

**UNDER GRADUATE PROGRAMME – B. Com PA**  
**UG SCHEME OF EXAMINATIONS: CBCS PATTERN**  
(For the candidates admitted from the academic year 2023-2024 onwards)

SEMESTER	PART	COURSE CODE	TITLE OF THE COURSE	NATURE OF COURSE	INS. HOURS	CREDIT POINTS	EXAM DURATION	EXAM MARKS		
								CIA	ESE	TOTAL
I	I	23UTML101	TAMIL COURSE I	LAN	6	3	3	25	75	100
		23UHDI101	HINDI COURSE I							
		23UFRH101	FRENCH COURSE I							
	II	23UGEL101 23UAEL101	GENERAL ENGLISH I ADVANCED ENGLISH I	ENG	6	3	3	25	75	100
	III	23UPA1C01	CORE: PRINCIPLES OF ACCOUNTANCY	CC	5	4	3	25	75	100
	III	23UPA1C02	CORE: INFORMATION TECHNOLOGY IN BUSINESS	CC	5	3	3	20	55	75
	III	23UPA1AP1	ALLIED: PRACTICAL I – OFFICE AUTOMATION ( <i>Employability</i> )	AEC	6	4	3	20	30	50
	IV	15UVAL101	VALUE EDUCATION	AEC	2	2	2	-	50	50
II	I	23UTML202	TAMIL COURSE II	LAN	6	3	3	25	75	100
		23UHDI202	HINDI COURSE II							
		23UFRH202	FRENCH COURSE II							
	II	23UGEL202 23UAEL202	GENERAL ENGLISH II ADVANCED ENGLISH II	ENG	6	3	3	25	75	100
	III	23UPA2C03	CORE: FINANCIAL ACCOUNTING	CC	5	4	3	25	75	100
	III	23UPA2C04	CORE: MERCANTILE LAW	CC	5	3	3	20	55	75
	III	23UPA2AP2	ALLIED: PRACTICAL II – COMPUTERISED ACCOUNTING	AEC	6	4	3	20	30	50
III	I	23UTML303	TAMIL COURSE III	LAN	4	3	3	25	75	100
		23UHDI303	HINDI COURSE III							
		23UFRH303	FRENCH COURSE III							
	II	23UGEL303 23UAEL303	GENERAL ENGLISH III ADVANCED ENGLISH III	ENG	4	3	3	25	75	100
	III	23UPA3C05	CORE: ADVANCED FINANCIAL ACCOUNTING	CC	5	5	3	25	75	100
		23UPA3C06	CORE: STRATEGIC MANAGEMENT	CC	3	3	3	20	55	75

		23UPA3C07	CORE: BUSINESS FINANCE	CC	4	3	3	25	75	100
		23UMA3A03/ 23UMA3A04/ 23UMA3A14/ 23UMA3A17	ALLIED: BUSINESS MATHEMATICS	GEN	5	4	3	20	55	75
	IV	22UBTA301	BASIC TAMIL I	AEC	2	2	2	25	25	50
		22UATA301	ADVANCED TAMIL I					-	50	
			INDIAN KNOWLEDGE SYSTEM							
	IV	23UPA3SB1	SB1: BUSINESS COMMUNICATION <i>(Skill Development)</i>	SEC	3	2	3	25	75	100
IV	21UNCCWS1	WOMEN STUDIES	AEC			2	-	50	50	
IV	I	23UTML404	TAMIL COURSE IV	LAN	4	3	3	25	75	100
		23UHDI404	HINDI COURSE IV							
		23UFRH404	FRENCH COURSE IV							
		23UGEL404 23UAEL404	GENERAL ENGLISH IV ADVANCED ENGLISH IV							
	III	23UPA4C08	CORE: CORPORATE ACCOUNTING I	CC	5	5	3	25	75	100
	III	23UPA4C09	CORE: COMPANY LAW AND SECRETARIAL PRACTICE	CC	4	3	3	20	55	75
	III	23UPA4C10	CORE: AUDITING AND ASSURANCE	CC	3	3	3	25	75	100
	III	23UMA4A16/ 23UMA4A04/ 23UMA4A11/ 23UMA4A14	ALLIED: BUSINESS STATISTICS	GEN	5	4	3	20	55	75
	IV	22UBTA402	BASIC TAMIL II	AEC	2	2	2	25	25	50
		22UATA402	ADVANCED TAMIL II					-	50	
21UHUR404		HUMAN RIGHTS								
IV	23UPA4SB2	SB II: ELEMENTS OF MARKETING	SEC	3	2	3	25	75	100	
V	III	23UPA5C11	CORE: APPLIED COST ACCOUNTING	CC	5	5	3	25	75	100
	III	23UPA5C12	CORE: CORPORATE ACCOUNTING II	CC	5	5	3	25	75	100
	III	23UPA5C13	CORE: INCOME TAX LAW AND PRACTICE I <i>(Employability)</i>	CC	5	5	3	25	75	100
	III	23UPA5E01	ELECTIVE: WORKING CAPITAL MANAGEMENT	DSE	5	4	3	25	75	100
		23UPA5E02	ELECTIVE: INVESTMENT MANAGEMENT							

	III	23NPA5E01	NON -MAJOR ELECTIVE: BASIC ACCOUNTING WITH TALLY	GE	4	4	3	25	75	100
	IV	23UPA5SB3	SB III: OFFICE MANAGEMENT ( <i>Skill Development</i> )	SEC	3	2	3	25	75	100
	IV	23IDSBPA1	SB: MARKETING	SEC	3	2	3	25	75	100
VI	III	23UPA6C14	CORE: ACCOUNTING FOR DECISION MAKING	CC	6	5	3	25	75	100
	III	23UPA6C15	CORE: INDIRECT TAXATION	CC	4	3	3	20	55	75
	III	23UPA6C16	CORE: INCOME TAX LAW AND PRACTICE II ( <i>Employability</i> )	CC	5	5	3	25	75	100
	III	23UPA6C17	CORE: BUSINESS ECONOMICS	CC	4	3	3	20	55	75
	III	23UPA6E01	ELECTIVE: CORPORATE GOVERNANCE ( <i>Entrepreneurship</i> )	DSE	5	4	3	25	75	100
		23UPA6E02	ELECTIVE: INTERNET AND E -COMMERCE ( <i>Entrepreneurship</i> )							
	IV	23UPA6SB4	SB IV: BUSINESS ETHICS	SEC	3	2	3	25	75	100
	IV	23IDSBPA1	SB: MARKETING	SEC	3	2	3	25	75	100
	V		EXTENSION AND CO- CURRICULAR ACTIVITIES (NSS/NCC, SPORTS, NECTAR/RSP/YRC/AICUF/ CHETNA WOMEN CELL/ROTRACT/ EDC)		-	1	-	-	-	50
	IV	19UCYS605	CYBER SECURITY	AEC		2	3	-	50	50
	IV		MOOC			2				
			<b>TOTAL</b>			<b>14 0+</b>				<b>380 0+5</b>

#### PART WISE TOTAL MARKS

PART	PAPERS	CREDIT POINTS	TOTAL MARKS
PART I	LANGUAGE –TAMIL/HINDI/FRENCH	12	400
PART II	ENGLISH-GENERAL/ADVANCED	12	400
PART III	CORE	67	1550
	ALLIED	16	250
	ELECTIVE	12	300
PART IV	BASIC TAMIL I AND II ADVANCED TAMIL I AND II INDIAN KNOWLEDGE SYSTEM	4	100

	HUMAN RIGHTS		
	SKILL BASED (6 PAPERS)	12	600
	VALUE EDUCATION	2	50
	WOMEN STUDIES	-	50
	ENVIRONMENTAL STUDIES	2	50
	CO-CURRICULAR ACTIVITIES	1	50
	CYBER SECURITY	2	50
	MOOC COURSE	2	
<b>GRAND TOTAL</b>		<b>140+2+2</b>	<b>3800+50</b>

<b>CERTIFICATE COURSES</b>	<b>HOURS</b>
STOCK MARKETS AND MUTUAL FUNDS	30

<b>SELF STUDY COURSES</b>	<b>OFFERED BY</b>
PHYSICAL & MENTAL HEALTH	COLLEGE
CURRENT AFFAIRS	COLLEGE
FINANCIAL MARKETS AND INSTITUTIONS	DEPARTMENT
PRINCIPLES AND PRACTICES OF AUDITING	DEPARTMENT

<b>NATURE OF COURSES</b>	<b>ABBREVIATIONS</b>
LANGUAGE	LAN
ENGLISH	ENG
CORE COURSE	CC
GENERIC (ALLIED)	GEN
ABILITY ENHANCEMENT COURSE	AEC
SKILL ENHANCEMENT COURSE	SEC
GENERIC ELECTIVE (NME)	GE
DISCIPLINE SPECIFIC ELECTIVE	DSE

### **SEMESTER: I**

**COURSE CODE: 23UPA1C01**

### **CORE COURSE: PRINCIPLES OF ACCOUNTANCY**

#### **OBJECTIVES**

- To enable the students to have complete knowledge of accounting theory and concepts.
- To record the financial transactions by applying the accounting principles.

#### **COURSE OUTCOMES**

At the completion of the course the student will have the ability to:

<b>CO 1</b>	Understand the concepts of accounting and accounting cycle	<b>K1</b>
<b>CO 2</b>	Able to prepare the final accounts of a sole trader	<b>K3</b>
<b>CO 3</b>	Can draft a bill of exchange /Pro-note	<b>K4</b>
<b>CO 4</b>	Get knowledge on practices of consignment and joint venture	<b>K2</b>
<b>CO 5</b>	Prepare the accounts of non-profit organizations	<b>K2</b>

### **SYLLABUS**

**Credits: 4**

**Instructional Hours: 75**

#### **UNIT – I: Fundamentals of Accounting and Accounting Cycle (K1) 15 Hours**

Fundamentals of Book – keeping – Accounting Concepts, Conventions – Journal – Ledger – Subsidiary Books – Trial Balance – Preparation of Bank Reconciliation Statement – Errors and their rectification.

*(Self - Study: Accounting Concepts, Conventions)*

#### **UNIT – II: Final accounts of a sole trader with adjustments (K3) 15 Hours**

Identification of capital and Revenue expenses, profit, receipts and losses - Preparation of Trading account, Profit and Loss account and Balance sheet - Opening, closing and adjusting entries - Two-fold and three-fold effects of adjustments made at the end of the accounting year.

*(Self - Study: Preparation of Trading account, Profit and Loss account and Balance sheet)*

#### **UNIT – III: Bills of Exchange, Account Current and Average due date (K4 ) 15 Hours**

Bills of Exchange - Definition, essentials, Nature, Parties to a Bills of Exchange, Types - Trade bill, Entries in the books of Drawer and Acceptor, discounting, renewal and retiring of a bill (Excluding Accommodation bill) – Average due date: Methods of ascertainment of average due date.

#### **UNIT – IV: Consignment and Joint Venture (K2 ) 15 Hours**

Accounting for Consignment – Meaning, Parties, accounting treatment in the books of consignor and consignee when goods are sent at cost and invoice price, valuation of unsold stock, accounting for loss of goods. Joint Venture- Methods of recording joint venture transactions.

*Beyond Curriculum: Preparation of Joint Venture Account under memorandum method.*

#### **UNIT – V: Accounts of Non-Profit Organization (K2) 15 Hours**

Accounts of Non-Profit Organization – Items specific to non-profit organizations, Preparation of Receipts and Payments Account, Income and Expenditure account and Balance Sheet, difference between receipts and payments account and income and expenditure account. -Disclosure of Accounting Policy AS - 1

**Note: Distribution of marks for Theory and Problems shall be 20% and 80% respectively.**

#### **TEXT BOOK:**

1. Reddy T.S. & Murthy A, (2011) Financial Accounting, (6<sup>th</sup> Revised Edition) Margham Publications, Chennai.

## **REFERENCE BOOKS:**

1. Jain S.P & Narang K.L., (2011) Advanced Accountancy, (18<sup>th</sup> Edition) Kalyani Publishers, New Delhi.
2. Vinayakam N, P.L. Mani & K.L. Nagarajan, (2004), Principles of Accountancy, (5<sup>th</sup> Edition) S. Chand Publishing, New Delhi.
3. Grewal T.S. & Gupta S.C (2016) Introduction to Accountancy, S. Chand Publishing, New Delhi.
4. Gupta R.L. & Gupta, V.K. (2014) Financial Accounting, (3<sup>rd</sup> Edition) Sultan Chand & Sons, New Delhi
5. Gupta S.C., Grewal T.S., Shukla M.C., (2016) Advanced Accounts Vol 1, S. Chand & Company Ltd. New Delhi

## **BLENDED LEARNING**

### **UNIT I Fundamentals of Accounting and Accounting Cycle**

TOPIC	LINKS
Accounting Concepts	<a href="https://youtu.be/4ZZBj2DlqUY">https://youtu.be/4ZZBj2DlqUY</a>
Conventions	<a href="https://youtu.be/iloxOoRw-tg">https://youtu.be/iloxOoRw-tg</a>

### **UNIT II Final accounts of a sole trader with adjustments**

TOPIC	LINKS
Preparation of Trading account	<a href="https://youtu.be/GWyO8qZdCGU">https://youtu.be/GWyO8qZdCGU</a>
Preparation of Trading account	<a href="https://youtu.be/erlfabmH60k">https://youtu.be/erlfabmH60k</a>
Profit and Loss account and Balance sheet	<a href="https://youtu.be/9uqj6NAfLJs">https://youtu.be/9uqj6NAfLJs</a>
Profit and Loss account and Balance sheet	<a href="https://youtu.be/Q_n01ZZ2Cw0">https://youtu.be/Q_n01ZZ2Cw0</a>

## **MAPPING OF CO'S WITH POs/PSOs**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	2	3	1	2	2	2	1	2	1	3	1	3	1	2
CO2	2	3	3	2	3	1	3	3	2	3	3	3	3	3
CO3	2	2	3	2	1	2	1	3	3	1	2	2	2	3
CO4	3	1	3	2	3	2	2	3	3	2	2	2	2	2
CO5	3	2	2	2	3	2	2	3	2	2	2	3	3	3

**Correlation: 1-Low, 2-Medium, 3-High**

## **ASSESSMENT TOOLS**

S.No	Assessment Methods	Frequency of Assessment
1.	End Semester Examination	Once in a Semester
2.	CIA I	Once in a Semester
3.	CIA II	Once in a Semester
4.	Model Examination	Once in a Semester
5.	Assignment (Unit I & II)	Twice in a Semester
6.	Seminar (Unit III & IV)	Twice in a Semester
7.	Other component (Unit V- Financial Statement Analysis of a nonprofit organization)	Once in a Semester

<b>Course designed by</b>	<b>Verified by HOD:</b>
<b>Name: Mrs. S. Suneka</b>	<b>Name: Dr. B. Jayanthi</b>

<b>Checked by CDC</b>	<b>Approved by:</b>
<b>Name: Dr. Lydia. H. Swamy</b>	<b>(Principal)</b>

**Dr V Padmanabhan**

**Dr G Kavitha**

**G. Balasubramaniam, FCS**

**Dr Gnanadesigan**

**Dr A Sulekha**

### **SEMESTER: I**

**COURSE CODE: 23UPA1C02**

### **CORE COURSE: INFORMATION TECHNOLOGY IN BUSINESS**

#### **OBJECTIVES**

- To acquire knowledge of Network and Communication System
- To provide basic conceptual knowledge about the Mobile Commerce and Digital Disruptions

#### **COURSE OUTCOMES**

At the completion of the course the student will have the ability to

<b>CO 1</b>	Provide guidance towards fetching computer related job in business.	<b>K1</b>
<b>CO 2</b>	Identify the need for BPM Implementation	<b>K2</b>
<b>CO 3</b>	Examine the different Information Systems and its application	<b>K2</b>
<b>CO 4</b>	Differentiate the various operating systems and the procedure of E-Commerce.	<b>K2</b>
<b>CO 5</b>	Gain knowledge about the fundamentals of Cyber Security	<b>K3</b>

### **SYLLABUS**

**Total credits: 3**

**Instructional hours: 75**

#### **UNIT I System Concepts and Information System Environment (K1)**

**15 hours**

Introduction – The system concept: definition – Characteristics of a System- Important elements- Information System Components: people, Computer System- Data- Network and Communication System- Classification of Information Systems – Trends in Information Systems- Information Technology as a key Business Enabler

#### **UNIT II Business Process Management and IT (K2)**

**15 hours**

Introduction- Business Process Management- Need for BPM Implementation- challenges in implementing BPA- Business Process Reengineering.

