Dept. of Biotechnology	& Microhiology N	СТ
Dept. of Diotechnology	x which obloid gy, iv	CI.

Packed cell volume (PCV) , Erythrocyte Sedimentation Rate [E.S.R.] - Westergren's Method,
Bleeding time, clotting time, Latex agglutination test. Pregnancy test.

Sample collection-Urine, sputum, Blood. Types of blood collection: capillary puncturevenipuncture, Anticoagulants. Composition of blood. Outline of Hematopoiesis. ABO blood

Basic laboratory principles -Organization of clinical laboratory and Safety measures -personnel hygiene, code of conduct. Overview of Lymphatic system, Urinary system, respiratory system and circulatory system.

grouping, Rh typing. Blood transfusion- Donor selection, Screening of donor (history, age, weight, Hb, pulse, BP, temperature, interval, registration), Post donation care, Preservation of samples.

Blood cells count: Total count, differential cell count, platelet count, Hemoglobin Estimation,

Unit II

Unit III

Unit I

C1 – Remember C2 – Understand

> To understand basics of histopathology

C3 - Apply

Objectives:

Jour Se Outcomest		
At the completion of the course, the student would be able to:		
COURSE OUTCOMES	COGNITIVE LEVEL	
Define diagnostic principles and methods	C1	
Understand the concepts of blood formation and status of maturation	C2	
Understand Collection, processing and preservation of blood and clinical samples	C2	
Describe methods of histopathological studies	С3	

Course Outcomes:

TECHNOLOGY		
CREDITS - 2		HOURS - 2

> To understand the principles of biomedical equipment used in diagnosis

> To gain basic knowledge on medical laboratory procedures > To understand methods of measurable clinical parameters

PART - IV: Skilled Based Elective II : MEDICAL LABORATORY

CODE – U19SBE2

SEMESTER -III

SEMESTER - III		CODE – U19SBE2
PART – IV: Skilled Based Elective II : MEDICAL LABORATORY TECHNOLOGY		
CREDITS - 2		HOURS - 2

Objectives:

> To gain basic knowledge on medical laboratory procedures

> To understand methods of measurable clinical parameters

To understand basics of histopathology

> To understand the principles of biomedical equipment used in diagnosis

Course Outcomes:

At the completion of the course, the student would be able to:

COURSE OUTCOMES	COGNITIVE LEVEL
Define diagnostic principles and methods	C1
Understand the concepts of blood formation and status of maturation	C2
Understand Collection, processing and preservation of blood and clinical samples	C2
Describe methods of histopathological studies	С3

C1 – Remember C2 – Understand C3 – Apply

Unit I

Basic laboratory principles -Organization of clinical laboratory and Safety measures - personnel hygiene,code of conduct. Overview of Lymphatic system, Urinary system, respiratory system and circulatory system.

Unit II

Sample collection-Urine, sputum, Blood. Types of blood collection: capillary puncturevenipuncture, Anticoagulants. Composition of blood. Outline of Hematopoiesis. ABO blood grouping, Rh typing. Blood transfusion- Donor selection, Screening of donor (history, age, weight, Hb, pulse, BP, temperature, interval, registration), Post donation care, Preservation of samples.

Unit III

Blood cells count: Total count, differential cell count, platelet count, Hemoglobin Estimation, Packed cell volume (PCV), Erythrocyte Sedimentation Rate [E.S.R.] – Westergren's Method, Bleeding time, clotting time, Latex agglutination test. Pregnancytest.

Unit IV

Introduction to Histopathology, Tissue preparation, labeling, Fixation – Simple fixative, compound fixative, histochemical fixative, Dehydration- Ethyl alcohol – Acetone, Clearing, impregnantion, embedding- Paraffin wax, sectioning. Microtome and its application.Staining of tissues - H&E Staining. Bio-Medical waste management- anoverview.



Post Graduate and Research Department of Zoology, National College (Syllabus for Candidates admitted from the academic year 2022 onwards)

Class	I-B.Sc., Zoology		
Semester	II		
Course and Code	Skill Based Elective course-I (SBE:1) Code:U22ZYSBE1		
Course Title	APICULTURE AND SERICULTURE		
Hours: 2	Credits : 2 Max Marks: 75		

Course Educational Objectives

- CEO1. To learn about the external morphology of Silkworm and Honey.
- CEO2. To learn about beehives, bee keeping equipment, methods of extraction of honey and processing of honey, mulberry cultivation.
- CEO3. To acquire knowledge on Pests and diseases associated with Silkworm and Honey Bee.
- CEO4. To learn about steps involved in silk production and various products from Apiculture
- CEO5. To make them entrepreneurs in Apiculture and Sericulture.

APICULTURE

UNIT – I

Introduction to Apiculture –Scope and importance. History of bee keeping: Definition, Bee keeping in worldwide, In India. Traditional bee keeping, Modern beekeeping, Urban or backyard beekeeping.

UNIT – II

Honey Bee species and their identification: Origin, systematic and distribution of honey bees. Caste system in honey bee, Types of honey bees, Species of honey bees. Bee identification.

UNIT – III

Bee keeping tools and equipment: Bee keeping equipment - introduction to types of bee boxes - BIS standard tools used in Apiculture. Bee breeding multiplication of colonies, Economic importance of Apiculture

SERICULTURE

UNIT IV

Definition, history and present status; Types of silkworms, Distribution and races - Exotic and indigenous races. Mulberry and non-mulberry. Biology and lifecycle of *Bombyx mori*

UNIT V

Silk fibre formation- Properties of cocoon filament – Pre reeling- process- cocoon boiling. Reeling and Re-reeling technology- raw silk industry-by-products of silk industries. Entrepreneurship in Sericulture.

