Examination Scheme & Syllabus

Bachelor of Commerce (Data Analytics)

(Scheme-D)

(w.e.f. 2024-25)

Under Graduate Programmes as per NEP 2020 Curriculum and Credit Framework for Undergraduate Programmes (Multiple Entry-Exit, Internships and Choice Based Credit System LOCF)

With effect from the session 2024-25 (in phased manner)

Chaudhary Bansi Lal University, Bhiwani

(A State University established under Haryana Act No. 25 of 2014)

1. Background

In today's rapidly evolving digital economy, the ability to analyze and interpret data has become crucial for business success. Recognizing this growing demand, the Bachelor of Commerce (B.Com.) in Data Analytics programme based on the National Education Policy (NEP) 2020 is designed to equip students with the skills and knowledge necessary to navigate the data-driven landscape of modern commerce. This programme blends core commerce subjects with specialized training in data analytics, preparing graduates for a wide range of careers in business, finance, marketing, and beyond.

Data analytics involves examining large datasets to uncover hidden patterns, correlations, and insights that can drive decision-making and strategy. In the context of commerce, data analytics can optimize operations, enhance customer experiences, and identify new market opportunities. Businesses today generate vast amounts of data from transactions, social media, customer feedback, and various other sources. The ability to harness this data effectively can provide a significant competitive advantage.

The B.Com. (Data Analytics) programme is structured to provide a strong foundation in commerce while incorporating comprehensive data analytics training. Students will benefit from the program's focus on technical proficiency, analytical and practical skills. To bridge theory and practice, the programme often includes capstone projects/ dissertation report, internships, and industry collaborations. These opportunities allow students to work on real-world business problems, applying their analytical skills to generate solutions and gain valuable professional experience. In addition to technical skills, the programme focuses on developing critical thinking, problem-solving, and communication skills.

The demand for data analytics professionals is projected to grow significantly in the coming years. As businesses increasingly rely on data-driven decision-making, the ability to interpret and leverage data will continue to be a highly sought-after skill. The B.Com. (Data Analytics) programme aims to meet this demand by producing graduates who are not only proficient in commerce but also adept at using data to drive business success. Graduates of the B.Com. (Data Analytics) programme are well-positioned for a variety of career paths. They can pursue roles such as Data Analyst, Business Analyst, Financial Analyst, Marketing Analyst, and Operations Analyst, among others. The skills acquired through this programme are applicable across diverse industries, including finance, retail, healthcare, manufacturing, and technology.

At CBLU, the B.Com. (Data Analytics) programme represents a forward-thinking approach to business education, integrating the core tenets of commerce with the powerful tools of data analytics. By fostering a deep understanding of both disciplines, the programme prepares students to become versatile professionals capable of navigating and thriving in a data-centric business environment. As data continues to transform the business landscape, graduates of this programme will be at the forefront of driving innovation and growth in their respective fields.

2. Programme Learning Outcomes

On completing the B.Com. (Data Analytics) Programme, the students shall be able to realize the following programme learning outcomes: On completing this programme, the students shall be able to realize the following specific outcomes:

PLO's	Description
PLO-1	Demonstrate a thorough understanding of essential business concepts and practices, and apply these principles to analyze and solve business problems.
PLO-2	Utilize strong problem-solving and critical thinking skills to address business challenges.
PLO-3	Employ advanced statistical and data analysis techniques to interpret large and complex datasets.
PLO-4	Gain expertise in the use of data analytics tools and technologies and to apply these tools effectively to manage, analyze, and visualize data in various business contexts.
PLO-5	Communicate complex data analysis results clearly and effectively to both technical and non-technical audiences. Create compelling data visualizations, reports, and presentations that facilitate informed decision-making.

3. **Eligibility:** Senior Secondary School Leaving Certificate or Higher Secondary (12th Grade) Certificate obtained after successful completion of Grade 12 or equivalent stage of education corresponding to Level-4.

CHAUDHARY BANSI LAL UNIVERSITY, BHIWANI
Scheme of Examination for Undergraduate Programme (Interdisciplinary)
Bachelor of Commerce (Data Analytics) (Scheme- D)
as per NEP-2020 Curriculum Framework
(Multiple Entry-Exit, Internships and Choice Based Credit System LOCF) w.e.f. the session 2024-2025 (in phased manner)