Information Technology – Major Classification – IT in Business –Marketing Systems- Manufacturing Systems

**UNIT III Different Information Systems and its application (K2) 15 hours**

Transaction Processing Systems- Decision Support System – Management Information Systems- Office Automation Systems- Knowledge System – Intelligence data systems – Business Intelligence Systems – A business Marketing Intelligence System Customer Relationship Management- Supply Chain Management- Knowledge Management system Enterprise Resource Planning.

*(Beyond Curriculum: Human Resource Systems – Accounting Systems- Finance management Systems- Cross functional Enterprises Applications)*

**UNIT IV Electronic/ Mobile Commerce and Digital Disruptions (K2) 15 hours**

Introduction to E Commerce, Benefits, Components, E Commerce Revenue model – Electronic Data Interchange, E-Commerce work flow diagram, Process Flow of sale – Authorization Clearing and Settlement of Credit card Facility, Profiling and Personalizing – Core Banking Solution (CBS) – Architecture, Features, and Key Modules of CBS- Core Features- Business process flow of CASA

**UNIT V Fundamentals of Cyber Security (K3) 15 hours**

Information Technology Act -Advantages – Computer related offences - Cybercrime- Introduction – Threats to internet Security – Access Control Security- Transaction Control Security - Information Systems Controls – Data Resources Management Control – Security Management Control – Operations Management Control – Crypto currency- Bit coins- Digital Currency. (*Industry 4.0*)

**Note: Distribution of Mark 100% Theory.**

**TEXT BOOK**

1. SaravanaKumar.R, Parameshwaran.R and Jayalakshmi.T(2012), Information Technology,(First Edition) , S.Chand& Company Limited, New Delhi.

**REFERENCE BOOKS**

1. Alexis Leon & Mathews Leon(2000), Fundamentals of Information Technology, Second Edition,Vikas Publications, New Delhi
2. Ajoy Kumar Rag &TinkuAchargu,(2009), Information Technology Principles and application, Fourth Edition , PHI Learning Private Ltd, New Delhi
3. ChetanSrivastava,(2004)Principles of Information Technology,First EditionKalyani Publishers, New Delhi
4. RizwanAhmed.P,(2014) Introduction to Information Technology,First Edition.Margham Publications, TamilNadu,

**BLENDED LEARNING**

**UNIT IV Electronic/ Mobile Commerce and Digital Disruptions**

TOPIC	LINKS
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Operating System	<a href="https://youtu.be/neLQQdLiEGc">https://youtu.be/neLQQdLiEGc</a>
World Wide Web -	<a href="https://youtu.be/neLQQdLiEGc">https://youtu.be/neLQQdLiEGc</a>
World Wide Web	<a href="https://youtu.be/mwQl9wq70fo">https://youtu.be/mwQl9wq70fo</a>

### **MAPPING OF CO'S WITH PO'S/PEO'S**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
<b>CO 1</b>	3	3	3	1	2	3	3	2	1	3	2	3	3	2
<b>CO 2</b>	2	3	1	3	3	1	1	3	2	3	3	3	3	3
<b>CO 3</b>	2	2	3	2	1	2	3	3	3	1	2	2	2	3
<b>CO 4</b>	3	2	1	2	3	2	2	3	1	2	2	3	2	2
<b>CO 5</b>	3	2	2	2	3	2	2	3	2	2	2	3	3	3

**Correlation: 1-Low, 2-Medium, 3-High**

### **ASSESSMENT TOOLS**

S.No	Assessment Methods	Frequency of Assessment
1.	End Semester Examination	Once in a Semester
2.	CIA I	Once in a Semester
3.	CIA II	Once in a Semester
4.	Model Examination	Once in a Semester
5.	Assignment (Unit I & II)	Twice in a Semester
6.	Seminar (Unit III & IV)	Twice in a Semester
7.	Other component (Unit V- Case Law of RTI)	Once in a Semester

<b>Course designed by</b>	<b>Verified by HOD:</b>
<b>Name: Dr. Mily Williams</b>	<b>Name: Dr. B. Jayanthi</b>
<b>Checked by CDC</b>	<b>Approved by:</b>
<b>Name: Dr. Lydia. H. Swamy</b>	     <b>(Principal)</b>

**Dr V Padmanabhan**

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**G. Balasubramaniam, FCS**

**Dr Gnanadesigan**

**Dr A Sulekha**

**SEMESTER-I**  
**COURSE CODE: 23UPA1AP1**  
**ALLIED- PRACTICAL I COURSE -OFFICE AUTOMATION**  
*(Employability)*

**OBJECTIVES**

- To know the goals of office automation
- To perform accounting operations using automation software.

**COURSE OUTCOME**

At the completion of the course the student will have the ability to:

<b>CO 1</b>	Gain through knowledge of the fundamental concept to perform documentation	<b>K2</b>
<b>CO 2</b>	To perform accounting operations	<b>K2</b>
<b>CO 3</b>	Attain the knowledge about spreadsheet with formula	<b>K2</b>
<b>CO 4</b>	To perform presentation skills	<b>K2</b>
<b>C05</b>	To design the PPT for organization structure	<b>K2</b>

**SYLLABUS**

**Total credits: 4**

**Instructional hours: 90**

**UNIT – I MS WORD (K2)**

**25 Hour**

Prepare Bio Data - Prepare Questionnaire - Prepare an invitation for the company's Annual general meeting [Using text boxes and clip arts] - Prepare a business letter about sales decline - Design a bill [ Using drawing tool, clip art, symbols word art, borders and shading] - Preparation of Class timetable [inserting table, data entry, alignment of rows and columns, inserting and deleting rows] - Draft the Chairman Speech / Auditor Report / Minutes / Agenda / [perform the alignment functions].

**UNIT – II MS EXCEL (K2)**

**25 Hour**

Prepare the employee pay roll table - Prepare final accounts (by using formulas and linking from next sheets) - Draw the different types of charts - Draw product life cycle - Draw Break – even chart - Prepare the student Mark Statement [Total, Average, Percentage, & Grading] - Demand and Supply Curve.

**UNIT – III MS ACCESS (K2)**

**20**

**Hour**

Create a database for the students [viewing in multiple forms] - Prepare a label for 10 addresses [viewing in labels].

**UNIT – IV MS POWERPOINT (K2)****10****Hour**

Prepare an advertisement for a product. [Using pictures, Colours, borders and text]

**UNIT – V PREPARATION OF SLIDES (K2)****10****Hour**

Prepare slides for organizational structure - Presentation for a seminar [Display in one slide (5 slides)].

**MAPPING OF CO'S WITH POs/PSOs**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	3	2	3	2	2	2	1	2	2	3	1	3	3	2
CO2	2	3	1	3	3	1	2	3	2	3	3	3	3	3
CO3	2	2	3	2	3	2	1	3	3	2	2	1	2	3
CO4	3	3	1	2	3	2	2	3	1	2	2	2	2	2
CO5	3	2	2	2	3	2	2	3	2	2	2	3	3	3

**Correlation: 1-Low, 2-Medium, 3-High**

<b>Course designed by</b>	<b>Verified by HOD:</b>
<b>Name: Mrs. S. Suneka</b>	<b>Name: Dr. B. Jayanthi</b>
<b>Checked by CDC</b>	<b>Approved by:</b>
<b>Name: Dr. Lydia. H. Swamy</b>	<b>(Principal)</b>

**Dr V Padmanabhan****Dr G Kavitha****G. Balasubramaniam, FCS****Dr Gnanadesigan****Dr A Sulekha****SEMESTER: II****COURSE CODE: 23UPA2C03****CORE COURSE- FINANCIAL ACCOUNTING****OBJECTIVES**

- To educate the drawback of single entry system and how the double entry system is applied to overcome the drawback.

- To illustrate the preparation of accounts of different organizations.

### **COURSE OUTCOME**

At the completion of the course the student will have the ability to:

<b>CO 1</b>	Ascertain the financial results from the incomplete records	<b>K2</b>
<b>CO 2</b>	Understand the concepts and methods of depreciation, Accounting treatment for Investment and Insurance Claims	<b>K2</b>
<b>CO 3</b>	Prepare the financial accounts of branches and understand the concepts of hire purchase system	<b>K2</b>
<b>CO 4</b>	Prepare the accounts of an insolvent and accounting treatment in Royalty transactions	<b>K2</b>
<b>CO 5</b>	Possess knowledge on Human resource, Farm and Inflation Accounting	<b>K2</b>

### **SYLLABUS**

**Credits: 4**

**Instructional Hours: 75**

#### **UNIT – I Single Entry (K2)**

**15 Hours**

Single entry system, Difference between Single entry & Double entry - Ascertainment of Profit under Single entry system, Net Worth method & Conversion method

*(Self – Study: Difference between Single entry & Double entry)*

#### **UNIT – II Depreciation, Investments and Insurance claims (K2)**

**15 Hours**

Accounting for Depreciation – Causes and Significance of Depreciation, Methods of providing depreciation - Straight Line Method, Written down Value Method - Investments accounts, Cum - Interest & Ex-Interest Quotations – Insurance claims (Loss of stock & Consequential Loss). AS – 13 – Accounting for Investments

*(Self – Study: Causes and Significance of Depreciation)*

#### **UNIT–III Branch accounts, Hire purchase and Installment system (K2)**

**18 Hours**

Branch accounts, Types of Branches - Branches keeping and not keeping full system of accounting - Debtors system, Final account system, Stock & Debtors system, and Wholesale Branch system - Independent branches. Hire purchase and Installment system, accounting treatment in the books of Buyer and Seller.

#### **UNIT – IV Insolvency & Royalty (K2)**

**17 Hours**

Insolvency of individual, conditions for declaration of Insolvency, preparation of Statement of Affairs & Deficiency Account – Royalty Accounts - Entries in books of Lessor and Lessee (excluding sublease).

*(Beyond Curriculum: Insolvency – Meaning – Distinction between insolvency of an individual and a partnership firm – Statement of affairs and deficiency account – Difference between Balance sheet and Statement of affairs)*

## UNIT – V Human Resource Accounting (K2)

**10 Hours**

Human Resource Accounting: Definition-Objectives-Methods-Advantages-Disadvantages –

Inflation Accounting: Definition-Objectives-Methods-Advantages-Disadvantages-Accounting for price level changes – Farm Accounting.

**Note: Distribution of marks for Theory and Problems shall be 20% and 80% respectively.**

### **TEXT BOOK:**

1. Reddy T.S. & Murthy A, (2011) Financial Accounting, (6<sup>th</sup> Revised Edition) Margham Publications, Chennai.

### **REFERENCE BOOKS:**

- 1.Jain S.P & Narang K.L., (2011) Advanced Accountancy, (18<sup>th</sup> Edition) Kalyani Publishers, New Delhi.
2. Vinayakam N, P.L.Mani & K.L.Nagarajan, (2004), Principles of Accountancy, (5<sup>th</sup> Edition) S. Chand Publishing, New Delhi.
3. Grewal T.S. & Gupta S.C (2016) Introduction to Accountancy, S. Chand Publishing, New Delhi.
4. Gupta R.L. & Gupta, V.K. (2014) Financial Accounting, (3<sup>rd</sup> Edition) Sultan Chand & Sons, New Delhi
5. Gupta S.C., Grewal T.S., Shukla M.C, (2016) Advanced Accounts Vol 1, S. Chand & Company Ltd. New Delhi

### **BLENDED LEARNING**

## **UNIT V Human Resource Accounting**

TOPIC	LINKS
Human Resource Accounting	<a href="https://mail.google.com/mail/u/3?ui=2&amp;ik=4fcc7fad37&amp;attid=0.1&amp;permmsgid=msg-a:r-5663971426944899210&amp;th=175703efaeceafa&amp;view=att&amp;disp=inline&amp;realattid=175703e820adb2718a01">https://mail.google.com/mail/u/3?ui=2&amp;ik=4fcc7fad37&amp;attid=0.1&amp;permmsgid=msg-a:r-5663971426944899210&amp;th=175703efaeceafa&amp;view=att&amp;disp=inline&amp;realattid=175703e820adb2718a01</a>
Inflation Accounting	<a href="https://mail.google.com/mail/u/3?ui=2&amp;ik=4fcc7fad37&amp;attid=0.1&amp;permmsgid=msg-a:r8476600744924917533&amp;th=175703f04821c444&amp;view=att&amp;disp=inline&amp;realattid=175703d8f088bb998d51">https://mail.google.com/mail/u/3?ui=2&amp;ik=4fcc7fad37&amp;attid=0.1&amp;permmsgid=msg-a:r8476600744924917533&amp;th=175703f04821c444&amp;view=att&amp;disp=inline&amp;realattid=175703d8f088bb998d51</a>

### **MAPPING OF CO'S WITH POs/PSOs**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO11	PO12	PSO 1	PSO 2
CO1	2	3	2	1	2	3	1	2	1	3	2	3	2	2
CO2	2	3	3	3	3	2	2	3	2	3	3	3	3	3
CO3	2	2	3	2	2	2	1	3	3	2	2	1	2	3
CO4	3	2	1	2	3	2	2	3	1	2	2	3	2	2
CO5	3	2	2	2	3	2	2	3	2	2	2	3	3	3

**Correlation: 1-Low, 2-Medium, 3-High**

### **ASSESSMENT TOOLS**

S.No	Assessment Methods	Frequency of Assessment
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1.	End Semester Examination	Once in a Semester
2.	CIA I	Once in a Semester
3.	CIA II	Once in a Semester
4.	Model Examination	Once in a Semester
5.	Assignment (Unit I & II)	Twice in a Semester
6.	Seminar (Unit III & IV)	Twice in a Semester
7.	Other component (Unit V – Identify Various insurance policies)	Once in a Semester

<b>Course designed by</b>	<b>Verified by HOD:</b>
<b>Name: Mrs. S. Suneka</b>	<b>Name: Dr. B. Jayanthi</b>
<b>Checked by CDC</b>	<b>Approved by:</b>
<b>Name: Dr. Lydia. H. Swamy</b>	         <b>(Principal)</b>

**Dr V Padmanabhan**

**Dr G Kavitha**

**G. Balasubramaniam, FCS**

**Dr Gnanadesigan**

**Dr A Sulekha**

**SEMESTER: II**

**COURSECODE: 23UPA2C04**

**CORE COURSE - MERCANTILE LAW**

### **OBJECTIVES**

- To test the general comprehension of elements of mercantile law.
- To understand provisions of various acts under mercantile law.

