

**G. VENKATASWAMY NAIDU COLLEGE, KOVILPATTI-628502
(AUTONOMOUS)**

(Re-Accredited with “A” Grade by NAAC)

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India)



CURRICULUM FOR B.COM. BUSINESS ANALYTICS PROGRAMME

(for those who joined from the Academic year 2023-2024 and onwards)

(under Choice Based Credit System and Outcome Based Education Pattern)

G. VENKATASWAMY NAIDU COLLEGE, KOVILPATTI-628502
(AUTONOMOUS)
(Re-Accredited with “A” Grade by NAAC)
Department of B.Com. Business Analytics
(for those who joined from the Academic year 2023-2024 and onwards)

VISION

- ✓ To furnish the students with business domain and analytics knowledge that enables the students to grow with potential career opportunities and enhance themselves to become dynamic leaders and entrepreneurs in the corporate world.
- ✓ To afford the students with technical knowledge, leadership skills and attitudes they can steer the ever-changing business problems and mould themselves with admired personality that develops corporate social responsibility in their minds.

MISSION

- ✓ To educate the advanced technological tools to crumble complicated problems into simple solutions.
- ✓ To acquire practical experience with business analytical tools and techniques for solving the business problems using data science.
- ✓ To impart the commerce knowledge with data analytics technique to search new business opportunities in the manufacturing and service sectors globally.
- ✓ To guide the students in meeting the ever changing challenges in the business environment.

PROGRAMME OUTCOMES (PO)

PO1: Disciplinary knowledge: Capable of demonstrating comprehensive knowledge and understanding of one or more Disciplines that form a part of an Undergraduate Programme of Study

PO2: Communication Skills: Ability to express thoughts and ideas effectively in writing and orally; Communicative with others using appropriate media: confidently share one’s views and express herself / himself; demonstrate the ability to listen carefully, read and write analytically and present complex information in a clear and concise manner to different groups.

PO3: Critical Thinking: Capability to apply analytic thought to the body of knowledge; analyse and evaluate evidence, arguments, claims, beliefs on the basis of empirical evidence; identify relevant assumptions or implications; formulate coherent arguments; critically evaluate practices, policies and theories by following scientific approach to knowledge development.

PO4: Problem Solving: Capacity to extrapolate from what one has learnt and apply their competencies to solve different kinds of non- familiar problems, rather than replicate curriculum content knowledge; and apply one’s learning to real life situations.

PO5: Analytical Reasoning: Ability to evaluate the reliability and relevance of evidence; identify logical flaws and holes in the arguments of others; analyse and synthesize data from the variety of sources; draw valid conclusion and support them with evidence and examples and addressing opposing viewpoints.

PO6: Research- related skill: A sense of inquiry and capability for asking relevant/appropriate questions, problem arising, synthesising and articulating, Ability to recognise cause and effect relationships, define problems, formulate hypothesis , analyse and interpret and draw conclusions from data, establish hypothesis, predict cause and effect relationships, execute and report the results of an experiment or investigation.

PO7: Moral and Ethical awareness /reasoning: Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives and use ethical practices in all work. Capable of demonstrating the ability to identify ethical issue's related to one's work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarist, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work.

PROGRAMME EDUCATIONAL OBJECTIVES

After successful completion of the three year degree programme in B.Com. Business Analytics, the student will have an ability to

PEO1: edify the students on the commerce stream blending with nitty-gritties of data analytics that are applicable in the modern business scenario.

PEO2: cultivate the skills and abilities on data handling and data management that are most expedient in pursuing their career in data analytics.

PEO3: explore new technologies and innovations on data analytics through advanced researches.

PROGRAMME SPECIFIC OUTCOMES

PSO1 – Placement:

To prepare the students who will demonstrate respectful engagement with others' ideas, behaviors, beliefs and apply diverse frames of reference to decisions and actions.

PSO2 - Entrepreneur:

To create effective entrepreneurs by enhancing their critical thinking, problem solving, decision making and leadership skill that will facilitate startups and high potential organizations

PSO3 – Contribution to the Society:

To contribute to the development of the society by collaborating with stakeholders for mutual benefit.

GRADUATE ATTRIBUTES

The three year under-graduate programme in B.Com. Business Analytics develops transferable life skills such as

1. **Comprehensive knowledge:** Able to demonstrate in-depth knowledge and comprehension of one or more disciplines included in an undergraduate programme of study
2. **Communication Skills:** Ability to communicate ideas and concepts clearly both vocally and in writing; In order to effectively communicate with people, one must use the right media. This means being able to express oneself and convey opinions with confidence.
3. **Rational Thinking:** The ability to critically evaluate statements, facts, and beliefs in the context of empirical data, to pinpoint relevant presumptions or implications, and to apply analytical thought to the body of knowledge. construct rational arguments; Practises, policies, and concepts should be subjected to a critical examination utilising a scientific method of knowledge acquisition.
4. **Problem Solving:** Ability to apply one's knowledge to real-world circumstances rather than just repeating what they have learned in the classroom. This includes the ability to extrapolate from what they have learned and use their skills to solve various types of unfamiliar challenges.

5. **Analytical Reasoning:** Ability to evaluate the relevance and validity of the evidence, identify logical flaws and holes in other people's arguments, analyse and synthesise data from many sources, draw reasonable conclusions, support them with examples and evidence, and engage in a productive debate with opposing viewpoints.
6. **Research expertise:** A curiosity and the capacity to pose pertinent, suitable questions, identify problems, synthesise information, and articulate Ability to perceive cause-and-effect links, define issues, generate hypotheses, evaluate data, interpret it, anticipate cause-and-effect correlations, plan and carry out an experiment or inquiry, and present the findings.
7. **Moral and Ethical Practice:** Ability to live one's life according to moral/ethical principles, construct a stance or argument concerning a moral dilemma from several angles, and apply moral principles to all work. able to demonstrate the ability to recognise ethical issues that pertain to one's work, refrain from unethical behaviour such as fabricating, falsifying, or misrepresenting data or engaging in plagiarism, respect for environmental and sustainability issues, and adoption of objective, unbiased, and truthful actions in all facets of work.

G. VENKATASWAMY NAIDU COLLEGE (AUTONOMOUS), KOVILPATTI
Programme Structure for B.COM BUSINESS ANALYTICS
(For those admitted from the academic year 2023-24 and onwards)

Category	Course Type	Course Code	Course Title	Contact Hours	Exam Hours	Marks			Credit
						CIA	ESE	Total Marks	
Semester-I									
PART-I	Language	U23TA1L1	Tamil– I	6	3	25	75	100	3
PART-II	English	U23EN1L1	English - I	6	3	25	75	100	3
PART-III	Core-1	U23BA101	Financial Accounting I	5	3	25	75	100	5
	Core-2	U23BA102	Principles of Management	5	3	25	75	100	5
	Elective Generic - 1 (Allied)	U23BA1A1	Spreadsheet for Business	4	3	25	75	100	3
PART-IV	Skill Enhancement Courses SEC1 (NME – 1)	U23BA1S1	Business Organisation	2	2	50	-	50	2
	Foundation Course	U23BAFC1	E-Commerce	2	2	50	-	50	2
TOTAL				30				600	23
Semester-II									
PART-I	Language	U23TA2L2	Tamil– II	6	3	25	75	100	3
PART-II	English	U23EN2L2	English - II	6	3	25	75	100	3
PART-III	Core-3	U23BA203	Financial Accounting II	5	3	25	75	100	5
	Core-4	U23BA204	Business Law	5	3	25	75	100	5
	Elective Generic - 2 (Allied)	U23BA2A2	Fundamentals of Business Analytics	4	3	25	75	100	3
	Comprehension - I(Self Study Course- Online Exam)	U23BA2C1	Comprehension in Business Analytics – I	-	1	-	50	50	1
PART-IV	Skill Enhancement Courses SEC2 (NME – 2)	U23BA2S2	Office Management	2	-	50	-	50	2
	Skill Enhancement Course (DSC) SEC3	U23BA2S3	Business Ethics	2	2	-	50	50	2
TOTAL				30				650	24
Semester-III									
PART-I	Language	U23TA3L3	Tamil– III	6	3	25	75	100	3
PART-II	English	U23EN3L3	English - III	6	3	25	75	100	3
PART-III	Core-05	U23BA305	Corporate Accounting I	5	3	25	75	100	5

