

### III and IV Sem B.Com (Business Data Analytics) 2025-2026

<b>Semester III</b>								
<b>Sl. No.</b>	<b>Course Code</b>	<b>Title of the Course</b>	<b>Category of Courses</b>	<b>Teaching Hours per Week</b>	<b>SEE</b>	<b>IA</b>	<b>Total Marks</b>	<b>Credits</b>
1		<b>Language–I</b>	<b>Lang</b>	<b>4</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>3</b>
2		<b>Language–II</b>	<b>Lang</b>	<b>4</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>3</b>
3	<b>B.Com 3.1</b>	<b>Information Technology</b>	<b>Core</b>	<b>5</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>5</b>
4	<b>B.Com 3.2</b>	<b>Corporate Accounting – I</b>	<b>Core</b>	<b>5</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>5</b>
5	<b>B.Com 3.3</b>	<b>Direct Tax – I</b>	<b>Core</b>	<b>5</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>5</b>
6.	<b>B.Com 3.4</b>	<b>Digital Marketing/Personal Management</b>	<b>Elective (Any one)</b>	<b>3</b>	<b>40</b>	<b>10</b>	<b>50</b>	<b>2</b>
	<b>B.Com 3.5</b>	<b>Information Technology Lab</b>	<b>Compulsory</b>	<b>3</b>	<b>40</b>	<b>10</b>	<b>50</b>	<b>2</b>
				<b>29</b>				<b>25</b>

<b>Semester IV</b>								
<b>Sl. No.</b>	<b>Course Code</b>	<b>Title of the Course</b>	<b>Category of Courses</b>	<b>Teaching Hours per Week</b>	<b>SEE</b>	<b>IA</b>	<b>Total Marks</b>	<b>Credits</b>
1		<b>Language–I</b>	<b>Lang</b>	<b>4</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>3</b>
2		<b>Language–II</b>	<b>Lang</b>	<b>4</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>3</b>
3	<b>B.Com 4.1</b>	<b>Python Programming</b>	<b>Core</b>	<b>5</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>5</b>
4	<b>B.Com 4.2</b>	<b>Corporate Accounting – II</b>	<b>Core</b>	<b>5</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>5</b>
5	<b>B.Com 4.3</b>	<b>Direct Tax – II</b>	<b>Core</b>	<b>5</b>	<b>80</b>	<b>20</b>	<b>100</b>	<b>5</b>
6.	<b>B.Com 4.4</b>	<b>Real Estate Management/Logistics/Travel &amp; Tourism</b>	<b>Elective (Any one)</b>	<b>3</b>	<b>40</b>	<b>10</b>	<b>50</b>	<b>2</b>
	<b>B.Com 4.5</b>	<b>Python lab</b>	<b>Skill Enhancement</b>	<b>2</b>	<b>40</b>	<b>10</b>	<b>50</b>	<b>2</b>
				<b>28</b>				<b>25</b>

## **Curriculum for III Semester B.Com (Business Data Analytics)**

### **Course Contents:**

**3.1 Information Technology**

**3.2 Corporate Accounting – I**

**3.3 Direct Tax – I**

**3.4 Digital Marketing**

**Or**

**Personal Investment Management**

**3.5 Information Technology Lab**

<b>Group I</b> <b>Course-1</b> <b>BCom 3.1: Information Technology</b> <b>Theory/Week: 5 Hrs</b> <b>Credits: 5</b>		<b>60 Hours</b>  <i>I.A: 20</i> Exam: 80
<b>Learning Objective:</b> To impart the knowledge about the evolution of computers, classification, various peripherals of computers, types of software's etc. <b>Learning Outcome:</b> Able to identify various devices and their working principles.		
<b>UNIT I</b>		
	<b>Computer Basics:</b> Introduction, Characteristics computers, Evolution computers, Generation of computers, Classification of computers, the computer system, Application of computers. <b>Computer Architecture:</b> Introduction, Central processing unit- ALU, Registers, Control unit, system bus, main memory unit, cache memory, communication between various units of a computer system. <b>Components inside a computer system</b> – Motherboard, BIOS, Ports and Interfaces, Memory chips, Processors.	12hrs
<b>UNIT II</b>		
	<b>Computer memory and storage:</b> Introduction, memory representation, memory hierarchy, Random access memory, Types of RAMS, read-only memory, Types of ROM, RAM, ROM and CPU interaction. <b>Secondary Storage:</b> Types of secondary storage device - Magnetic tape, magnetic disk, Floppy disk, Hard disk, Advantages and disadvantages of magnetic disk, Optical disk, Types- CD, DVD,	12hrs
<b>UNIT III</b>		
	<b>Input devices:</b> Introduction, Types of input devices, Keyboard, Mouse, Track ball, Joystick light pen, Touch screen and track pad. Speech recognition, digital camera, webcam, flatbed scanner  <b>Output devices:</b> Types of output, Classification of output devices, Printers– Dot matrix, Ink-jet, Laser, Hydra, Plotter, Monitor – CRT, LCD, Differences between LCD and CRT	12hrs
<b>UNIT IV</b>		
	<b>Computer programming languages:</b> Introduction, Developing a program, Program development cycle, Types of programming languages, generation of programming languages, Features of a good programming language. <b>Computer software:</b> Introduction, software definition, relationship between software and hardware	12hrs
<b>UNIT V</b>		
	<b>MS-Office :</b> Introduction, Office user interface, Microsoft office Components MS-Word: Introduction, Starting MS-Word, Microsoft word Environment working with word documents, MS Excel, Microsoft Excel environment, working with Excel workbook, working with worksheet – Entering data, Excel formatting tips and Techniques, Presentation software: Introduction, PowerPoint environment, creating a new presentation.	1hrs

**Text Book:**

1. ITL Education Solution Limited, **Introduction to Information Technology**, Pearson- Second Edition.
2. How to Solve it by Computer, R G Dromey, Prentice Hall
3. M. Morris Mano, Digital Logic and Computer design, PHI, 2015

**Reference Books:**

1. **A K SHARMA, Computer Fundamentals and Programming in C, Universities Press, 2nd edition, 2018**
2. Peter Norton, **Introduction to Computers**, 7th edition, Tata McGraw Hill Publication, 2011
3. Anita Goel, **Computer Fundamentals**, Pearson Education, 2011.
4. Pradeep K. Sinha and Priti Sinha, Computer Fundamentals, Sixth Edition,BPB Publication.
5. David Riley and Kenny Hunt, Computational thinking for modern solver,Chapman & Hall/CRC.
6. J. Glenn Brookshear, Computer Science: An Overview, Twelfth Edition,Addison- Wesley