### **COURSE OUTCOMES**

At the completion of the course the student will have the ability to

<b>CO 1</b>	Identify the fundamental and legal principles behind the essentials of the contract.	<b>K1</b>
<b>CO 2</b>	Classify the discharge of contract on the basis of performance, lapse of time operation of law.	<b>K2</b>
<b>CO 3</b>	Gain knowledge about the provisions of creation & termination of agency.	<b>K2</b>
<b>CO 4</b>	Impart the knowledge of provision relating to the sale of goods act 1930.	<b>K2</b>

<b>CO 5</b>	Acquire Knowledge of FEMA 1999 & Competition act 2002.	<b>K2</b>
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## SYLLABUS

**Total credit: 3**

**Instructional hours: 75**

### **UNIT I**

**15 Hours**

#### **Indian Contract Act 1872 (K1 level)**

Indian Contract Act 1872 – Contract – Definition – Obligation and Agreement – Nature of Contract and Classification – Essential Elements of a Valid Contract – Offer and Acceptance – Consideration – Capacity – Free Consent – Unlawful Agreement – Quasi Contract.

*(Self Study: Essential elements of a Valid Contract)*

### **UNIT II**

**15 Hours**

#### **Discharge of Contract (K2)**

Discharge of Contract – Remedies for Breach – Principles for Awarding Damages – Bailment-Pawn or Pledge – Rights of Pawnee – Rights and Liabilities of Finder of Lost Goods.

### **UNIT III**

**15 Hours**

#### **Contract of Indemnity and Guarantee (K2)**

Contract of Indemnity and Guarantee – Rights of Surety – Discharge of Surety -Law of Agency – Kinds of Agency – Creation of Agency– Rights and Liabilities of Principal and Agents- Termination of Agency.

*(Beyond The Curriculum: Performance of Contract - Delivery of Goods, Rights and Duties of Buyers)*

*(Self Study: Creation of Agency)*

### **UNIT IV**

**15 Hours**

#### **Sale of goods Act 1930 (K2)**

Sale of goods Act 1930 – Definition of Sale and Distinction between “Sale and Related Transaction Resembling Sale” – Sale of Agreement to Sell – Rules regarding Passing of Property in Goods – Conditions and Warranties – Actual and Implied – Principles of “CAVEAT EMPTOR” –Rights of Unpaid Vendor.

### **UNIT V**

**15 Hours**

#### **FEMA 1999 (K2)**

FEMA 1999 – Competition Act 2002

**Note: Distribution of Mark 100% Theory.**

## **TEXT BOOKS**

KapoorN.D,(2013),Elements of Mercantile Law,Thirty Fourth Edition,Sultan Chand & Sons, New Delhi

### **REFERENCE BOOKS**

1. Gogna P.P(2014),Mercantile Law,Sixth Edition, S, S. Chand and Company Ltd, New Delhi.
2. Tulsian P.C, .(2010)Mercantile law for CA Common Proficiency Test (CPT),Second Edition Tata McGraw Hill Publishing Company, New Delhi.
3. Kuchhal M.C and VivekKuchhall, (2012), Mercantile Law,Eighth Edition,Vikas publishing house.
4. Jain V.K,(2014), Mercantile Laws,Second EditionTaxmann Publications PvtLtd,New Delhi

### **BLENDLED LEARNING**

#### **UNIT IV Sale of goods Act 1930**

TOPIC	LINK
Sale of goods Act 1930	<a href="https://youtu.be/HLz3GQvks7E">https://youtu.be/HLz3GQvks7E</a>

### **MAPPING OF COs WITH POs/PSOs**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO2
CO 1	3	2	3	1	2	1	1	2	1	3	1	3	1	2
CO 2	2	3	1	3	3	1	2	3	2	3	3	3	3	3
CO 3	2	2	3	2	3	2	1	3	3	1	2	1	2	3
CO 4	3	1	1	2	3	2	2	3	1	2	2	1	2	2
CO 5	3	2	2	2	3	2	2	3	2	2	2	3	3	3

**Correlation: 1-Low, 2-Medium,3-High**

### **ASSESSMENT TOOLS**

S.No	Assessment Methods	Frequency of Assessment
1.	End Semester Examination	Once in a Semester
2.	CIA I	Once in a Semester
3.	CIA II	Once in a Semester
4.	Model Examination	Once in a Semester
5.	Assignment (Unit I & II)	Twice in a Semester
6.	Seminar (Unit III & IV)	Twice in a Semester
7.	Other component (Unit V – Case Study)	Once in a Semester

Course designed by	Verified by HOD:
Name: Mrs. Mohana Priya. T	Name: Dr. B. Jayanthi
Checked by CDC	Approved by:
Name: Dr. Lydia. H. Swamy	(Principal)



**Dr V Padmanabhan**

**Dr G Kavitha**

**G. Balasubramaniam, FCS**

**Dr Gnanadesigan**

**Dr A Sulekha**

**SEMESTER: III**

**COURSE CODE: 23UPA2AP2**

**ALLIED PRACTICAL COURSE: COMPUTERISED ACCOUNTING**

***(Employability)***

**OBJECTIVES**

- To enable the students to learn Tally software
- To enlighten the students on the accounting concepts using Tally

**Course Outcomes:**

At the completion of the course the student will have the ability to

<b>CO 1</b>	Get knowledge of the fundamental concepts on Accountancy and Tally	<b>K2</b>
<b>CO 2</b>	Prepare Single and multiple ledger	<b>K2</b>
<b>CO 3</b>	Apply and practice about the various accounting vouchers	<b>K3</b>
<b>CO 4</b>	Prepare accounts for various entities under different situations.	<b>K4</b>
<b>CO 5</b>	Prepare Bank Reconciliation statement, Bill wise and Printing the Statement	<b>K4</b>

**SYLLABUS**

**Total Credit: 4**

**Instructional hours: 90**

**I. Introduction, Company Creation and Alteration**

**20 Hour**

Introduction to the computerized accounting – Objectives – Usage of short cut keys in Tally  
9.2.- Creation and Alteration - Tally vault password - security control for the company

**II. Ledger Creation and Alteration**

**20 Hour** Creating

the ledger – Single ledger – Multiple ledger – Altering the ledger for the cash balance – View the ledger Created.

**III. Creation and Voucher type**

**20 Hour**

Creation of Vouchers – Purchase Voucher – Sales Voucher – Payment Voucher – Receipt Voucher – Contra Voucher – Journal Voucher – Debit Note – Credit Note.

#### **IV. Preparation of Trial Balance and Final accounts of the Company 20 Hour**

Preparation of the Trial balance using ledger and check the total balance of the ledger. Preparing the Trading, Profit and Loss – Balance Sheet of the Company with the help of the trial balance (with minimum five adjustments).

#### **V. Bank Reconciliation statement, Bill wise and Printing the Statement 20 Hour**

Rectifying errors in the Bank book and Cash book-Preparing Bill wise Outstanding statements for the Sundry debtors (for the purpose of sales dealing with debtors) Cheque Print – Debit Note – Credit Note – Vouchers Print - Ledger – Trial Balance – Profit and Loss – Balance Sheet.

#### **MAPPING OF COs WITH POs/PSOs**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO10	PO 11	PO 12	PSO 1	PSO 2
<b>CO 1</b>	3	2	3	1	2	1	3	2	1	3	1	3	3	2
<b>CO 2</b>	2	3	1	3	3	2	2	3	2	3	3	3	3	3
<b>CO 3</b>	2	2	3	2	3	2	1	3	3	2	2	2	2	3
<b>CO 4</b>	3	2	1	2	3	2	2	3	1	2	2	1	2	2
<b>CO 5</b>	3	2	2	2	3	2	2	3	2	2	2	3	3	3

**Correlation: 1-Low, 2-Medium, 3-High**

<b>Course designed by</b>	<b>Verified by HOD:</b>
<b>Name: Mrs. S. Suneka</b>	<b>Name: Dr. B. Jayanthi</b>
<b>Checked by CDC</b>	<b>Approved by:</b>
<b>Name: Dr. Lydia. H. Swamy</b>	          <b>(Principal)</b>

**Dr V Padmanabhan**

**Dr G Kavitha**

**G. Balasubramaniam, FCS**

**Dr Gnanadesigan**

**Dr A Sulekha**

**SEMESTER: III**  
**COURSE CODE: 23UCB3C06**

**TITLE OF THE COURSE: CORE - BUSINESS DATA MINING**  
*(Employability & Skill Development)*

**OBJECTIVES**

- To understand data mining techniques and algorithm in business analytics.
- To apply data preprocessing techniques and tools to solve business problems.

**COURSE OUTCOMES**

**At the end of the course the student will be able to:**

<b>CO 1</b>	Define the concepts of data warehousing, data mining and data preprocessing	<b>K1</b>
<b>CO 2</b>	Outline the concepts of association rule mining	<b>K2</b>
<b>CO 3</b>	Define the concepts of classification of predication of data using c++	<b>K3</b>
<b>CO 4</b>	Explain the methods of clustering using C++	<b>K3</b>
<b>CO 5</b>	Analyze the data mining tool	<b>K3</b>

**Syllabus**

**Credit Points- 3**

**Instructional Hours: 60 hours**

**Unit I : Data Warehousing (K1)**

**12 Hours**

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

*Self - Study : OLAP queries & Tools. Datamining & Data Preprocessing*

**Unit II : Association Rule Mining(K2)**

**12 Hours**

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.

***Beyond Curriculum: Mining multi- dimensional association rules.***

### **Unit III : Classification & Prediction(K3)**

**12 Hours**

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.

***Self - Study :*** Other Classification Methods

### **Unit IV : Clustering (K3)**

**12 Hours**

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 (K3)**

**12 Hours**

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).

**Note: 100% Theory.**

#### **Text Book(s)**

1. Jiawei Han and Micheline Kamber – Data Mining Concepts and Techniques – Morgan Kaufman – 2011 3rd Edition.
2. M. H. Dunham – Data Mining Introductory and Advanced Topics, Imprint Pearson Education, 2011 4th Impression.

## Reference Books

1. Ian H. Witten and Eibe Frank – Data Mining Practical Machine Learning Tools and Techniques, Morgan Kaufmann Publication – 2016 4th Edition.
2. Arun K. Pujari – Data Mining Techniques, Universities Press (India) Pvt. Ltd., 2013 Kindle Edition.

## BLENDED LEARNING

UNIT	TOPIC	SOURCE	LINKS
Unit IV	Data Modeling	XENONSTACK	<a href="https://www.xenonstack.com/insights/data-modelling">https://www.xenonstack.com/insights/data-modelling</a>
Unit V	BI for ERP systems	In4Velocity	<a href="https://www.in4velocity.com/blog/role-of-business-intelligence.html">https://www.in4velocity.com/blog/role-of-business-intelligence.html</a>

## MAPPING OF CO'S WITH POs/PSOs

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
CO1	3	1	1	1	3	3	1	1	1	2	2	2	3	1
CO2	3	1	1	1	2	2	3	1	2	2	3	2	3	2
CO3	3	1	2	2	1	1	3	2	2	3	1	3	3	2
CO4	3	1	2	2	3	2	3	2	2	3	2	2	3	2
CO5	3	1	1	1	3	2	3	2	3	3	2	3	3	2

Correlation: 3-High, 2-Medium, 1-Low






## ASSESSMENT TOOLS

S.No.	Assessment Methods	Frequency of Assessment
1.	End semester Examinations	Once in a semester
2.	CIA I	Once in a semester
3.	CIA II	Once in a semester
4.	Model Examination	Once in a semester

5.	Assignment (Unit I & II)	Twice in a semester
6.	Seminar (Unit III & IV)	Twice in a semester
7.	Other Component (Open Book Test)	Once in a semester

<b>Course designed by:</b>	<b>Verified by HOD:</b>
<b>Name: Dr.C. Goldbell Rachel</b>	<b>Name: Dr.C. Goldbell Rachel</b>
<b>Checked by CDC:</b>	<b>Approved by :</b>
<b>Name: Dr.S.Jaculin Arockia Selvi</b>	<b>(Principal)</b>

### MEMBERS OF BOARD OF STUDIES

				
Dr.M.NIRMALA Assistant Professor, Department of Commerce, Bharathiar University, Coimbatore	Dr.T.M.HEMALATHA Dean School of Commerce, Rathinam College of Arts and Science Coimbatore	Dr.G.VENGATESAN Associate Professor and Head Department of B. Com (Business Analytics) KPR College of Arts Science and Research Avinashi Road, Arasur, Coimbatore	Dr. S. GOWRI Associate Professor and Head Dept of Commerce Business Analytics PSG College of Arts & Science, Coimbatore	Mr.B.SIVA KUMAR CEO, Crewmates HR Consultancy Firm & LEN DAN Event Management, Coimbatore.

**SEMESTER: III**  
**COURSE CODE: 23UCB3CP1**  
**TITLE OF THE COURSE : CORE PRACTICAL I: PYTHON PROGRAMMING**  
**(Employability)**

**COURSE OBJECTIVES :**

- To Understand various statistical calculations
- To explore and acquire skills in Python Programming

**COURSE OUTCOMES :**

**At the completion of the course the student will have the ability to**

<b>CO 1</b>	Understand and relate statistical calculations	<b>K2</b>
<b>CO 2</b>	Apply and describe pandas	<b>K3</b>
<b>C03</b>	Practically apply plotting graphs	<b>K3</b>

**SYLLABUS**

**Total Credits - 3**

**Instructional hours: 45**

**1. Word frequency analysis**

**Exercise 1.1.** Write a program that reads a file, breaks each line into words, strips whitespace and punctuation from the words, and converts them to lowercase.

