Vijayanagara Sri Krishnadevaraya University

Jnana Sagara, Ballari (Karnataka)

Department of Studies in Commerce

Syllabus

Bachelor of Commerce (B.Com.) Programme

(Vocational-Computer Studies)

[Under Choice Based Credit System (CBCS)]

With Effect from the Academic Year 2024-25

Vijayanagara Sri Krishnadevaraya University
Jnana Sagara, Ballari (Karnataka)

B.Com Programme Outcomes

After the successful completion of the programme, the student will be able to:

1. Differentiate between various accounting systems.
2. Prepare necessary accounting statements to exhibit business performance.
3. Apply accounting and statistical tools to analyse and interpret financial statements, and forecast business prospects.
4. Apply management principles for effective management of economic entities.
5. Adapt marketing principles and strategies for marketing of goods and services.
6. Ensure regulatory compliance in all business activities.
7. Apply provisions of taxes for tax planning and management.
8. Evaluate different projects by applying suitable capital budgeting technique to take optimal investment decision.
9. Assess the costs and apply costing methods and techniques for optimum solution.
10. Determine optimum capital structure, appropriate dividend policy and required working capital.
11. Exploit the business opportunities by innovative business ideas.
12. Apply computing skills to solve business problems.

Bachelor of Commerce (B.Com.)

(Vocational-Computer Studies)

Curriculum Structure of the Programme

(Effective from the Academic Year 2024-25)

Bachelor of Commerce (B.Com.) Curriculum 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	24COMVC101	Management Principles and Applications	4	4	--	--	20	80	3
4	DCC	24COMVC102	Financial Accounting	4	4	--	--	20	80	3
5	DCC	24COMVC103	Introduction to Computer	4	3	--	2	20	80	3
6	DCC	24COMVC104	Programming in C	4	3	--	2	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.) Curriculum 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	24COMVC205	Law and Practice of Banking	4	4	--	--	20	80	3
4	DCC	24COMVC206	Advanced Financial Accounting	4	4	--	--	20	80	3
5	DCC	24COMVC207	Numerical and Statistical Methods	4	3	--	2	20	80	3
6	DCC	24COMVC208	Systems Analysis and Design	4	3	--	2	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.) Curriculum Structure										
Semester – III										
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	24COMVC309	Corporate Administration	4	4	--	--	20	80	3
4	DCC	24COMVC310	Corporate Accounting	4	4	--	--	20	80	3
5	DCC	24COMVC311	Data Base Management	4	3	--	2	20	80	3
6	DCC	24COMVC312	Fundamentals of Information Technology and Computers	4	3	--	2	20	80	3
7	SEC	24COMVS301	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.) Curriculum Structure										
Semester – IV										
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	24COMVC413	Business Laws	4	4	--	--	20	80	3
4	DCC	24COMVC414	Advanced Corporate Accounting	4	4	--	--	20	80	3
5	DCC	24COMVC415	Web Technologies	4	3	--	2	20	80	3
6	DCC	24COMVC416	E - Commerce	4	3	--	2	20	80	3
7	SEC	24COMVS402	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.) Curriculum Structure										
Semester – V										
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	24COMVC517	Marketing Management	4	4	--	--	20	80	3
2	DCC	24COMVC518	Cost Accounting	4	4	--	--	20	80	3
3	DCC	24COMVC519	Income Tax-I	4	4	--	--	20	80	3
4	DCC	24COMVC520	Computer Networks	4	3	--	2	20	80	3
5	DCC	24COMVC521	Python Programming	4	3	--	2	20	80	3
6	SEC	24COMVS503	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.) Curriculum 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	24COMVC622	Costing Methods and Techniques	4	4	--	--	20	80	3
2	DCC	24COMVC623	Income Tax-II	4	4	--	--	20	80	3
3	DCC	24COMVC624	Management Accounting	4	4	--	--	20	80	3
4	DCC	24COMVC625	Internet and E-Governance	4	3	--	2	20	80	3
5	DCC	24COMVC626	Data Analysis using SPSS	4	3	--	2	20	80	3
6	SEC	24COMVS604	Project on python programming/KJK Courses 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 Vocational Computer Studies Programme				144				760	3040	
Total Credits and Marks for B.Com. in Vocational Computer Studies 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, Computer Courses 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. LC – Language Course
    c. MC – Mandatory Course
    d. SEC – Skill Enhancement Course
3. **Course Code consists of 10 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 one letter – The Category of Programme like G – General, T – Taxation, V – Vocational-Computer Studies and B - BFSI
    d. The next one letter – The category of the Course
    e. The next digit – Serial number of the Semester
    f. 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

Bachelor of Commerce (B.Com.) Curriculum Structure										
Semester – III										
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	24COMVC309	Corporate Administration	4	4	--	--	20	80	3
4	DCC	24COMVC310	Corporate Accounting	4	4	--	--	20	80	3
5	DCC	24COMVC311	Data Base Management	4	3	--	2	20	80	3
6	DCC	24COMVC312	Fundamentals of Information Technology and Computers	4	3	--	2	20	80	3
7	SEC	24COMVS301	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.)
Semester – III

Course Title: **Corporate Administration**	Course code: **24COMVC309**
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 framework of Companies Act of 2013 and different kind of companies.
- Identify the stages and documents involved in the formation of companies in India.
- Analyse the role, responsibilities and functions of Key management Personnel in Corporate Administration.
- Examine the procedure involved in the corporate meeting and the role of company secretary in the meeting.
- Evaluate the role of liquidator in the process of winding up of the company.

Unit	Description	Hours
1	**Introduction to Company:** Introduction - Meaning and Definition – Features – Highlights of Companies Act 2013 - Kinds of Companies – One Person Company Private Company-Public Company- Company limited by Guarantee-Company limited by Shares- Holding Company- Subsidiary Company-Government Company-Associate Company- Small Company-Foreign Company-Global Company-Body Corporate-Listed Company.	12
2	**Formation of Companies:** Introduction - Promotion Stage: Meaning of Promoter, Position of Promoter & Functions of Promoter, Incorporation Stage: Meaning & contents of Memorandum of Association & Articles of Association, Distinction between Memorandum of Association and Articles of Association, alteration of MA and AA, Certificate of Incorporation, Subscription Stage – Meaning & contents of Prospectus, misstatement in prospectus - liability and remedies for misstatement, Statement in lieu of Prospects and Book Building, Commencement Stage – Document to be filed, e-filing, Register of Companies, Certificate of Commencement of Business.	12
3	**Company Administration:** Introduction - Key Managerial Personnel – Managing Director, Whole time Directors, the Companies Secretary, Chief Financial Officer, Resident Director, Independent Director, Auditors – Appointment – Powers - Duties & Responsibilities. Managing Director – Appointment – Powers – Duties & Responsibilities. Audit Committee, CSR Committee. Company Secretary - Meaning, Types, Qualification, Appointment, Position, Rights, Duties, Liabilities & Removal or dismissal.	12

4	**Corporate Meetings:** Introduction - Corporate meetings: types – Importance - Distinction; Resolutions: Types – Distinction; Requisites of a valid meeting – Notice – Quorum –Proxies - Voting - Registration of resolutions; Role of a company secretary in convening the meetings**.**	10
5	**Winding Up:** Introduction – Meaning- Modes of Winding up –Consequence of Winding up – Official Liquidator – Role & Responsibilities of Liquidator – Defunct Company – Insolvency Code.	10

References:

1 Venkataramana, K. (n.d.). Corporate Administration. SHBP.

2 Kapoor, N. D. (n.d.). Company Law and Secretarial Practice. Sultan Chand.

3 Bhandari, M. C. (n.d.). Guide to Company Law Procedures. Wadhwa Publication.

4 Kuchal, S. C. (n.d.). Company Law and Secretarial Practice.

5 Sharma, S. C. (n.d.). Business Law. I.K. International Publishers.

Note: Latest edition of textbooks may be used.

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

Course Title: **Corporate Accounting**	Course code: **24COMVC310**
Total Contact Hours: **56**	Course Credits: **4**
Internal Assessment Marks: **20**	Duration of SEE: **3 hours**
Semester End Examination Marks: **80**	

Pedagogy: Combination of lectures, seminars, assignments, exposing the students to annual accounts of companies to get practical insights, etc.

