University of Madras

Chepauk, Chennai 600 005

[Est.1857, State University, NAAC 'A' Grade, CGPA 3.32, NIRF2019 Rank: 20]
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Undergraduate Programme in Commerce

Curriculum and Syllabus for

B.Com. (Information System Management)

(With effect from the Academic Year 2023-24)

JUNE 2023

Note: The Board of Studies in Commerce (UG) designed the syllabus as per Common Model Syllabus provided by TANSCHE based on Learning Outcome based Curriculum Framework (LOCF) as prescribed by the UGC.

B.COM. - INFORMATION SYSTEM MANAGEMENT

PROGRAMME OBJECTIVE:

The B.Com. Degree Programme provides ample exposure to courses from the fields of Commerce, Accountancy and Management. The course equips the students for entry level jobs in industry, promotes the growth of their professional career, entrepreneurship and a key contributor to the economic development of the country.

LEARNING OUTCOMES – BASED CURRICULUM FRAMEWORK GUIDELINES BASED REGULATIONS FOR UNDER GRADUATE PROGRAMME	
Programme:	**B.COM INFORMATION SYSTEM MANAGEMENT**
Programme Code:	
Duration:	**3 Years (UG)**
Programme Outcomes:	**PO1: Disciplinary knowledge**: Capable of demonstrating comprehensive knowledge and understanding of one or more Disciplines that form a part of an Undergraduate Programme of Study

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

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

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

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

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

PO7: Co-operation/Team work: Ability to work effectively and respectfully with diverse teams; facilitate cooperative or coordinated effort on the part of a group, and act together as a group or a team in the interests of a common cause and work efficiently as a member of the team.

PO8: Scientific reasoning: Ability to analyse, interpret and draw conclusions from quantitative or qualitative data: and critically evaluate ideas, evidence and experiences from an open minded and reasoned perspective.

PO9: Reflective thinking: Critical sensibility to lived experiences, with self-awareness and reflexivity of both self and society.

PO10: Information/Digital Literacy: Capability to use ICT in variety of learning situations, demonstrate ability to access, evaluate and use a variety of relevant information sources, and use appropriate software for analysis of data.

PO11: Self- directed learning: ability to work independently, identify appropriate resources required for a project and manage a project through to completion.

PO12: Multicultural competence: Posse's knowledge of values and belief of multiple cultures and global perspective: and capability to effectively engage in a multicultural society and interact respectfully with diverse groups.

PO13: Moral and Ethical awareness /reasoning: Ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives and use ethical practices in all work. Capable of demonstrating the ability to identify ethical issue's related to one's work, avoid unethical behaviour such as fabrication, falsification or misrepresentation of data or committing plagiarist, not adhering to intellectual property rights; appreciating environmental and sustainability issues; and adopting objective, unbiased and truthful actions in all aspects of work. |
|---|---|

	PO14: Leadership readiness/qualities: Capability for mapping out the task of the team or an organisation, and setting direction, formulating and inspiring vision, building a team who can help achieve the vision, motivating and inspiring team members to engage with that vision and using management skill to guide people to the right destination in a smooth and efficient way. **PO15: Life Long Learning**: Ability to acquire knowledge and skills, including "learning how to learn", that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives and adapting to changing trades and demands of workplace through knowledge/skill development/reskilling.
Programme Specific Outcomes:	**PSO1 – Placement**: To prepare the students who will demonstrate respectful engagement with others' ideas, behaviours, beliefs and apply diverse frames of reference to decisions and action. Further the students are encouraged with add-on value based and job-oriented courses which ensure them to sustain in the organisation level. **PSO2 – Contribution to Business World:** Apply theoretical concepts to business practices to produce employable, ethical, and innovative professionals to sustain in the dynamic business world. **PSO3 – Contribution to the Society:** To contribute to the development of the society by collaborating with stakeholders for mutual benefit. Become acquainted with commercial knowledge and soft skill to react in the most appropriate way when faced with challenges in the society.

B.COM INFORMATION SYSTEM MANAGEMENT

Part	Course Code	Title of the Course	Credits	Hours
		FIRST YEAR		
		FIRST SEMESTER		
Part I	----	Language – I	**3**	**6**
Part II	100L1Z	English I	**3**	**6**
Part III	151C1A	Core Paper I –Financial Accounting I	**5**	**5**
	151C1B	Core Paper II - Principles of Management	**5**	**5**
	151E1A	Elective I - Programming in C and Lab	**3**	**4**
	151E1B	Elective I - Python Programming and Lab		
	151E1C	Elective I – Open Source Technology Lab		
Part IV	151S1A	SEC – 1 - MS Office for Commerce *	**2**	**2**
	100L1L	Basic Tamil-I (Other Language Students) *		
	100L1M	Advanced Tamil-I (Other Language Students) *		
	151B1A	Foundation Course FC - Professional Ethics	**2**	**2**
		TOTAL	**23**	**30**

* PART-IV: SEC-1 / Basic Tamil / Advanced Tamil (Any one)
1. Students who have studied Tamil upto XII STD and also have taken Tamil in Part I shall take SEC-I.
2. Students who have **not** studied Tamil upto XII STD and have taken any Language other than Tamil in Part-I shall take **Basic Tamil** comprising of Two Courses (level will be at 6th Std.).
3. Students who have studied Tamil upto XII STD and have taken any Language other than Tamil in Part-I shall take **Advanced Tamil** comprising of Two Courses.

Part	Course Code	Title of the Course	Credits	Hours
		SECOND SEMESTER		
Part I	----	Language – II	**3**	**6**
Part II	100L2Z	English II	**3**	**6**
Part III	151C2A	Core Paper III –Financial Accounting II	**5**	**5**
	151C2B	Core Paper IV-Business Law	**5**	**5**
	151E21	Elective II - Programming in JAVA and Lab	**3**	**4**
	151E22	Elective II - Programming in C++ and Lab		
	151E23	Elective II – Web Technology (PHP)		
Part IV	151S21	SEC – 2 - Accounting Using Excel *	**2**	**2**
	100L2L	Basic Tamil-II (Other Language Students) *		
	100L2M	Advanced Tamil-II (Other Language Students) *		
	151S2A	SEC 3 - Retail Management	**2**	**2**
		TOTAL	**23**	**30**

		SECOND YEAR		
		THIRD SEMESTER		
Part I	----	Language – III	**3**	**6**
Part II	200L3Z	English III	**3**	**6**
Part III	251C3A	Core Paper V- Corporate Accounting I	**5**	**5**
	251C3B	Core Paper VI – Company Law	**5**	**5**
	251E31	Elective III – Computerized Accounting	**3**	**4**
	251E3A	Elective III – E-Commerce		
	251E3B	Elective III – Human Resource Management		
Part IV	251S3A	Skill Enhancement Course – SEC 4: Basics of Entrepreneurship	**1**	**1**
	251S3B	Skill Enhancement Course – SEC 5: Website Designing	**2**	**2**
	---	Environmental Studies	**-**	**1**
		TOTAL	**22**	**30**
		FOURTH SEMESTER		
Part I	----	Language – IV	**3**	**6**
Part II	200L4Z	English IV	**3**	**6**
Part III	251C4A	Core Paper VII–Corporate Accounting II	**5**	**5**
	251C4B	Core Paper VIII- Principles of Marketing	**5**	**5**
	251E41	Elective IV– SPSS Practical	**3**	**3**
	251E4A	Elective IV– Management Information System		
	251E4B	Elective IV– Investment Analysis and Portfolio Management		
Part IV	251S4A	Skill Enhancement Course SEC – 6: Cash Accounting and Operating Cycle	**2**	**2**
	251S4B	Skill Enhancement Course – SEC-7: Fin Tech	**2**	**2**
	251V4A	Environmental Studies	**2**	**1**
		TOTAL	**25**	**30**

		THIRD YEAR		
		FIFTH SEMESTER		
Part III	351C5A	Core Paper IX –Cost Accounting I	4	5
	351C5B	Core Paper X - Banking Law and Practice	4	5
	351C5C	Core Paper XI – Income Tax Law and Practice I	4	5
	351C5D	Core Paper XII – Auditing and Corporate Governance	4	5
	351E5A 351E5B	Discipline Specific Elective 1/2 - Operation Research 2/2 - Research Methodology	3	4
	351E51 351E5C	Discipline Specific Elective 3/4 – Software Engineering and UML Lab 4/4 – Cryptography & Network Security	3	4
Part IV	351V5A	Value Education	2	2
	351V5B	Summer Internship / Industrial Training	2	-
		TOTAL	26	30
		SIXTH SEMESTER		
Part III	351C6A	Core Paper XIII –Cost Accounting - II	4	6
	351C6B	Core Paper XIV-Management Accounting	4	6
	351C6C	Core Paper XV- Income Tax Law and Practice II	4	6
	351E6A 351E6B	Discipline Specific Elective 5/6- Entrepreneurial Development 6/6 - Project	3	5
	351E61 351E62	Discipline Specific Elective 7/8 - R Language 8/8 – Data Science Using Python Lab	3	5
Part IV	351S6A	General awareness for Competitive Examination	2	2
Part V	351V6A	Extension Activity	1	-
		TOTAL	21	30
		GRAND TOTAL	140	180

The following distribution of marks for Computer related subjects which have both theory and practical (syllabus combined both theory and practical in each paper together) in B.Com (Information System Management) be followed:

PAPER	INTERNAL	EXTERNAL	TOTAL
Theory	25	75	100
Practical	40	60	100

Finally, theory marks (100) be reduced to 60% and practical marks (100) be reduced to 40%.

UNIVERSITY OF MADRAS

B.COM. DEGREE PROGRAMME IN INFORMATION SYSTEM MANAGEMENT
SYLLABUS WITH EFFECT FROM 2023-2024

FIRST YEAR – SEMESTER – I
CORE–I: FINANCIAL ACCOUNTING - I
(Common to BCom-Gen., AF, BM, CA, MM, Co-op. & CS)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
151C1A	5				5	5	25	75	100

Learning Objectives	
LO1	To understand the basic accounting concepts and standards.
LO2	To know the basis for calculating business profits.
LO3	To familiarize with the accounting treatment of depreciation.
LO4	To learn the methods of calculating profit for single entry system.
LO5	To gain knowledge on the accounting treatment of insurance claims.

Prerequisites: Should have studied Accountancy in XII Std

Unit	Contents	No. of Hours
I	**Fundamentals of Financial Accounting** Financial Accounting – Meaning, Definition, Objectives, Basic Accounting Concepts and Conventions - Journal, Ledger Accounts– Subsidiary Books — Trial Balance - Classification of Errors – Rectification of Errors – Preparation of Suspense Account – Bank Reconciliation Statement - Need and Preparation	15
II	**Final Accounts** Final Accounts of Sole Trading Concern- Capital and Revenue Expenditure and Receipts – Preparation of Trading, Profit and Loss Account and Balance Sheet with Adjustments.	15
III	**Depreciation and Bills of Exchange** Depreciation - Meaning – Objectives – Accounting Treatments - Types - Straight Line Method – Diminishing Balance method – Conversion method. Units of Production Method – Cost Model vs Revaluation **Bills of Exchange** – Definition – Specimens – Discounting of Bills – Endorsement of Bill – Collection – Noting – Renewal – Retirement of Bill under rebate	15
IV	**Accounting from Incomplete Records – Single Entry System** Incomplete Records -Meaning and Features - Limitations - Difference between Incomplete Records and Double Entry System - Methods of Calculation of Profit - Statement of Affairs Method – Preparation of final statements by Conversion method.	15
V	**Royalty and Insurance Claims** Meaning – Minimum Rent – Short Working – Recoupment of Short Working – Lessor and Lessee – Sublease – Accounting Treatment. **Insurance Claims** –Calculation of Claim Amount-Average clause (Loss of Stock only)	15
	TOTAL	75
THEORY 20% & PROBLEM 80%		

CO	Course Outcomes
CO1	Remember the concept of rectification of errors and Bank reconciliation statements
CO2	Apply the knowledge in preparing detailed accounts of sole trading concerns
CO3	Analyse the various methods of providing depreciation
CO4	Evaluate the methods of calculation of profit
CO5	Determine the royalty accounting treatment and claims from insurance companies in case of loss of stock.
	Textbooks
1.	S. P. Jain and K. L. Narang Financial Accounting- I, Kalyani Publishers, New Delhi.
2.	S.N. Maheshwari, Financial Accounting, Vikas Publications, Noida.
3.	Shukla Grewal and Gupta, "Advanced Accounts", volume 1, S.Chand and Sons, New Delhi.
4.	Radhaswamy and R.L. Gupta: Advanced Accounting, Sultan Chand, New Delhi.
5.	R.L. Gupta and V.K. Gupta, "Financial Accounting", Sultan Chand, New Delhi.
6.	Dr. K. Murugadoss, Dr. M. Jaya, Dr. V. Charulatha & Dr. D. Baskar Financial Accounting, Vijay Nicole Imprints Private Limited, Chennai
7.	T.S. Reddy and Dr. A. Murthy, Financial Accounting, Margham Publications, Chennai
	Reference Books
1.	Dr. Arulanandan and Raman: Advanced Accountancy, Himalaya Publications, Mumbai.
2.	Tulsian , Advanced Accounting, Tata McGraw Hills, Noida.
3.	Charumathi and Vinayagam, Financial Accounting, S.Chand and Sons, New Delhi.
4.	Goyal and Tiwari, Financial Accounting, Taxmann Publications, New Delhi.
5.	Robert N Anthony, David Hawkins, Kenneth A. Merchant, Accounting: Text and Cases. McGraw-Hill Education, Noida.
NOTE: Latest Edition of Textbooks May be Used	
	Web Resources
1.	https://www.slideshare.net/mcsharma1/accounting-for-depreciation-1
2.	https://www.slideshare.net/ramusakha/basics-of-financial-accounting
3.	https://www.accountingtools.com/articles/what-is-a-single-entry-system.html

**MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	3	2	3	2	2	3	2	2
CO2	3	2	3	3	3	2	2	2	3	2	2
CO3	3	2	3	3	3	2	2	2	3	2	2
CO4	3	2	3	3	2	2	2	2	3	2	2
CO5	3	2	3	3	3	2	2	2	3	2	2
TOTAL	15	10	15	15	13	11	10	10	15	10	10
AVERAGE	3	2	3	3	2.6	2.2	2	2	3	2	2

