

# M.COM., COMPUTER APPLICATIONS

## SYLLABUS

(THIS WILL COME INTO EFFECT FROM THE ACADEMIC YEAR 2023 – 2024)

### **Programme Outcomes:**

#### **PO1: Problem Solving Skill:**

Apply knowledge of Management Theories and Human Resource Practices to solve business problems through research in global context.

#### **PO2: Decision Making Skill:**

Foster analytical and critical thinking abilities to enable decision-making based on data.

#### **PO3: Ethical Value:**

Incorporate quality, ethical and value-based legal perspectives in all organisational activities.

#### **PO4: Employability Skill:**

Develop business acumen to enhance employability skills in the competitive environment.

#### **PO5: Entrepreneurial Skill:**

Equip with skills and competencies to become an entrepreneur.

#### **PO6: Contribution to Society:**

Succeed in career endeavours and contribute significantly to society.

#### **PO7: Communication Skill:**

Develop communication, managerial and interpersonal skills.

#### **PO8: Individual and Team Leadership Skill:**

Lead oneself and the team to achieve organizational goals.

#### **PO 9: Multicultural competence:**

Demonstrate knowledge of the values and beliefs of multiple cultures to address issues in the global scenario

#### **PO 10: Moral and ethical awareness/reasoning:**

Embrace moral and ethical values in one's life,

#### **PO 11: Leadership readiness qualities:**

Demonstrate to take up leadership mapping out the tasks and formulating an inspiring vision and mission

**PO 12: Lifelong learning:**

Acquire knowledge and skills, including “learning how to learn”,

**M.Com., Computer Applications**

**Programme Specific Outcomes:**

**PSO 1 - Entrepreneurship:**

Exhibit entrepreneurial ability by enhancing critical thinking, problem solving, decision making and leadership skills that will facilitate startups and high potential organisations.

**PSO2 – Research and Development:**

Design and implement accounting, marketing, finance and HR systems and practices grounded in research that comply with mercantile laws, leading the organisation towards growth and development.

**PSO 3 – Contribution to the Society:**

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

**PSO4 - Placement:**

Demonstrate respectful engagement with others’ ideas, behaviors, beliefs and apply in diverse frames of decisions and actions.

**PSO5 - Contribution to Business World:**

Facilitate production of employable, ethical and innovative professionals to sustain in the dynamic business world.

**Mapping of Course outcomes (COs)** with Programme Outcomes (POs) and Programme Specific Outcomes (PSOs) can be carried out, assigning the appropriate level (1 – Low; 2 – Middle and 3 – High) in the grids:

	<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>PS0 1</b>	<b>PSO 2</b>	<b>PSO 3</b>
<b>CO 1</b>									
<b>CO 2</b>									
<b>CO 3</b>									
<b>CO 4</b>									
<b>CO 5</b>									

**Strong - 3**

**Medium – 2**

**Low - 1**

## **Credit Distribution for PG Programme in Commerce**

### **M.Com., Computer Applications**

#### **First Year**

##### **Semester I**

	<b>Course</b>	<b>Credit</b>	<b>Hours per Week</b>
Part I	Core I - Business Finance	5	6
	Core II - Digital Marketing	5	6
	Core III - Banking and Insurance	4	6
	Elective I A - Introduction to Industry 4.0 (or) I B - Big Data Analytics	3	6
	Elective II A–Enterprise Resource Planning (or) II B - Database Management System	3	6
		22	30

##### **Semester II**

	<b>Course</b>	<b>Credit</b>	<b>Hours per Week</b>
Part I	Core IV - Strategic Cost Management	5	6
	Core V - Corporate Accounting	5	6
	Core VI - Setting up of Business Entities	4	6
	Elective III A - Data Mining and Data Interpretation (or) III B - Technology in Banking	3	4
	Elective IV A - Financial Analytics (Practical) (or) IV B - Management Information System	3	4
	NME – I	2	4
		22	30

**Second Year****Semester III**

	<b>Course</b>	<b>Credit</b>	<b>Hours per Week</b>
Part I	Core VII - Taxation	5	6
	Core VIII - Research Methodology	5	6
	Core IX - Computers in Business	5	6
	Core X - International Business	4	6
	Elective V A –Applied Data Analytics and Machine Learning (or) V B - Python R Programming	3	3
Part II	NME – II	2	3
	Internship/Industrial Activity (Credits)	2	-
		26	30

**Semester IV**

	<b>Course</b>	<b>Credit</b>	<b>Hours per Week</b>
Part I	Core XI- Corporate and Economic Laws	5	6
	Core XII- Human Resource Analytics	5	6
	Project with Viva	7	10
	Elective VI A- Cyber and Data Security (or) VI B - E-Commerce	3	4
Part II	Skill Enhancement/ Professional Competency Skill	2	4
	Extension Activity	1	-
		<b>23</b>	<b>30</b>
	<b>Total (Semester I to IV)credits</b>	<b>91</b>	

