



Vijayanagara Sri Krishnadevaraya University
Jnana Sagara, Ballari (Karnataka)

Department of Studies in Commerce

Syllabus

Bachelor of Commerce (B.Com.) Programme

B.Com. in Business Analytics

[Under Choice Based Credit System (CBCS)]

With Effect from the Academic Year 2025-26



Vijayanagara Sri Krishnadevaraya University

Jnana Sagara, Ballari (Karnataka)

Bachelor of Commerce (B.Com.) Programme

B.Com. in Business Analytics

B. Com. in Business Analytics Programme Objectives (POs):

The **B. Com. in Business Analytics** program typically aims to equip students with the knowledge and skills necessary to analyze data and make informed decisions in the business world. Below are some key objectives for students enrolled in this program:

- Equip students with the ability to interpret and analyze business data using statistical methods and tools, enabling them to provide actionable insights.
- Provide a strong foundation in core business concepts such as finance, marketing, operations, and management, enabling students to connect business strategy with data analysis.
- Encourage critical thinking and the ability to solve complex business problems by leveraging data analytics to find innovative solutions.
- Develop students' ability to communicate complex data insights clearly and effectively to stakeholders, including executives, managers, and non-technical audiences.
- Emphasize the ethical implications of using business data, including data privacy, security, and responsible data handling practices.
- Prepare students for continuous learning in the evolving field of business analytics, ensuring they stay up-to-date with emerging trends, technologies, and methodologies.
- To enhance students' research capabilities and problem-solving skills through hands-on projects and methodologies in the Business Analytics domain.
- Provide students with hands-on experience through internships, projects, and case studies, ensuring they are well-prepared to handle real business challenges.
- To prepare students for successful careers in the Business Analytics sector by aligning the curriculum with industry standards and providing relevant skills and certifications.



Vijayanagara Sri Krishnadevaraya University
Jnana Sagara, Ballari (Karnataka)

Bachelor of Commerce (B.Com.) Programme
B.Com. in Business Analytics
Curriculum and Credit Structure of the
Programme

(Effective from the Academic Year 2025-26)

Bachelor of Commerce (B.Com.)in Business Analytics Curriculum and Credit Structure										
Semester-I										
Sl. No.	Course Category	Course Code	Title of the Course	Credits	Teaching Hours per Week			Marks		Duration of Examination
					L	T	P	IA	SEE	
1	LC		Kannada/Indian Language	3	4	--	--	20	80	3
2	LC		English	3	4	--	--	20	80	3
3	DCC	25COMAC101	Financial Accounting	4	4	--	--	20	80	3
4	DCC	25COMAC102	Quantitative Techniques-I	4	4	--	--	20	80	3
5	DCC	25COMAC103	Indian Financial Markets	4	4	--	--	20	80	3
6	DCC	25COMAC104	Fundamentals of Business Analytics	4	4	--	--	20	80	3
7	MC		Environmental Studies	2	3	--	--	10	40	1.5
Total Credits and Marks for the First Semester				24				130	520	

Bachelor of Commerce (B.Com.) in Business Analytics Curriculum and Credit Structure										
Semester – II										
SI. No.	Course Category	Course Code	Title of the Course	Credits	Teaching Hours per Week			Marks		Duration of Examination
					L	T	P	IA	SEE	
1	LC		Kannada/Indian Language	3	4	--	--	20	80	3
2	LC		English	3	4	--	--	20	80	3
3	DCC	25COMAC205	Advanced Financial Accounting	4	4	--	--	20	80	3
4	DCC	25COMAC206	Quantitative Techniques – II	4	4	--	--	20	80	3
5	DCC	25COMAC207	Application of Business Analytics	4	4	--	--	20	80	3
6	DCC	25COMAC208	Data Management and Analysis using MS – Excel	4	4	--	--	20	80	3
7	MC		Indian Constitution	2	3	--	--	10	40	1.5
Total Credits and Marks for the Second Semester				24				130	520	

Bachelor of Commerce (B.Com.) in Business Analytics Curriculum and Credit Structure										
Semester–III										
SI. No.	Course Category	Course Code	Title of the Course	Credits	Teaching Hours per Week			Marks		Duration of Examination
					L	T	P	IA	SEE	
1	LC		Kannada/Indian Language	3	3	--	--	20	80	3
2	LC		English	3	3	--	--	20	80	3
3	DCC	25COMAC309	Marketing Management	4	4	--	--	20	80	3
4	DCC	25COMAC310	Corporate Accounting	4	4	--	--	20	80	3
5	DCC	25COMAC311	Data Visualization	4	4	--	--	20	80	3
6	DCC	25COMAC312	Ethical and Legal aspects in Business Analytics	4	4	--	--	20	80	3
7	SEC	25COMAS301	Accounting Software–Tally	2	1	--	2	10	40	1.5
Total Credits and Marks for Third Semester				24				130	520	