3 – Strong, 2- Medium, 1- Low

UNIVERSITY OF MADRAS

B.COM. DEGREE PROGRAMME IN INFORMATION SYSTEM MANAGEMENT
SYLLABUS WITH EFFECT FROM 2023-2024

FIRST YEAR – SEMESTER – I
CORE–II: PRINCIPLES OF MANAGEMENT
(Common to BCom-Gen., AF, BM, CA, MM, Co-op. & CS)

Subject Code	L	T	P	S	Credits	Inst. Hours	CIA	External	Total
							Marks		
151C1B	5				5	5	25	75	100

	Learning Objectives
LO1	To understand the basic management concepts and functions
LO2	To know the various techniques of planning and decision making
LO3	To familiarize with the concepts of organisation structure
LO4	To gain knowledge about the various components of staffing
LO5	To enable the students in understanding the control techniques of management

Prerequisites: Should have studied Commerce in XII Std

Unit	Contents	No. of Hours
I	**Introduction to Management** Meaning- Definitions – Nature and Scope - Levels of Management – Importance - Management Vs. Administration – Management: Science or Art –Evolution of Management Thoughts – F. W. Taylor, Henry Fayol, Peter F. Drucker, Elton Mayo - Functions of Management - Trends and Challenges of Management. Managers – Qualification – Duties & Responsibilities.	15
II	**Planning** Planning – Meaning – Definitions – Nature – Scope and Functions – Importance and Elements of Planning – Types – Planning Process - Tools and Techniques of Planning – Management by Objective (MBO). Decision Making: Meaning – Characteristics – Types - Steps in Decision Making – Forecasting.	15
III	**Organizing** Meaning - Definitions - Nature and Scope – Characteristics – Importance – Types - Formal and Informal Organization – Organization Chart – Organization Structure: Meaning and Types - Departmentalization– Authority and Responsibility – Centralization and Decentralization – Span of Management.	15
IV	**Staffing** Introduction - Concept of Staffing- Staffing Process – Recruitment – Sources of Recruitment – Modern Recruitment Methods - Selection Procedure – Test-Interview– Training: Need - Types– Promotion –Management Games – Performance Appraisal - Meaning and Methods – 360 degree Performance Appraisal – Work from Home - Managing Work from Home [WFH].	15

V	**Directing** Motivation –Meaning - Theories – Communication – Types - Barriers to Communications – Measures to Overcome the Barriers. Leadership – Nature - Types and Theories of Leadership – Styles of Leadership - Qualities of a Good Leader – Successful Women Leaders – Challenges faced by women in workforce - Supervision. **Co-ordination and Control** Co-ordination – Meaning - Techniques of Co-ordination. Control - Characteristics - Importance – Stages in the Control Process - Requisites of Effective Control and Controlling Techniques – Management by Exception [MBE].	15
	Total	**75**

Course Outcomes	
CO1	Demonstrate the importance of principles of management.
CO2	Paraphrase the importance of planning and decision making in an organization.
CO3	Comprehend the concept of various authorizes and responsibilities of an organization.
CO4	Enumerate the various methods of Performance appraisal
CO5	Demonstrate the notion of directing, co-coordination and control in the management.

Textbooks	
1	Gupta.C.B, -Principles of Management-L.M. Prasad, S.Chand& Sons Co. Ltd, New Delhi.
2	DinkarPagare, Principles of Management, Sultan Chand & Sons Publications, New Delhi.
3	P.C.Tripathi& P.N Reddy, Principles of Management. Tata McGraw, Hill, Noida.
4	L.M. Prasad, Principles of Management, S.Chand&Sons Co. Ltd, New Delhi.
5	R.K. Sharma, Shashi K. Gupta, Rahul Sharma, Business Management, Kalyani Publications, New Delhi.

Reference Books	
1	K Sundhar, Principles Of Management, Vijay Nichole Imprints Limited, Chennai
2	Harold Koontz, Heinz Weirich, Essentials of Management, McGraw Hill, Sultan Chand and Sons, New Delhi.
3	Grifffin, Management principles and applications, Cengage learning, India.
4	H.Mintzberg - The Nature of Managerial Work, Harper & Row, New York.
5	Eccles, R. G. & Nohria, N. Beyond the Hype: Rediscovering the Essence of Management. Boston The Harvard Business School Press, India.

NOTE: Latest Edition of Textbooks May be Used

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SYLLABUS WITH EFFECT FROM 2023-2024

	Web Resources
1	http://www.universityofcalicut.info/sy1/management
2	https://www.managementstudyguide.com/manpower-planning.htm
3	https://www.businessmanagementideas.com/notes/management-notes/coordination/coordination/21392

MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	2	3	3	2	2	2	3	2	3
CO2	3	2	3	3	2	2	2	2	3	2	2
CO3	3	2	2	3	2	2	2	1	3	2	2
CO4	3	2	2	3	2	2	2	2	3	2	2
CO5	3	2	3	3	2	2	2	1	3	2	2
TOTAL	15	10	12	15	11	10	10	8	15	10	11
AVERAGE	3	2	2.4	3	2.2	2	2	1.6	3	2	2.2

3 – Strong, 2- Medium, 1- Low

UNIVERSITY OF MADRAS

B.COM. DEGREE PROGRAMME IN INFORMATION SYSTEM AND MANAGEMENT
SYLLABUS WITH EFFECT FROM 2023-2024

FIRST YEAR – SEMESTER - I
ELECTIVE - I: PYTHON PROGRAMMING AND LAB
(Common to BCom-CA)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
151E1B	2		2		3	4	40	60	100

Learning Objectives	
LO1	Describe the core syntax and semantics of Python programming language.
LO2	Discover the need for working with the strings and functions.
LO3	Illustrate the process of structuring the data using lists, dictionaries, tuples and sets.
LO4	Understand the usage of packages and Dictionaries

Prerequisites: Should have studied Commerce in XII Std

Unit	Contents	No. of Hours
I	Introduction: Computer algorithms-Computer Hardware- Computer Software-Python programming language - Literals - Variables and Identifiers - Operators - Expressions and Data types, Input / output	12
II	Control Structures: Boolean Expressions - Selection Control - If Statement- Indentation in Python- Multi-Way Selection -- Iterative Control- While Statement- Infinite loops- Definite vs. Indefinite Loops- Boolean Flag. String, List and Dictionary, Manipulations Building blocks of python programs, Understanding and using ranges.	12
III	Functions: Program Routines- Defining Functions- More on Functions: Calling Value-Returning Functions- Calling Non-Value-Returning Functions- Parameter Passing - Keyword Arguments in Python - Default Arguments in Python-Variable Scope. Recursion: Recursive Functions	12
IV	Objects and their use: Software Objects - Turtle Graphics – Turtle attributes-Modular Design: Modules - Top-Down Design - Python Modules -	12
V	Dictionaries and Sets: Dictionary type in Python - Set Data type. Text Files: Opening, reading and writing text files – Exception Handling	12
	Total (Theory + Practical)	**60**

Course Outcomes	
CO1	Develop and execute simple Python programs
CO2	Write simple Python programs using conditionals and looping for solving problems
CO3	Decompose a Python program into functions
CO4	Represent compound data using Python lists, tuples, dictionaries etc.

Textbooks	
1	Charles Dierbach, "Introduction to Computer Science using Python - A computational Problem-solving Focus", Wiley India Edition, 2015.

2	Wesley J. Chun, "Core Python Applications Programming", 3rd Edition , Pearson Education, 2016
3	Mark Lutz, "Learning Python Powerful Object Oriented Programming", O'reilly Media 2018, 5th Edition.
Reference Books	
1	Timothy A. Budd, "Exploring Python", Tata MCGraw Hill Education Private Limited 2011, 1 st Edition.
2	John Zelle, "Python Programming: An Introduction to Computer Science", Second edition, Course Technology Cengage Learning Publications, 2013, ISBN 978-1590282410
3	Michel Dawson, "Python Programming for Absolute Beginers" , Third Edition, Course Technology Cengage Learning Publications, 2013, ISBN 978-1435455009
NOTE: Latest Edition of Textbooks May be Used	
Web Resources	
1	https://onlinecourses.swayam2.ac.in/cec22_cs20/preview

Python Programming Lab	

Learning Objectives: (for teachers: what they have to do in the class/lab/field)
- Acquire programming skills in core Python.
- Acquire Object-oriented programming skills in Python.
- Develop the skill of designing graphical-user interfaces (GUI) in Python.
- Develop the ability to write database applications in Python.
- Acquire Python programming skills to move into specific branches

Course Outcomes: (for students: To know what they are going to learn)
CO1: To understand the problem solving approaches

CO2: To learn the basic programming constructs in Python

CO3: To practice various computing strategies for Python-based solutions to real world problems
CO4: To use Python data structures - lists, tuples, dictionaries.

List of Programs

1. Program to convert the given temperature from Fahrenheit to Celsius and vice versa depending upon user's choice.
2. Write a Python program to construct the following pattern, using a nested loop
```
    *
   **
  ***
 ****
*****
```

```
****
***
**
*
```

3. Program to calculate total marks, percentage and grade of a student. Marks obtained in each of the five subjects are to be input by user. Assign grades according to the following criteria:

Grade A: Percentage >=80   Grade B: Percentage >=70 and 80

Grade C: Percentage >=60 and <70   Grade D: Percentage >=40 and <60

Grade E: Percentage < 40

4. Program, to find the area of rectangle, square, circle and triangle by accepting suitable input parameters from user.
5. Write a Python script that prints prime numbers less than 20.
6. Program to find factorial of the given number using recursive function.
7. Write a Python program to count the number of even and odd numbers from array of N numbers.
8. Write a Python class to reverse a string word by word.
9. Read a file content and copy only the contents at odd lines into a new file.
10. Create a Turtle graphics window with specific size.

Extended Professional Component	Questions related to the above topics, from various competitive examinations UPSC / TRB / NET / UGC – CSIR / GATE / TNPSC / others to be solved (To be discussed during the Tutorial hour)
Skills acquired from the course	Knowledge, Problem Solving, Analytical ability, Professional Competency, Professional Communication and Transferrable Skill

Learning Resources:

- **Recommended Texts**

1. Charles Dierbach, "Introduction to Computer Science using Python - A computational Problem-solving Focus", Wiley India Edition, 2015.

2. Wesley J. Chun, "Core Python Applications Programming", 3rd Edition , Pearson Education, 2016

- **Reference Books**

1. Mark Lutz, "Learning Python Powerful Object Oriented Programming", O'reilly Media 2018, 5th Edition.
2. Timothy A. Budd, "Exploring Python", Tata MCGraw Hill Education Private Limited 2011, 1 st Edition.
3. John Zelle, "Python Programming: An Introduction to Computer Science", Second edition, Course Technology Cengage Learning Publications, 2013, ISBN 978- 1590282410
4. Michel Dawson, "Python Programming for Absolute Beginers" , Third Edition, Course Technology Cengage Learning Publications, 2013, ISBN 978-1435455009

UNIVERSITY OF MADRAS

B.COM. DEGREE PROGRAMME IN INFORMATION SYSTEM MANAGEMENT
SYLLABUS WITH EFFECT FROM 2023-2024

FIRST YEAR – SEMESTER – I
SEC – 1 MS OFFICE FOR COMMERCE (Practical)
(Common to BCom-Gen., AF, BM, CA & MM)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
151S1A			2		2	2	40	60	100

Unit	Contents	No. of Hours
I	**Introduction to MS Word & Commonly used features** Introduction to Word processing -Word processor / Editor - File Extension - DOCx, DOTx - Application / Document area Title Bar, Menu Bar, Ribbon, Icons, Status Bar, Scroll Bar - Page Layout - Page Size (Letter / A4) - Orientation (Landscape / Portrait) - Margin (Top, Left, Bottom, Right) -Navigation(Arrow keys, Ctrl + Arrow keys, Home, End, Page UP/ Page Down) - Selection - Using Shift + Navigation Fonts / Superscript / Subscript - Show / Hide - Displays non printing characters (Space / TAB / Enter) - Change Case - Bullets / Numbering - Format Painter – Clipboard - Find / Replace Screen shot - Prnt SCR / Alt + PrntScr – Indent - Line and Para spacing - Tab Stop - Text to Table - Table to Text	6
II	**Insert Tab & Mail Merge** Insert Tab - Picture (Styles, Border, Effects, Warp Text, Align, Rotate, Flip, Crop) - Water Mark - Shapes (Group, Ungroup, Bring to Front, Send to Back, Format shape) – Hyperlink – Bookmark - Text Box - Word Art Tables - Rows , Columns, Cell - Merge Cell - Split Cell TOC - Update entire - Header / Footer - Cover Page - Break - Section Break - Spell Check - ABC / F7 - Word Count Working with Mail Merge	6
III	**Introduction to MS Powerpoint** Creating Presentation - File Extension - PPTx, PPSx - Slides and Layouts, Apply Background - Title Bar, Menu Bar, Ribbon, Icons, Status Bar, Scroll Bar - View - Slide Master Insert Logo - to display in all slides - Change Text color - to maintain consistency in all slides Slideshow - F5 / Shift F5 New Slide - Ctrl + M Animation Effects - Apply in objects within the Slide Transition Effect - Apply between slides Rehearse Timing - Set timing to each slide Loop until ESC - After reaching LAST slide, display again from 1st slide. SaveAs - PPSx - PowerPoint Show SlideShow - Use Pen / Highlighter Paste the Chart from Excel - Data linked to Excel source Insert Chart within PowerPoint - Data linked internally	6