Course Outcomes

Upon Completion of the course student would be able to:

- CO1: Define Silk Worm and Honey Bee types.
- CO2: Demonstrate on beehives, bee keeping equipment, methods of extraction of honey and processing of honey, mulberry cultivation.
- CO3: Categorize pests and diseases associated with silk worm and Honey Bee.
- CO4: Explicate steps involved in silk production and various types of silk produced from different silk moths.



Class	II-B.Sc., Zoology		
Semester	III		
Course and Code	Skill Based Elective course-II (SBE:2) Code:U22ZYSBE2		
Course Title	AQUARIUM FISH KEEPING AND VERMICULTURE		
Hours: 2	Credits : 2	Max N	Aarks: 75

Course Educational Objectives

- CEO1. Learn the basic principles, themes and steps needed to set-up and maintain an aquarium.
- CEO2. Learn the maintenance techniques of an aquarium.
- CEO3. Learn the basic principles, themes and steps needed for vermiculture.
- CEO4. Learn the techniques involved in vermiculture.
- CEO5. Learn the entrepreneurial opportunities in Aquarium fish keeping and Vermiculture.

AQUARIUM FISH KEEPING

UNIT - I

Introduction to Aquarium fish, Exotic and Endemic species of Aquarium fishes, Common characters and sexual dimorphism of Freshwater and Marine aquarium fishes such as Guppy, Molly, Sword tail, Gold fish, Fighter fish, Zebra fish, Angel fish.

UNIT II

Food and feeding of aquarium fishes. Use of live fish feed organisms. Preparation and composition of formulated fish feeds, Maintenance of Aquarium– budget for setting up an Aquarium, Fish farm as a Cottage industry.

VERMICULTURE

UNIT – III

Vermiculture – definition, scope and importance, common species for culture. Life cycle, growth of *Lampito mauritti, Perionyx excavatus*. Optimal conditions for vermiculture – temperature, pH, soil type, organic matter, protection from sun light, rain and predators.

UNIT-IV

Environmental requirements, culture methods – wormery – breeding techniques, indoor and outdoor cultures – monoculture and polyculture – Outline and ecological classification – Epigeic, Endogeic and Anecicspecies.

UNIT-V

Applications of Vermiculture, vermicomposting, use of vermicastings and vermiwash in organic farming: earthworms for management of municipal waste, selected biomedical solid wastes as feed, bait for capture, culture fisheries, forest regeneration. Medicinal importance.

Course Outcomes

- Upon Completion of the course student would be able to:
- CO1: List the economic importance of ornamental fishes and earth worms.
- CO2: Trace different types of ornamental fishes and to apply modern methods on aquarium culture.
- CO3: Make use of earthworm in organic farming and Solid waste Management.



Post Graduate and Research Department of Zoology, National College (Syllabus for Candidates admitted from the academic year 2022 onwards)

Class	I-B.Sc., Zoology	
Semester	Ш	
Course and Code	Skill Based Elective course-III (SBE:3) Code:U22ZYSBE3P	
Course Title	PRACTICAL: APICULTURE AND SERICULTURE &	
	AQUARIUM FISH KEEPING AND VERMICULTURE	
Hours: 2	Credits : 2	Max Marks: 75

Course Educational Objectives

- CEO1. To know about steps involved in bee keeping with different types of honey bee and to commercialize the byproduct of beekeeping.
- CEO2. To Learn Identification and Interpretation of different types of Silkworms, and comprehend the methodologies involved in Silkworm rearing.
- CEO3. To deploy vermitechnology for sustainable agriculture and to understand primary, Secondary degradation and vermibed preparation.
- CEO4. To impart knowledge on aquarium fishes and to artificially create and maintain natural habitat of aquarium fishes.
- CEO5. To provide idea on entrepreneurial opportunities in fields of applied Zoology.

APICULTURE

Spotters: Identify, classify and describe Honey Bees: i. Rock bee, *Apis dorsata*. ii. Little bee, *A. florae* iii. Asian bee, *A. cerana*. iv. European bee, *A. mellifera*. **Spotters**: Bee products –honey, pollen, royal jelly, bee wax

SERICULTURE

Life cycle of Bombyx mori- Morphology of egg, larva, pupa and adult of Bombyx mori.

AQUARIUM FISH KEEPING

Spotters: Identify, classify and describe aquarium fishes (Freshwater ornamental fishes - Guppy, Gold fish. Brackish water ornamental fishes - Black Molly, Sword tail. Marine ornamental fishes- Anemone fish & Butterfly fish.

Spotters: Identify and describe the aquarium accessories with their use and maintains: An aquarium tank.

VERMICULTURE

Spotters: Earthworm egg and vermicompost

Course Outcomes

Upon Completion of the course student would be able to:

- CO1: Enumerate steps involved in bee keeping with different types of Honey Bee.
- CO2: Demonstrate different types of Silkworms, and methodologies involved in Silkworm rearing.
- CO3: Apply vermitechnology for sustainable agriculture.
- CO4: Distinguish aquarium fishes and to maintain natural habitat of aquarium fishes.
- CO5: Appraise sustainable agricultural practice using vermi products.
- CO6: Develop commercialization for byproducts of beekeeping

Part -IV: SBE I	Semester - II	
ENTREPRENEURSHIP		
Course Code: 22SBECO1	Hours per week: 2	Credit: 2
CIA: 25 Marks	ESE: 75 Marks	Total: 100 Marks

Objective:

> To prepare a ground where the students view on entrepreneurship as an attractive career option and to know the process involved in entrepreneurship.