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

- Prepare financial statements as per the Companies Act, 2013 and IND AS-1, including special items.
- Calculate and ascertain pre- and post-incorporation profits and prepare related statements.
- Understand accounting for amalgamation and absorption, including methods and purchase consideration.
- Learn the valuation of intangible assets and goodwill using various methods.
- Understand share valuation methods and explore rights issues and warrant valuations.

Unit	Description	Hours
1	**Financial statements of Companies -** Phases of Share Capital, Statutory provisions regarding preparation of financial statements of companies as per schedule III of Companies Act, 2013 and IND AS-1 – Treatment of Special Items – Tax deducted at source – Advance payment of Tax – Provision for Tax– Depreciation – Interest on debentures – Dividends – Rules regarding payment of dividends – Transfer to Reserves – Preparation of Statement of profit and loss and Balance Sheet (Numerical Problems).	12
2	**Profit prior to incorporation -** Introduction - Meaning – Calculation of sales ratio– time ratio – weighted ratio – treatment of capital and revenue expenditure –capital profit and revenue profit (theory) Ascertainment of pre-incorporation and post-incorporation profits by preparing statement of Profit and Loss and Balance Sheet as per schedule III of companies Act, 2013. (Numerical Problems)	10
3	**Accounting for amalgamation -** Meaning-Objectives-Types-Methods-Purchase consideration.(Numerical Problems) **Absorption-** Meaning-Differences between amalgamation and absorption-Methods. .(Numerical Problems)	12
4	**Valuation of Intangible Assets -** Introduction **–** types and objectives of intangible assets, Valuation of Goodwill –factors influencing goodwill, circumstances of valuation of goodwill- Methods of Valuation of Goodwill: Average Profit Method, Capitalization of average Profit Method, Super Profit	10

	Method, Capitalization of Super Profit Method, and Annuity Method (Numerical Problems). Brand valuation and Intellectual Property Rights (IPR).(Theory)	
5	**Valuation Of Shares -** Introduction - Meaning –Types of Shares - Need for Valuation – Factors Affecting Valuation – Methods of Valuation: Intrinsic Value Method, Yield Method, Earning Capacity Method, Fair Value of shares (Numerical Problems). Rights Issue and Valuation of Rights Issue, Valuation of Warrants (Theory).	12

References:

1 Raman, B. S. (n.d.). Corporate Accounting. S. Chand & Company Ltd.

2 Maheshwari, S. N. (n.d.). Financial Accounting. Vikas Publishing House.

3 Shukla, M., & Grewal, T. S. (n.d.). Financial Accounting. S. Chand & Company Ltd.

4 Gupta, R. L., & Radhaswamy, M. (n.d.). Advanced Accounting. S. Chand & Company Ltd.

5 Grewal, T. S. (n.d.). Introduction to Accountancy. S. Chand & Company Ltd.

6 Kadkol, M. B. (n.d.). Advanced Accountancy. Himalaya Publishing House.

Note: Latest edition of textbooks may be used.

Bachelor of Commerce (B.Com.)

Semester – III

Course Title: **Database Management System**	Coursecode:**24COMVC311**
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 -

- Explain the various database concepts and the need for database systems.
- Identify and define database objects, enforce integrity constraints on a database using DBMS.
- Demonstrate a Data model and Schemas in RDBMS.
- Identify entities and relationships and draw ER diagram for a given real-world problem.
- Convert an ER diagram to a database schema and deduce it to the desired normal form.
- Formulate queries in Relational Algebra, Structured Query Language (SQL) for database manipulation.
- Explain the transaction processing and concurrency control techniques.

Unit	Description	Hours
1	**Database Architecture:** Introduction to Database system applications. Characteristics and Purpose of database approach. People associated with Database system. Data models. Database schema. Database architecture. Data independence. Database languages, interfaces, and classification of DBMS.	10
2	**E-R Model:** Entity-Relationship modeling: E – R Model Concepts: Entity, Entity types, Entity sets, Attributes, Types of attributes, key attribute, and domain of an attribute. Relationship between the entities. Relationship types, roles and structural constraints, degree and cardinality ratio of a relationship. Weak entity types, E -R diagram.	10
3	**Relational Data Model:** Relational model concepts. Characteristics of relations. Relational model constraints: Domain constrains, key constraints, primary & foreign key constraints, integrity constraints and null values. **Relational Algebra:** Basic Relational Algebra operations. Set theoretical operations on relations. JOIN operations Aggregate Functions and Grouping. Nested Sub Queries-Views. Introduction to PL/SQL & programming of above operations in PL/SQL	12
4	**Data Normalization:** Anomalies in relational database design. Decomposition. Functional dependencies. Normalization. First normal form, Second normal	12

	form, Third normal form. Boyce-Codd normal form.	
5	**Query Processing Transaction Management:** Introduction Transaction Processing. Single user & multiuser systems. Transactions: read & write operations. Need of concurrency control: The lost update problem, Dirty read problem. Types of failures. Transaction states. Desirable properties (ACID properties) of Transactions. Concurrency Control Techniques: Locks and Time stamp Ordering. Deadlock & Starvation.	12

References :

1. Fundamentals of Database Systems, Ramez Elamassri, Shankant B. Navathe, 7th Edition, Pearson, 2015
2. An Introduction to Database Systems, Bipin Desai, Galgotia Publications, 2010.
3. Introduction to Database System, C J Date, Pearson, 1999.
4. Database Systems Concepts, Abraham Silberschatz, Henry Korth, S.Sudarshan, 6thEdition, McGraw Hill, 2010.
5. Database Management Systems, Raghu Rama Krishnan and Johannes Gehrke, 3rd Edition, McGraw Hill, 2002

Note: Latest edition of text books may be used.

Bachelor of Commerce (B.Com.)

Semester – III

Course Title: **Fundamentals of Information Technology and Computers**	Coursecode:**24COMVC312**
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 -

- To understand the basic concepts and terminology of information technology and to identify issues related to information security

Unit	Description	Hours
1	**Introduction to Computers:** Introduction, Definition, Characteristics of computer, Evolution of Computer, Block Diagram Of a computer, Generations of Computer, Classification Of Computers, Applications of Computer, Capabilities and limitations of computer. Role of I/O devices in a computer system. Input Units: Keyboard, Terminals and its types. Pointing Devices, Scanners and its types, Voice Recognition Systems, Vision Input System, Touch Screen, **Output Units:** Monitors and its types. Printers: Impact Printers and its types. Non-Impact Printers and its types, Plotters, types of plotters, Sound cards, Speakers.	10
2	**Computer Arithmetic & Storage Fundamentals:** Binary, Binary Arithmetic, and Number System: Positional & Non Positional, Binary, Octal, Decimal, Hexadecimal, Converting from one number system to another. Primary Vs Secondary Storage, Data storage & retrieval methods. Primary Storage: RAM, ROM, PROM, EPROM, EEPROM. Secondary Storage: Magnetic Tapes, Magnetic Disks. Cartridge tape, hard disks, Floppy disks Optical Disks, Compact Disks, Zip Drive, Flash Drives.	10
3	**Software:** Software and its needs, Types of S/W. System Software: Operating System, Utility Programs Programming Language: Machine Language, Assembly Language, High Level Language their advantages & disadvantages. Application S/W and its types: Word Processing, Spread Sheets Presentation, Graphics, DBMS s/w.	12
4	**Operating System:** Functions, Measuring System Performance, Assemblers, Compilers and Interpreters. Batch Processing, Multiprogramming, Multi Tasking, Multiprocessing, Time Sharing, DOS, Windows, Unix/Linux.	12

5	**Understanding of Computer And Word Processing& Presentation (PPT):** What is Computer, Basic Applications of Computer; Components of Computer System, Central Processing Unit (CPU), VDU, Keyboard and Mouse, Other I/O Devices, Computer Memory, Concepts of Hardware and Software; Concept of Computing, Data and Information; Applications of IECT; Connecting keyboard, mouse, monitor and printer to CPU and checking power supply. Operating Computer using GUI Based Operating System: What is an OS?;Basics of Popular OS; The User Interface, Using Mouse; Using right Button of the Mouse and Moving Icons on the screen, Use of Common Icons, Status Bar, Using Menu and Menu-selection, Running an Application, Viewing of File, Folders and Directories, Creating and Renaming of files and folders, Opening and closing of different Windows; Using help; Creating Short cuts, Basics of OS Setup; Common utilities. Understanding Word Processing: Word Processing Basics; Opening and Closing of documents; Text creation and Manipulation; Formatting of text; Table handling; Spell check, language setting and thesaurus; Printing of word document. **Basics of presentation software:** Creating Presentation; Preparation and Presentation of Slides; Slide Show; Taking printouts of presentation / handouts.	12

References :

1. Introduction to Computers, Peter Norton, McGraw Hill , 2012.
2. Using Information Technology, Brian K williams, Stacey C. Sawyer, Tata McGraw Hill.