<b>CORPORATE ACCOUNTING-I</b>			
Course Code	<b>B.Com 3.2</b>	IA Marks	<b>20</b>
Course Type (Theory/Practical/Integrated)	Theory	End Sem Marks	<b>80</b>
		Total Marks	<b>100</b>
Teaching Hours/Week	<b>5hrs</b>		
Total Hours	<b>60hrs</b>	Credits	<b>05</b>
<b>Course Learning Objectives:</b> The objective of the course is to <ul style="list-style-type: none"> <li>• Comprehend the significance, necessity, and management of share underwriting</li> <li>• Understand the approach for calculating profit before incorporation.</li> <li>• Understand the valuation of intangible assets, particularly goodwill.</li> <li>• Understand the valuation of equities.</li> <li>• Prepare the financial accounts of companies in accordance with the Companies Act, 2013, along with current industry practices.</li> </ul>			
<b>Module-1 VALUATION OF GOODWILL</b>			<b>10 Hours</b>
<b>Introduction to Goodwill Valuation:</b> Definition and Significance of Goodwill, Determinants Affecting Goodwill Value, Situations Necessitating Goodwill Valuation.  <b>Valuation Methods for Goodwill:</b> Average Profit Method, Capitalisation of Average Profit Method, Super Profit Method, Capitalisation of Super Profit Method, Annuity Method			
<b>Module-2 VALUATION OF SHARES</b>			<b>12 Hours</b>
<b>Introduction to Share Valuation:</b> Definition and Significance of Share Valuation, Necessity for Share Valuation, Determinants Influencing Share Valuation.  <b>Methods of Share Valuation:</b> Intrinsic Value Method, Yield Method, Earning Capacity Method, Fair Value of Shares. <b>Specialised Subjects in Valuation:</b> Rights Offerings and the Valuation of Rights Offerings, Valuation of Warrants			
<b>Module-3 UNDERWRITING OF SHARES</b>			<b>12 Hours</b>
<b>Introduction to Underwriting:</b> Definition of Underwriting, SEBI Regulations Pertaining to Underwriting, Underwriting Commission. <b>Underwriter:</b> Roles of an Underwriter, Benefits of Underwriting. <b>Categories of Underwriting:</b> Designated Applications, Undesignated Applications. <b>Assessment of Liability in Underwriting Agreements:</b> Fully Underwritten Agreements, Partially Underwritten Agreements, Agreements with Firm Underwriting (including issues), Agreements without Firm Underwriting (including issues)			
<b>Module-4 FINAL ACCOUNTS OF A JOINT STOCK COMPANY</b>			<b>14 Hours</b>
<b>Preparation of Financial Statements for Companies:</b> Legal Requirements for Financial Statement Preparation, Schedule III of the Companies Act, 2013, IND AS-1: Presentation of Financial Statements. <b>Management of Distinct Items:</b> Tax Deducted at Source (TDS), Advance Tax Payment, Tax Provision, Depreciation, Interest on Debentures. Dividends - Regulations Concerning Dividend Disbursement and Allocation to Reserves. <b>Preparation of Financial Statements:</b> Statement of Profit and Loss (in accordance with Schedule III), Balance Sheet (in accordance with Schedule III)			
<b>Module-5 PROFIT PRIOR TO INCORPORATION</b>			<b>12 Hours</b>
<b>Introduction to Profit Prior to Incorporation:</b> Definition of Profit Prior to Incorporation, Computation of Sales Ratio, Computation of Time Ratio, Computation of Weighted Ratio. <b>Management of Expenditures:</b> Management of Capital Expenditure, Management of Revenue Expenditure. <b>Determination of Pre-Incorporation and Post-Incorporation Profits:</b>			

Compilation of Statement of Profit and Loss in accordance with Schedule III of the Companies Act, 2013, Compilation of Balance Sheet in accordance with Schedule III of the Companies Act, 2013
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**Books for reference:**

- ✓ M.C. Shukla, T.S. Grewal, and S.C. Gupta. Advanced Accounts. Vol.-II. S. Chand & Co., New Delhi
- ✓ S.N. Maheshwari, and S. K. Maheshwari. Corporate Accounting. Vikas Publishing House, New Delhi.
- ✓ Ashok Sehgal, Fundamentals of Corporate Accounting. Taxman Publication, New Delhi.
- ✓ V.K. Goyal and Ruchi Goyal, Corporate Accounting. PHI Learning.
- ✓ Jain, S.P. and K.L. Narang. Corporate Accounting. Kalyani Publishers, New Delhi.
- ✓ Bhushan Kumar Goyal, Fundamentals of Corporate Accounting, International Book House
- ✓ P. C. Tulsian and Bharat Tulsian, Corporate Accounting, S.Chand
- ✓ Amitabha Mukherjee, Mohammed Hanif, Corporate Accounting, McGraw Hill Education

<b>DIRECT TAX - I</b>			
Course Code	<b>B.Com 3.3</b>	IA Marks	20
Course Type (Theory/Practical/Integrated)	Theory	End Sem Marks	80
		Total Marks	100
Teaching Hours/Week	5 Hours		
Total Hours	60 Hours	Credits	5
<b>Course Learning Objectives:</b> The objective of the course is to <ul style="list-style-type: none"> <li>To familiarize the students with the Legal Provisions and Procedural aspects of Income Tax.</li> <li>To equip the students with a comprehensive understanding of direct taxes, their applications, and the tax laws governing them.</li> <li>To be taught with reference to the relevant amendments made to Direct Tax Laws of India by Finance Acts passed in the Parliament from time to time.</li> <li>Apply the knowledge of taxation in practical field.</li> </ul>			
<b>Module - 1: Introduction</b>			<b>10 Hours</b>
Definitions – Assessee – Person- Assessment Year and Previous Year – Income- Agricultural Income, Partial integration of Agricultural Income with Non-agricultural Income- Gross Total Income- Taxable Income (also known as Total Income) –Permanent Account Number (PAN)- Income tax rates of relevant assessment year for an individual assessee. Exposure to applying for PAN online. New Income Tax Bill – 2025.			
<b>Module-2: Residential Status</b>			<b>12 Hours</b>
Individual – HUF-Firm-Company-Determination of Residential Status of Individual-Incidence of Tax (scope of Total Income)-Meaning -Indian Income- Foreign Income- Deemed Income- Computation of Total Income based on residential status.			
<b>Module-3: Exempted incomes U/s 10 relating to computation of Salary Income</b>			<b>12 Hours</b>
Leave Travel Concession, Death cum Retirement Gratuity, Commuted Pension, Leave Encashment, Retrenchment Compensation, Receipts at the time of Voluntary Retirement, Foreign Allowances and Perquisites, Receipts from Life Insurance Policy, House Rent Allowance.			
<b>Module-4: Income from Salary</b>			<b>14 Hours</b>
Characteristics of salary income, meaning of salary for various purposes -allowances-perquisites and their valuation -tax free perquisites- Deductions under sec.16; Provident Fund – meaning & income tax provisions relating to Statutory Provident Fund, Recognized Provident Fund, Unrecognized Provident Fund, Superannuation Fund and Public Provident Fund; Computation of Income from Salary.			
<b>Module-5: Computation of Taxable Salary and Relevant Deductions U/s 80</b>			<b>12 Hours</b>
Problems on Computation of Taxable Salary and Deductions u/s 80C, 80CCC, 80CCD, 80CCE; Provisions relating to Deduction of Tax at Source (TDS) from Salaries u/s 192.			