Course Outcomes (COs)

After completing this course, the student shall be able to:

- CO1 : Understand the concept of entrepreneurship
- CO2 : Gather knowledge and ideas on the existing support system for entrepreneurial orientation
- CO3 : Understand enterprise formation process for gaining ideas as to creation of an enterprise for pursuing a career
- CO4 : Understand requirements of post-enterprise creation for effective operation of the small business enterprises.
- : Gain knowledge on institutional supports available for CO5 entrepreneurs.

UNIT - I: Introduction to Entrepreneurship:

Entrepreneurship - Modern Concepts of Entrepreneurs- Characteristics -Barriers to Entrepreneurship - Environmental Factors Influencing Entrepreneurship - Intrapreneurs#. Entrepreneur - Functions, Types of Entrepreneurs -Qualities.

UNIT - II: Entrepreneurial Motivation

Motivating Factors - Entrepreneurial Ambitions - Compelling Factors -Facilitating Factors - Achievement Motivation - Entrepreneurial Development Programme - Objectives* - Phases.

UNIT - III: Establishing Entrepreneurial Systems

Steps for Establishing Entrepreneurial Systems - Search for Business Idea# - Sources of Ideas - Idea Processing and Selection. Project Identification and Classification - Project Selection - Project Appraisal - Methods of Project Appraisal. **UNIT - IV: Small Enterprises** (6 Hours)

Small Scale Industry - Types - Characteristics* - Objectives - Role of Small Scale Industries in Economic Development - Problems of Small Scale Industries. Financing of Enterprises - Need - Sources of Finance - Capital Structure - Term Loans - Venture Finance - Crowd Funding - Angele Investors.

UNIT - V: Institutional Finance to Entrepreneurs

Institutional Finance to Entrepreneurs - Role of TIIC, SIDBI, MSME and Commercial Banks# - Incentives and Subsidies to Entrepreneurs - Role of DIC, SIPCOT, SISI, SIDCO NSIC and ECGC.

School of Commerce, National College (Autonomous), Tiruchirappalli

(6 Hours)

(6 Hours)

(6 Hours)

(6 Hours)

COMPUTER APPLICATION IN BUSINESS - THEORY			
Course Code: U22SBECO2T Hours per week: Credit: 2			
CIA: 25 Marks	ESE: 75 Marks	Total: 100 Marks	

Objective

> To acquire knowledge on MS-office and the latest accounting procedures with the help of Tally ERP 9.

Course Outcomes (COs)

After completing this course, the student shall be able to:

- **CO1** : Describe the basics of computer and MS word.
- **CO2** : Know creation of table with the help of Excel.
- **CO3** : Prepare slides using MS-PowerPoint.
- **CO4** : Create voucher entries in Tally
- **CO5** : Create stock group, cost centers and budgets in Tally

Unit I: Introduction to Computer and Ms-Word

Introduction to Computers - History - Generation - Characteristics -Components of Computer - Areas of Application- Components of Computer -Hardware - Software, Operating System - Introduction to MS-Word, Creating, Editing and Formatting Document - Working with Drawing Objects - Text Manipulation - Working with Tables - Columns - Labels - Plotting, Editing and Filling Drawing Objects - Bookmark - Header & Footer - Checking and Correcting a Document - Creating Labels - Envelops - Mail Merge - Formatted Output and Report Generation Printing Documents.

Unit II: Ms-Excel

Ms-Excel - Workbook Features - Objectives - Creating a Worksheet - Editing Worksheets - Formatting Worksheets - Types of Charts - Creation of Charts -Application of Financial and Statistical Functions - List - Sorting of Data - Filtering Data - Saving, Opening and Closing of Worksheets.

Unit III: Ms-Powerpoint

(Hours 6)

(Hours 6)

MS PowerPoint - Creating, Editing and Formatting Presentation - Applying Transition and Animation Effects - Applying Design Templates - Viewing and Setting up a Slide Show - Navigating among Different Views - MS Outlook: Introduction to Folder List - Address Book.

Unit IV: Introduction to Tally, Company Creation, Voucher Entry (Hours 6)

Objectives - Fundamentals of Computerized Accounting - Starting Tally -Features of Tally - Gateway of Tally and Menus - Creation of Company - Creating of Groups - Editing and Deleting Groups - Creation of Ledgers - Editing and Deleting Ledgers - Introduction to Vouchers.

Unit V: Creation of Stock Group, Cost Centers and Budgets (Hours 6)

Introduction to Inventory - Creation of Stock Group - Stock Categories and

(Hours 6)

DEPARTMENT OF BUSINESS ADMINISTRATION

Programme: B.B.A. CBCS Syllabus – Outcome Based Education (OBE)

(For those who have joined during the Academic Year 2022--2023 onwards)

	Part –IV : Skill Based Cour	se I : (SBE I)	Semester-II	
	Course Title : AI	VERTISING AND	MEDIA COM	IMUNICATION
Ī	Course Code :U22SBEBBI	Hours per w	eek: 2	Credit :2
	CIA: 25 Marks	ESE : 75 M	arks	Total: 100 Marks

Objective

□ To enhance knowledge on Advertising and Media Management.

□ To help the students to study about the Advertising Planning & Layout

□ To enable the students to Know about Direct and Indirect advertising.

Course Outcomes (COs)

After completing this course the student will be able to

CO1:Summarize employee related advertising and promotional skills in business.