**Exercise 1.2.** Go to Project Gutenberg (<http://gutenberg.org>) and download your favorite out-of-copyright book in plain text format. Modify your program from the previous exercise to read the book you downloaded, skip over the header information at the beginning of the file, and process the rest of the words as before.

Then modify the program to count the total number of words in the book, and the number of times each word is used. Print the number of different words used in the book. Compare different books by different authors, written in different eras. Which author uses the most extensive vocabulary?

**Exercise 1.3.** Modify the program from the previous exercise to print the 20 most frequently- used words in the book.

**Exercise 1.4.** Modify the previous program to read a word list (see Section 9.1) and then print all the words in the book that are not in the word list. How many of them are typos? How many

of them are common words that should be in the word list, and how many of them are really obscure?

## **2. Random numbers**

**Exercise 2.1.** Write a function named `choose_from_hist` that takes a histogram as defined in and returns a random value from the histogram, chosen with probability in proportion to frequency.

## **3. Word histogram**

**Exercise 3.1** Reads a file and builds a histogram of the words in the file Exercise 3.2.reads `emma.txt`, which contains the text of Emma by Jane Austen.

**Exercise 3.3** Updates the histogram by creating a new item or incrementing an existing one.  
Exercise 3.4. Count the total number of words in the file by add up the frequencies in the histogram.

## **4. Most common words**

**Exercise 4.1.** Find the most common words by applying the DSU pattern; `most common` takes a histogram and returns a list of word-frequency tuples, sorted in reverse order by frequency.

**Exercise 4.2.** Print the ten most common words.

## **5. Optional parameters**

**Exercise 5.1.** Prints the most common words in a histogram.

## **6. Dictionary subtraction**

**Exercise 6.1.** Python provides a data structure called `set` that provides many common set operations.

**Exercise 6.2.** Write a program that uses set subtraction to find words in the book that are not in the word list.

## **7. Random words**

**Exercise 7.2:** Use keys to get a list of the words in the book, Build a list that contains the cumulative sum of the word frequencies. The last item in this list is the total number of words in the book, `n`, Choose a random number from 1 to `n`. Use a bisection search to find the index where the random number would be inserted in the cumulative sum, Use the index to find the corresponding word in the word list.

**Exercise 7.2.** Write a program that uses this algorithm to choose a random word from the book.

## **8. Markov analysis**

➤ Read a text from a file and perform Markov analysis



- Add a function to the previous program to generate random text based on the Markov analysis.
- Finally mashup:

### 9. Docstrings for polygon, arc and circle.

Draw a stack diagram that shows the state of the program while executing circle(bob,radius).

**Note: Distribution of Mark 100% Practical.**

### MAPPING OF CO'S WITH PO'S/PEO'S





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CO 2	3	3	2	3	3	1	1	2	1	2	2	2	2	2
CO 3	2	2	2	2	2	2	1	2	1	1	1	1	3	3

(Correlation: 3-High, 2-Medium, 1-Low)

### ASSESSMENT TOOLS

S.No	Assessment Methods	Frequency of Assessment
1.	End semester Examination	Once in a semester
2.	Test	Twice in a semester
3.	Record	Every Exercise

<b>Course designed by:</b>	<b>Verified by HOD:</b>
<b>Name: Dr.C. Goldbell Rachel</b>	<b>Name: Dr.C. Goldbell Rachel</b>
<b>Checked by CDC:</b>	<b>Approved by :</b>
<b>Name: Dr.S.Jaculin Arockia Selvi</b>	<b>(Principal)</b>

	T.M. Henth			
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Dr.M.NIRMALA Assistant Professor, Department of Commerce, Bharathiar University, Coimbatore	Dr.T.M.HEMALATHA Dean School of Commerce, Rathinam College of Arts and Science Coimbatore	Dr.G.VENGATESAN Associate Professor and Head Department of B. Com (Business Analytics) KPR College of Arts Science and Research Avinashi Road, Arasur, Coimbatore	Dr. S. GOWRI Associate Professor and Head Dept of Commerce Business Analytics PSG College of Arts & Science, Coimbatore	Mr.B.SIVA KUMAR CEO, Crewmates HR Consultancy Firm & LEN DAN Event Management, Coimbatore.
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### SEMESTER: III

**COURSE CODE: 23UCB3SB1**

**TITLE OF THE COURSE: SKILL BASED – BUSINESS COMMUNICATION**

*(Skill Development)*

#### OBJECTIVES

- To create an awareness on the types and importance of communication.
- To enable them to develop their writing skills through various forms of business letters.

#### COURSE OUTCOMES

**At the end of the course the student will be able to:**

<b>CO 1</b>	Identify the do's and don'ts of communication	<b>K1</b>
<b>CO 2</b>	Familiarize with the different types of communication	<b>K2</b>
<b>CO 3</b>	Acquaint with layout of a business letter	<b>K3</b>
<b>CO 4</b>	Draft enquiry, order and sales letters	<b>K3</b>
<b>CO 5</b>	Draft compliant, adjustment, collection and circular letters	<b>K3</b>

#### Syllabus

**Credit Points - 2**

**Total hours: 45 hours**

**UNIT – I: Fundamentals of Communication (K1)****9 hours**

Principles of Communication: Definition – Process - Objectives – Communication Network – 7C's and 4S's in Communication.

*(Self – Study: Process of Communication)*

**UNIT-II: Types and Barriers of Communication (K2)****9 hours**

Types of Communication: Oral, Written and Gesture – Barriers to Communication.

**UNIT –III: Layout and Functions of Business Letter (K3)****9 hours**

Need and Functions of Business Letter – Effective Business Letter –Layout of Business Letter.

**UNIT – IV: Basic Business Letters (K3)****9 hours**

Types of Business Letters: Inquiries - Orders - Credit Letters – Sales Letters.

**UNIT – V: Business Letters (K3)****9 hours**

Claim or Complaint Letters – Adjustment Letters– Collection Letters – Circular Letters.

*(Self – Study: Circular Letters)*

**Note: 100% Theory.**

**TEXT BOOK:**

Rajendra Pal and Korlahalli J.S, (2012)13th edition Essentials of Business Communication, Sultan Chand &Company Ltd, New Delhi

**REFERENCE BOOKS:**

1. Gupta C.B,(2016) 10th edition Business communication, Sultan Chand & Sons, New Delhi.
2. Pillai R S N and Mrs.Bagavathi,(2013) 10th edition Commercial Correspondence & Office Management, Sultan Chand & Company, New Delhi.
- 3.Sunder K & Kumara Raj A, (2017) Business communication, Vijay Nicole Imprints Pvt. Ltd, Chennai
- 4.Raman B.S,(2012) 2nd edition Business communication, United Publishers, Karnataka.
5. Nishitesh and Dr.Bhaskara Reddi,(2012) Soft Skills and Life Skills: The Dynamics of Success, BSC Publishers and Distributors, Hyderabad.

**BLENDED LEARNING**

UNIT	TOPIC	SOURCE	LINKS
I	Principles of Communication	e-PG Pathshala	<a href="https://youtu.be/r3chnW3jD3c">https://youtu.be/r3chnW3jD3c</a>

	Effective Communication	e-PG Pathshala	<a href="https://youtu.be/fFemIRdVhHQ">https://youtu.be/fFemIRdVhHQ</a>
II	Types of Communication	e-PG Pathshala	<a href="https://youtu.be/CCwS-21ruNA">https://youtu.be/CCwS-21ruNA</a>

### MAPPING OF CO'S WITH POs/PSOs






	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
CO1	3	1	1	1	2	1	3	2	3	2	1	3	3	2
CO2	3	1	1	1	2	1	3	2	3	2	1	3	3	2
CO3	3	1	1	1	2	2	3	2	3	2	1	3	3	2
CO4	2	1	1	1	2	2	3	2	3	2	1	3	3	2
CO5	2	1	1	1	2	2	3	2	3	2	1	3	3	2

Correlation: 3-High, 2-Medium, 1-Low

### ASSESSMENT TOOLS

S.No	Assessment Methods	Frequency of Assessment
1.	End semester Examinations	Once in a semester
2.	CIA I	Once in a semester
3.	CIA II	Once in a semester
4.	Model Examination	Once in a semester
5.	Assignment (Unit I & II)	Twice in a semester
6.	Seminar (Unit III & IV)	Twice in a semester
7.	Other Component (Letter writing)	Once in a semester

<b>Course designed by:</b>	<b>Verified by HOD:</b>
<b>Name: Dr.C.Goldbell Rachel</b>	<b>Name: Dr.C.Goldbell Rachel</b>
<b>Checked by CDC:</b>	<b>Approved by :</b>
<b>Name:Dr.S.Jaculin Arockia Selvi</b>	<b>(Principal)</b>

				
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**SEMESTER: IV**

**COURSE CODE: 23UCB4CP2**

**TITLE OF THE COURSE : CORE PRACTICAL II: DATABASE PROGRAMMING**

*(Employability)*

**COURSE OBJECTIVES :**

- To provide comprehensive knowledge about relational database concepts
- To explore NoSQL database management system

**COURSE OUTCOMES :**

**At the completion of the course the student will have the ability to**

<b>CO 1</b>	Interpret relational database management concepts	<b>K2</b>
<b>CO 2</b>	Develop the tables using normalization	<b>K3</b>
<b>C03</b>	Illustrate SQL operators and keys	<b>K3</b>

## **SYLLABUS**

**Total Credits - 3**

**Instructional hours: 45**

### **1. Normalize the following dataset:**

- a) Employee database
- b) Students database
- c) Hospital database

### **2. Data Definition Language and Data Manipulation Language Table:**

Student Regno number (5) primary key Studname varchar2 (15)

Gender char (6)

Deptname char (15)

Address char (25)

Percentage number (4, 2)

Queries:

- a) To create a table, describe a table, alter a table, drop a table, and truncate a table
- b) To insert values, retrieve records, update records, delete records

### **3. Create an Employee table with following field.**

Eno number (5) primary key

Ename varchar2 (20) not null Deptno number (2) not null Desig char (10) not null

Sal number (9, 2) not null

- a) Insert values and display the records
- b) Display sum, maximum amount of basic pay
- c) List the name of the clerks working in the department 20
- d) Display name that begins with „G“
- e) List the names having „I“ as the second character
- f) List the names of employees whose designation are „Analyst“ and „Salesman“
- g) List the different designation available in the Employee table without duplication (distinct)

### **4. Create a student table with the following fields**

Stuno number (5) primary key

Stunm Varchar2 (20)

Age number (2)

Mark1 number (3)

Mark2 number (3)

Mar 3 number (3) Queries:

- a) Insert values and display the records

- b) List the names and age of the student whose age is more than 12
- c) Display total and average of marks
- d) Display the names of the maximum total & minimum total student
- e) List the names of the student that ends with „A“
- f) List the names of student whose names have exactly 5 characters

**5. Create the table PAYROLL with the following fields and insert the values:**

Emplno

number (8)

Emplname

varchar2 (8)

Dept

varchar2 (10)

Baspay

number (8, 2)

HRA

number (6, 2)

DA

number (6, 2)

Pf

number (6, 2)

Netpay

number (8, 2)

Queries:

- a) Update the records to calculate the net pay.
- b) Arrange the records of the employees in ascending order of their net pay.
- c) Display the details of the employees whose department is "Sales".
- d) Select the details of employees whose HRA>= 1000 and DA<=900.
- e) Select the records in descending order.

**6. Create a Table Publisher and Book with the following fields: Table: publisher**

Pubcode Varchar2 (5)

Pubname Varchar2 (10)

Pubcity Varchar2 (12) PubState Varchar2 (10)

Bookcode Varchar2 (5) Table: Book

Booktitle Varchar2 (15)

Bookcode Varchar2 (5)

Bookprice Varchar2 (5) Queries:

- a) Insert the records into the table publisher and book.
- b) Describe the structure of the tables.
- c) Show the details of the book with the title "DBMS".
- d) Show the details of the book with price>300.
- e) Show the details of the book with publisher name "Kalyani".
- f) Select the book code, book title; publisher city is "Delhi".
- g) Select the book code, book title and sort by book price.

h) Count the number of books of publisher starts with "Sultan chand".

i) Find the name of the publisher starting with "S".

**7. Create Orders table and customers table with following fields:**

Table: order

Orderid number (10)

Customerid number (5) Orderdate date

Table: customers

Customerid number (5)

Custname varchar2 (10)

Contactname varchar2 (10)

Country varchar2 (10)

a) Perform INNER JOIN, that selects records that have matching values in both tables

b) Perform LEFT JOIN, that selects records that have matching values in both tables

c) Perform RIGHT JOIN, that selects records that have matching values in both tables.

**8. Create Customer Table and supplier table with following fields:**

Table: Customer

cusidnumber(10)

FirstName varchar2 (10)

LastName varchar2 (10)

City varchar2 (10)

Country varchar2 (10)

Phone number (10) Table: Supplier

Supid number (10)

CompanyName varchar2 (10)

ContactName varchar2 (10)

City varchar2 (10)

Country varchar2 (10)

Phone number (10)

Fax number (10)

a) Insert the records into the table customer and supplier.

b) Describe the structure of the tables.

c) List details of customer table and supplier table.

d) Perform full outer join from customer on supplier table order by country

**MONGODB:**

9. Create a Student Database in MongoDB using "use" Command.

10. Create program using crud operation using MongoDB.

11. Create program text search and indexes using MongoDB.

12. Create the replica set in the mongo shell and test the configuration

**WEKA:**

13. Demonstration of preprocessing on dataset student.arff



14. Demonstration of classification rule process on dataset employee.arff using id3 algorithm

15. Demonstration of clustering rule process on dataset student.arff using simple k-means

**Note: Distribution of Mark 100% Practical.**

### MAPPING OF CO'S WITH PO'S/PEO'S



	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO 1	3	3	3	3	2	1	2	2	2	1	1	2	2	3
CO 2	3	3	2	3	3	1	1	2	1	2	2	2	2	2
CO 3	2	2	2	2	2	2	1	2	1	1	1	1	3	3

(Correlation: 3-High, 2-Medium, 1-Low)

### ASSESSMENT TOOLS

S.No	Assessment Methods	Frequency of Assessment
1.	End semester Examination	Once in a semester
2.	Test	Twice in a semester
3.	Record	Every Exercise

<b>Course designed by:</b>	<b>Verified by HOD:</b>
<b>Name: Dr.C. Goldbell Rachel</b>	<b>Name: Dr.C. Goldbell Rachel</b>
<b>Checked by CDC:</b>	<b>Approved by :</b>
<b>Name: Dr.S.Jaculin Arockia Selvi</b>	<b>(Principal)</b>

	T.M. Hens			B. J. J.
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**SEMESTER: IV**  
**COURSE CODE: 23UCB4SB2**

**TITLE OF THE COURSE: SKILL BASED – DATABASE PROGRAMMING**

*(Employability & Skill Development)*

**OBJECTIVES**

- To provide comprehensive knowledge about relational database.
- To understand the NoSQL database management system

## COURSE OUTCOMES

At the end of the course the student will be able to:

CO 1	Interpret relational database management concepts	K1
CO 2	Develop the tables using normalization	K2
CO 3	Gain knowledge on SQL operators and keys	K3
CO 4	Understand the overview and history of SQL database	K3
CO 5	Acquire knowledge on the concepts of MongoDB	K3

## Syllabus

Credit Points – 2

Total hours: 45 hours

### UNIT - I: Introduction to Database Management System (K1)

9 Hours

Introduction to database management system-Data models - Database system architecture-The SQL Language-Relational database Management System-Candidate key, primary tables key, Foreign key-Relational operators-Attribute domains and their implementations-New conventions for Database object-Structure of SQL statements and SQL writing guidelines- Creating tables-Describing the structure of a table-Populating tables.

