

**CHOICE BASED CREDIT SYSTEM - LEARNING OUTCOMES-BASED  
CURRICULUM FRAMEWORK  
B.COM (IT)**

**PROGRAMME OBJECTIVE:**

The B.Com. Information Technology 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.

<b>Programme :</b>	<b>B.COM Information Technology</b>
<b>Programme Code :</b>	
<b>Duration :</b>	<b>3 Years (UG)</b>
<b>Programme Outcomes:</b>	<p><b>PO1 : Disciplinary knowledge :</b> Capable of demonstrating comprehensive knowledge and understanding of one or more Disciplines that form a part of an Undergraduate Programme of Study</p> <p><b>PO2 : Communication Skills :</b> 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.</p> <p><b>PO3 : Critical Thinking :</b> 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.</p> <p><b>PO4 : Problem Solving :</b> 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.</p> <p><b>PO5 : Analytical Reasoning :</b> 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.</p> <p><b>PO6 : Research- related skill :</b> 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.</p> <p><b>PO7 : Co-operation/Team work:</b> 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.</p>

	<p><b>PO8</b> : 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.</p> <p><b>PO9</b> : Reflective thinking : Critical sensibility to lived experiences, with self-awareness and reflexivity of both self and society.</p> <p><b>PO10</b> : 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.</p> <p><b>PO11</b>: Self- directed learning: ability to work independently, identify appropriate resources required for a project and manage a project through to completion.</p> <p><b>PO12</b> : Multicultural competence : Posses 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.</p> <p><b>PO13: Moral and Ethical awareness /reasoning</b> : 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.</p> <p><b>PO14</b> : 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.</p> <p><b>PO15 : Life Long Learning</b> : 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.</p>
<p>Programme Specific Outcomes :</p> <p><b>(These are mere guidelines. Faculty can create POs based on their curriculum or adopt from UGC or University for their Programme)</b></p>	<p><b>PSO1 – Placement</b> :</p> <p>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.</p> <p><b>PSO2 – Contribution to Business World:</b></p> <p>Apply theoretical concepts to business practices to produce employable, ethical, and innovative professionals to sustain in the dynamic business world.</p> <p><b>PSO3 – Contribution to the Society :</b></p> <p>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.</p>

**CHOICE BASED CREDIT SYSTEM - LEARNING OUTCOMES-BASED  
CURRICULUM FRAMEWORK  
DEPARTMENT OF B.COM (IT)**

Part	Courses	Subject	Code	Cr.	Hrs
<b>SEMESTER I</b>					
I	Lang. – I	nghJj;jkpo; - I	230103101	3	6
II	Lang. - II	General English – I	231003101	3	4
III	CC – 1	Financial Accounting I	233203101	4	5
	CC – 2	Principles of Management	233203102	4	5
	EC – I [Any One]	1. Business Communication 2. Business Economics	233203103 233203104	3	4
IV	SEC –I (NME)	Accounting for Business	234603132	2	2
IV	FC	Office Fundamentals Lab	234403132	2	2
	AECC- 1	Soft Skill - I	236003101	2	2
	Total			<b>23</b>	<b>30</b>
<b>SEMESTER II</b>					
I	Lang. -I	nghJj;jkpo; - II	230103201	3	6
II	Lang. -II	General English - II	231003201	3	4
III	CC – 3	Financial Accounting II	233203201	4	5
	CC - 4	Business Law	233203202	4	5
	EC – II [Any One]	Introduction to Information Technology Informatics and Cyber Laws	233203203 233203204	3	4
IV	SEC –II (NME)	Accounting for Decision Making	234603232	2	2
	SEC - III	C Programming Lab	234403232	2	2
	AECC –II	Soft Skill - II	236003201	2	2
				<b>23</b>	<b>30</b>
<b>SEMESTER III</b>					
I	Lang. -I	nghJj;jkpo; - III	230103301	3	6
II	Lang. -II	General English - III	231003301	3	4
III	CC – 5	Corporate Accounting I	233203301	4	5
	CC - 6	Company Law	233203302	4	5
	EC – 3	Programming in C++ Introduction to ERP	233203303 233203304	3	4
.IV	SEC –IV	Presentation Skills	234403332	1	1
	SEC – V	Programming in C++ Lab	238203332	2	2
	AECC – III	Soft Skill - III	236003301	2	2
	EVS	Environmental Studies - I	234103301	1	1
				<b>23</b>	<b>30</b>

Part	Courses		Code	Cr.	Hrs
<b>SEMESTER IV</b>					
I	Lang. – I	nghJ;jkpo; - IV	230103401	3	6
II	Lang. - II	General English - IV	231003401	3	4
III	CC – 7	Corporate Accounting II	233203401	4	5
	CC - 8	Business Mathematics & Statistics	233203402	4	5
	EC – IV	Tally Prime Essentials	233203403	3	3
Visual Basic		233203404			
IV	SEC –VI	Entrepreneurial Skill Development	234403432	2	2
IV	SEC –VII	Accounting Software Essentials Lab	238203432	2	2
	AECC- IV	Soft Skill - IV	236003401	2	2
	EVS	Environmental Studies - II	234103401	1	1
V	Extension Activity **	NSS / NCC / Physical Education / Rovers and Rangers / Library Science	-	1	-
	Total			<b>25</b>	<b>30</b>
<b>SEMESTER V</b>					
III	CC – 9	Cost Accounting I	233203501	4	5
	CC - 10	Banking Law and Practice	233203502	4	5
	CC - 11	Income tax law and Practice - I	233203503	4	5
	Core 12	Project with Viva Voce	233203504	4	4
	EC – V	1. Spread sheet Accounting	233203505	3	5
		2. Web Technology	233203506		
EC – VI	1. Integrated marketing communication	233203507	3	5	
	2. cryptography and network security	233203508			
IV		Value Education	234303501	1	1
		Internship/Industrial Training(carried out in II year summer vacation)30 hrs*	233203509	2	
				<b>25</b>	<b>30</b>
<b>SEMESTER VI</b>					
III	CC – 13	Cost Accounting - II	233203601	4	5
	CC – 14	Management Accounting	233203602	4	5
	CC – 15	Income Tax law and Practice II	233203603	4	5
	EC –7	1. Computerized Application in Business	233203604	3	5
		2. Management information system	233203605		
	EC - 8	1. Computer graphics and animation	233203606	3	5
2. Technology Management		233203607			
IV	Professional competency skill enhancement course	General awareness for Competitive Examinations	234403632	2	4
		Value Education	234303601	1	1
				<b>21</b>	<b>30</b>

\*\* Physical Education – 235003401 / NCC – 235103401 / NSS – 235203401 / Rovers and Rangers - 235303401 / Library Science - 235403401

\*Internship will be carried out during the summer vacation of the Second year and marks will be included in the Fifth Semester Marks Statement.

Title of the Course		COST ACCOUNTING I						
PART		III						
Category	Core - 9	Year	II	Credits	4	Course Code	233203501	
		Semester	III					
Instructional Hours per week		Lecture	Tutorial	Lab Practice	Total	CIA	External	Total
				5	-	--	5	25
Learning Objectives								
✍ To understand the various concepts of cost accounting.								
✍ To prepare and reconcile Cost accounts.								
✍ To gain knowledge regarding valuation methods of material.								
✍ To familiarize with the different methods of calculating labour cost.								
✍ To know the apportionment of Overheads.								
UNIT	Details							No. of Periods for the Unit
I	<b>Introduction of Cost Accounting</b> 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	<b>Cost Sheet and Methods of Costing</b> Preparation of Cost Sheet - Tenders & Quotations - Reconciliation of Cost and Financial Accounts –Unit Costing-Job Costing.							15
III	<b>Material Costing</b> 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	<b>Labour Costing</b> 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	<b>Overheads Costing</b> 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

Course Outcomes	Course Outcomes
CO1	Remember and recall the various concepts of cost accounting
CO2	Demonstrate the preparation and reconciliation of cost sheet.
CO3	Analyze the various valuation methods of issue of materials.
CO4	Examine the different methods of calculating labour cost.
CO5	Critically evaluate the apportionment of Overheads.