CO2: Identify effective types of advertising to capture the attention of the audience and sales Performance.

CO3: Create successful advertising and promotional campaigns.

CO4: Examine performances of advertising agencies, along with utilizing resources effectively.

CO5: Evaluate the performance of media vehicle towards the success of product in rural and

urban economies.

UNIT I: Introduction to Advertising

Nature and scope of Advertising - Characteristics of advertising - Factors of advertisability of a product -Advertising Standard Council of India (ASCI) - Functions and Models of Advertising - Benefits of Advertising *# – Distinguish between - Advertising and Advertisement, Advertising and Sales Promotion.

UNITII: Types of Advertising

Classification of advertising- On the basis of Prospectus - On the basis of Product - On the basis of Geographical – On the basis of Demand – On the basis of Advertising – On the basis of Response – On the basis of Sponsorship – On the basis of Media – Scientific Advertising – National Advertising #– Trade Advertising – Retail Advertising – Comparative Advertising*.

UNIT III: Advertising Planning & Layout

Advertising Campaign - Steps involved in Campaign Planning Process - Responsibility in Execution -Advertisement copy- Features, Purpose and Format of a copy - Advertisement layout - Functions, Characteristics – Essentials of a Good Layout.

UNIT IV: Advertising Agency and Budget

Advertising Agency - Role, Types and Importance - Client and Agency relationship - Advertising Budget -Preparation and Execution of Budget - Methods of determining advertising budget - Fixed Guidelines Approach, Objective and Task Method, Return on Investment approach.

UNIT V: Advertising Media

Direct and Indirect advertising – Indoor and Outdoor Advertising – Classification of advertising media – Media Planning – Target Market Study, Deciding the Message, Matching Media and Target Group, Media Selection and Media Schedule..

(6hours)

(6hours)

(6hours)

(6 hours)

(6 hours)

Extra Credit:

- # Case Study
- * Self Learning

Activities 1.Quiz 2. Data Collection and interpretation.

Text Book:

1.Dr. S.V. Srinivsasa Vallabha , Computer Applications in Business , Sultan Chand Publications, New Delhi 2015

Reference Book:

- 1. Ed. Jones Derek, Microsoft Office Windows 95 Bible Comdex Computer Publication 2015
- 2. Computerized Accounting under Tally, Deva Publications 2013
- 3. S.V. Srinivasa Vallabhan ,Introduction to Computers –, Sultan Chand Publication 2013
- 4. SMW Deva TIAL Smart Accountant Book, AVC Deva Publication 2015
- 5. Computerized Accounting under Tally Publication, Deva Publication 2013
- 6. Computer Application in Business, Dr. Joseph Anbarasu, LearnTech Press 2014
- 7. Implementing Tally 5.4, 6.3, 7.2 versus. Author K.K. Nandhani Publication, BPB Publication, New Delhi 2016

Marks Scheme : Theory 20% and Problems 80%

Section A (20*1=20 Marks)	Section B (5*5= 25 Marks)	Section C(3*10=30Marks)
Questions 1 to 20	21a) Theory 21b) Problem	Questions 26 to 30
Multiple Choice Questions only	22a) Problem 22b) Problem	Problems only
	23a) Problem 23b) Problem	
	24a) Problem 24 b) Problem	
	25 a) Problem 25b) Problem	

Online Resources:

Swayam Course	https://ugcmoocs.inflibnet.ac.in/index.php/courses/view_ug/121
E-Content	http://www.joydivisionman.com/vita/MBAv1.pdf
Other online resources	https://www.youtube.com/watch?v=xrGVe6gMRyk https://www.youtube.com/watch?v=rrfFTdO2Z7I

Relationship Matrix for COs, POs and PSOs

Course	Programme Outcomes			Programme Specific Outcomes						
Outcomes	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3	PSO4	PSO5
CO1	3	3	3	3	3	3	2	3	2	3
CO2	2	2	-	2	-	-	2	-	2	-
CO3	3	3	3	3	3	3	2	3	2	3
CO4	3	3	3	3	3	3	2	3	2	3
CO5	3	3	3	3	3	3	-	3	-	3
AVG	2.8	2.8	2.4	2.8	2.4	2.4	1.6	2.4	1.6	2.4

Notes :1-Slight (Low) 2- Moderate (Medium) 3- Substantial (High) "" Indicates there is no correlation