*(Self – Study: Relational database Management System)*

### UNIT-II: Normalization Process (K2)

9 Hours

Functional dependencies-Normalization process: 1NF- 2NF-3NF-BCNF. The E-R model-Entities and attributes-Relationships-Normalizing the model-Table instance charts-Implementation of the selection operator-Using aliases to control column headings- Implementation of the projection and join operators-Creating foreign keys and primary keys and check constraints-adding and modifying columns-Removing constraints from a table.

### UNIT –III: Introduction To Group Functions (K3)

9 Hours

Built in functions-Numeric-Character conversion functions-Introduction to group functions-sum, avg, max, min, count-combining single value and group functions- Displaying specific groups- Introduction to processing date and time-Arithmetic with dates - Date Functions-Formatting dates and time. Sub queries-Correlated queries-Using sub queries to create, update, insert and delete rows from a table-Transaction-Commit, rollback, save point and auto commit-Introduction to PL/SQL-user defined functions-Triggers-Stored procedure.

### UNIT – IV: Overview and History Of NOSQ (K3)

9 Hours

Overview and History of NoSQL Databases Definition of the Four Types of NoSQL Database, The Value of Relational Databases, Getting at Persistent Data, Concurrency, Integration, Impedance Mismatch, Application and Integration Databases, Attack of the Clusters, The Emergence of NoSQL. Aggregate Data Models: Aggregates - Key-Value and Document Data Models - Column- Family Stores - Summarizing Aggregate-Oriented Databases - More Detail on Data Models - Distribution Models - Consistency.

**UNIT – V: Introduction to MONGODB (K3)****9 Hours**

Introduction to MongoDB- Getting Started – Querying - Creating, Updating, and Deleting Document– Querying - Designing Your Application: Indexing - Special Index and Collection Types – Aggregation.

*(Self – Study: Creating, Updating, and Deleting Documents)*

**Note: 100% Theory**

**TEXT BOOKS**

1. Pramod J. Sadalage & Martin Fowler - NoSql Distilled, Pearson Education Inc., 2013 Edition.

**REFERENCE BOOKS:**

1. Ramon A Mata-Toledo Pauline K Cushman – Database Management System, Tata McGraw-Hill Publishing Company Limited, New Delhi, 2010, 2<sup>nd</sup> Edition.
2. Kristina Chodorow – MongoDB: The Definitive Guide, O'Reilly Media Inc., 2013 2<sup>nd</sup> Edition.
3. Ramakrishnan & Gehrke – Database Management Systems, Tata Mc Graw Hill, 2009, 8<sup>th</sup> edition.
4. Nilesh Shah – Database System using Oracle, PHI learning Pvt. Ltd., 2014, 2<sup>nd</sup> edition.

**BLENDED LEARNING**

UNIT	TOPIC	SOURCE	LINKS
<b>I</b>	Data models	geeksforgeeks	<a href="https://www.geeksforgeeks.org/data-models-in-dbms/">https://www.geeksforgeeks.org/data-models-in-dbms/</a>
<b>II</b>	Normalizing the model	DATANAMIC	<a href="https://www.datanamic.com/support/database-normalization.html">https://www.datanamic.com/support/database-normalization.html</a>

**MAPPING OF CO'S WITH POs/PSOs**






	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PSO	PSO
	1	2	3	4	5	6	7	8	9	10	11	12	1	2
<b>CO1</b>	3	1	1	1	2	1	3	2	3	2	1	3	3	2
<b>CO2</b>	3	1	1	1	2	1	3	2	3	2	1	3	3	2
<b>CO3</b>	3	1	1	1	2	2	3	2	3	2	1	3	3	2
<b>CO4</b>	2	1	1	1	2	2	3	2	3	2	1	3	3	2
<b>CO5</b>	2	1	1	1	2	2	3	2	3	2	1	3	3	2

**Correlation: 3-High, 2-Medium, 1-Low**

**ASSESSMENT TOOLS**

S.No	Assessment Methods	Frequency of Assessment
1.	End semester Examinations	Once in a semester
2.	CIA I	Once in a semester
3.	CIA II	Once in a semester
4.	Model Examination	Once in a semester
5.	Assignment (Unit I & II)	Twice in a semester
6.	Seminar (Unit III & IV)	Twice in a semester
7.	Other Component (Letter writing)	Once in a semester

<b>Course designed by:</b>	<b>Verified by HOD:</b>
<b>Name: Dr.S.Leema Rosaline</b>	<b>Name: Dr.A.Elizabeth</b>
<b>Checked by CDC:</b>	<b>Approved by :</b>
<b>Name:Dr.S.Jaculin Arockia Selvi</b>	<b>(Principal)</b>

				
<b>Dr.M.NIRMALA</b> Assistant Professor, Department of Commerce, Bharathiar University, Coimbatore	<b>Dr.T.M.HEMALATHA</b> Dean School of Commerce Rathinam College of Arts and Science Coimbatore	<b>Dr.G.VENGATESAN</b> Associate Professor and Head Dept of B.Com(Business Analytics) KPR College of Arts Science and Research Coimbatore	<b>Dr. S. GOWRI</b> Associate Professor and Head Dept of B.Com(Business Analytics) PSG College of Arts & Science , Coimbatore	<b>Mr.B.SIVA KUMAR</b> CEO, Crewmates HR Consultancy Firm & LEN DAN Event Management, Coimbatore.

**SEMESTER: V**

**COURSE CODE: 23UCB5CP3**

**TITLE OF THE COURSE: CORE – PRACTICAL III R PROGRAMMING**

*(Employability & Skill Development)*

**COURSE OBJECTIVES :**

- Develop understanding on R concepts using vectors and matrix.
- Familiarize with R functions to read files from other sources by using different datasets and drawing charts.
- Enhance the knowledge of R concepts applied in ANOVA and PCA.

## **COURSE OUTCOMES :**

**At the completion of the course the student will have the ability to**

<b>CO 1</b>	Apply statistical functions (mean, standard deviation, sampling).	<b>K2</b>
<b>CO 2</b>	Understand merging Datasets and subset of datasets for applying in real timeexample.	<b>K3</b>
<b>C03</b>	Implement R with Control statements and looping.	<b>K3</b>

## **SYLLABUS**

**Total Credits - 4**

**Instructional hours: 75**

### **Hours**

1 Read a CSV & excel file and perform Subsets of dataset, Merging datasets

2 Create an R program:

- a) To add two vectors.
- b) To find sum, mean and product of vector.
- c) To generate random number from standard distributions
- d) To sample from a population.

3 Consider an experiment with Cars. Three different brands and four different models have been tested, and there are three replications for each of the 12 combinations. The production has been registered for each of the 36 units. The data are saved in the file cars.xlsx. Make a histogram of the production details. Moreover, compute the mean, median and standard deviation of the production variable.

4 Take the data from two different sources (files), and merge before analysis. And analyse the data set using charts.

5 Apply table () function to summarize the dataset, “Rental Units”.

6 Draw a cumulative frequency graph using R with relevant data

7 Create R program to verify the age of Voting using Conditional Statement.

8 Analyse the Banking Crisis using two way ANOVA method.

9 As part of a large project on characterization of ecological zones, 11 environmental variables were measured at 30 sites along the Doubs River. The variables were distance from the source, i.e. from the start location (das), altitude (alt), slope (pen), mean minimum discharge (deb), pH of water (pH), concentration of calcium, phosphate, nitrate, ammonium, respectively (dur,pho, nit, amm), dissolved oxygen (oxy), biological oxygen demand (dbo). Perform PCA and make a plot for first two principal components.

10 Perform the following: Matrix computations, Transpose, Inverse matrix, Determinant

**Note: Distribution of Mark 100% Practical.**

#### **MAPPING OF CO'S WITH PO'S/PEO'S**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2
<b>C O 1</b>	3	3	3	3	2	1	2	2	2	1	1	2	2	3
<b>C O 2</b>	3	3	2	3	3	1	1	2	1	2	2	2	2	2
<b>C O</b>	2	2	2	2	2	2	1	2	1	1	1	1	3	3






**(Correlation: 3-High, 2-Medium, 1-Low)**

#### **ASSESSMENT TOOLS**

S.No	Assessment Methods	Frequency of Assessment
1.	End semester Examination	Once in a semester
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<b>Course designed by:</b>	<b>Verified by HOD:</b>
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<b>Name: Dr.S.Jaculin Arockia Selvi</b>	<b>(Principal)</b>

## MEMBERS OF BOARD OF STUDIES

				
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## SEMESTER V

**COURSE CODE: 23UCB5E01**

**TITLE OF THE COURSE: ELECTIVE - BIG DATA ANALYTICS**

*(Entrepreneurship & Skill Development)*

*Industry 4.0*

## OBJECTIVES

- To develop an understanding on Big Data and Analytics using various Applications.
- To familiarize with data collection, sampling and preprocessing.



## COURSE OUTCOMES

At the end of the course the student will be able to:

<b>CO 1</b>	Learn Analytical process model and its requirements	<b>K1</b>
<b>CO 2</b>	Implement detection, Standardization Data Categorization.	<b>K2</b>
<b>CO 3</b>	Understand industry examples of Big data in Line World, Database Marketers and Pioneers of Big Data	<b>K3</b>
<b>CO 4</b>	Implement market basket analysis and finding frequent item dataset.	<b>K3</b>
<b>CO 5</b>	Apply Crowd Sourcing Analytics and Firewall Analytics.	<b>K3</b>

## Syllabus

**Credit Points - 4**

**Instructional Hours: 75**

**hours**

### **Unit I: Big Data and Analytics (K1) (15 hours)**

Big Data and Analytics – Applications – Basic Nomenclature-Analytics Process Model – Job Profiles Involved – Analytics – Analytical Model Requirements.

### **Unit II: Data Collection, Sampling and Preprocessing (K2) (15 hours)**

Data Collection, Sampling and Preprocessing – Types of Data Sources –Sampling Types of Data Elements – Visual Data Exploration and Exploratory Statistical Analysis Missing Values – Outlier Detection and Treatment – Standardization Data Categorization – Weights of Evidence Coding – Variable Selection – Segmentation

### **Unit III: Industry and Big Data (K3) (15 hours)**

Industry Examples of Big Data – Digital Marketing and the Non – Line World – Database Marketers, Pioneers of Big Data – Big Data and the New School of Marketing Fraud and Big Data – Risk and Big Data – Credit Risk Management – Big Data and Algorithmic Trading – Advertising and Big Data – Using Consumer Products as a Doorway.

### **Unit IV: Big Data Technology (K3) (15 hours)**

Big Data Technology – The Elephant in the Room: Hadoop's Parallel World Old Vs New Approaches – Data Discovery: Work the Way People's Minds Work – Open Source Technology for Big Data Analytics – The Cloud and Big Data – Software as a Service BI – Mobile Business Intelligence is Going Mainstream – Crowd Sourcing Analytics – Inter and Trans Firewall Analytics.

### **Unit V: Big Data Applications (K3) (15 hours)**

Applications – Credit Risk Modeling – Fraud Detection – Net Lift Response Modeling Churn

Prediction – Recommender Systems – Web Analytics – Social Media Analytics Business Process Analytics.

**Note: 100% Theory.**

### **Text book**

1. Wiley Baesens ,“Analytics Big data World - The Essential Guide to Data Science and its Applications”, Wiley, 2014.

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CO4	3	2	3	3	3	1	1	3	1	3	3	3	3	3
CO5	3	2	3	3	3	1	1	3	3	3	3	3	3	3

2. Minelli Chambers Dhiraj,“Big Data Big Analytics - Emerging Business Intelligence and Analytics Trends for Today’s Businesses”, Wiley, 2013.

### **Reference Books**

1. James R Evans, “Business Analytics- Methods, Models and Decisions”, Pearson education India Chennai.2013.
2. R.N Prasad, Seema Acharya, “Fundamentals of Business Analytics”, Wiley, 2015.

### **BLENDED LEARNING**

UNIT	TOPIC	SOURCE	LINKS
IV	Big Data Technology	YouTube	<a href="https://youtu.be/Pyo4RWtxsQM?si=mwUYcfVuFjbwhTvv">https://youtu.be/Pyo4RWtxsQM?si=mwUYcfVuFjbwhTvv</a>
V	Big Data Applications	YouTube	<a href="https://youtu.be/nogE5tOt3g8?si=VGfL-4XzIGqrNHIU">https://youtu.be/nogE5tOt3g8?si=VGfL-4XzIGqrNHIU</a>

### **MAPPING OF CO’S WITH POs/PSOs**






**Correlation: 3-High, 2-Medium, 1-Low**

### **ASSESSMENT TOOLS**

S.No	Assessment Methods	Frequency of Assessment
1.	End semester Examinations	Once in a semester
2.	CIA I	Once in a semester
3.	CIA II	Once in a semester

4.	Model Examination	Once in a semester
5.	Assignment (Unit I & II)	Twice in a semester
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7.	Other Component	Once in a semester

Course designed by:	Verified by HOD:
Name: Dr.C.Goldbell Rachel	Name: Dr.C.Goldbell Rachel
Checked by CDC:	Approved by :
Name:Dr.S.Jaculin Arockia Selvi	(Principal)

				
<b>Dr.M.NIRMALA</b> Assistant Professor, Department of Commerce, Bharathiar University, Coimbatore	<b>Dr.T.M.HEMA LATHA</b> Dean School of Commerce Rathinam College of Arts and Science Coimbatore	<b>Dr.G.VENGATESAN</b> Associate Professor and Head Dept of B.Com(Business Analytics) KPR College of Arts Science and Research Coimbatore	<b>Dr. S. GOWRI</b> Associate Professor and Head Dept of B.Com(Business Analytics) PSG College of Arts & Science , Coimbatore	<b>Mr.B.SIVA KUMAR</b> CEO, Crewmates HR Consultancy Firm & LEN DAN Event Management, Coimbatore.

## SEMESTER V

**COURSE CODE: 23UCB5E02**

**TITLE OF THE COURSE: ELECTIVE - BUSINESS ORGANISATION AND MODELS**  
(*Entrepreneurship & Skill Development*)

### OBJECTIVES

- To enable the students to learn principles and concepts of Business.
- To provide a theoretical knowledge about the process of decision making with models of business.