Semester	Course Type	Course Code	Nomenclature of Course	Credits			Contact Hours L: Lecture P: Practical T: Tutorial			Internal Assessment Marks		End Term Examinations Marks		Total Marks	Examination Hours	
				Total	Theory (T)	Tutorial (T)	L	T	Total	T	P	T	T/P		T	T/P
FIRST YEAR SCHEME																
I	CC-1	24UN-COM-101	Financial Accounting-I	4	3	1	3	1	4	30	-	70	-	100	3	-
	CC-2	24UN-COM-103	Business Management	4	3	1	3	1	4	30	-	70	-	100	3	-
	CC-3	24UN-COM-DA -101	Fundamentals of MS-Excel	4	3	1(P)	3	2(P)	5	20	10	50	20	100	3	-
	CC-M1	24UN-COM-104	Business Mathematics-I	2	1	1	1	1	2	15	-	35	-	50	3	-
	MDC-1	Select one course from the pool of Multidisciplinary courses(MDC) **3 Credits**														
	AEC-1	Select one course from the pool of Ability Enhancement Courses (AEC) **2 Credits**														
	SEC-1	Select one course from the pool of Skill Enhancement Courses (SEC) **3 Credits**														
	VAC-1	Select one course from the pool of Value Added Courses (VAC) **2 Credits**														
	Total	**Credits: 24**														

II	CC-4	24UN-COM-201	Financial Accounting-II	4	3	1	3	1	4	30	-	70	-	100	3	-
	CC-5	24UN-COM-203	Principles of Marketing	4	3	1	3	1	4	30	-	70	-	100	3	-
	CC-6	24UN-COM-DA - 201	Fundamentals of Database Management System and SQL	4	3	1(P)	3	2(P)	5	20	10	50	20	100	3	-
	CC-M2	24UN-COM-204	Business Mathematics-II	2	1	1	1	1	2	15	-	35	-	50	3	-
	MDC-2	Select one course from the pool of Multidisciplinary courses(MDC) **3 Credits**														
	AEC-2	Select one course from the pool of Ability Enhancement Courses (AEC) **2 Credits**														
	SEC-2	Select one course from the pool of Skill Enhancement Courses (SEC) **3 Credits**														
	VAC-2	Select one course from the pool of Value Added Courses (VAC) **2 Credits**														
	Total	**Credits: 24**														

Exit Option: Any student opting for exit option after first year will get **Undergraduate Certificate in Commerce** provided he/she completes 52 Credits comprising 48 Credits of first two semesters and additional 4 credits of internship (100 Marks) based 4-6 weeks internship after IInd semester. The internship report would be evaluated by a panel of one internal and one external expert to be nominated by Principal/Director of the institute/Chairperson of the Department from the panel of examiners approved by UGBOS of department.

Furthermore, the credits of internship will be included/mention in the **Undergraduate Certificate in Commerce as follow:**

Course Type	**Course Code**	**Nomenclature**	**Internal Marks**	**External Marks**	**Total Marks**	**Credit**
Internship	24UN-COM-505	Internship	-	100	100	4

Scheme applicable w.e.f. Session 2024-2025			
Part-A Introduction			
Subject	Commerce		
Semester	I		
Name of the Course	Financial Accounting -I		
Course Code	24UN-COM-101		
Course Type: (CC/MCC/MDC/ CCM/ DSEC/VOC/DSE/PC/AEC/ VAC	CC-1		
Pre-requisite for the course (if any)	NIL		
Course Learning Outcomes (CLO)	After completing this course, the learner will be able to: 1. To illustrate the understanding of theoretical framework of accounting and be able to prepare financial statements of business organizations with additional items. 2. To prepare the financial statements for non-profit organization. 3. To analyse and apply Accounting Standards according to requirements. 4. To apply the knowledge and skills of accounting to prepare.		
Credits	**Theory**	**Tutorial**	**Total**
	03	01	04
Internal Assessment Marks	30	-	30
End Term Exam Marks	70	-	70
Exam Time	3 Hrs.	-	3 Hrs.

Part-B Contents of the Course

Instructions for Paper Setters

1. The examiner will set 9 questions in all covering the course learning outcomes (CLOs). Question No. 1 will be compulsory and comprises of seven parts of 2 marks each. Question Nos. 2 to 9 will carry 14 marks each, having two questions from each unit. About 40% questions should be numerical type.
2. Students are required to attempt 5 questions in all, selecting one question from each unit and the compulsory question

Unit	Topics	Contact Hours
I	Financial accounting: Concept, objectives & scope; book-keeping and accounting; accounting principles: concepts and conventions; accounting cycle and accounting equation; branches of accounting; journal; rules of journalizing; ledger & trial balance; banking transactions and bank reconciliation statement; rectification of errors: suspense account; effect on profit.	14

II	Capital and Revenue: Concept and classification of income; expenditure; receipts (with relevant accounting standards) Depreciation provisions and reserves: concept and classification; Methods of depreciation accounting (with relevant accounting standards)	14
III	Final Accounts: manufacturing, trading, profit & loss account; Balance sheet; adjustment entries. Accounts of Non-profit Organizations: Receipt & payment account, income and expenditure account and balance sheet.	16
IV	Consignment Accounts: accounting records; Normal and abnormal Loss, valuation of unsold stock. Accounting for joint ventures: distinction between joint ventures and partnership, joint venture and consignment, accounting methods for joint ventures.	16