Category	Course Type	Course Code	Course Title	Contact Hours	Exam Hours	Marks			Credit
						CIA	ESE	Total Marks	
	Core-06	U23BA306	Principles of Marketing	5	3	25	75	100	5
	Elective Generic -3 (Allied)	U23BA3A3	Database Management System	4	3	25	75	100	3
PART-IV	Skill Enhancement Courses (DSC) SEC4	U23BA3SP1	Relational Database Management System - Lab	2		50	-	50	2
	Ability Enhancement Course I	U23AE301	Environmental Studies	2		50	-	50	2
TOTAL				30				600	23
Semester-IV									
PART-I	Language	U23TA4L4	Tamil– IV	6	3	25	75	100	3
PART-II	English	U23EN4L4	English– IV	6	3	25	75	100	3
PART-III	Core-07	U23BA407	Corporate Accounting II	5	3	25	75	100	5
	Core-08	U23BA408	Company Law	5	3	25	75	100	5
	Elective Generic -4(Allied)	U23BA4A3	Business Data Warehousing	4	3	25	75	100	3
	Comprehension - II(Self Study Course- Online Exam)	U23BA4C2	Comprehension in Business Analytics – II	-	1	-	50	50	1
PART-IV	Skill Enhancement Courses (DSC) SEC5	U23BA4SP2	Tally ERP 9.0 (Practical)	2	2	-	50	50	2
	Ability Enhancement Compulsory Course	U23AE402	Yoga and Value Education	2		50	-	50	2
TOTAL				30				650	24
Semester-V									
PART-III	Core-09	U23BA509	Cost Accounting I	5	3	25	75	100	4
	Core-10	U23BA510	Banking Law and Practice	5	3	25	75	100	4
	Core-11	U23BA511	Income Tax Law and Practice I	5	3	25	75	100	4
	Core-12	U23BA5MP	Major Group Project & Viva-Voce	5	3	40	60	100	5

Category	Course Type	Course Code	Course Title	Contact Hours	Exam Hours	Marks			Credit
						CIA	ESE	Total Marks	
	Core Elective -1	U23BA5E1A	Business Intelligence	5	3	25	75	100	4
	Core Elective 2	U23BA5E2A	Python for Data Analytics	5	3	40	60	100	4
		U23BA5E2B	Data Analysis using SPSS						
		U23BA5E2C	Research Methodology						
PART-IV	Summer Internship/Industrial Training/Mini Project	U23BA5IT	Summer Internship/Industrial Training/Mini Project	-	-	40	60	100	2
PART-V	Proficiency Enhancement Course (Self-study Course)	U23GS5SS	General Studies	-	-	-	-	Completion	2
		MOOC/Spoken Tutorial (Self Study Course - online)		-	-	-	-	Completion	2
TOTAL				30				700	31
Semester-VI									
PART-III	Core – 13	U23BA613	Cost Accounting - II	6	3	25	75	100	4
	Core – 14	U23BA614	Management Accounting	6	3	25	75	100	4
	Core – 15	U23BA615	Income Tax Law and Practice II	6	3	25	75	100	4
	Core Elective 3	U23BA6E3A	Financial Econometrics	5	3	25	75	100	3
		U23BA6E3B	Programming in R			40	60		
		U23BA6E3C	Auditing and Corporate Governance			25	75		
	Core Elective 4	U23BA6E4A	Indirect Taxation	5	3	25	75	100	3
		U23BA6E4B	Big Data Analytics						
		U23BA6E4C	Financial Services and Markets						
		Comprehension – III(Self Study Course- Online Exam)	U23BA6C3	Comprehension in Business Analytics – III	-	1	-	50	50
PART-IV	Professional Competency Enhancement	U23BAPC1	General Awareness for Competitive Examinations	2	2	-	50	50	2

Category	Course Type	Course Code	Course Title	Contact Hours	Exam Hours	Marks			Credit
						CIA	ESE	Total Marks	
	Extra Department Course Open Elective – (Self Study Course)		To be selected from the courses offered by other departments	-	3	-	100	100	3
PART-V	Extension Activities - NSS, NCC, YRC, Physical Education, Consumer Club, Youth Welfare, Nature Club & Electoral Literacy Club.			-					1
	NCC*								
TOTAL				30				700	25
TOTAL CREDITS									150

- As per UGC Norms, those students who opt NCC under extension activities will be studying the prescribed syllabi of the UGC which will include Theory, Practical and Camp components. Such students who qualify the prescribed requirements will earn an additional **24 credits**.

Category	Credits
Part – I	12
Part – II	12
Part - III	100
Part - IV	21
Part - V	5
Core Credits	69
Total Credits	150
Total Marks	3900

**Part-III B.Com. Business Analytics/ Semester – III /
Core-05: CORPORATE ACCOUNTING I (U23BA305)**

Lecture Hours	: 75	Tutorial Hours	: -
Practical Hours	: -	No. of Credits	: 5
Contact Hours per Semester: 75			
Contact Hours per Week: 5			
Internal Marks	: 25		
External Marks	: 75		
Total Marks	: 100		

Objectives of the course

The course aims at giving an overall view of the

- pro-rata allotment and Underwriting of Shares
- provisions of companies Act regarding Issue and Redemption of Preference shares and debentures
- form and contents of financial statements as per Schedule III of Companies Act 2013
- various methods of valuation of Goodwill and shares
- significance of International Financial Reporting Standard (IFRS)

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students will be able to

CO1: prepare and account for various entries to be passed in case of issue, forfeiture and reissue of shares and compute the liability of underwriters.

CO2: assess the accounting treatment of issue and redemption of preference shares and debentures

CO3: construct Financial Statements applying relevant accounting treatments.

CO4: compute the value of goodwill and shares under different methods and assess its applicability.

CO5: integrate theoretical knowledge on all accounting in par with IFRS and IND AS.

CO-PO and PSO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	2	3	2	2
CO2	3	2	3	2	2	2	2	3	2	2
CO3	3	2	3	2	3	2	2	3	2	2
CO4	3	1	3	2	3	2	2	3	2	2
CO5	3	3	3	2	3	2	2	3	2	2
Total Contribution of COs to POs and PSOs	15	11	15	10	13	10	10	15	10	10
Weighted percentage of Course Contribution to POs	100.00	73.33	100.00	66.67	86.67	66.67	66.67	100.00	66.67	66.67

0-No Correlation

1-Weak

2-Moderate

3-Strong

Course Content

Unit-I: Issue of Shares (L-15hrs)

Issue of Shares – Premium - Discount - Forfeiture - Reissue – Pro-rata Allotment - Issue of Rights and Bonus Shares - Underwriting of Shares and Debentures – Underwriting Commission - Types of Underwriting.

Unit-II: Issue & Redemption of Preference Shares & Debentures (L-15hrs)

Redemption of Preference Shares–Provisions of Companies Act– Capital Redemption Reserve – Minimum Fresh Issue – Redemption at Par, Premium and Discount.

Debentures: Issue and Redemption – Meaning – Methods – In-One lot–in Instalment – Purchase in the Open Market includes Ex Interest and Cum Interest - Sinking Fund Investment Method.

Unit-III: Final Accounts (L-15hrs)

Introduction – Final Accounts – Form and Contents of Financial Statements as Per Schedule III of Companies Act 2013 – Part I Form of Balance Sheet – Part II Form of Statement of Profit and Loss – Ascertaining Profit for Managerial Remuneration.

Unit-IV: Valuation of Goodwill & Shares (L-15hrs)

Valuation of Goodwill – Meaning – Need for Valuation of Goodwill – Methods of Valuing Goodwill – Average Profit – Super Profit – Annuity and Capitalisation Method.

Valuation of Shares – Need for Valuation of Shares – Methods of Valuation of Shares – Net Assets Method – Yield and Fair Value Methods.

Unit-V: Indian Accounting Standards (L-15hrs)

International Financial Reporting Standard (IFRS)–Meaning and its Applicability in India - Indian Accounting Standards – Meaning – Objectives – Significance – Procedures for Formulation of Standards – Ind AS – 1 Presentation of Financial Statement, Ind AS – 2 Valuation of Inventories, Ind AS – 7 Cash Flow Statement, Ind AS – 8 Accounting Policies, Changes in Accounting Estimate and Errors, Ind AS – 16 – Property, Plant & Equipment, Ind AS 38 – Intangible Assets Ind AS – 103, Business Combinations Ind AS 110, Consolidated Financial Statement. (**Theory Only**)

THEORY 20% and PROBLEM 80%

Recommended Texts

1. S.P. Jain and N.L. Narang, Advanced Accounting Vol I, Kalyani Publication, New Delhi.
2. R.L. Gupta and M. Radhaswamy, Advanced Accounts, Vol I, Sultan Chand, New Delhi.
3. Broman, Corporate Accounting, Taxmann, New Delhi.
4. Shukla, Grewal and Gupta, Advanced Accounts, Vol. I, S.Chand, New Delhi.
5. M.C.Shukla, Advanced accounting, Vol I, S.Chand, New Delhi.

Reference Books

1. T.S. Reddy, A. Murthy, Corporate Accounting, Margham Publication, Chennai.
2. D.S.Rawat & Nozer Shroff, Students Guide To Accounting Standards, Taxmann, New Delhi
3. Prof. Mukeshbramhbutt, Devi, Corporate Accounting I, Ahilya Publication, Madhya Pradesh
4. Anil Kumar, Rajesh kumar, Corporate Accounting I, Himalaya Publishing House, Mumbai.
5. Prasanth Athma, Corporate Accounting I, Himalaya Publishing House, Mumbai.