	DEPARTMEN	NTOF BUSINESS	ADMINISTI	RATION
	Programme: B.B.A. CE	•		. ,
	(For those who have joine Part –IV : Skill Based Elective		iemic year 2	Semester: III
	Course Title : COMPUT	, ,	NS IN RUSI	
	Course Code : U22 SBEBB3P	Hours per v		Credit :2
	CIA: 25 Marks	ESE : 75 M		Total: 100 Marks
<u>Objec</u>	tive			
	To equip the students with knowled	lge of practical appl	ication of Mi	crosoft office and its application.
	To facilitate the students to understa	and MS office and l	PowerPoint ap	oplication
	To train the students on Architectur	e and customization	n of tally.	
Cours	<u>e Outcomes (COs)</u>		-	
	ter completing this course the studen	t will be able to		
	Create Business letter ,Invitation ,Bi			
	Ability to work with MS Excel - crea	0	g different typ	bes of charts
	Ability to work with MS Power Poin			
	Demonstrate the ability to work with	•		
	Assess ERP (Tally) in business activ I: MS Office	vities.	(Chound)	
UNII	1. Business Letters and Invitation		(6 hours)	
	2. Bio Data – Resume			
	3. Mail Merge			
UNIT	II: MS Excel		(6 hou	rs)
	4.Work sheet – Mark sheet ; Pay bi	ll – Pay Slip		
	5. Creating Charts	v 1		
UNIT	III: MS-Power Point		(6 hours)	
	6. Presentation in PowerPoint – Bus	-		
	7. Advertising Presentation in Powe	erPoint		
UNIT	IV: Tally-Introduction		(6 hours)	
	8.Creation of New Company,			
TINITT	9.Books of Accounts,	udget and Contro	la (6 hour a)	
UNII	V: Inventories, Vouchers Entry, B 10.Trial Balance in Tally	budget and Contro	IS. (0 HOURS)	
	11. Trading Profit and Loss Accourt	t Balance Sheet		
	12. Voucher Entry	it : Duluilee Sheet		
Text I	-			
1	Dr. S.V. Srinivsasa Vallabha , Com	puter Applications	in Business , S	Sultan Chand Publications, New
Delhi	2015			
R	eference Book:			
1.	Ed. Jones Derek, Microsoft Office Wir		-	Publication 2015
2.	Computerized Accounting under Tally,			
3.	S.V. Srinivasa Vallabhan ,Introduction	-		lication 2013
<i>4</i> .	SMW Deva TIAL Smart Accountant B			
5.	Computerized Accounting under Tally	Publication, Deva Pi	<i>ublication</i> 2013	5

Passed in the Board of Studies Meeting held on 23.06.2022 Approved in the Academic Council Meeting held on ----

School of Commerce

(For those who have joined during the Academic Year 2021-2022 onwards)				
Part –III : SBE2		Semester - III		
Course Title : Desktop Publishing -Theory				
Course Code : U22SBE2	week:2	Credit :2		
CIA: 25 Marks	ESE : 75	Marks	Total: 100 Marks	

Programme: BMS CBCS Syllabus – Outcome Based Education (OBE) For those who have joined during the Academic Year 2021-2022 onwards

OBJECTIVE : To understand the fundamentals & concepts of Adobe Photoshop and Corel Draw

Course Outcomes (COs)

After completing this course, the student will be able to:

CO1: Know the concept of Photo shop for making graphics

CO2: Comprehend the different color models and concepts of layers in Photoshop

CO3: To impart the knowledge in order to create animations

CO4: Apply different kind of transformation, grouping, special effects etc.

CO5: To give students the skills to create business cards, pamphlets, banners, calendars etc

UNIT I:

Photoshop Tools : Move, Type, Marquee, Lasso, Crop, Shapes, Healing, Brush, Patch, Cloning

Stamp, Eraser, Gradient, Blur, Smudge, Dodge, Pen, Eye Dropper, Patch selection and Zoom tool.

Layer: New layer, Layer set, Duplicate layer, Rasterize and Merge down

Layer Styles: Drop shadow, inner shadow, outer glow & inner glow, Bevel and Emboss, Gradient overlay, Stroke. Text formatting

UNIT II:

File: Save, File formats, Page set up.

Edit: Check spelling, Copy merged, Fill, Transform, Define pattern.

112:m. Motion blur, Twirl, lens flare, Glowing edges, lighting effects, solarize, water paper,

Stained glass, Mosaic Tiles.

Window: Character and Paragraph settings.

COREL DRAW:

UNIT III:

<u>Drawing Tools:</u> Pick, Shape, Knife, eraser, Smudge, Roughen brush, free transform, Zoom, hand, Free hand, Bezier, Artistic, Pen, Poly line, Point, Interactive connective, Spiral tool. <u>Colour Tool:</u> Paint Bucket Tool, Eye Dropper, Fill Tools. Fill Options, Stroke Options.

School of Commerce

Programme: BMS CBCS Syllabus – Outcome Based Education (OBE)

(For those who have joined during the Academic Year 2021-2022 onwards)

Part –III : Elective cou	arse: 2	Semester - VI		
Cours	e Title: Multi-Mod	lal Transportatio	on	
Course Code: U22BM11E	Hours per week:8		Credit :2	
CIA: 25	ESE : 75		Total: 100	

• OBJECTIVE: Introduce about Multi-modal and Intermodal Transport concepts.

Course Outcomes (COs)

After completing this course, the student will be able to

CO1: Introduce Multi-modal and Intermodal Transport concepts.

CO2:Explain Regulatory framework and policies for Multi-modal transportation. CO3:Describe Indian Railways' initiatives to promote Multimodal Logistics in India. CO4:Overview evolution of infrastructure facilitating Multi-modal Logistics in India. CO5: Indian Government's policies and vision R for development of seamless multi-modal transport.

Unit	Topics
Ι	Transportation Systems & Multi modal Transport –Concept of Multi modal & Intermodal Transport – introductionto Multi modal transport, the difference between Multi modal and Intermodal transport-Type of transport Modes – detail and characteristics of air, road, rail, water, pipelines, package carriers-Need, Aim and Key Issues of Multimodal transport.
II	How to organise Multi modal transport-Role of Containerisation in MMT- history, utility, types, ease of handling, cost saving-Types of Multi modal transport – combined container transport, rolling Road & forwarding of trailers, RORO & LASH transportation-National Multi modal Transport Committee (NMTC) and Logistics Policy of India – key features and importance
III	Multi modal Transportation Act & Procedures-MMTG Act of 1993-Custom procedures for Export & Import - Bill Of Lading – Hague Rules, Visby Rules, Hamburg Rules, Voyage by Sea-INCOTERMS – meaning, explanation, list, and types
IV	MMT and Indian Railways-PFT Policy – maintenance of rolling stock, cargo handling, customs, etc- WarehousingPolicy – stuffing, de-stuffing, stacking, use of MHE, etc-Layout and design of Multi modal Logistics parks
V	Multi modal transport & Practice Today-India's growing conflict between Trade & transport – issues, policy, problems & pricing-Integrated Transport – Bharatmala, Sagarmala, IWT, DFC, the concept of ICP (International Check Posts-Scenario in India and neighbouring countries with a case study