## M.Com., Computer Applications

**First Year Core –I**

**Semester I**

### BUSINESS FINANCE

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>BUSINESS FINANCE</b>		6	-	-	-	5	6	25	75	100

	Learning Objectives
1	To outline the fundamental concepts in finance
2	To estimate and evaluate risk in investment proposals
3	To evaluate leasing as a source of finance and determine the sources of startup financing
4	To examine cash and inventory management techniques
5	To appraise capital budgeting techniques for MNCs

**Course Outcomes** Students will be able to

CO 1	Explain important finance concepts
CO 2	Estimate risk and determine its impact on return
CO 3	Explore leasing and other sources of finance for startups
CO 4	Summarise cash receivable and inventory management techniques
CO 5	Evaluate techniques of long term investment decision incorporating risk factor

### Mapping of Course Outcomes with POs and PSOs

	Pos						PSOs		
	1	2	3	4	5	6	1	2	3
CO1	3	3	1	3	3	3	2	2	2
CO2	3	3	2	3	3	3	3	3	3
CO3	2	2	1	2	2	2	3	2	2
CO4	2	2	1	2	2	2	2	2	2
CO5	3	3	2	3	3	3	3	3	3

**Strong - 3**

**Medium – 2**

**Low - 1**

**M.Com., Computer Applications**

**First Year**

**Core – II**

**Semester I**

**DIGITAL MARKETING**

Course Code	Title of the Course	y	L	T	P	O	Credits	Hours	Marks			
									A	ern	tot	al
	<b>DIGITAL MARKETING</b>		6	-	-	-	5	6	25	75	100	

	<b>Learning Objectives</b>
1	To assess the evolution of digital marketing
2	To appraise the dimensions of online marketing mix
3	To infer the techniques of digital marketing
4	To analyse online consumer behaviour
5	To interpret data from social media and to evaluate game based marketing

**Course Outcomes:** Students will be able to:

CO 1	Explain the dynamics of digital marketing
CO 2	Examine online marketing mix
CO 3	Compare digital media channels
CO 4	Interpret online consumer behavior
CO 5	Analyse social media data

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	3	3	2	3	3	3	3	3	3
<b>CO2</b>	3	3	2	3	3	3	3	3	3
<b>CO3</b>	3	3	2	2	3	2	3	3	2
<b>CO4</b>	3	3	2	2	3	3	3	3	3
<b>CO5</b>	3	3	1	3	3	2	3	3	2

**Strong - 3**

**Medium – 2**

**Low - 1**

**M.Com., Computer Applications****First Year****Core – III****Semester I****BANKING AND INSURANCE**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>BANKING AND INSURANCE</b>		6	-	-	-	4	6	25	75	100

	Learning Objectives
1	To understand the evolution of new era banking
2	To explore the digital banking techniques
3	To analyse the role of insurance sector
4	To evaluate the mechanism of customer service in insurance and the relevant regulations
5	To analyse risk and its impact in banking and insurance industry

**Course Outcomes**

CO 1	Relate the transformation in banking from traditional to new age
CO 2	Apply modern techniques of digital banking
CO 3	Evaluate the role of insurance sector
CO 4	Examine the regulatory mechanism
CO 5	Assess risk mitigation strategies

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	2	2	1	3	3	3	3	3	3
<b>CO2</b>	3	3	3	3	3	3	3	3	3
<b>CO3</b>	2	2	1	2	2	2	2	3	2
<b>CO4</b>	3	2	2	1	2	2	2	3	2
<b>CO5</b>	3	3	1	3	3	3	3	3	3

**Strong - 3****Medium – 2****Low - 1**



## M.Com., Computer Applications

**First Year**

**Elective –I A**

**Semester I**

### INTRODUCTION TO INDUSTRY 4.0

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>INTRODUCTION TO INDUSTRY 4.0</b>		6	-	-	-	3	6	25	75	100

	<b>LEARNING OBJECTIVES</b>
1.	To enable the students to comprehend the change from industry 1.0 to 4.0
2.	To gain knowledge on the challenges and future prospects of applying artificial intelligence
3.	To learn the applications of big data for industrial growth and development
4.	To understand the applications of IoT in various sectors
5.	To understand why education has to be aligned with industry 4.0

### Course Outcomes

CO 1	Discuss on the change from industry 1.0 to 4.0
CO 2	Discover the challenges and future prospects of applying artificial intelligence
CO 3	Apply big data for industrial growth and development
CO 4	Apply IoT in various sectors like Manufacturing, Healthcare, Education, Aerospace and Défense
CO 5	Appraise why education has to be aligned with industry 4.0