IV	**Introduction to MS Excel &Using Formulas** Working with Excel Opening a Workbook - Understanding the Display Screen Working with the Ribbon - Exploring the File Tab - Working with the Quick Access Toolbar - Working with the Status Bar- Switching Between Opened Workbooks Entering Data - Moving the Cell Pointer - Selecting a Range of Cells - Creating a New Workbook - Inserting, Renaming, and Deleting Worksheets - Entering Constant Values - Using Auto Fill to Enter Data - Saving a Workbook - Editing Cell Contents Clearing Cell Contents - Insert / Edit Comments - Working with Undo and Redo - Closing a Workbook Using Formulas Entering Formulas with Addressing Methods (Relative / Mixed / Absolute) - Using Auto Fill with Formulas - Using the Sum, Average, Max, Min, Count Functions - Using IF and NestedIf Function - Using Text Functions (Len, Trim, Left, Right, Mid, Find, Replace, Upper, Lower, Proper) - Using Date Functions (Today, Now, Day, Month, Year) - Using Lookup Functions (Vlookup, Hlookup) - Using Formula Error Checking - Cutting / Copying and Pasting Constant Values and Formulas - Copy / Pasting using Transpose option - Using Format Painter	6
V	**Working on multiple Worksheets & Working with huge Datasets** Formatting Worksheets - Formatting Numbers - Changing the Font Format - Aligning Cell Contents - Merging Cells Adding Borders - Applying Cell Styles - Modifying Columns and Rows - Changing Column Width - Changing Row Height Inserting and Deleting Columns or Rows - Hiding Columns or Rows - Editing Workbooks - Working with AutoCorrect Checking Spelling - Using Find and Replace - Using Hyperlinks (Internal / External) Working with huge Dataset Using multilevel Sort - Using Filters - Fetching Unique Records Finding Duplicates - Applying Conditional Formatting Rules Applying Freeze Panes - Using Pivot Table (Layout & Format) Working with Charts Pie / Bar / Column / Line Charts - Titles / Legends / Data labels Copy / Pasting in Word / PowerPoint Printing Worksheets Using Print Preview - Working with Print Settings - Using Page Setup Tools - Working in Page Layout View - Creating a Header and Footer - Using Page Break Preview - Printing a Worksheet Exiting Excel	6
	Total	**30**

	Reference Books
1	Hart-Davis, G., Kettell, J. A., Simmons, C. (2003). Microsoft Office 2003: The Complete Reference. United Kingdom: McGraw-Hill/Osborne.
2	Lambert, J., Frye, C. (2018). Microsoft Office 2019 Step by Step. United States: Pearson Education.
3	Lambert, J., Cox, J. (2007). Microsoft Office Word 2007 Step by Step. United States: Microsoft Press.
4	Richardson, T., Held, B., Moriarty, B. (2019). Microsoft Excel Functions and Formulas with Excel 2019/Office 365. United States: Mercury Learning and Information
5	Lalwani, L. (2019). Excel 2019 All-in-One: Master the New Features of Excel 2019 / Office 365. India: BPB Publications.
6	Weverka, P. (2010). PowerPoint 2010 All-in-One For Dummies. Germany: Wiley.
	Web Resources
1	Ms Word tutorial: https://youtu.be/S-nHYzK-BVg
2	Ms PowerPoint: https://youtu.be/XF34-Wu6qWU
3	Mail Merge material: https://support.microsoft.com/en-us/office/use-mail-merge-for-bulk-email-letters-labels-and-envelopes-f488ed5b-b849-4c11-9cff-932c49474705
4	Ms Excel functions: https://youtu.be/ShBTJrdioLo
5	Materials : https://support.microsoft.com/en-us/training

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SYLLABUS WITH EFFECT FROM 2023-2024

FIRST YEAR – SEMESTER – I

FOUNDATION COURSE – PROFESSIONAL ETHICS

(Common to BCom-Gen., AF, BM, CA & MM)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
151B1A	**2**				**2**	**2**	**40**	**60**	**100**

Unit	Contents	No. of Hrs.
I	**Concept and Theories of Business Ethics:** Definition of Ethics – Personal Ethics and Business Ethics – Morality and Law – How are moral standards are formed? - Religion and Morality – Morality, Etiquette and - Professional Codes – Indian Ethical Traditions.	6
II	**Business Ethics:** Principles of Personal Ethics – Principles of Professional Ethics – Evaluation of Ethics over the Years – Honesty, Integrity and Transparency – Distinction between Values and Ethics – Roots of Unethical Behaviour – Ethical Decision-making.	6
III	**Ethical Dilemmas, Sources and their Resolutions:** What is an Ethical Dilemma? – Sources of Ethical Behaviour – Code of Personal Ethics for Employees – How to resolve an Ethical problem? – How to resolve Ethical Dilemmas?	6
IV	**Ethical Decision-making in Business:** Ethical Models that guide Decision-making – Which approach to use? – Ethical Decision-making with cross-holder Conflicts and Competition – Applying Moral Philosophy to Ethical Decision-making – Kohlberg's Model of Cognitive Moral Development – Influences on Ethical Decision-making – Personal values and Ethical Decision-making.	6
V	**Human Values for Indian Managers:** Lessons from Ancient Indian Education System – The Law of Karma – Quality of Work Life – Ethics of Vivekananda, Gandihiji, Aurobindo and Tagore.	6
	Total	**30**

	Textbooks
1	Tom L. Beauchamp and Norman E. Bowie, "Ethical Theory and Business", Prentice Hall, New Jersey
2	Manual Vela Squez, "Business Ethics Concepts and Cases", Prentice Hall, New Jersey
3	Kenneth Blanchard and Norman Vincent Peale, "The Power of Ethical Management", New York, William Morrow & Co
4	Dr.S.S.Khanka, "Business Ethics and Corporate Governance",S Chand and Company Ltd,NewDelhi.
5	R.S.Naagarazan, "A Textbook on Professional Ethics and Human Values", New Age International(P) Limited.
6	A.C.Fernando, "Business Ethics and Corporate Governance", Pearson.
7	A.C.Fernando,K.P.Muraleedharan, E.K.Satheesh, "Business Ethics - An Indian Perspective",Pearson India Education Service Pvt Ltd.

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FIRST YEAR – SEMESTER - II
CORE – III: FINANCIAL ACCOUNTING-II
(Common to B.Com- Gen., AF, BM, CA, MM, Co-op. & CS)

| Subject Code | L | T | P | S | Credits | Inst. Hours | Marks | | |
							CIA	External	Total
151C2A	5				5	5	25	75	100

	Learning Objectives
LO1	The students are able to prepare different kinds of accounts such Higher purchase and Instalments System.
LO2	To understand the allocation of expenses under departmental accounts
LO3	To gain an understanding about partnership accounts relating to Admission and retirement
LO4	Provides knowledge to the learners regarding Partnership Accounts relating to dissolution of firm
LO5	To know the requirements of international accounting standards

Prerequisites: Should have studied Accountancy in XII Std

Unit	Contents	No. of Hours
I	**Hire Purchase and Instalment System** Hire Purchase System – Accounting Treatment – Calculation of Interest - Default and Repossession - Hire Purchase Trading Account - Instalment System - Calculation of Profit	15
II	**Branch and Departmental Accounts** Branch – Dependent Branches: Accounting Aspects - Debtors system -Stock and Debtors system – Distinction between Wholesale Profit and Retail Profit – Independent Branches (Foreign Branches excluded) - Departmental Accounts: Basis of Allocation of Expenses – Inter- Departmental Transfer at Cost or Selling Price.	15
III	**Partnership Accounts - I** Partnership Accounts: –Admission of a Partner – Treatment of Goodwill - Calculation of Hidden Goodwill –Retirement of a Partner – Death of a Partner.	15
IV	**Partnership Accounts - II** Dissolution of Partnership - Methods – Settlement of Accounts Regarding Losses and Assets – Realization account – Treatment of Goodwill – Preparation of Balance Sheet - One or more Partners insolvent – All Partners insolvent – Application of Garner Vs Murray Theory – Accounting Treatment - Piecemeal Distribution – Surplus Capital Method – Maximum Loss Method.	15

V	**Accounting Standards for financial reporting (Theory only)** Objectives and Uses of Financial Statements for Users-Role of Accounting Standards - Development of Accounting Standards in India Role of IFRS- IFRS Adoption vs Convergence Implementation Plan in India- Ind AS- An Introduction - Difference between Ind AS and IFRS.	15
	TOTAL	**75**

THEORY 20% & PROBLEMS 80%

Course Outcomes	
CO1	To evaluate the Hire purchase accounts and Instalment systems
CO2	To prepare Branch accounts and Departmental Accounts
CO3	To understand the accounting treatment for admission and retirement in partnership
CO4	To know Settlement of accounts at the time of dissolution of a firm.
CO5	To elaborate the role of IFRS

Textbooks	
1	Radhaswamy and R.L. Gupta: Advanced Accounting, Sultan Chand, New Delhi.
2	M.C. Shukla T.S. Grewal & S.C. Gupta, Advance Accounts, S Chand Publishing, New Delhi.
3	R.L. Gupta and V.K. Gupta, "Financial Accounting", Sultan Chand, New Delhi.
4	S P Jain and K. L. Narang: Financial Accounting- I, Kalyani Publishers, New Delhi.
5	T.S. Reddy& A. Murthy, Financial Accounting, Margam Publishers, Chennai.
6	Dr. K. Murugadoss, Dr. M. Jaya, Dr. V. Charulatha & Dr. D. Baskar Financial Accounting, Vijay Nicole Imprints Private Limited, Chennai

Reference Books	
1	Dr. S.N. Maheswari: Financial Accounting, Vikas Publications, Noida.
2	Dr. Venkataraman& others (7 lecturers): Financial Accounting, VBH, Chennai.
3	Dr.Arulanandan and Raman: Advanced Accountancy, Himalaya publications, Mumbai.
4	Tulsian , Advanced Accounting, Tata MC. Graw hills, India.
5	Charumathi and Vinayagam, Financial Accounting, S.Chand and sons, New Delhi.

NOTE: Latest Edition of Textbooks May be Used

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	Web Resources
1	https://www.slideshare.net/mcsharma1/accounting-for-depreciation-1
2	https://www.slideshare.net/ramusakha/basics-of-financial-accounting
3	https://www.accountingtools.com/articles/what-is-a-single-entry-system.html

MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	3	2	3	2	2	3	2	2
CO2	3	2	3	3	3	2	2	2	3	2	2
CO3	3	2	2	3	3	2	2	2	3	2	2
CO4	3	2	3	3	2	2	2	2	3	2	2
CO5	3	3	3	3	3	3	3	3	3	3	3
TOTAL	16	11	14	15	14	12	11	11	15	11	11
AVERAGE	3.2	2.2	2.8	3	2.8	2.4	2.2	2.2	3	2.2	2.2

3 – Strong, 2- Medium, 1- Low

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FIRST YEAR – SEMESTER – II

CORE – IV: BUSINESS LAW

(Common to BCom- Gen., AF, BM, CA, MM, Co-op. & CS)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
151C2B	5				5	5	25	75	100

Learning Objectives	
LO1	To know the nature and objectives of Mercantile law
LO2	To understand the essentials of valid contract
LO3	To gain knowledge on performance contracts
LO4	To define the concepts of Bailment and pledge
LO5	To understand the essentials of contract of sale

Prerequisites: Should have studied Commerce in XII Std

Unit	Contents	No. of Hours
I	**Elements of Contract** **Indian Contract Act 1872:** Definition of Contract, Essentials of Valid Contract, Classification of Contract, Offer and Acceptance – Consideration – Capacity to Contract – Free Consent - Legality of Object – Contingent Contracts – Void Contract	15
II	**Performance Contract** Meaning of Performance, Offer to Perform, Devolution of Joint liabilities & Rights, Time and Place of Performance, Reciprocal Promises, Assignment of Contracts - Remedies for Breach of contract - Termination and Discharge of Contract - Quasi Contract	15
III	**Contract of Indemnity and Guarantee** Contract of Indemnity and Contract of Guarantee - Extent of Surety's Liability, Kinds of Guarantee, Rights of Surety, Discharge of Surety –	15
IV	**Bailment and Pledge** Bailment and Pledge – Bailment – Concept – Essentials - Classification of Bailments, Duties and Rights of Bailor and Bailee – Law of Pledge – Meaning – Essentials of Valid Pledge, Pledge and Lien, Rights of Pawner and Pawnee.	15
V	**Sale of Goods Act 1930:** Definition of Contract of Sale – Formation - Essentials of Contract of Sale - Conditions and Warranties - Transfer of Property – Contracts involving Sea Routes - Sale by Non-owners - Rights and duties of buyer - Rights of an Unpaid Seller	15
	TOTAL	75

Course Outcome	
CO1	Explain the Objectives and significance of Mercantile law
CO2	Understand the clauses and exceptions of Indian Contract Act.
CO3	Explain concepts on performance, breach and discharge of contract.
CO4	Outline the contract of indemnity and guarantee
CO5	Explain the various provisions of Sale of Goods Act 1930
Textbooks	
1	N.D. Kapoor , Business Laws- Sultan Chand and Sons, New Delhi.
2	R.S.N. Pillai – Business Law, S.Chand, New Delhi.
3	M C Kuchhal& Vivek Kuchhal, Business law, S Chand Publishing, New Delhi
4	M.V. Dhandapani, Business Laws, Sultan Chand and Sons, New Delhi.
5	Shusma Aurora, Business Law, Taxmann, New Delhi.
Reference Books	
1	Preethi Agarwal, Business Law, CA foundation study material, Chennai.
2	Business Law by Saravanavel, Sumathi, Anu, Himalaya Publications, Mumbai.
3	Kavya and Vidhyasagar, Business Law, Nithya Publication, New Delhi.
4	D.Geet, Business Law Nirali Prakashan Publication, Pune.
5	M.R. Sreenivasan , Business Laws, Margham Publications, Chennai.
NOTE: Latest Edition of Textbooks May be Used	
Web Resources	
1	www.cramerz.comwww.digitalbusinesslawgroup.com
2	http://swcu.libguides.com/buslaw
3	http://libguides.slu.edu/businesslaw

MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	2	3	2	2	2	2	2	2	2
CO2	3	2	3	3	2	2	2	2	2	2	2
CO3	3	2	2	3	2	2	2	2	2	2	2
CO4	3	2	3	3	2	2	2	2	2	2	2
CO5	3	2	3	3	2	2	2	2	2	2	2
TOTAL	15	10	13	15	10	10	10	10	10	10	10
AVERAGE	3	2	2.6	3	2	2	2	2	2	2	2

3 – Strong, 2- Medium, 1- Low

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FIRST YEAR – SEMESTER – II

ELECTIVE– II: PROGRAMMING IN JAVA AND LAB

(Common to B.Com-CA)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
151E21	2		2		3	4	40	60	100

	Learning Objectives
LO1	To provide fundamental knowledge of object-oriented programming.
LO2	To equip the student with programming knowledge in Core Java from the basics up.
LO3	To enable the students to use AWT controls, Event Handling and Swing for GUI.