Suggested Evaluation Methods

Internal Assessment	End Term Exam
Class Participation Seminar/Presentation/Assignment/Quiz/Class Test etc. Mid Term Exam	Theory Exam

Part-C Learning Resources

Recommended Books/E-Resources/LMS:

- Anthony, R.N., and Reece, J.S.: Accounting Principle, Richard Irwin Inc.
- Compendium of Statement of Standards of Accounting: The Institute of Chartered Accountants of India, New Delhi.
- Gupta R. L., and Radhaswamy, M.: Financial Accounting, Sultan Chand and Sons, New Delhi.
- Monga J.R, Ahuja Girish, and Sehgal Ashok: Financial Accounting; Mayur Paper Back, Noida.
- Shukla, M.C., Grewal T.S., and Gupta, S.C.: Advanced Accounts, S. Chand & Co., New Delhi.
- Jain S. P., and Narang K. L.: Advanced Accountancy, Volume-I, Kalyani Publishers.
- Goyal, Bhushan Kumar: Basic Financial Accounting, Taxmann, New Delhi.
- Lal, Jawahar, Srivastava, Seema, & Abrol Shivani: Financial Accounting: Text and Problems, Himalaya Publishing House, New Delhi.
- Lt. Bhupinder, Principles of Financial Accounting, Cengage.
- Monga, J.R.: Financial Accounting: Concept and Applications. Mayur Publication, New Delhi.
- Sehgal, Ashok & Sehgal, Deepak: Fundamentals of Financial Accounting. Taxmann, New Delhi.
- Charles, T. Horngren, Gart, L. Sundem, John, A. Elliot, and Donna, R. Philbrick: Introduction to Financial Accounting, Pearson.
- Leonardo, A. Robinson, James, R. Qanis, C. Wayne Alderman: Accounting Information Systems: A Cycle Approach. Publisher Wiley.
- Marshall, B. Romney, and Paul, John Steinbart: Accounting Information Systems, Pearson Education Limited.
- Robert, L. Hurt: Accounting Information Systems: Basic Concepts and Current Issues, Mc.

Scheme applicable w.e.f. Session 2024-2025			
Part-A Introduction			
Subject	Commerce		
Semester	I		
Name of the Course	Business Management		
Course Code	24UN-COM-103		
Course Type: (CC/MCC/MDC/ CCM/ DSEC/VOC/DSE/PC/AEC/ VAC	CC-2		
Pre-requisite for the course (if any)	NIL		
Course Learning Outcomes (CLO)	After completing this course, the learner will be able to: 1. To gain knowledge about the conceptual framework of business management; development of management thoughts and knowing the emerging management thoughts. 2. To understand the utility and application of planning and organizing functions of management. 3. To assimilate and use the concepts of delegation, decentralization and staffing in organization. 4. To comprehend the concept and applications of leadership styles, and controlling practices in organizations.		
Credits	**Theory**	**Tutorial**	**Total**
	3	1	4
Internal Assessment Marks	30	-	30
End Term Exam Marks	70	-	70
Exam Time	3 Hrs.	-	3 Hrs.

Part-B Contents of the Course

Instructions for Paper Setters

1. The examiner will set 9 questions in all covering the course learning outcomes (CLOs). Question No. 1 will be compulsory and comprises of seven parts of 2 marks each. Question Nos. 2 to 9 will carry 14 marks each, having two questions from each unit.
2. Students are required to attempt 5 questions in all, selecting one question from each unit and the compulsory question.

Unit	Topics	Contact Hours
I	Introduction to Management: characteristics and significance, process and functions of management; Management: as science, art and profession; Approaches to management: Classical and neo classical approach, behavioral approach, management science approach, systems approach and contingency approach; Emerging management concepts.	15

II	Planning: process and importance; Types of plans: Policy, programme, strategy, vision, mission, goals and objectives; Organizing: Principles and benefits of organizations; Organizational structure: Functional, line and staff, matrix, formal vs. informal; Organizational structure for large scale business organization, virtual organization.	15
III	Staffing: Importance, scope and modes of staffing; Delegation: Advantages, barriers to delegation, guidelines for effective delegation; Decentralization and Centralization: Advantages and disadvantages; Factors influencing decentralization; Directing; Coordination; Controlling: Characteristics and process of control, prerequisites of an effective control system, controlling techniques.	15
IV	Motivation: Objectives and significance; Approaches to motivation; Leadership: Significance and functions; Leadership styles; Approaches to leadership	15

Suggested Evaluation Methods

Internal Assessment	End Term Exam
Class Participation Seminar/Presentation/Assignment/Quiz/Class Test etc. Mid Term Exam	Theory Exam

Part-C Learning Resources

Recommended Books/E-Resources/LMS:

- Basu, C, Business Organisation and Management, McGraw Hill Education.
- Bhattacharya Kumar Deepak, Principles of Management, Pearson, New Delhi.
- Gupta, C.B.: Management: Theory and Practice, Sultan Chand & Sons, New Delhi
- O"Donnel Cyril & Koontz Harold, Management, McGraw Hill, New Delhi.
- Stephen P Robbins, David A DeCenzo, „Fundamentals of Management, Essential Concepts and Applications
- Tripathi, P.C. & Reddy, P.N., Principles of Management, Tata McGraw Hill, New Delhi.