Web Resources:

1. https://online.stanford.edu/courses/soe-ycscs101-sp-computer-science-101
2. https://www.extension.harvard.edu/open-learning-initiative/intensive-introduction-computer-science.

Note: Latest edition of text books may be used.

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

Course Title: **Accounting Software – Tally**	Course code: **24COMVS301**
Total Contact Hours: **30**	Course Credits**: 2**
Internal Assessment Marks: **10**	Duration of SEE: **1.5 hours**
Semester End Examination Marks: **40**	

Pedagogy: Classroom Lectures, Tutorials, Seminar, Computer lab exercises etc.

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

- Learn about Tally's history, versions, key features, and improvements, with a focus on Tally Prime.
- Acquire the skills to install Tally, create a company, and configure settings to match business requirements.
- Gain proficiency in creating and managing accounts, recording transactions, and organizing accounts using groups and sub-groups.
- Master advanced Tally features such as bank reconciliation, GST accounting, payroll, multi-currency transactions, and cost centre management.

Unit	Description	Hours
1	**Introduction to Tally and Basics of Accounting:** History, versions, and introduction to Tally Prime. Installing and setting up the software, creating a company, and configuring settings. Navigating through the Tally interface, menus, and different functional keys and basics of Accounting.	8
2	**Creating and Managing Accounts:** **Company Creation**: Setting up companies, configuring multiple companies in Tally. **Ledger Creation**: Creating and managing ledgers, understanding types of accounts (personal, real, nominal). **Groups and Sub-groups**: Creating, modifying, and understanding groups like assets, liabilities, income, and expenses. **Stock Groups, Stock Items, and Godown Creation**: Creating and managing stock items, units of measurement, and tracking inventory.	10
3	**Advanced Features in Tally:** **Voucher Entry**: Recording transactions through different vouchers (sales, purchase, payment, receipt, journal, etc.). **Payroll Management**: Setting up employee payroll, calculating salaries, and generating pay slips. **Generating Financial Reports**: Profit and Loss account, Balance Sheet, Trial Balance, and Cash Flow statements.	12
References:		

1 Kapoor, A. (2020). Tally ERP 9: A comprehensive guide to accounting and inventory management. 5th ed. McGraw-Hill Education.

2 Weygandt, J. J., Kimmel, P. D., &Kieso, D. E. (2019). Financial accounting: Tools for business decision making. 10th ed. Wiley.

3 Maheshwari, S. N., & Maheshwari, S. K. (2021). Financial accounting: A managerial perspective. 8th ed. Pearson.

4 Jain, P., & Narang, A. (2021). GST and accounting: A complete guide for businesses. 3rd ed. Taxmann Publications.

5 Tally Solutions. (2022). Tally Prime: An ultimate guide to accounting and taxation. Tally Solutions.

6 Chandra, S. (2020). Inventory management: Theory and practice. 4th ed. Sage Publications.

7 Horngren, C. T., Sundem, G. L., & Elliott, J. A. (2018). Introduction to financial accounting. 11th ed. Pearson.

8 Tally Solutions. (2023, June 14). Introduction to Tally Prime: History, versions, and features. Tally Solutions. https://www.tallysolutions.com/tally-prime-history

9 Tally Solutions. (2022). Tally Prime (Version 2.0) [Computer software]. Tally Solutions. https://www.tallysolutions.com

10 Government of India. (2020). GST guide for businesses. Ministry of Finance. https://www.gst.gov.in

11 Tally Solutions. (2021, December 10). How to install and set up Tally Prime: A step-by-step guide. Tally Solutions. https://www.tallysolutions.com/install-setup-tally-prime

Note: Latest Edition of textbooks may be used.

Bachelor of Commerce (B.Com.) Curriculum Structure										
Semester – IV										
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	24COMVC413	Business Laws	4	4	--	--	20	80	3
4	DCC	24COMVC414	Advanced Corporate Accounting	4	4	--	--	20	80	3
5	DCC	24COMVC415	Web Technologies	4	3	--	2	20	80	3
6	DCC	24COMVC416	E - Commerce	4	3	--	2	20	80	3
7	SEC	24COMVS402	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.)
Semester – IV

Course Title: **Business Laws**	Course code: **24COMVC413**
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 -

- Understand the law contract and elements of contracts.
- Differentiate between the offer, acceptance and consideration.
- Predict possible developments in the intellectual property rights in the upcoming days

Unit	Description	Hours
1	**Law of Contract:** Indian Contract Act 1872 – definition of contract – types of contract – essential elements of valid contract – agreements expressly declared void, doctrine of privity of contract – quasi-contract.	12
2	**Offer, Acceptance and Consideration: Offer –** Definition – legal rules of offer –revocation of offer – **Acceptance** – definition, legal rules of acceptance –revocation of acceptance – **Consideration** – definition – essentials of validconsideration – exceptions to the rule 'No consideration No Contract'.	10
3	**Capacity of Parties:** Definition – essentials, minor - definition – legal rulesrelating to minor, unsound mind person – definition – types of unsound mindperson, disqualified persons – definition – types of disqualified persons.	12
4	**Free Consent:** Definition–coercion – undue influence – misrepresentation – mistake & fraud, meaning and types. Performance of Contract – meaning andtypes, discharge of contract – meaning and modes of discharge of contract-breachof contract – remedies for breach of contract.	12
5	**Sale of Goods Act:** Definition, essentials, kinds of goods, un-paid seller and rightof unpaid seller. **Intellectual Property Rights** - meaning – objectives and scope, **Right to Information Act** - objectives and scope.	10

References:

1. Mercantile Law -N.D. Kapoor
2. Business Laws - Gulshan and Gulshan
3. Business Laws - B S Raman
4. ICAI and ICWAI Course Materials
5. Handouts/ amendment notes issued from time to time by the Board of Law

Note: Latest edition of text books may be used.

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

Course Title: **Advanced Corporate Accounting**	Course code: **24COMVC414**
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 -

- To acquaint the students with accounting issues on bank accounts.
- To acquaint the students with accounting issues on company accounts.
- To acquaint the students with accounting issues on liquidation accounts.
- Understand about the self-balancing ledger.

Unit	Description	Hours
1	**Accounts of Banking Companies -** Preparation of Profit and Loss Account and Balance Sheet in accordance with the latest amendments to Banking Regulation Act. Special provisions of the Banking Regulation Act regarding disposal of non-banking assets- Share capital and preference shares- Restriction regarding payment of dividend and reserve fund- System of keeping books**.**	12
2	**Redemption of Preference Shares -** Meaning-Legal requirements of redemption of preference shares-Accounting entries connected with the redemption of preference shares.	10
3	**Accounts of Holding Company -** Meaning of Holding Company and Subsidiary– meaning of important terms – Requirement of Holding Companies under Companies Act – preparation of consolidated Balance Sheet with special adjustment regarding unrealized profit on Trading Stock, unrealized profit on fixed assets – inter-company elimination and adjustment – chart showing, minority interest in subsidiary company and calculation of capital reserve or goodwill.	12
4	**Accounts of Liquidation Of Companies -** Meaning- Differences between winding up and liquidation – Modes of liquidation- Preparation of Liquidators final statements of accounts-(Numerical Problems)	12
5	**Self-balancing Ledgers** - Meaning and advantages- steps to introduce self-balancing system-preparation of different types of ledger accounts – transfer from one ledger to another.(Numerical Problems).	10

References:

1 Maheshwari, S. N. (n.d.). Financial Accounting. Vikas Publishing House.

2 Shukla, M., & Grewal, T. S. (n.d.). Financial Accounting. S. Chand & Company Ltd.

3 Raman, B. S. (n.d.). Financial Accounting. S. Chand & Company Ltd.
4 Gupta, R. L., & Radhaswamy, M. (n.d.). Advanced Accounting (Vol. 1 & 2). S. Chand & Company Ltd.
5 Grewal, T. S. (n.d.). Introduction to Accountancy. S. Chand & Company Ltd.