### Mapping of course outcomes with POs and PSOs

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
CO1	2	2	2	3	3	3	3	3	3
CO2	2	3	2	3	3	3	3	3	3
CO3	2	3	2	3	3	3	3	3	3
CO4	2	3	2	3	3	3	3	3	3
CO5	2	3	2	3	3	3	3	3	3

**Strong - 3**

**Medium – 2**

**Low - 1**

## M.Com., Computer Applications

First Year

Elective – I B

Semester I

### BIG DATA ANALYTICS

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>BIG DATA ANALYTICS</b>		6	-	-	-	3	6	25	75	100

Learning Objectives	
1.	To understand the various aspects of data science and applying them in health care
2.	To learn the applications of big data for industrial growth and development
3.	To understand the characteristics of 5 V's
4.	To know the big data problems
5.	To understand the Hadoop

### Course Outcomes

CO 1	Describe the Big Data landscape including examples of realworld big data problems
CO 2	Explain the advantages of Big Data.
CO 3	Explain the Vs of Big Data and its impacts of data collection, monitoring, storage, analysis and reporting
CO 4	Identify what are and what are not big data problems and be able to recast big data problems as data science questions
CO 5	ExplainHadoop technology

### Mapping of course outcomes with POs and PSOs

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	2	2	2	2	1	2	1	1	2
<b>CO2</b>	2	2	2	3	1	3	1	2	3
<b>CO3</b>	3	3	3	3	2	3	2	3	3
<b>CO4</b>	2	2	2	2	1	2	1	2	2
<b>CO5</b>	3	3	3	3	3	3	3	3	3

**Strong - 3**

**Medium – 2**

**Low - 1**

**M.Com., Computer Applications**

**First Year**

**Elective –II A**

**Semester I**

**ENTERPRISE RESOURCE PLANNING**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>ENTERPRISE RESOURCE PLANNING</b>		6	-	-	-	3	6	25	75	100

	<b>LEARNING OBJECTIVES</b>
1.	To learn the history and growth of ERP
2.	To understand the risks involved while using ERP
3.	To gain knowledge on the various ERP technologies
4.	To learn the dynamics of ERP marketplace
5.	To choose appropriate ERP solutions or packages

**Course outcomes**

CO 1	Recall the history and growth of ERP
CO 2	Appraise the risks involved while using ERP
CO 3	Select from among various ERP technologies
CO 4	Analyse the dynamics of ERP marketplace
CO 5	Distinguish and choose appropriate ERP solutions or packages

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	2	1	2	2	3	3	3	3	3
<b>CO2</b>	3	3	2	3	3	3	3	3	3
<b>CO3</b>	3	3	2	3	3	3	3	3	3
<b>CO4</b>	3	3	2	3	3	3	3	3	3
<b>CO5</b>	3	3	2	3	3	3	3	3	3

**Strong - 3**

**Medium – 2**

**Low - 1**

**M.Com., Computer Applications**

**First Year**

**Elective – II B**

**Semester I**

**DATABASE MANAGEMENT SYSTEM**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>DATABASE MANAGEMENT SYSTEM</b>		6	-	-	-	3	6	25	75	100
<b>LEARNING OBJECTIVES</b>											
1.	To introduce the basic concepts of Relational Database Management System and the working knowledge of Linux environment										
2.	To understand designing databases and queries in SQL										
3.	To learn RDBMS										
4.	To upskill the functions and operators										
5.	To understand the constraints, locks and MySQL										

**COURSE OUTCOMES**

CO 1	Identify models and schemas in DBMS and LINUX
CO 2	Demonstrate Queries in SQL
CO 3	Discuss handling files and databases
CO 4	Apply skills on functions and operators in RDBMS
CO 5	Apply constraints and locks in SQL

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	2	3	3	3	2	2	2	3	2
<b>CO2</b>	3	3	2	3	3	3	2	2	3
<b>CO3</b>	1	2	2	2	1	2	1	2	2
<b>CO4</b>	3	3	3	3	3	3	3	3	3
<b>CO5</b>	3	3	3	3	1	2	1	3	2

**Strong - 3**

**Medium – 2**

**Low - 1**

# M.Com., Computer Applications

First Year

Core – IV

Semester II

## STRATEGIC COST MANAGEMENT

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	STRATEGIC COST MANAGEMENT		6	-	-	-	5	6	25	75	100

	Learning Objectives
1	To analyse the aspects of strategic and quality control management
2	To analyse and select cost control techniques
3	To apply activity based costing for decision making
4	To utilise transfer pricing methods in cost determination
5	To apply cost management techniques in various sectors