Scheme applicable w.e.f. Session 2024-2025			
Part-A Introduction			
Subject	Commerce		
Semester	I		
Name of the Course	**Fundamentals of MS-EXCEL**		
Course Code	24-UN-COM-DA-101		
Course Type: (CC/MCC/MDC/ CCM/ DSEC/VOC/DSE/PC/AEC/ VAC	CC-3		
Pre-requisite for the course (if any)	NIL		
Course Learning Outcomes (CLO)	After completing this course, the learner will be able to: •**Financial Analysis**: Students will be able to perform financial calculations and analyze financial data using Excel's advanced functions. •**Budgeting and Forecasting**: Learners will demonstrate the ability to create and manage budgets, as well as forecast future financial performance with Excel tools. •**Data Presentation**: Participants will develop skills to present financial data effectively through professional charts, graphs, and pivot tables. •**Business Efficiency**: Students will learn to automate routine accounting tasks using Excel macros, enhancing business efficiency and productivity.		
Credits	**Theory**	**Practical**	**Total**
	3	1	4
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Exam Time	3 Hrs.	-	3 Hrs.

Part-B Contents of the Course

Instructions for Paper Setters

1. The examiner will set 9 questions in all covering the course learning outcomes (CLOs). Question No. 1 will be compulsory and comprises of seven parts of 2 marks each. Question Nos. 2 to 9 will carry 9 marks each, having two questions from each unit.
2. Students are required to attempt 5 questions in all, selecting one question from each unit and the compulsory question.

Unit	Topics	Contact Hours
I	Basics of Ms.- Windows – Desktop, Icon, creating, saving, and using of different documents and applications, Ms.- Office: Installing, Customizing, and Using different applications and tools in Ms.-Office package, Basics of MS-Word, MS- Access &MS-Outlook.Using IF Condition, and using Multiple IF Condition in University Result Declaration.	15

II	Spread sheets basics, Need for Spreadsheets, Work-Book, Work–Sheet, Part sofa MS-Excel Work-Sheet- Program area, Work area, Contents of Title-Bar, Manu-Bar, Contents of Manu Ribbons, Meaning of Cell- Cell address, Formula-Bar, Row- Numbers, Column-Letters, Quick Access to Tool-Bar, Office Button, Floating Frames, Adding Work-Sheets in Sheet Tab, Status-Bar., and other features of Excel.Using Formulae to Find the roots of a Quadratic Equations, Prove LHS= RHS for Identities, Formula of a Straight –line (Y=MX+C) to find the Slope of a straight –line, Regression Formula, Compound Interest, EMI-Formula, Formulae used in calculating Banker Discount, Bankers gain, True-Discount, Net-Present Value, Sum of AP and GP, Break – Even Analysis, Using Formulae in Ratio Analysis (Balance Sheet Ratios).	15
III	Selecting Cell and Range of Cells, Merging of Cells, Entering and Saving Data in the Cell, Named Cells, Need of Naming Cells, Entering, Storing, Copying Formula, Using different Arithmetic and logical Operators in Formula, Moving Cell with contents, Copying and Pasting of Cell and Cell Content, Freezing Cells, Editing of Cell Contents, using Cell Formatting Options – Editing Cell Size (increasing Column and Row size of a cell), Text Alignment, using Border, Comments option usage in Cell, Editing and Deleting Comments, Fill, Formatting Fonts, Text Warping, Text Rotate, Using Auto-fitto Adjust Rows and Columns Using of Short- Cuts and Short-Cut Manu, Clear Contents in a Cell ,Adding, Deleting and Copying Work-Sheet with in a Work-Book, Renaming a File or Work-Sheet, Inserting Multiple Work-Sheet at a time, Formatting a Work-Sheer Automatically, Sorting Textual & Numerical DATA ,Sort Dates or Times, Sort by Cell Colour, Font Colour, or by icon, Sort by a custom list, Sort Rows, sort by more than column or row and other issues in sorting.	15
IV	Creating a Table, Changing the look of a table, Navigating in a Table, Selecting parts of a Table, Adding, Deleting New Rows/Columns, Moving a T able, Working with the Total Row, Removing Duplicate rows from a table. Sorting and Filtering a table, Converting Table into Range. Formatting tools on the Home Tab, Mini Toolbar, Fonts, Text Alignment, Wrapping text to fit a cell, Colours and Shading, Borders and Lines, Miming Styles Conditional Formatting and Reporting: Format all Cells by using a Two Colour Scale, Form at all Cells by using Data Bars quick formatting, Protecting, Protect a Work-Book, Un Protect Work-Book, Protect Work-SheetData,UnprotectWork-Sheetdata,ShareaWork-BookandProofing tools-Use a Shared Work-Book to Collaborate, Spelling and Grammar Check, Referencing–Relative, Absolute, Mixed Referencing, Basic FunctionsViz., SUM, AVERAGE, MAX, MIN, SQRT, TODAY, COUNT, COUNTIF, VAR, CHAR OR, NOT, VALUE. ROUND, Introduction to ChartWizard	15
Suggested Evaluation Methods		