Note: Latest edition of textbooks may be used.

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

Course Title: **Web Technologies**	Course Code: **24COMVC415**
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 -

- Gain skills of usage of Web Technologies to design Web pages.

Unit	Description	Hours
1	**Introduction:** Introduction to web technology – HTML – types of HTML tags-basic Structure of HTML –Web design principles – HTML attributes – styles – Hypertext - Formatting text – Forms & formulating instructions & formulation elements – Commenting code – Back grounds – Images-Hyperlinks – Lists –Tables – Frames.	10
2	**An Over View Of Dynamic Web Pages & Dynamic Web Page:** An over view of dynamic web pages – technologies: Introduction to Dynamic HTML programming - Cascading style sheets (CSS) – types and advantages of CSS – CSS basic syntax and structure - Changing Text and Attributes - Dynamically changing style - Text Graphics and placements - Creating multimedia effects with filters and Transactions.	10
3	**Java Script:** Java Script: Introduction - Client side Java script - Server side Java script - Core features – Data types and variables – Operators - Expressions and statements – Functions – Objects – Array -Date and math related objects - Document object model – Event handling.	12
4	**Events & Event Handlers:** Events and Event Handlers: General information about Events – Event – OnAbort – OnClick - Ondbl click - Ondrag drop – Onerror - Onfocus - Onkey Press – Onkey Up – Onload – OnmouseDown – Onmouse Move - Onmouse Out – Onmouse Over - Onmove - Onrest – Onresize -Onselect - Onsubmit - Onunload.	12
5	**Extensible Markup Language (XML):** Extensible Markup Language (XML): Introduction - Creating XML Documents - XML style Sheet – Hyperlinks in XML Document Object Model - XML Query Language.	12

References:

1. Web Technology: IndrakantiSekhar, V.N. Battu, Himalaya Publishers.
2. Internet & World Wide Web How to Program: Deitel&Deitel,Pearson.
3. Web programming: ChrisBates.

4. HTML & XML An Introduction NIIT, PHI.
5. HTML for the WWW with XHTML & CSS: Wlizabeth Castro, Pearson
6. Internet and Web Technologies: Raj Kamal, McGrawHill.
7. Web Technology: A Developer's Perspective: Gopalan & Sivaselvan, PHI.
8. Internet Technology and Web Page Design: R.Singh & M.Sonia, Kalyani.
9. Web Technology and Design by Xavier, New Age International Pub.

Note: Latest edition of text books may be used.

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

Course Title: **E- Commerce**	Course Code: **24COMVC416**
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 -

- To acquire conceptual and application knowledge of ecommerce.

Unit	Description	Hours
1	**Introduction:** E-Commerce: Meaning - Advantages & Limitations - E-Business: Traditional & Contemporary Model, Impact of E-Commerce on Business Models - Classification of E-Commerce: B2B - B2C - C2B - C2C -B2E - Applications of Ecommerce: E-Commerce Organization Applications - E-Marketing - E-Advertising - E-Banking - Mobile Commerce - E-Trading - E-Learning - E-Shopping.	12
2	**Frame Work of E-Commerce:** Framework of E-Commerce: Application Services - Interface Layers - Secure Messaging – Middleware Services and Network Infrastructure - Site Security - Firewalls & Network Security - TCP/IP – HTTP - Secured HTTP – SMTP - SSL. Data Encryption: Cryptography – Encryption – Decryption - Public Key - Private Key – Digital Signatures - Digital Certificates.	12
3	**Consumer Oriented E-Commerce Applications:** Introduction - Mercantile Process Model: Consumers Perspective and Merchant's Perspective – Electronic Payment Systems: Legal Issues & Digital Currency - E-Cash & E-Cheque - Electronic Fund Transfer(EFT) - Advantages and Risks - Digital Token-Based E-Payment System - Smart Cards.	12
4	**Electronic Data Interchange:** Introduction - EDI Standards - Types of EDI - EDI Applications in Business – Legal - Security and Privacy issues if EDI - EDI and E-Commerce - EDI Software Implementation.	10
5	**E-Marketing Techniques:** Introduction - New Age of Information - Based Marketing - Influence on Marketing - Search Engines &Directory Services - Charting the On-Line Marketing Process – Chain Letters - Applications of 5P's(Product, Price, Place, Promotion, People) E-Advertisement - Virtual Reality & Consumer Experience -Role of Digital Marketing.	10

References:

1. Frontiers of Electronic Commerce: Ravi Kalakota, Andrew B Whinston, Pearson
2. E-Commerce: Tulasi Ram Kandula, HPH.

3. E-Commerce: An Indian Perspective: P.T. Joseph, S.J, PHI
4. Electronic Commerce, Framework Technologies & Applications: Bharat Bhasker, McGraw Hill
5. Introduction To E-Commerce: Jeffrey F Rayport, Bernard J. Jaworski: Tata McGraw Hill
6. E-Commerce & Computerized Accounting: Rajinder Singh, Er. KaisarRasheed, Kalyani
7. E-Commerce & Mobile Commerce Technologies: Pandey, SaurabhShukla, S. Chand
8. E-Business 2.0, Roadmap For Success: Ravi Kalakota, Marcia Robinson, Pearson
9. Electronic Commerce: Pete Loshin / John Vacca, Firewall Media
10. E-Commerce, Strategy, Technologies And Applications : David Whiteley, Tata Mcgraw Hill

Note: Latest edition of text books may be used.

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

Course Title: **Spread Sheets for Business Data Analysis – MS Excel**	Course code: **24COMVS402**
Total Contact Hours: **30**	Course Credits**: 2**
Internal Assessment Marks: **10**	Duration of SEE: **1.5 hours**
Semester End Examination Marks: **40**	

Pedagogy: Classroom Lectures, Tutorials, Seminar, Computer lab exercises etc.

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

- Navigate the MS Excel interface and manage worksheets effectively.
- Input, format, and customize data for business use.
- Use basic and advanced Excel functions for data analysis.
- Perform financial analysis and create data visualizations.

Unit	Description	Hours
1	**Introduction to MS Excel and Basic Data Handling:** Overview of MS Excel interface: Ribbons, menus, and tabs**, Basic worksheet management**- Creating, saving, and opening workbooks**,** Navigating through cells, rows, and columns**. Data Entry and Formatting-** Basic data entry: Text, numbers, and dates**.** Cell formatting: Font styles, alignment, borders, and colours**.** Number formatting: Currency, percentages, dates, and custom formats**.**	6
2	**Intermediate Data Analysis and Excel Tools:** **Basic Functions and Formulas:** Arithmetic functions: SUM, AVERAGE, MIN, MAX, COUNT and Basic formulas and their usage in business data**. Advanced Excel Functions**- Lookup and reference functions- VLOOKUP, HLOOKUP, INDEX, MATCH. Logical functions- IF, AND, OR. **Pivot Tables and Pivot Charts-**, Creating and modifying Pivot Tables for data analysis, Using Pivot Charts to visualize aggregated data, Grouping data in Pivot Tables for detailed insights.	12
3	**Advanced Data Analysis and Reporting in Excel:** **Financial Analysis Functions**- Using financial functions: NPV, IRR, PMT for investment analysis, Calculating loan repayments, future value, and present value. **Statistical Analysis-**Descriptive statistics: Mean, median, mode, standard deviation. **Data Visualization-**Introduction to charts: Bar charts, line charts, pie charts, Chart formatting for visual appeal and clarity, Creating simple visualizations for business reports.	12

References:

1 Walkenbach, J. (2018). Excel 2019 Bible: The comprehensive tutorial resource. Wiley.
2 Excel Campus. (2020). Excel formulas and functions: The step-by-step guide to mastering Excel formulas. Excel Campus.
3 Jelen, B., & Alexander, M. (2018). Excel 2019 for business statistics. Pearson.
4 Excel Easy. (n.d.). Excel tutorial: The complete guide. Retrieved from https://www.excel-easy.com
5 Tushar, P. (2017). Excel for finance and accounting: A practical guide. McGraw-Hill Education.
6 Chandoo, P. (2021). Excel dashboards and reports: The step-by-step guide. Chandoo.org.
7 Smith, J. D. (2020). Mastering Excel for business analysis. Excel Press.
8 Johnson, A. M. (2019). Practical applications of Excel functions. Data World Publishing.
9 Brown, L., & White, P. R. (2021). Advanced Excel techniques for professionals. Tech Books.
10 Excel Solutions. (n.d.). A comprehensive guide to Excel basics. Retrieved from https://www.excel-solutions.com
11 Turner, E. J. (2018). Excel for financial analysis and reporting. Finance Press.
12 Lee, C. R. (2022). Data visualization and reporting using Excel. VisualTech Publishing.