Text Books (Latest Editions)	
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

Web Resources	
1.	<a href="https://study.com/learn/lesson/cost-accounting-principles-examples-what-is-cost-accounting.html">https://study.com/learn/lesson/cost-accounting-principles-examples-what-is-cost-accounting.html</a>
2	<a href="https://www.accountingtools.com/articles/what-is-material-costing.html">https://www.accountingtools.com/articles/what-is-material-costing.html</a>
3	<a href="https://www.freshbooks.com/hub/accounting/overhead-cost">https://www.freshbooks.com/hub/accounting/overhead-cost</a>

**Mapping with Programme Outcomes:**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO 1	3	2	3	2	2	2	2	2	3	2	2
CO 2	3	2	2	2	2	2	2	2	3	2	2
CO 3	3	2	3	2	2	2	2	2	3	2	2
CO 4	3	2	2	2	2	2	2	2	3	2	2
CO 5	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

**S-Strong M-Medium L-Low**

<b>Title of the Course</b>		<b>BANKING LAW AND PRACTICE</b>						
<b>PART</b>		<b>III</b>						
<b>Category</b>	Core – 10	<b>Year</b>	III	<b>Credits</b>	4	<b>Course Code</b>	233203502	
		<b>Semester</b>	V					
<b>Instructional Hours per week</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>	
	5	-	--	5	25	75	100	
<b>Learning Objectives</b>								
☞ To help the students understand various provision of Banking Regulation Act 1949 applicable to banking companies including cooperative banks								
☞ To trace the evolution of central bank concept and prevalent central banking system around the world and their roles and function								
☞ 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								
☞ To understand how capital fund of commercial banks, objectives and process of Asset securitization etc.,								
☞ To explore practical banking systems relationship of bankers and customers, crossing of cheques, endorsement etc.								
<b>UNIT</b>	<b>Details</b>							<b>No. of Periods for the Unit</b>
<b>I</b>	<b>Introduction to Banking</b> History of Banking- Provisions of Banking Regulations Act 1949 - Components of Indian Banking - Indian Banking System-Phases of Development - Banking Structure in India - Payment Banks and Small Banks - Commercial Banking: Definition - Classification of Banks. Banking System - Universal Banking - Commercial Banking functions - Role of Banks in Economic Development. Central Banking: Definition – Need - Principles- Central Banking Vs Commercial Banking - Functions of Central Bank.							<b>15</b>
<b>II</b>	<b>RBI</b> Establishment – objective - Legal framework – Functions – SBI - Origin and History – Establishment Indian subsidiaries - Foreign subsidiaries - Non-Banking-Subsidiaries-Personal banking International banking-Trade Financing-Correspondent banking - Co-operative banks-Meaning and definition-Features-Co-operative banks Vs Commercial banks-Structure.- NBFC-Role of NBFCRBI Regulations-Financial sector reforms-Sukhmoy committee 1985-Narasimham committee I and II-Prudential norms: capital adequacy norms-classification of assets and provisioning – Meaning, Structure of Interest Rates - Short term and Long Term – Impacts of Savings and Borrowings.							<b>15</b>
<b>III</b>	<b>Bank Account</b> Opening – Types of Accounts-FDR-Steps in opening Account-Saving vs Current Account-‘Donatio Mortis Causa’-Passbook-Bank Customer Relationship-Special Types of currents –KYC norms. Bank Lending – Lending Sources-Bank Lending Principles-Forms of lending-Loan evaluation process-securities of lending-Factors influencing bank lending – Negotiable Instruments –Meaning –Characteristics-Types. Crossing – Definition –Objectives-Crossing and negotiability-Consequences of Crossing.							<b>15</b>

<b>IV</b>	<p><b>Endorsement</b>                      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 of paying banks Payments of a crossed cheque payment. Collecting bankers-Statutory protection under section85 - Refusal of cheques Payment. Collecting Banker-Statutory protection under section 131-Collecting bankers’ duty – RBI instruction –Paying Banker Vs Collecting Banker- Customer grievances-Grievance Redressal –Banking Ombudsman.</p>	<b>15</b>
<b>V</b>	<p><b>E-Banking</b>                      Meaning-Services-e-banking and Financial services- Initiatives- Opportunities-Internet banking Meaning-Internet banking Vs Traditional banking-Services-Drawbacks-Frauds in Internet banking. Mobile banking–Anywhere Banking-Any Time Banking- Electronic Mobile Wallets. ATM Evolution -Concept-Features - Types-. Electronic money-Meaning-Categories-Merits of e-money - National Electronic Funds Transfer (NEFT) Real Time Gross Settlement (RTGS) Difference between NEFT &amp; RTGS- Meaning- Steps–Benefits-Monetary policies- final sector reforms- Chakravarthy committee 1985- Narasimham Committee I &amp;II Prudential norms capital adequacy norms- classification of assets &amp; provisions.</p>	<b>15</b>

Course Outcomes	Course Outcomes
<b>CO1</b>	Aware of various provision of Banking Regulation Act 1949 applicable to banking companies including cooperative banks
<b>CO2</b>	Analyse the evolution of Central Banking concept and prevalent Central Banking system in India and their roles and function
<b>CO3</b>	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
<b>CO4</b>	Evaluate the role of capital fund of commercial banks, objectives and process of Asset securitization etc
<b>CO5</b>	Define the practical banking systems relationship of bankers and customers, crossing of cheques, endorsement etc.

Text Books (Latest Editions)	
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



<b>Reference Books</b>	
1.	B. Santhanam, Banking & Financial System, Margam Publication, Chennai
2.	<a href="#">KataitSanjay</a> , 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

<b>Web Resources</b>	
1.	<a href="https://www.rbi.org.in/">https://www.rbi.org.in/</a>
2.	<a href="https://businessjargons.com/e-banking.html">https://businessjargons.com/e-banking.html</a>
3.	<a href="https://www.wallstreetmojo.com/endorsement/">https://www.wallstreetmojo.com/endorsement/</a>

**Mapping with Programme Outcomes:**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
<b>CO 1</b>	3	2	3	2	3	2	2	2	3	3	2
<b>CO 2</b>	3	2	2	2	3	2	2	2	3	3	2
<b>CO 3</b>	3	2	3	2	3	2	2	2	3	3	2
<b>CO 4</b>	3	2	2	2	3	2	2	2	3	3	2
<b>CO 5</b>	3	2	3	2	3	2	2	2	3	3	2
<b>TOTAL</b>	15	10	13	10	15	10	10	10	15	15	10
<b>AVERAGE</b>	3	2	2.6	2	3	2	2	2	3	3	2

**S-Strong      M-Medium      L-Low**

<b>Title of the Course</b>		<b>INCOME TAX LAW AND PRACTICE I</b>						
<b>PART</b>		<b>III</b>						
<b>Category</b>	Core 11	<b>Year</b>	III	<b>Credits</b>	4	<b>Course Code</b>	233203503	
		<b>Semester</b>	V					
<b>Instructional Hours per week</b>		<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>
		5	-	--	5	25	75	100
<b>Learning Objectives</b>								
✍ To understand the basic concepts & definitions under the Income Tax Act,1961.								
✍ To compute the residential status of an assessee and the incidence of tax.								
✍ To compute income under the head salaries.								
✍ To learn the concepts of Annual value, associated deductions and the calculation of income from House property.								
✍ To compute the income from Business & Profession considering its basic principles & specific disallowances.								
<b>UNIT</b>	<b>Details</b>							<b>No. of Periods for the Unit</b>
<b>I</b>	<b>Introduction to Income Tax</b> Introduction to Income Tax – History – Objectives of Taxation - Features of Income Tax – Meaning of Income – Types – Important Definitions Under the Income Tax Act – Assessee – Types – Incomes Exempted under Section 10.							<b>12</b>
<b>II</b>	<b>Residential Status</b> 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.							<b>12</b>
<b>III</b>	<b>Income from Salary</b> Computation of Salary Income – Features of Salary – Allowances – Types of Allowances - Perquisites – Kinds of Perquisites –Types of Provident Fund - Gratuity – Pension – Commutation of Pension – Deduction of Salary - Profits in Lieu of Salary.							<b>12</b>
<b>IV</b>	<b>Income from House Property</b> Income from House Property –Basis of Charge – Annual Value – Gross Annual Value, Net Annual Value of Let-out Property, Self-Occupied Property– Amenities –Deductions.							<b>12</b>
<b>V</b>	<b>Profits and Gains from Business Profession</b> Income from Business or Profession – Allowable Expenses – Not Allowable Expenses - General Deductions – Provisions Relating to Depreciation – Deemed Business Profits - Undisclosed Incomes – Investments – Compulsory Maintenance of Books of Accounts – Audit of Accounts of Certain Persons – Special Provisions for Computing Incomes on Estimated Basis – Computation of Income from Business or Profession.							<b>12</b>

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

<b>Text Books (Latest Editions)</b>	
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.	H.C. Mehrotra, Dr.GoyalS.P, Income Tax Law and Accounts, Sahitya Bhavan Publications, Agra.
5.	T. Srinivasan – Income Tax & Practice –Vijay Nicole Imprints Private Limited , Chennai.

<b>Reference Books</b>	
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.

