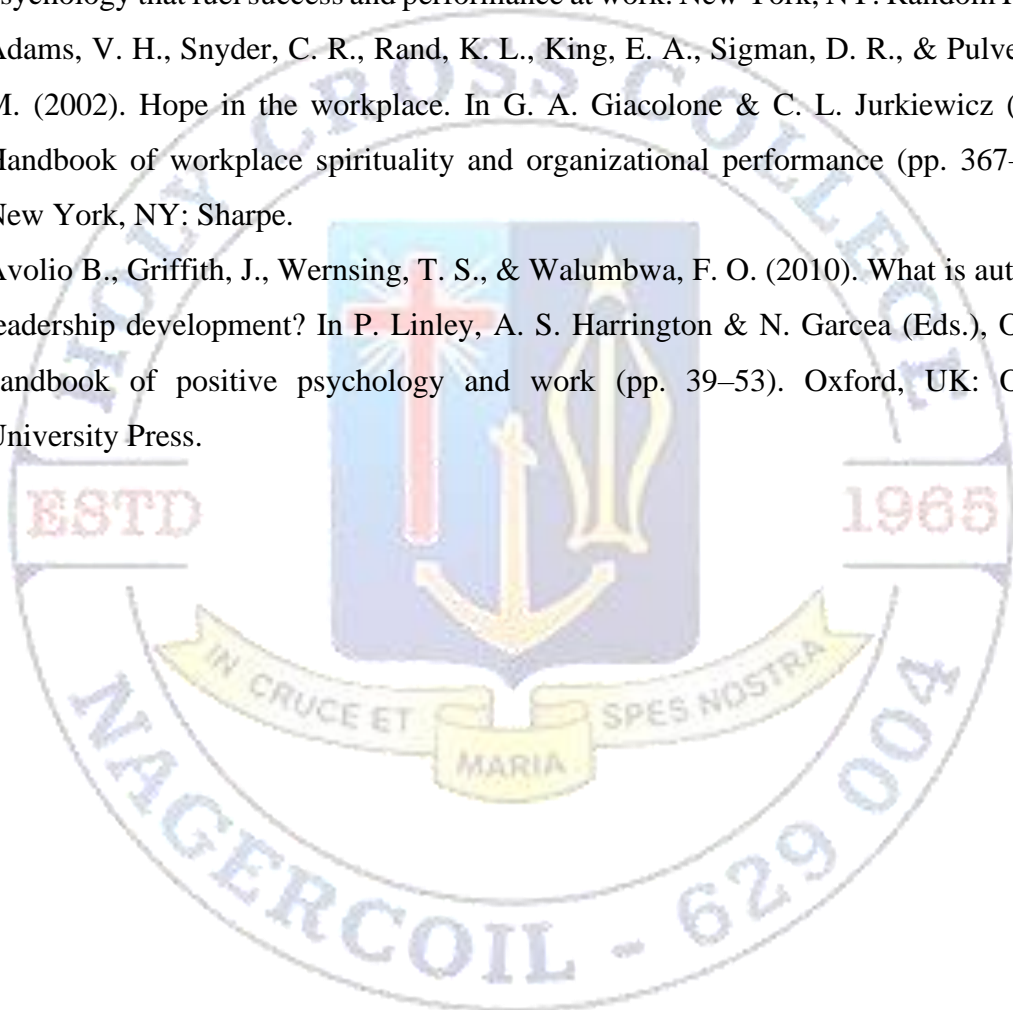


Unit V Prosocial Behaviour & Positive Environments

Empathy and Egotism: Altruism – Gratitude – Forgiveness – Societal implications – Attachment, Love and Flourishing Relationships Positive Schooling –Gainful Employment – Building better communities – Life above Zero

Reference Books:

1. Achor, S. (2011). The happiness advantage: The seven principles of positive psychology that fuel success and performance at work. New York, NY: Random House.
2. Adams, V. H., Snyder, C. R., Rand, K. L., King, E. A., Sigman, D. R., & Pulvers, K. M. (2002). Hope in the workplace. In G. A. Giacalone & C. L. Jurkiewicz (Eds.), Handbook of workplace spirituality and organizational performance (pp. 367–377). New York, NY: Sharpe.
3. Avolio B., Griffith, J., Wernsing, T. S., & Walumbwa, F. O. (2010). What is authentic leadership development? In P. Linley, A. S. Harrington & N. Garcea (Eds.), Oxford handbook of positive psychology and work (pp. 39–53). Oxford, UK: Oxford University Press.