<b>Course Outcomes:</b> At the end of the course the student will be able to:	
<b>Understand</b>	The structure of direct taxes in India
<b>Comprehend</b>	The income tax laws, procedures and regulations time to time.
<b>Apply</b>	The knowledge in calculation of tax liability and filing of returns

**Reference Books:**

Sl. No.	Title of the Book	Name of the Author/s	Name of the Publisher
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1	<b>Direct Taxes,</b>	Dr. Vinod K Singhania,	Taxmann's Publications.
2	<b>Income Tax Law and Practice,</b>	Dr. H.C.Mehrotra and Dr. S.P.Goyal,	Sahithya Bhavan Publication.
3	<b>Students Hand Book on Taxation</b>	T.N. Manoharan	Snow White Publications.
4	<b>Practical Approach to Income Tax</b>	Dr. Girish Ahuja and Dr. Ravi Gupta	Commercial Law Publishers (India) Pvt. Ltd.
5	<b>Direct Tax - I</b>	Dr. Ravi M.N., Dr. Suman Shetty N and Bhanuprakash B.E.	Professional Books publishers



<b>DIGITAL MARKETING</b>			
Course Code	<b>B.Com 3.4</b>	IA Marks	10
Course Type (Theory/Practical/Integrated)	Integrated	End Sem Marks	40
		Total Marks	50
Teaching Hours/Week	03		
Total Hours	36	Credits	02
<b>Course Learning Objectives:</b> The objectives of the course is to <ul style="list-style-type: none"> <li>• Introduce the fundamentals of digital marketing and its evolution.</li> <li>• Explore various digital marketing channels and tools.</li> <li>• Develop skills in content marketing, SEO, SEM, social media, and analytics.</li> <li>• Enable students to create, manage, and evaluate digital marketing campaigns.</li> </ul>			
<b>Module-1: Introduction to Digital Marketing</b>			<b>09 Hours</b>
Meaning and Evolution of Digital Marketing, Traditional Marketing vs. Digital Marketing, Components of Digital Marketing Ecosystem, Benefits and Challenges of Digital Marketing, Digital Marketing Trends and Career Opportunities.			
<b>Module-2 : Digital Marketing Channels and Strategies</b>			<b>09 Hours</b>
Meaning, Concept, Importance of Digital Marketing Channels, Website Planning and Development, Content Marketing Strategy, Email Marketing – Planning and Execution, Affiliate and Influencer Marketing, Mobile Marketing and App-based Marketing, Online Reputation Management (ORM)			
<b>Module-3 : Search Engine and Social Media Marketing</b>			<b>09 Hours</b>
Search Engine Optimization (SEO): On-page and Off-page Techniques, Search Engine Marketing (SEM) and Google Ads, Pay Per Click (PPC) Advertising, Social Media Platforms: Facebook, Instagram, LinkedIn, Twitter, YouTube, Social Media Campaign Planning and Management, Tools for Social Media Management			
<b>Module - 4: Web Analytics and Digital Campaign Planning</b>			<b>09 Hours</b>
Introduction to Web Analytics (Google Analytics, etc.), Key Metrics: Traffic, Conversion, Bounce Rate, Engagement, ROI Measurement in Digital Marketing, Budgeting and Media Planning for Campaigns, Legal and Ethical Aspects of Digital Marketing			

<b>Course Outcomes:</b> At the end of the course the student will be able to:	
<b>CO1</b>	Understand the basics and importance of digital marketing and Identify the key differences and advantages over traditional marketing.
<b>CO2</b>	Create and manage content strategies across platforms, Plan and execute email and mobile marketing campaigns.
<b>CO3</b>	Gain practical knowledge of SEO and SEM techniques, Design and monitor social media campaigns effectively.
<b>CO4</b>	Analyze and interpret data from digital campaigns, Plan and present a digital marketing strategy for a product or service.

#### Books for Reference

Sl. No.	Title of the Book	Name of the Author/s	Name of the Publisher
1	Understanding Digital Marketing	Damian Ryan	Kogan Page
2	Marketing 4.0: Moving from Traditional to Digital	Philip Kotler, Hermawan Kartajaya, Iwan Setiawan	Wiley

3	Digital Marketing	Dave Chaffey & Fiona Ellis-Chadwick	Pearson Education
4	Digital Marketing Essentials	Jeff Larson & Stuart Draper	Stukent
5	Digital Marketing for Dummies	Ryan Deiss & Russ Henneberry	Wiley
6	Social Media Marketing: A Strategic Approach	Melissa Barker, Donald Barker, Nicholas Bormann, Krista Neher	Cengage Learning
7	The Art of Digital Marketing	Ian Dodson	Wiley
8	Digital Marketing Strategy: An Integrated Approach to Online Marketing	Simon Kingsnorth	Kogan Page
9	SEO 2023: Learn Search Engine Optimization	Adam Clarke	Independently published

**Web links and Video Lectures (e-Resources):**

- **Google Digital Garage** – <https://learndigital.withgoogle.com>
- **HubSpot Academy** – <https://academy.hubspot.com>
- **Simplilearn – Digital Marketing Full Course:** <https://www.youtube.com/watch?v=nU-IIXBWS4>
- **Marketing91 (India-based):** <https://www.youtube.com/@Marketing91>
- **Coursera – Digital Marketing Specializations:** <https://www.coursera.org/specializations/digital-marketing>