<b>Web Resources</b>	
1.	<a href="https://cleartax.in/s/residential-status/">https://cleartax.in/s/residential-status/</a>
2	<a href="https://www.legalraasta.com/itr/income-from-salary/">https://www.legalraasta.com/itr/income-from-salary/</a>
3	<a href="https://taxguru.in/income-tax/income-house-properties.html">https://taxguru.in/income-tax/income-house-properties.html</a>

**Mapping with Programme Outcomes:**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
<b>CO 1</b>	3	2	3	2	3	2	2	2	3	3	2
<b>CO 2</b>	3	2	2	2	2	2	2	2	3	2	2
<b>CO 3</b>	3	3	3	2	3	2	2	2	3	3	2
<b>CO 4</b>	3	2	2	2	2	2	2	2	3	3	2
<b>CO 5</b>	3	3	3	2	3	2	2	2	3	2	2
<b>TOTAL</b>	15	12	13	10	13	10	10	10	15	13	10
<b>AVERAGE</b>	3	2.2	2.6	2	2.6	2	2	2	3	2.6	2

**S-Strong      M-Medium      L-Low**

<b>Title of the Course</b>		<b>PROJECT WITH VIVA VOCE</b>					
<b>PART</b>		<b>III</b>					
<b>Category</b>	Core 12	<b>Year</b>	III	<b>Credits</b>	4	<b>Course Code</b>	233203504
		<b>Semester</b>	V				
<b>Instructional Hours per week</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>
	4	-	--	4	25	75	100

<b>Title of the Course</b>		<b>SPREAD SHEET ACCOUNTING</b>						
<b>PART</b>		<b>III</b>						
<b>Category</b>	Elective- 5.1	<b>Year</b>	III	<b>Credits</b>	3	<b>Course Code</b>	<b>233203505</b>	
		<b>Semester</b>	V					
<b>Instructional Hours per week</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>	
	5	-	--	5	25	75	100	
<b>Learning Objectives</b>								
✍ To understand the working of spreadsheet								
✍ To analyse the functions of spreadsheet								
✍ To imply the functions of spread sheet								
✍ To explore the reporting and analysis in spreadsheet								
✍ To give more knwoeldge on the accounting principles in spreadhseet								
<b>UNIT</b>	<b>Details</b>						<b>No. of Periods for the Unit</b>	
<b>I</b>	Spreadsheets: A tool for thinking with numbers What is a Spreadsheet – History of Spreadsheet – Spreadsheets in Popular use (Google Spreadsheet and Microsoft Excel) – Differences between Microsoft Excel and Google Sheets –Spreadsheet Basics – Cells, Rows, Columns, Cell Coordinates – Getting Familiar with the Menus on a Spreadsheet –Edit and Format a Spreadsheet – Saving a Spreadsheet – Construct, Modify, and Format and Print a Spreadsheet.						<b>15</b>	
<b>II</b>	Spreadsheet Functions: Formulas Basic Functions – Date and Time Functions – Logical Functions - Manipulating Text using Functions – Financial and Statistical Functions – Database Functions						<b>15</b>	
<b>III</b>	Spreadsheet Functions: Data Filter and Sort Functions – Data Validation – Conditional Filters – Pivot Tables – Group and Sub-Totals – What-if Analysis – Writing Macros (Basics) - Connect to Database (optional topic).						<b>15</b>	
<b>IV</b>	Spreadsheet for Reporting and Analysis - Import Data Sets and Spreadsheets – Set Calculations Settings – Graphs and Charts – Using QUERY Function - Statistical Trend Analysis.						<b>15</b>	
<b>V</b>	Spreadsheet for Accounting - Create and Customize a Spreadsheet to journalize and post transactions – Preparing a Budget / Costing Sheet Template – Personal Income Tax Calculator Template.						<b>15</b>	

<b>Course Outcomes</b>	<b>Course Outcomes</b>
<b>CO1</b>	Paraphrase the importance of spreadsheet accounting
<b>CO2</b>	Applications of spreadsheet functions in spreadsheet accounting
<b>CO3</b>	Implication of data functions in spreadsheet accounting
<b>CO4</b>	Describe the reports of spreadsheet accounting
<b>CO5</b>	Enumerate the accounting terminology in spreadsheet accounting

<b>Text Books (Latest Editions)</b>	
1.	John Walkenbach , MS Excel Bible, Wiley Publication, New Jersey, USA.
2.	Ramesh Bangia, Learning Microsoft Excel 2013, Khanna Book Publishing, Bangalore.
3.	Wayne L Winston, Microsoft Excel, Data Analysis and Business Modelling, Prentice Hall, New Jersey, USA.
4.	Greg Harvey, Excel 2016 for Dummies, Chennai.

<b>Reference Books</b>	
1.	Glyn Davis & Branko Pecar : Business Statistics using Excel, Oxford publications, Chennai.
2.	Google Sheets Basics: Masato Takeda and others; Tekuru Inc, India.
3.	Harjit Suman, Excel Bible for Beginners, Kindle Editio, Chennai.
4.	Jennifer Ackerman Kettel, Guy Hat-Davis, Curt Simmons, “Microsoft 2003”, Tata McGrawHill, Noida.

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

**Mapping with Programme Outcomes:**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
<b>CO 1</b>	3	2	3	2	3	2	3	3	3	2	2
<b>CO 2</b>	3	2	2	2	2	2	2	2	3	2	3
<b>CO 3</b>	3	3	3	2	3	2	3	3	3	2	2
<b>CO 4</b>	3	2	2	2	2	2	2	2	3	2	2
<b>CO 5</b>	3	3	3	2	3	2	3	3	3	2	3
<b>TOTAL</b>	15	12	13	10	13	10	13	13	15	10	12
<b>AVERAGE</b>	3	2.2	2.6	2	2.6	2	2.6	2.6	3	2	2.4

**S-Strong      M-Medium      L-Low**

<b>Title of the Course</b>		<b>WEB TECHNOLOGY</b>						
<b>PART</b>		<b>III</b>						
<b>Category</b>	EC 5.2	<b>Year</b>	III	<b>Credits</b>	3	<b>Course Code</b>	233203506	
		<b>Semester</b>	V					
<b>Instructional Hours per week</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>	
	5	-	--	5	25	75	100	
<b>Learning Objectives</b>								
✍ To understand the internet basic concepts								
✍ To have practical knowledge on the JavaScript								
✍ To instil the programming of HTML								
✍ To apply the structure in HTML								
✍ To analyze the request and response objects								
<b>UNIT</b>	<b>Details</b>							<b>No. of Periods for the Unit</b>
<b>I</b>	Internet Basic – Introduction to HTML – List – Creating Table – linking document – frames – graphics to HTML Doc- Creating simple static page.							<b>15</b>
<b>II</b>	Introduction to JavaScript – Advantage of Java script – java script syntax – Data type – variable – array – operator and expression – looping constructor – function – Dialog box.							<b>15</b>
<b>III</b>	JavaScript document object model – introduction – object in HTML – event handling – window object – browser object – form object – navigator object – build in object – cookies.							<b>15</b>
<b>IV</b>	ASP.NET: Language Structure – page structure – page event, properties - compiler directives. HTML server controls – Anchor, Tables, Forms - Basic Web server controls – label, textbox, button, image, links, check & radio button, hyperlink.							<b>15</b>
<b>V</b>	Request and Response objects - Working with data – OLEDB connection class, Command class Transaction class, data adaptor class, data set class. Security: Authentication, IP Address, Secure by SSL & Client Certificates.							<b>15</b>

<b>Course Outcomes</b>	
<b>Course Outcomes</b>	<b>Course Outcome</b>
<b>CO1</b>	Illustrate the objectives of HTML
<b>CO2</b>	Describe the advantages of Java Script
<b>CO3</b>	Apply the skills of HTML Objects
<b>CO4</b>	Analyze the language structure in HTML
<b>CO5</b>	Explain the IP Address and to secure by SSL

<b>Text Books (Latest Editions)</b>	
1.	Bayross, Web Enable Commercial Application Development Using HTML, DHTML, javascript, Perl CGL. BPB Publications, 2000
2.	G. Buczek, ASP.NET Developers Guide, TMH, 2002 3. A.Russell Jones, Mastering Active Server Pages 3, BPB Publications
3.	M Srinivasan, Web technology, Pearson, 2012

<b>Reference Books</b>	
1	Akshi Kumar, Web Technology, Theory and Practice, CRC Press
2	C Xavier, Web technology & design, New Age Publications
3	Pankaj Sharma, Introduction to web technology, S. K. Kataria & Sons, 2009
<b>Web Resources</b>	
1.	<a href="https://www.google.co.in/books/edition/Web_Technology/BmDW8qqO15EC?hl=en&amp;gbpv=1&amp;dq=web%20technology&amp;pg=PR4&amp;printsec=front%20cover">https://www.google.co.in/books/edition/Web_Technology/BmDW8qqO15EC?hl=en&amp;gbpv=1&amp;dq=web%20technology&amp;pg=PR4&amp;printsec=front cover</a>
2	<a href="https://www.google.co.in/books/edition/Web_Technology/bEUPEAAAQBAJ?hl=en&amp;gbpv=1&amp;dq=web%20technology&amp;pg=PP1&amp;printsec=front%20cover">https://www.google.co.in/books/edition/Web_Technology/bEUPEAAAQBAJ?hl=en&amp;gbpv=1&amp;dq=web%20technology&amp;pg=PP1&amp;printsec=front cover</a>
3	<a href="https://www.google.co.in/books/edition/Web_Technology_Design/nKjLYPCVxGIC?hl=en&amp;gbpv=1&amp;dq=web%20technology&amp;pg=PP1&amp;printsec=front%20cover">https://www.google.co.in/books/edition/Web_Technology_Design/nKjLYPCVxGIC?hl=en&amp;gbpv=1&amp;dq=web%20technology&amp;pg=PP1&amp;printsec=front cover</a>