Note: Latest Edition of textbooks may be used.

Bachelor of Commerce (B.Com.) Curriculum Structure										
Semester – V										
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	24COMVC517	Marketing Management	4	4	--	--	20	80	3
2	DCC	24COMVC518	Cost Accounting	4	4	--	--	20	80	3
3	DCC	24COMVC519	Income Tax-I	4	4	--	--	20	80	3
4	DCC	24COMVC520	Computer Networks	4	3	--	2	20	80	3
5	DCC	24COMVC521	Python Programming	4	3	--	2	20	80	3
6	SEC	24COMVS503	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.)
Semester – V

Course Title: **Marketing Management**	Course code: **24COMVC517**
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 -

- Understand the basic concepts of marketing and asses the marketing environment.
- Analyse the consumer behaviour in the present scenario and marketing segmentation.
- Discover the new product development & identify the factors affecting the price of a product in the present context.
- Judge the impact of promotional techniques on the customers & importance of channels of distribution.
- Outline the recent developments in the field of marketing.

Unit	Description	Hours
1	**Introduction to Marketing:** Introduction-Nature-Scope-Importance of Marketing; Concepts & Approaches of Marketing: Need-Want-Demand-Customer Value-Customer Creation; Evolution of marketing; Selling vs Marketing; Marketing Environment: Concept-importance-Micro and Macro Environment. Marketing Management-Meaning-importance.	12
2	**Consumer Behaviour:** 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; Product differentiation vs. market segmentation. **Marketing Mix:** Product-Price-Place & Promotion.	12
3	**Product and Product Planning:** Meaning, definition, objectives and components of product planning, product related concepts; meaning, features, product classification, product portfolio, product-line, Product Life Cycle, new product planning and development - meaning, definition, innovation and steps of new product development, reasons for failure of new product, success of new product development.	12
4	**Promotion and Distribution:** Nature and importance of promotion; Communication process; Types of promotion: advertising, personal selling, public relations & sales promotion, and their distinctive characteristics; Promotion mix and factors affecting promotion mix decisions. **Distribution Channels and Physical Distribution:** Channels of distribution - meaning and	12

	importance; Types of distribution channels; Functions of middle man; Factors affecting choice of distribution channel; Wholesaling and retailing; Types of Retailers; e-retailing, Physical Distribution.	
5	**Recent Developments in Marketing:** Customer Relationship Management (CRM) - customer satisfaction, mass marketing v/s target marketing, direct marketing,retail marketing, rural marketing, social marketing, green marketing e-marketing, and niche marketing.	08

References:

1. Marketing Management - Philip Kotler
2. Marketing - J.C. Gandhi
3. Marketing Management - T.Ramaswamy
4. Marketing Management - S.A.Sherlekar
5. Marketing Management –B S Raman

Note: Latest edition of text books may be used.

Bachelor of Commerce (B.Com.)

Semester – V

Course Title: **Cost Accounting**	Course code: **24COMVC518**
Total Contact Hours: 56	Course Credits: 4
Internal Assessment Marks: 20	Duration of SEE: 3 hours
Semester End Examination Marks: 80	

Pedagogy: Combination of lectures, GDs, assignments, et

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

- Outline the Procedure and documentations involved in procurement of materials and compute the value of Inventory
- Make use of payroll procedures and compute idle and overtime.
- Discussthe methods of allocation, apportionment and absorption of overheads..
- Prepare cost sheet and discuss cost allocation under ABC.

Unit	Description	Hours
1	**Introduction to Cost Accounting:** Meaning and definition, features, objectives, functions andsignificance of cost accounting; distinction between financial accounting and cost accounting; cost v/s price; cost objects, cost units and cost centers ; systems, methods and techniques of costaccounting; installation of cost accounting system; limitations of cost accounting **Classification of Costs** -Classification of Costs- element-wise, functional, behavioural, controllability, period -wise, identifiability and managerial classification of costs	10
2	**Material Cost Accounting:** Meaning, features, merits and applicability, preparation of cost sheet. Materials: Meaning, Importance and Types of Materials – Direct and Indirect Material, Material control. - Inventory control Technique of inventory control, problems on level setting and EOQ. Procurement- Procedure for procurement of materials and documentation involved in materials accounting –Material Storage: Duties of Store keeper, pricing of material issues, preparation of Stores Ledger Account – FIFO, LIFO, Simple Average Price and Weighted Average Price Methods (Numerical Problems).	12
3	**Labour Cost Accounting:** Introduction – Labour Cost – types of labour cost- Labour Cost Control – time keeping and time booking and Payroll Procedure - Preparation of Payroll: Idle Time Causes and Treatment of Normal and Abnormal Idle time, Over Time Causes and Treatment, Methods of Wage Payment: Time rate system and piece rate system, and the Incentive schemes- Halsey plan, Rowan plan and Taylor differential piece rate system. (Numerical	12

	Problems)	
4	**Overhead Accounting:** Introduction- Meaning and Classification of Overheads; Accounting and Control of Manufacturing Overheads: Estimation and Collection, Cost Allocation, Apportionment, Re-apportionment and Absorption of Manufacturing Overheads; Problems on Primary and Secondary overheads distribution using Reciprocal Service Methods (Repeated Distribution Method and Simultaneous Equation Method); Problems on Machine Hour Rate. (Numerical Problems)	12
5	**Reconciliation of Cost and Financial Accounts:** Introduction – meaning of reconciliation, Reasons for differences in Profits under Financial and Cost Accounts; Procedure for Reconciliation – Ascertainment of Profits as per Financial Accounts and Cost Accounts and Reconciliation of Profits of both sets of Accounts– Preparation of Reconciliation Statement (Numerical Problems)	10

References:

1. Jain and Narang, Principles of Cost Accounting, Kalyani Publishers, New Delhi
2. M N Arora, A Textbook of Cost and Management Accounting, Vikas, New Delhi
3. S N Maheswari, Cost Accounting, Sultan Chand, New Delhi.
4. Ravi M. Kishore, Cost and Management Accounting, Taxmann Publications, New Delhi
5. Publications
6. Khan and Jain, Cost and Management Accounting, TMH, New Delhi.
7. M C Shukla, Cost Accounting – Text and Problems; S Chand, New Delhi
8. V K Saxena and C D Vashist, Advanced Cost and Management Accounting, Sultan Chand, NewDelhi
9. Charles T Horngren, Srikant Datar and Madhav Rajan, Cost Accounting, Pearson , New Delhi
10. Jawahar Lal, Seema Srivastava and Manisha Singh, Cost Accounting – Text, Problems and Cases,McGraw Hill, New DelhiGupta, Sharma and Ahuja, Cost Accounting, FK Publications, New Delhi.

Note: Latest Edition of text books may be used.

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

Course Title: **Income Tax-I**	Course code: **24COMVC519**
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 -

- Identify the origin and evolution of income tax law in India
- Comprehend the procedure for computation of Total Income and tax liability of an individual.
- Describe the provisions for determining the residential status of an Individual.
- Explain the meaning of salary, perquisites, profit in lieu of salary, allowances and various retirement benefits.
- Compute the income from house property for different categories of house properties.
- Describe the procedure for computation of income from business and other Profession.