Prerequisite: Should have studied Commerce in XII Std

Unit	Contents	No. of Hours
I	Introduction: Review of Object-Oriented concepts - Java buzzwords (Platform independence, Portability, Threads)- JVM architecture – Java Program structure - – Java main method - Java Console output (System.out) - simple java program - Data types - Variables - type conversion and casting- Java Console input: Buffered input - operators - control statements - Static Data - Static Method - String and String Buffer Classes	12
II	Java user defined Classes and Objects – Arrays – constructors - Inheritance: Basic concepts - Types of inheritance - Member access rules - Usage of this and Super key word - Method Overloading - Method overriding - Abstract classes - Dynamic method dispatch - Usage of final keyword	12
III	Packages: Definition - Access Protection - Importing Packages - Interfaces: Definition – Implementation – Extending InterfacesException Handling: try – catch - throw - throws –- finally – Built-in exceptions - Creating own Exception classes - garbage collection, finalise -	12

IV	Multithreaded Programming: Thread Class - Runnable interface – Synchronization – Using synchronized methods – Using synchronized statement - Interthread Communication – Deadlock.	**12**
V	Adapter classes - Inner classes - Java Util Package / Collections Framework: Collection & Iterator Interface- Enumeration- List and ArrayList- Vector- Comparator	**12**
	TOTAL (Theory + Practical)	**60**

Course Outcomes	
CO1	Understand the basic Object-oriented concepts. Implement the basic constructs of Core Java
CO2	Implement inheritance, packages, interfaces and exception handling of Core Java.
CO3	Implement multi-threading and I/O Streams of Core Java

Textbooks	
1	Herbert Schildt, The Complete Reference, Tata McGraw Hill, New Delhi, 7th Edition, 2010.
2	Gary Cornell, Core Java 2 Volume I – Fundamentals, Addison Wesley, 1999.

Reference Books	
1	Head First Java, O'Rielly Publications, Y. Daniel Liang, Introduction to Java Programming, 7th Edition, Pearson Education India, 2010.

Java Programming Lab	**Core -S2EC1L**
Learning Objectives: (for teachers: what they have to do in the class/lab/field) • To gain practical expertise in coding Core Java programs • To become proficient in the use of AWT, Event Handling and Swing.	
Course Outcomes: (for students: To know what they are going to learn) CO1: Code, debug and execute Java programs to solve the given problems CO2: Implement multi-threading and exception-handling CO3: Implement functionality using String and StringBuffer classes	

List of Programs

1. Write a Java program that prompts the user for an integer and then prints out all the prime numbers up to that Integer?

2. Write a Java program to multiply two given matrices.

3. Write a Java program that displays the number of characters, lines and words in a text?

4. Generate random numbers between two given limits using Random class and print messages according to the range of the value generated.

5. Write a program to do String Manipulation using Character Array and perform the following string operations:

   a) String length
   b) Finding a character at a particular position
   c) Concatenating two strings

6. Write a program to perform the following string operations using String class:

   a) String Concatenation

   b) Search a substring

   c) To extract substring from given string

7. Write a program to perform string operations using StringBuffer class:

   a) Length of a string

   b) Reverse a string

   c) Delete a substring from the given string

8. Write a java program that implements a multi-thread application that has three threads. First thread generates random integer every 1 second and if the value is even, second thread computes the square of the number and prints. If the value is odd, the third thread will print the value of cube of the number.

9. Write a threading program which uses the same method asynchronously to print the numbers 1 to 10 using Thread1 and to print 90 to 100 using Thread2.

10. Write a program to demonstrate the use of following exceptions.

    a) Arithmetic Exception

    b) Number Format Exception

    c) Array Index Out of Bound Exception

    d) Negative Array Size Exception

Extended Professional Component	Questions related to the above topics, from various competitive examinations UPSC / TRB / NET / UGC – CSIR / GATE / TNPSC / others to be solved (To be discussed during the Tutorial hour)
Skills acquired from the course	Knowledge, Problem Solving, Analytical ability, Professional Competency, Professional Communication and Transferrable Skill

Learning Resources:

Recommended Texts

Herbert Schildt, The Complete Reference, Tata McGraw Hill, New Delhi, 7th Edition, 2010.

Gary Cornell, Core Java 2 Volume I – Fundamentals, Addison Wesley, 1999.

Reference Books

Head First Java, O'Rielly Publications, Y. Daniel Liang, Introduction to Java Programming, 7th Edition, Pearson Education India, 2010.

Web resources: Web resources from NDL Library, E-content from open-source libraries

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FIRST YEAR – SEMESTER – II
SEC–3: RETAIL MANAGEMENT
(Common to BCom-Gen., AF, CA, BM & MM)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
151S2A	2				2	2	25	75	100

Unit	Contents	No. of Hours
I	**Overview of Retail** Introduction to Retail (Barter System to Trading) - Contribution to GDP -Career Opportunities in Retail - Retail & Entrepreneurship - Retail Formats - SMART Goals	6
II	**Retail Marketing** Basic Retail Marketing Concepts - Fundamentals of Pricing - Promotion - Omni Channel Retail Marketing & Distribution - Inventory management	6
III	**Retail Store Operations** Store Layout & Design - Visual Merchandising - Point of sale – Customer Handling - Basics in Retail Logistics & Supply Chain Management	6
IV	**Customer Value Management** Retail Communication - Personality Grooming - Sales Management - Cross Selling & Up-selling - Customer experience and feedback management - WOW factor in Retail Business - Health and Safety at Workplace - Retail KPI - Team Work & Leadership Skills - Ethics in Retail	6
V	**Latest Trend in Retail Business** Latest technological developments in retail Sector - Social Media Marketing - Basic Retail Analytics	6
	Total	**30**
	Reference Books	
1	Retailing Management, Gibson C Vedamani , Jaico Publishing House	
2	Retail Management,: Suja Nair, Publisher: Himalaya Publishing House	
3	Retailing Management,: Michael Levy, Barton A Weitz and Ajay Pandit, Tata McGraw Hill Publishing	
4	The Art of Retailing, A J Lamba, Tata McGraw Hill Publishing	
	Web Links	
	https://www.managementstudyguide.com/retail-management.htm https://www.open.edu/openlearn/money-business/business-strategy-studies/retail-marketing/content-section---references https://www.tutorialspoint.com/retail_management/retail_management_useful_resources.htm https://ebooks.lpude.in/management/mba/term_3/DMGT550_RETAIL_MANAGEMENT.pdf	

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SECOND YEAR – SEMESTER - III
CORE – V: CORPORATE ACCOUNTING I

(Common to BCom- Gen., AF, BM, CA, MM, Co-op. & CS)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
251C3A	5				5	5	25	75	100

	Learning Objectives
LO1	To understand about the pro-rata allotment **and Underwriting of Shares**
LO2	To know the provisions of companies Act **regarding Issue and** Redemption of Preference shares and debentures
LO3	To learn the form and contents of financial statements as per Schedule III of Companies Act 2013
LO4	To examine **the various methods of valuation of Goodwill and shares**
LO5	To identify the Significance of International financial reporting standard (IFRS)

Prerequisite: Should have studied Financial Accounting in I Year

Unit	Contents	No. of Hours
I	**Issue of Shares** Issue of Shares – Premium - Discount - Forfeiture - Reissue – Pro-rata Allotment **Issue of Rights and Bonus Shares** - Underwriting of Shares and Debentures – Underwriting Commission - Types of Underwriting.	15
II	**Issue & Redemption of Preference Shares & Debentures** Redemption of Preference Shares–Provisions of Companies Act–Capital Redemption Reserve – Minimum Fresh Issue – Redemption at **Par,** Premium **and Discount**. Debentures: Issue and Redemption – Meaning – Methods – In-One lot–in Instalment – Purchase in the Open Market includes Ex Interest and Cum Interest - Sinking Fund Investment Method.	15
III	**Final Accounts** Introduction – Final Accounts – Form and Contents of Financial Statements as Per Schedule III of Companies Act 2013 – Part I Form of Balance Sheet – Part II Form of Statement of Profit and Loss – Ascertaining Profit for Managerial Remuneration	15
IV	**Valuation of Goodwill & Shares** Valuation of Goodwill – Meaning – Need for Valuation of Goodwill – Methods of Valuing Goodwill – Average Profit – Super Profit – Annuity and Capitalisation Method. Valuation of Shares – Need for Valuation of Shares – Methods of Valuation of Shares – Net Assets Method – Yield and Fair Value Methods.	15

V	**Indian Accounting Standards** International Financial Reporting Standard (IFRS)–Meaning and its Applicability in India - Indian Accounting Standards – Meaning – Objectives – Significance – Procedures for Formulation of Standards – Ind AS – 1 Presentation of Financial Statement, Ind AS – 2 Valuation of Inventories, Ind AS – 7 Cash Flow Statement, Ind AS – 8 Accounting Policies, Changes in Accounting Estimate and Errors, Ind AS – 16 – Property, Plant & Equipment, Ind AS 38 – Intangible Assets Ind AS – 103, Business Combinations Ind AS 110, Consolidated Financial Statement. (**Theory Only**)	15
	TOTAL	75

THEORY 20% & PROBLEMS 80%

Course Outcomes	
CO1	Prepare and account for various entries to be passed in case of issue, forfeiture and reissue of shares and compute the liability of underwrites
CO2	Asses the accounting treatment of issue and redemption of preference shares and debentures
CO3	Construct Financial Statements applying relevant accounting treatments
CO4	Compute the value of goodwill and shares under different methods and assess its applicability
CO5	Integrate theoretical knowledge on all accounting in par with IFRS and IND AS

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

Reference Books	
1	T.S. Reddy, A. Murthy – Corporate Accounting- Margham Publication, Chennai.
2	D.S.Rawat&NozerShroff,Students Guide To Accounting Standards ,Taxmann, New Delhi
3	Prof. Mukeshbramhbutt, Devi,Corporate Accounting I, Ahilya Publication, Madhya Pradesh
4	Anil Kumar, Rajesh kumar, Corporate accounting I, Himalaya Publishing house, Mumbai.
5	PrasanthAthma, Corporate Accounting I, Himalaya Publishing house, Mumbai.

NOTE: Latest Edition of Textbooks May be Used

	Web Resources
1	https://www.tickertape.in/blog/issue-of-shares/
2	https://www.taxmann.com/bookstore/bookshop/bookfiles/chapter12valuationofgoodwill andshares.pdf
3	https://www.mca.gov.in/content/mca/global/en/acts-rules/ebooks/accounting-standards.html

MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	2	2	3	2	2
CO2	3	2	3	2	2	2	2	2	3	2	2
CO3	3	2	3	2	3	2	2	2	3	2	2
CO4	3	1	3	2	3	2	2	2	3	2	2
CO5	3	3	3	2	3	2	2	2	3	2	2
TOTAL	15	11	15	10	13	10	10	10	15	10	10
AVERAGE	3	2.2	3	2	2.6	2	2	2	3	2	2

3 – Strong, 2- Medium, 1- Low

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SECOND YEAR – SEMESTER - III
CORE – V: CORPORATE ACCOUNTING I

(Common to BCom- Gen., AF, BM, CA, MM, Co-op. & CS)

Subject Code	L	T	P	S	Credits	Inst. Hours	CIA	External	Total
							Marks		
251C3A	5				5	5	25	75	100

	Learning Objectives
LO1	To understand about the pro-rata allotment **and Underwriting of Shares**
LO2	To know the provisions of companies Act **regarding Issue and** Redemption of Preference shares and debentures
LO3	To learn the form and contents of financial statements as per Schedule III of Companies Act 2013
LO4	To examine **the various methods of valuation of Goodwill and shares**
LO5	To identify the Significance of International financial reporting standard (IFRS)

Prerequisite: Should have studied Financial Accounting in I Year

Unit	Contents	No. of Hours
I	**Issue of Shares** Issue of Shares – Premium - Discount - Forfeiture - Reissue – Pro-rata Allotment **Issue of Rights and Bonus Shares** - Underwriting of Shares and Debentures – Underwriting Commission - Types of Underwriting.	15
II	**Issue & Redemption of Preference Shares & Debentures** Redemption of Preference Shares–Provisions of Companies Act– Capital Redemption Reserve – Minimum Fresh Issue – Redemption at **Par,** Premium **and Discount**. Debentures: Issue and Redemption – Meaning – Methods – In-One lot–in Instalment – Purchase in the Open Market includes Ex Interest and Cum Interest - Sinking Fund Investment Method.	15
III	**Final Accounts** Introduction – Final Accounts – Form and Contents of Financial Statements as Per Schedule III of Companies Act 2013 – Part I Form of Balance Sheet – Part II Form of Statement of Profit and Loss – Ascertaining Profit for Managerial Remuneration	15
IV	**Valuation of Goodwill & Shares** Valuation of Goodwill – Meaning – Need for Valuation of Goodwill – Methods of Valuing Goodwill – Average Profit – Super Profit – Annuity and Capitalisation Method. Valuation of Shares – Need for Valuation of Shares – Methods of Valuation of Shares – Net Assets Method – Yield and Fair Value Methods.	15

V	**Indian Accounting Standards** International Financial Reporting Standard (IFRS)–Meaning and its Applicability in India - Indian Accounting Standards – Meaning – Objectives – Significance – Procedures for Formulation of Standards – Ind AS – 1 Presentation of Financial Statement, Ind AS – 2 Valuation of Inventories, Ind AS – 7 Cash Flow Statement, Ind AS – 8 Accounting Policies, Changes in Accounting Estimate and Errors, Ind AS – 16 – Property, Plant & Equipment, Ind AS 38 – Intangible Assets Ind AS – 103, Business Combinations Ind AS 110, Consolidated Financial Statement. (**Theory Only**)	15
	TOTAL	**75**

THEORY 20% & PROBLEMS 80%

Course Outcomes	
CO1	Prepare and account for various entries to be passed in case of issue, forfeiture and reissue of shares and compute the liability of underwrites
CO2	Asses the accounting treatment of issue and redemption of preference shares and debentures
CO3	Construct Financial Statements applying relevant accounting treatments
CO4	Compute the value of goodwill and shares under different methods and assess its applicability
CO5	Integrate theoretical knowledge on all accounting in par with IFRS and IND AS

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

Reference Books	
1	T.S. Reddy, A. Murthy – Corporate Accounting- Margham Publication, Chennai.
2	D.S.Rawat&NozerShroff,Students Guide To Accounting Standards ,Taxmann, New Delhi
3	Prof. Mukeshbramhbutt, Devi,Corporate Accounting I, Ahilya Publication, Madhya Pradesh
4	Anil Kumar, Rajesh kumar, Corporate accounting I, Himalaya Publishing house, Mumbai.
5	PrasanthAthma, Corporate Accounting I, Himalaya Publishing house, Mumbai.