NOTE: Latest Edition of Textbooks May be Used

Website and E-learning sources

1. <https://www.tickertape.in/blog/issue-of-shares/>
2. <https://www.taxmann.com/bookstore/bookshop/bookfiles/chapter12valuationofgoodwillandshares.pdf>
3. <https://www.mca.gov.in/content/mca/global/en/acts-rules/ebooks/accounting-standards.html>

**Part-III B.Com. Business Analytics/ Semester – III /
Core-06: PRINCIPLES OF MARKETING (U23BA306)**

Lecture Hours	: 75	Tutorial Hours	: -
Practical Hours	: -	No. of Credits	: 5
Contact Hours per Semester: 75			
Contact Hours per Week: 5			
Internal Marks	: 25		
External Marks	: 75		
Total Marks	: 100		

Objectives of the course

The course aims at giving an overall view of the

- To know the concept and functions of marketing
- To understand the importance of market segmentation
- To examine the stages of new product development
- To gain knowledge on the various advertising medias
- To analyse the global market environment

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

CO1: develop an understanding on the role and importance of marketing.

CO2: apply the 4p's of marketing in their venture.

CO3: identify the factors determining pricing.

CO4: use the different Channels of distribution of industrial goods.

CO5: understand the concept of E-marketing and E-Tailing.

CO-PO and PSO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO2	PSO 3
CO1	3	2	3	2	2	2	2	2	3	2
CO2	3	2	3	2	3	2	2	2	3	2
CO3	3	2	3	2	3	2	2	2	3	2
CO4	3	2	3	2	2	2	2	2	3	2
CO5	3	2	3	2	2	2	2	2	3	2
Total Contribution of COs to POs and PSOs	15	10	15	10	12	10	10	10	15	10
Weighted percentage of Course Contribution to POs	100.0 0	66.6 7	100.0 0	66.6 7	80.0 0	66.6 7	66.6 7	66.6 7	100.0 0	66.6 7
	0-No Correlation		1-Weak		2-Moderate			3-Strong		

Course Content

Unit-I: Introduction to Marketing (L-15hrs)

Meaning – Definition and Functions of Marketing – Evolution of Marketing Concepts – Innovations in Modern Marketing. Role and Importance of Marketing - Classification of Markets - Niche Marketing.

Unit-II: Market Segmentation (L-15hrs)

Meaning and definition – Benefits – Criteria for segmentation – Types of segmentation – Geographic – Demographic – Psychographic – Behavioural – Targeting, Positioning & Repositioning - Introduction to Consumer Behaviour – Consumer Buying Decision Process and Post Purchase Behaviour — Motives. Freud's Theory of Motivation.

Unit-III: Product & Price (L-15hrs)

Marketing Mix – an overview of 4P's of Marketing Mix – Product – Introduction to Stages of New Product Development – Product Life Cycle – Pricing – Policies – Objectives – Factors Influencing Pricing – Kinds of Pricing.

Unit-IV: Promotions and Distributions (L-15hrs)

Elements of promotion – Advertising – Objectives - Kinds of Advertising Media- Traditional vs. Digital Media - Sales Promotion – types of sales promotion – Personal Selling – Qualities needed for a personal seller – Channels of Distribution for Consumer Goods - Channel Members – Channels of Distribution for Industrial Goods.

Unit-V: Competitive Analysis and Strategies (L-15hrs)

Global Market Environment – Social Responsibility and Marketing Ethics – Recent Trends in Marketing – A Basic Understanding of E-Marketing & M-Marketing – E-Tailing – CRM – Market Research – MIS and Marketing Regulation.

Recommended Texts

1. Philip Kotler, Principles of Marketing: A South Asian Perspective, Pearson Education. New Delhi
2. Dr.C.B.Gupta & Dr.N.Rajan Nair, Marketing Management, Sultan Chand & Sons, New Delhi.
3. Dr.Amit Kumar, Principles Of Marketing, Shashibhawan Publishing House, Chennai
4. Dr.N.Rajan Nair, Marketing, Sultan Chand & Sons, New Delhi
5. Neeru Kapoor, Principles Of Marketing, PHI Learning, NewDelhi

Reference Books

1. Prof. Kavita Sharma, Dr. Swati Agarwal, Principles of Marketing, Taxmann, New Delhi.
2. Dr.J.Jayasankar, Marketing Management, Margham Publications, Chennai.
3. Assael ,H. Consumer Behaviour and Marketing Action, USA: PWS-Kent
4. Hoyer, W.D. And Macinnis, D.J., Consumer Behaviour, USA: Houghton Mifflin Company.
5. Baker M, Marketing Management And Strategy, Macmillan Business, Bloombury Publishing, India.

NOTE: Latest Edition of Textbooks May be Used

Website and E-learning sources

1. <https://www.aha.io/roadmapping/guide/marketing/introduction>
2. <https://www.investopedia.com/terms/m/marketsegmentation.asp>
3. <https://www.shiprocket.in/blog/understanding-promotion-and-distribution-management/>

**Part-III B.Com. Business Analytics/ Semester – III /
Elective Generic -3: BUSINESS MATHEMATICS AND STATISTICS (U23BA3A1)**

Lecture Hours : 60	Tutorial Hours : -
Practical Hours : -	No. of Credits : 3
Contact Hours per Semester: 60	
Contact Hours per Week: 4	
Internal Marks : 25	
External Marks : 75	
Total Marks : 100	

Objectives of the course

The course aims at giving an overall view of the

- knowledge on the basics of ratio, proportion, indices and proportions
- simple and compound interest and arithmetic, geometric and harmonic progressions.
- measures of central tendency
- correlation co-efficient
- knowledge on time series analysis

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

CO1: learn the basics of ratio, proportion, indices and logarithm

CO2: familiarise with calculations of simple and compound interest and arithmetic, geometric and harmonic progressions

CO3: determine the various measures of central tendency

CO4: calculate the correlation and regression co-efficient.

CO5: assess problems on time series analysis.

CO-PO and PSO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	3	3	2	2
CO2	3	2	3	2	3	2	3	3	2	2
CO3	3	2	3	2	3	2	3	3	2	2
CO4	3	2	3	2	2	2	3	3	2	2
CO5	3	2	3	2	2	2	3	3	2	2
Total Contribution of COs to POs and PSOs	15	10	15	10	12	10	15	15	10	10
Weighted percentage of Course Contribution to POs	100.00	66.67	100.00	66.67	80.00	66.67	100.00	100.00	66.67	66.67

0-No Correlation

1-Weak

2-Moderate

3-Strong

Course Content

Unit-I: Ratio **(L-12hrs)**

Ratio, Proportion and Variations, Indices and Logarithms

Unit-II: Interest and Annuity **(L-12hrs)**

Banker's Discount – Simple and Compound Interest - Arithmetic, Geometric and Harmonic Progressions.

Annuity - Meaning - Types of Annuity Applications.

Unit-III: Business Statistics Measures of Central Tendency **(L-12hrs)**

Arithmetic Mean, Geometric Mean - Harmonic Mean - Mode and Median – Quartiles – Deciles - Percentiles. Measures of Variation – Range - Quartile Deviation and Mean Deviation - Variance and Standard Deviation & Co-efficient.

Unit-IV: Correlation and Regression **(L-12hrs)**

Correlation - Karl Pearson's Coefficient of Correlation – Spearman's Rank Correlation – Regression Lines and Coefficients.

Unit-V: Time Series Analysis and Index Numbers **(L-12hrs)**

Time Series Analysis: Secular Trend – Seasonal Variation – Cyclical variations - Index Numbers – Aggregative and Relative Index – Chain and Fixed Index – Wholesale Index – Cost of Living Index.

Recommendeds

1. Dr.B.N. Gupta, Business Mathematics & Statistics, Shashibhawan publishing house, Chennai
2. Asim Kumar Manna, Business Mathematics & Statistics, McGraw hill education, Noida
3. A.V. Rayarikar and Dr. P.G. Dixit, Business Mathematics & Statistics, Nirali Prakashan Publishing, Pune
4. Dr.S. Sachdeva, Business Mathematics & Statistics, Lakshmi NarainAgarwal, Agra
5. P.R. Vittal, Business Mathematics & Statistics, Margham Publications, Chennai

ReferenceBooks

1. J.K. Sharma, Fundamentals of business statistics, Vikas Publishing, Noida
2. Peter Waxman, Business Mathematics & Statistics, Prentice Hall, New York
3. Andre Francis, Business Mathematics & Statistics, Cengage Learning EMEA, Andover
4. Aggarwal B M, Business Mathematics & Statistics, Ane Book Pvt. Ltd., New Delhi
5. R.S. Bhardwaj, Business Mathematics & Statistics, Excel Books Publisher, New Delhi

NOTE: Latest Edition of Textbooks May be Used

Website and E-learning sources

1. <https://www.britannica.com/biography/Henry-Briggs>
2. <https://corporatefinanceinstitute.com/resources/data-science/central-tendency/>
3. <https://www.expressanalytics.com/blog/time-series-analysis/>

**Part-III B.Com. Business Analytics/ Semester – III /
Elective Generic -3: FINANCIAL MANAGEMENT (U23BA3A2)**

Lecture Hours : 60	Tutorial Hours : -
Practical Hours : -	No. of Credits : 3
Contact Hours per Semester: 60	
Contact Hours per Week: 4	
Internal Marks : 25	
External Marks : 75	
Total Marks : 100	

Objectives of the course

The course aims at giving an overall view of the

- concept of financial management.
- capital structure theories.
- knowledge about techniques in capital budgeting
- dividend payment models.
- needs and calculation of working capital in an organization.