### COURSE OUTCOMES

**At the end of the course the student will be able to:**

<b>CO 1</b>	Classify the basic ideas of Business	<b>K1</b>
<b>CO 2</b>	Indicate the Preparation method of business models.	<b>K2</b>
<b>CO 3</b>	Outline the financial models of business	<b>K3</b>
<b>CO 4</b>	Illustrate the marketing and selling models to promote business	<b>K3</b>
<b>CO 5</b>	Apply the models of HR in business	<b>K3</b>

### Syllabus

**Credit Points - 4**

**Instructional Hours: 75**

**hours**

#### **Unit I: Introduction to Business (K1) (15 hours)**

Meaning of Business – Entrepreneur (Meaning, Characteristics of an entrepreneur)- Enterprise- a business venture- Business idea and opportunity- Examining some business ideas in agriculture, agro-based enterprises, general trade (including shops), manufacturing products and services (including hotels) and their unique features by incorporating outsourcing.

#### **Unit II: Business Plan (K2) (15 hours)**

Preparing a Business Plan – Retail selling grocery shop; a textiles selling shop; any other consumer goods selling business; a small scale manufacturing unit –Printing Press- Electrical and Electronic goods dealership. Contract works as business - Estimating the returns or profits-Preparing a conceptual and graphic model.

#### **Unit III: Financing Model (K3) (15 hours)**

Financing model for a business: Sources for a small business- owned capital, friends and relatives; banks; government sources; suppliers and customers; interest and other costs and the terms and conditions attached to such sources and investing the finance in assets-The working capital cycle.

#### **Unit IV: Marketing and Selling Models (K3) (15 hours)**

Marketing and Selling models- Advertising and soliciting customers, customer relationship; Quality assurance; Pricing Methods; Competition and strategies in facing the competition.

#### **Unit V: Human Resources in Business (K3) (15 hours)**

Applications – Credit Risk Modeling – Fraud Detection – Net Lift Response Modeling Churn Prediction – Recommender Systems – Web Analytics – Social Media Analytics Business Process Analytics.

**Note: 100% Theory.**

### Text book

1. Y.K.Bhushan - Business Organisation and Management, Sultanchand& Sons, 2012 edition.
2. C.B. Gupta – Business Organisation and Management, Mayur Paperbacks, 2011 Edition.

### Reference Books

1. Rashmi Bansal - Take Me Home: The Inspiring Stories of 20 Entrepreneurs, Westlands, 2014 edition.

### BLENDED LEARNING

UNIT	TOPIC	SOURCE	LINKS
II	Business Plan	YouTube	<a href="https://youtu.be/ZEMbKzy7FD8?si=WJb0hXtCukXJB7A">https://youtu.be/ZEMbKzy7FD8?si=WJb0hXtCukXJB7A</a>
V	Credit Risk Modeling	YouTube	<a href="https://youtu.be/NSfxb5hM3_g?si=SWydWsjcP38SKc3G">https://youtu.be/NSfxb5hM3_g?si=SWydWsjcP38SKc3G</a>






### MAPPING OF CO'S WITH POs/PSOs

**Correlation: 3-High, 2-Medium, 1-Low**

### ASSESSMENT TOOLS

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
CO1	3	1	3	3	1	1	1	3	1	3	3	3	3	3
CO2	3	2	3	3	3	1	1	3	1	3	3	3	3	3
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CO5	3	2	3	3	3	1	1	3	3	3	3	3	3	3
	S.No	Assessment Methods							Frequency of Assessment					
	1.	End semester Examinations							Once in a semester					
	2.	CIA I							Once in a semester					
	3.	CIA II							Once in a semester					
	4.	Model Examination							Once in a semester					
	5.	Assignment (Unit I & II)							Twice in a semester					
	6.	Seminar (Unit III & IV)							Twice in a semester					
	7.	Other Component							Once in a semester					

<b>Course designed by:</b>	<b>Verified by HOD:</b>
<b>Name: Dr.C.Goldbell Rachel</b>	<b>Name: Dr.C.Goldbell Rachel</b>
<b>Checked by CDC:</b>	<b>Approved by :</b>
<b>Name:Dr.S.Jaculin Arockia Selvi</b>	<b>(Principal)</b>

				
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### SEMESTER V

**COURSE CODE: 23UCB5SB3**

**TITLE OF THE COURSE: SKILL BASED- INTRODUCTION TO DIGITAL MARKETING  
(Industry 4.0)**

*(Entrepreneurship & Skill Development)*

**OBJECTIVES**

- To learn the basics of Marketing.
- To provide knowledge about the digital marketing management, digital marketing presence and interactive marketing.

**COURSE OUTCOMES**

**At the end of the course the student will be able to:**

<b>CO 1</b>	Understand the basics of marketing	<b>K1</b>
<b>CO 2</b>	Be familiar with introduction of Digital marketing	<b>K1</b>
<b>CO 3</b>	Know the effectiveness of Digital marketing management	<b>K2</b>
<b>CO 4</b>	Get knowledge on Digital marketing presence	<b>K2</b>
<b>CO 5</b>	Be familiar with interactive marketing	<b>K2</b>

**Syllabus**

**Credit Points - 3**

**Instructional Hours: 60**

**hours**

**UNIT- I: Introduction of marketing (K1) 12 hours**

Introduction of marketing: – Definition of marketing - - Products and service marketing – Functions of marketing. Marketing Mix – Concept of 7 Ps of Marketing - Product mix: Product life cycle, Concepts of product – Price mix: Objectives, Methods and kinds, Practical concepts – Place mix: Channels of Distribution – Promotion Mix: Personal selling

*(Self – Study: Price Mix)*

**UNIT – II: Introduction of Digital Marketing (K1)**

Introduction: Concept, scope, and importance of digital marketing, Traditional marketing versus digital marketing. Challenges and opportunities for digital marketing. Digital marketing in Indian Scenario

*(Self-Study: Traditional marketing versus digital marketing)*

**UNIT – III: Digital Marketing Mix (K2) 12 Hours**

Digital marketing mix: Segmentation, Targeting, Differentiation, and Positioning. Digital Technology and Customer Relationship Management. Digital Consumers and their buying decision process.

**UNIT – IV: Digital Marketing Presence (K2)**

Concept and role of Internet in Marketing. Online marketing domains. Website design and Domain name branding. Search engine optimization: Stages, types of traffic, tactics. E-mail marketing: types and strategies.

***Beyond Curriculum: Online Public Relation Management.***

**UNIT - V: Interactive Marketing (K2)**

**12 hours**

Interactive marketing: Concept and options. Social media marketing: Concept and tools. Online communities and social networks. Blogging: Types and role. Video marketing: tools and techniques. Mobile marketing tools. PPC Marketing. Payment options.

**Note: 100% Theory.**

**TEXT BOOK:**

1. Pillai R.S.N & Bhagavathi, (2010) 4th edition Modern Marketing, S Chand & Co, New Delhi.
2. Kotler, Philip, Hermawan Kartajaya, and Iwan Setiawan (2017). Digital Marketing: 4.0 Moving from Traditional to Digital. Pearson India, Delhi

**REFERENCE BOOKS:**

1. Vandana Ahuja, (2015) Digital Marketing Oxford University Press, UK.
2. Puneet Singh Bhatia, Fundamentals of Digital Marketing, Pearson, Delhi

**BLENDED LEARNING**

UNIT	TOPIC	SOURCE	LINKS
II	Digital Marketing	YOUTUBE	<a href="https://youtu.be/b62x9f-os-o">https://youtu.be/b62x9f-os-o</a>
V	Digital Payment	YOUTUBE	<a href="https://youtu.be/kP9fcw0Xq0E">https://youtu.be/kP9fcw0Xq0E</a>

**MAPPING**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
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CO4	3	1	2	2	3	2	3	2	2	3	2	2	3	1
CO5	3	1	1	1	3	2	3	2	3	3	2	3	3	2

**Correlation: 3-High, 2-Medium**






**Low**

**ASSESSMENT TOOLS**



S.No.	Assessment Methods	Frequency of Assessment
1.	End semester Examinations	Once in a semester
2.	CIA I	Once in a semester
3.	CIA II	Once in a semester
4.	Model Examination	Once in a semester
5.	Assignment (Unit I & II)	Twice in a semester
6.	Seminar (Unit III & IV)	Twice in a semester
7.	Other Component (Quiz)	Once in a semester

<b>Course designed by:</b>	<b>Verified by HOD:</b>
<b>Name: Dr.C.Goldbell Rachel</b>	<b>Name: Dr.C.Goldbell Rachel</b>
<b>Checked by CDC:</b>	<b>Approved by :</b>
<b>Name:Dr.S.Jaculin Arockia Selvi</b>	<b>(Principal)</b>

				
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**SEMESTER V**  
**COURSE CODE: 23IDSBCB1**  
**TITLE OF THE COURSE: SKILL BASED - FUNDAMENTALS OF SQL**  
**(Skill Development)**  
**(Industry 4.0)**

**OBJECTIVES**

- To provide comprehensive knowledge about relational database.
- To understand the NoSQL database management system

**COURSE OUTCOMES**

**At the end of the course the student will be able to:**

<b>CO 1</b>	Interpret relational database management concepts	<b>K1</b>
<b>CO 2</b>	Develop the tables using normalization	<b>K2</b>
<b>CO 3</b>	Gain knowledge on group functions	<b>K3</b>
<b>CO 4</b>	Understand the overview of user defined functions	<b>K2</b>
<b>CO 5</b>	Acquire knowledge on the concept NOSQL.	<b>K3</b>

**Syllabus**

**Credit Points - 2**

**Total hours: 45 hours**

**UNIT-I: Introduction To Database Management System (K1) 9 hours**

Introduction to database management system-Data models - Database system architecture-The SQL Language-Relational database Management System

**UNIT-II: Normalization Process (K2) 9 hours**

Functional dependencies-Normalization process: 1NF- 2NF-3NF-BCNF. The E-R model-Entities and attributes-Relationships-Normalizing the model-Table instance charts-Implementation of the selection operator

**Unit-III: Introduction To Group Functions (K3) 9 hours**

Built in functions-Numeric-Character conversion functions-Introduction to group functions-sum, avg, max, min, count-combining single value and group functions- Displaying specific groups-

**UNIT – IV: User Defined Functions (K2) 9 hours**

Introduction to processing date and time-Arithmetic with dates - Date Functions Introduction to PL/SQL-user defined functions-Triggers-Stored procedure.

## UNIT – V: Overview and History Of NOSQL (K3) 9 hours

Overview and History of NoSQL Databases Definition of the Four Types of NoSQL Database, The Value of Relational Databases, Getting at Persistent Data, Concurrency, Integration, Impedance Mismatch, Application and Integration Databases.

**Note: 100% Theory.**

### TEXT BOOK:

Pramod J. Sadalage & Martin Fowler - NoSql Distilled, Pearson Education Inc., 2013 Edition.

### REFERENCE BOOKS:

1. Ramon A Mata-Toledo Pauline K Cushman – Database Management System, Tata McGraw-Hill Publishing Company Limited, New Delhi, 2010, 2<sup>nd</sup> Edition.
2. Kristina Chodorow – MongoDB: The Definitive Guide, O'Reilly Media Inc., 2013 2<sup>nd</sup> Edition.

### BLENDED LEARNING

UNIT	TOPIC	SOURCE	LINKS
I	Data models	geeksforgeeks	<a href="https://www.geeksforgeeks.org/data-models-in-dbms/">https://www.geeksforgeeks.org/data-models-in-dbms/</a>

### MAPPING OF CO'S WITH POs/PSOs






	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
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CO4	2	1	1	1	2	2	3	2	3	2	1	3	3	2
CO5	2	1	1	1	2	2	3	2	3	2	1	3	3	2

Correlation: 3-High, 2-Medium, 1-Low

### ASSESSMENT TOOLS

S.No	Assessment Methods	Frequency of Assessment
1.	End semester Examinations	Once in a semester
2.	CIA I	Once in a semester
3.	CIA II	Once in a semester
4.	Model Examination	Once in a semester
5.	Assignment (Unit I & II)	Twice in a semester
6.	Seminar (Unit III & IV)	Twice in a semester
7.	Other Component (Letter writing)	Once in a semester

<b>Course designed by:</b>	<b>Verified by HOD:</b>
<b>Name: Dr.C.Goldbell Rachel</b>	<b>Name Dr.C.Goldbell Rachel</b>
<b>Checked by CDC:</b>	<b>Approved by :</b>
<b>Name:Dr.S.Jaculin Arockia Selvi</b>	<b>(Principal)</b>

				
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**SEMESTER V**  
**COURSE CODE: 23NCB5E01**  
**TITLE OF THE COURSE: NON MAJOR ELECTIVE:**  
**INTRODUCTION TO BUSINESS ANALYTICS**  
*(Employability & Skill Development)*

**OBJECTIVES**

- To impart knowledge on various levels of Business Analysis and issues concerning them.
- To educate the functions of Business Analytics.

**COURSE OUTCOMES**

**At the end of the course the student will be able to:**

<b>CO 1</b>	Understand the different levels of business analysis	<b>K2</b>
<b>CO 2</b>	Gain knowledge on information technology applications	<b>K1</b>
<b>CO 3</b>	Understand the role Data Integration	<b>K3</b>
<b>CO 4</b>	Understand about OLAP and OLTP	<b>K2</b>
<b>CO 5</b>	Gain knowledge on KPI's	<b>K3</b>

**Syllabus**

**Credit Points - 4**

**Instructional Hours: 75 hours**

**Unit:1 Introduction to the Business Analytics (K2)**

**(15 hours)**

Introduction to the Business Analytics -The evolving role of the Business Analyst - The BA roadmap: different levels of business analysis - The basic rules of Business & Business Analysis - Classical Requirements and Tasks performed by Business Analysts.

**Unit – II : Information Technology Applications (K1)**

**(15 hours)**

Business view of Information Technology Applications: Core business process – Baldrige Business Excellence framework - Key purpose of using IT in business - Enterprise Applications- Information users and their requirements.

**Unit – III : Data And Data Integration (K3)**

Data Definition: Types of Data – Attributes and Measurement – Types of data sets – Data quality – Types of Digital Data. Data Integration – Data Warehouse – Goals – Data sources - Data Quality maintenance – Data profiling. Data Modelling– Basics – Types – Techniques

#### **Unit – IV: OLTP and OLAP (K2)**

**(15 hours)**

Introduction to OLTP and OLAP – OLTP – OLAP – Different OLAP Architectures – OLTP and OLAP – Data models for OLTP and OLAP – Role of OLAP Tools in Business Intelligence.

#### **UNIT – V: Concept of KPIs (K3)**

**(15 hours)**

Measures, Metrics, KPIs and Performance Management – Definition -Measurement system terminology – Role of Metrics and metrics supply chain – fact-based decision making and KPIs use of KPIs – potential source for metrics.