### Course Outcomes

1	Discuss strategic cost management and QC
2	Choose the appropriate technique for cost control
3	Utilise activity based costing in practice
4	Adopt transfer pricing methods
5	Build cost structure for Agriculture and IT sector

### Mapping of course outcomes with POs and PSOs

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
CO1	3	3	3	3	3	3	3	3	3
CO2	3	3	2	3	3	3	3	3	3
CO3	3	3	2	3	3	3	3	3	3
CO4	3	3	2	3	3	3	3	2	3
CO5	3	3	1	3	3	3	3	3	3

Strong - 3

Medium – 2

Low - 1

**M.Com., Computer Applications****First Year****Core – V****Semester II****CORPORATE ACCOUNTING**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>CORPORATE ACCOUNTING</b>		6	-	-	-	5	6	25	75	100

	<b>Learning Objectives</b>
1	To understand the accounting treatment for issue of shares
2	To determine profits for fire and marine insurance
3	To prepare consolidated financial statements
4	To account for price level changes
5	To adopt financial reporting standards

**Course Outcomes**

CO1	Prepare Financial Statements of companies as per schedule III of Companies Act, 2013
CO2	Apply the provisions of IRDA Regulations, 2002 in the preparation of final accounts of Life Insurance and General Insurance Companies.
CO3	Prepare Consolidated Financial Statements of Holding Companies in accordance with AS 21.
CO4	Assess contemporary accounting methods
CO5	Examine Financial Reporting based on appropriate Accounting Standards and provisions of Companies Act 2013 with respect to Corporate Social Responsibility

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO 1</b>	3	3	2	3	3	3	3	3	3
<b>CO 2</b>	3	3	3	3	2	3	2	3	3
<b>CO 3</b>	3	3	2	3	3	3	3	3	3
<b>CO 4</b>	3	3	3	3	3	3	3	3	3
<b>CO 5</b>	3	3	3	3	3	3	3	3	3

**Strong - 3****Medium – 2****Low - 1**

## M.Com., Computer Applications

First Year

Core – VI

Semester II

### SETTING UP OF BUSINESS ENTITIES

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>SETTING UP OF BUSINESS ENTITIES</b>		6	-	-	-	4	6	25	75	100
	<b>Learning Objectives</b>										
1	To understand the startup landscape and its financing										
2	To analyse the formation and registration of Section 8 company										
3	To outline the concept of LLP and business collaboration										
4	To understand the procedure for obtaining registration and license										
5	To create awareness about the legal compliances governing business entities										

### Course Outcomes

CO 1	Build a startup and acquire finance
CO 2	Comply with the legal requirements for Section 8 Company
CO 3	Initiate the proceedings for LLP
CO 4	Illustrate the registration and licensing procedure
CO 5	Examine the compliance of regulatory framework

### Mapping of course outcomes with POs and PSOs

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	3	3	3	3	3	3	3	1	3
<b>CO2</b>	3	2	2	3	2	3	2	3	3
<b>CO3</b>	3	3	2	3	3	3	3	3	3
<b>CO4</b>	3	3	3	3	3	3	3	3	3
<b>CO5</b>	3	3	3	3	3	3	3	3	3

Strong - 3

Medium – 2

Low - 1

**M.Com., Computer Applications****First Year****Elective – III A****Semester II****DATA MINING AND DATA WAREHOUSING**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>DATA MINING AND DATA WAREHOUSING</b>		4	-	-	-	3	4	25	75	100

LEARNING OBJECTIVES	
1.	To understand the basic concepts, principles and need of data warehousing
2.	To gain knowledge on the data warehouse architecture, modelling and its implementation.
3.	To understand steps in implementing data mart and its various dimensions
4.	To learn the features, types and challenges of data mining
5.	To aid the students to understand the various data mining tools and techniques

**Course Outcomes**

<b>CO 1</b>	Explain the basic concepts, principles and need of data warehousing
<b>CO 2</b>	Appraise data warehouse architecture, modelling and its implementation.
<b>CO 3</b>	Choose various steps in implementing data mart and its dimensions
<b>CO 4</b>	Recall the features and types of data mining
<b>CO 5</b>	Apply various data mining tools and techniques

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	1	1	1	1	2	3	2	2	3
<b>CO2</b>	2	3	2	2	2	3	2	2	3
<b>CO3</b>	3	3	3	3	3	3	3	3	3
<b>CO4</b>	3	3	3	3	3	3	3	3	3
<b>CO5</b>	3	3	3	3	3	3	3	3	3

**Strong - 3****Medium – 2****Low - 1**



**M.Com., Computer Applications**

**First Year**

**Elective – III B**

**Semester II**

**TECHNOLOGY IN BANKING**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>TECHNOLOGY IN BANKING</b>		4	-	-	-	3	4	25	75	100