<b>Personal Investment Management</b>			
Course Code	<b>B.Com 3.4</b>	IA Marks	10
Course Type (Theory/Practical/Integrated)	Integrated	End Sem Marks	40
		Total Marks	50
Teaching Hours/Week	3 Hours		
Total Hours	36	Credits	02
<b>Course Learning Objectives:</b> The objectives of the course are to <ul style="list-style-type: none"> <li>• Create awareness about various financial products in the market.</li> <li>• Enable the learners to acquire basic knowledge and skills in managing personal investment.</li> <li>• Understand the basics of investment in financial and capital market.</li> <li>• Encourage learners to take up careers in financial planning and Financial Advisory.</li> </ul>			
<b>Module-1 Introduction to Investment:</b>			<b>08 Hours</b>
Savings vs Investment, Objectives of Investment, Principles of Investment: Liquidity, Safety or Security & Profitability or Return, Other Considerations: Tax implications, Rate of Interest & Inflation.			
<b>Module-2 Investment Avenues:</b>			<b>08 Hours</b>
Term deposits, Insurance Policies, Retirement Plans, Real Estate, Gold and Bullion, Stock market securities & Mutual Funds. Basics of Investment Products – Goals & Time Frame, Assessing Risk Profile, Diversification & Asset Allocation, Capital Market vs Money Market, Market Participants & Stock Return and Risk			
<b>Module-3 Investment in Stock Market Securities:</b>			<b>10 Hours</b>
Meaning of Stock market securities. How to Invest in Stock market. Stock indices: SENSEX, NIFTY. Risks involved in Stock market investments and Investor protection –SEBI.			
<b>Module-4 Investment in Mutual Funds:</b>			<b>10 Hours</b>
Meaning of Mutual Funds, Types/classification of Mutual Funds, How to Invest in Mutual Funds, Net Asset Value: Meaning and computation. Benefits of Mutual Fund Investment. Financial Planning, Life Cycle & Personal Budget. Personal Investment Planning and Personal Financial Planning with Case Studies			

<b>Course Outcomes:</b> At the end of the course the student will be able to:	
<b>1</b>	Take up careers in Personal Investment and Financial Planning
<b>2</b>	Set up their own offices for Stock Market and Investment advisory
<b>3</b>	Be aware of the investment products and work in terms of Financial Independence.

#### Books for Reference

Sl. No.	Title of the Book	Name of the Author/s	Name of the Publisher
1	Financial Education & Investment Awareness	--	NSE Academy
2	NSDL Primer on Personal Finance	--	NSDL
3	Personal Investment Management	Louis Manoj & Dr Therese Pereira	Louis Publication
4	Let's Talk Money	Monika Halan	Harper Business

5	Retire Rich: Invest ₹40 a Day	P .V. Subramanyam	TV18 Broadcast Ltd
6	The Money Manual: How to Control Your Budget and Your Finances	Tonya B Rapley	Createspace Independent Publishing Platform
7	The Richest Engineer	Abhishek Kumar	Manjul Publish House
8	Finance for Non-Finance People	Vishal Thakkar	JA Enterprises/ Network 18 Publications
9	Stocks to Riches	Parag Parikh	McGraw Hill Education
10	Value Investing and Behavioural Finance	Parag Parikh	McGraw Hill Education
11	How to Budget & Manage your Money	Rachel Mercer	Independently Published

**Web links and Video Lectures (e-Resources):**

- Saaθhi App of SEBI can be downloaded for insights into financial planning and investment tips.
- <https://youtu.be/sGrpyFiqNEI?si=HAT8XvKw4Nr01h09> – 11 Financial Rules for Financial Planning and help you retire early.
- [https://youtu.be/MabD5R8kRak?si=A0Xn3umJRjeGS\\_1w](https://youtu.be/MabD5R8kRak?si=A0Xn3umJRjeGS_1w) – The Ultimate Financial Plan in 10 minutes
- <https://youtu.be/Y4a3I4TjMrc?si=GDrmMdyOlkUfdCFV> – Financial Planning & Personal Budget
- [https://youtu.be/CU4l\\_rs50Kk?si=\\_b1zUpHQTf7Qfyrz](https://youtu.be/CU4l_rs50Kk?si=_b1zUpHQTf7Qfyrz) – Steps for Money Management and Financial Planning.
- <https://youtu.be/4j2emMn7UaI?si=UB9W2WY0A-ooVYTQ> – Financial Literacy
- <https://youtu.be/UcAY6qRHlw0?si=-Gkc66rcbW284TJk> – Personal Finance Basics

<b>Group I Practical 1</b>	<b>BCom 3.5 Information Technology LAB</b>	<b>32 Hours</b>
<b>Theory/Week: 3 Hrs Credit: 2</b>		<b>IA: 10 Exam: 40</b>

### PART A-MS WORD

1	Prepare a word document that includes the following features inserting picture, bulleting and numbering, formatting (size, bold, underline, italic, superscript, subscript, color etc.), border and shading, paragraph and line alignment.
2	Prepare a word document containing meaningful text features like word art, drop cap, columns, text box, symbols, equation of any mathematical series, background color, header and footer.
3	Prepare a word document with a table to insert roll no, name, class, marks in three subjects. Find total and average
4	Prepare a presentation with at least four slides about your college.

### PART B-MS EXCEL

1. Eight salesmen sell three products for a week. Using a spreadsheet create a sales report. The report should include the name of the salesman, Amount of sales for each product and the salesman's total sales in the format given below.

Sales for the Month				
Name	Total Amt. for product1	Total Amt. for product2	Total Amt. for product3	Total sales

a) Type in all text and numbers in the spreadsheet.  
b) Format all numbers as a currency.  
c) Center the spreadsheet headings across the spreadsheet.  
d) Format all text.  
e) Create formulas to display a total for each sales rep.  
f) Create formulas to display a total for each product.  
g) Create a formula to calculate the total sales for all sales rep's for the month.

2. Enter the following details for 10 employees Employee Code, Employee name, Basic salary, DA, HRA, Loans, Total salary and Tax

Salary for the Month								
Employee Code	Employee Name	Basic Salary	DA	HRA	Loan	Total Salary	Annual Salary	Tax

a) Type the Employee Code, Employee Name, Basic Salary and Loan amount data for 10 employees in the spreadsheet.  
b) Format all numbers as a currency.  
c) Center the spreadsheet headings across the spreadsheet.

	<p>d) Format all text.</p> <p>e) Create a formula to compute DA as 50% of the Basic salary and copy this to all the cells.</p> <p>f) Create a formula to compute HRA as 12% of the Basic salary and copy this to all the cells.</p> <p>g) Create a formula to compute Total salary and copy this to all the cells.</p> <p>h) If Total salary is greater than 500000, compute Tax as 20% of Total salary otherwise 10% of the Total salary using a formula.</p>
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3.

Enter the following details for 10 Students Register Number, Name, Subject1 Marks, Subject2 Marks, Subject3 Marks, Subject4 Marks, Total Marks and Percentage.

Test Marks data of a Class							
Register Number	Name	Subject1 Marks	Subject2 Marks	Subject3 Marks	Subject4 Marks	Total Marks	Percentage

a) Type the Register Number, Name and marks of four subjects for 10students in the spreadsheet.

b) Format all text and numeric data appropriately.

c) Center the spreadsheet headings across the spreadsheet.

d) Create a formula to compute the Total marks and copy this to all the cells.

e) Create a formula to compute Percentage and copy this to all the cells.

f) Create a formula to compute the highest and lowest score using a library function.

g) Draw a bar graph for Register Number against total marks.

h) Draw Pie chart for one student showing his marks in different subject from total score

4.