**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	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	2.4

**3 – Strong, 2- Medium, 1- Low**



<b>Title of the Course</b>		<b>INTEGRATED MARKETING COMMUNICATION</b>						
<b>PART</b>		<b>III</b>						
<b>Category</b>	EC 6.1	<b>Year</b>	III	<b>Credits</b>	3	<b>Course Code</b>	233203507	
		<b>Semester</b>	V					
<b>Instructional Hours per week</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>	
	5	-	--	5	25	75	100	
<b>Learning Objectives</b>								
✍ To understand the role of Integrated Marketing Communication								
✍ To enhance knowledge in different models in communication hierarchy								
✍ To have an understanding on budgeting for promotional programmes								
✍ To learn the development of creative marketing communication								
✍ To examine the effectiveness and control of promotional programmes								
<b>UNIT</b>	<b>Details</b>							<b>No. of Periods for the Unit</b>
<b>I</b>	An Introduction to Integrated Marketing Communication (IMC) Meaning and role of IMC in the Marketing process, Introduction to IMC tools – Advertising, sales promotion, publicity, public relations, and event sponsorship							<b>15</b>
<b>II</b>	Understanding communication process Source, Message and channel factors, Communication response hierarchy- AIDA model, Hierarchy of effect model, Innovation adoption model, information processing model							<b>15</b>
<b>III</b>	Planning for Marketing Communication (Marcom) Establishing marcom Objectives and Budgeting for Promotional Programmes-Setting communication objectives, Sales as marcom objective, Budgeting for marcom-Factors influencing budget							<b>15</b>
<b>IV</b>	Developing the Integrated Marketing Communication Programme Planning and development of creative marcom. Creative strategies in advertising, sales promotion, publicity, event sponsorships etc							<b>15</b>
<b>V</b>	Measuring Effectiveness and control of Promotional Programmes Meaning and importance of measuring communication effectiveness, The testing process, measuring the effectiveness of other promotional tools and IMC.							<b>15</b>

<b>Course Outcomes</b>	
<b>Course Outcomes</b>	<b>Course Outcome</b>
<b>CO1</b>	Explain the role of Integrated Marketing Communication
<b>CO2</b>	Describe the different types of model in communication hierarchy
<b>CO3</b>	Enumerate the Objectives and Budgeting for Promotional Programmes
<b>CO4</b>	List out the development in creative marketing communication
<b>CO5</b>	Outline the effectiveness and control of promotional programmes in IMC

<b>Text Books (Latest Editions)</b>	
1.	Advertising Management, Jaishri Jethwaney & Shruti Jain, Oxford University Press
2.	Advertising & Promotions: An IMC perspective, Kruti Shah and Alan D'Souza, Tata McGraw Hill
3.	Advertising & Promotion- An Integrated Marketing Communications Perspective, George Belch, Michael Belch & Keyoor Purani, TATA McGraw Hill

<b>Reference Books</b>	
1	Jerome M. Juska- Integrated Marketing Communication ,Taylor & Francis
2	Advertising & Promotions, S H Kazmi and Satish K Batra, Excel
3	Advertising & Promotion: An IMC approach, Terence A. Shimp Pub., Cengage Learnin
<b>Web Resources</b>	
1.	<a href="https://www.google.co.in/books/edition/Marketing_Communications/paVeBAAQBAJ?hl=en&amp;gbpv=1&amp;dq=marketing%20communications&amp;pg=PP1&amp;printsec=front cover">https://www.google.co.in/books/edition/Marketing_Communications/paVeBAAQBAJ?hl=en&amp;gbpv=1&amp;dq=marketing%20communications&amp;pg=PP1&amp;printsec=front cover</a>
2	<a href="https://www.google.co.in/books/edition/Marketing_Communications/q6deBAAQBAJ?hl=en&amp;gbpv=1&amp;dq=marketing%20communications&amp;pg=PA1&amp;printsec=frontcover">https://www.google.co.in/books/edition/Marketing_Communications/q6deBAAQBAJ?hl=en&amp;gbpv=1&amp;dq=marketing%20communications&amp;pg=PA1&amp;printsec=frontcover</a>

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

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PSO1</b>	<b>PSO2</b>	<b>PSO3</b>
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
<b>TOTAL</b>	15	12	13	10	13	10	13	13	15	10	12
<b>AVERAGE</b>	3	2.2	2.6	2	2.6	2	2.6	2.6	3	2	2.2

**3 – Strong, 2- Medium, 1- Low**

<b>Title of the Course</b>		<b>CRYPTOGRAPHY AND NETWORK SECURITY</b>						
<b>PART</b>		<b>III</b>						
<b>Category</b>	EC 6.2	<b>Year</b>	III	<b>Credits</b>	3	<b>Course Code</b>	<b>233203508</b>	
		<b>Semester</b>	V					
<b>Instructional Hours per week</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>	
	5	-	--	5	25	75	100	
<b>Learning Objectives</b>								
✍ To understand on the security trends								
✍ To apply the mathematical symmetric key cryptography								
✍ To analyze the mathematics of asymmetric key cryptography								
✍ To imply the authentication requirements								
✍ To understand election mail survey and firewall								
<b>UNIT</b>	<b>Details</b>							<b>No. of Periods for the Unit</b>
<b>I</b>	Security trends – Legal, Ethical and Professional Aspects of Security, Need for Security at Multiple levels, Security Policies – Model of network security – Security attacks, services and mechanisms – OSI security architecture – Classical encryption techniques: substitution techniques, transposition techniques, steganography- Foundations of modern cryptography: perfect security – information theory – product cryptosystem – cryptanalysis.							<b>15</b>
<b>II</b>	Mathematics of Symmetric Key Cryptography: Algebraic structures – Modular arithmetic-Euclid’s algorithm- Congruence and matrices - Groups, Rings, Fields- Finite fields- SYMMETRIC KEY CIPHERS: SDES – Block cipher Principles of DES – Strength of DES – Differential and linear cryptanalysis – Block cipher design principles – Block cipher mode of operation – Evaluation criteria for AES – Advanced Encryption Standard – RC4 – Key Distribution.							<b>15</b>
<b>III</b>	Mathematics of Asymmetric Key Cryptography: Primes – Primality Testing –Factorization – Euler’s totient function, Fermat’s and Euler’s Theorem – Chinese Remainder Theorem – Exponentiation and logarithm – ASYMMETRIC KEY CIPHERS: RSA cryptosystem – Key distribution – Key management – Diffie Hellman key exchange - ElGamal cryptosystem – Elliptic curve arithmetic-Elliptic curve cryptography.							<b>15</b>
<b>IV</b>	Authentication requirement – Authentication function – MAC – Hash function – Security of hash function and MAC – SHA –Digital signature and authentication protocols – DSS- Entity Authentication: Biometrics, Passwords, Challenge Response protocols- Authentication applications – Kerberos,X.509							<b>15</b>
<b>V</b>	Electronic Mail security – PGP, S/MIME – IP security – Web Security – SYSTEM SECURITY: Intruders – Malicious software – viruses – Firewalls.							<b>15</b>

Course Outcomes	
Course Outcomes	Course Outcome
CO1	Remember the security trends in cryptography and network security
CO2	Enumerate the algebra structures
CO3	Apply and analyze the key distribution of mathematical of asymmetrical key
CO4	Implication of authentication requirement and functions
CO5	Describe the electronic mail security and web security system

Text Books (Latest Editions)	
1	William Stallings, “Cryptography And Network Security – Principles and Practices”, Prentice Hall of India, Third Edition, 2003.
2	Atul Kahate, “Cryptography and Network Security”, Tata McGraw-Hill, 2003.
3	Bruce Schneier, “Applied Cryptography”, John Wiley & Sons Inc, 2001.

Reference Books	
1	Charles B. Pfleeger, Shari Lawrence Pfleeger, “Security in Computing”, Third Edition, Pearson Education, 2003
2	William Stallings, Cryptography and Network security, Hardcover, 2016

Web Resources	
1.	<a href="https://www.google.co.in/books/edition/Cryptography_and_Network_Security/v8nCCwAAQBAJ?hl=en&amp;gl=in&amp;kptab=editions&amp;sa=X&amp;ved=2ahUKEwiDnLTgxoP8AhXbpVYBHd18CggQmBZ6BAgBEAc">https://www.google.co.in/books/edition/Cryptography_and_Network_Security/v8nCCwAAQBAJ?hl=en&amp;gl=in&amp;kptab=editions&amp;sa=X&amp;ved=2ahUKEwiDnLTgxoP8AhXbpVYBHd18CggQmBZ6BAgBEAc</a>
2	<a href="https://www.google.co.in/books/edition/Cryptography_And_Network_Security_4_E/qKcrce0x_2YC?hl=en&amp;gbpv=1&amp;dq=cryptography%20and%20network%20security&amp;pg=PP1&amp;printsec=frontcover">https://www.google.co.in/books/edition/Cryptography_And_Network_Security_4_E/qKcrce0x_2YC?hl=en&amp;gbpv=1&amp;dq=cryptography%20and%20network%20security&amp;pg=PP1&amp;printsec=frontcover</a>
3	<a href="https://www.google.co.in/books/edition/Introduction_to_Cryptography_and_Network/JGPDxwEACAAJ?hl=en">https://www.google.co.in/books/edition/Introduction_to_Cryptography_and_Network/JGPDxwEACAAJ?hl=en</a>

**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	2	3	3	3	2	2
CO2	3	2	2	3	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	3	3	2	3	3	3	2	3
TOTAL	15	13	13	12	13	10	13	13	15	10	12
AVERAGE	3	2.6	2.6	2.4	2.6	2	2.6	2.6	3	2	2.4