Bachelor of Commerce (B.Com.) in Business Analytics Curriculum and Credit Structure

Semester-IV

SI. No.	Course Category	Course Code	Title of the Course	Credits	Teaching Hours per Week			Marks		Duration of Examination
					L	T	P	IA	SEE	
1	LC		Kannada/Indian Language	3	3	--	--	20	80	3
2	LC		English	3	3	--	--	20	80	3
3	DCC	25COMAC413	Financial Management	4	4	--	--	20	80	3
4	DCC	25COMAC414	Human Resource Management	4	4	--	--	20	80	3
5	DCC	25COMAC415	Supply Chain Analytics	4	4	--	--	20	80	3
6	DCC	25COMAC416	Marketing Analytics	4	4	--	--	20	80	3
7	SEC	25COMAS402	Spread Sheets for Business Data Analysis-MS Excel	2	1	--	2	10	40	1.5
Total Credits and Marks for the Fourth Semester				24				130	520	

Bachelor of Commerce (B.Com.) in Business Analytics Curriculum and Credit Structure

Semester-V

SI. No.	Course Category	Course Code	Title of the Course	Credits	Teaching Hours per Week			Marks		Duration of Examination
					L	T	P	IA	SEE	
1	DCC	25COMAC517	Principles and Practices of Insurance	4	4	--	--	20	80	3
2	DCC	25COMAC518	Principles and Practices of Auditing	4	4	--	--	20	80	3
3	DCC	25COMAC519	Income Tax	4	4	--	--	20	80	3
4	DCC	25COMAC520	Financial Analytics	4	4	--	--	20	80	3
5	DCC	25COMAC521	HR analytics	4	4	--	--	20	80	3
6	SEC	25COMAS503	Business Research Methods	4	2	1	2	20	80	3
Total Credits and Marks for the Fifth Semester				24				120	480	

Bachelor of Commerce (B.Com.) in Business Analytics Curriculum and Credit Structure

Semester–VI

Sl. No.	Course Category	Course Code	Title of the Course	Credits	Teaching Hours per Week			Marks		Duration of Examination
					L	T	P	IA	SEE	
1	DCC	25COMAC622	Entrepreneurship Development	4	4	--	--	20	80	3
2	DCC	25COMAC623	Principles of Management	4	4	--	--	20	80	3
3	DCC	25COMAC624	Management Accounting	4	4	--	--	20	80	3
4	DCC	25COMAC625	Goods and Services Tax (GST)	4	4	--	--	20	80	3
5	DCC	25COMAC626	Predictive Analytics	4	4	--	--	20	80	3
6	SEC	25COMAS604	Project/KJK as per Govt. Guidelines	4	1	1	4	20	80	--
Total Credits and Marks for the Sixth Semester				24				120	480	
Total Credits and Marks for B.Com.in Business Analytics Programme				144				760	3040	
Total Credits and Marks for B.Com.in Business Analytics Programme				144				3800		

Internal Assessment for Project Work

Activities	C1	C2	Total Marks
Review of Literature and Formulation of Research Problem	05	-	05
Research Design and Approach	05	-	05
Analysis and Findings	-	05	05
Pre-submission Presentation	-	05	05
Total	10	10	20

Semester-End Assessment for Project Work

Activities	Total Marks
Project Viva–Voce at the College level with an external examiner appointed by the Chairman of BoE with the approval of Registrar (Evaluation) of the University.	20
Project Report Evaluation at the time of Central Valuation at the Valuation Centre.	60
Total	80

Notes:

1. **All the courses, except Language and Mandatory Courses, are to be taught by the Commerce Teachers only.**
2. **Abbreviations used for course category are as follows:**
 - a. DCC–Discipline-specific Core Course
 - b. DEC–Discipline-specific Elective Course
 - c. LC–Language Course
 - d. MC–Mandatory Course
 - e. SEC–Skill Enhancement Course
3. **Course Code consists of digits. It indicates as follows:**
 - a. The first two digits–Year of Commencement of this Curriculum
 - b. The Second three letters–The programme, Commerce
 - c. The next Two letter –The Category of Programme like BA-Business Analytics
 - d. The next digit–Serial number of the Semester.
 - e. The last two digits–Serial Number of the Course in that category
4. **Teaching Hours**
 - a. L–Lecture
 - b. T–Tutorial-one hour of tutorial is equivalent to one hour of lecture.
 - c. P–Practical-two hours of practical is equivalent to one hour of lecture.
5. **Marks**
 - a. IA–Internal Assessment
 - b. SEE–Semester-End Examination.