Create a worksheet to maintain student information such as RollNo, Name, Class, Marks in three subjects of 10 students. Calculate total marks, average and grade. Find grade for Distinction, First class, Second class, Pass and Fail using normally used conditions

- Using custom sort, sort the data according to class: - Distinctionfirst, First Class next, and so on. Within each class, average marks should be in descending order. Also draw the Column Chart showing the RollNo versus Averagescored.

Assessment Criteria		
Program-1	PART-A Writing:7 Marks Execution:8Marks	15Marks
Program-2	PART-B Writing:10 Marks Execution:10 Marks	20 Marks
Practical Record		05 Marks
Total		40 Marks

## **Curriculum for IV Semester B.Com (Business Data Analytics)**

### **Course Contents:**

**4.1 Python Programming**

**4.2 Corporate Accounting – II**

**4.3 Direct Tax – II**

**4.4 Real Estate Management**

**Or**

**Logistics and Supply Chain Management**

**Or**

**Travel and Tourism**

**4.5**

**Python Lab**

<b>Course-1</b> <b>Theory/Week: 4 Hrs</b> <b>Credits :4</b>	<b>B.Com 4.1 Python Programming</b>
<b>Course Outcomes (COs):</b>  At the end of the course, students will be able to: <ul style="list-style-type: none"><li>• Explain the basic concepts of Python Programming.</li><li>• Demonstrate proficiency in the handling of loops and creation of functions.</li><li>• Identify the methods to create and manipulate lists, tuples and dictionaries.</li><li>• Discover the commonly used operations involving file handling.</li><li>• Interpret the concepts of Object-Oriented Programming as used in Python.</li></ul> Develop the emerging applications of relevant fields using Python.	
UNIT I	
	<b>Introduction to Python:</b> Features of Python, Flavors of python, Python Virtual machine, Writing and executing Python program <b>Datatypes in Python:</b> Writing comments, built in data types –None type, numeric type, sequences, sets and mappings. Literals, determining data types of variables, naming conventions in Python. Indentation, Comments, Reading Input, Print Output, Type Conversions. <b>Operators in Python:</b> Arithmetic, Assignment, relational, logical, Boolean, Bitwise, membership & Identity Operators Input/output Statements.
UNIT II	
	<b>Strings:</b> Creating and Storing Strings; Accessing Sting Characters; the str() function; Operations on Strings- Concatenation, Comparison, Slicing and Joining, Traversing; Format Specifies; Escape Sequences; Python String Methods. <b>Lists:</b> Creating Lists, Basic List Operations, Indexing and Slicing in Lists, Built-In Functions Used on Lists, List Methods, The del Statement,
UNIT III	
	<b>Dictionaries:</b> Creating Dictionaries; Operations on Dictionaries; Built-in Functions on Dictionaries; Dictionary Methods; Populating and Traversing Dictionaries. <b>Tuples and Sets:</b> Creating Tuples; Operations on Tuples; Built-in Functions on Tuples; Tuple Methods; Creating Sets; Operations on Sets; Built- in Functions on Sets; Set methods.
UNIT IV	
	<b>File Handling:</b> File Types; Operations on Files– Create, Open, Read, Write, Close Files <b>Data Analysis:</b> NumPy- Introduction to NumPy, Array Creation using NumPy, Operations on Arrays
UNIT V	



	<p><b>Pandas:</b> Introduction to Pandas, Series and DataFrames, Creating DataFrames from Excel Sheet and .csv file, Dictionary and Tuples. Operations on DataFrames</p> <p><b>Data Visualisation:</b> Introduction to Data Visualisation; Matplotlib Library; Different Types of Charts using Pyplot- Line chart, Bar chart and Histogram and Pie chart</p>
<p><b>Text Book:</b></p> <ol style="list-style-type: none"> <li>1. Think Python How to Think Like a Computer Scientist, Allen Downey et al., 2<sup>nd</sup> Edition, GreenTea Press. Freely available online @<a href="https://www.greenteapress.com/thinkpython/thinkCSpy.pdf">https://www.greenteapress.com/thinkpython/thinkCSpy.pdf</a>, 2015.</li> <li>2. Introduction to Python Programming, Gowrishankar S et al., CRC Press, 2019.</li> <li>3. Python Programming: Using Problem Solving Approach, Reema Thareja, June 2017</li> <li>4. Python Data Analytics: Data Analysis and Science Using Pandas, matplotlib, and the Python Programming Language, Fabio Nelli, Apress®, 2015</li> <li>5. Advance Core Python Programming, MeenuKohli, BPB Publications, 2021.</li> <li>6. Core PYTHON Applications Programming, Wesley J. Chun, 3rd Edition, Prentice Hall, 2012.</li> <li>7. Automate the Boring Stuff, Al Sweigart, No Starch Press, Inc, 2015.</li> <li>8. Data Structures and Program Design Using Python, D Malhotra et al., Mercury Learning and Information LLC, 2021.</li> </ol>	

<b>CORPORATE ACCOUNTING-II</b>			
Course Code	<b>B.Com 4.2</b>	IA Marks	<b>20</b>
Course Type (Theory/Practical/Integrated)	Theory	End Sem Marks	<b>80</b>
		Total Marks	<b>100</b>
Teaching Hours/Week	<b>5hrs</b>		
Total Hours	<b>60hrs</b>	Credits	<b>05</b>
<b>Course Learning Objectives:</b> Upon successful completion of the course, students will be able to ✓ Comprehend the legal regulations and procedures for the redemption of preference shares. ✓ Understand the various techniques of mergers and acquisitions involving joint stock corporations. ✓ Comprehend the procedure of internal reconstruction. ✓ Comprehend the implications and conditions of liquidation, and formulate the liquidator's conclusive financial statement. ✓ Acquire understanding of contemporary advancements in accounting and accounting norms.			
<b>Module-1 REDEMPTION OF PREFERENCE SHARES</b>			<b>12 Hours</b>
Definitions and Legal Regulations, Treatment of Premium on Redemption. Establishment of Capital Redemption Reserve Account for New Share Issuance for Redemption. Organising Cash Reserves for Redemption, Establishment of the Minimum Quantity of Shares Required for Redemption. Issuance of Bonus Shares, Preparation of Balance Sheet in accordance with Schedule III of the Companies Act, 2013 post-Redemption			
<b>Module-2 MERGERS AND ACQUISITION OF JOINT STOCK COMPANIES</b>			<b>16 Hours</b>
<b>Amalgamation and Acquisition of Companies:</b> Definition of Amalgamation and Acquisition, Categories of Amalgamation, Amalgamation as a Merger, Amalgamation as a Purchase. <b>Calculation of Purchase Consideration:</b> Lump Sum Method, Net Asset Method, Net Payment Method. <b>Accounting for Amalgamation:</b> Pooling of Interests Method (including issues), Purchase Method (including issues). <b>Accounting Procedures:</b> Journal Entries and Ledger Accounts in the Transferor Company's Records, Journal Entries in the Transferee Company's Records, Preparation of Balance Sheet Post-Merger (in accordance with Schedule III of the Companies Act, 2013).			
<b>Module-3 INTERNAL RECONSTRUCTION OF JOINT STOCK COMPANIES</b>			<b>10 Hours</b>
<b>Internal Reconstruction and Capital Reduction:</b> Definition of Capital Reduction, Aims of Capital Reduction, Regulations for Share Capital Reduction under the Companies Act, 2013. Methods of Capital Reduction. <b>Journal Entries for Capital Reduction:</b> Accounting for Capital Reduction. Preparation of the Capital Reduction Account and the Balance Sheet post-reduction in accordance with Schedule III of the Companies Act, 2013.			
<b>Module-4 LIQUIDATION OF COMPANIES</b>			<b>12 Hours</b>
<b>Liquidation of Companies:</b> Definition of Liquidation, Methods of Winding Up, Compulsory Winding Up, Voluntary Winding Up, Winding Up under Judicial Supervision. <b>Essential Elements of Liquidation:</b> Payment Hierarchy during Liquidation, Liquidator's Financial Statement, Liquidator's Compensation. <b>Practical Application:</b> Issues Regarding the Preparation			