Internal Assessment	End Term Exam
Class Participation Seminar/Presentation/Assignment/Quiz/Class Test/Labs etc. Mid Term Exam	Theory Exam and Practical

Part-C Learning Resources

Recommended Books/E-Resources/LMS:

1. Rajkumar S and Nagarajan G and Naveen Kumar M, Fundamentals of MS Excel, Jayvee International Publications, Bangalore.
2. Microsoft Excel Latest Version Inside Out–Mark Doge and Craig Stinson– PHI Learning Private Limited, New Delhi–110001.
3. Excel2013Bible; John Walkenbach, Wiley
4. Financial Analysis and Modeling using Excel and VAB: Chandan Sengupta, Wiley
5. Excel Data Analysis–Modeling and Simulation: Hector Guerreor, Springe
6. MicrosoftExcel2013: Data Analysis and Business Modeling: Winston, PHI
   Excel Functions and Formulas: Bernd Held, BPB Publications.

Scheme applicable w.e.f. Session 2024-2025			
Part-A Introduction			
Subject	Commerce		
Semester	I		
Name of the Course	Business Mathematics-1		
Course Code	24UN-COM-104		
Course Type: (CC/MCC/MDC/ CCM/ DSEC/VOC/DSE/PC/AEC/ VAC	CC-M1		
Pre-requisite for the course (if any)	NIL		
Course Learning Outcomes (CLO)	After completing this course, the learner will be able to: 1. To understand set theory, logical statements and truth tables. 2. To learn the logarithms and arithmetic and geometric progressions and their applications. 3. To familiarize with the concepts of matrices and determinants. Learn to solve system of simultaneous linear equations. 4. To have the conceptual knowledge of Compound interest, annuity, loan, debenture and sinking funds and attain skills to use these concepts in daily life.		
	Theory	**Tutorial**	**Total**
Credits	01	01	02
Internal Assessment Marks	15	-	15
End Term Exam Marks	35	-	35
Exam Time	3 Hrs.	-	3 Hrs.

Part-B Contents of the Course

Instructions for Paper Setters

1. The examiner will set 9 questions in all covering the course learning outcomes (CLOs). Question No. 1 will be compulsory and comprises of seven parts of 1 marks each. Question Nos. 2 to 9 will carry 7 marks each, having two questions from each unit. About 40% questions should be numerical type.
2. Students are required to attempt 5 questions in all, selecting one question from each unit and the compulsory question.

Unit	Topics	Contact Hours
I	Set Theory: Representation of sets, equivalent sets, power set, complement of a set. Venn Diagrams: Union and intersection of sets, De-Morgan's laws; Logical statements and truth tables.	8
II	Logarithms: Laws of operation, log tables; Arithmetic and geometric progression.	7

III	Matrices and Determinants: Definition of a matrix, order, equality, types of matrices; Operations on matrices: Addition, multiplication and multiplication with a scalar and their simple properties. Determinant of a square matrix (upto 3x 3 order): Properties of determinants, minors, co-factors and applications of determinants in finding the area of triangle, adjoint and inverse of a square matrix, solutions of a system of linear equations by examples.	8
IV	Compound interest and annuities: Different types of interest rates, types of annuities, present value and amount of an annuity (including the case of continuous compounding), valuation of simple loans and debentures, problems related to sinking funds.	7

Suggested Evaluation Methods

Internal Assessment	**End Term Exam**
Class Participation Seminar/Presentation/Assignment/Quiz/Class Test etc. Mid Term Exam	Theory Exam

Part-C Learning Resources

Recommended Books/E-Resources/LMS:

- Allen R.G.D., Basic Mathematics, Macmillan, New Delhi
- D.C. Sancheti and V.K. Kapoor, Business Mathematics, Sultan Chand and Sons.
- E. Don and J. Lerner (2009). Schaum outlines of Basic Business Mathematics, McGraw Hill.
- Holden, Mathematics for Business and Economics, Macmillan India, New Delhi.
- S.C. Gupta and V.K. Kapoor, Fundamentals of Mathematical Statistics, S. Chand & Sons, Delhi.