Semester-I										
Sl. No.	Course Category	Course Code	Title of the Course	Credits	Teaching Hours per Week			Marks		Duration of Examination
					L	T	P	IA	SEE	
1	LC		Kannada/Indian Language	3	4	--	--	20	80	3
2	LC		English	3	4	--	--	20	80	3
3	DCC	25COMAC101	Financial Accounting	4	4	--	--	20	80	3
4	DCC	25COMAC102	Quantitative Techniques-I	4	4	--	--	20	80	3
5	DCC	25COMAC103	Indian Financial Markets	4	4	--	--	20	80	3
6	DCC	25COMAC104	Fundamentals of Business Analytics	4	4	--	--	20	80	3
7	MC		Environmental Studies	2	3	--	--	10	40	1.5
Total Credits and Marks for the First Semester				24				130	520	

Bachelor of Commerce (B.Com.)
Semester – I

Course Title: Financial Accounting	Course code: 25COMAC101
Total Contact Hours: 56	Course Credits: 4
Internal Assessment Marks: 20	Duration of SEE: 3 hours
Semester End Examination Marks: 80	

Pedagogy: Classroom Lectures, Tutorials, Group Discussion, Seminar, Case Studies, Field Work etc.
<p>Course Outcomes: On successful completion of the course, the Students will be able to -</p> <ul style="list-style-type: none"> ▪ Understand the theoretical framework of accounting as well accounting standards. ▪ Demonstrate the preparation of financial statement of manufacturing and non- manufacturing entities of sole proprietors. ▪ Exercise the accounting treatments for consignment transactions & events in the books of consignor and consignee. ▪ Understand the accounting treatment for royalty transactions & articulate the Royalty agreements. ▪ Outline the emerging trends in the field of accounting.

Unit	Description	Hours
1	Theoretical Framework of Accounting: Introduction - Meaning and Scope of Accounting- Accounting Terminologies- Uses and Users of Accounting information- Accounting Process-Basis of Accounting: Cash and Accrual basis-Branches of Accounting-Accounting Principles-Concepts and Conventions - Accounting Standards-An overview of Indian Accounting Standards (IND AS).	12
2	Financial Statements of Sole Proprietors: Introduction - Meaning of Sole Proprietor-Financial Statements of Non-Manufacturing Entities: Trading Account - Income Statement/Profit & Loss Account-Balance Sheet; Financial Statements of Manufacturing Entities: Manufacturing Account-Trading Account- Profit & Loss Account- Balance Sheet.	10
3	Consignment Accounts: Introduction - Meaning of Consignment-Consignment vs Sales-Pro-forma Invoice-Accounts Sales-Types Commission-Accounting for Consignment Transactions & Events in the books of Consignor and Consignee - Treatment of Normal & Abnormal Loss. -Valuation of Closing Stock-Goods sent at Cost Price and Invoice Price.	12
4	Royalty Accounts: Introduction-Meaning-Types of Royalty-Technical Terms: Lessee, Lessor, Minimum Rent – Short Workings –Recoupment of Short Working– Accounting Treatment in the books of Lessee and lessor – Journal Entries and Ledger Accounts including minimum rent account.	12
5	Emerging Trends in Accounting: Digital Transformation of Accounting-Big Data Analytics in Accounting-Cloud Computing in accounting- Accounting with drones- Forensic Accounting- Accounting for Planet - Creative Accounting-Outsourced	10

References:

1. J Magegowda and Inchara P M Gowda, Sapna Book House, Bengaluru
2. ICAI Study Materials on Principles & Practice of Accounting, Accounting and Advanced Accounting.
3. SP Iyengar (2005), Advanced Accounting, Sultan Chand & Sons, Vol.1.
4. Robert N Anthony, David Hawkins, Kenneth A. Merchant, (2017) Accounting: Text and Cases, McGraw-Hill Education, 13th Edition.
5. Charles T. Horngren and Donna Philbrick, (2013) Introduction to Financial Accounting, Pearson Education, 11th Edition.
6. J.R. Monga, Financial Accounting: Concepts and Applications. Mayur Paper Backs, New Delhi, 32nd Edition.
7. S.N. Maheshwari, and. S. K. Maheshwari. Financial Accounting. Vikas Publishing House, New Delhi, 6th Edition.
8. B.S. Raman (2008), Financial Accounting Vol. I & II, United Publishers & Distributors
9. Compendium of Statements and Standards of Accounting. The Institute of Chartered Accountants of India, New Delhi.

Note: Latest edition of text books may be used.

Bachelor of Commerce (B.Com.) Semester – I

Course Title: Quantitative Techniques – I	Course code: 25COMAC102
Total Contact Hours: 56	Course Credits: 4
Internal Assessment Marks: 20	Duration of SEE: 3 hours
Semester End Examination Marks: 80	

Pedagogy: Classroom Lectures, Tutorials, Group Discussion, Seminar, Case Studies, Field Work etc.

Course Outcomes: On successful completion of the course, the Students will be able to -

- Familiarizes statistical data and descriptive statistics for business decision- making.
- Comprehend the measures of variation and measures of skewness.
- Demonstrate the use of probability and probability distributions in business.
- Validate the application of correlation and regression in business decisions.
- Show the use of index numbers in business.