**3 – Strong, 2- Medium, 1- Low**

<b>Title of the Course</b>		<b>CORPORATE ACCOUNTING II</b>						
<b>PART</b>		<b>III</b>						
<b>Category</b>	Core – 13	<b>Year</b>	III	<b>Credits</b>	4	<b>Course Code</b>	233203601	
		<b>Semester</b>	VI					
<b>Instructional Hours per week</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>	
	5	-	--	5	25	75	100	
<b>Learning Objectives</b>								
To understand the standards in Cost Accounting								
To know the concepts of contract costing.								
To be familiar with the concept of process costing.								
To learn about operation costing.								
To gain insights into standard costing.								
<b>Prerequisite: Should have studied Cost Accounting in V Sem</b>								
<b>UNIT</b>	<b>Details</b>						<b>No. of Periods for the Unit</b>	
<b>I</b>	<b>Cost Accounting Standards</b> 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.						<b>15</b>	
<b>II</b>	<b>Contract Costing</b> Definition - Features of Contract Costing - Calculation of Profit on Contracts – Cost Plus Contract- Contract Costing and Job Costing - A Comparison -Preparation of Contract A/c.						<b>15</b>	
<b>III</b>	<b>Process Costing</b> Process Costing – Meaning – Features of Process Costing – Application of Process Costing – Fundamental Principles of Process Costing – Treatment of Loss and Gain : Normal and Abnormal Loss - Abnormal Gain - Joint Products, By Products – Concept of Equivalent Production – Process Accounts - Process Losses and Gains.						<b>15</b>	
<b>IV</b>	<b>Operation Costing</b> Operation Costing – Meaning – Preparation of Operating Cost Sheet – Transport Costing – Power Supply Costing–Hospital Costing–Simple Problems.						<b>15</b>	
<b>V</b>	<b>Standard Costing</b> Definition – Objectives – Advantages – Standard Cost and Estimated Cost – Installation of Standard Costing – Variance Analysis – Material, Labour, Overhead, and Sales Variances – Calculation of Variances.						<b>15</b>	

<b>Course Outcomes</b>	<b>Course Outcomes</b>
<b>CO1</b>	Remember and recall standards in cost accounting
<b>CO2</b>	Apply the knowledge in contract costing
<b>CO3</b>	Analyze and assimilate concepts in process costing
<b>CO4</b>	Understand various bases of classification cost and prepare operating cost statement.
<b>CO5</b>	Set up standards and analyse variances.

<b>Text Books (Latest Editions)</b>	
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.

<b>Reference Books</b>	
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.

<b>Web Resources</b>	
1.	<a href="https://www.economicdiscussion.net/cost-accounting/contract-costing/32597">https://www.economicdiscussion.net/cost-accounting/contract-costing/32597</a>
2	<a href="https://www.wallstreetmojo.com/process-costing/">https://www.wallstreetmojo.com/process-costing/</a>
3	<a href="https://www.accountingnotes.net/cost-accounting/operating-costing/17755">https://www.accountingnotes.net/cost-accounting/operating-costing/17755</a>

**Mapping with Programme Outcomes:**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
<b>CO 1</b>	3	3	3	2	3	3	3	3	3	2	2
<b>CO 2</b>	3	3	3	2	2	3	2	2	3	2	3
<b>CO 3</b>	3	3	3	2	3	3	3	3	3	2	2
<b>CO 4</b>	3	3	3	2	2	3	2	2	3	2	2
<b>CO 5</b>	3	3	3	2	3	3	3	3	3	2	3
<b>TOTAL</b>	15	15	15	10	13	15	13	13	15	10	12
<b>AVERAGE</b>	3	3	3	2	2.6	3	2.6	2.6	3	2	2.4

**S-Strong      M-Medium      L-Low**

<b>Title of the Course</b>		<b>MANAGEMENT ACCOUNTING</b>						
<b>PART</b>		<b>III</b>						
<b>Category</b>	Core - 14	<b>Year</b>	III	<b>Credits</b>	4	<b>Course Code</b>	<b>233203602</b>	
		<b>Semester</b>	VI					
<b>Instructional Hours per week</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>	
	5	-	--	5	25	75	100	
<b>Learning Objectives</b>								
✍ To understand basics management accounting								
✍ To know the aspects of Financial Statement Analysis								
✍ To familiarize with fund flow and cash flow analysis								
✍ To learn about budgetary control								
✍ To gain insights into marginal costing.								
<b>Prerequisite: Should have studied Financial Accounting in I st Sem</b>								
<b>UNIT</b>	<b>Details</b>						<b>No. of Periods for the Unit</b>	
<b>I</b>	<b>Introduction to Management Accounting</b> Management Accounting – Meaning – Scope – Importance- Limitations - Management Accounting Vs Cost Accounting – Management Accounting Vs Financial Accounting.						<b>15</b>	
<b>II</b>	<b>Financial Statement Analysis</b> Analysis and Interpretation of Financial Statements – Nature and Significance – Types of Financial Analysis – Tools of Analysis – Comparative Statements – Common Size Statement – Trend Analysis. Ratio Analysis: Meaning – Advantages – Limitations – Types of Ratios – Liquidity Ratios – Profitability Ratios -Turnover Ratios – Capital Structure Ratios – Leverage Ratios - Preparation of Financial Statements from Ratios.						<b>15</b>	
<b>III</b>	<b>Fund Flow Analysis &amp; Cash Flow Analysis</b> Introduction, Meaning of Funds Flow Statement-Ascertainment of Flow of Funds -Technique of Preparing Funds Flow Statement- Schedule of Changes in Working Capital-Adjusted Profit and Loss Account - Preparation of Funds Flow Statement. <b>Cash Flow Statements:</b> Meaning – Advantages – Limitations – Preparation of Cash Flow Statement as per AS 3 – Types of Cash Flows - Operating, Financing and Investing Cash Flows.						<b>15</b>	
<b>IV</b>	<b>Budgetary Control</b> Budgetary Control: Meaning – Preparation of Various Budgets – Cash Budget - Flexible Budget– Production Budget – Sales Budget.						<b>15</b>	
<b>V</b>	<b>Marginal Costing :</b> Meaning - Features – 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- Break Even Point – Decision Making : Selection Of a Product Mix – Make or Buy Decision – Discontinuance of a product line – Change or Status quo – Limiting Factors – Exploring New Markets.						<b>15</b>	

Course Outcomes	Course Outcome
CO1	Remember and recall basics in management accounting
CO2	Apply the knowledge of preparation of Financial Statements
CO3	Analyze 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.

Text Books (Latest Editions)	
1.	Jain S.P. & Narang K.L. (2018) Cost and Management Accounting, Kalyani Publications,
2.	Dr.S.N.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, Dashton L Cecil, Management Accounting, Lerantec Press, Chennai.
5.	T.S.Reddy & Y. Hari Prasad Reddy, Management Accounting, Margham Publications, 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 Gurusamy S, 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.

Web Resources	
1.	<a href="https://www.accountingnotes.net/companies/fund-flow-analysis/fund-flow-analysis-accounting/13300">https://www.accountingnotes.net/companies/fund-flow-analysis/fund-flow-analysis-accounting/13300</a>
2.	<a href="https://accountingshare.com/budgetary-control/">https://accountingshare.com/budgetary-control/</a>
3.	<a href="https://www.investopedia.com/terms/m/marginalcostofproduction.asp">https://www.investopedia.com/terms/m/marginalcostofproduction.asp</a>

**Mapping with Programme Outcomes:**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO 1	3	2	3	2	3	2	3	3	3	2	2
CO 2	3	2	2	2	3	2	2	2	3	2	3
CO 3	3	2	3	2	3	2	3	3	3	2	2
CO 4	3	2	2	2	3	2	2	2	3	2	2
CO 5	3	3	3	2	3	2	3	3	3	2	3
<b>TOTAL</b>	15	11	13	10	15	10	13	13	15	10	12
<b>AVERAGE</b>	3	2.1	2.6	2	2	2	2.6	2.6	3	2	2.4

**S-Strong      M-Medium      L-Low**



<b>Title of the Course</b>		<b>INCOME TAX LAW AND PRACTICE II</b>						
<b>PART</b>		III						
<b>Category</b>	Core – 15	<b>Year</b>	III	<b>Credits</b>	4	<b>Course Code</b>	233203603	
		<b>Semester</b>	VI					
<b>Instructional Hours per week</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>	
	5	-	--	5	25	75	100	
<b>Learning Objectives</b>								
✍ To understand provisions relating to capital gains								
✍ To know the provisions for computation of income from other sources.								
✍ To familiarize law relating to set off and carry forward of losses and deductions from Gross Total Income.								
✍ To learn about assessment of individuals								
✍ To gain knowledge about assessment procedures.								
<b>UNIT</b>	<b>Details</b>						<b>No. of Periods for the Unit</b>	
<b>I</b>	<b>Capital Gains</b> Capital Gains – Kinds of Capital Assets – Computation of Capital Gains – Exemption under Section 54 , 54B, 54D, 54EC, 54F, 54GA.						<b>15</b>	
<b>II</b>	<b>Income From Other Sources</b> Income from Other Sources – Income Chargeable to Tax under the Head Income from Other Sources – Procedures for Computing Income from Other Sources – Deductions Allowed – Deduction not Allowed – Problems on Computation of Income from Other Sources.						<b>15</b>	
<b>III</b>	<b>Set Off and Carry Forward of Losses and Deductions From Gross Total Income</b> Provisions for Set-off and Carry Forward of Losses (Simple Problems). Deductions U/S 80C, 80CC, 80CCB, 80CCC, 80CCD, 80CCE, 80D, 80DD, 80DDB, 80E, 80EE, 80EEA, 80EEB, 80G, 80GG, 80GGA, 80TTA, 80TTB, and 80U only.						<b>15</b>	
<b>IV</b>	<b>Assessment of Individuals</b> Assessment: Meaning and Types, Computation of Total Income and Tax Liability of an Individuals (simple problems in case of Income from salaries, HP and Profits and Gains – computed income may be given).						<b>15</b>	
<b>V</b>	<b>Income Tax Authorities</b> Administration of Income Tax Act – Income Tax Authorities – Powers of CBDT – Powers of Income – Tax Officers - Procedures for Assessment – Filing of Return – Due Dates of Filing – Voluntary Filing – Return of Loss – Related Return – Defective Return – Signing of Return – Permanent Account Number (PAN)						<b>15</b>	

Course Outcomes	Course Outcomes
CO1	Remember and recall provisions on capital gains
CO2	Apply the knowledge about income from other sources
CO3	Analyze the set off and carry forward of losses provisions
CO4	Learn about assessment of individuals
CO5	Apply procedures learnt about assessment procedures.