	<b>Learning Objectives</b>
1	To understand the network essentials for an operational core banking system
2	To provide an overview of customer centric electronic banking.
3	To understand the evolution of electronic fund transfer systems in the banking sector
4	To analyse the digital technologies offered in banking services.
5	To understand the information security system

**Course Outcomes**

CO 1	Discuss the utility of stand-alone and multi-user systems access in Core banking.
CO 2	Assess the multi-faceted electronic payment options available to customer and host transactions in banking.
CO 3	Evaluate the dynamic transitions in Electronic Fund transfer systems.
CO 4	Evaluate the enhanced utility and user interface and other recent developments in banking technologies.
CO5	Assess the information security system

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	2	3	2	3	3	2	3	2	2
<b>CO2</b>	2	3	2	3	3	3	3	3	3
<b>CO3</b>	1	2	3	3	3	3	3	3	3
<b>CO4</b>	2	2	2	3	3	3	3	3	3
<b>CO5</b>	1	2	3	2	2	3	2	3	3

**Strong - 3**

**Medium – 2**

**Low - 1**

**M.Com., Computer Applications**

**First Year**

**Elective – IV A**

**Semester II**

**FINANCIAL ANALYTICS (PRACTICALS)**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>FINANCIAL ANALYTICS (PRACTICALS)</b>		4	-	-	-	3	4	25	75	100

	<b>Learning Objectives</b>
1.	To understand the statistical concepts relating to Probability, decision making under uncertainty and analysis of exploratory data
2.	To learn the use of regression, time series analysis and building of models using accounting data
3.	To gain knowledge on R and python programming
4.	To prepare, analyse and forecast financial statements using cash flow statements
5.	To gain knowledge on concept, application, and issues in capital budgeting

**Course Outcomes**

CO 1	Analyse decisions under uncertainty and also analyse exploratory
CO 2	Build models using accounting data and analyse using regression and time series tools
CO 3	Apply R and python programming
CO 4	Estimate and analyse financial statements using cash flow statements
CO 5	Select appropriate capital budgeting techniques for decision making

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	3	3	1	3	3	2	3	2	2
<b>CO2</b>	3	3	1	3	3	2	3	2	2
<b>CO3</b>	3	3	1	3	3	2	3	2	2
<b>CO4</b>	3	3	1	3	3	2	3	2	2
<b>CO5</b>	3	3	1	3	3	2	3	2	2

**Strong - 3**

**Medium – 2**

**Low - 1**

**M.Com., Computer Applications****First Year****Elective – IV B****Semester II****MANAGEMENT INFORMATION SYSTEM**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>MANAGEMENT INFORMATION SYSTEM</b>		4	-	-	-	3	4	25	75	100

	<b>Learning Objectives</b>
1.	To understand the basic concept of Information system
2.	To identify the importance of MIS
3.	To understand the Functional Management Information System
4.	To learn the role of system analyst
5.	To apply the concept of Enterprise Resource Planning

**Course Outcomes**

CO 1	Identify the basic concept of Information system
CO 2	Discuss the importance of MIS
CO 3	Explain the functional MIS
CO 4	Describe the role of system analyst
CO 5	Apply the concept of Enterprise resource planning

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	1	1	2	2	1	2	1	2	2
<b>CO2</b>	2	2	2	2	1	2	1	2	2
<b>CO3</b>	3	3	3	3	1	2	1	2	3
<b>CO4</b>	3	3	3	3	2	3	2	3	3
<b>CO5</b>	3	3	3	3	2	3	2	3	3

**Strong - 3****Medium – 2****Low - 1**

**M.Com., Computer Applications**

**Second Year**

**Core – VII**

**Semester III**

**TAXATION**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>TAXATION</b>		6	-	-	-	5	6	25	75	100

Learning Objectives	
<b>1</b>	To identify deductions from gross total income and computation of income for different classes of assesses
<b>2</b>	To understand the procedure for filing of returns and tax planning
<b>3</b>	To analyse the structure on international business taxation
<b>4</b>	To assess Goods and Services Tax and filing GST returns
<b>5</b>	To compute customs duty as per Customs Act

**Course Outcomes**

CO 1	Estimate taxable income
CO 2	File returns and plan taxes
CO 3	Illustrate the nuances of international business taxation
CO 4	Apply the provisions of GST
CO 5	Assess the provisions of Customs Act

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	3	3	3	3	3	3	3	2	3
<b>CO2</b>	3	3	3	3	3	3	2	2	3
<b>CO3</b>	3	3	3	3	3	3	3	2	3
<b>CO4</b>	3	3	3	3	3	3	3	2	3
<b>CO5</b>	3	3	3	3	3	3	3	3	3