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

- CO1:** recall the concepts in financial management.
CO2: apply the various capital structure theories.
CO3: apply capital budgeting techniques to evaluate investment proposals.
CO4: determine dividend payouts.
CO5: estimate the working capital of an organization.

CO-PO and PSO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	2	3	3	2	3	3	3	3	3
CO2	3	2	3	3	3	3	3	3	3	3
CO3	3	2	3	3	3	2	3	3	3	3
CO4	3	1	2	3	3	3	3	3	3	3
CO5	3	1	3	3	3	3	3	3	3	3
Total Contribution of COs to POs and PSOs	15	8	14	15	14	14	15	15	15	15
Weighted percentage of Course Contribution to POs	100.00	53.33	93.33	100.00	93.33	93.33	100.00	100.00	100.00	100.00

0-No Correlation

1-Weak

2-Moderate

3-Strong

Course Content

Unit-I: Introduction (L-12hrs)

Meaning and Objectives of Financial Management – Functions of Financial Management. Finance - Sources of Financing-Role of Financial Manager in Financial Management- Financial Goals- Profit maximization Vs. Wealth Maximization – Components of Financial Management.

Unit-II: Financial Decision (L-12hrs)

Capital Structure – Definition - Meaning- Theories- Factors determining Capital Structure – Various approaches of Capital structure - Cost of Capital – Meaning - Methods - Cost of Equity Capital – Cost of Preference Capital – Cost of Debt – Cost of Retained Earnings – Weighted Average (or) Composite Cost of Capital (WACC) Leverage – Concept – Operating and Financial Leverage on EPS.

Unit-III: Investment Decision (L-12hrs)

Capital Budgeting - Meaning - Process – Cash Flow Estimation- Capital Budgeting Appraisal Methods: Traditional Methods - Payback Period – Accounting Rate of Return (ARR). Discounted Cash-flow Methods: Net Present Value (NPV) – Net Terminal Value - Internal Rate of Return – Profitability Index.

Unit-IV: Dividend Decision (L-12hrs)

Meaning – Dividend Policies – Factors Affecting Dividend Payment – Provisions on Dividend Payment in Company Law – Dividend Models - Walter’s Model - Gordon’s Model - M. M. Model.

Unit-V: Working Capital Decision (L-12hrs)

Working Capital - Meaning and Importance – Factors Influencing Working Capital – Determining - Working Capital Operating Cycle - Management of Current Assets: Inventories, Accounts Receivables and Cash.

Recommended Texts

1. R.K. Sharma, Shashi K Gupta, Financial Management, Kalyani Publications, New Delhi.
2. M.Y. Khan and P.K. Jain, Financial Management, MC Graw Hill Education, Noida.
3. I.M. Pandey, Financial Management, Vikas Publications, Noida.
4. Dr. S.N. Maheshwari, Elements of Financial Management, Sultan Chand & Sons, New Delhi.
5. Dr. Kulkarni and Dr.Sathya Prasad, Financial Management, Himalaya Publishing House, Mumbai.

Reference Books

1. Prasanna Chandra, Financial Management, Tata Mc. Graw Hill, New Delhi.
2. I.M. Pandey, Financial Management, Vikas Publishing, Noida.
3. Khan & Jain, Financial Management, Sultan Chand & Sons, New Delhi.
4. A. Murthy, Financial Management, Margham Publications, Chennai.
5. J. Srinivasan and P. Periyasamy, Financial Management, Vijay Nicole Publishers, Chennai.

NOTE: Latest Edition of Textbooks May be Used

Website and E-learning sources

1. <https://efinancemanagement.com/financial-management/types-of-financial-decisions>
2. <https://efinancemanagement.com/dividend-decisions>
3. <https://www.investopedia.com/terms/w/workingcapital.asp>

**Part-III B.Com. Business Analytics/ Semester – III /
Elective Generic -3: DATABASE MANAGEMENT SYSTEM (U23BA3A3)**

Lecture Hours	: 60	Tutorial Hours	: -
Practical Hours	: -	No. of Credits	: 3
Contact Hours per Semester: 60			
Contact Hours per Week: 4			
Internal Marks	: 25		
External Marks	: 75		
Total Marks	: 100		

Objectives of the course

The course aims at giving an overall view of the

- strong foundation of database concepts and develop skills for the design.
- implementation of a database application with an exposure to advanced database concepts.
- need of transaction processing and learn techniques for controlling the consequences of concurrent data access.
- normalization techniques to normalize a database.
- functional dependencies for designing robust Database.

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

CO1: describe basic concepts of database system.

CO2: describe and interpret the fundamental elements of the database management system and its model.

CO3: demonstrating of High-level Conceptual data model through E-R diagram to represent simple database applications.

CO4: apply the CRUD functions using SQL and NoSQL for simple database applications.

CO5: understand the storage architecture for advanced database concepts.

CO-PO and PSO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	3	3	3	3	3
CO2	3	3	3	3	3	3	3	3	3	3
CO3	3	3	3	3	3	3	3	3	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	3
Total Contribution of COs to POs and PSOs	15	15	15	15	15	15	15	15	15	15
Weighted percentage of Course Contribution to POs	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

0-No Correlation

1-Weak

2-Moderate

3-Strong

Course Content

Unit-I: Database Management Systems- Overview (L-12hrs)

Data, Database, Database management system, Characteristics of the database approach, DBMS Architecture, Role of Database administrators, Role of Database Designers, End Users, Advantages of Using a DBMS and When not to use a DBMS. DBMS vs. RDBMS, Relational and Non-Relational Database. Data Models – Categories of data models, Schemas, Instances, and Database states.

Unit-II: Database Management Design (L-12hrs)

Database design strategies, Database structures- Tables, Views, Index. Logical Design vs. Physical Design, Entity Relationship Modeling: Entity, Relationship, Cardinality, Types of Keys, Enhanced ER Design, Normalization and denormalization, Setting up an RDBMS environment, ETL.

Unit-III: Data Querying and Retrieval (L-12hrs)

Data Definition Language (DDL), Constraints, Integrity constraints, Data Manipulation Language (DML): UPDATE, DELETE, SELECT, Functions and Operators. TCL: Commit and Rollback Advanced Querying: SELECT with Order BY, GROUP BY, Sub queries: Single row, Multi-row; Set Operators, JOINS: Inner JOIN, Outer JOIN. Procedural SQL: Procedure, function and trigger.

Unit-IV: Database Management & Administration (L-12hrs)

Roles and Responsibilities of Database Administrator, Database Integrity and ACID (Atomicity, Consistency, Isolation and Durability) properties, Emerging Trends: Data Centers, Distributed Data Storage, Big Data- Storage and Retrieval, Web, Cloud Databases, E-Commerce, M-Commerce.

Unit-V: Understanding the Storage Architecture (L-12hrs)

Working with Column-Oriented Databases, HBase Distributed Storage Architecture, Document Store Internals, Understanding Key/Value Stores in Memcached and Redis, Eventually Consistent Non-Relational Databases MongoDB: Getting started: Documents, Collections, Databases, Getting and starting in MongoDB, CRUD operations in Mongo DB.

Recommended Texts

1. Elmasri Ramez and Navathe Shamkant B, Fundamentals of Database Systems, Addison-Wesley.
2. Shashank Tiwari, PROFESSIONAL NoSQL, John Wiley & Sons, Inc.
3. Luc Perkins, with Eric Redmond and Jim R. Wilson, Seven Databases in Seven Weeks,
4. A Guide to Modern Databases and the NoSQL Movement, The Pragmatic Bookshelf, Second Edition.

Reference Books

1. Kyle Banker, MongoDB in Action, Manning Shelter Island.
2. A Silberschatz, H Korth, S Sudarshan, "Database System and Concepts", Fifth Edition McGraw-Hill, Rob, Coronel, "Database Systems", Seventh Edition, Cengage Learning.
3. Alexis Leon & Mathews Leon, "Fundamentals of DBMS", Vijay Nicole Publications 2014, 2nd Edition.
4. C.J. Date -An Introduction to Database Systems -7th Edition – Addison Wesley.

NOTE: Latest Edition of Textbooks May be Used

Website and E-learning sources

1. <https://www.w3resource.com/mongodb-exercises/#PracticeOnline>
2. <https://nptel.ac.in/courses/106106095/>
3. <https://nptel.ac.in/courses/106106095/>

**Part-IV B.Com. Business Analytics/ Semester – III /
Skill Enhancement Courses (DS) SEC4: RELATIONAL DATABASE
MANAGEMENT SYSTEM – LAB (U23BA3SP1)**

Lecture Hours :-	Tutorial Hours :-
Practical Hours : 2	No. of Credits : 2
Contact Hours per Semester: 30	
Contact Hours per Week: 2	
Internal Marks : 50	
External Marks : -	
Total Marks : 50	

Objectives of the course

The course aims at giving an overall view of the

- basics of SQL and how to write simple queries to retrieve and manipulate data in a database.
- advanced SQL features, such as joins, subqueries, and aggregate functions, to perform complex data operations.
- PL/SQL code to automate tasks and implement business logic within a database.
- proficiency in using SQL Developer and other tools to develop and test SQL and PL/SQL code.
- best practices for database security.