of the Liquidator's Statement of Account.

**Module-5 RECENT DEVELOPMENTS IN ACCOUNTING AND ACCOUNTING STANDARDS** **10 Hours**

**Recent Advancements in Accounting and Accounting Standards:** Global Reporting Initiative (GRI) concepts: General disclosure of ESG factors. **Inflation Accounting:** Introduction, meaning, objectives and applications

**Books for Reference**

- ✓ Arulanandam & Raman - Corporate Accounting-II, HPH
- ✓ Anil Kumar.S Rajesh Kumar.V and Mariyappa B Advanced Corporate Accounting, HPH
- ✓ Dr. Venkataraman. R – Advanced Corporate Accounting
- ✓ S.N. Maheswari , Financial Accounting, Vikas publishing
- ✓ Soundarajan A & K. Venkataramana, Advanced Corporate Accounting, SHBP
- ✓ RL Gupta, Advanced Accountancy, Sultan Chand
- ✓ K.K Verma – Corporate Accounting.
- ✓ Jain and Narang, Corporate Accounting.
- ✓ Tulsian, Advanced Accounting
- ✓ Shukla and Grewal – Advanced Accountancy, Sultan Chand

<b>DIRECT TAX - II</b>			
Course Code	<b>B.Com 4.3</b>	IA Marks	20
Course Type (Theory/Practical/Integrated)	Theory	End Sem Marks	80
		Total Marks	100
Teaching Hours/Week	5 Hours		3 Hours
Total Hours	60 Hours	Credits	5
<b>Course Learning Objectives:</b> The objective of the course is to <ul style="list-style-type: none"> <li>• To familiarize the students with the Legal Provisions and Procedural aspects of Income Tax.</li> <li>• To equip the students with a comprehensive understanding of direct taxes, their applications, and the tax laws governing them.</li> <li>• To be taught with reference to the relevant amendments made to Direct Tax Laws of India by Finance Acts passed in the Parliament from time to time.</li> <li>• Apply the knowledge of taxation in practical field.</li> </ul>			
<b>Module - 1: Income from House Property</b>			<b>14 Hours</b>
Composite Rent, Annual Value of let out property- self occupied property-concept of Unrealized Rent and Arrears of Rent and its treatment-recovery of arrears of rent, deductions from Annual Value.			
<b>Module-2: Depreciation</b>			<b>08 Hours</b>
Rules governing Depreciation – Additional Depreciation - Computation of Depreciation and Written Down Value under Block of Assets Method.			
<b>Module-3: Profit and Gain from Business and Profession</b>			<b>14 Hours</b>
Deduction Permissible u/s 30 to 37, Payments not Deductible - Computation of Professional Income and Business Income.			
<b>Module-4: Capital Gains</b>			<b>12 Hours</b>
Meaning –Transfer, Transactions not regarded as Transfer- Short Term and Long Term Capital Gains -Cost of Acquisition – Capital Gains Exempt u/s 54 –Problems on Computation of Taxable Capital Gains.			
<b>Module-5: Income from Other Sources</b>			<b>12 Hours</b>
Interest on securities-Grossing up – Other Important Exemptions u/s10 including section 10(15) - Deductions u/s 57.			

<b>Course Outcomes:</b> At the end of the course the student will be able to:	
<b>Understand</b>	The structure of direct taxes in India
<b>Comprehend</b>	The income tax laws, procedures and regulations time to time.
<b>Apply</b>	The knowledge in calculation of tax liability and filing of returns

#### Books for Reference

Sl. No.	Title of the Book	Name of the Author/s	Name of the Publisher
1	<b>Direct Taxes,</b>	Dr. Vinod K Singhania,	Taxmann's Publications.
2	<b>Income Tax Law and Practice,</b>	Dr. H.C.Mehrotra and Dr. S.P.Goyal,	Sahithya Bhavan Publication.
3	<b>Students Hand Book on Taxation</b>	T.N. Manoharan	Snow White Publications.
4	<b>Practical Approach to Income Tax</b>	Dr. Girish Ahuja and Dr. Ravi Gupta	Commercial Law Publishers (India) Pvt. Ltd.
5	<b>Direct Tax - II</b>	Dr. Ravi M.N., Dr. Suman Shetty N and Bhanuprakash B.E.	Professional Books publishers