Unit	Description	Hours
1	Introduction: Meaning, definition, objective of statistics, functions of statistics, application of statistics in various fields and limitations of statistics, primary data and secondary data.	10
2	Classifications and Tabulation: Meaning of classification, objectives of classification, rules of classification, Types of classification, types of series, preparation of frequency distribution and bi-variate distribution, tabulation of data, meaning, objects, rules for tabulation, types of tables. Diagram and graphical representation of statistical data – one and two dimensional diagrams.	10
3	Measures of Central Tendency: Meaning, definition, types of averages, arithmetic mean, weighted arithmetic mean, Geometric Mean, Harmonic Mean, Median, Quartiles and Mode, Merits and Demerits (Theory and Problems).	12
4	Measures of Dispersion: Definition, concepts of variation, purpose of measuring variation, methods of measuring variation, Range, Inter-quartile deviation, mean deviation, Coefficient of Mean deviation, computation of mean deviation, Standard Deviation, Computation of standard deviation (Theory and problems).	12
5	Commercial Mathematics: Introduction - Meaning of Simple and Compound interest and problems thereon, -Annuities, types & problems on present and future value of annuity; Ratios and Proportions-meaning and problems thereon-problems on speed, time and work.	12

References:

1. Gupta, S.P., and Archana Agarwal. Business Statistics, Sultan Chand and Sons
2. Vohra N. D., Business Statistics, McGrawHill Education.
3. Gupta, S.C. Fundamentals of Statistics. Himalaya Publishing House.
4. Anderson, Sweeney, and Williams, Statistics for Students of Economics and Business
5. Sen Chetty and Kapoor Mathematical Statistics
6. Padmalochana Hazarika, Business Mathematics.
7. B.H.Suresh, Quantitative Techniques, Chetana Book House.

Note: Latest edition of text books may be used.

Bachelor of Commerce (B.Com.)
Semester – I

Course Title: Indian Financial Markets	Course code: 25COMAC103
Total Contact Hours: 56	Course Credits: 4
Internal Assessment Marks: 20	Duration of SEE: 3 hours
Semester End Examination Marks: 80	

Pedagogy: Classroom Lectures, Tutorials, Group Discussion, Seminar, Case Studies, Field Work etc.

Course Outcomes: By the end of this course, students will be able to:

- Understand the structure of Indian Financial system and its constituents
- Outline the role of capital and money market in economic development
- Comprehend primary and secondary market and its relevance in capital formation

Unit	Description	Hours
1	Indian Financial System: Introduction to the Financial System: Definition and Importance of the Financial System, Role of the financial system in the economy, Functions of financial markets and intermediaries, Key elements: financial markets, financial instruments, financial services: Overview of the Indian Financial System, Structure and components of the financial system, Evolution of the financial system in India, Regulatory framework and key institutions.	10
2	Introduction of Financial Markets: Introduction to Financial Markets; Definition and Importance of Financial Markets, Role of financial markets in the economy, Types of financial markets: Primary and Secondary, Structure of Financial Markets, Overview of the financial system and its components, Financial intermediaries: Banks, stock brokers, mutual funds, insurance companies: Primary Market: Meaning, features, players of primary market, Instruments in primary market, Merits and Demerits of primary markets – Methods of floating new issues: Public issue – Offer for sale – Right issue – Private placement – Problems of Indian Primary Market	10
3	Secondary Market: Meaning, structure, functions, players in Stock Market, Merits and Demerits of stock markets. Methods in Stock Markets – Recognition of stock exchanges – Function of stock exchanges of BSE – NSE – OTCI – Listing of securities – Trading and Settlement Procedure in the Stock Market – Problems of Indian Stock Market; SEBI: Objectives – functions – Role and Reforms in Secondary Market. Money Market: Meaning, role and participants in money markets, Segments of money market, Call money market, Repo and Reverse Repo concepts, Treasury Bill Market, Certificate of Deposit and Commercial Paper (with numerical).	12
4	Capital Market: Introduction to Stock Markets, Regional and Modern Stock Exchanges, International Stock Exchanges, Demutualization of exchanges, Indian Stock Indices and their construction. Debt Market: Introduction and meaning, Primary Market for Corporate Securities in India: Issue of Corporate Securities, Secondary market for government/debt securities (NDS-OM), Auction process (with numerical), Corporate Bonds vs. Government Bonds. Retail Participation in Money and Debt	12

	Market – RBI Retail Direct Platform.	
5	Instruments in Capital Markets: Major Instruments traded in sock markets: Equity Shares, Debentures, and Exchange Traded Funds. Trading of securities on a stock exchange; Selection of broker, capital and margin requirements of a broker, MTM and VAR margins (with numerical), kinds of brokers, opening of an account to trade in securities, DEMAT System, placing an order for purchase/sale of shares, contract note and settlement of contracts, Commodity Markets – Structure.	12
Reference Books:		
<ol style="list-style-type: none"> 1. Bhole L.M and Mahakud J, Financial Institutions and Markets, Cengage Learning EMEA, 2008 2. Meir G. Khon, Financial Institutions and Markets, Oxford University Press, 2004. 3. Fabozzi, Frank J. and Modigliani, Franco, Capital Markets: Institutions and Markets, Prentice Hall of India, New Delhi, Third Edition, 2005. 		
Note: Latest edition of text books may be used.		