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

CO1: choose appropriate SQL queries and PL/SQL blocks for the database.

CO2: implement SQL and PL/SQL blocks for the given problem effectively.

CO3: analyze the problem and Exceptions using queries and PL/SQL blocks.

CO4: validate the database for normalization using SQL and PL/SQL blocks.

CO5: design Database tables, create Procedures, user-defined functions and Triggers.

CO-PO and PSO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	2	2	2	3	3	2	2	2	2	2
CO2	3	3	2	3	2	3	2	3	3	2
CO3	2	3	3	3	2	3	2	2	3	3
CO4	2	3	2	3	3	3	2	2	3	2
CO5	2	2	2	3	3	2	2	2	2	2
Total Contribution of COs to POs and PSOs	11	13	11	15	13	13	10	11	13	11
Weighted percentage of Course Contribution to POs	73.33	86.67	73.33	100.00	86.67	86.67	66.67	73.33	86.67	73.33

0-No Correlation

1-Weak

2-Moderate

3-Strong

List of Exercises

Demonstrate the following commands SQL:

1. DDL Commands
2. DML Commands
3. DCL Commands
4. SQL Built-in functions
5. Using Sub Queries

PL/SQL:

6. Simple programs using PL/SQL
7. Procedures
8. User-defined functions
9. Exception Handling
10. Triggers

Recommended Texts

1. Ramez Elmasri, Shamkant B. Navathe, Database Systems, Sixth edition, Pearson Education, New Delhi.
2. Ivan Bayross, SQL, PL/SQL-The Programming Language of Oracle, Second Revised Edition, BPB Publications, New Delhi.

Reference Books

1. Abraham Silberschatz, Henry F.Korth, S.Sudarshan, Database System Concepts, Tata McGraw Hill Publication, 4th Edition.

NOTE: Latest Edition of Textbooks May be Used

Website and E-learning sources

1. <http://srikanthtechnologies.com/books/orabook/ch1.pdf>
2. Http://www.tmv.edu.in/pdf/Distance_education/BCA%20Books/BCA%20IV%20SEM/BCA%20A-428%20Oracle.pdf
3. <http://www.tutorialspoint.com/sql/sql-rdbms-concepts.htm>

**Part-IV B.Com. Business Analytics/ Semester – III /
Ability Enhancement Course: ENVIRONMENTAL STUDIES
(UR3AE301)**

Lecture Hours	: 30	Tutorial Hours	: -
Practical Hours	:	No. of Credits	: 2
Contact Hours per Semester: 30			
Contact Hours per Week: 2			
Internal Marks	: 50		
External Marks	: -		
Total Marks	: 50		

Objectives of the course

The course aims at giving an overall view of the

- basic concepts, components and importance of environment.

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

CO1: define the structure and functions of ecosystem.

CO2: explain the benefits of biodiversity conservation.

CO3: summarise the sources, effects and control measures of various types of pollutants.

CO4: perceive the environment legislations in India for sustainable development.

CO-PO and PSO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	2	3	3	3	2	3	3	2	3
CO2	3	1	3	3	3	3	3	3	3	3
CO3	3	2	3	3	3	2	3	3	3	3
CO4	3	3	3	3	3	3	3	2	3	3
CO5	3	3	3	3	3	3	3	3	3	3
Total Contribution of COs to POs and PSOs	15	11	15	15	15	13	15	14	14	15
Weighted percentage of Course Contribution to POs	100.00	73.33	100.00	100.00	100.00	86.67	100.00	93.33	93.33	100.00

0-No Correlation

1-Weak

2-Moderate

3-Strong

Course Content

Unit I: (L-6 Hours)

Definition and Scope of Environmental Studies – Ecology and Ecosystem – Structure of an Ecosystem – Types & Function of Ecosystem - Food chains, food webs, energy flow and ecological pyramids.

Unit II: (L-6 Hours)

Environmental problems and Management: Causes, effects and Control measures of: Air Pollution – Water Pollution – Noise Pollution – Nuclear Hazards. Solid waste management and Waste Disposal methods.

Unit III: (L-6 Hours)

Biodiversity and its conservation: Introduction-definition, Types of diversity: genetic, species and ecosystem biodiversity. Value of biodiversity: Consumptive use, productive use, social, ethical and aesthetic values. Biodiversity at global, national and local levels.

Unit IV: (L-6 Hours)

Environment protection Act, Wildlife protection Act, Forest conservation Act, Endangered and endemic species of India. Conservation of biodiversity: In-situ and Ex-situ conservation of biodiversity. Environment Impact Assessment (EIA).

Unit V: (L-6 Hours)

Climate change and Global Warming causes and Measures. Disaster management: floods, earthquake, cyclone and landslides. Social issues and the Environment: Rain water harvesting, watershed management.

Recommended Texts:

1. P.D.Sharma.2003. Ecology and Environment. Rastogi Publication.
2. N. Arumugam and V. Kumaresan. Environmental Studies. Saras Publication.

Reference Books:

1. Agarwal. K.C. 2001. Environmental Biology, Nidi Publications Limited, Bikaner.
2. A.K.De. 1999. Environmental Chemistry, Wiley Eastern Limited, India.
3. Jadhav,H. and Bhosale, V.M.1995. Environmental Protection and Laws,Himalaya Publishing House, Delhi. pp284.
4. Odum, E.P.1971. Fundamentals of Ecology, W.B.Saunders Co., USA. pp.574.

Website and E-learning sources

1. Biodiversity: <https://www.pmfias.com/biodiversity-hotspots-india/>
2. <https://byjus.com/free-ias-prep/biodiversity/>
3. Pollution; <https://www.livescience.com/22728-pollution-facts.html>
4. <https://sciencing.com/types-pollutants-5270696.html>
5. Wildlife Protection Act:
https://www.indiacode.nic.in/handle/123456789/1726?view_type=browse&sam_handle=123456789/1362
6. <https://byjus.com/free-ias-prep/wildlife-protection-act-1972/>

**Part-III B.Com. Business Analytics/ Semester – IV /
Core-07: CORPORATE ACCOUNTING II (U23BA407)**

Lecture Hours	: 75	Tutorial Hours	: -
Practical Hours	: -	No. of Credits	: 5
Contact Hours per Semester: 75			
Contact Hours per Week: 5			
Internal Marks	: 25		
External Marks	: 75		
Total Marks	: 100		

Objectives of the course

The course aims at giving an overall view of the

- types of Amalgamation, Internal and external Reconstruction
- final statements of banking companies
- accounting treatment of Insurance company accounts
- procedure for preparation of consolidated Balance sheet
- modes of winding up of a company

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

CO1: understand the accounting treatment of amalgamation, Internal and external reconstruction.

CO2: construct Profit and Loss account and Balance Sheet of Banking Companies in accordance in the prescribed format.

CO3: synthesize and prepare final accounts of Insurance companies in the prescribed format

CO4: give the consolidated accounts of holding companies.

CO5: preparation of liquidator's final statement of account.

CO-PO and PSO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	3	3	2	2
CO2	3	2	3	2	3	2	3	3	2	2
CO3	3	2	3	2	3	2	3	3	2	2
CO4	3	2	3	2	2	2	3	3	2	2
CO5	3	2	3	2	2	2	3	3	2	2
Total Contribution of COs to POs and PSOs	15	10	15	10	12	10	15	15	10	10
Weighted percentage of Course Contribution to POs	100.00	66.67	100.00	66.67	80.00	66.67	100.00	100.00	66.67	66.67
	0-No Correlation			1-Weak		2-Moderate		3-Strong		

Course Content

Unit-I: Amalgamation, Internal & External Reconstruction (L-15hrs)

Amalgamation – Meaning - Purchase Consideration - Lump sum Method, Net Assets Method Net Payment Method, Intrinsic Value Method - Types of Methods of Accounting for Amalgamation. The Pooling of Interest Method - The Purchase Method (Excluding Inter-Company Holdings). Internal & External Reconstruction: Internal Reconstruction – Conversion of Stock – Increase and Decrease of Capital – Reserve Liability - Accounting Treatment of External Reconstruction.

Unit-II: Accounting of Banking Companies (L-15hrs)

Final Statements of Banking Companies (As Per New Provisions) - Non-Performing Assets - Rebate on Bills Discounted- Profit and Loss a/c - Balance Sheet as Per Banking Regulation Act 1949.

Unit-III: Insurance Company Accounts (L-15hrs)

Meaning of Insurance – Principles – Types – Preparation of Final Accounts of Insurance Companies – Accounts of Life Insurance Business – Accounts of General Insurance Companies -New Format.

Unit-IV: Consolidated Financial Statements (L-15hrs)

Introduction-Holding & Subsidiary Company-Legal Requirements Relating to Preparation of Accounts -Preparation of Consolidated Balance Sheet (Excluding Inter-Company Holdings).E-Commerce, M-Commerce.

Unit-V: Liquidation of Companies (L-15hrs)

Meaning-Modes of Winding Up – Preparation of Statement of Affairs and Statement of Deficiency or Surplus (List H) Order of Payment – Liquidators Remuneration- Liquidator's Final Statement of Accounts.