**Note: 100% Theory.**

#### **Text Book(s)**

1 RN Prasad, Seema Acharaya - Fundamentals of Business Analytics – Wiley – Revised

Edition 2015.

#### **Reference Books**

1 Haydn Thomas – Demonoid – Business Analysis Fundamentals – Pearson Education –

2015 Revised Edition.

#### **BLENDED LEARNING**

UNIT	TOPIC	SOURCE	LINKS
Unit III	Data Modeling	XENONSTACK	<a href="https://www.xenonstack.com/insights/data-modelling">https://www.xenonstack.com/insights/data-modelling</a>

#### **MAPPING OF CO'S WITH POs/PSOs**






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CO3	3	2	3	3	2	3	3	2	2	2	3	3	3	3
CO4	3	3	3	3	2	3	3	1	2	2	3	3	3	3
CO5	3	2	3	3	2	3	3	1	2	2	3	3	3	3

**Correlation: 3-High, 2-Medium, 1-Low**

## ASSESSMENT TOOLS

S.No	Assessment Methods	Frequency of Assessment
1.	End semester Examinations	Once in a semester
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<b>Course designed by:</b>	<b>Verified by HOD:</b>
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**SEMESTER: VI**

**COURSE CODE:23UCB6C12**

**TITLE OF THE COURSE: CORE: HADOOP**

***(Employability & Skill Development)***

***Industry 4.0***

## **OBJECTIVES**

The main objectives of this course is:

- To explore and acquire skills in Hadoop,
- To educate the students on Pig and Hive in Hadoop

## **COURSE OUTCOMES**

**At the end of the course the student will be able to:**

<b>CO 1</b>	Relate Hadoop concepts with Datasets	K2
<b>CO 2</b>	Outline the use of Hadoop distribution file system	K3
<b>CO 3</b>	Experiment with MapReduce application for development	K3
<b>CO 4</b>	List the features of MapReduce applications	K3
<b>CO 5</b>	Apply PIG and Hive concepts to integrate	K3

## **Syllabus**

**Credit Points - 4**

**Instructional hours: 60 hours**

**UNIT I: Meet Hadoop & Map Reduce (K2)**

***12 Hours***

Meet Hadoop: Data – Data Storage and Analysis – Comparison with other systems – A brief history of Hadoop – The Apache Hadoop Project – Map Reduce: A weather dataset – Scaling out - Hadoop streaming - Hadoop pipes.

**UNIT II: Hadoop Distributed Filesystem (K3)**

***12 Hours***

**The Hadoop Distributed Filesystem:** The design of HDFS – HDFS concepts – The Command Line interface – Hadoop File Systems – The Java Interface – Data Flow – Parallel copying with distcp – Hadoop archives. **Hadoop i/o:** Data Integrity – Compression – Serialization – File based data structure.

**UNIT III: MapReduce Application (K3)**

***12 Hours***

**Developing a MapReduce Application:** The Configuration API – Configuring the development environment – Writing a Unit Test – Running locally on test data – Running on a cluster – Tuning a job – Map Reduce workflows. **MapReduce Types and Formats:** MapReduce Types – Input Formats – Output Formats.



**UNIT IV: MapReduce Features****(K3)****12 Hours****MapReduce Features:** Counters – Sorting – Joins – Side Data Distribution – MapReduce library classes.**Setting up a Hadoop Cluster:** Hadoop Specification – Cluster setup and installation – SSH Configuration – Hadoop Configuration – Post Installation – Benchmarking a

Hadoop Cluster – Hadoop in the cloud.

**UNIT V: PIG & HIVE****(K3)****12 Hours****PIG:** Features – modes – modes – PIG Latin – Dataset – Commands and Functions – Operators –Evaluation Functions – Batch Mode – Embedded Mode – PIG vs. SQL. **HIVE:** Features – Architecture –

Data Units – HIVE Query Languages – Database Operations – Tables – Joins – HIVE vs. PIG.

**Note: 100% Theory.****TEXT BOOKS:**

1. Tom White - Hadoop: The Definitive Guide, O'Reilly, 4th Edition, 2015.

**REFERENCE BOOKS:**

1. Mark Kerzner, Sujee Maniyam - Hadoop Illuminated, Git-Hub, 2016 Edition

**BLENDED LEARNING**

UNIT	TOPIC	SOURCE	LINKS
II	HDFS concepts	YouTube	<a href="https://youtu.be/nRX4_3qf3rc?si=bjijsjw5AmUUtEY">https://youtu.be/nRX4_3qf3rc?si=bjijsjw5AmUUtEY</a>
IV	MapReduce Features	YouTube	<a href="https://youtu.be/cHGaqz0E7AU?si=tQEdHYhyhfSsbr43">https://youtu.be/cHGaqz0E7AU?si=tQEdHYhyhfSsbr43</a>






**MAPPING OF CO'S WITH POs/PSOs**

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CO5	3	3	3	3	3	3	1	2	2	2	3	3	3	3

**Correlation: 3-High, 2-Medium, 1-Low. ASSESSMENT TOOLS**

S.No.	Assessment Methods	Frequency of Assessment
1.	End semester Examinations	Once in a semester
2.	CIA I	Once in a semester
3.	CIA II	Once in a semester
4.	Model Examination	Once in a semester
5.	Assignment (Unit I & II)	Twice in a semester
6.	Seminar (Unit III & IV)	Twice in a semester
7.	Other Component (Field visit: Inventory Management)	Once in a semester

<b>Course designed by:</b>	<b>Verified by HOD:</b>
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**SEMESTER: VI**

**COURSE CODE: 23UCB6C13**

**TITLE OF THE COURSE: CORE - BANKING AND AUDIT**

***(Entrepreneurship & Employability)***

**OBJECTIVES**

- To impart knowledge on functions of banks, types of deposits and recent trends in Banking.
- To educate the students on the purpose and process of auditing books of accounts.

**COURSE OUTCOMES**

**At the end of the course the student will be able to:**

<b>CO 1</b>	Understand the relationship between a banker and a customer and various types of deposits.	<b>K1</b>
<b>CO 2</b>	Gain knowledge with the Banking operations	<b>K3</b>
<b>CO 3</b>	Understand the objectives, scope and need for auditing	<b>K1</b>
<b>CO 4</b>	Acquaint with audit planning and programme	<b>K2</b>
<b>CO 5</b>	Acquire knowledge on appointment, powers and duties of an auditor.	<b>K2</b>

**Syllabus**

**Credit Points - 4**

**Instructional Hours: 75 hours**

**UNIT- I: Introduction to Banking (K1)**

**15 hours**

Banking: – Banker – Customer – General Relationship – Special Relationship – Garnishee order – Rights of banker - Duties of banker - Functions of Commercial Banks – Types of Deposits : Fixed, Current, Saving and Recurring deposit.

*(Self-study: Types of Deposits)*

**UNIT - II: Operations of Banking (K3)**

**15 hours**

Negotiable Instruments: - Endorsement – Types of endorsement – Cheque: Meaning – Crossing of cheques - Payment of Cheques - Collection of Cheques - Bills of Exchange and Promissory Notes. Commercial Banking Operations: Payment and settlement system-New age clearing and new age payment – Online Banking - E-banking - Mobile banking, RTGS, SWIFT, Electronic Clearing System (ECS), E -Payments: Electronic Fund Transfer (EFT)- E-money-Safeguard for internet banking - KYC Norms and Anti- Money Laundering. (Industry 4.0)

***Beyond Curriculum: Neo banking - Advantages of neo banking – difference between neo banking and normal banking***

**UNIT-III: Audit and Audit Planning (K1)****12hours**

Definition of audit, auditing, auditor, auditee – Difference between book-keeping, accountancy and auditing - qualification of an auditor- objectives and scope of audit - auditing Vs investigation - Professional Ethics. Audit planning: – Benefits of audit planning - Factors affecting audit planning - internal control – internal check. Audit Programme – Advantages of Audit programme - audit procedure – audit working papers – documentation.

*(Self – Study: Difference between book- keeping, accountancy and auditing)*

**UNIT - IV: Verifications and Valuation of Assets and Liabilities (K2)****14 hours**

Meaning of verification - Cash transactions, trading transactions, Valuation of assets and liabilities – Auditor's position as regards the valuation of assets - **Audit under computerized environment (Industry 4.0)**- Audit report (Concept only)

*(Self – Study: Audit report (Concept only))*

**UNIT - V: Kinds of audit and Company Audit (K2)****12 hours**

Concurrent Audit, Internal Audit, Final Audit, Interim Audit, Balance Sheet Audit, Environmental Audit, Operation Audit, Management Audit, Cost Audit, Propriety Audit – merits and demerits of an audit. Appointment, reappointment and removal of auditors- Qualification, powers, remuneration and expenses of an auditor- rotation of auditors- rights and duties of company auditors.

**Note: 100% Theory.**

**TEXT BOOKS:**

1. Gordon E and Dr. Natarajan K, Banking Theory Law and Practice. (29<sup>th</sup> Edition) Himalaya Publishing House Pvt Ltd., Mumbai (2021),
2. Tandon B.N, 14th edition, Practical Auditing, Sultan Chand & Company, Delhi (2012)

**REFERENCE BOOKS:**

1. Guruswamy S, Banking Theory Law and Practice, (5th Edition) Vijay Nicole Imprints Private Ltd, Mumbai. (2018)
2. Tripathy D.N 8th edition, Principles and Practice of Auditing, Tata McGraw – Hill Publication, New Delhi. , (2012)
3. Dinkar Pagare, 13th revised edition, Principles and Practice of Auditing, Sultan Chand & Company Ltd, Delhi. (2020)

**BLENDED LEARNING**

UNIT	TOPIC	SOURCE	LINKS
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<b>II</b>	Introduction to Negotiable Instruments	e-PG Pathshala	<a href="https://youtu.be/dsgRcaplh2g">https://youtu.be/dsgRcaplh2g</a>
<b>IV</b>	Audit under computerized environment	ACA IPCC Material	<a href="https://youtu.be/4yb-6QhQ6CM">https://youtu.be/4yb-6QhQ6CM</a>

#### MAPPING OF CO'S WITH POs/PSOs






	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
<b>CO1</b>	3	1	1	1	1	3	1	1	3	1	3	3	3	1
<b>CO2</b>	3	1	1	3	1	3	1	1	3	3	1	3	3	2
<b>CO3</b>	3	3	1	1	1	1	2	3	1	3	3	3	3	3
<b>CO4</b>	3	3	1	1	1	2	2	3	1	3	3	3	3	3
<b>CO5</b>	3	3	3	1	1	2	2	3	1	3	1	3	3	3

**Correlation: 3-High, 2-Medium, 1-Low**

#### ASSESSMENT TOOLS

S.No	Assessment Methods	Frequency of Assessment
1.	End semester Examinations	Once in a semester
2.	CIA I	Once in a semester
3.	CIA II	Once in a semester
4.	Model Examination	Once in a semester
5.	Assignment (Unit I & II)	Twice in a semester
6.	Seminar (Unit III & IV)	Twice in a semester
7.	Other Component	Once in a semester

Course designed by:	Verified by HOD:
Name: Dr.C.Goldbell Rachel	Name: : Dr.C.Goldbell Rachel
Checked by CDC:	Approved by :
Name: Dr.S.Jaculin Arockia Selvi	(Principal)

				
<b>Dr.M.NIRMALA</b> Assistant Professor, Department of Commerce, Bharathiar University, Coimbatore	<b>Dr.T.M.HEMA LATHA</b> Dean School of Commerce Rathinam College of Arts and Science Coimbatore	<b>Dr.G.VENGATESAN</b> Associate Professor and Head Dept of B.Com(Business Analytics) KPR College of Arts Science and Research Coimbatore	<b>Dr. S. GOWRI</b> Associate Professor and Head Dept of B.Com(Business Analytics) PSG College of Arts & Science , Coimbatore	<b>Mr.B.SIVA KUMAR</b> CEO, Crewmates HR Consultancy Firm & LEN DAN Event Management, Coimbatore.

**SEMESTER VI**  
**COURSE CODE :23UCB6CP4**  
**TITLE OF THE COURSE : CORE PRACTICAL IV - HADOOP**  
*(Employability & Skill Development)*

**COURSE OBJECTIVES :**

- To Understand various statistical calculations
- To explore and acquire skills in Python Programming

**COURSE OUTCOMES :**

**At the completion of the course the student will have the ability to**

<b>CO 1</b>	Relate data as data sets	<b>K2</b>
<b>CO 2</b>	Describe PIG AND HIVE	<b>K3</b>
<b>C03</b>	Relate analysis techniques to more complex data sets	<b>K3</b>

**SYLLABUS**

**Total Credits - 4**

**Instructional hours: 60**

1. Perform File Management in Hadoop.
2. Perform Health Care Analysis using Map Reduce.
3. Perform Word Count in Map Reduce using Politics dataset.
4. Find Maximum temperature using Map Reduce.
5. Perform Inner joins in PIG using Human Resource dataset.
6. Program to perform job tracker, word count using Travel dataset.
7. Perform PIG operations using Telecom dataset.
8. Perform HIVE operations using Politics dataset.
9. Cross Operation in PIG using Logistics dataset.
10. Order the data by Ascending and Descending operations Retail Dataset.

**Note: Distribution of Mark 100% Practical.**

**MAPPING OF CO'S WITH PO'S/PEO'S**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
<b>CO 1</b>	3	3	3	3	2	1	2	2	2	1	1	2	2	3
<b>CO 2</b>	3	3	2	3	3	1	1	2	1	2	2	2	2	2
<b>CO 3</b>	2	2	2	2	2	2	1	2	1	1	1	1	3	3






**(Correlation: 3-High, 2-Medium, 1-Low)**

**ASSESSMENT TOOLS**

S.No	Assessment Methods	Frequency of Assessment
1.	End semester Examination	Once in a semester
2.	Test	Twice in a semester

3.	Record	Every Exercise
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<b>Course designed by:</b>	<b>Verified by HOD:</b>
<b>Name: Dr.C. Goldbell Rachel</b>	<b>Name: Dr.C. Goldbell Rachel</b>
<b>Checked by CDC:</b>	<b>Approved by :</b>
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**SEMESTER VI**  
**COURSE CODE : 23UCB6E01**  
**TITLE OF THE COURSE : ELECTIVE: BUSINESS INTELLIGENCE**  
***(Entrepreneurship & Skill Development)***

***Industry 4.0***

**Course Objective**

The main objective of this course is :

- To equip knowledge on technical components of Business Intelligence

**COURSE OUTCOMES**

**At the end of the course the student will be able to:**

<b>CO 1</b>	Understand the Framework of Business Intelligence	<b>K1</b>
<b>CO 2</b>	Able to know the business performance management	<b>K2</b>
<b>CO 3</b>	Understand the concepts of web mining	<b>K3</b>
<b>CO 4</b>	Able to know the implementation of BI	<b>K3</b>
<b>CO 5</b>	Determine the emerging trends in BI	<b>K3</b>

**Syllabus**

**Credit Points - 4**

**Instructional Hours: 75 Hours**

**Unit I Introduction to Business Intelligence (K1) (15 Hours)**

Introduction to Business Intelligence: Framework for Business Intelligence–Intelligence Creation–Transaction Processing Versus Analytic Processing–Major Tools and Techniques of BI.