NOTE: Latest Edition of Textbooks May be Used

	Web Resources
1	https://www.tickertape.in/blog/issue-of-shares/
2	https://www.taxmann.com/bookstore/bookshop/bookfiles/chapter12valuationofgoodwill andshares.pdf
3	https://www.mca.gov.in/content/mca/global/en/acts-rules/ebooks/accounting-standards.html

MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	2	2	3	2	2
CO2	3	2	3	2	2	2	2	2	3	2	2
CO3	3	2	3	2	3	2	2	2	3	2	2
CO4	3	1	3	2	3	2	2	2	3	2	2
CO5	3	3	3	2	3	2	2	2	3	2	2
TOTAL	15	11	15	10	13	10	10	10	15	10	10
AVERAGE	3	2.2	3	2	2.6	2	2	2	3	2	2

3 – Strong, 2- Medium, 1- Low

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SECOND YEAR – SEMESTER – III

ELECTIVE - III: COMPUTERIZED ACCOUNTING

(Common to BCom-CA)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
251E31		2	2		3	4	40	60	100
Learning Objectives									
LO1	Examination of general accounting applications as they apply to computerized financial records for each step of the accounting cycle to the completion of financial statements, as well as management accounting applications.								
Prerequisite: Should have studied Commerce in XII Std									
	List of Exercises								
	1. Preparation of Trial Balance - preparation of profit and loss accounts, Balance sheet 2. Interest simple, compound interest calculation. Setting ledger master, Interest report. 3. Receivable and payable management, meaning activating bill wise details, all types of entries 4. Cost Centres and Category summary, cost centre breakup ledgers and group breakup outstanding receivable and payable, interest receivable and payable, statistics, cash and fund flow daybook list of account reversing journals, optional vouchers. 5. Budget Budgetary control creation of budget, group budget Budgetary ledger creation alteration of budget deletion of budget.								

	6. Introduction to GST, Getting started with GST, Transferring Input tax to GST, Interest supply of goods, GST reports 7. Recording advance entries, Exports, Imports, Exempted Goods, Adjustment and Return filing, GST tax payments 8. Electronic Commerce Introduction, Tax Collected at Source (TCS), Procedures for E-commerce Operator, Input Tax Credit: - Introduction, Important Points, Input Service Distributors 9. Matching of Input Tax Credit, Returns, GSTR-2, Other Taxable Persons, Annual Return, Overview of the IGST Act, Overview, Other Provisions. 10. GST Portal, Introduction, GST Eco-system, GST Suvidha Provider (GSP), Uploading Invoices	
TOTAL (Theory + Practical)		**60**
Course Outcomes		
CO1	input journal entries, adjust entries and prepare financial statements for cash and accrual-based businesses	
CO2	record vendor, customer, and inventory transactions essential for maintaining accounts payable, accounts receivable, and inventory subsidiary ledgers	

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SECOND YEAR – SEMESTER – III

SEC – 4 Basics of Entrepreneurship

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
251S3A	1				1	1	25	75	100

Unit	Contents	No. of Hours
I	**Introduction to Entrepreneurship** Meaning- Characteristics – Dimensions of an Entrepreneurship- Fostering critical thinking and innovation.	3
II	**Idea Generation and selection** Design Thinking Process- Creativity – Innovation- Ideas Generation techniques – Analysis of Business opportunity – Fishbowl Method –Brainstroming.	3
III	**Pitching the business Idea** Business Models- Costing and Pricing - -Market survey- Writing of a B-Plan	3
IV	**Bootstrap of an Enterprise** Process of setting up an Enterprise – Feasibility Study-Marketing- Technical and Financial.	3
V	**Finance and Government Support to setting up of an Enterprise** Sources of Funds- Government Schemes for entrepreneurs	3
	Total	15
	Text Books	
1	Jayashree Suresh, (Reprint 2017) Entrepreneurial Development, Margham Publications, Chennai.	
2	Vasanth Desai, (Reprint 2017) Dynamics of Entrepreneurial Development and Management, 24ᵗʰ Edition, Himalaya Publishing House, Mumbai.	
	Reference Books	
1	Dr.C.B.Gupta and S.S.Khanka(Reprint 2014), Entrepreneurship and Small Business Management, Sultan Chand & Sons, New Delhi.	

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SECOND YEAR – SEMESTER – IV
CORE – VII: CORPORATE ACCOUNTING – II
(Common to BCom- Gen., AF, BM, CA, MM, Co-op. & CS)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
251C4A	5				5	5	25	75	100

	Learning Objectives
LO1	To know the types of Amalgamation, Internal and external Reconstruction
LO2	To know Final statements of banking companies
LO3	To understand the accounting treatment of Insurance company accounts
LO4	To understand the procedure for preparation of consolidated Balance sheet
LO5	To have an insight on modes of winding up of a company

Prerequisite: Should have studied Financial Accounting in I Year

Unit	Contents	No. of Hours
I	**Amalgamation, Internal & External Reconstruction** Amalgamation – **Meaning** - Purchase Consideration - Lump sum Method, Net Assets Method, Net Payment Method, Intrinsic Value Method - Types of **Methods of Accounting for**Amalgamation -**The Pooling of Interest Method - The Purchase Method**(Excluding Inter-Company Holdings). **Internal & External Reconstruction** **Internal Reconstruction – Conversion of Stock – Increase and Decrease of Capital – Reserve Liability - Accounting Treatment of External Reconstruction**	15
II	**Accounting of Banking Companies** Final Statements of Banking Companies (As Per New Provisions) - Non-Performing Assets - Rebate on Bills Discounted- Profit and Loss a/c - Balance Sheet as Per Banking Regulation Act 1949.	15
III	**Insurance Company Accounts:** Meaning of Insurance – Principles – Types – Preparation of Final Accounts of Insurance Companies – Accounts of Life Insurance Business – Accounts of General Insurance Companies -New Format.	15
IV	**Consolidated Financial Statements** Introduction-Holding & Subsidiary Company-Legal Requirements Relating to Preparationof Accounts -Preparation of Consolidated Balance Sheet (Excluding Inter-Company Holdings).	15
V	**Liquidation of Companies** Meaning-Modes of Winding Up – Preparation of Statement of Affairs and Statement of Deficiency **or Surplus (List H)** Order of Payment – Liquidators Remuneration- Liquidator's Final Statement of Accounts.	15
	TOTAL	75

THEORY 20% & PROBLEMS 80%

Course Outcomes	
CO1	Understand the accounting treatment of amalgamation, Internal and external reconstruction
CO2	Construct Profit and Loss account and Balance Sheet of Banking Companies in accordance in the prescribed format.
CO3	Synthesize and prepare final accounts of Insurance companies in the prescribed format
CO4	Give the consolidated accounts of holding companies
CO5	Preparation of liquidator's final statement of account
Textbooks	
1	S.P. Jain and K.L Narang. Advanced Accountancy, Kalyani Publishers, New Delhi.
2	Dr.K.S .Raman and Dr. M.A. Arulanandam , Advanced Accountancy, Vol. II, Himalaya Publishing House, Mumbai.
3	R.L. Gupta and M. Radhaswamy, Advanced Accounts, Sultan Chand, New Delhi.
4	M.C. Shukla and T.S. Grewal, Advanced Accounts Vol.II, S Chand & Sons, New Delhi.
5	T.S. Reddy and A.Murthy, Corporate Accounting II, Margham Publishers, Chennai
Reference Books	
1	B.Raman, Corporate Accounting, Taxmann, New Delhi
2	M.C.Shukla, Advanced Accounting,S.Chand, New Delhi
3	Prof. MukeshBramhbutt, Devi Ahilya publication, Madhya Pradesh
4	Anil kumar, Rajesh kumar, Advanced Corporate Accounting, Himalaya Publishing house, Mumbai.
5	PrasanthAthma, Corporate Accounting, Himalaya Publishing house, Mumbai.
NOTE: Latest Edition of Textbooks May be Used	
Web Resources	
1	https://www.accountingnotes.net/amalgamation/amalgamation-absorption-and-reconstruction-accounting/126
2	https://www.slideshare.net/debchat123/accounts-of-banking-companies
3	https://www.accountingnotes.net/liquidation/liquidation-of-companies-accounting/12862

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**MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES**

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	3	2	3	2	2
CO2	3	2	3	2	3	2	3	2	3	2	2
CO3	3	2	3	2	3	2	3	2	3	2	2
CO4	3	2	3	2	2	2	3	2	3	2	2
CO5	3	2	3	2	2	2	3	2	3	2	2
TOTAL	15	10	15	10	12	10	15	10	15	10	10
AVERAGE	3	2	3	2	2.4	2	3	2	3	2	2

3 – Strong, 2- Medium, 1- Low

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SECOND YEAR– SEMESTER– IV

CORE PAPER VIII –PRINCIPLES OF MARKETING

(Common to BCom- Gen., AF, BM, CA, MM, Co-op. & CS as Elective)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
251C4B	5				5	5	25	75	100

	Learning Objectives
LO1	To know the concept and functions of marketing
LO2	To understand the importance of market segmentation
LO3	To examine the stages of new product development
LO4	To gain knowledge on the various advertising medias
LO5	To analyse the global market environment

Prerequisite: Should have studied Commerce in XIIStd

Unit	Contents	No. of Hours
I	**Introduction to Marketing** Meaning – Definition and Functions of Marketing – Evolution of Marketing Concepts – Innovations in Modern Marketing. Role and Importance of Marketing - Classification of Markets - Niche Marketing.	15
II	**Market Segmentation** Meaning and definition – Benefits – Criteria for segmentation – Types of segmentation – Geographic – Demographic – Psychographic – Behavioural – Targeting, Positioning & Repositioning - Introduction to Consumer Behaviour–Consumer Buying Decision Process and Post Purchase Behaviour — Motives. Freud's Theory of Motivation.	15
III	**Product & Price** Marketing Mix — an overview of 4P's of Marketing Mix – Product – Introduction to Stages of New Product Development – Product Life Cycle — Pricing – Policies – Objectives –Factors Influencing Pricing– Kinds of Pricing.	15
IV	**Promotions and Distributions** Elements of promotion – Advertising – Objectives - Kinds of Advertising Media - Traditional vs Digital Media - Sales Promotion – types of sales promotion – Personal Selling –Qualities needed for a personal seller – Channels of Distribution for Consumer Goods- Channel Members – Channels of Distribution for Industrial Goods.	15

V	**Competitive Analysis and Strategies** Global Market Environment – Social Responsibility and Marketing Ethics – Recent Trends in Marketing –A Basic Understanding of E–Marketing & M–Marketing – E-Tailing – CRM –Market Research – MIS and Marketing Regulation.	**15**
	TOTAL	**75**

CO	Course Outcomes
CO1	Develop an understanding on the role and importance of marketing
CO2	Apply the 4p's of marketing in their venture
CO3	Identify the factors determining pricing
CO4	Use the different Channels of distribution of industrial goods
CO5	Understand the concept of E-marketing and E-Tailing

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

Reference Books	
1	Prof Kavita Sharma, Dr Swati Agarwal, Principles of Marketing Book,Taxmann,Newdelhi
2	Dr.J.Jayasankar, Marketing Management, Margham Publications, Chennai.
3	Assael, H.Consumer Behaviour and Marketing Action,USA :PWS-Kent

4	Hoyer, W.D. And Macinnis, D.J., Consumer Behaviour, USA: Houghton Mifflin Company
5	Baker M, Marketing Management And Strategy, Macmill an Business, Bloombury Publishing, India
NOTE: Latest Edition of Textbooks May be Used	
WebResources	
1	https://www.aha.io/roadmapping/guide/marketing/introduction
2	https://www.investopedia.com/terms/m/marketsegmentation.asp
3	https://www.shiprocket.in/blog/understanding-promotion-and-distribution-management/

MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO 1	PSO 2	PSO 3
CO1	3	2	3	2	2	2	2	2	2	3	2
CO2	3	2	3	2	3	2	2	2	2	3	2
CO3	3	2	3	2	3	2	2	2	2	3	2
CO4	3	2	3	2	2	2	2	2	2	3	2
CO5	3	2	3	2	2	2	2	2	2	3	2
TOTAL	15	10	15	10	12	10	10	10	10	15	10
AVERAGE	3	2	3	2	2.4	2	2	2	2	3	2

3 – Strong, 2- Medium, 1- Low

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SECOND YEAR – SEMESTER – IV

ELECTIVE IV - SPSS Practical

Subject Code	Subject Name	Category	L	T	P	S	Credits	Inst. Hours	CIA	External	Total
									Marks		
251E41	SPSS Practical	Elective - IV			3		3	3	40	60	100

Learning Objectives	
LO1	To introduce students to SPSS as an important tool in Research
LO2	To familiarize them with calculation of central tendancy
LO3	To understand the concepts of correlation
LO4	To calculate management decision tools using SPSS
LO5	To develop various applications of various non parametric tools.

Prerequisites: Should have studied Commerce in XII Std

Unit	Contents	No. of Hours
I	Construction of frequency tables, Graphical representation of data	9
II	Measures of central tendency, Measures of dispersion	9
III	Correlation co-efficient	9
IV	Calculation of NPV of projects Cash Budget Break-Even Analysis Comparison of prices across years of multiple products Flexible Budgets	9
V	Non Parametric test Mann whitney, Kurskal Wallis, Chi Square, Wilcoxen sign rank test, Friedman test	9
	TOTAL	45

CO	Course Outcomes
CO1	Construct frequency tables and graphical representation of data
CO2	Summarize the whole set of data with a single value that represents the center of its distribution.
CO3	Interpret the relationship between two variables using correlation coefficient.
CO4	Make use of specified analysis tools for decision making in business
CO5	Summarize the whole set of data with non parametric tests.