Part –IV: SBEC I	Semester	Semester - II	
INTRO	DDUCTION TO MARKETI	NG	
Course Code: U22SBEC1	Hours per week: 2	Credit: 2	
CIA: 25 Marks	ESE: 75 Marks	Total: 100 Marks	

Objectives

To impart the knowledge and meaning of Marketing and also to understand the various pricing methods and marketing research.

Course Outcomes (COs)

After completing this course, the student shall be able to:

- **CO1** : Understand the concepts of marketing, functions, warehousing and packaging.
- **CO2** : Analyses the buying behaviour, motives, introduction to new product and product life cycle.
- **CO3** : Demonstrate the pricing methods and strategies.
- **CO4** : Remember the pricing methods and sales promotion.
- **CO5** : Examine the students in marketing research.

UNIT – I: Introduction

Definition and meaning of marketing- Marketing and selling – Marketing functions-Buying – Transportation – **# Ware housing** – Standardization – Grading – * **Packaging**.

Unit II : Buying Behaviour

Buyer's behaviour – Buying motive – Market segmentation – Market strategies – Product development, introduction of new product- **# branding**- packing, brand loyalty-***product life cycle**

Unit III : Pricing Methods and Strategies

Pricing methods and strategies – Physical Distribution – ***Whole seller and retailer** – Services rendered by them.

Unit IV: Promotional Methods

Promotional methods – Advertising – AIDA concept- different types of advertising-Publicity – **# Personal selling – * Sales promotion at various levels**.

Unit V: Marketing Research

Marketing Research – Importance of marketing decision – ***Interactive marketing** – Use of internet- On line action.- types of marketing services-relevance of marketing mix for services.

Extra Credit: # Case Study * Self Learning Activities : Quiz, Collection of Data. Text Books : 1. Marketing Rajan Nair, Marketing , Sultan Chand Company Books for Reference: 1. Sherlekar, Marketing Management

(6 hours)

School of Commerce, National College (Autonomous), Tiruchirappalli

(6 hours)

(6 hours)

(6 hours)

(6 hours)

Part - III: Skill Based Elective	Semester	- 111	
0	EMENT		
Course Code: U22SBEC2	ek: 2	Credit: 2	
CIA: 25 Marks	ESE: 75 Mark	S	Total: 100 Marks

Objective

> To develop the students to an extensive study on Office Management.

Course Outcomes (COs)

After completing this course, the student shall be able to:

- **CO1** : Understand the Meaning, Functions of Office Management.
- **CO2** : Enable the students to understand the Office Organization, Characteristics, types and the functions of Office Manager.
- **CO3** : Analyze the importance and essentials of Office Record and filing methods.
- **CO4** : Compile information on Office Communication, and Mailing of Document
- **CO5** : Explain the meaning, Principles of Form Letters and types of Report Writing.

Unit I: Introduction to office management

Office Management – Meaning –*Elements of Office Management – #Functions of Office Management- Importance of office management- Principles of Office management.

Unit II: Office Organization

Office organization – Definition- ***Characteristics** - Types of organization – Modern office organization - qualification and qualities of office manager- #**Functions of an Office Manager-** Authorities – Responsibilities

Unit III: Record Management

Office record management – Importance – **#Filing essentials** – Classification and arrangements of files – ***Modern methods of filing** – Modern filing devices-Indexing.

Unit IV: Office Communication

Office communication - ***Types of communication**- Electronic communication-Barriers of e-communication- #E-mail- *** mailing of office document** Unit V: Form Letters (6 hours)

Form letters – Meaning, Principals and factors to be considered in designing office forms Office report- qualities of good report- Types of report –***Types of report writing**.

Extra Credit:

Case Study

* Self Learning

Activities: Quiz, Collection of Reports. Collection of Forms.

Text Books:

1. J.P. Mahajan, Fundamentals of Office management.

Books For Reference:

- **1.** S.P. Arrora,Office Management.
- 2. RSN Pillai and Bagavathi, Office Management.

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(6 hours)

(6 hours)

(6 hours)

(6 hours)

Part - III: Skill Based Elective	e III Sei	nester	- 111		
RETAIL MANAGEMENT					
Course Code: U22SBEC3	Hours per week:	2	Credit: 2		
CIA: 25 Marks	Practical: 75 Mar	ks	Total: 100 Marks		

Objectives

> To impart the knowledge and meaning of Retail management.

Course Outcomes (COs)

After Completing this course student will be able to

CO1 : Develop the knowledge of Retail process and Segmentation.

CO2 : Understand the concept of Planning Strategy, Financial Strategy

- **CO3** : Discuss the Purpose and Principles of Inventory Management and Material Handling.
- **CO4** : Express the ideas of Stores Layout designs, Objectives and the factors Considered for Display
- **CO5** : Compile the knowledge of Store based; Non-Store based retail formats and emerging trends in retail formats

Unit I: Introduction

(6 Hours)

(6 Hours)

Retail Management – ***Process** – #**Retail Marketing segmentation** – Key retail segments- Role of marketing in retail- marketing mix- STP approach.