Bachelor of Commerce (B.Com.)
Semester – I

Course Title: Fundamentals of Business Analytics	Course code: 25COMAC104
Total Contact Hours: 56	Course Credits: 4
Internal Assessment Marks: 20	Duration of SEE: 3 hours
Semester End Examination Marks: 80	

Pedagogy: Classroom Lectures, Tutorials, Group Discussion, Seminar, Case Studies, Field Work etc.

Course Outcomes: By the end of this course, students will be able to:

- Understand the fundamentals of business analytics, including its stages and role in decision-making.
- Apply descriptive analytics techniques to summarize and visualize data effectively.
- Comprehend the theoretical foundation of predictive and prescriptive analytics and their practical applications.
- Utilize basic statistical tools and software systems for business analytics tasks.
- Recognize emerging trends in business analytics and their implications for businesses.

Unit	Description	Hours
1	<p>Introduction to Business Analytics and Decision Making: Introduction to Data and Analytics: Meaning and types of data - as structured, semi-structured, and unstructured. Overview of data analytics - meaning, definition, and importance. Key stages of analytics such as Descriptive, Predictive, and Prescriptive.</p> <p>Introduction to Business Analytics: Meaning, definition, and scope of business analytics. Importance of analytics in business decision-making. Frameworks for business analytics.</p> <p>Business Analytics in Decision-Making: Role of data-driven decision-making. Benefits of integrating analytics into strategic decisions. Challenges and ethical considerations in analytics.</p>	10
2	<p>Descriptive Analytics and Data Visualization: Understanding Descriptive Analytics: Overview and applications of descriptive analytics. Summary statistics including mean, median, mode, variance, and others. Data aggregation and summarization techniques.</p> <p>Data Visualization Concepts: Importance and principles of effective data visualization. Types of visualizations such as tables, graphs, heat maps, and dashboards. Tools for data visualization like Excel, Tableau, and Power BI.</p> <p>Use Cases of Descriptive Analytics and Visualization: Real-world applications in marketing, HR, finance, and other areas.</p>	10
3	<p>Predictive and Prescriptive Analytics: Understanding Predictive Analytics: Concepts and techniques - regression analysis, decision trees, and forecasting. Predictive models, application of predictive models in business decision making and basics of machine learning.</p> <p>Understanding Prescriptive Analytics: concepts and Optimization models, application</p>	12

	of prescriptive analytics in business decision making, predictive analytics vs prescriptive analytics Applications of Predictive and Prescriptive Analytics: Use cases in operations, supply chain, and customer analytics.	
4	Statistical Tools and Software for Business Analytics: Statistical Foundations: Hypothesis testing, correlation, and regression. Probability distributions and sampling techniques. Introduction to Analytics Tools: Overview of software systems such as Excel/R/Python/SPSS/SAS. Introduction to SQL and database management. Hands-on with Tools: Simple exercises using tools like Excel/R/Python/SPSS/SAS and visualization tools like Tableau.	12
5	Recent Trends in Business Analytics: Emerging Trends and Technologies: Big Data Analytics and its business applications. Artificial Intelligence (AI) and Machine Learning (ML) in analytics. Advanced Analytics: Natural Language Processing (NLP) and text analytics. Real-time analytics and Internet of Things (IoT). Future of Business Analytics: Ethical considerations and sustainability in analytics. Career opportunities and skills for future analysts.	12

Reference Books

1. **“Data Science for Business”** by Foster Provost and Tom Fawcett
2. **“Business Analytics: Data Analysis and Decision Making”** by Albright, Winston, and Zappe
3. **“Competing on Analytics: The New Science of Winning”** by Thomas H. Davenport and Jeanne G. Harris
4. **“Introduction to Business Analytics”** by Majid Nabavi, David L. Olson, and Wesley S. Boyce
5. **“Big Data and Analytics for Business: Developing a Data-Driven Culture”** by Jay Liebowitz

Web Links

1. **Tableau Official Website**
 - Tutorials and resources for mastering data visualization tools and techniques.
2. **Kaggle**
 - Datasets, competitions, and learning resources for analytics and machine learning.
3. **Statistical Analysis Handbook**
 - Free online resource for statistical analysis concepts and methods.
4. **Data Science Central**
 - Articles, resources, and discussions on data science and business analytics.
5. **Analytics Vidhya**
 - Blogs, tutorials, and courses focused on data science and analytics topics.
6. **Power BI Official Website**
 - Learning materials and guides for creating impactful business visualizations.
7. **R Programming for Data Science**
 - An online book to learn R programming for data analysis.
8. **Python for Data Analysis**
 - Author's official page for a comprehensive book on Python in analytics.