Text Books (Latest Editions)	
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	Mehrotra H.C, Dr.GoyalS.P,Income Tax Law and Accounts, SahityaBhavan 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, VishwaPrakasan, New Delhi.
3	Vinod K. Singhanian, Students Guide to Income Tax., U.K. Bharghava Taxman, New Delhi.
4	Dr.Vinod K Singhanian, Dr. Monica Singhanian, Taxmann's Students' Guide to Income Tax, New Delhi.
5	Mittal PreethiRani andBansalAnshika, Income Tax Law and Practice, Sultan & Chand Sons, New Delhi.

Web Resources	
1.	<a href="https://www.investopedia.com/terms/c/capitalgain.asp">https://www.investopedia.com/terms/c/capitalgain.asp</a>
2	<a href="https://www.incometaxmanagement.com/Direct-Taxes/AY-2021-22/assessment/1-assessment-of-an-individual.html">https://www.incometaxmanagement.com/Direct-Taxes/AY-2021-22/assessment/1-assessment-of-an-individual.html</a>
3	<a href="https://www.incometax.gov.in/iec/foportal/">https://www.incometax.gov.in/iec/foportal/</a>

**Mapping with Programme Outcomes and PSO:**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO 1	3	2	3	2	3	2	3	3	3	2	2
CO 2	3	2	2	2	2	2	2	2	3	2	3
CO 3	3	3	3	2	3	2	3	3	3	2	2
CO 4	3	2	2	2	2	2	2	2	3	2	2
CO 5	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

**S-Strong M-Medium L-Low**

<b>Title of the Course</b>		<b>COMPUTERIZED APPLICATION IN BUSINESS</b>						
<b>PART</b>		III						
<b>Category</b>	Elective 7..1	<b>Year</b>	III	<b>Credits</b>	3	<b>Course Code</b>	233203604	
		<b>Semester</b>	VI					
<b>Instructional Hours per week</b>		<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>
		5	-	--	5	25	75	100
<b>Learning Objectives</b>								
✍ To apply various terminologies used in the operation of computer systems in a business environment.								
✍ To Understand the basic concepts of a word processing package								
✍ To apply the basic concepts of electronic spread sheet software in business.								
✍ To Understand and apply the basic concepts of PowerPoint presentation.								
✍ To generate electronic mail for communicating in an automated office for business environment.								
<b>UNIT</b>	<b>Details</b>							<b>No. of Periods for the Unit</b>
<b>I</b>	<b>Word Processing</b> Introduction to Word Processing, Word Processing Concepts, Use of Templates, and Working with Word Document: Editing Text, Find and Replace Text, Formatting, Spell Check, Autocorrect, Auto Text - Bullets and Numbering, Tabs, Paragraph Formatting, Indent, and Page Formatting, Header and Footer.							<b>15</b>
<b>II</b>	<b>Mail Merge</b> Tables - Inserting, Filling and Formatting a Table - Inserting Pictures and Video - Mail Merge Including Linking with Database - Printing Documents, Creating Business Documents.							<b>15</b>
<b>III</b>	<b>Preparing Presentations</b> Basics of Presentations: Slides, Fonts, Drawing, Editing, Inserting, Tables, Images, texts, Symbols. Media – Design – Transition – Animation - Slideshow. Creating Business Presentations.							<b>15</b>
<b>IV</b>	<b>Spreadsheet and its Business Applications</b> Spreadsheet: Concepts, Managing Worksheets - Formatting, Entering Data, Editing, and Printing a Worksheet - Handling Operators in Formula, Project Involving Multiple Spreadsheets, Organizing Charts and Graphs. Mathematical, Statistical, Financial, Logical, Date and Time, Lookup and Reference, Database, and Text Functions.							<b>15</b>
<b>V</b>	<b>Creating Business Spreadsheet</b> Creating Spreadsheet in the Area of: Loan and Lease Statement, Ratio Analysis, Payroll Statements, Capital Budgeting, Depreciation Accounting, Graphical Representation of Data, Frequency Distribution and its Statistical Parameters, Correlation and Regression.							<b>15</b>
<b>THEORY 20% &amp; PROBLEMS 80%</b>								

Course Outcomes	Course Outcomes
CO1	Recall various techniques of working in MS-WORD.
CO2	Prepare appropriate business document.
CO3	Create - Presentation for Seminars and Lecture.
CO4	Understanding various tools used in MS-EXCEL.
CO5	Apply Excel tools in various business areas of Finance, HR, Statistics.

Text Books (Latest Editions)	
1.	<a href="#">R Parameswaran</a> , Computer Application in Business - S. Chand Publishing, UP.
2.	Dr.Sandeep Srivastava, Er. Meera Goyal, Computer Applications In Business - SBPD Publications,UP.
3.	<a href="#">MansiBansal</a> , <a href="#">Sushil Kumar Sharma</a> , Computer Application In Business
4.	Peter Norton, “Introduction to Computers” –Tata McGraw-Hill, Noida.
5.	Renu Gupta : Computer Applications in Business, Shree Mahavir Book Depot (Publishers) New Delhi.

Reference Books	
1.	Gupta, Swati, Office Automation System, Lap Lambert Academic Publication. USA.
2.	Jennifer Ackerman Kettel, Guy Hat-Davis, Curt Simmons, “Microsoft 2003”, Tata McGrawHill, Noida.
3	Dr.R.Deepalakshmi, Computer Fundamentals and Office Automation, Charulatha Publications, Tamilnadu.
4	John Walkenbach ,MS Excel 2007 Bible, Wiley Publication, New Jersey, USA.
5	Glyn Davis & Branko Pecar : Business Statistics using Excel, Oxford publications, Chennai.

Web Resources	
1.	<a href="https://www.youtube.com/watch?v=Nv_Nnw01FaU">https://www.youtube.com/watch?v=Nv_Nnw01FaU</a>
2	<a href="https://www.udemy.com/course/office-automation-certificate-course/">https://www.udemy.com/course/office-automation-certificate-course/</a>
3	<a href="https://guides.lib.umich.edu/ld.php?content_id=11412285">https://guides.lib.umich.edu/ld.php?content_id=11412285</a>

**Mapping with Programme Outcomes and PSO:**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
CO 1	3	2	3	2	3	2	3	2	3	2	2
CO 2	3	2	3	2	2	2	2	2	3	2	3
CO 3	3	3	3	2	3	2	3	2	3	2	2
CO 4	3	2	3	2	2	2	2	2	3	2	2
CO 5	3	3	3	2	3	2	3	2	3	2	3
TOTAL	15	12	15	10	13	10	13	10	15	10	12
AVERAGE	3	2.4	3	2	2.6	2	2.6	2	3	2	2.4

**S-Strong      M-Medium      L-Low**

<b>Title of the Course</b>		<b>MANAGEMENT INFORMATION SYSTEM</b>						
<b>PART</b>		<b>III</b>						
<b>Category</b>	EC 7.2	<b>Year</b>	III	<b>Credits</b>	3	<b>Course Code</b>	233203605	
		<b>Semester</b>	VI					
<b>Instructional Hours per week</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>	
	5	-	--	5	25	75	100	
<b>Learning Objectives</b>								
✍ To understand the management information system								
✍ To explore the system concepts and to identify the characteristics of system								
✍ To analyse the transaction processing system								
✍ To apply the database management systems and architecture networks								
✍ To estimate the functional management information systems								
<b>UNIT</b>	<b>Details</b>						<b>No. of Periods for the Unit</b>	
<b>I</b>	Management information system: meaning – features – requisites of an effective MIS – MIS Model – components – subsystems of an MIS – role and importance – corporate planning for MIS – growth of MIS in an organization – centralization vs decentralization of MIS. Support – Limitations of MIS.						<b>15</b>	
<b>II</b>	System concepts – elements of system – characteristics of a system – types of system – categories of information system – system development life cycle – system enhancement.						<b>15</b>	
<b>III</b>	Information systems in business and management: Transaction processing system: Information repeating and executive information system.						<b>15</b>	
<b>IV</b>	Database management systems – conceptual presentation – client server architectures networks.						<b>15</b>	
<b>V</b>	Functional management information system: Financial – accounting – marketing – production – Human resource – business process outsourcing.						<b>15</b>	
<b>Course Outcomes</b>	<b>Course Outcome</b>							
<b>CO1</b>	Paraphrase the characteristics of Management information system							
<b>CO2</b>	Describe the elements and characteristics of system							
<b>CO3</b>	Enumerate the application of information system in business							
<b>CO4</b>	Explain the database management system							
<b>CO5</b>	Elaborate the functional management information system in financial, accounting, marketing and production.							
<b>Text Books (Latest Editions)</b>								
1.	Gordon B. Davis And Maggrethe H . Olson , Management Information Systems , Mc Graw Hill International Edition - Second Edition , 1998							
2.	Rober G . Mudrick , Joel E . Ross And James R . CIAGGET , Information Systems For Modern Management , 33Rd Edition , 1992 , Prentice Hall Of India (P) Ltd ., Eastern Economy Edition .							
3.	Jerome Kanter Management Information Systems, 3 Edition , 1990 . Prentice Hall Of India Ltd. ,Eastern Economy Edition							