**Strong - 3**

**Medium – 2**

**Low - 1**

**M.Com., Computer Applications**  
**Second Year**                      **Core – VIII**                      **Semester III**

**RESEARCH METHODOLOGY**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>RESEARCH METHODOLOGY</b>		6	-	-	-	5	6	25	75	100

	<b>Learning Objectives</b>
1	To understand the fundamentals of research
2	To construct theoretical design and formulate hypotheses
3	To evaluate the data collection techniques
4	To perform parametric and non-parametric tests
5	To enhance report writing skills and develop ethical conduct in research

**Course Outcomes**

CO 1	Recall the research concepts and recognise the research problem
CO 2	Formulate research hypothesis and determine the sample size
CO 3	Select appropriate method for data collection
CO 4	Make inferences based on statistical tests
CO 5	Draft a research report avoiding plagiarism

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	3	3	3	2	2	3	2	3	3
<b>CO2</b>	3	3	3	2	2	3	2	3	3
<b>CO3</b>	3	3	3	2	2	3	2	3	3
<b>CO4</b>	3	3	3	2	2	3	2	3	3
<b>CO5</b>	3	3	3	2	2	3	2	3	3

**Strong - 3**

**Medium – 2**

**Low - 1**

**M.Com., Computer Applications**

**Second Year**

**Core-IX**

**Semester III**

**COMPUTERS IN BUSINESS**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>COMPUTERS IN BUSINESS</b>		2	-	4	-	5	6	25	75	100

	<b>Learning Objectives</b>
1	To understand the fundamentals of SPSS
2	To compare the values obtained in t-test and ANOVA
3	To perform regression and non-parametric tests
4	To create company, groups and ledgers and obtain financial statements using Tally Prime
5	To understand inventory management and account for goods and services tax

**Course Outcomes**

<b>CO 1</b>	Create data file in SPSS
<b>CO 2</b>	Examine Means of samples
<b>CO 3</b>	Conduct non-parametric tests
<b>CO 4</b>	Create a company, form groups and get automated financial statements
<b>CO 5</b>	Automate inventory management and GST filing

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO 1</b>	2	3	2	2	3	3	2	3	3
<b>CO 2</b>	3	3	2	2	3	3	2	3	3
<b>CO 3</b>	3	3	2	2	3	3	2	3	3
<b>CO 4</b>	3	3	2	3	3	3	3	3	3
<b>CO 5</b>	3	3	2	3	3	3	3	3	3

**Strong - 3**

**Medium – 2**

**Low - 1**

**M.Com., Computer Applications****Second Year****Core – X****Semester IV****INTERNATIONAL BUSINESS**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>INTERNATIONAL BUSINESS</b>		6	-	-	-	4	6	25	75	100

	<b>Learning Objectives</b>
1	To understand the concepts of International Business and International Business Environment
2	To analyse the different theories of International Business.
3	To understand the legal procedures involved in International Business.
4	To evaluate the different types of economic integrations.
5	To analyse the operations of MNCs through real case assessment.

**Course Outcomes**

CO 1	Recall the concepts of International Business and International Business Environment
CO 2	Analyse different theories of International Business
CO 3	Evaluate the legal procedures involved in International Business.
CO 4	Explain the different types of economic integrations.
CO 5	Identify the operations of MNCs through real case assessment

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	1	3	1	2	2	2	3	1	2
<b>CO2</b>	3	2	3	1	3	3	2	2	1
<b>CO3</b>	2	1	2	3	2	2	3	3	3
<b>CO4</b>	1	3	1	2	1	1	2	2	2
<b>CO5</b>	3	2	2	2	2	2	1	1	1

**Strong - 3****Medium – 2****Low - 1**

**M.Com., Computer Applications****Second Year****Elective – V A****Semester III****APPLIED DATA ANALYTICS AND MACHINE LEARNING**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>APPLIED DATA ANALYTICS AND MACHINE LEARNING</b>		3	-	-	-	3	3	25	75	100

	<b>LEARNING OBJECTIVES</b>
1.	To understand basics of data analysis in Python
2.	To interpret the data analysis pipeline via usage of NumPy and Pandas.
3.	To examine methods of working with textual and time series data
4.	To investigate machine learning techniques with Scikit-Learn
5.	To understand advanced machine learning techniques

**Course Outcomes**

<b>CO 1</b>	Demonstrate data analysis with apt knowledge in foundational concepts of Python
<b>CO 2</b>	Demonstrate getting, cleaning and manipulation of data using NumPy and Pandas
<b>CO 3</b>	Use Python for Statistical Data analysis
<b>CO 4</b>	Use Scikit-Learn for advanced Data analysis
<b>CO 5</b>	Explain advanced machine learning techniques