Note: Latest edition of text books may be used.

Bachelor of Commerce (B.Com.) in Business Analytics Curriculum and Credit Structure
Semester – II

Sl. No.	Course Category	Course Code	Title of the Course	Credits	Teaching Hours per Week			Marks		Duration of Examination
					L	T	P	IA	SEE	
1	LC		Kannada/Indian Language	3	4	--	--	20	80	3
2	LC		English	3	4	--	--	20	80	3
3	DCC	25COMAC205	Advanced Financial Accounting	4	4	--	--	20	80	3
4	DCC	25COMAC206	Quantitative Techniques – II	4	4	--	--	20	80	3
5	DCC	25COMAC207	Application of Business Analytics	4	4	--	--	20	80	3
6	DCC	25COMAC208	Data Management and Analysis using MS – Excel	4	4	--	--	20	80	3
7	MC		Indian Constitution	2	3	--	--	10	40	1.5
Total Credits and Marks for the Second Semester				24				130	520	

Bachelor of Commerce (B.Com.)
Semester – II

Course Title: Advanced Financial Accounting	Course code: 25COMAC205
Total Contact Hours: 56	Course Credits: 4
Internal Assessment Marks: 20	Duration of SEE: 3 hours
Semester End Examination Marks: 80	

Pedagogy: Classroom Lectures, Tutorials, Group Discussion, Seminar, Case Studies, Field Work etc.

Course Outcomes: On successful completion of the course, the Students will be able to -

- Compute the amount of claims for loss of stock and loss of profit.
- Narrate various methods of accounting for hire purchase transactions.
- Deal with the inter-departmental transfers and their accounting treatment.
- Demonstrate various accounting treatments for dependent & independent branches.
- Prepare financial statements from incomplete records.

Unit	Description	Hours
1	Insurance Claims for Loss of Stock and Loss of Profit: Introduction-Meaning of fire-computation of Claim for loss of stock- Computations of Claim for loss of Profit-Average Clause (Numerical Problems)	10
2	Hire Purchase Accounting: Introduction-Meaning, nature and features of hire purchase-difference between hire purchase and instalment- basic terminologies used in Hire Purchase Accounting, Ascertainment of Interest-Accounting for hire purchase transactions-Repossession (Numerical Problems)	10
3	Departmental Accounts: Introduction-meaning-advantages and disadvantages-Methods of departmental accounting – basis of allocation of common expenditure among different departments – types of departments-inter department transfer and its treatment (Numerical Problems)	12
4	Accounting for Branches: Introduction-difference between branch accounts and departmental accounts-types of branches-Accounting for dependent & independent branches (Numerical Problems) Foreign branches: Accounts for foreign branches-Techniques for foreign currency translation. (Theory only)	12
5	Conversion of Single Entry into Double Entry: Introduction - Meaning-Limitations of Single Entry System-Difference between Single entry and Double entry system - Problems on Conversion of Single Entry into Double Entry.(Numerical Problems)	12

References:

1. J Madegowda and Inchara P M Gowda, Advanced Financial Accounting, Sapna Book House, Bengaluru
2. B.S. Raman (2008), Financial Accounting Vol. I & II, United Publishers & Distributors
3. S P Iyengar (2005), Advanced Accounting, Sultan Chand & Sons, Vol.1.
4. S.N. Maheshwari, and. S. K. Maheshwari. Financial Accounting. Vikas Publishing House, New Delhi.

5. ICAI Study Materials on Principles & Practice of Accounting, Accounting and Advanced Accounting.
6. Robert N Anthony, David Hawkins, Kenneth A. Merchant, (2017) Accounting: Text and Cases, McGraw-Hill Education.
7. Charles T. Horngren and Donna Philbrick, (2013) Introduction to Financial Accounting, Pearson Education.
8. J.R. Monga, Financial Accounting: Concepts and Applications. Mayur Paper Backs, New Delhi.
9. Compendium of Statements and Standards of Accounting. The Institute of Chartered Accountants of India, New Delhi.

Note: Latest edition of text books may be used.

Bachelor of Commerce (B.Com.)
Semester – II

Course Title: Quantitative Techniques – II	Course code: 25COMAC206
Total Contact Hours: 56	Course Credits: 4
Internal Assessment Marks: 20	Duration of SEE: 3 hours
Semester End Examination Marks: 80	

Pedagogy: Classroom Lectures, Tutorials, Group Discussion, Seminar, Case Studies, Field Work etc.

Course Outcomes: On successful completion of the course, the Students will be able to -

- Narrate the number system applications in solving basic business problems.
- Apply concept of commercial arithmetic concepts to solve business problems.
- Make use of theory of equation in solving the business problems in the present context.
- Understand and apply the concepts of Set Theory, Permutations & Combinations and Matrices solving business problems.
- Apply measurement of solids in solving simple business problems.