Textbooks	
1	Discovering Statistics Using SPSS Andy field 3rd ed., Sage, 2009
2	A Handbook Of Statistical Analyses Using Spss
Web Resources	
1	https://www.spss-tutorials.com/spss-what-is-it/
2	https://www.techtarget.com/whatis/definition/SPSS-Statistical-Package-for-the-Social-Sciences

MAPPING WITH PROGRAMME OUTCOMES AND PROGRAMME SPECIFIC OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3	PSO4
CO1	3	2	3	3	3	2	3	3	3	2	2	3
CO2	3	2	3	3	2	2	2	2	3	2	3	3
CO3	3	3	3	3	3	2	3	3	3	2	2	3
CO4	3	2	3	3	2	2	2	2	3	2	2	3
CO5	3	3	3	3	3	3	3	3	3	3	3	3
TOTAL	15	12	15	15	13	11	13	13	15	11	12	15
AVERAGE	3	2.4	3	3	2.6	2.2	2.6	2.6	3	2.2	2.4	3

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SECOND YEAR – SEMESTER – IV

SEC – 7 FinTech

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
251S4B	2				2	2	40	60	100

Unit	Contents	No. of Hours
I	**Overview of Financial Technology** Financial Technology - Emerging Technologies - India's FinTech Ecosystem - Value Creation -FinTech Adaption - FinTech Global Scenario	6
II	**Internet of Things (IoT) & Application Program Interfaces** Introduction to Internet of Things & Application Program Interfaces - Financial System Communication - Open Banking	6
III	**Avenues of FinTech & Strategies of Artificial Intelligence/Machine Learning** Equity Crowd Funding - Wealth Management – P2P & Marketplace lending - Introduction to Artificial Intelligence / Machine Learning - Difference between Artificial Intelligence & Machine Learning - Fintech Applications / Case Studies	6
IV	**FinTech Regulations** Govt. initiatives in India (NPCI, UPI, OCEAN) - Security and Privacy in FinTech - Data Protection Laws & Regulations	6
V	**Project**	6
	Total	30
Note : 40 marks of CIA will be carried out in the form of Project		
Text Books		
1	Agustin Rubini, "Fintech in a Flash: Financial Technology Made Easy", Zaccheus, 3rd Edition, 2018	
2	Susanne Chishti and Janos Barberis, " The FINTECH Book: The Financial Technology Handbook for Investors, Entrepreneurs and Visionaries", John Wiley, 1st Edition, 2016	
3	Theo Lynn, John G. Mooney, Pierangelo Rosati, Mark Cummins, "Disrupting Finance: FinTech and Strategy in the 21st Century", Palgrave, 1st edition, 2018	
4	Abdul Rafay, "FinTech as a Disruptive Technology for Financial Institutions", IGI Global, January, 2019	
5	Bernardo Nicoletti , The Future of FinTech: Integrating Finance and Technology in Financial Services, Palgrave Macmillan, August, 2018	
6	The Internet of Things by Samuel Greengard from The MIT Press	

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THIRD YEAR – SEMESTER - V

CORE – IX: COST ACCOUNTING – I

(Common to BCom- Gen., AF, BM, CA & MM)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
351C5A	5				4	5	25	75	100
Learning Objectives									
LO1	To understand the various concepts of cost accounting.								
LO2	To prepare and reconcile Cost accounts.								
LO3	To gain knowledge regarding valuation methods of material.								
LO4	To familiarize with the different methods of calculating labour cost.								
LO5	To know the apportionment of Overheads.								

Prerequisite: Should have studied Commerce in XII Std

Unit	Contents	No. of Hours
I	**Introduction of Cost Accounting** Definition-Nature and Scope – Principles of Cost Accounting – Cost Accounting and Financial Accounting - Cost Accounting Vs Management Accounting –Installation of Costing System – Classification of Costs– Cost Centre– Profit Centre.	15
II	**Cost Sheet and Methods of Costing** Preparation of Cost Sheet - Tenders & Quotations - Reconciliation of Cost and Financial Accounts –Unit Costing-Job Costing.	15
III	**Material Costing** Material Control – Meaning and Objectives – Purchase of Materials – EOQ –Stores Records – Reorder Levels – ABC Analysis - Issue of Materials –Methods of Issue – FIFO – LIFO – Base Stock Method – Specific Price Method – Simple and Weighted Average Method.	15
IV	**Labour Costing** Direct Labour and Indirect Labour – Time Keeping – Methods and Calculation of Wage Payments – Time Wages – Piece Wages – Incentives – Different Methods of Incentive Payments - Idle time– Overtime – Labour Turnover - Meaning, Causes and Measurement.	15
V	**Overheads Costing** Overheads – Definition – Classification – Allocation and Apportionment of Overheads – Basis of Apportionment – Primary and Secondary Distribution - Absorption of Overheads – Methods of absorption Preparation of Overheads Distribution Statement – Machine Hour Rate – Computation of Machine Hour Rate.	15
	TOTAL	75
THEORY 20% & PROBLEMS 80%		

Course Outcomes	
CO1	Remember and recall the various concepts of cost accounting
CO2	Demonstrate the preparation and reconciliation of cost sheet.
CO3	Analyse the various valuation methods of issue of materials.
CO4	Examine the different methods of calculating labour cost.
CO5	Critically evaluate the apportionment of Overheads.
Textbooks	
1	Jain S.P. and Narang K.L, Cost Accounting. Kalyani Publishers, New Delhi
2	Khanna B.S., Pandey I.M., Ahuja G.K., and Arora M.N., Practical Costing, S. Chand & Co, New Delhi,
3	Dr.S.N. Maheswari, Principles of Cost Accounting, Sultan Chand Publications, New Delhi
4	T.S. Reddy and Y. Hari Prasad Reddy, Cost Accounting, Margham publications, Chennai
5	S.P. Iyengar, Cost Accounting, Sultan Chand Publications, New Delhi
Reference Books	
1	Polimeni, Cost Accounting: Concepts and Applications for Managerial Decision Making, 1991, McGraw–Hill, New York.
2	Jain S.P. and Narang K.L. Cost Accounting, Latest Edition.2013, Kalyani Publishers, New Delhi,
3	V.K.Saxena and C.D.Vashist, Cost Accounting, Sultan Chand publications, New Delhi
4	Murthy A &GurusamyS,CostAccounting,Vijay Nicole Imprints Pvt.Ltd.Chennai
5	Prasad.N.K and Prasad.V.K, Cost Accounting, Book Syndicate, Kolkata
NOTE: Latest Edition of Textbooks May be Used	
Web Resources	
1	https://study.com/learn/lesson/cost-accounting-principles-examples-what-is-cost-accounting.html
2	https://www.accountingtools.com/articles/what-is-material-costing.html
3	https://www.freshbooks.com/hub/accounting/overhead-cost

MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	2	2	3	2	2
CO2	3	2	2	2	2	2	2	2	3	2	2
CO3	3	2	3	2	2	2	2	2	3	2	2
CO4	3	2	2	2	2	2	2	2	3	2	2
CO5	3	2	3	2	2	2	2	2	3	2	2
TOTAL	15	10	13	10	10	10	10	10	15	10	10
AVERAGE	3	2	2.6	2	2	2	2	2	3	2	2

3 – Strong, 2- Medium, 1- Low

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THIRD YEAR – SEMESTER - V
CORE – X: BANKING LAW AND PRACTICE
(Common to BCom- Gen., AF, BM, CA, MM, Co-op. & CS)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
351C5B	5				4	5	25	75	100

	Learning Objectives
LO1	To help the students understand various provision of Banking Regulation Act 1949 applicable to banking companies including cooperative banks
LO2	To trace the evolution of central bank concept and prevalent central banking system around the world and their roles and function
LO3	To throw light on Central Bank in India, its formation, nationalizing its organization structure, role of bank to government, role in promoting agriculture and industry, role in financial inclusion
LO4	To understand how capital fund of commercial banks, objectives and process of Asset securitization etc.
LO5	To explore practical banking systems relationship of bankers and customers, crossing of cheques, endorsement etc.

Unit	Contents	No. of Hours
I	**Introduction to Banking** History of Banking- Provisions of Banking Regulations Act 1949 - Components of Indian Banking - Indian Banking System-Phases of Development - Banking Structure in India – Public Sector Banks, Private Banks, Foreign Banks, RRB, UCB, Payment Banks and Small Finance Banks - Banking System – Branch Banking - Unit Banking - Universal Banking- Financial Inclusion	15
II	**Central Bank and Commercial Bank** Central Banking: Definition –Need - Principles- Central Banking Vs Commercial Banking - Functions of Central Bank – Credit Creation. Commercial Banking: Definition - Functions – Personal Banking – Corporate Banking – Digital banking – Core Banking System (CBS) - Role of Banks in Economic Development.	15

III	**Banking Practice** Types of Accounts CASA – Types of Deposits - Opening Bank Account- Jan Dhan Yojana - Account Statement vs Passbook vs e-statement - Banker Customer Relationship - Special Types of Customers –KYC norms. Loans & Advances –Lending Sources- Lending Principles-Types of Loans - classification of assets and income recognition / provisioning (NPA) – Repo Rate & Reverse Repo Rate - securities of lending-Factors influencing bank lending.	15
IV	**Negotiable Instruments Act** Negotiable Instruments – Meaning & Definition – Characteristics -Types of negotiable instruments. Crossing of Cheques– Concept - Objectives – Types of Crossing - - Consequences of Non-Crossing. Endorsement - Meaning-Components-Kinds of Endorsements-Cheques payable to fictitious person Endorsement by legal representative – Negotiation bank-Effect of endorsement-Rules regarding Endorsement. Paying banker - Banker's duty - Dishonouring of Cheques- Discharge by paying banks - Payments of a crossed cheque - Refusal of cheques Payment. Duties of Collecting Banker-Statutory protection under section 131-Collecting bankers' duty –RBI instruction –Paying Banker Vs Collecting Banker- Customer Grievances-Grievance Redressal –Banking Ombudsman.	15
V	**Digital Banking** Meaning- Services - e-banking and financial services- Initiatives- Opportunities - Internet banking Vs Traditional Banking Mobile banking–Anywhere Banking-Any Time Banking- Electronic Mobile Wallets. ATM – Concept - Features - Types-. Electronic money-Meaning-Categories-Merits of e-money - National Electronic Funds Transfer (NEFT), RTGS, IMPS, UPI and Digital currency – Differences - Safety and Security in Digital Banking.	15
	TOTAL	75
	Course Outcomes	
CO1	Aware of vvarious provision of Banking Regulation Act 1949 applicable to banking companies including cooperative banks	
CO2	Analyse the evolution of Central Banking concept and prevalent Central Banking system in India and their roles and function	
CO3	Gain knowledge about the Central Bank in India, its formation, nationalizing its organization structure, role of bank to government, role in promoting agriculture and industry, role in financial inclusion	
CO4	Evaluate the role of capital fund of commercial banks, objectives and process of Asset securitization etc	
CO5	Define the practical banking systems relationship of bankers and customers, crossing of cheques, endorsement etc.	

	Textbooks
1	Gurusamy S, Banking Theory: Law and Practice, Vijay Nicole Publication, Chennai
2	Muraleedharan, Modern Banking: Theory and Practice, Prentice Hall India Learning Private Ltd, New Delhi
3	Gupta P.K. Gordon E.Banking and Insurance, Himalaya publication, Kolkata
4	Gajendra,A Text on Banking Theory Law & Practice, Vrinda Publication, Delhi
5	K P Kandasami, S Natarajan & Parameswaran, Banking Law and Practice, S Chand publication, New Delhi
	Reference Books
1	B. Santhanam, Banking & Financial System, Margam Publication, Chennai
2	KataitSanjay, Banking Theory and Practice, Lambert Academic Publishing,
3	Henry Dunning Macleod, The Theory And Practice Of Banking, Hard Press Publishing, Old New Zealand
4	William Amasa Scott, Money And Banking: An Introduction To The Study Of Modern Currencies, Kesinger publication, USA
5	NektariosMichail, Money, Credit, and Crises: Understanding the Modern Banking System, Palgrave Macmillan, London
NOTE: Latest Edition of Textbooks May be Used	
	Web Resources
1	https://www.rbi.org.in/
2	https://businessjargons.com/e-banking.html
3	https://www.wallstreetmojo.com/endorsement/

MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	2	3	2	2	2	3	3	2
CO2	3	2	2	2	3	2	2	2	3	3	2
CO3	3	2	3	2	3	2	2	2	3	3	2
CO4	3	2	2	2	3	2	2	2	3	3	2
CO5	3	2	3	2	3	2	2	2	3	3	2
TOTAL	15	10	13	10	15	10	10	10	15	15	10
AVERAGE	3	2	2.6	2	3	2	2	2	3	3	2

3 – Strong, 2- Medium, 1- Low

THIRD YEAR – SEMESTER - V

CORE – XI: INCOME TAX LAW AND PRACTICE- I

(Common to BCom- Gen., AF, BM, CA, MM & CS)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
351C5C	5				4	5	25	75	100

	Learning Objectives
LO1	To understand the basic concepts & definitions under the Income Tax Act,1961.
LO2	To compute the residential status of an assessee and the incidence of tax.
LO3	To compute income under the head salaries.
LO4	To learn the concepts of Annual value, associated deductions and the calculation of income from House property.
LO5	To compute the income from Business & Profession considering its basic principles & specific disallowances.

Prerequisite: Should have studied Commerce in XII Std

Unit	Contents	No. of Hours
I	**Introduction to Income Tax** Introduction to Income Tax – History – Objectives of Taxation - Features of Income Tax – Meaning of Income – Types – Important Definitions Under the Income Tax Act –Types of Assessee – Income exempted under Section 10.	15
II	**Residential Status** Residential Status – Residential Status of an Individual – Company – HUF – Basic Conditions – Additional Conditions – Incidence of Tax and Residential Status – Problems on Residential Status and Incidence of Tax.	15
III	**Income from Salary** Salary Income - Definition – Allowances –Taxability - Perquisites – Kinds of Perquisites –Types of Provident Fund - Gratuity – Pension – Commutation of Pension – Deduction of Salary - Profits in Lieu of Salary - Computation of Salary Income .	15
IV	**Income from House Property** Income from House Property –Basis of Charge – Annual Value – Gross Annual Value, Net Annual Value - Let-out vs Deemed to be let out Self-Occupied Property – Deductions – Computation of Income from House Property.	15

V	**Profits and Gains from Business or Profession** Income from Business or Profession – Allowable Expenses – Expenses Disallowed - General Deductions – Depreciation – Undisclosed Income & Investments, Unexplained expenditure (Sec 69A, 69B, 69C, 69D) – Compulsory Maintenance of Books of Accounts – Audit of Accounts of Certain Persons – Special Provisions for Computing Incomes on Estimated Basis (Deemed Income) – Computation of Income from Business or Profession.	15
	TOTAL	**75**

Course Outcomes	
THEORY 20% & PROBLEMS 80%	
CO1	Demonstrate the understanding of the basic concepts and definitions under the Income Tax Act.
CO2	Assess the residential status of an assessee& the incidence of tax.
CO3	Compute income of an individual under the head salaries.
CO4	Ability to compute income from house property.
CO5	Evaluate income from a business carried on or from the practice of a Profession.