THEORY 20% & PROBLEMS 80%

Recommended Texts

1. S.P. Jain and K.L Narang. Advanced Accountancy, Kalyani Publishers, New Delhi.
2. Dr.K.S .Raman and Dr. M.A. Arulanandam , Advanced Accountancy, Vol. II, Himalaya Publishing House, Mumbai.
3. R.L. Gupta and M. Radhaswamy, Advanced Accounts, Sultan Chand, New Delhi.
4. M.C. Shukla and T.S. Grewal, Advanced Accounts Vol.II, S Chand & Sons, New Delhi.
5. T.S. Reddy and A.Murthy, Corporate Accounting II, Margham Publishers, Chennai

Reference Books

1. B.Raman, Corporate Accounting, Taxmann, New Delhi
2. M.C.Shukla, Advanced Accounting,S.Chand, New Delhi
3. Prof. MukeshBramhbutt, Devi Ahilya publication, Madhya Pradesh
4. Anil kumar, Rajesh kumar, Advanced Corporate Accounting, Himalaya Publishing house, Mumbai.
5. PrasanthAthma, Corporate Accounting, Himalaya Publishing house, Mumbai.

NOTE: Latest Edition of Textbooks May be Used

Website and E-learning sources

1. <https://www.accountingnotes.net/amalgamation/amalgamation-absorption-and-reconstruction-accounting/126>
2. <https://www.slideshare.net/debchat123/accounts-of-banking-companies>
3. <https://www.accountingnotes.net/liquidation/liquidation-of-companies-accounting/12862>

**Part-III B.Com. Business Analytics/ Semester – IV /
Core-08: COMPANY LAW (U23BA408)**

Lecture Hours	: 75	Tutorial Hours	: -
Practical Hours	: -	No. of Credits	: 5
Contact Hours per Semester: 75			
Contact Hours per Week: 5			
Internal Marks	: 25		
External Marks	: 75		
Total Marks	: 100		

Objectives of the course

The course aims at giving an overall view of the

- Company Law 1956 and Companies Act 2013
- formation of a company
- requisites of meeting and resolution
- procedure to appoint and remove Directors
- various modes of winding up

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

CO1: understand the classification of companies under the act.

CO2: examine the contents of the Memorandum of Association & Articles of Association.

CO3: know the qualification and disqualification of Auditors.

CO4: understand the workings of National Company Law Appellate Tribunal (NCLAT).

CO5: analyse the modes of winding up.

CO-PO and PSO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	2	3	2	3	3	2	3	2	2
CO2	3	2	3	2	3	3	2	3	2	2
CO3	3	2	3	2	3	3	2	3	2	2
CO4	3	2	3	2	3	3	2	3	2	2
CO5	3	2	3	2	3	3	2	3	2	2
Total Contribution of COs to POs and PSOs	15	10	15	10	15	15	10	15	10	10
Weighted percentage of Course Contribution to POs	100.00	66.67	100.00	66.67	100.00	100.00	66.67	100.00	66.67	66.67

0-No Correlation

1-Weak

2-Moderate

3-Strong

Course Content

Unit-I: Introduction to Company law (L-15hrs)

Companies Act 2013 – Definition of a Company, Characteristics of Company – Lifting or Piercing the Corporate Veil – Company Distinguished from Partnership and Limited Liabilities Partnerships – Classification of Companies – Based on Incorporation, Liability, Number of Members, Control

Unit-II: Formation of Company (L-15hrs)

Formation of a Company – Promoter – Incorporation Documents e-filing – Memorandum of Association – Contents – Alteration – Legal Effects – Articles of Association - Certificate of Incorporation – Prospectus – Contents - Kinds – Liabilities – Share Capital – Kinds – Issue – Alteration – Dividend – Debentures.

Unit-III: Meeting (L-15hrs)

Meeting and Resolution – Types – Requisites – Voting & Poll – Quorum – Proxy - Resolution – Ordinary & Special - Audit & Auditors – Qualification, Disqualification, Appointment and Removal of an Auditor.

Unit-IV: Management and Administration (L-15hrs)

Management & Administration – Directors – Legal Position – Board of Directors – Appointment/ Removal – Disqualification – Director Identification Number – Directorships – Powers – Duties – Board Committees – Related Party Transactions – Contract by One Person Company – Insider Trading- Managing Director – Manager – Secretarial Audit – Administrative Aspects and Winding Up – National Company Law Tribunal (NCLT) – National Company Law Appellate Tribunal (NCLAT) – Special Courts.

Unit-V: Winding up (L-15hrs)

Meaning – Modes – Compulsory Winding Up – Voluntary Winding Up – Consequences of Winding Up Order – Powers of Tribunal – Petition for Winding Up – Company Liquidator.

Recommended Texts

1. N.D. Kapoor, Business Laws, Sultan Chand and Sons, Chennai
2. R.S.N. Pillai – Business Law, S.Chand, New Delhi.
3. M.V. Dhandapani, Business Laws Sultan Chand and Sons, Chennai
4. Shusma Aurora, Business Law, Taxmann, New Delhi
5. M.C.Kuchal, Business Law, Vikas Publication, Noida

Reference Books

1. Gaffoor&Thothadri, Company Law, Vijay Nichole Imprints Limited, Chennai
2. M.R. Sreenivasan, Business Laws, Margham Publications, Chennai
3. KavyaAndVidhyasagar, Business Law, Nithya Publication, Bhopal
4. S.D.Geet, Business Law Nirali Prakashan Publication, Pune
5. PreethiAgarwal, Business Law, CA foundation study material

NOTE: Latest Edition of Textbooks May be Used

Website and E-learning sources

1. <https://www.mca.gov.in/content/mca/global/en/acts-rules/companies-act/companies-act-2013.html>
2. <https://vakilsearch.com/blog/explain-procedure-formation-company/>
3. <https://www.investopedia.com/terms/w/windingup.asp>

**Part-III B.Com. Business Analytics/ Semester – IV /
Elective Generic -4: FINANCIAL ECONOMETRICS (U23BA4A1)**

Lecture Hours	: 60	Tutorial Hours	: -
Practical Hours	: -	No. of Credits	: 3
Contact Hours per Semester: 60			
Contact Hours per Week: 4			
Internal Marks	: 25		
External Marks	: 75		
Total Marks	: 100		

Objectives of the course

The course aims at giving an overall view of the

- univariate and multivariate time-series methods, including estimation and statistical model evaluation
- methods for modelling long-run relationships in finance
- methods for modelling volatility and correlation, such as ARCH and gARCH
- ability to forecast volatility
- balanced and unbalanced panel data

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

CO1: the students can apply advanced econometric techniques for analyzing current research topics in applied economics and finance research.

CO2: examine the contents of the Memorandum of Association & Articles of Association. assist students in getting comfortable with applied time series models and panel data models through eviews and stata statistical packages to manage and analyze data.

CO3: provide students with thorough and sound understanding of the essential theoretical base of econometric modelling and broad applications of time-series and panel data econometrics.

CO4: the volatility and conditional leverage effects on the model GARCH.

CO5: appraise the students to formulate the data panel with random effects and model.

CO-PO and PSO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	3	3	2	2
CO2	3	2	2	2	3	2	3	3	2	2
CO3	3	2	3	2	3	2	3	3	2	2
CO4	3	2	2	2	2	2	3	3	2	2
CO5	3	2	3	2	2	2	3	3	2	2
Total Contribution of COs to POs and PSOs	15	10	13	10	12	10	15	15	10	10
Weighted percentage of Course Contribution to POs	100.00	66.67	86.67	66.67	80.00	66.67	100.00	100.00	66.67	66.67

0-No Correlation;

1-Weak;

2-Moderate;

3-Strong

Course Content

Unit-I: Stationarity Univariate Models

(L-12hrs)

Stochastic processes - Properties of stochastic processes. Time series as a discrete stochastic process– Stationarity- Characteristics of stochastic components of time series (mean, auto-covariance and autocorrelation functions). Lag operator- Unit root tests - Deterministic and stochastic trend models- Augmented Dickey Fuller test – Phillips-Perron test

Unit-II: Simultaneous Equation Models

(L-12hrs)

Dynamic simultaneous equations models- Granger causality test - Vector Auto Regressive (VAR) models-Impulse Response Function (IRF)-Variance Decomposition Analysis - Structural Vector Auto Regressive (SVAR) models

Unit-III: Non-Stationary Multivariate Models

(L-12hrs)

Spurious regression- Cointegration- Granger representation theorem -Vector error correction models (VECMs)- Structural VAR models with cointegration - Testing for cointegration – Engle and Granger (1987) and Johansen and Juselius (1990)

Unit-IV: Conditional Variance Models

(L-12hrs)

Volatility Clustering- Leverage Effects- Modeling Volatility- Auto Regressive Conditional Heteroscedasticity (ARCH) Model- Generalized Auto Regressive Conditional Heteroscedasticity (GARCH) Model - Extensions to GARCH-Exponential GARCH and Threshold GARCH models.