Unit	Description	Hours
1	Correlation: Meaning and definition, types of correlation, methods of studying correlation – scatter diagram, simple graph, Karl Pearson’s Co-efficient of Correlation, Spearman’s rank co-efficient of Correlation, Correlation of grouped bivariate data, probable error (theory and problems)	12
2	Regression - meaning, definition, uses, methods of studying regression, regression line, regression equation, deviation taken from arithmetic mean and assumed mean, regression equation in a bivariate grouped regency, deviation taken from assumed mean (theory and problems).	10
3	Index Numbers: Meaning, definition, characteristics, problems in construction of index numbers, methods of construction of index numbers, un-weighted index number, simple aggregate method, simple average of price relatives methods, weighted index numbers, Laspeyer’s method, Paasche’s method, Fisher’s Ideal Method, time reversal test, factor reversal test, consumer price index meaning and need, construction of a consumer price index, methods of constructing consumer price index, limitations of index numbers (theory and problems).	12
4	Probability: Meaning, usefulness, event, samples space, mutually exclusive events, exhaustive events, independent events, dependent events, simple and compound events (theory and problems).	12
5	Set Theory, Permutations & Combinations and Matrices: Introduction - Meaning & types of sets-Laws of Sets-Venn diagram-problems thereon - Meaning and problems on permutations and combinations; Matrices-Meaning & types of Matrices, simple problems on addition, subtraction and multiplication.	10

References:

1. Gupta, S.P., and Archana Agarwal. Business Statistics, Sultan Chand and Sons, New Delhi.
2. Vohra N. D., Business Statistics, McGrawHill Education.

3. Gupta, S.C. Fundamentals of Statistics. Himalaya Publishing House.
4. Anderson, Sweeney, and Williams, Statistics for Students of Economics and Business, CengageLearning.
5. Sen Chetty and Kapoor Mathematical Statistics
6. Saha and Rama Rao, Business Mathematics, HPH.
7. S.N.Dorairaj, Business Mathematics, United Publications.
8. B.H.Suresh, Quantitative Techniques, Chetana Book House.

Note: Latest edition of text books may be used.

Bachelor of Commerce (B.Com.)
Semester – II

Course Title: Application of Business Analytics	Course Code: 25COMAC207
Total Contact Hours: 56	Course Credits: 4
Internal Assessment Marks: 20	Duration of SEE: 3 hours
Semester End Examination Marks: 80	

Pedagogy: Classroom Lectures, Tutorials, Group Discussion, Seminar, Case Studies, Field Work etc.

Course Outcomes: On successful completion of the course, the Students will be able to -

- Outline the business analytical role.
- Examine the business view of information technology application.
- Explain the concepts of OLTP, OLAP and BI.
- Demonstrate the data integration and data modelling concepts.
- List the concepts of Enterprise reporting and BI in real world.

Unit	Description	Hours
1	Introduction to the BA Role: Business Analysis -Business Analyst - The evolving role of the Business Analyst - The BA roadmap: different levels of business analysis - The basic rules of Business & Business Analysis - Classical Requirements and Tasks performed by Business Analysts. Project Definition and Scoping: Aspects - Projects phases - Project approaches (Waterfall, Agile, Iterative, Incremental) - The role of the BA across the project lifecycle.	10
2	Business view of Information Technology Applications: Core business process – Baldrige Business Excellence framework - Key purpose of using IT in business - Enterprise Applications - Information users and their requirements. Data Definition: Types of Data – Attributes and Measurement – Types of data sets – Data quality – Types of Digital Data.	10
3	Introduction to OLTP and OLAP: OLTP – OLAP – Different OLAP Architectures – OLTP and OLAP – Data models for OLTP and OLAP – Role of OLAP Tools in BI Architecture. Business Intelligence – Business Intelligence defined – Evolution of BI and Role of DSS, EIS, MIS and Digital Dashboards – Need for BI – BI value chain – Introduction to Business Analytics. BI Definitions and Concepts – BI Component Framework – Need for BI – BI Users – Business Intelligence applications – BI roles and responsibilities.	12
4	Data Integration: Data Warehouse – Goals – Data sources – Extract – Transform, Load – Data Integration – Technologies – Data Quality maintenance – Data profiling. Data Modelling – Basics – Types – Techniques – Fact table – Dimension Table – Typical Dimensional Models – Dimensional modeling life cycle – Designing the Dimensional Model.	12
5	Measures, Metrics, KPIs and Performance Management: Definition - Measurement system terminology – Role of Metrics and metrics supply chain – fact based decision making and KPIs; use of KPIs – potential source for metrics. Enterprise Reporting – Report standardization – Balanced score card – dashboards – scoreboards vs.	12

dashboards. BI in Real world – BI and mobility – BI and cloud computing – BI for ERP systems –Social CRM and BI.	
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References:

1. RN Prasad, Seema Acharaya - Fundamentals of Business Analytics – Wiley – Revised Edition 2015.
2. Pang-Ning Tan, Michael Steinbach, Vipin Kumar – Introduction to Data Mining – Pearson Education - Revised Edition 2015.
3. Haydn Thomas – Demonoid – Business Analysis Fundamentals – Pearson Education – 2015 Revised Edition.