Textbooks	
1	V.P. Gaur, Narang, Puja Gaur and Rajeev Puri - Income Tax Law and Practice, Kalyani Publishers, New Delhi.
2	T.S. Reddy and Hariprasad Reddy, Income Tax Law and Practice, Margham Publications, Chennai.
3	DinkarPagare, Income Tax Law and Practice, Sultan & Chand Sons, New Delhi.
4	H.C. Mehrotra, Dr.Goyal S.P, Income Tax Law and Accounts, Sahitya Bhavan Publications, Agra.
5	T. Srinivasan – Income Tax & Practice –Vijay Nicole Imprints Private Limited , Chennai.

Reference Books	
1	Hariharan N, Income Tax Law & Practice, Vijay Nicole Imprints Pvt. Ltd. Chennai
2	Bhagwati Prasad, Income Tax Law and Practice, Vishwa Prakasan. New Delhi.
3	Vinod K. Singhania, Students Guide to Income Tax.,U.K.Bharghava Taxman.
4	Dr.Vinod K Singhania, Dr. Monica Singhania, Taxmann's Students' Guide to Income Tax, New Delhi.
5	Mittal Preethi Rani and Bansal Anshika, Income Tax Law and Practice, Sultan & Chand Sons, New Delhi.

NOTE: Latest Edition of Textbooks May be Used	

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	Web Resources
1	https://cleartax.in/s/residential-status/
2	https://www.legalraasta.com/itr/income-from-salary/
3	https://taxguru.in/income-tax/income-house-properties.html

3 – Strong, 2- Medium, 1- Low

MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	2	3	2	2	2	3	3	2
CO2	3	2	2	2	2	2	2	2	3	2	2
CO3	3	3	3	2	3	2	2	2	3	3	2
CO4	3	2	2	2	2	2	2	2	3	3	2
CO5	3	3	3	2	3	2	2	2	3	2	2
TOTAL	15	12	13	10	13	10	10	10	15	13	10
AVERAGE	3	2.2	2.6	2	2.6	2	2	2	3	2.6	2

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THIRD YEAR – SEMESTER – V
DISCIPLINE SPECIFIC ELECTIVE – 1 / 2 : Operation Research

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
351E5A	4				3	4	25	75	100

	Learning Objectives	
LO1	To introduce the students to operations research and linear programming.	
LO2	To impart knowledge about transportation and assignment problems.	
LO3	To get acquainted with game theory and simulation.	
LO4	To develop abilities to analyse and manage inventories using various methods.	
LO5	To acquire knowledge on network analysis.	

Prerequisite: Should have studied Statistics in 1ˢᵗ year B.Com.

UNIT	Contents	No. of Hours
I	**Introduction to Operations research and Linear Programming Problem** Operations research – Origin and development - Role in decision making - Phases and approaches to OR - Linear programming problem – Applications and limitations - Formulation of LPP - Optimal Solution to LPP - Graphical method - Simplex Method	12
II	**Transportation and Assignment problem** Transportation Problem – methods - North West corner method - Least cost method - Vogel's approximation method - Moving towards optimality - Stepping stone & MODI methods - Assignment problem	12
III	**Game Theory and Simulation** Game Theory- different strategies followed by the players in a game - Optimal strategies of a game using maxi-min criterion - Dominance property - Graphical method - Simulation	12

IV	**Inventory Management** Introduction to inventory systems, inventory classification. Economic order quantity (EOQ) model, Single period probabilistic inventory models with discrete and continuous demand, determination of reorder point for deterministic and probabilistic Inventory System. Basic concepts of Just-in-Time (JIT) and Material Requirement Planning (MRP)	12
V	**Network Analysis** Network models- CPM and PERT Determination of Critical Path Method (CPM)- PERT cost- Crashing a project- Scheduling of a project- Application of PERT and CPM.	12
	Total	60
CO	**Course Outcomes**	
CO1	Frame a linear programming problem for quantitative decisions in business planning.	
CO2	Optimise economic factors by applying transportation and assignment problems.	
CO3	Apply the concept of game theory and simulation for optimal decision making.	
CO4	Analyse and manage inventories to meet the changes in market demand.	
CO5	Construct networks including PERT, CPM for strategic management of business projects.	
	Textbooks	
1.	C.R.Kothari, "Quantitative Techniques", Vikas Publications, Noida	
2.	V.K. Kappor, "Operations Research - Problems and Solutions", Sultan Chand & Sons Publisher, New Delhi	
3.	Anand Sharma, Operation Research, Himalaya Publishing House, 2014, Mumbai	
4.	M Sreenivasa Reddy, Operation Research, CENGAGE, New Delhi	
5.	S. Gurusamy, Elements of Operation Research, Vijay Nicole Imprints Private Limited	
	Reference Books	
1.	S Kalavathy, Operations Research, Vikas Publications, Noida	
2.	S.P. Gupta, "Statistical Methods", S.Chand& Sons Publisher, New Delhi. 2019	

3.	Sarangi, SK Applied Operations Research and Quantitative Methods, Himalaya Publishing House, 2014, Mumbai
4.	ND Vohra, Quantitative Techniques in Management, McGraw Hill, 6th Edition, New Delhi 2021
5.	P.R.Vittal - Operation Research, Margham Publications, Chennai
Web Resources	
1.	www.orsi.in
2.	www.learnaboutor.co.uk
3.	www.theorsociety.com

MAPPING WITH PROGRAMME OUTCOMES AND PROGRAMME SPECIFIC OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	2	3	2	2	2	2	2	3	2	2
CO2	3	2	3	2	2	2	2	2	3	2	2
CO3	3	2	3	2	3	2	2	2	3	2	2
CO4	3	1	3	2	3	2	2	2	3	2	2
CO5	3	3	3	2	3	2	2	2	3	2	2
TOTAL	15	11	15	10	13	10	10	10	15	10	10
AVERAGE	3	2.2	3	2	2.6	2	2	2	3	2	2

3-Strong, 2-Medium , 1- Low

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THIRD YEAR – SEMESTER - V

DISCIPLINE SPECIFIC ELECTIVE – 3 /4 : SOFTWARE ENGINEERING AND UML LAB

(Common to BCom-CA)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
351E51	2		2		3	4	40	60	100

Learning Objectives	
LO1	To introduce the software development life cycles
LO2	To introduce concepts related to structured and objected oriented analysis & design co
LO3	To provide an insight into UML and software testing techniques

Prerequisite: Should have studied Commerce in XII Std

Unit	Contents	No. of Hours
I	Introduction – Evolution – Software Development projects – Emergence of Software Engineering. Software Life cycle models – Waterfall model – Rapid Application Development – Agile Model – Spiral Model	12
II	Requirement Analysis and Specification – Gathering and Analysis – SRS – Formal System Specification	12
III	Software Design – Overview – Characteristics – Cohesion & Coupling – Layered design – Approaches Function Oriented Design – Structured Analysis – DFD – Structured Design – Detailed design	12
IV	Object Modeling using UML – OO concepts – UML – Diagrams – Use case, Class, Interaction, Activity, State Chart – Postscript	12
V	Coding & Testing – coding – Review – Documentation – Testing – Black-box, White-box, Integration, OO Testing, Smoke testing.	12
	TOTAL (Theory + Practical)	**60**

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Course Outcomes	
CO1	The students should be able to specify software requirements, design the software using tools
CO2	To write test cases using different testing techniques.
Textbooks	
1	Rajib Mall, "Fundamentals of Software Engineering", PHI 2018, 5th Edition.
2	Roger S. Pressman, "Software Engineering - A Practitioner's Approach", McGraw Hill 2010, 7thEdition.
Reference Books	
1	Pankaj Jalote, "An Integrated Approach to Software Engineering", Narosa Publishing House 2011,3rd Edition.
NOTE: Latest Edition of Textbooks May be Used	
Web Resources	
1	NPTEL online course – Software Engineering - https://nptel.ac.in/courses/106105182/

UML Lab	Core - Core -S5EC1/2L
Credits 4	
Learning Objectives: (for teachers: what they have to do in the class/lab/field) - To get familiarized to the usage of UML tool kit. - To understand the requirements of the software and to map them appropriately to subsequent phases of the software development - To develop the ability to verify and validate their designs	

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Course Outcomes: (for students: To know what they are going to learn)

CO1: Students must be able to analyse and design the problem at hand.
CO2: Students should be able to use UML tools for the designing the software and test the correctness and soundness of their software through testing tools.

LIST OF PRACTICALS

Using UML tools produce analysis and design models for
a. Library Management System
b. Automatic Teller Machine
c. Student Information Management
d. Matrimony Service
e. Stock Management System

Extended Professional Component	Questions related to the above topics, from various competitive examinations UPSC / TRB / NET / UGC – CSIR / GATE / TNPSC / others to be solved (To be discussed during the Tutorial hour)
Skills acquired from the Course	Knowledge, Problem Solving, Analytical ability, Professional Competency, Professional Communication and Transferrable Skill

Extended Professional Component	Questions related to the above topics, from various competitive examinations UPSC / TRB / NET / UGC – CSIR / GATE / TNPSC / others to be solved (To be discussed during the Tutorial hour)
Skills acquired from the Course	Knowledge, Problem Solving, Analytical ability, Professional Competency, Professional Communication and Transferrable Skill

Learning Resources:

Recommended Texts
1. Roger D. Peng," R Programming for Data Science ", 2012
2. Norman Matloff,"The Art of R Programming- A Tour of Statistical Software Design", 2011

Reference Books
1. Garrett Grolemund, Hadley Wickham,"Hands-On Programming with R: Write Your Own Functions and Simulations" , 1st Edition, 2014
2. Venables , W.N.,and Ripley,"S programming", Springer, 2000.

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THIRD YEAR – SEMESTER - VI

CORE –XIII: COST ACCOUNTING – II

(Common to BCom- Gen., AF, BM, CA & MM)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
351C6A	6				4	6	25	75	100
Learning Objectives									
LO1	To understand the standards in Cost Accounting								
LO2	To know the concepts of contract costing.								
LO3	To be familiar with the concept of process costing.								
LO4	To learn about operation costing.								
LO5	To gain insights into standard costing.								

Prerequisite: Should have studied Cost Accounting in V Sem

Unit	Contents	No. of Hours
I	**Cost Accounting Standards** An Introduction to CAS – Purpose of CAS – Advantages of CAS – Difference between CAS and FAR Regulations – Different Degrees of CAS Coverage – Cost Accounting Standards - Responsibility Accounting and Divisional Performance Measurement.	18
II	**Job Costing, Batch Costing and Contract Costing** Definitions - Features - A Comparison - Calculation of Profit on Contracts – Cost Plus Contract - Preparation of Contract A/c.	18
III	**Process Costing** Process Costing – Meaning – Features of Process Costing – Application of Process Costing – Fundamental Principles of Process Costing – Preparation of Process Accounts - Treatment of Loss and Gain : Normal and Abnormal Loss - Abnormal Gain - Concept of Equivalent Production - Joint Products and By Products.	18
IV	**Operation Costing** Operation Costing – Meaning – Preparation of Operating Cost Sheet – Transport Costing – Power Supply Costing–Hospital Costing–Simple Problems.	18
V	**Standard Costing and Variance Analysis** Definition – Objectives – Advantages – Standard Cost and Estimated Cost – Installation of Standard Costing System – Variance Analysis – Material, Labour, Overhead, and Sales Variances – Calculation of Variances.	18
	TOTAL	90
THEORY 20% & PROBLEMS 80%		

Course Outcomes	
CO1	Remember and recall standards in cost accounting
CO2	Apply the knowledge in contract costing
CO3	Analyze and assimilate concepts in process costing
CO4	Understand various bases of classification cost and prepare operating cost statement.
CO5	Set up standards and analyse variances.
Textbooks	
1	Jain S.P. and Narang K.L. Cost Accounting. Kalyani Publishers. New Delhi.
2	Khanna B.S., Pandey I.M., Ahuja G.K., and Arora M.N., Practical Costing, S Chand & Co, New Delhi.
3	Dr.S.N. Maheswari, Principles of Cost Accounting, Sultan Chand publications, New Delhi.
4	T.S. Reddy and Y. Hari Prasad Reddy, Cost Accounting, Margham publications, Chennai.
5	S.P. Iyengar, Cost Accounting, Sultan Chand Publications, New Delhi.
Reference Books	
1	Polimeni, Cost Accounting: Concepts and Applications for Managerial Decision Making, New York, McGraw–Hill, Noida.
2	Jain S.P. and Narang K.L. Cost Accounting, Kalyani Publishers, New Delhi.
3	V.K.Saxena and C.D. Vashist, Cost Accounting, Sultan Chand publications, New Delhi.
4	Murthy A &Gurusamy S, Cost Accounting,Vijay Nicole Imprints Pvt. Ltd. Chennai.
5	Prasad. N.K and Prasad.V.K, Cost Accounting, Book Syndicate, Bangladesh.
NOTE: Latest Edition of Textbooks May be Used	
Web Resources	
1	https://www.economicsdiscussion.net/cost-accounting/contract-costing/32597
2	https://www.wallstreetmojo.com/process-costing/
3	https://www.accountingnotes.net/cost-accounting/operating-costing/17755

MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO1	PSO2	PSO3
CO1	3	3	3	2	3	3	3	3	3	2	2
CO2	3	3	3	2	2	3	2	2	3	2	3
CO3	3	3	3	2	3	3	3	3	3	2	2
CO4	3	3	3	2	2	3	2	2	3	2	2
CO5	3	3	3	2	3	3	3	3	3	2	3
TOTAL	15	15	15	10	13	15	13	13	15	10	12
AVERAGE	3	3	3	2	2.6	3	2.6	2.6	3	2	2.4

3 – Strong, 2- Medium, 1- Low

THIRD YEAR – SEMESTER – VI
CORE – XIV: MANAGEMENT ACCOUNTING

(Common to BCom- Gen., AF, BM, CA, MM, Co-op. & CS)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
351C6B	6				4	6	25	75	100

Learning Objectives	
LO1	To understand basics management accounting
LO2	To know the aspects of Financial Statement Analysis
LO3	To familiarize with fund flow and cash flow analysis
LO4	To learn about budgetary control
LO5	To gain insights into marginal costing.

Prerequisite: Should have studied Financial Accounting in I Semester.