REAL ESTATE MANAGEMENT			
Course Code	B.Com 4.4	IA Marks	10
Course Type (Theory/Practical/Integrated)	Integrated	End Sem Marks	40
		Total Marks	50
Teaching Hours/Week	3 Hours		
Total Hours	36	Credits	2
<b>Course Learning Objectives:</b> The objective of the course is to <ul style="list-style-type: none"><li>• Become aware about the latest trends in Real Estate dealings.</li><li>• Become a well-rounded Real Estate Advisors.</li><li>• Make a career in Real Estate.</li><li>• Get insights into Real Estate Dealings.</li><li>• Learn the tax implications of real estate transactions.</li></ul>			
<b>Module-1 Introduction to Real Estate</b>		<b>10 Hours</b>	
Meaning & Scope of Real Estate - Meaning of Immovable Property. Types of immovable property – Freehold, Agriculture & Leasehold. Terms associated with Real Estate – Carpet Area, Built up area, Super Built up area, Loading factor, Plot area, Floor Space Index/Floor Area Ratio, Set back area and Per square Feet rate. Precautionary measures to be taken while purchasing the Immovable Property - Sale deed, Gift deed, Partition deeds, Release deeds, Guidance value, stamp Duty. Registration of Immovable Property. Pre and Post registration –compliances. Loss of original documents - Remedies.			
<b>Module-2 Sources of Finance and Trends in Real Estate in India</b>		<b>8 Hours</b>	
Loans from Financial Institutions, Documents Required. Mortgages – Types - Equitable Mortgage & Reverse Mortgage. Simple Problems on EMI. Affordable Housing- Pradhan Mantri Awas Yojana, Gated Communities for High Net Worth Individuals. Property Insurance. Trends in Real Estate: Fractional Ownership, Proptech Integration, Co-living and Co-working spaces and Flexible Office spaces.			
<b>Module-3 Trends in Real Estate Investment and Tax Implications:</b>		<b>10 Hours</b>	
Trends in Real Estate: Real Estate Investment Trust’s, AI based Real Estate Analytics & Crowd funding.Transfer of properties, Capital gains on sale. Holding period under IT Act. Computation of gains: STCG LTCG. Income tax applicability on gains. Exemptions under Sections 54, 54B and 54F.			
<b>Module-4 Real Estate (Regulation &amp; Development) Act (RERA) 2016.</b>		<b>08 Hours</b>	
Purpose & objectives of RERA. Applicability of RERA (Projects / Layouts), Authorities under RERA. Remedies available to the buyers under RERA. Penalties under RERA (Sellers). Case studies			

<b>Course Outcomes:</b> At the end of the course the student will be able to:	
<b>1</b>	Make Career choices in Real Estate Field
<b>2</b>	Understand the nuances of Real Estate and be clear when making such a transaction
<b>3</b>	Apply the tax laws to their advantage and plan their income tax on real estate dealings
<b>4</b>	Get a clear understanding of RERA

**Books for Reference:**

Sl. No.	Title of the Book	Name of the Author/s	Name of the Publisher
1	Real Estate Management	P. K. Gupta.	Himalaya Publishing House
2	Real Estate Management	Louis Manoj & Dr Therese Pereira	Louis Publications
3	Urban Land Economics and Real Estate Market	S. C. Gupta	S Chand & Sons
4	Real Estate Development and Investment: An Indian Perspective	Gaurav Jain & Sumit Sharma	Jain Book Agency
5	Principles of Real Estate Management	Dr. V. K. Jain	S Chand & Co
6	Buy it, Rent it, Profit!	Bryan M Chavis	Touchstone Publishers
7	Real Estate Regulation & Development with Model Forms	M L Bhargava	Kamal Publishers
8	Real Estate Management and Financial Analysis	Gaurav Jain	Jain Book Agency

**Web links and Video Lectures (e-Resources):**

- <https://youtu.be/EIW0QGJEfuk?si=0fhSMiN4knN0sZW6> - Real Estate: Property Management
- <https://youtu.be/I-XiX1u0iaE?si=agOV16CAxkQmYlWm> - Property-technology: The Future of Real Estate in India | Aditya Jhaveri | TEDxYouth@DAIS
- <https://youtu.be/6aGXr302-k4?si=D1cNNnlvv0T467NC> - Earn Money from Real Estate Business without Investment | How to Start Real Estate Business?

<b>Logistics and Supply Chain Management</b>			
Course Code	<b>B.Com 4.4</b>	IA Marks	10
Course Type (Theory/Practical/Integrated)	Compulsory	End Sem Marks	40
		Total Marks	50
Teaching Hours/Week	3		3 Hours
Total Hours	36	Credits	2
<b>Course Learning Objectives:</b> The objective of the course is to <ul style="list-style-type: none"> <li>• To provide an exposure to the language of logistics</li> <li>• To analyse the principles and functions of Logistics Management</li> <li>• To apply the concepts of logistics management in the present market oriented society.</li> <li>• To develop a strong understanding of logistics and supply chain management</li> </ul>			
<b>Module-1 Introduction to Logistics and Supply Chain Management</b>			<b>09 Hours</b>
<ul style="list-style-type: none"> <li>• Concept and evolution of logistics and SCM</li> <li>• Objectives and functions of logistics and SCM</li> <li>• Difference between logistics and SCM</li> <li>• Importance of supply chains in business</li> </ul>			
<b>Module-2 Logistics Management and Inventory Management</b>			<b>09 Hours</b>
<ul style="list-style-type: none"> <li>• Role of IT in logistics</li> <li>• Concept of logistics management system(LIS)</li> <li>• Functions and types of inventory</li> <li>• Warehousing: Functions, types, and design</li> <li>• Material handling and automation in warehouses</li> </ul>			
<b>Module-3 Customer Service</b>			<b>09 Hours</b>
<ul style="list-style-type: none"> <li>• Concept of customer service</li> <li>• Customer Service Costs</li> <li>• Gap analysis for Customer Service Measurement</li> <li>• Logistics outsourcing, Issues in logistics outsourcing</li> <li>• Third-Party Logistics(3PL), Fourth-Party Logistics(4PL)</li> </ul>			
<b>Module-4 Purchasing, Sourcing and Distribution Management</b>			<b>09 Hours</b>
<ul style="list-style-type: none"> <li>• Importance of Purchasing</li> <li>• Supplier management</li> <li>• Global sourcing and e-procurement</li> <li>• Network design for distribution</li> <li>• Distribution strategies: Centralized vs decentralized</li> </ul>			

<b>Course Outcomes:</b> At the end of the course the student will be able to:	
<b>1</b>	Understand the concepts in Logistics and Supply Chain Management
<b>2</b>	Identify the role of Logistics and Supply Chain Management to provide better service to the customers.
<b>3</b>	Assess procurement, packaging and distribution management in logistics to have better service to the customer



## Books for Reference:

Sl. No.	Title of the Book	Name of the Author/s	Name of the Publisher
1	Logistics Management	VV Sople	Pearson Education, India
2	Logistics Management	Bhattacharya S.K	S. Chand
3	Supply Chain Management	Sunil Chopra Peter Meindl	Pearson Education, India
4	Logistics and Supply chain management	K Shridharabhat	Himalaya Publishing House
5	Logistical Management	Donald J. Bowersox & David J. Closs	Tata McGraw Hill Publishing Co. Ltd, New Delhi,
6	Logistics Management	Satish.C. Ailawadi., Rakesh.P. Singh	PHI