Unit	Description	Hours
1	**Introduction:** History of Income Tax in India – Meaning of Tax – Objectives ofTaxation – Agricultural income – Assessee – Individual – Income – Gross TotalIncome – Total Income – Assessment year – Previous year.**Tax Free Income** – under Section 10 (2), 10 (2A), 10(5), 10(10), 10(10A),10(10AA).	10
2	**Residential Status and Incidence of Tax:** Introduction – Residential status of an individual. Determination of residential status of an individual. Incidence of tax or Scope of Total income. Problems on computation of Gross total Income of an individual.	12
3	**Income from Salary:** Introduction - Meaning of Salary -Basis of charge Definitions–Salary, Perquisites and profits in lieu of salary - Provident Fund. Retirement Benefits – Gratuity, pension andLeave salary. Deductions and Problems on Computation of Taxable Salary	12
4	**Income from House Property:** Introduction - Basis for charge - Deemed owners -Houseproperty incomes exempt from tax, composite rent and unrealized rent. Annual Value –Determination of Annual Value - Deductions from Annual Value - Problems on Computation of Income from House Property.	10
5	**Profits and Gains of Business and Profession:** Introduction - Meaning and definition of Business, Profession and Vocation. - Expenses Expressly allowed - Expenses Expressly Disallowed - Allowable and disallowable losses, Expenses allowed on payment basis. Problems on computation of income from business of	12

	a sole trading concern - Problems oncomputation of income from profession: Medical Practitioner - Advocate and Chartered Accountants.	

References:

1. Ahuja G.K. & Ravi Gupta., Systematic Approach to Income Tax and Central Sales Tax, Bharath
2. Law House, New Delhi.
3. SinghaniaVinod K and Singhania Monica., Direct Tax Planning and Management, Taxmann Publications, New Delhi.
4. Lakhotia R.N., Corporate Tax Planning, Vision Publications, New Delhi.
5. Lal B.B. and Vashisht, Direct Taxes, Pearson Education.
6. Mehrotra H.C. and Goyal S.P., Income Tax Law and Practice, SahityaBhavan Publications, Agra.
7. Circulars issued by CBDT
8. Income Tax Rules, 1962.

Note: Latest edition of text books may be used.

Bachelor of Commerce (B.Com.)

Semester – V

Course Title: **Computer Networks**	Course code: **24COMVC520**
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 -

- Students should be understand and explore the basics of Computer Networks and Various Protocols.
- Student will be in a position to understand the World Wide Web concepts.
- Students will be in a position to administrate a network and flow of information further
- Student can understand easily the concepts of network security and Mobile

Unit	Description	Hours
1	**Introduction:** Network, Uses of Networks, Types of Networks, Reference Models: TCP/IP Model, The OSI Model, Comparison of the OSI and TCP/IP reference model. Architecture of Internet. Physical Layer: Guided transmission media, Wireless transmission media, Switching	12
2	**Data Link Layer:** Design issues, Error Detection & Correction, Elementary Data Link Layer Protocols, and Sliding window protocols. Multiple Access Protocols - ALOHA, CSMA,CSMA/CD, CSMA/CA, Collision free protocols, Ethernet- Physical Layer, Ethernet Mac Sub layer, Data link layer switching: Use of bridges, learning bridges, spanning tree bridges, repeaters, hubs, bridges, switches, routers and gateways.	10
3	**Network Layer:** Network Layer Design issues, store and forward packet switching connection less and connection oriented networks-routing algorithms-optimality principle, shortest path, flooding, Distance Vector Routing, Count to Infinity Problem, Link State Routing, Path Vector Routing, Hierarchical Routing; Congestion control algorithms, IP addresses, CIDR, Subnetting, Super Netting, IPv4, Packet Fragmentation, IPv6 Protocol, Transition from IPv4 to IPv6, ARP, RARP.	12
4	**Transport Layer:** Services provided to the upper layers elements of transport protocol addressing connection establishment, Connection release, Error Control & Flow Control, Crash Recovery. The Internet Transport Protocols: UDP, Introduction to TCP, The TCP Service Model, The TCP Segment Header, The Connection Establishment, The TCP Connection Release, The TCP Sliding Window, The TCP Congestion Control Algorithm.	12
5	**Application Layer:** Introduction, providing services, Applications layer paradigms: Client server model, HTTP, E-mail, WWW, TELNET, DNS; RSA algorithm.	10
References:		

1. Computer Networks - Andrew S Tanenbaum, 4th Edition, Pearson Education.
2. Data Communications and Networking - Behrouz A. Forouzan, Fifth Edition TMH, 2013.
3. An Engineering Approach to Computer Networks - S. Keshav, 2nd Edition, Pearson Education.
4. Understanding communications and Networks, 3rd Edition, W. A. Shay, Cengage Learning.
5. Computer Networking: A Top-Down Approach Featuring the Internet, James F. Kurose, K. W. Ross, 3rd Edition, Pearson Education.

Note: Latest edition of text books may be used.

Bachelor of Commerce (B.Com.)

Semester – V

Course Title: **Python Programming**	Course code: **24COMVC521**
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 -

- Setup python to develop simple applications
- Understand the basic concepts in Python Programming.
- Learn how to write, debug and execute Python programs.
- Understand and demonstrate the use of advanced data types such as tuples, dictionaries and lists, Tuples and Sets.
- Design solutions for problems using object-oriented concepts in Python.
- Use and apply the different Python Libraries for GUI Interface, Data Analysis and Data Visualization.
- Extend the knowledge of python programming to build successful career in software development.

Unit	Description	Hours
1	**Introduction:** Features and Applications of Python; Python Versions; Installation of Python; Python Command Line mode and Python IDEs; Simple Python Program. **Python Basics:** Identifiers; Keywords; Statements and Expressions; Variables; Operators; Precedence and Association; Data Types; Indentation; Comments; Built-in Functions- Console Input and Console Output, Type Conversions; Python Libraries; Importing Libraries with Examples. **Python Control Flow:** Types of Control Flow; Control Flow Statements- if, else, elif, while loop, break, continue statements, for loop Statement; range () and exit () functions.	12
2	**Exception Handling:** Types of Errors; Exceptions; Exception Handling using try, except and finally. **Python Functions:** Types of Functions; Function Definition- Syntax, Function Calling, Passing Parameters/arguments, the return statement; Default Parameters; Command line Arguments; Key Word Arguments; Recursive Functions; Scope and Lifetime of Variables in Functions. **Strings:** Creating and Storing Strings; Accessing Sting Characters; the str () function; Operations on Strings- Concatenation, Comparison, Slicing and Joining, Strings; Python String Methods.	10
3	**Lists:** Creating Lists; Operations on Lists; Built-in Functions on Lists; Implementation of Stacks and Queues using Lists; Nested Lists. **Dictionaries:** Creating Dictionaries; Operations on Dictionaries; Built-in Functions on Dictionaries; Dictionary Methods;	12

	Populating and Traversing Dictionaries. **Tuples and Sets:** Creating Tuples; Operations on Tuples; Built-in Functions on Tuples; Tuple Methods; Creating Sets; Operations on Sets; Built-in Functions on Sets; Set Methods.	
4	**File Handling:** File Types; Operations on Files– Create, Open, Read, Write, Close Files; File Names and Paths; Format Operator. **Object Oriented Programming:** Classes and Objects; Creating Classes and Objects; Constructor Method; Classes with Multiple Objects; Objects as Arguments; Objects as Return Values; Inheritance- Single and Multiple Inheritance, Multilevel and Multipath Inheritance; Encapsulation- Definition, Private Instance Variables; Polymorphism- Definition, Operator Overloading.	12
5	**GU Interface:** The Tkinter Module; Window and Widgets; Layout Management- pack, grid and place. **Python SQLite:** The SQLite3 module; SQLite Methods- connect, cursor, execute, close; Connect to Database; Create Table; Operations on Tables- Insert, Select, Update. Delete and Drop Records. **Data Analysis:** NumPy- Introduction to NumPy, Array Creation using NumPy, Operations on Arrays; Pandas Introduction to Pandas, Series and Data Frames, Creating Data Frames from Excel Sheet and .csv file, Dictionary and Tuples. Operations on Data Frames. **Data Visualisation:** Introduction to Data Visualisation; Matplotlib Library; Different Types of Charts using Pyplot- Line chart, Bar chart and Histogram and Pie chart.	10

References:

1. Think Python How to Think Like a Computer Scientist, Allen Downey et al., 2nd Edition, 2015, Green Tea Press. Freely available online@ https://www.greenteapress.com/thinkpython/thinkCSpy.pdf
2. Introduction to Python Programming, Gowrishankar S et al.,2019, CRC Press.
3. Python Data Analytics: Data Analysis and Science Using Pandas, matplotlib, and the Python Programming Language, Fabio Nelli, 2015, Apress®.
4. Advance Core Python Programming, Meenu Kohli, 2021, BPB Publications.
5. Core PYTHON Applications Programming, Wesley J. Chun, 3rd Edition, 2012, Prentice Hall.
6. Automate the Boring Stuff, Al Sweigart, 2015, No Starch Press, Inc.
7. Data Structures and Program Design Using Python, D Malhotra et al., 2021, MercuryLearning and Information LLC.
8. http://www.ibiblio.org/g2swap/byteofpython/read/
9. https://docs.python.org/3/tutorial/index.html

Note: Latest edition of text books may be used.