<b>Reference Book</b>	
1	James A. O'Brien, Management information systems, McGraw Hill, 2002
2	Bagchi Nirmalya, Management Information systems, Vikas Publications, 2010
3	Indrajit Chattarjee, Management information systems, PHI Learning, 2010
<b>Web Resources</b>	
1.	<a href="https://www.google.co.in/books/edition/Management_Information_Systems/RTZDDAAQBAJ?hl=en&amp;gbpv=1&amp;dq=management%20information%20system&amp;pg=PR4&amp;printsec=frontcover">https://www.google.co.in/books/edition/Management_Information_Systems/RTZDDAAQBAJ?hl=en&amp;gbpv=1&amp;dq=management%20information%20system&amp;pg=PR4&amp;printsec=frontcover</a>
2	<a href="https://www.google.co.in/books/edition/MANAGEMENT_INFORMATION_SYSTEMS/DOI2meoOKWsC?hl=en">https://www.google.co.in/books/edition/MANAGEMENT_INFORMATION_SYSTEMS/DOI2meoOKWsC?hl=en</a>
3.	<a href="https://www.google.co.in/books/edition/Management_Information_Systems_Manageria/ZaNDAAAQBAJ?hl=en&amp;gbpv=1&amp;dq=management%20information%20system&amp;pg=PP1&amp;printsec=frontcover">https://www.google.co.in/books/edition/Management_Information_Systems_Manageria/ZaNDAAAQBAJ?hl=en&amp;gbpv=1&amp;dq=management%20information%20system&amp;pg=PP1&amp;printsec=frontcover</a>

**Mapping with Programme Outcomes:**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
<b>CO 1</b>	3	2	3	2	3	2	3	3	3	2	2
<b>CO 2</b>	3	2	2	2	2	2	2	2	3	2	3
<b>CO 3</b>	3	3	2	2	3	2	3	3	3	2	2
<b>CO 4</b>	3	2	2	2	2	2	2	2	2	2	2
<b>CO 5</b>	3	3	3	2	3	2	3	3	3	2	3
<b>TOTAL</b>	15	12	12	10	13	10	13	13	14	10	12
<b>AVERAGE</b>	3	2.4	2.4	2	2.6	2	2.6	2.6	2.8	2	2.4

**S-Strong      M-Medium      L-Low**

<b>Title of the Course</b>		<b>COMPUTER GRAPHICS AND ANIMATION</b>						
<b>PART</b>		<b>III</b>						
<b>Category</b>	EC - 8.1	<b>Year</b>	III	<b>Credits</b>	3	<b>Course Code</b>	233203606	
		<b>Semester</b>	VI					
<b>Instructional Hours per week</b>		<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>
		5	-	--	5	25	75	100
<b>Learning Objectives</b>								
✍ To understand the applications of computer graphics								
✍ To analyze the scan conversion								
✍ To apply the two dimensional transformation								
✍ To explore the three dimensional transformation								
✍ To apply the computer animation								
<b>UNIT</b>	<b>Details</b>							<b>No. of Periods for the Unit</b>
<b>I</b>	<b>Introduction to Computer Graphics:</b> Overview of Computer Graphics, Computer Graphics Application and Software, Description of some graphics devices, Input Devices for Operator Interaction, Active and Passive Graphics Devices, Display Technologies, Storage Tube Graphics Displays, Calligraphic Refresh Graphics Displays, Raster Refresh (Raster-Scan) Graphics Displays, Cathode Ray Tube Basics, Color CRT Raster Scan Basics, Video Basics, The Video Controller, Random-Scan Display Processor, LCD displays.							<b>15</b>
<b>II</b>	<b>Scan conversion:</b> Digital Differential Analyzer (DDA) algorithm, Bresenhams' Line drawing algorithm. Bresenhams' method of Circle drawing, Midpoint Circle Algorithm, Midpoint Ellipse Algorithm, Mid-point criteria, Problems of Aliasing, end-point ordering and clipping lines, Scan Converting Circles, Clipping Lines algorithms–Cyrus-Beck, Cohen-Sutherland and Liang-Barsky, Clipping Polygons, problem with multiple components.							<b>15</b>
<b>III</b>	<b>Two-Dimensional Transformations:</b> Transformations and Matrices, Transformation Conventions, 2D Transformations, Homogeneous Coordinates and Matrix Representation of 2D Transformations, Translations and Homogeneous Coordinates, Rotation, Reflection, Scaling, Combined Transformation, Transformation of Points, Transformation of The Unit Square, Solid Body Transformations, Rotation About an Arbitrary Point, Reflection through an Arbitrary Line, A Geometric Interpretation of Homogeneous Coordinates, The Window-to-Viewport Transformations.							<b>15</b>
<b>IV</b>	<b>Three-Dimensional Transformations:</b> Three-Dimensional Scaling, Three-Dimensional Shearing, Three- Dimensional Rotation, Three-Dimensional Reflection, Three- Dimensional Translation, Multiple Transformation, Rotation about an Arbitrary Axis in Space, Reflection through an Arbitrary Plane, Matrix Representation of 3D Transformations, Composition of 3D Transformations, Affine and Perspective Geometry, Perspective Transformations, Techniques for Generating Perspective Views, Vanishing Points, the Perspective Geometry and camera models, Orthographic Projections, Axonometric Projections, Oblique Projections, View volumes for projections.							<b>15</b>

<b>V</b>	<b>Computer Animation:</b> Principles of Animation, Key framing, Deformations, Character Animation, Physics-Based Animation, Procedural Techniques, Groups of Objects. <b>Image Manipulation and Storage:</b> What is an Image? Digital image file formats, Image compression standard – JPEG, Image Processing - Digital image enhancement, contrast stretching, Histogram Equalization, smoothing and median Filtering.	<b>15</b>
<b>THEORY 20% &amp; PROBLEMS 80%</b>		
<b>Course Outcomes</b>	<b>Course Outcome</b>	
<b>CO1</b>	Describe the application of computer graphics	
<b>CO2</b>	Analyse the digital transfer analyzer	
<b>CO3</b>	Applications of two dimensional transformation	
<b>CO4</b>	Implementation of three dimensional transformation	
<b>CO5</b>	List our the principles of the computer animation	
<b>Text Books (Latest Editions)</b>		
1.	Computer Graphics, Donald Hearn and M. Pauline Baker, Prentice Hall of India.	
2.	Steven Harrington, computer graphics, Mc-Graw Hill	
3.	J.D. Foley, A Van Dam, S. K. Feiner and R. L. Phillips, Computer Graphics Principles and Practice, Addison Wesley	
<b>Reference Book</b>		
1	William M. Newman, Robert F. Sproull, Principles of Interactive Computer Graphics, Tata McGraw-Hill.	
2	J.D. Foley, A. Van Dam, S. K. Feiner, J.F. Hughes and R.L. Phillips, Introduction to Computer Graphics, Addison Wesley.	
3	Malay K Pakhira, Computer graphics, multimedia and animation, PHI Learning	
<b>Web Resources</b>		
1.	<a href="https://www.google.co.in/books/edition/Computer_Graphics_Multimedia_and_Animati/3AQFN4IzBAoC?hl=en&amp;gbpv=1&amp;dq=computer%20graphics%20and%20animation&amp;pg=PR2&amp;printsec=frontcover">https://www.google.co.in/books/edition/Computer_Graphics_Multimedia_and_Animati/3AQFN4IzBAoC?hl=en&amp;gbpv=1&amp;dq=computer%20graphics%20and%20animation&amp;pg=PR2&amp;printsec=frontcover</a>	
2	<a href="https://www.google.co.in/books/edition/Computer_Graphics_Animation/-RsL_JtLbekC?hl=en&amp;gbpv=0&amp;bsq=computer%20graphics%20and%20animation">https://www.google.co.in/books/edition/Computer_Graphics_Animation/-RsL_JtLbekC?hl=en&amp;gbpv=0&amp;bsq=computer%20graphics%20and%20animation</a>	
3.	<a href="https://www.google.co.in/books/edition/Computer_Graphics_Animation/sx-MSQAACAAJ?hl=en">https://www.google.co.in/books/edition/Computer_Graphics_Animation/sx-MSQAACAAJ?hl=en</a>	