Scheme applicable w.e.f. Session 2024-2025			
Part-A Introduction			
Subject	Commerce		
Semester	II		
Name of the Course	Financial Accounting -II		
Course Code	24UN-COM-201		
Course Type: (CC/MCC/MDC/ CCM/ DSEC/VOC/DSE/PC/AEC/ VAC	CC-4		
Pre-requisite for the course (if any)	Financial Accounting -I		
Course Learning Outcomes (CLO)	After completing this course, the learner will be able to: 1. To illustrate the understanding of theoretical framework of accounting and be able to prepare branch accounts and departmental accounts. 2. To prepare the financial statements for hire purchase. 3. To prepare accounting statements including reconstitution of partnership firms. 4. To apply the knowledge and skills of accounting to prepare accounting statements for insolvency of business firms.		
Credits	**Theory**	**Tutorial**	**Total**
	03	01	04
Internal Assessment Marks	30	-	30
End Term Exam Marks	70	-	70
Exam Time	3 Hrs.	-	3 Hrs.

Part-B Contents of the Course

Instructions for Paper Setters

1. The examiner will set 9 questions in all covering the course learning outcomes (CLOs). Question No. 1 will be compulsory and comprises of seven parts of 2 marks each. Question Nos. 2 to 9 will carry 14 marks each, having two questions from each unit. About 40% questions should be numerical type.
2. Students are required to attempt 5 questions in all, selecting one question from each unit and the compulsory question

Unit	Topics	Contact Hours
I	Branch Accounts: dependent branch, debtor's system, stock and debtor system; final accounts; wholesale branch, foreign branch; departmental accounting.	14

II	Hire purchase and installment purchase system: concept and legal provisions regarding hire-purchase contract; accounting records for goods of substantial sale value	12
III	Partnership account: final accounts; adjustment after closing the accounts; fixed and fluctuating capital; accounts; goodwill; joint life policy; change in profit sharing ratio, reconstitution of partnership firm: admission; retirement; death of a partner.	18
IV	Dissolution of partnership: modes & accounting treatment. Insolvency Accounts: Statement of affairs and settlement of accounts	16

Suggested Evaluation Methods

Internal Assessment	End Term Exam
Class Participation Seminar/Presentation/Assignment/Quiz/Class Test etc. Mid Term Exam	Theory Exam

Part-C Learning Resources

Recommended Books/E-Resources/LMS:

- Anthony, R.N., and Reece, J.S.: Accounting Principle, Richard Irwin Inc.
- Compendium of Statement of Standards of Accounting: The Institute of Chartered Accountants of India, New Delhi.
- Gupta R. L., and Radhaswamy, M.: Financial Accounting, Sultan Chand and Sons, New Delhi.
- Monga J.R, Ahuja Girish, and Sehgal Ashok: Financial Accounting; Mayur Paper Back, Noida.
- Shukla, M.C., Grewal T.S., and Gupta, S.C.: Advanced Accounts, S. Chand & Co., New Delhi.
- Jain S. P., and Narang K. L.: Advanced Accountancy, Volume-I, Kalyani Publishers.
- Goyal, Bhushan Kumar: Basic Financial Accounting, Taxmann, New Delhi.
- Lal, Jawahar, Srivastava, Seema, & Abrol Shivani: Financial Accounting: Text and Problems, Himalaya Publishing House, New Delhi.
- Lt. Bhupinder, Principles of Financial Accounting, Cengage.
- Monga, J.R.: Financial Accounting: Concept and Applications. Mayur Publication, New Delhi.
- Sehgal, Ashok & Sehgal, Deepak: Fundamentals of Financial Accounting. Taxmann, New Delhi.
- Charles, T. Horngren, Gart, L. Sundem, John, A. Elliot, and Donna, R. Philbrick: Introduction to Financial Accounting, Pearson.
- Leonardo, A. Robinson, James, R. Qanis, C. Wayne Alderman: Accounting Information Systems: A Cycle Approach. Publisher Wiley.
- Marshall, B. Romney, and Paul, John Steinbart: Accounting Information Systems, Pearson Education Limited.
- Robert, L. Hurt: Accounting Information Systems: Basic Concepts and Current Issues, Mc.

Scheme applicable w.e.f. Session 2024-2025			
Part-A Introduction			
Subject	Commerce		
Semester	II		
Name of the Course	Principles of Marketing		
Course Code	24UN-COM-203		
Course Type: (CC/MCC/MDC/ CCM/ DSEC/VOC/DSE/PC/AEC/VAC	CC-6		
Pre-requisite for the course (if any)	NIL		
Course Learning Outcomes (CLO)	After completing this course, the learner will be able to: 1. understand the basic concepts of marketing and assess the marketing environment. 2. analyse the consumer behaviour in the present scenario and marketing segmentation. 3. discover the new product development and factors affecting the price of a product in the present context. 4. understand the promotional and distribution strategies along with the recent developments in the field of marketing.		
Credits	**Theory**	**Tutorial**	**Total**
	03	01	04
Internal Assessment Marks	30	-	30
End Term Exam Marks	70	-	70
Exam Time	03 Hrs.		03 Hrs.