Value Added - PSYCHOTHERAPY

Course Code	Total Hours	Marks
VAW202	30	100

Objectives:

1. To facilitate positive change in clients seeking better emotional and social functioning to improve their feelings of satisfaction and the overall quality of their lives
2. To bring unconscious material into consciousness and enhance the functioning of the ego, helping the individual become less controlled by biological drives or demands of the superego

Course Outcomes

- To develop a sound basis for professional and ethical practice in the counselling and psychotherapy field
- To take an active role as members of a professional community

UNIT I Introduction

Interventions – Definition – Goals of Psychotherapy – Professional issues – Personal characteristics of therapists – common and unique features of Psychotherapies – Psychotherapy in India

UNIT II Psychoanalysis

Psycho-Dynamic therapies – Indications and evaluations – Neo-Freudian approaches – Ego analytic therapies – Group therapy - Current status and evaluation

UNIT III Humanistic – Existentialistic Therapies

Person-centred therapy – Gestalt therapy – Transactional analysis – Reality therapy – Existential therapy – Logotherapy– Current status and evaluation

UNIT IV Cognitive Behaviour Therapies

Behaviour therapy – Rational Emotive behaviour therapy – Cognitive therapy – Current status and evaluation



UNIT V Postmodern Therapies

Solution-focused therapy – Brief therapy – Narrative therapy - Eclecticism– Current status and evaluation

Text Books:

1. Nelson-Jones, R. (2014). Theory and Practice of Counselling & Psychotherapy. 6th ed. Sage, New Delhi
2. Nelson-Jones, R. (2011). Theory and Practice of Counselling & Therapy, 5th ed. Sage, New Delhi
3. Kottler, J. A., & Montgomery, M. J. (2011). Theories of Counselling and Therapy: an experimental approach. 2nd ed. Sage, New Delhi

Reference Books:

1. Nelson-Jones, R. (2005). Practical counseling and Helping Skills, 5th Edition, Sage, New Delhi.
2. DeRubies, R.J., Hollon, S.D., Amsterdam, J.D., Shelton, R.C., Young, P.R., Salomon, R. et al. (2005). Cognitive therapy vs medications in the treatment of moderate to severe depression. Archives of General Psychiatry, 62 (4), 409–416.
3. Hollon, S.D., DeRubies, R.J., Shelton, R.C., Amsterdam, J.D., Salomon, R.M., O'Reardin, J.P. et al. (2005). Prevention of relapse following cognitive therapy vs medications in moderate to severe depression. Archives of General Psychiatry, 62 (4), 417–422.



மதிப்புக்கூட்டு கல்வி (Value Added-Course)
இதழியல் கலை
பாடக்குறியீடு –VAT203

பாடக்குறியீடு	மதிப்புகள்	மொத்தமணிநேரம்	மொத்த மதிப்பெண்
VAT203	2	30	100

குறிக்கோள்

இதழ்களின் இன்றியமையாமையை உணர்தல். பத்திரிக்கை துறையில் ஈடுபாட்டினை உருவாக்குதல். வளர்ந்துவரும் காலச் சூழலுக்கேற்ப கருத்துகளை வெளியிடும் திறனை வளர்த்தல்.

CO No.	Expected Learning Outcomes Upon completion of this course, the students will be able to:
CO-1	இதழியல் குறித்த விளக்கங்களை அறிதல்
CO-2	இதழியல் துறையின் பணிகளை அறிதல்
CO-3	இதழியல் சட்டங்களை அறிதல்
CO-4	உலக இந்திய செய்தி நிறுவனங்களை அறிதல்
CO-5	பலவகை இதழ்களை அறிதல், இதழியல் பயிற்சி பெறுதல்

அலகு – 1

இதழியல் விளக்கமும் இலக்கணமும் • இதழ்களின் நோக்கம் • பணிகள்-இதழியலாளர்களின் தகுதிகளும் திறமைகளும்

அலகு – 2

செய்தித்தாளின் அடிப்படையும் தோற்றமும் வளர்ச்சியும் • உலக அளவில்-இந்திய அளவில்-தமிழக அளவில்- தற்காலத் தமிழ் இதழ்கள்

அலகு – 3

பத்திரிகைச் சட்டங்கள் • அவமதிப்புச்சட்டம் • நாடாளுமன்ற நடவடிக்கைச் சட்டம் • நீதிமன்ற அவமதிப்புச் சட்டம் • அலுவலக ரகசிய சட்டம் • புத்தகங்கள் பதிவுச் சட்டம் • ஆயாச வெளியீட்டுச் சட்டம் • பதிப்புரிமைச் சட்டம்