### Web links and Video Lectures (e-Resources):

- <https://www.tompkinsinc.com/en-us/Services/Inventory-Planning-Management/Logistics-Outsourcing>
- [www.blog/7-advantages-outsourcing-logistics](http://www.blog/7-advantages-outsourcing-logistics)
- <https://www.supplychainbrain.com/articles/26644-four-barriers-to-outsourcing-a-challenge-for-logistics-service-providers>
- <https://www.allynintl.com/en/logistics/logistics-outsourcing-4th-party-logistics-4pl>
- <https://www.warehouseanywhere.com/resources/3pl-vs-4pl-logistics-definition-and-comparison/>
- <https://www.warehouseanywhere.com/resources/3pl-vs-4pl-logistics-definition-and-comparison/>

TRAVEL AND TOURISM			
Course Code	B.Com 4.4	IA Marks	10
Course Type (Theory/Practical/Integrated)	Theory	End Sem Marks	40
		Total Marks	50
Teaching Hours/Week	3 Hours		
Total Hours	36	Credits	2
<b>Course Learning Objectives:</b> <ul style="list-style-type: none"><li>• To introduce students to the size, structure, and significance of the travel and tourism industry globally and locally.</li><li>• To provide insights into different sectors such as transportation, accommodation, attractions, tour operations, and travel agencies.</li><li>• To inspire innovation and entrepreneurship within the tourism sector.</li><li>• To expose students to various career paths and develop soft and technical skills required in the tourism and hospitality field.</li></ul>			
<b>Module-1 Introduction to Travel and Tourism</b>		<b>10 Hours</b>	
Definitions, Meaning,Significance, History and evolution of tourism, Types of tourism, Factors influencing travel and tourism, Tourism industry in India, Authorities of Tourism Industry, Advantages and Disadvantages of tourism development. Key terms used in travel and tourism - tourist, traveler, Travel Agent,Tour Operator, Package Tour, Travel Insurance (Meaning only). Hospitality management - Meaning, Basics and significance.			
<b>Module-2 Components of the Tourism Industry and Travel Motivators</b>		<b>08 Hours</b>	
Major sectors - transportation, accommodation, attractions, tour operators, travel agents; Support services - government tourism boards, insurance, foreign exchange, etc.; Role of technology in tourism (online bookings, apps, virtual tourism etc.) and Interdependence of tourism sectors. Travel motivators and Impacts of Industrialization & Technological Advancement on Tourism Industry. Impacts of tourism on Economic, social, cultural and environment.			
<b>Module-3 Marketing and Business in Tourism</b>		<b>08 Hours</b>	
Marketing in tourism – Meaning, Need, significance and marketing mix.Principles of Marketing in Tourism, Seasonality in Tourism, Consumer Behavior and Market Segmentation, Digital Marketing in Travel and Tourism, Entrepreneurship in Tourism, Tourism Economics, Tourism Policy, Planning, and Development. Employment opportunities in travel and tourism.			
<b>Module-4 Issues and Sustainable Tourism Development</b>		<b>10 Hours</b>	
Environmental Concerns: Coastal Erosion, Waste Management, etc.; Seasonality and Its Impact on Local Economy, Sustainable Practices and Community Involvement, Government Policies and Tourism Promotion (Karnataka Tourism Department Initiatives). Coastal tourism – Issues and challenges, Importance of tourism in coastal area, local community involvement and participation in development of coastal tourism and recent trends in tourism			

<b>Course Outcomes:</b> At the end of the course the student will be able to:	
	Understand the fundamentals of travel and tourism industry.
	Analyze the impact of tourism on the environment and society, and promote sustainable and ethical tourism.
	Utilize modern tools and technologies like reservation systems, digital marketing, and online booking platforms.
	Develop basic business and entrepreneurial skills for setting up and managing tourism-related ventures.
	Prepare for employment in various tourism sectors such as travel agencies, airlines, hotels, tour operations, and event management.

### **Books for Reference**

<b>Sl. No.</b>	<b>Title of the Book</b>	<b>Name of the Author/s</b>	<b>Name of the Publisher</b>
1	Tourism: Principles and Practice	Chris Cooper, John Fletcher, David Gilbert, Stephen Wanhill	Pearson Education
2	The Business of Tourism	J. Christopher Holloway & Claire Humphreys	SAGE
3	Tourism Management	David Weaver and Laura Lawton	Wiley
4	Sustainable Tourism: A Global Perspective	Rob Harris, Tony Griffin, Peter Williams	

<b>Group I Practical 1</b>	<b>B.Com 4.5 Python Lab</b>	<b>32 Hours</b>
<b>Theory/Week: 3 Hrs Credit: 2</b>		<b>IA: 10 Exam: 40</b>

**PART A**

1.	Write a basic program to demonstrate data types in python
2.	Create a list and perform following methods (i) insert()(ii)remove() (iii) append()(iv) pop() (v) clear()
3.	Write a python program to print date ,time for today and now
4.	Write python program to count frequency of characters in given file

**PART B**

1.	Write the python program to concatenate the data frames with two different objects
2.	Write a python program to print the checkboard pattern of nxn using numpy
3.	Write a python program to create a grouped bar chart in Python using Matplotlib to compare the number of students who passed in BCOM, BCA, and BBA streams over the years 2015 to 2019?"
4.	Write a Pandas program to join the two given data frames along rows. Sample Data frame may contain details of student like rollno , name , Total Marks.

<b>Assessment Criteria</b>		
<b>Program-1</b>	<b>PART-A Writing:7 Marks Execution:8Marks</b>	<b>15Marks</b>
<b>Program-2</b>	<b>PART-B Writing:10 Marks Execution:10 Marks</b>	<b>20 Marks</b>
<b>Practical Record</b>		<b>05 Marks</b>
<b>Total</b>		<b>40 Marks</b>

**Question Paper Pattern for 50 Marks Papers**

**Internal Exams**

**Time: 1 Hours**

**Total Marks: 20**

**Section A**

**Answer any two of the following**

**2\*2 =4**

1. XXXX
2. XXXX
3. XXXX
4. XXXX

**Section B**

**Answer any two of the following**

**4\* 2 = 8**

5. XXXX
6. XXXX
7. XXXX
8. XXXX

**Section C**

**Answer any one of the following**

**8\*1= 8**

9. XXXX
10. XXXX

**\*\*\*\*\***

**Question Paper Pattern for 50 Marks Papers**

**Semester End Exams**

**Time: 2 Hours**

**Total Marks: 40**

**Section A**

**Answer any four of the following**

**2\*4 =8**

11. XXXX
12. XXXX
13. XXXX
14. XXXX
15. XXXX
16. XXXX

**Section B**

**Answer any four of the following**

**4\* 4 = 16**

17. XXXX
18. XXXX
19. XXXX
20. XXXX
21. XXXX
22. XXXX

**Section C**

**Answer any two of the following**

**8\*2 = 16**

23. XXXX
24. XXXX
25. XXXX
26. XXXX

**\*\*\*\*\***