Unit II: Strategic Plan

Strategic planning in retailing – ***Financial strategy in retailing** – Retail strategic profit model

Unit III: Inventory Management

(6 hours)

(6 hours)

(6 hours)

Inventory management in retailing – **#Material Handling** – Principles and purpose of material handling –***Symptoms of poor material handling**.

Unit IV: Stores Layout

Stores layout and design – ***Objectives** – Factors – Display **Unit V : Retail Formats**

Retail formats – ***Store based retail format**- Non Store Board Retail Format – #other emerging retail formats- continence stores- super markets- hyper market-Specialty stores, Department stores.

Extra Credit:

Case Study
* Self Learning
 Activities : Quiz, Visiting Retails, Group Discussion
Text Books :

1. Dr. Harjit Singh, Retail Management : S Chand and Co.

Books for Reference:

- 1. Balraj Tuli Srivatsava, Retail Management
- 2. Dr.L. Natarajan , Retail Marketing, Margam Publications
- 3. Ansuya Angadi, Retail Management, S. Chand and Co.

தேசியக்கல்லூரி (தன்னாட்சி), திருச்சிராப்பள்ளி – 620 001.

தமிழாய்வுத்துறை

இளங்கலைத்தமிழ் - முதலாம் ஆண்டு - இரண்டாம் பருவம் - திறன்சார் விருப்பப்பாடம் - I தாள் : கணினித்தமிழ் U22SBETL1

கற்பிக்கும் காலம் : 2 மணி தரப்புள்ளிகள் : 2

கற்பித்தலின் நோக்கங்கள்

கணினித் தொழில் நுட்பம் பற்றிய அறிமுகத்தினை ஏற்படுத்துதல்

2. கணினியின் பாகங்களை எடுத்துரைத்தல்

3. தமிழ்த் தட்டச்சு செய்யும் விசைப்பலகைகளை அடையாளங் காட்டுதல்

தமிழ் மென்பொருட்களைப் பயன்படுத்தக் கற்றுத் தருதல்.

மைக்ரோ சாப்ட் ஆபிஸ் பயன்படுத்தும் முறையை எடுத்துரைத்தல்

தமிழ்க்கணினிப் பயன்பாட்டின் முன் முயற்சிகளைத் தெளிவித்தல்.

அலகு – 1

கணினியின் வரலாறு – தொடக்க காலப் பயன்பாடு – வளர்ச்சி நிலை – கணினியின் அமைப்பு – மையச் செயலகம் - உள்ளீட்டகம் - வெளியீட்டகம்.

அலகு – 2

வன்பொருள் - மென்பொருள் - பெயிண்ட் - நோட்பேட் - வேர்டு பேட் - தமிழ் விசைப்பலகை – என்.ஹெச்.எம். ரைட்டர் - தமிழ் எழுத்துருக்கள் - பாமினி – ஒருங்குறி – எழுத்துரு மாற்றிகள்.

அலகு – 3

எம்.எஸ்.வேர்டு – கோப்பு உருவாக்கம் - தட்டச்சு செய்தல் - எழுத்து உரு, எழுத்தளவு, வண்ணம் மாற்றம் - அட்டவணை – படங்கள் - மெயில் மெர்ஜ் - புக் மார்க் - பக்க வடிவமைப்பு – தாள் அளவு – அச்சிடுதல்

அலகு – 4

எக்ஸெல் - கோப்பு உருவாக்கம் - தரவு உள்ளீடு – கணக்கீட்டு முறைகளும் வாய்பாடுகளும் - வரைபட உருவாக்கம்.

அலகு – 5

பவர் பாய்ண்ட் - டிசைன் - டிரான்ஸ்மிசன் - அமைப்பு முறை — காலக்கெடு — படங்கள் - அட்டவணைகள் - ஒலி ஒளி கோப்புகளை இணைத்தல்.

தேசியக்கல்லூரி (தன்னாட்சி), திருச்சிராப்பள்ளி – 620 001.

தமிழாய்வுத்துறை

இளங்கலைத்தமிழ் - இரண்டாம் ஆண்டு - மூன்றாம் பருவம் - திறன்சார் விருப்பப்பாடம் - II

தாள் : இணையத்தமிழ் U22SBETL2

தரப்புள்ளிகள் : 2

கற்பிக்கும் காலம் : 2 மணி

கற்பித்தலின் நோக்கங்கள்

1. இணையம் பற்றிய அறிமுகத்தினைத் தருதல்

2. மின்னஞ்சல் முகவரி உருவாக்கம் பற்றி எடுத்துரைத்தல்.

உலாவிகள், தேடுபொறிகள் குறித்துக் கற்பித்தல்.

4. தமிழ் விக்கிப்பீடியாவைப் பயன்படுத்த, உருவாக்க வழிகாட்டுதல்.

5. வலைப்பூ உருவாக்கம், படைப்புகளை வெளியிட நெறிகாட்டுதல்

இணைய சேவைகள் குறித்து விழிப்புணர்வு உண்டாக்குதல்.

அலகு – 1

இணைய அநிமுகம் - இணையத்தின் வரலாறும் வளர்ச்சியும் - இணையப் பயன்பாடும் இன்றைய வாழ்வியலும் - தமிழ் இணைய வரலாறு - இணைய மாநாடுகள். **அலகு –** 2

தகவல் பரிமாற்றம் - மின்னஞ்சல் உருவாக்கமும் அதன் பயன்பாடுகளும் -மின்னஞ்சலின் உள்ளடக்கம் - இணைய இயங்குதளங்கள் - இணையத்தில் தகவல் உலாவுதல், தகவல் தேடுதல் - தமிழ்த் தேடு பொறிகள் - இணையத்தில் தரவுகளைப் பதிவிறக்குதல், பதிவேற்றுதல்.