Part-B Contents of the Course

Instructions for Paper Setters

1. The examiner will set 9 questions in all covering the course learning outcomes (CLOs). Question No. 1 will be compulsory and comprises of seven parts of 2 marks each. Question Nos. 2 to 9 will carry 14 marks each, having two questions from each unit.
2. Students are required to attempt 5 questions in all, selecting one question from each unit and the compulsory question.

Unit	**Topics**	**Contact Hours**

I	Marketing:Concept, nature, scope and importance; Evolution of Marketing; Understanding marketing in new perspectives; Marketing environment:Concept, importance; Micro environmental factors: Suppliers, marketing intermediaries, customers, competitors, public; Macro environmental factors: Demographic, economic, natural, technological, politico-legal and socio- cultural.	15
II	Consumer behaviour: Concept, nature and importance, consumer buying decision process, factors Influencing consumer buying behaviour; Market segmentation: Concept, importance and bases; Target market selection; Positioning: Concept, importance and bases.	15
III	Product: Concept, importance and classification; Branding, Packaging and Labelling; Product life cycle; New product development; Pricing: Concept, significance, price determination, pricing methods, pricing policies and strategies.	15
IV	Promotion: Nature and importance; Advertising, personal selling, sales promotion and publicity/public relations; Factors affecting promotion mix decisions; Distribution: Concept, importance and types of distribution channels; Factors affecting choice of distribution channel; Retailing; Wholesaling. Overview of recent developments in marketing: Social marketing; Online marketing; Direct marketing; Green marketing; Relationship marketing.	15

Suggested Evaluation Methods

Internal Assessment	**End Term Exam**
Class Participation Seminar/Presentation/Assignment/Quiz/Class Test etc. Mid Term Exam	Theory Exam

Part-C Learning Resources

Recommended Books/E-Resources/LMS:

- Grewal, Dhruv and Michael Levy; *Marketing*; Tata McGraw Hill.
- Kumar Arun & Meenakshi N., Marketing Management, Vikas Publishing House Pvt. Ltd., New Delhi. Third Edition
- Michael, J. Etzel, Bruce J. Walker, William J Stanton and Ajay Pandit, Marketing: Concepts and Cases. (Special Indian Edition)., McGraw Hill Education Philip Kotler, Principles of Marketing. Pearson Education.
- Ramaswami, V.S. and Namakumari, S.; *Marketing Management*; MacMillan India Ltd.
- Saxena Rajan, Marketing Management, Tata McGraw-Hill Publishing Company Ltd., New Delhi. Fifth Edition.

Scheme applicable w.e.f. Session 2024-2025			
Part-A Introduction			
Subject	Commerce		
Semester	II		
Name of the Course	**Fundamentals of Database Management System and SQL**		
Course Code	24-UN-COM-DA-201		
Course Type: (CC/MCC/MDC/ CCM/ DSEC/VOC/DSE/PC/AEC/ VAC	CC-5		
Pre-requisite for the course (if any)	NIL		
Course Learning Outcomes (CLO)	After completing this course, the learner will be able to: •**Database Design**: Students will understand and apply the principles of database design to create efficient and normalized database structures. •**SQL Proficiency**: Learners will gain proficiency in writing SQL queries to retrieve, manipulate, and manage data in relational databases. •**Data Integrity and Security**: Participants will learn techniques to ensure data integrity and implement security measures to protect sensitive business information. •**Business Applications**: Students will be able to use database systems and SQL to support business decision-making and operations through effective data management.		
Credits	**Theory**	**Practical**	**Total**
	03	01	04
Internal Assessment Marks	20	10	30
End Term Exam Marks	50	20	70
Exam Time	03 Hrs.		03Hrs.

Part-B Contents of the Course

Instructions for Paper Setters

1. The examiner will set 9 questions in all covering the course learning outcomes (CLOs). Question No. 1 will be compulsory and comprises of seven parts of 2 marks each. Question Nos. 2 to 9 will carry 9 marks each, having two questions from each unit.
2. Students are required to attempt 5 questions in all, selecting one question from each unit and the compulsory question.

Unit	Topics	Contact Hours
I	Meaning and Definition of Database, Objectives of Database, Features of Database, Conceptual Data modelling – File Organization – Data Structure – Data models: HDBMS, NDBMS, RDBMS, OODBMS, Desktop and Server-level Database, Resent Trends in Database.	14