Unit-V: Panel Data Models

(L-12hrs)

Introduction to Panel Data - Types of panels- Balanced and Unbalanced Panel Data-Benefits and drawbacks of longitudinal data. Basic models-Pooled OLS-Fixed effects-Random effects Model- Estimation and testing- Fixed vs Random Effects Model -Hausman specification test.

Recommended Text Books

1. Gupta, S. (2020). Statistical Methods, Sultan Chand Publishers. New Delhi
2. R.A. Johnson, and D.W. Wichern, Applied Multivariate Statistical Analysis, Prentice Hall, 1988 India
3. W. Greene, Econometric Analysis, Collier Macmillan, 1993. New York
4. B. H. Baltagi, Econometric Analysis of Panel Data, 4th ed., John Wiley, New York, 2018.
5. J.D. Hamilton, Time Series Analysis, Princeton, NJ: Princeton University Press, 2021. India

Reference Books

1. Gujarati, D. (2020). Econometrics by Example. Palgrave Macmillan Publishers.
2. Kerry Patterson, An Introduction to Applied Econometrics: A Time Series Approach. Palgrave Macmillan, 2020.
3. Walter Enders, Applied Econometric Time Series. New York: John Wiley & Sons, Inc., 1995.
4. Chris Brooks, Introductory Econometrics to Finance - Cambridge University Press, 2018

NOTE: Latest Edition of Textbooks May be Used

Website and E-learning sources

1. www.academic.oup.com
2. www.researchgate.net
3. www.springer.com

**Part-III B.Com. Business Analytics/ Semester – IV /
Elective Generic -4: DIGITAL MARKETING (U23BA4A2)**

Lecture Hours : 60	Tutorial Hours : -
Practical Hours : -	No. of Credits : 3
Contact Hours per Semester : 60	
Contact Hours per Week : 4	
Internal Marks : 25	
External Marks : 75	
Total Marks : 100	

Objectives of the course

The course aims at giving an overall view of the

- basic concepts of digital marketing
- buyer behaviour and marketing communication
- advertising and social networking
- knowledge of digital marketing tool, online marketing matrixes
- Web Marketing Strategies

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

CO1: Remember the scope of digital marketing and how it integrates with overall business and marketing strategy globally .

CO2: Assess various digital channels and understand which are most suitable to an idea or solution.

CO3: Summarise the fundamentals of a digital marketing campaign, and be able to apply it to achieve your business objectives.

CO4: Knowledge on usage of internet for promotion using digital marketing communication.

CO5: Students will be able to establish in web marketing.

CO-PO and PSO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	2	3	3	3	2	3	3	2	3
CO2	3	1	3	3	3	3	3	3	3	3
CO3	3	2	3	3	3	2	3	3	3	3
CO4	3	3	3	3	3	3	3	2	3	3
CO5	3	3	3	3	3	3	3	3	3	3
Total Contribution of COs to POs and PSOs	15	11	15	15	15	13	15	14	14	15
Weighted percentage of Course Contribution to POs	100.00	73.33	100.00	100.00	100.00	86.67	100.00	93.33	93.33	100.00
	0-No Correlation		1-Weak		2-Moderate			3-Strong		

Course Content

Unit-I: Introduction (L-12hrs)

Introduction, Digital Marketing meaning, scope and Importance, Types, Digital Marketing Channels, Traditional Marketing Vs. Digital Marketing, Reason for choosing Digital Marketing, Opportunities and challenges in Digital Marketing,

Unit-II: Online Buyer Behavior (L-12hrs)

Online Buyer Behavior, Website Design, Online user experience, online site design, Integrated Internet Marketing Communications, Interactive Marketing Communication, Search Engine Optimization, Creating and Managing Campaigns.

Unit-III: Digital Promotion Techniques (L-12hrs)

Digital Promotion Techniques: E-Mail marketing, Permission Marketing, Viral Marketing, Social Media Marketing, Content Marketing, Facebook Advertising, Visual Advertising, Display Advertising, Mobile Advertising, Image Advertising, Video Advertising; YouTube Advertising, Concept of SNS Industry (Social Networking Site Industry).

Unit-IV: Google Analytics (L-12hrs)

Google Analytics, Tracking Performance, Tracking Mobile marketing Performance, Web Analytics, Traffic Reports, Behaviour reports, KPIs in analytics, Tracking SMM performance.

Unit-V: Web marketing strategy (L-12hrs)

Web marketing strategy, Web marketing environment, Web Content, Web marketing tools.

Recommended Texts

1. Ryan Damian, Understanding Digital Marketing, Kogan Page, London, UK
2. Parkin Godfrey, Digital Marketing: Strategies for Online Success, New Holland Publishers, London
3. Hanson, W. and Kalyanam, E-Commerce and Web Marketing, Cengage.
4. Puneet Singh Bhatia, Fundamentals of Digital Marketing, Pearson, New Delhi

Reference Books

1. Whitley, David, E-Commerce Strategy, Technologies and Applications, Mcgraw Hill, New Jersey
2. Seema Gupta, Digital Marketing, Mcgraw Hill Education, New Delhi
3. Swaminathan T N, Digital Marketing: From Fundamentals to Future, Cengage Learning, Boston
4. Whitley, David, E-Commerce Strategy, Technologies and Applications, Mcgraw Hill, New Jersey

NOTE: Latest Edition of Textbooks May be Used

Website and E-learning sources

1. <https://digitalfireflymarketing.com/wp-content/uploads/2017/02/Big-Book-of-Digital->
2. <https://www.7boats.com/academy/wp-content/uploads/2016/10/50-shades-of-digital->
3. https://www.redandyellow.co.za/content/uploads/woocommerce_uploads/2017/10/emarketing_te
4. <https://webmarketingacademy.in/wp-content/uploads/2015/09/A-Step-By-Step-Guide-to->
5. <https://www.gbv.de/dms/zbw/865712123.pdf>

**Part-III B.Com. Business Analytics/ Semester – IV /
Elective Generic -4: BUSINESS DATA WAREHOUSING (U23BA4A3)**

Lecture Hours : 60	Tutorial Hours : -
Practical Hours : -	No. of Credits : 3
Contact Hours per Semester : 60	
Contact Hours per Week : 4	
Internal Marks : 25	
External Marks : 75	
Total Marks : 100	

Objectives of the course

The course aims at giving an overall view of the

- concept of Data Warehousing and data discoveries
- occurring patterns, correlations, or associations from datasets
- differentiation between the Classifications and Predictions
- Cluster analysis and Methods
- Data mining tool WEKA and Data sets

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

CO1: sketch the concept of data warehousing and data discoveries

CO2: defend the occurring patterns, correlations, or associations from datasets

CO3: use the classifications and predictions methods

CO4: mapping the cluster analysis and methods.

CO5: relate the data mining tool WEKA and data sets

CO-PO and PSO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	3	3	3	3	3	3	3	3	3	3
CO2	3	3	3	3	3	3	3	3	3	3
CO3	3	3	3	3	3	3	3	3	3	3
CO4	3	3	3	3	3	3	3	3	3	3
CO5	3	3	3	3	3	3	3	3	3	3
Total Contribution of COs to POs and PSOs	15	15	15	15	15	15	15	15	15	15
Weighted percentage of Course Contribution to POs	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

0-No Correlation

1-Weak

2-Moderate

3-Strong

Course Content

Unit-I: Data Warehousing **(L-12hrs)**

Operational Database Systems vs. Data Warehouses - Multidimensional Data Model - Schemas for Multidimensional Databases – OLAP Operations – Data Warehouse Architecture– Indexing – OLAP queries & Tools. Data mining & Data Pre-processing- Introduction to KDD process –Knowledge Discovery from Databases - Need for Data Pre-processing – Data Cleaning – Data Integration and Transformation – Data Reduction – Data Discretization and Concept Hierarchy Generation.

Unit-II: Association Rule Mining **(L-12hrs)**

Introduction - Data Mining Functionalities - Association Rule Mining - Mining Frequent Item sets with and without Candidate Generation - Mining Various Kinds of Association Rules - Constraint-Based Association Mining. Data Mining: Data mining Tasks-Data mining vs KDD- Issues in data mining, Data Mining metrics, Data mining architecture - Data cleaning- Data Transformation-Data reduction - Data mining primitives. Association Rule Mining: Introduction - Mining single dimensional Boolean association rules from transactional databases - Mining multi-dimensional association rules.

Unit-III: Classification & Prediction **(L-12hrs)**

Classification vs. Prediction – Data preparation for Classification and Prediction – Classification by Decision Tree Introduction – Bayesian Classification – Rule Based Classification – Classification by Back Propagation – Support Vector Machines – Associative Classification – Lazy Learners – Other Classification Methods – Prediction – Accuracy and Error Measures – Evaluating the Accuracy of a Classifier or Predictor – Ensemble Methods – Model Section.

Unit-IV: Clustering **(L-12hrs)**

Cluster Analysis: - Types of Data in Cluster Analysis – A Categorization of Major Clustering Methods – Partitioning Methods – Hierarchical methods – Density-Based Methods – Grid-Based Methods – Model-Based Clustering Methods – Clustering High- Dimensional Data – Constraint-Based Cluster Analysis – Outlier Analysis.