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

Course Title: **Business Research Methods**	Course code**: 24COMVS503**
Total Contact Hours: **56**	Course Credits**: 2**
Internal Assessment Marks: **20**	Duration of SEE: **3 hours**
Semester End Examination Marks: **80**	

Pedagogy: Classroom Lectures, Tutorials, Seminar, Computer lab exercises etc.

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

- Awareness about how to carry on research
- Knowledge about framing a research design and collection of data
- Knowledge about how to analyse the data collected and report writing under different situations

Unit	Description	Hours
1	**Introduction:** Meaning-objectives – Research Categories (Basic Research and Applied Research)-Types of research(Descriptive, Analytical, Applied, Fundamental, Quantitative, Qualitative, Conceptual and Empirical research) - research approaches(Quantitative and Qualitative Approaches) - research methods Vs research methodology- Research Process	12
2	**Defining the Research Problem**: Meaning - selecting the problem – techniques involved in defining the problem- formulating of the problem- formulation of hypothesis (concept only)- Developing the research plan. **Research Design**: Meaning - need - features important concepts relating to research design -types of research design (Exploratory and Conclusive Research Design) - basic principles of experimental designs	12
3	**Sampling:** Meaning - need - census and sample survey - sampling designs - probability sampling (simple random, systematic, stratified, cluster, area multistage, sequential sampling methods)- non probability sampling (convenience, snowball, judgmental, case study. Quota sampling methods)	10
4	**Data collection and processing:** Collection of primary data - collection of data through questionnaire- construction of a questionnaire- and schedules - secondary data - qualitative techniques of data collection – interview, Case study Method, observation - tabulation of data- Difference between primary and secondary data.	10
5	**Analysis and interpretation of data and research reporting:** Meaning of interpretation - techniques of interpretation - significance of report writing - steps - layout of the research report - types of reports -precautions while writing research reports documentation and bibliography	12

References:

1. C.R. Kothari, Research Methodology.
2. O.R. Krishna Swamy, Research Methodology
3. Wilkinson and Bhandarkar, Methodology and techniques of social research
4. Sadhu Sing, research methodology in social sciences
5. V.P. Michael, Research Methodology in Management
6. Willium M.K. Trochim, Research Methods, Bzantra.

Note: Latest Edition of textbooks may be used.

Bachelor of Commerce (B.Com.) Curriculum Structure										
Semester – VI										
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	24COMVC622	Costing Methods and Techniques	4	4	--	--	20	80	3
2	DCC	24COMVC623	Income Tax-II	4	4	--	--	20	80	3
3	DCC	24COMVC624	Management Accounting	4	4	--	--	20	80	3
4	DCC	24COMVC625	Internet and E-Governance	4	3	--	2	20	80	3
5	DCC	24COMVC626	Data Analysis using SPSS	4	3	--	2	20	80	3
6	SEC	24COMVS604	Project on python programming/KJK Courses 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 Vocational Computer Studies Programme				144				760	3040	
Total Credits and Marks for B.Com. in Vocational Computer Studies Programme				**144**				**3800**		

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

Course Title: **Costing Methods and Techniques**	Course code: **24COMVC622**
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 -

- Explain different methods of costing.
- Determination of cost by applying different methods of costing.
- Prepare flexible and cash budget with imaginary figures
- Analyse the processes involved in standard costing

Unit	Description	Hours
1	**Contract Costing:** Meaning- Definition- Features- treatment of certain important costs- contract price-work in progress-work certified and uncertified. Recognition of profits on incomplete contracts. Escalation clause.	12
2	**Process Costing:** Meaning, features and application Treatment of process losses – Normal losses and abnormal losses– abnormal gain. **Accounting for joint and by-products** – Meaning – Objectives and application-Accounting for joint and by products.	10
3	**Operating Costing:** Meaning, features -Classification of Operating cost-Preparation of operating cost sheet of Transport undertaking only	12
4	**Marginal Costing:** Meaning, definitions, features, application, merits and demerits of marginalcosting; marginal costing v/s absorption costing; marginal costing equation; Cost-Volume-ProfitAnalysis – meaning and assumptions; Break Even Point and BE Analysis; Contribution MarginRatio (Profit –Volume Ratio), Margin of Safety and angle of incidence, BE Charts.	12
5	**Standard Costing:** Introduction-Meaning- Definition-Standard cost V/s Budgetary control-Merits and demerits – Variance analysis-Numerical Problems on Materials and Labour Variances only	10

References:

1. Jain and Narang, Principles of Cost Accounting, Kalyani Publishers, New Delhi
2. M N Arora, A Textbook of Cost and Management Accounting, Vikas, New Delhi
3. S N Maheswari, Cost Accounting, Sultan Chand, New Delhi.
4. Ravi M. Kishore, Cost and Managemen Accounting, Taxmann Publications, New Delhi Publications
5. Khan and Jain, Cost and Management Accounting, TMH, New Delhi.

6. M C Shukla, Cost Accounting – Text and Problems; S Chand, New Delho
7. V K Saxena and C D Vashist, Advanced Cost and Management Accounting, Sultan Chand, New Delhi
8. Charles T Horngren, Srikant Datar and Madhav Rajan, Cost Accounting, Pearson , New Delhi
9. Jawahar Lal, Seema Srivastava and Manisha Singh, Cost Accounting – Text, Problems and Cases,McGraw Hill, New Delhi
10. Gupta, Sharma and Ahuja, Cost Accounting, FK Publications, New Delhi.

Note: Latest Edition of text books may be used.

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

Course Title: **Income Tax-II**	Course code: **24COMVC623**
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 –

- Apply the provisions for determining the capital gains.
- Understand the concept of set-offs and carry forward of losses as per tax.
- Compute the income from other sources.
- Demonstrate the computation of total income of an Individual.
- Explain the assessment procedure and the power of income tax authorities.

Unit	Description	Hours
1	**Capital Gains:** Introduction - Basis for charge - Capital Assets - Types of capital assets –Transfer - Computation of capital gains – Short term capital gains and Long term capitalgains - Exemptions under section 54, 54B, 54EC, 54D, 54F, and 54G. Problems covering the above sections.	12
2	**Income from Other Sources:** Introduction - Incomes taxable under Head income othersources – Securities - Types of Securities - Rules for Grossing up. Ex-interest and cum-interest securities. Bond Washing Transactions - Computation of Income from other Sources	12
3	**Set Off and Carry Forward of Losses & Assessment of Individuals:** Introduction – Provisions of Set off and Carry Forward of Losses - Computation of Total Income and taxliability of an Individual.	10
4	**Computation of Total Income:** Individuals, HUF, Firms (practical problems).	12
5	**Assessment Procedure and Income Tax Authorities:** Introduction - Due date of filingreturns, Filing of returns by different assesses, E-filing of returns, Types of Assessment,Permanent Account Number -Meaning, Procedure for obtaining PAN and transactions forwhich quoting of PAN is compulsory. Income Tax Authorities, their Powers and duties.	10

References:

1. Ahuja G.K. & Ravi Gupta., Systematic Approach to Income Tax and Central Sales Tax, Bharath Law House, New Delhi.
2. Singhania Vinod K and Singhania Monica., Direct Tax Planning and Management, Taxmann Publications, New Delhi.
3. Singhania Vinod K., Direct Taxes: Law and Practice, Taxmann Publications, New Delhi.

4. Lakhotia R.N., Corporate Tax Planning, Vision Publications, New Delhi.
5. Lal B.B. and Vashisht, Direct Taxes, Pearson Education.
6. Mehrotra H.C. and Goyal S.P., Income Tax Law and Practice, Sahitya Bhavan Publications, Agra.
7. Circulars issued by CBDT
8. Income Tax Rules, 1962.

Note: Latest edition of text books may be used.