அலகு – 3

விக்கிப்பீடியா அறிமுகம் - விக்கிப்பீடியா பெயர்க்காரணம் - தோற்றம் வளர்ச்சி – தமிழ் விக்கிப்பீடியா – விக்கிப்பீடியா கணக்கு உருவாக்கம் - விக்கிப்பீடியாவில் தகுந்த சான்றாதாரங்களுடன் கட்டுரை எழுதுதல் மற்றும் புதுப்பித்தல்.

அலகு – 4

வலைப்பூ அறிமுகம் - அதன் வளர்ச்சியும் வகைப்பாடும் - தமிழ் வலைப்பூக்கள் - வலைப்பூ உருவாக்கம் - வலைப்பூ தொடங்குவதற்கான அடிப்படைகள் - வலைப்பூத் தலைப்பும் முகவரியும் - பக்க வடிவமைப்புத் தெரிவு – வலைப்பூவின் உள்ளடக்கக் கூறுகள் - வலைப்பூப் பதிவிடுகை.

அலகு – 5

இணையச் சேவைகள் அறிமுகமும் பயன்பாடும் -வங்கிச்சேவைகளுக்கு விண்ணப்பித்தல் - மின் வணிகம் - முன்பதிவு செய்தல் - போட்டித் தேர்வுகளுக்கு விண்ணப்பித்தல் - வேலை வாய்ப்பு அலுவலகப் பதிவு மற்றும் புதுப்பித்தல்.

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CODE	TITLE
U22BBSBE1	ADVERTISING AND MEDIA COMMUNICATION
U22BBSBE2	COMPUTER APPLICATIONS IN BUSINESS
U22BOSBE1	BIOFERTILIZER AND BIOPESTICIDES
U22BOSBE2	MUSHROOM TECHNOLOGY
U22BTSBE1	INTRODUCTION TO BIOENTREPRENEURSHIP SKILLS
U22BTSBE2	BIOENTREPRENEURSHIP SKILLS I
U22BTSBE3	BIOENTREPRENEURSHIP SKILLS II
U22CCSBE1	INTRODUCTION TO MARKETING
U22CCSBE2	OFFICE MANAGEMENT
U22CCSBE3	RETAIL MANAGEMENT
U22CHSBE2	CHEMISTRY IN DAILY LIFE
U22CHSBE3	NANO AND CLINICAL CHEMISTRY
U22COSBE1	ENTREPRENEURSHIP
U22COSBE2	COMPUTER APPLICATION IN BUSINESS
U22CSSBE1	WEB DESIGNING USING HTML
U22CSSBE2	JAVA SCRIPT
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U22GYSBE1	BASIC COMPUTER STUDIES
U22GYSBE2	GEOSTATISTICS
U22MSSBE1	QUANTITATIVE APTITUDE - I
U22MSSBE2	QUANTITATIVE APTITUDE - II
U22MSSBE3	VERBAL AND NON- VERBAL REASONING
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U22PHSBE3	BIO MEDICAL INSTRUMENTATION
U22SBE1	OFFICE AUTOMATION
U22SBE2	DESKTOP PUBLISHING
U22STSBE1	DIGITAL ERA
U22STSBE2	INTRODUCTION TO R
U22TLSBE1	KANINI TAMIL
U22TLSBE2	INNAIYATHAMIZH
U22ZYSBE1	APICULTURE AND SERICULTURE
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SKILL BASED PAPERS : 2016 - 2017

CODE	TITLE
U16SBE1	OFFICE AUTOMATION
U16SBE1C	WEB PAGE DESIGNING USING HTML
U16SBE2	DESKTOP PUBLISHING
U16SBE2C	JAVA SCRIPT AND ASP
U16SCC1	ELEMENTS OF MARKETING
U16SCC2	OFFICE MANAGEMENT
U16SCC3	RETAIL MANAGEMENT

SKILL BASED PAPERS: 2017 - 2019

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U16SBE1N	OFFICE AUTOMATION	
U16SBE1CN	WEB PAGE DESIGNING USING HTML	
U16SBE2N	DESKTOP PUBLISHING	
U16SBE2CN	JAVA SCRIPT AND ASP	
U16SCC1N	ELEMENTS OF MARKETING	
U16SCC2N	OFFICE MANAGEMENT	
U16SCC3N	RETAIL MANAGEMENT	

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SKILL BASED PAPERS: 2018 - 2019

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U18FSBE1	MATHEMATICS FOR BIOTECHNOLOGISTS	
U18SMB2	MEDICAL LAB TECHNOLOGY	

SKILL BASED PAPERS : 2019 - 2022

CODE	TITLE
U19SBE1	OFFICE AUTOMATION
U19SBE1C	WEB PAGE DESIGNING USING HTML
U19SBE2	DESKTOP PUBLISHING
U19SBE2C	JAVA SCRIPT & PHP
U19SBEB1	BIOFERTILIZER AND BIOPESTICIDES
U19SBEB2	MUSHROOM TECHNOLOGY
U19SCC1	INTRODUCTION TO MARKETING
U19SCC2	OFFICE MANAGEMENT
U19SCC3	RETAIL MANAGEMENT
U19SMB1	OFFICE AUTOMATION
U19SMB2	MEDICAL LAB TECHNOLOGY

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Spracevaration

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