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	1	2	1	3	3	1	3	2	1
<b>CO2</b>	1	2	1	3	3	1	3	2	1
<b>CO3</b>	1	2	1	3	3	1	3	2	1
<b>CO4</b>	1	2	1	3	3	1	3	2	1
<b>CO5</b>	1	2	1	3	3	1	3	2	1

**Strong - 3****Medium – 2****Low - 1**



**M.Com., Computer Applications****Second Year****Elective–V B****Semester III****PYTHON AND R FOR DATA ANALYTICS**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>PYTHON AND R FOR DATA ANALYTICS</b>		3	-	-	-	3	3	25	75	100

	<b>Learning Objectives</b>
1.	To understand the basics of Python
2.	To learn Bio Python
3.	To understand the features of R
4.	To learn data handling
5.	To identify the use of bio conductor

**Course Outcomes**

CO 1	Describe the basics of Python
CO 2	Explain the necessity for programming in biology
CO 3	Apply R programming
CO 4	Discuss Data handling
CO 5	Apply R in Phylogenetics

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	2	2	2	2	1	2	1	2	3
<b>CO2</b>	2	2	2	2	1	2	1	2	2
<b>CO3</b>	3	3	3	3	2	3	2	3	3
<b>CO4</b>	3	3	3	3	3	3	3	3	3
<b>CO5</b>	3	3	3	3	3	3	3	3	3

**Strong - 3****Medium – 2****Low - 1**

**M.Com., Computer Applications**

**Second Year**

**Core – XI**

**Semester IV**

**CORPORATE AND ECONOMIC LAWS**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>CORPORATE AND ECONOMIC LAWS</b>		6	-	-	-	5	6	25	75	100

	<b>Learning Objectives</b>
1	To analyse current and capital account transactions and deal with foreign currency under FEMA Act
2	To understand unethical competitive practices and forums for redressal of consumer disputes under Competition Act and Consumer Protection Act
3	To understand the procedure for obtaining patents and copyright under The Copyright and Patents Act
4	To evaluate offences and punishment for money laundering under Prevention of Money Laundering Act
5	To explain the registration and related procedures under Real Estate Act

**Course Outcomes**

CO 1	Recall important provisions of FEMA
CO 2	Evaluate the provisions of the Competition Act, 2002 and Consumer Protection Act to govern commercial competition and protect a consumer
CO 3	Recall the process relating to obtaining copyrights and patents.
CO 4	Examine the provisions of Money Laundering Act
CO 5	Analyse the provisions relating to regulation of real estate.

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	3	3	2	2	3	3	3	2	3
<b>CO2</b>	3	3	3	2	2	3	2	2	3
<b>CO3</b>	3	3	2	2	2	3	2	2	3
<b>CO4</b>	3	3	3	3	3	3	3	2	3
<b>CO5</b>	3	3	2	2	3	3	3	2	3

**Strong - 3**

**Medium – 2**

**Low - 1**

**M.Com., Computer Applications****Second Year****Core – XII****Semester IV****HUMAN RESOURCE ANALYTICS**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>HUMAN RESOURCE ANALYTICS</b>		6	-	-	-	5	6	25	75	100

	<b>Learning Objectives</b>
1	To understand the concept and framework of human resource analytics
2	To evaluate the process of human resource analytics and the relevant research tools
3	To illustrate the evolution, types and design of HR metrics
4	To deal with data collection and transformation
5	To adopt tools and techniques for predictive modelling

**Course Outcomes**

<b>CO 1</b>	Examine the concept of human resource analytics
<b>CO 2</b>	Apply the HR tools and techniques in decision making
<b>CO 3</b>	Examine the different types of HR metrics and their relative merits
<b>CO 4</b>	Collect and transform data leading to HR reporting
<b>CO 5</b>	Build models for predictive analysis

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	3	2	2	3	3	3	3	3	3
<b>CO2</b>	3	3	2	3	3	3	3	3	3
<b>CO3</b>	3	3	2	3	3	3	3	3	3
<b>CO4</b>	3	3	2	3	3	3	3	3	3
<b>CO5</b>	3	3	2	3	3	3	3	3	3

**Strong - 3****Medium – 2****Low – 1**

**M.Com., Computer Applications**

**Second Year**

**Elective – VI A**

**Semester IV**

**CYBER AND DATA SECURITY**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>CYBER AND DATA SECURITY</b>		4	-	-	-	3	4	25	75	100
<b>Learning Objectives</b>											
1.	To understand threats and risks in cybersecurity landscape										
2.	To interpret cybersecurity framework and regulations										
3.	To examine data security and integrity regulations										
4.	To discuss network security management										
5.	To recall cybersecurity disasters										