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

Course Title: **Management Accounting**	Course code: **24COMVC624**
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, Board work etc.

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

- Demonstrate the significance of management accounting in decision making.
- Analyse and interpret the corporate financial statements by using various techniques.
- Understand the trend percentages and comparative financial statements.
- Compare the financial performance of companies through ratio analysis.
- Narrate the latest provisions in preparing cash flow statement.
- Explain the classification and significance of ratio analysis.

Unit	Description	Hours
1	**Introduction to Management Accounting:** Introduction – Concept – Meaning and Definition - Significance - Scope - Objectives and Functions - Difference between FinancialAccounting, Cost Accounting and Management Accounting - Advantages and Limitationsof Management Accounting - Management Accountant: Role and Functions of Management Accountant.	10
2	**Analysis and Interpretation of Financial Statements:** Meaning and significance and objective of financial analysis; steps involved in financial analysis; analysis v/s interpretations, criteria of comparison; tools of financial analysis – trend analysis – comparative and common-size financial statements and preparation, ratio analysis and funds flow and cash flow analysis; limitations of financial analysis; financial analysis using inflation adjusted financial statements	12
3	**Ratio Analysis:** Introduction- Meaning and Definition of Ratio Analysis, Uses & Limitations of Ratio Analysis – Classification of ratios: Liquidity ratios: Current ratio, Liquid ratio and Absolute liquid ratio; Solvency ratios: Debt equity ratio, Proprietary ratioand Capital gearing ratio - Earning per share and return on capital employed; Profitability ratios: Gross profit ratio - Net profit ratio – Operating ratio, and Operating profit ratio.Turnover ratios: Inventory turnover ratio - Debtors turnover ratio Debt collection period -Creditors turnover ratio -Debt payment period, Assets turnover ratio, Earnings per share andPrice Earnings Ratio. Problems on Ratio Analysis - Preparation of financial statements withthe help of Accounting Ratios.	12

4	**Fund Flow Statement:** Concepts of funds, current liabilities, Meaning of fundflow statement, Importance of fund flow statement, Statement showing changes in working capital. Preparation of fund flow statement, sources and application offunds. Limitations of fund flow statement.	10
5	**Cash Flow Statement:** Introduction - Meaning and Definition, Merits and Demerits, differences between Fund flow and cash flow statements. Provisions of Ind AS 7. Procedureof cash flow statement, Concept of cash and cash equivalent. Classification of Cash flows, Preparation of cash flow statement as per Ind AS 7 (Indirect method only). Problems.	12

References:

1. Management Accounting - S.N. Maheswari
2. Management Accounting - J. Madegowda
3. Management Accounting – Agarwal
4. Cost and Management Accounting - Khan and Jain
5. Principles of Management Accounting - Pandey I.M
6. Advanced Management Accounting - Ravi M Kishore
7. Management Accounting and Financial Control,-Babatosh Banerjee
8. Management Accounting-Gupta and Sharma
9. Management Accounting-Bhattacharya

Note: Latest edition of text books may be used.

Bachelor of Commerce (B.Com.)

Semester – VI

Course Title: **Internet and E-Governance**	Course code: **24COMVC625**
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 -

- To study the concept, importance and models of E- Governance and Acquire skills required to seek services from Administration.

Unit	Description	Hours
1	**Internet:** Evolution, Concepts, Growth of Internet, ISP, ISP in India, Types of connectivity, Dial-up, leased line, DSL, Broad band, RF, VSAT etc., Methods of sharing of Internet connection, Use of proxy server. Internet Services: USENET, GOPHER, WAIS, ARCHIE and VERONICA, IRC, Conceptof Search Engines, Search engines types, searching the Web, Web Servers, TCPIP and other main protocols used on the Web. E-Mail: Concepts of e-mailing, POP and WEB Based E-mail, merits, address, Basics of Sending & Receiving, E-mail Protocols, Mailing List, Free E-mail services, e-mail serversand e-mail client programs.	12
2	**Introduction to E-Commerce:** Emergence of the Internet, Commercial use of the Internet, Emergence of World Wide Web, Advantages and Disadvantages of E Commerce, Transition to E-Commerce in India, E-Commerce opportunities for Industries	10
3	**Models:** Business Models for E-commerce, Models based on Relationship of Transaction Brokerage Model, Aggregator Model, Infomediary Model, and Community Model. Value Chain parties: B2C, B2B, C2C, C2B: Models based on Model, Manufacturer Model, Advertising Model, Subscription Model, Affiliate Model.	12
4	**E-Marketing versus Traditional Marketing:** Identifying Web Presence Goals, BrowsingBehavior Model,Online Marketing, E-advertising, Internet Marketing Trends, E-branding andE-Marketing strategies.	12
5	**E-Security:** Information system security, security on the internet, E-business Riskmanagement issues, information security environment in India.E-Payment Systems: Digital payment requirements, Digital Token based e-paymentsystems, properties of Electronic cash, risk and e-payment systems and designing E payment systems.Secure Business, Web store, Online Payment, Internet Barking. Security- E-commercesecurity issues, Cryptography, Digital Signature & Authentication protocol, DigitalCertificates. Online Security, Secure Electronic Transaction (SET)	10

References:

1. William A Shay, Understanding Data Communications and Networks, 2nd Edition, Thomson

Learning, Vikas Publishing House (1998)
2. Ravi Kalkota and Andrec Whinston, Frontiers of Electronic Commerce, Addision Wesley (1998)
3. Bharath Bhaskar, Electronic Commerce, Tata McGraw Hill (2003).

Note: Latest edition of text books may be used.

Bachelor of Commerce (B.Com.)

Semester – VI

Course Title: **Data Analysis using SPSS**	Course code: **24COMVC626**
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 -

- Effectively manage, analyze, and interpret data using SPSS, applying various statistical techniques to draw meaningful conclusions for business applications.

Unit	Description	Hours
1	**Introduction to SPSS :** Creating/retrieving SPSS data files and output files, different data types, scale of measurements, classification techniques Basics of SPSS, Data entry in SPSS, missing values, multi response Data transformation through SPSS: selection of cases, recoding of variables, identification of duplicate cases, compute variable, merge files	12
2	**Basic Statistics:** Statistics: Meaning, Application and limitation, Basic terminologies: Population, Sample, Variables and Attributes, Types of data: Primary data and Secondary data, Qualitative data and Quantitative data, Univariate data and Multivariate data, Discrete data and Continuous data, Concepts of measurement, Types of Scale: Nominal, Ordinal, Interval, and Ratio, Different methods of presenting data: Tabular representation, Diagrammatic representation, Graphical representation	10
3	**Exploratory Data Analysis:** Measures of Central tendency, Measures of dispersion, absolute and relative measures, Measures of skewness and kurtosis, Analysis of Bivariate data, Scatter diagram of bivariate data, Pearson correlation of co-efficient, Spearman's rank correlation (non-parametric measure of correlation), Case of ties, t-test for significance of correlation, simple linear regression and fitting of straight line	12
4	**Testing of Hypotheses**: Basics of Testing: Null and Alternative hypothesis, Simple and Composite hypothesis, Small sample and Large sample test, Tests concerning means, One Population, Univariate: t-test, z-test, Bivariate : Paired t-test, Two Populations: t-tests, z-tests, Chi-Square test, Single variance, Goodness of fit, Testing for independence of attributes, Graphical test for normality: QQ plot, Box plot, Histogram.	12
5	**Regression Analysis:** Introduction, Multiple linear regression, Validation of model, Residual analysis, Checking normality, Confidence interval for regression co-efficients, T-tests for related to regression co-efficients, Transformation to achieve linearity, Log transformation, Transformation to stabiles variance, Power transformation, Polynomial regression models, Multiple regression models, Types of Sampling, Sampling Errors and Non-sampling Errors	10

References:

1. "Discovering Statistics Using IBM SPSS Statistics" – Andy Field
2. "SPSS for Beginners" – Vijay Gupta
3. "SPSS Survival Manual" – Julie Pallant
4. "A Simple Guide to IBM SPSS Statistics" – Lee A. Kirkpatrick & Brooke C. Feeney
5. "Data Analysis Using SPSS" – Lokesh Vijayvargia

Note: Latest edition of text books 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., 10×2=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., 3×5=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., 3×15=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. (40×1= 40 marks)