Note: Latest edition of text books may be used.

Bachelor of Commerce (B.Com.)
Semester – II

Course Title: Data Management and Analysis using Excel	Course code: 25COMAC208
Total Contact Hours: 56	Course Credits: 4
Internal Assessment Marks: 40	Duration of SEE: 4 hours
Semester End Examination Marks: 60	
Pedagogy: Classroom Lectures, Tutorials, Group Discussion, Seminar, Case Studies, Field Work etc.	
Course Outcomes: On successful completion of the course, the Students will be able to - This course equips commerce students with essential Excel skills for data management and analysis. It provides a hands-on understanding of Excel functions, data visualization, and business analytics, emphasizing practical applications in business scenarios.	

Unit	Description	Hours
1	Introduction to Excel and Data Management: Introduction to MS- Excel and data management – Data, Types of Data – Qualitative and Quantitative, concept of Data Management and application of data management, Data Entry in Excel – formatting, editing, sorting and filtering of data. Importing and exporting of data, data validation techniques. Practical Exercises - Business data analysis – Customer data organization, sales record management, budgeting.	12
2	Formulas, Functions, and Logical Operations: Arithmetic Operations in Excel – Addition, subtraction, multiplication and division. Functions - SUM, AVERAGE, COUNT, MAX, and MIN, and logical functions like IF, AND, OR, and NOT, text functions and time functions, Look up functions, Practical Exercises - payroll management, tax computations, inventory calculations, and financial ratio analysis.	12
3	Business Data Analysis Tools in Excel: Business Data analysis in excel – Conditional formatting, financial functions and Statistical functions Pivot Tables and Pivot Charts, Data analysis Tool Pak – Descriptive statistics – Measures of central tendency, dispersion, Moving Averages. Inferential statistics – ANOVA, T Test, F Test, Co-relation, Covariance, Regression. Practical exercises Sales trends, demand forecasting, customer segmentation, performance and profitability analysis etc	12
4	Data Visualization: Introduction to data visualization – Concept, Importance of visualization in business data, effective data visualization, data visualization tools - charts – Bar, Pie and Area Charts, Conditional Charts, Histograms, waterfall charts and other advanced visualization techniques, emerging trends and technologies in data visualization.	10
5	Data Reporting: Data Reporting – concept and importance of reporting in business, types of Business reports – Descriptive reports, Diagnostic reports, Predictive reports, Prescriptive reports. Tools for Business data Reporting –	10

Spreadsheet tools, Business intelligence tools. Reporting platforms – Dashboards, Importance of Data Reporting in business decision-making. Trends in business data reporting. Key business reports and their applications. Reporting ethics and Privacy. Practical Exercises - Marketing campaign performance analysis, financial reporting, and KPIs	
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Reference Books:

1. Ritu Arora, Excel for Beginners
2. Hirdesh Bhardwaj, Mastering MS Excel
3. Anil Maheshwari, Excel for Business Analytics
4. Dinesh Maidasani, Advanced Excel for Managers
5. Manish Mahajan, Excel Macros and VBA
6. John Walkenbach, Excel Bible
7. Bernd Held, Excel Functions and Formulas
8. Paul McFedries, Microsoft Excel Data Analysis for Dummies
9. Cole Nussbaumer Knaflic, Storytelling with Data
10. Michael Alexander, Excel VBA Programming for Dummies

Note: Latest edition of textbooks may be used.

**Question Paper Pattern for all Commerce Courses
(All DCCs and SEC - Business Research Methods)**

SECTION – A

This Section consists of One Question (Question No. 1) comprising of twelve sub-questions (a to l). The student has to answer ten sub-questions. Each sub-question carries two marks (i.e., $10 \times 2 = 20$ marks).

SECTION – B

This Section consists of Five Questions (Question No. 2 to 6). There shall be three numerical questions in case of quantitative papers. The student has to answer three questions. Each question carries five marks (i.e., $3 \times 5 = 15$ marks).

SECTION – C

This Section consists of Five Questions (Question No. 7 to 11). There shall be three numerical questions in case of quantitative papers. The student has to answer three questions. Each question carries fifteen marks (i.e., $3 \times 15 = 45$ marks)

**Question Paper Pattern for all Skill Enhancement Courses
(Except SEC - Business Research Methods)**

There shall be 40 Multiple-Choice Questions consisting of four options.
Each question carries ONE mark. ($40 \times 1 = 40$ marks)