Unit	Contents	No. of Hours
I	**Introduction to Management Accounting** Management Accounting – Meaning – Scope – Importance- Limitations - Management Accounting Vs Cost Accounting – Management Accounting Vs Financial Accounting. Analysis and Interpretation of Financial Statements – Nature and Significance – Types of Financial Analysis – Tools of Analysis – Comparative Statements – Common Size Statement – Trend Analysis.	18
II	**Ratio Analysis** Ratio Analysis: Meaning – Advantages – Limitations – Types of Ratios – Liquidity Ratios – Profitability Ratios -Turnover Ratios – Solvency Ratios – Leverage Ratios - Preparation of Financial Statements from Ratios.	18
III	**Funds Flow & Cash Flow Analysis** Introduction, Meaning of Funds Flow Statement-Ascertainment of Flow of Funds - Schedule of Changes in Working Capital- Adjusted Profit and Loss Account - Preparation of Funds Flow Statement. **Cash Flow Statement:** Meaning – Advantages – Limitations – Preparation of Cash Flow Statement as per AS 3 –Cash Flow from Operating, Financing and Investing activities	18

IV	**Budget and Budgetary Control** Meaning – Preparation of Various Budgets – Cash Budget - Flexible Budget– Production Budget – Sales Budget – Master Budget – Budgetary Control – Benefits	**18**
V	**Marginal Costing:** Meaning - Features – Marginal Costing vs Absorption Costing - Fixed Cost, Variable Cost and Semi Variable Cost- Contribution- Marginal Cost Equation- P/V Ratio - Break Even Point - Margin of Safety – Cost- Volume Profits Analysis. Decision Making: Selection of a Product Mix – Make or Buy Decision – Discontinuance of a product line – Change or Status quo – Limiting Factor or Key Factor.	**18**
	TOTAL	**90**

THEORY 20% & PROBLEMS 80%

CO	Course Outcomes
CO1	Remember and recall basics in management accounting
CO2	Apply the knowledge of preparation of Financial Statements
CO3	Analyse the concepts relating to fund flow and cash flow
CO4	Evaluate techniques of budgetary control
CO5	Formulate criteria for decision making using principles of marginal costing.

	Textbooks
1	Jain S.P. & Narang K.L. (2018) Cost and Management Accounting, Kalyani Publications,
2	Rds. Maheswari, Cost and Management Accounting, Sultan Chand Sons Publications, New Delhi.
3	Sharma and Shashi K. Gupta, Management Accounting, Kalyani Publishers, Chennai.
4	Jenitra L Mervin ,Daslton L Cecil, Management Accounting, Lerantec Press, Chennai.
5	T.S.Reddy& Y. Hari Prasad Reddy, Management Accounting, MarghamPublications,Chennai.

	Reference Books
1	Chadwick – The Essence of Management Accounting, Financial Times Publications, England.
2	Charles T.Horngren and Gary N. Sundem–Introduction to Management Accounting, Pearson, Chennai.
3	Murthy A and GurusamyS ,Management Accounting- Theory &Practice, Vijay Nicole Imprints Pvt. Ltd .Chennai.
4	Hansen - Mowen, Cost Management Accounting and Control, South Western College, India.
5	N.P. Srinivasan, Management Accounting, New Age publishers, Chennai.

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NOTE: Latest Edition of Textbooks May be Used	
Web Resources	
1	https://www.accountingnotes.net/companies/fund-flow-analysis/fund-flow-analysis-accounting/13300
2	https://accountingshare.com/budgetary-control/
3	https://www.investopedia.com/terms/m/marginalcostofproduction.asp

MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO 1	PSO 2	PSO 3
CO1	3	2	3	2	3	2	3	3	3	2	2
CO2	3	2	2	2	3	2	2	2	3	2	3
CO3	3	2	3	2	3	2	3	3	3	2	2
CO4	3	2	2	2	3	2	2	2	3	2	2
CO5	3	3	3	2	3	2	3	3	3	2	3
TOTAL	15	11	13	10	15	10	13	13	15	10	12
AVERAGE	3	2.1	2.6	2	2	2	2.6	2.6	3	2	2.4

3 – Strong, 2- Medium, 1- Low

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THIRD YEAR – SEMESTER - VI
CORE – XV: INCOME TAX LAW AND PRACTICE – II
(Common to BCom- Gen., AF, BM, CA, MM & CS)

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		Total
							CIA	External	
351C6C	6				4	6	25	75	100

	Learning Objectives
LO1	To understand provisions relating to capital gains
LO2	To know the provisions for computation of income from other sources.
LO3	To familiarize law relating to set off and carry forward of losses and deductions from Gross Total Income.
LO4	To learn about assessment of individuals
LO5	To gain knowledge about assessment procedures.

Prerequisite: Should have studied Financial Accounting in I stSem

Unit	Contents	No. of Hours
I	**Capital Gains** Capital Assets – Transfer – Short term vs Long term capital assets - Computation of Capital Gains – Exemption under Section 54 , 54B, 54D, 54EC, 54F, 54GA.	18
II	**Income From Other Sources & Clubbing of Income** Chargeability - Computation of Income from Other Sources – Deductions Allowed – Clubbing of Income – Concept	18
III	**Set Off and Carry Forward of Losses and Deductions From Gross Total Income** Gross Total Income vs Total Income - Provisions for Set-off and Carry Forward of Losses (Simple Problems). Deductions U/S 80C, 80CC, 80CCB, 80CCC, 80CCD, 80 CCE, 80D, 80DD, 80DDB, 80E, 80EE, 80EEA, 80EEB, 80G, 80GG, 80GGA, 80TTA, 80TTB, and 80U only.	18
IV	**Computation of Total Income – Individual** Computation of Total Income - Tax Liability of an Individuals (Old regime vs New regime	18
V	**Income Tax Authorities** Administration of Income Tax Act – Income Tax Authorities – Powers of CBDT – Powers of Income Tax Officer - Procedure for Assessment – Filing of Return – Due Dates of Filing – Voluntary Filing – Return of Loss – Belated Return – Defective Return – Signing of Return – Permanent Account Number (PAN) , e-PAN – Tax credit statement (26 AS) and Annual Information Statement (AIS).	18
	TOTAL	90

THEORY 20% & PROBLEMS 80%

Course Outcomes	
CO1	Remember and recall provisions on capital gains
CO2	Apply the knowledge about income from other sources
CO3	Analyse the set off and carry forward of losses provisions
CO4	Learn about assessment of individuals
CO5	Apply procedures learnt about assessment procedures.
Textbooks	
1	V.P.Gaur, Narang, Puja Gaur and Rajeev Puri- Income Tax Law and Practice, Kalyani Publishers, New Delhi.
2	T.S. Reddy and Hariprasad Reddy, Income Tax Law and Practice, Margham Publications, Chennai.
3	Dinkar Pagare, Income Tax Law and Practice, Sultan & Chand Sons, New Delhi.
4	Mehrotra H.C, Dr.Goyal S.P, Income Tax Law and Accounts, Sahitya Bhavan Publications, Agra.
5	T. Srinivasan – Income Tax & Practice –Vijay Nicole Imprints Private Limited, Chennai.
Reference Books	
1	Hariharan N, Income Tax Law & Practice, Vijay Nicole Imprints Pvt. Ltd. Chennai.
2	Bhagwati Prasad, Income Tax Law and Practice, Vishwa Prakasan, New Delhi.
3	Vinod K. Singhania, Students Guide to Income Tax., U.K. Bharghava Taxman, New Delhi.
4	Dr.Vinod K Singhania, Dr. Monica Singhania, Taxmann's Students' Guide to Income Tax, New Delhi.
5	Mittal Preethi Rani and Bansal Anshika, Income Tax Law and Practice, Sultan & Chand Sons, New Delhi.
NOTE: Latest Edition of Textbooks May be Used	
Web Resources	
1	https://www.investopedia.com/terms/c/capitalgain.asp
2	https://www.incometaxmanagement.com/Direct-Taxes/AY-2021-22/assessment/1-assessment-of-an-individual.html
3	https://www.incometax.gov.in/iec/foportal/

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**MAPPING WITH PROGRAMME OUTCOMES
AND PROGRAMME SPECIFIC OUTCOMES**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO 1	PSO 2	PSO 3
CO1	3	2	3	2	3	2	3	3	3	2	2
CO2	3	2	2	2	2	2	2	2	3	2	3
CO3	3	3	3	2	3	2	3	3	3	2	2
CO4	3	2	2	2	2	2	2	2	3	2	2
CO5	3	3	3	2	3	2	3	3	3	2	3
TOTAL	15	12	13	10	13	10	13	13	15	10	12
AVERAGE	3	2.2	2.6	2	2.6	2	2.6	2.6	3	2	2.2

3 – Strong, 2- Medium, 1- Low

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351E6B

THIRD YEAR – SEMESTER - VI

DISCIPLINE SPECIFIC ELECTIVE – 6 / 6:

PROJECT

A Group of 3 students will be assigned a Project in the beginning of the Final year. The Project Work shall be submitted to the College 20 days before the end of the Final year and the College has to certify the same and submit to the University 15 days prior to the commencement of the University Examinations. The Project shall be evaluated externally. The External Examiner shall be from the Panel of Examiners suggested by the board of Studies from time to time. Those who fail in the Project Work will have to redo the Project Work and submit to the College for External examination by the University.

This project can be done individually or in groups (not more than five students) which may be carried outside the campus.

External Project Evaluation and Viva / Presentation are compulsory and will be conducted at the end of the Programme.

EVALUATION OF THE PROJECT REPORT: The project report shall be subject to Internal and External Evaluation followed by a Viva-voce. Internal Evaluation is to be done by the supervising teacher and external evaluation by an examiner the Head of the Department or his nominee. Grades are to be awarded to the students combining the internal evaluation, external evaluation and viva voce.

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THIRD YEAR – SEMESTER - VI

DISCIPLINE SPECIFIC ELECTIVE – 8 / 8:DATA SCIENCE USING PYTHON LAB

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
351E62			5		3	5	40	60	100
Learning Objectives									
LO1	Know the fundamentals of programming.								
LO2	Understand the importance of different data types in programming								
LO3	Analyze how data extraction is possible using regular expression								
LO4	Use file concepts when retrieving or storing data is required in python								
LO5	Know how object oriented concepts helps in organizing the coding structure								
Prerequisite: Should have studied Commerce in XII Std									
	List of Exercises								

1. Editing and executing Programs involving Flow Controls. 2. Editing and executing Programs involving Functions. 3. Program in String Manipulations 4. Creating and manipulating a Tuple 5. Creating and manipulating a List 6. Creating and manipulating a Dictionary 7. Object Creation and Usage 8. Program involving Inheritance 9. Program involving Overloading 10. Reading and Writing with Text Files and Binary Files 11. Combining and Merging Data Sets 12. Program involving Regular Expressions 13. Data Aggregation and GroupWise Operations	**75**
TOTAL (Practical)	**75**

Course Outcomes	
CO1	To understand the problem solving approaches
CO2	To learn the basic programming constructs in R Programming
CO3	To practice various computing strategies for R Programming -based solutions to real world problems
CO4	To use R Programming data structures - lists, tuples, dictionaries.
CO5	To do input/output with files in R Programming

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THIRD YEAR – SEMESTER - VI

SEC - GENERAL AWARENESS FOR COMPETITIVE EXAMINATION

Subject Code	L	T	P	S	Credits	Inst. Hours	Marks		
							CIA	External	Total
351S6A	2				2	2	25	75	100

	Learning Objectives
LO1	To create the opportunity for learning across different disciplines and builds experience for students as they grow into lifelong learners.
LO2	To build experiences for students as they grow into lifelong learners.
LO3	To know the basic concepts of various discipline

Prerequisites: Should have studied Commerce in XII Std

UNIT	Details	No. of Hours
I	**Indian Polity** Basics concepts- Three organs of Indian government (Executives, Legislature, Judiciary), Introduction to Indian Constitution – Salient features of constitution, Preamble, Fundamental rights, Fundamental duties, Directive Principles of State policy, Types of Majority, Amendments to the Constitution, Basic structure Doctrine, Division of subjects between the union and the states local Governance, Elections in India and Election Commission, CAG.	6
II	**Geography** Major oceans of the world –Important Canals – Gulfs – Straits and passes – Indian Rivers and its Tributaries – Climatology – Atmosphere, Wind systems, Clouds systems, World climatic classification – Indian climate – Indian Monsoon – Indian's physical features, Indian Soil types and Distribution – Importance Trade routes and projects, Indian naturals vegetation – Indian agriculture- Major crops and its distribution, Indian Industries and its Distribution.	6
III	**Economy** National Income – Inflation – Money and Banking - Agriculture in India – Union Budget – Planning in India – Poverty – Unemployment – Inclusive Development and Development issues – Industrial polices – Financial Markets.	6
IV	**History** Modern India – formation of Indian National Congress – Morley Minto Reforms, Revolutionary activities – World War I and India's Response – Home Rule league – Montague Chelmsford reforms – Rowlett Act – Non –Cooperation Movement – Simon commission and Nehru Report – Civil Disobedience Movement and Round Table conferences – Quit India Movement and Demand for Pakistan – Cabinet Mission – Formation of Constituents Assembly and partition of India.	6

V	**Environment and Ecology** Basic concepts – Ecology, Biodiversity- Food chain and food web – Bio Geo Chemical Cycles – International Bio Diversity organisations- International Conventions – Conferences and Protocol – Indian Environmental laws and Environment Related organisation	**6**
	TOTAL	**30**

Course Outcomes	
CO1	Develop board knowledge of the different components in polity
CO2	Understand the Geographical features across countries and in India
CO3	Acquire knowledge on the aspects of Indian Economy
CO4	Understand the significance of India's Freedom Struggle
CO5	Gain knowledge on Ecology and Environment

Textbooks	
1	Class XI and XII NCERT Geography
2	History – Old NCERT'S Class XI and XII

Reference Books	
1	M. Laxmi Kant (2019), Indian polity, McGraw- Hill
2	Ramesh Singh (2022), Indian Economy, McGraw - Hill
3	G.C Leong, Physical and Human Geography, Oxford University Press
4	Majid Hussain- India Map Entries in Geography, GK Publications Pvt, Ltd.

NOTE: Latest Edition of Textbooks May be Used	

Web Resources	
1	https://www.freebookkeepingaccounting.com/using-excel-in-accounts
2	https://courses.corporatefinanceinstitute.com/courses/free-excel-crash-course-for-finance
3	https://www.youtube.com/watch?v=Nv_Nnw01FaU