**Mapping with Programme Outcomes:**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
<b>CO 1</b>	3	2	3	2	3	2	3	2	3	2	2
<b>CO 2</b>	3	2	3	2	2	2	2	2	3	2	3
<b>CO 3</b>	3	3	3	2	3	2	3	2	3	2	2
<b>CO 4</b>	3	2	3	2	2	2	2	2	3	2	2
<b>CO 5</b>	3	3	3	2	3	2	3	2	3	2	3
<b>TOTAL</b>	15	12	15	10	13	10	13	10	15	10	12
<b>AVERAGE</b>	3	2.4	3	2	2.6	2	2.6	2	3	2	2.4

**S-Strong      M-Medium      L-Low**



<b>Title of the Course</b>		<b>TECHNOLOGY MANAGEMENT</b>						
<b>PART</b>		<b>III</b>						
<b>Category</b>	EC - 8.2	<b>Year</b>	III	<b>Credits</b>	3	<b>Course Code</b>	233203607	
		<b>Semester</b>	VI					
<b>Instructional Hours per week</b>		<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>
		5	-	--	5	25	75	100
<b>Learning Objectives</b>								
☞ To understand the concept of technology management								
☞ To analyze the competitive advantages in new technology								
☞ To gain knowledge on the technological forecasting								
☞ To explore the technology assessment								
☞ To identify the technology strategy								
<b>UNIT</b>								
<b>UNIT</b>	<b>Details</b>							<b>No. of Periods for the Unit</b>
<b>I</b>	Introduction to technology management: Concept and meaning of technology, Evolution and growth of technology, role and significance of management of technology, Impact of technology on society and business, Forms of technology: process technology and product technology.							<b>15</b>
<b>II</b>	Competitive advantages through new technologies: product development – from scientific breakthrough to marketable product – Role of Government in Technology Development. Linkage between technology, development and competition, Managing research and development (R&D), Managing Intellectual Property							<b>15</b>
<b>III</b>	Technological Forecasting: Exploratory: Intuitive, Extrapolation, Growth Curves, Technology Monitoring, Normative: Relevance Tree, Morphological Analysis, Mission Flow Diagram.							<b>15</b>
<b>IV</b>	Technology Assessment: Technology Choice, Technological Leadership and Follower ship, Technology Acquisition. Meaning of Innovation and creativity, innovation management							<b>15</b>
<b>V</b>	Technology strategy: concept, types, key principles, framework for formulating technology strategy, Technology forecasting: techniques and application-. Technology diffusion and absorption: Rate of Diffusion; Innovation Time and Innovation Cost, Speed of Diffusion. Project management in adoption and implementation of new technologies							<b>15</b>
<b>Course Outcome</b>								
<b>Course Outcomes</b>	<b>Course Outcome</b>							
<b>CO1</b>	Describe the significance of technology management							
<b>CO2</b>	Enumerate the role of government in technology development							
<b>CO3</b>	Explain the methods of technological forecasting and monitoring							
<b>CO4</b>	Elaborate the technology assessment and acquisition.							
<b>CO5</b>	Discuss the principles of technology strategy							
<b>Text Books (Latest Editions)</b>								
1.	Strategic Technology Management - Betz. F. - McGraw-Hill.							
2.	Management of Technology - Tarek Khalli -, McGraw-Hill.							
3.	Management of Technology - Tarek Khalli -, McGraw-Hill.							
4.	Managing Technology and Innovation for Competitive Advantage - V K Narayanan - Pearson Education Asia							

<b>Reference Book</b>	
1	Handbook Of Technology Management - Gaynor - Mcgraw Hill
2	Management Of New Technologies For Global Competitiveness — Christian N Madu - Jaico Publishing House
3	Management Of New Technologies For Global Competitiveness — Christian N Madu - Jaico Publishing House
4	Strategic Management of Technology & Innovation - Burgelman, R.A., M.A. Madique, and S.C. Wheelwright -. Irwin
<b>Web Resources</b>	
1.	<a href="https://www.google.co.in/books/edition/Technology_Management/p5CwzgEACAAJ?hl=en">https://www.google.co.in/books/edition/Technology_Management/p5CwzgEACAAJ?hl=en</a>
2	<a href="https://www.google.co.in/books/edition/Technology_Management_and_Systems_of_Inn/CY32XXw9floC?hl=en&amp;gbpv=1&amp;pg=PP1&amp;printsec=frontcover">https://www.google.co.in/books/edition/Technology_Management_and_Systems_of_Inn/CY32XXw9floC?hl=en&amp;gbpv=1&amp;pg=PP1&amp;printsec=frontcover</a>
3.	<a href="https://www.google.co.in/books/edition/A_Textbook_of_Technology_Management/8YpS8B1cD7oC?hl=en&amp;gbpv=1&amp;dq=technology%20management&amp;pg=PP1&amp;printsec=frontcover">https://www.google.co.in/books/edition/A_Textbook_of_Technology_Management/8YpS8B1cD7oC?hl=en&amp;gbpv=1&amp;dq=technology%20management&amp;pg=PP1&amp;printsec=frontcover</a>

**Mapping with Programme Outcomes:**

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PSO1	PSO2	PSO3
<b>CO 1</b>	3	2	3	3	3	2	3	3	3	2	2
<b>CO 2</b>	3	2	3	3	2	2	2	2	3	2	3
<b>CO 3</b>	3	3	3	3	3	2	3	3	3	2	2
<b>CO 4</b>	3	2	3	3	2	2	2	2	3	2	2
<b>CO 5</b>	3	3	3	3	3	2	3	3	3	2	3
<b>TOTAL</b>	15	12	15	15	13	10	13	13	15	10	12
<b>AVERAGE</b>	3	2.4	3	3	2.6	2	2.6	2.6	3	2	2.4

**S-Strong      M-Medium      L-Low**

<b>Title of the Course</b>		<b>GENERAL AWARENESS FOR COMPETITIVE EXAMINATIONS</b>						
<b>PART</b>		<b>IV</b>						
<b>Category</b>	Professional competency SEC	<b>Year</b>	III	<b>Credits</b>	2	<b>Course Code</b>	234403632	
		<b>Semester</b>	VI					
<b>Instructional Hours per week</b>		<b>Lecture</b>	<b>Tutorial</b>	<b>Lab Practice</b>	<b>Total</b>	<b>CIA</b>	<b>External</b>	<b>Total</b>
		4	-	--	4	25	75	100
<b>Learning Objectives</b>								
✍ To create the opportunity for learning across different disciplines and builds experience for students as they grow into lifelong learners.								
✍ To build experiences for students as they grow into lifelong learners.								
✍ To know the basic concepts of various discipline								
<b>UNIT</b>	<b>Details</b>							<b>No. of Periods for the Unit</b>
<b>I</b>	<b>Indian Polity</b> 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.							<b>15</b>
<b>II</b>	<b>Geography</b> 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 natural vegetation – Indian agriculture- Major crops and its distribution, Indian Industries and its Distribution.							<b>15</b>
<b>III</b>	<b>Economy</b> 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.							<b>15</b>
<b>IV</b>	<b>History</b> 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 – Rowlatt 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.							<b>15</b>
<b>V</b>	<b>Environment and Ecology</b> 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							<b>15</b>

<b>Course Outcomes</b>	<b>Course Outcome</b> On completion of this course, students will
<b>CO1</b>	Develop board knowledge of the different components in polity
<b>CO2</b>	Understand the Geographical features across countries and in India
<b>CO3</b>	Acquire knowledge on the aspects of Indian Economy
<b>CO4</b>	Understand the significance of India's Freedom Struggle
<b>CO5</b>	Gain knowledge on Ecology and Environment
<b>Text Books (Latest Editions)</b>	
1.	Class XI and XII NCERT Geography
2.	History – Old NCERT'S Class XI and XII
<b>Reference Book</b>	
1	M. Laximikanth (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	MajidHussain- India Map Entries in Geography, GK Publications Pvt , Ltd.
<b>Web Resources</b>	
1.	<a href="https://www.freebookkeepingaccounting.com/using-excel-in-accounts">https://www.freebookkeepingaccounting.com/using-excel-in-accounts</a>
2	<a href="https://courses.corporatefinanceinstitute.com/courses/free-excel-crash-course-for-finance">https://courses.corporatefinanceinstitute.com/courses/free-excel-crash-course-for-finance</a>
3.	<a href="https://www.youtube.com/watch?v=Nv_Nnw01FaU">https://www.youtube.com/watch?v=Nv_Nnw01FaU</a>

**Mapping with Programme Outcomes:**

	<b>PO 1</b>	<b>PO 2</b>	<b>PO 3</b>	<b>PO 4</b>	<b>PO 5</b>	<b>PO 6</b>	<b>PO 7</b>	<b>PO 8</b>
<b>CO 1</b>	3	3	3	3	3	3	3	3
<b>CO 2</b>	3	3	3	3	3	2	3	3
<b>CO 3</b>	3	2	2	2	3	3	3	3
<b>CO 4</b>	3	3	3	3	3	3	3	3
<b>CO 5</b>	3	3	3	3	3	3	3	3
<b>TOTAL</b>	15	14	14	14	15	14	15	15
<b>AVERAGE</b>	3.0	2.8	3.0	2.8	3.0	2.8	3.0	3.0

**S-Strong      M-Medium      L-Low**