**Unit II Performance Management (K2) (15 Hours)**

Business Performance Management – Strategize–Plan–Monitor Performance Measurement– BPM Methodologies–Performance Dashboards and Scorecards.

***(Self Study : BPM Methodologies)***

**Unit III Web Mining (K3) (15 Hours)**

Text and web mining – text mining concepts and definitions – natural language processing – text mining applications – text mining process – text mining tools – web mining overview – web content mining and web structure mining – web usage mining – web mining success stories

**Unit IV Implementation (K3) (15 Hours)**

Business Intelligence Implementation: Integration and Emerging Trends– Implement BI– BI and Integration implementation –Connecting BI systems to Databases and other enterprise systems.

**Unit V Emerging Trends in BI (K3) (15 Hours)**

On-Demand BI–Issues of Legality, Privacy and Ethics–Emerging Topics in BI – the web2.0 revolution – online social networking – virtual worlds – social networks and BI: collaborative decision making – RFID and new BI application opportunities – reality mining

**Note: 100% Theory.**

**Text book**

1. Efraim Turban, Ramesh Sharda, Dursun Delen and David King – Business Intelligence – A Managerial Approach, Pearson, 2012, 2nd Edition

**Reference Books**

1. Galit Shmueli, Nitin R. Patel and Peter C. Bruce – Data Mining for Business Intelligence, Prentice Hall, 2009, 3rd Edition.
2. Stuart Russel and Peter Norvi, Artificial Intelligence: A Modern Approach, Prentice Hall, 2009, 3rd Edition.

**BLENDED LEARNING**

UNIT	TOPIC	SOURCE	LINKS
III	Text and web mining	YouTube	<a href="https://youtu.be/I3cjbB38Z4A?si=LEmBIy4ybhIYQ9nb">https://youtu.be/I3cjbB38Z4A?si=LEmBIy4ybhIYQ9nb</a>
V	RFID and new BI application	YouTube	<a href="https://youtu.be/Ukfpq71BoMo?si=La8WFwhe9LJqvNnX">https://youtu.be/Ukfpq71BoMo?si=La8WFwhe9LJqvNnX</a>

**MAPPING OF CO'S WITH POs/PSOs**






	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
CO1	3	1	3	3	1	1	1	3	1	3	3	3	3	3
CO2	3	2	3	3	3	1	1	3	1	3	3	3	3	3
CO3	3	2	3	3	3	1	1	3	1	3	3	3	3	3
CO4	3	2	3	3	3	1	1	3	1	3	3	3	3	3
CO5	3	2	3	3	3	1	1	3	3	3	3	3	3	3

**Correlation: 3-High, 2-Medium, 1-Low**

**ASSESSMENT TOOLS**

S.No	Assessment Methods	Frequency of Assessment
1.	End semester Examinations	Once in a semester
2.	CIA I	Once in a semester
3.	CIA II	Once in a semester
4.	Model Examination	Once in a semester
5.	Assignment (Unit I & II)	Twice in a semester
6.	Seminar (Unit III & IV)	Twice in a semester
7.	Other Component	Once in a semester

<b>Course designed by:</b>	<b>Verified by HOD:</b>
<b>Name: Dr.C.Goldbell Rachel</b>	<b>Name: Dr.C.Goldbell Rachel</b>
<b>Checked by CDC:</b>	<b>Approved by :</b>
<b>Name:Dr.S.Jaculin Arockia Selvi</b>	<b>(Principal)</b>

				
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**SEMESTER VI**  
**COURSE CODE : 23UCB6E02**  
**TITLE OF THE COURSE : ELECTIVE: BRAND MANAGEMENT**  
*(Employability, Entrepreneurship & Skill Development)*

**Course Objective**

The main objective of this course is :

- To teach the importance of brand and its impacts among the customers

**COURSE OUTCOMES**

**At the end of the course the student will be able to:**

<b>CO 1</b>	Recall the basic concepts of branding and related terms	<b>K1</b>
<b>CO 2</b>	Compare brand image building and brand positioning strategies	<b>K2</b>
<b>CO 3</b>	Analyze the impact of brand, brand loyalty and brand audit.	<b>K3</b>
<b>CO 4</b>	Explain the brand rejuvenation and brand monitoring process	<b>K3</b>
<b>CO 5</b>	Apply various strategies for brand building and monitoring	<b>K3</b>

**Syllabus**

**Credit Points - 4**

**Instructional Hours: 75 hours**

**Unit I INTRODUCTION TO BRANDING (K1) (15 Hours)**

Introduction- Basic understanding of brands – concepts and process – significance of a brand – brand mark and trade mark – different types of brands – family brand, individual brand, private brand – selecting a brand name – functions of a brand – branding decisions – influencing factors.

**Unit II BRAND ASSOCIATIONS (K2) (15 Hours).**

Brand Associations: Brand vision – brand ambassadors – brand as a personality, as trading asset, Brand extension – brand positioning – brand image building.  
*(Self Study : Brand positioning)*

**Unit III BRAND IMPACT (K3) (15 Hours)**

Brand Impact: Branding impact on buyers – competitors, Brand loyalty – loyalty programme – brand equity – role of brand manager – Relationship with manufacturing - marketing- finance - purchase and R & D – brand audit.

**Unit IV BRAND REJUVENATION (K3) (15 Hours).**

Brand Rejuvenation: Brand rejuvenation and re-launch, brand development through acquisition takes over and merger – Monitoring brand performance over the product life cycle. Co-branding.

**Unit V Brand Strategies (K3)****(15 Hours)**

Brand Strategies: Designing and implementing branding strategies – Case studies.

**Note: 100% Theory.****Text book**

1. Kevin Lane Keller, “Strategic brand Management”, Person Education, New Delhi, 2003.
2. Lan Batey Asian Branding – “A great way to fly”, Prentice Hall of India, Singapore 2002.

**Reference Books**

1. Jean Noel, Kapferer, “Strategic brand Management”, The Free Press, New York, 1992.






**MAPPING OF CO’S WITH POs/PSOs**

		PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
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CO2		3	2	3	3	3	1	1	3	1	3	3	3	3	3
CO3		3	2	3	3	3	1	1	3	1	3	3	3	3	3
CO4		3	2	3	3	3	1	1	3	1	3	3	3	3	3
CO5		3	2	3	3	3	1	1	3	3	3	3	3	3	3

**Correlation: 3-High, 2-Medium, 1-Low****ASSESSMENT TOOLS**

S.No	Assessment Methods	Frequency of Assessment
1.	End semester Examinations	Once in a semester
2.	CIA I	Once in a semester
3.	CIA II	Once in a semester
4.	Model Examination	Once in a semester
5.	Assignment (Unit I & II)	Twice in a semester
6.	Seminar (Unit III & IV)	Twice in a semester
7.	Other Component	Once in a semester

Course designed by:	Verified by HOD:
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## SEMESTER VI

**COURSE CODE: 23UCB6SB4**

### **TITLE OF THE PAPER : SKILL BASED – STRATEGIC MANAGEMENT**

#### **Objectives**

- To understand the components of business environment
- To know the need and importance of formulating strategies

#### **COURSE OUTCOMES**

**At the end of the course the student will be able to:**

<b>Syllabus</b>  <b>Credit</b>  <b>Points - 2</b>	<b>CO 1</b>	Remember Strategic management process.	<b>K1</b>
	<b>CO 2</b>	Understand the factors influencing various types of environment and strategies	<b>K2</b>
	<b>CO 3</b>	Apply knowledge and abilities in formulating strategies and strategic plans.	<b>K3</b>
	<b>CO 4</b>	Analyze the relevant tools to resolve the contemporary issues in strategic management	<b>K2</b>
	<b>CO 5</b>	understand the challenges in the implementation of strategies	<b>K3</b>

**Total hours: 45 hours**

#### **Unit I Introduction to Strategic Management (K1) (12 hours)**

Strategic Management: Meaning and nature - Strategic management imperative - Vision, Mission and Objectives - Strategic levels in organizations

#### **Unit II Strategic Analysis (K2) (12 hours)**

Strategic Analysis: Situational Analysis – SWOT Analysis, TOWS Matrix, Portfolio Analysis – BCG Matrix. Strategic Planning: Meaning, stages – alternatives - strategy formulation.

#### **Unit III Formulation of Functional Strategy (K3) (12 hours)**

Formulation of Functional Strategy: Marketing strategy - financial strategy - Production strategy - Logistics strategy - Human resource strategy

#### **Unit IV Strategy Implementation and Control: (K2) (12 hours)**

Strategy Implementation and Control: Organizational structures - establishing strategic business units - Establishing profit centers by business, product or service, market segment or customer - Leadership and behavioral challenges.

**Unit V Reaching Strategic Edge (K3)****(12 hours)**

Reaching Strategic Edge: Business Process Reengineering - Benchmarking - Total Quality Management - Six Sigma – C.K. Prahalad's concepts and tasks of TQM - Contemporary Strategic Issues

**Note: 100% Theory**

**Text Book:**

1) Subba Rao.P (2013), *Business Policy and Strategic Management*, Himalaya Publishing House, Mumbai, 5<sup>th</sup> Edition.

**Reference Books:**

- 1) Rao.VSP, Harikrishna.C(2009), *Strategic Management – Text and Cases*, Excel books, 1<sup>st</sup> Edition.
- 2) Charles W.L, Hill Gareth R.Jones (2016), *Strategic Management and Integrated Approach*, Cengage learning India Pvt.Ltd, New Delhi, 4<sup>th</sup> Edition..

**MAPPING**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
CO1	3	1	1	2	3	3	1	1	1	2	2	2	3	1
CO2	3	1	1	2	2	2	1	1	2	2	3	2	3	1
CO3	3	1	2	2	1	1	1	2	2	3	1	3	3	1
CO4	3	1	2	2	3	2	3	2	2	3	2	2	3	1
CO5	3	1	1	1	3	2	3	2	3	3	2	3	3	2






**Correlation: 3-High, 2-Medium, 1-Low**

**ASSESSMENT TOOLS**

S.No.	Assessment Methods	Frequency of Assessment
1.	End semester Examinations	Once in a semester
2.	CIA I	Once in a semester
3.	CIA II	Once in a semester
4.	Model Examination	Once in a semester
5.	Assignment (Unit I & II)	Twice in a semester
6.	Seminar (Unit III & IV)	Twice in a semester
7.	Other Component (Quiz)	Once in a semester



<b>Course designed by:</b>	<b>Verified by HOD:</b>
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<b>Checked by CDC:</b>	<b>Approved by :</b>
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**SEMESTER VI**  
**COURSE CODE: 23IDSBCB1**  
**TITLE OF THE COURSE: SKILL BASED - FUNDAMENTALS OF SQL**  
**(Skill Development)**  
**(Industry 4.0)**

**OBJECTIVES**

- To provide comprehensive knowledge about relational database.
- To understand the NoSQL database management system

**COURSE OUTCOMES**

**At the end of the course the student will be able to:**

<b>CO 1</b>	Interpret relational database management concepts	<b>K1</b>
<b>CO 2</b>	Develop the tables using normalization	<b>K2</b>
<b>CO 3</b>	Gain knowledge on group functions	<b>K3</b>
<b>CO 4</b>	Understand the overview of user defined functions	<b>K2</b>
<b>CO 5</b>	Acquire knowledge on the concept NOSQL.	<b>K3</b>

**Syllabus**

**Credit Points - 2**

**Total hours: 45 hours**

**UNIT-I: Introduction To Database Management System (K1) 9 hours**

Introduction to database management system-Data models - Database system architecture-The SQL Language-Relational database Management System

**UNIT-II: Normalization Process (K2) 9 hours**

Functional dependencies-Normalization process: 1NF- 2NF-3NF-BCNF. The E-R model-Entities and attributes-Relationships-Normalizing the model-Table instance charts-Implementation of the selection operator

**Unit-III: Introduction To Group Functions (K3) 9 hours**

Built in functions-Numeric-Character conversion functions-Introduction to group functions-sum, avg, max, min, count-combining single value and group functions- Displaying specific groups-

**UNIT – IV: User Defined Functions (K2) 9 hours**

Introduction to processing date and time-Arithmetic with dates - Date Functions Introduction to PL/SQL-user defined functions-Triggers-Stored procedure.

**UNIT – V: Overview and History Of NOSQL (K3) 9 hours**

Overview and History of NoSQL Databases Definition of the Four Types of NoSQL Database, The Value of Relational Databases, Getting at Persistent Data, Concurrency, Integration, Impedance Mismatch, Application and Integration Databases.

**Note: 100% Theory.**

### TEXT BOOK:

Pramod J. Sadalage & Martin Fowler - NoSql Distilled, Pearson Education Inc., 2013 Edition.

### REFERENCE BOOKS:

3. Ramon A Mata-Toledo Pauline K Cushman – Database Management System, Tata McGraw-Hill Publishing Company Limited, New Delhi, 2010, 2<sup>nd</sup> Edition.
4. Kristina Chodorow – MongoDB: The Definitive Guide, O'Reilly Media Inc., 2013 2<sup>nd</sup> Edition.

### BLENDED LEARNING

UNIT	TOPIC	SOURCE	LINKS
I	Data models	geeksforgeeks	<a href="https://www.geeksforgeeks.org/data-models-in-dbms/">https://www.geeksforgeeks.org/data-models-in-dbms/</a>

### MAPPING OF CO'S WITH POs/PSOs






	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
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CO2	3	1	1	1	2	1	3	2	3	2	1	3	3	2
CO3	3	1	1	1	2	2	3	2	3	2	1	3	3	2
CO4	2	1	1	1	2	2	3	2	3	2	1	3	3	2
CO5	2	1	1	1	2	2	3	2	3	2	1	3	3	2

**Correlation: 3-High, 2-Medium, 1-Low**

### ASSESSMENT TOOLS

S.No	Assessment Methods	Frequency of Assessment
1.	End semester Examinations	Once in a semester
2.	CIA I	Once in a semester
3.	CIA II	Once in a semester
4.	Model Examination	Once in a semester
5.	Assignment (Unit I & II)	Twice in a semester
6.	Seminar (Unit III & IV)	Twice in a semester
7.	Other Component (Letter writing)	Once in a semester

<b>Course designed by:</b>	<b>Verified by HOD:</b>
<b>Name: Dr.C.Goldbell Rachel</b>	<b>Name Dr.C.Goldbell Rachel</b>
<b>Checked by CDC:</b>	<b>Approved by :</b>
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