**Course Outcomes**

CO 1	Develop plans to mitigate risks and threats to cyber security
CO 2	Solve vulnerabilities in cyber security frameworks
CO 3	Solve issues in integrity issues in cyber security
CO 4	Implement radical changes in cyber security management
CO 5	Formulate strategies to overcome cyber security disasters

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	3	3	3	3	2	2	2	3	2
<b>CO2</b>	3	3	3	3	2	2	2	2	3
<b>CO3</b>	3	3	3	3	2	2	2	2	3
<b>CO4</b>	3	3	2	3	2	2	2	2	2
<b>CO5</b>	3	3	2	3	2	2	2	3	3

**Strong - 3**

**Medium – 2**

**Low - 1**

**M.Com., Computer Applications**

**Second Year**

**Elective – VI B**

**Semester IV**

**E-COMMERCE**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>E-COMMERCE</b>		4	-	-	-	3	4	25	75	100

<b>LEARNING OBJECTIVES</b>	
1.	To explain use of Information technology and e-commerce for entrepreneur
2.	To apply the functions of Windows operating system
3.	To apply the advance functions of MS word
4.	To apply the functions of MS excel
5.	To understand the concept of E-Commerce and Electronic payments

**Course Outcomes**

<b>CO 1</b>	Understand the hardware and software of a system
<b>CO 2</b>	Apply the functions of Windows operating system
<b>CO 3</b>	Apply the advance functions of MS word
<b>CO 4</b>	Apply the functions of MS excel
<b>CO 5</b>	Understand the concept of E-Commerce and Electronic payments

**Mapping of course outcomes with POs and PSOs**

	POs						PSOs		
	1	2	3	4	5	6	1	2	3
<b>CO1</b>	2	2	1	2	2	2	2	2	2
<b>CO2</b>	2	2	2	2	2	2	2	2	2
<b>CO3</b>	3	3	3	3	3	3	3	3	3
<b>CO4</b>	3	3	3	3	3	3	3	3	3
<b>CO5</b>	3	3	3	3	3	3	3	3	3

**Strong - 3**

**Medium – 2**

**Low - 1**

**M.Com., Computer Applications****First Year****NME – I****Semester II****ACCOUNTING FOR MANAGERS - I**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>ACCOUNTING FOR MANAGERS – I</b>		4	-	-	-	2	4	25	75	100

	<b>LEARNING OBJECTIVES</b>
1.	To impart knowledge about basic concepts of accounting and its applications
2.	To understand double entry system of book keeping
3.	To prepare subsidiary books and cash book
4.	To prepare bank reconciliation statement and rectification of errors
5.	To prepare final accounts

**Course Outcomes**

<b>CO 1</b>	Learn Accounting concepts, conventions and Accounting transactions
<b>CO 2</b>	Prepare Journal, Ledger and Trial Balance
<b>CO 3</b>	Prepare subsidiary books
<b>CO 4</b>	Classify errors, making rectification entries and prepare BRS
<b>CO 5</b>	Prepare Final Accounts with adjustments

**M.Com., Computer Applications****Second Year****NME – II****Semester III****ACCOUNTING FOR MANAGERS - II**

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	<b>ACCOUNTING FOR MANAGERS – II</b>		3	-	-	-	2	3	25	75	100

	<b>LEARNING OBJECTIVES</b>
1.	To impart knowledge about Cost Accounting
2.	To understand Cost concepts and prepare Cost sheet
3.	To impart knowledge about Management Accounting
4.	To analyse and interpret Financial Statements
5.	To prepare ratios from Profit and Loss Account

**Course Outcomes**

<b>CO 1</b>	Learn concepts of Cost Accounting
<b>CO 2</b>	Able to prepare Cost Sheet
<b>CO 3</b>	Learn concept of Management Account
<b>CO 4</b>	Prepare comparative, common size statements and trend analysis
<b>CO 5</b>	Prepare ratios from Profit and Loss Account

## M.Com., Computer Applications

Second Year    Skill Enhancement course / Professional Competency Skill    Semester IV

### ADVANCED MS-EXCEL

Course Code	Title of the Course	Category	L	T	P	O	Credits	Inst. Hours	Marks		
									CIA	External	Total
	ADVANCED MS-EXCEL		2	-	2	-	2	4	25	75	100

LEARNING OBJECTIVES	
1.	To use worksheet and work book
2.	To import external data and creating table
3.	To create chart and pivot table
4.	To create custom auto filter
5.	To prepare various financial statements

### Course Outcomes

CO 1	Learn to use worksheet and workbook
CO 2	Understand to import external data and to create table
CO 3	Able to create chart and pivot table
CO 4	Learn custom auto filter
CO 5	Prepare various financial statements