அலகு – 4 பேட்டி • பேட்டியின் வகைகள் • பேட்டி

நடத்துதல் • பேட்டிக் கட்டுரை எழுதுதல்

அலகு – 5 செய்தியின் கட்டமைப்பு – பக்க வடிவமைப்பு –அச்சுப்படி திருத்துதல் • தலையங்கம் •கள ஆய்வு

பாடநூல்

குருசாமி,மா.பா. (2010). இதழியல் கலை. திருச்செந்தூர்: ஆதித்தனார்கல்லூரி.

பார்வையாளர்கள்

1. அந்தோணி இராசு, ஆ.பி.(2009).இதழியல் ஓர் அறிமுகம். திருச்சி: ஆரோக்கியப் பதிப்பகம்.
2. குளத்தூரான், க. (2009). தமிழ்ப் பத்திரிக்கைகள். நாகர்கோவில்:ஜெயகுமாரி ஸ்டோர்ஸ்.
3. கோதண்டபாணி,இரா.(2006).இதழியல்.மதுரை:கற்பகநூலகம்.



மதிப்புக் கூட்டுக்கல்வி (Value Added Course)
அரசு போட்டித் தேர்வுக்கான பயிற்சி
பாடக்குறியீடு –VAT204

பாடக் குறியீடு	மதிப்புகள்	மொத்த மணிநேரம்	மொத்த மதிப்பெண்
VAT204	2	30	100

குறிக்கோள்

தமிழக அரசின் பொதுப்பணித் துறைக்கான போட்டித் தேர்வுக்கு மாணவர்களைத் தயாரித்தல் . வினாத்தாளில் இடம்பெறும் தமிழ் வினாக்களின் மாதிரிகளைக் கற்பித்தல்

CO No.	Expected Learning Outcomes Upon completion of this course, the students will be able to:
CO-1	போட்டித்தேர்வு அறிமுகம்
CO-2	போட்டித்தேர்வு மூலம் அரசு வேலை வாய்ப்பை பெறும் திறன் பெறுதல்
CO-3	போட்டித்தேர்வின் நுட்பங்களை அறிதல்

அலகு - 1

சங்க இலக்கியம் • காப்பியங்கள் •

அலகு -2

புராண இதிகாசங்கள் • நீதி இலக்கியம்

அலகு • 3

பக்தி இலக்கியம் • இலக்கணம்

அலகு • 4-

நிகண்டு – அகராதி

அலகு • 5

தற்கால இலக்கியம் (இன்று வரை)

பாடநூல்

பாக்கியமேரி, (2013). தமிழ் இலக்கியவரலாறு. நியு செஞ்சுவரி புக ஹவுஸ் சென்னை.

பார்வைநூல்

கவிஞர் பாழீ, (2014). தமிழறிவுக் களஞ்சியம். குமரிமாவட்டம்: கவிஞன் பதிப்பகம்.



மதிப்புக்கூட்டு கல்வி (Value Added-Course)
ஆரி வேலைப்பாடு
பாடக்குறியீடு -VAT205

பாடக்குறியீடு	மதிப்புகள்	மொத்தமணிநேரம்	மொத்த மதிப்பெண்
VAT205	2	30	100

குறிக்கோள்

ஆரி வேலைப்பாட்டின் இன்றியமையாமையை உணர்த்தல். ஆரித்துறையில் ஈடுபாட்டினை உருவாக்குதல். வளர்ந்துவரும் காலச் சூழலுக்கேற்ப தையல் திறனை வளர்த்தல்.

CO No.	Expected Learning Outcomes Upon completion of this course, the students will be able to:
CO-1	ஆரி வேலைப்பாடு குறித்த விளக்கங்களை அறிதல்
CO-2	ஆரி வேலைப்பாட்டின் பல்வேறு வகைகளை அறிதல்
CO-3	ஆரி நுணுக்கங்களை அறிதல்

அலகு - 1

ஆரி இரட்டை சங்கிலி தையல்

அலகு - 2

ஆரி கல் வேலைப்பாடு

அலகு - 3

ஆரி முடிச்சுத்தையல்

அலகு - 4

ஆரி கண்ணாடி தையல்

அலகு - 5

ஆரி இரவிக்கை தையல்

பாடநூல்

Complete Tailoring Guide- R. Saravanan- Nool Ulagam (Established 2010) Namakkal District