II	Relational Data Model – Relational Algebra – ER Diagrams – Data Dictionary – Normalisation – Boyce Codd Normal Forms – Integrity – Relational Database Languages – Database Administration – File Structures and Indexing. Object orientedconcepts–Structure–ModelsandDatabases–Objectlifecyclemodeling – Objects, Classes, and Patterns – Object interaction modelling – Object Oriented Design–UML	16
III	Client / Server and Databases – Data Warehousing – Query Processing – Concurrency Management – Heterogeneous and Homogenous Systems – Distributed Databases–Controls–Atomicity, Recovery–Security, Back-up and Recovery, Distributed Databases: Structure of Distributed Database; Trade-offs in Distributing the Database, Advantages of Data Distribution, Disadvantages of Data Distribution; Design of Distributed Databases, Data Replication, Data Fragmentation	16
IV	RelationalQuery Languages, the SQLQuery Language, DDL–CREATETable, ALTERTable, DROPTable, CREATEIndex, DROPIndexetc., DML–SELECT, UPDATE, DELETE, INSERTINTO etc., DATA–TYPE, ConstraintsonAttributes – Referential Integrity Constraint, Ware-Clause – Arithmetic and Relational Operators	14

Suggested Evaluation Methods

Internal Assessment	End Term Exam
Class Participation Seminar/Presentation/Assignment/Quiz/Class Test/Labs etc. Mid Term Exam	Theory Exam and Practical

Part-C Learning Resources

Recommended Books/E-Resources/LMS:

1. Nagarajan Gand Clement King Fundamentals of Database Management Systems and SQL(2021), Jayvee International Publication, Bangalore.
2. Clement King and Raju G.S, Fundamentals of Database Management Systems and SQL(2021), Jayvee International Publication, Bangalore.
3. Gary W. Hansen and James V.Hansen, "Database Management and Design" Prentice Hall
4. C.S.V. Murthy–Data Base Management Systems-HPH
5. C.Laudon.Managementinformationsystems6thedition, published2000.P.
6. Dr. Milind m. Oka. Management information systems. Everest publishing house.P.3
7. Gordon. B. Davis & M.H. Olson. Management Information Systems.. Conceptual Foundations, structure and development. SECOND EDITION.

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8. Jacek Błażewicz , et al., "Handbook on parallel and distributed processing", Springer Science &Business Media, 2013.

Scheme applicable w.e.f. Session 2024-2025			
Part-A Introduction			
Subject	Commerce		
Semester	II		
Name of the Course	Business Mathematics-II		
Course Code	24UN-COM-204		
Course Type: (CC/MCC/MDC/ CCM/ DSEC/VOC/DSE/PC/AEC/ VAC	CC-M2		
Pre-requisite for the course (if any)	NIL		
Course Learning Outcomes (CLO)	After completing this course, the learner will be able to: 1. gain the knowledge to find derivatives simple functions related to commerce problems, attain skills to use application of derivatives in evaluating maxima and minima. 2. learn to find integration of simple functions related to commerce and economic problems, attain skills to use application of integration in business and commerce problems. 3. apply binomial theorem, learn the concept and applications of permutations and combinations. 4. learn the concept of Linear programming and formulation of linear programming problems related to business and commerce.		
Credits	**Theory**	**Tutorial**	**Total**
	01	01	02
Internal Assessment Marks	15	-	15
End Term Examination Marks	35	-	35
Examination Time	3Hrs	-	3 Hrs.

Part-B Contents of the Course

Instructions for Paper Setters

1. The examiner will set 9 questions in all covering the course learning outcomes (CLOs). Question No. 1 will be compulsory and **comprises of seven parts of 1 marks** each. Question Nos. 2 to 9 will **carry 7 marks each**, having two questions from each unit. About 40% questions should be numerical type.
2. Students are required to attempt 5 questions in all, selecting one question from each unit and the compulsory question.

Unit	Topics	Contact Hours

I	Differentiation; derivative of simple functions and other functions (excluding trigonometric functions) having applications in business studies; Maxima and minima of Revenue, Cost, Demand, Production, Profit functions and other functions related to business and commerce.	7
II	Integration: Definite and indefinite (simple functions excluding trigonometric functions), basic rules of integration, application of integration in commercial and business problems.	7
III	Binomial Theorem; Permutations and Combinations.	8
IV	Linear programming: Formulation of linear programming problems (LPP) and their solution by graphical and simplex methods, Applications of linear programming in solving problems related to business and commerce.	8

Suggested Evaluation Methods

Internal Assessment Class Participation Seminar/Presentation/Assignment/Quiz/Class Test etc. Mid Term Exam	**End Term Exam** Theory Exam

Part-C Learning Resources

Recommended Books/E-Resources/LMS:

- A.R. Vasishtha, Matrices, Krishna Prakashan (P) Media Ltd.
- Allen R.G.D., Basic Mathematics, Macmillan, New Delhi
- D.C. Sancheti and V.K. Kapoor, Business Mathematics, Sultan Chand and Sons.
- Dowling E.T., Mathematics for Economics, Schaum Series, McGraw Hill, London.
- E.T. Dowling, Schaum outlines of Calculus for Business, Economics and the Social Sciences. McGraw Hill.
- Holden, Mathematics for Business and Economics, Macmillan India, New Delhi.
- S.C. Gupta and V.K. Kapoor, Fundamentals of Mathematical Statistics, S. Chand & Sons, Delhi.