Unit-V: Data Mining Tool **(L-12hrs)**

Introduction to WEKA – Loading the data (Simple) - Filtering attributes (Simple) - Selecting attributes (Intermediate) – Training a classifier (Simple) - Building your own classifier (Advanced) - Tree visualization (Intermediate) - Testing and evaluating your models (Simple) Regression models (Simple) - Association rules (Intermediate) - Clustering (Simple) - Reusing models (Intermediate) - Data mining in direct marketing (Simple) - Using Weka for stock value forecasting (Advanced).

Recommended Texts

1. Ian H. Witten and Eibe Frank, Data Mining: Practical Machine Learning Tools and Techniques, Morgan Kaufmann Publications
2. M. H. Dunham, Data Mining: Introductory and Advanced Topics, Imprint Pearson Education
3. Arun K. Pujari, Data Mining Techniques, Universities Press
4. Paulraj Ponniah, Data Warehousing Fundamentals, Wiley India Pvt. Limited
5. Thomas C. Hammergren, Data Warehousing For Dummies, Wiley

Reference Books

1. Parteek Bhatia, Data Mining and Data Warehousing, Cambridge University Press
2. Anahory, Data Warehousing in the Real World, Pearson Education
3. Paulraj Ponniah, Data Warehousing Fundamentals for IT Professionals, Wiley
4. Nagabhushana, S. Data Warehousing OLAP and Data Mining, New Delhi: New Age International (P) Ltd., Publishers,

5. Mourya. S.K. Data mining and data warehousing Oxford, England: Alpha Science International Ltd.,

NOTE: Latest Edition of Textbooks May be Used

Website and E-learning source

1. https://www.vssut.ac.in/lecture_notes/lecture1428550844.pdf
2. <https://mrcet.com /DATA.pdf>
3. https://www.lpude.in/SLMs/ /Sem_1.pdf

**Part-IV B.Com. Business Analytics/ Semester – IV /Skill Enhancement – 5:
Tally ERP 9.0 - U23BA4S5 (Practical)**

Lecture Hours	: -	Tutorial Hours	: -
Practical Hours	: 30	No. of Credits	: 2
Contact Hours per Semester	:		
Practical hours per Week	: 2		
Internal Marks	: 40		
External Marks	: 60		
Total Marks	: 100		

Objectives of the course

The course aims at giving an overall view of the

- To impart knowledge about basic use of Tally and its functions
- To understand the creation of groups and Ledgers
- To provide understanding about Data Management in Tally
- To familiarize students about significance of Tally in implications in the Organizations

Course Learning Outcomes (for mapping with Pos and PSOs)

On completion of the course the students will be able to

- Co1 To understand about the basic accounting and Tally. ERP 9
 Co2 Identify the maintenance of Ledger and inventory system
 Co3 Creation of various vouchers and bill wise details
 Co4 Understand various taxes returns and filing
 Co5 Relate and infer various reports generated in Tally. ERP 9

CO – PO and PSO Mapping (Course Articulation Matrix)

POs & PSOs COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	2	3	2	1	2	2	1	2	2	1
CO2	3	2	3	3	3	1	3	3	1	3
CO3	2	1	1	1	2	2	1	2	2	1
CO4	3	3	3	2	1	2	3	1	2	3
CO5	1	1	2	3	1	3	1	1	3	1
Total Contribution of COs to POs and PSOs	11	10	11	10	9	10	9	9	10	9
Weighted Percentage of COs Contribution to POs and PSOs	73.33	66.67	73.33	66.67	60.00	66.67	60.00	60.00	66.67	60.00

0 – No Correlation

1 – Weak

2- Moderate

3- Strong

LIST OF EXERCISES

1. Fundamentals of Tally. ERP 9 and Configuration
2. Creation/ Setting up of Company in Tally ERP 9.
3. Accounting Master in Tally. ERP 9: Groups & Ledgers Creation
4. Inventory Master in Tally. ERP 9: Creation of Stock Groups and Categories and Units of Measure.
5. Vouchers Entries in Tally. ERP 9: Types of Vouchers, Invoicing, Bill Wise Details,
6. Report and Financial Statements Generation in Tally. ERP 9

Recommended Texts:

1. Journal of Emerging Technologies and Innovative Research
2. Global Journal for Research Analysis
3. Tally.ERP 9 with GST in Simple Steps by DT Editorial Services, Dreamtech Press
4. Vikas Gupta, Comdex Tally, ERP 9 Course Kit with GST and MS Excel, Wiley India, 2017
5. Official Guide To Financial Accounting Using Tally.Erp 9 With Gst by Tally Education, BPB Publications

Reference Books:

1. Shraddha Singh & Navneet Mehra, Tally. ERP 9, V & S Publishers, 2015
2. Official Guide to Financial Accounting using Tally. ERP 9, Fourth Revised & Updated Edition, BPB Publications
3. Vinod Kumar, Tally. ERP 9 Made Easy, Accounting Education
4. Bimlendu Shekhar, Tally Practical Work Book -1, 2nd Edition.
5. Asian's Quintessential Course Tally.ERP 9 with GST by Vishnu Priya Singh edition 2020

Website and E-learning sources

1. <https://tallysolutions.com/learning-hub/>
2. <https://www.tutorialkart.com/tally/tally-tutorial/>
3. <https://sscstudy.com/tally-erp-9-book-pdf-free-download/>
4. <https://tallysolutions.com/tally/how-to-use-gst-in-tally-erp-9/>
5. <https://www.javatpoint.com/tally>

**Part-IV B.Com. Business Analytics/ Semester – III /
Ability Enhancement Course: YOGA AND VALUE EDUCATION
(UR3AE402)**

Lecture Hours : 30	Tutorial Hours : -
Practical Hours: -	No. of Credit : 2
Contact Hours per Semester: 30	
Contact Hours per Week: 2	
Internal Marks : 50	
External Marks : -	
Total Marks : 50	

Objectives of the course

The course aims at giving an overall view of the

- basic concepts of digital marketing
- buyer behaviour and marketing communication
- advertising and social networking
- knowledge of digital marketing tool, online marketing matrixes
- Web Marketing Strategies

Course Learning Outcomes (for Mapping with POs and PSOs)

On completion of the course the students should be able to

CO1: Understand the scientific basis of yoga, importance of practice of yoga and holistic living.

CO2: Get motivated to develop moral values and empathic feeling.

CO3: Identify the tools for a positive self-development.

CO4: Gain a realistic understanding about various social evils and measures to overcome it.

CO-PO and PSO Mapping (Course Articulation Matrix)

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
CO1	2	2	2	2	2	3	2	2	3	3
CO2	2	3	2	3	2	2	2	2	2	2
CO3	2	2	2	2	2	3	2	2	2	2
CO4	2	2	3	3	2	2	2	2	2	3
CO5	2	2	2	2	2	2	2	2	2	2
Total Contribution of COs to POs and PSOs	10	11	11	12	10	12	10	10	11	12
Weighted percentage of Course Contribution to POs	66.67	73.33	73.33	80.00	66.67	80.00	66.67	66.67	73.33	80.00

0-No Correlation

1-Weak

2-Moderate

3-Strong

Course Content

Unit: 1- SCIENCE OF YOGA

(T:03 P: 10 Hours)

Science of Yoga: Meaning - Pancha kosha - **Types of yoga:** Karma yoga – Bakthi Yoga - Jnana yoga - Raja yoga - **Paths of Yoga:** Yama - Niyama - Asana - Pranayama - Prathyahara - Dharana - Dhyana - Samadhi.

(Practice: Suksma Vyama – Surya Namaskar – Basic set of Asanas, Pranayama & yogic kriyas)

Unit: 2 - VALUES FOR LIFE

(T: 04 Hours)

Human Values: Definition - Nature – Types - Process and Significance - **Social Consciousness and responsibility - Holistic living**

Unit: 3 - MORAL DEVELOPMENT

(T: 04 Hours)

Morality: Moral Development - Inherent difficulties in Acquiring moral Values -

Truth – Commitment - Honesty and Integrity - Forgiveness and Love – **Empathy and ability to sacrifice**

Unit: 4 -SELF DEVELOPMENT

(T: 04 Hours)

Self Development: Meaning - Growth mindset - Self-soothing mechanism - Developing resilience – **Body Language** - Good Manners and Etiquette

Unit: 5 -SOCIAL EVILS

(T: 05 Hours)

Social Evils: Meaning - Domestic violence - Corruption - Terrorism - **Measures to eradicate social evils.**

Reference Books

1. Study Material: The work book compiled by the TEAM of GVN College
2. Yoga: (Asanas, Pranayama, Mudra, Kriya) Vivekananda Kendra (1977), Vivekananda Prakasan Trust, Chennai.

E-References

1. <https://www.mea.gov.in/in-focus-article.htm?25096/Yoga+Its+Origin+History+and+Development>
2. <https://www.incredibleindia.org/content/incredibleindia/en/blogs/india-the-land-of-yoga.html>
3. <https://www.artofliving.org/in-en/yoga/yoga-for-beginners/science-behind-yoga>
4. <https://www.livescience.com/35129-yoga-increases-brain-function-bone-density.html>
5. <https://kripalu.org/presenters-programs/science-yoga>