Dr. N.G.P. ARTS AND SCIENCE COLLEGE

BoS

(An Autonomous Institution, Affiliated to Bharathiar University, Coimbatore)

Approved by Government of Tamil Nadu & Accredited by NAAC with 'A++' Grade (3rd Cycle-3.64 CGPA)

Dr. N.G.P.-Kalapatti Road, Coimbatore-641 048, Tamil Nadu, India.

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18th

Department of Commerce with Computer Applications
Board of Studies Meeting

The minutes of the 18th meeting of Board of Studies held on 09.11.2024 at 10.00 am at the Commerce Lab D1-Block.

Members Present:

S.NO.	NAME	POSITION
1.	Dr.P.Suganya	Chairman
2.	Dr.M.Jegadeeshwaran	University Nominee
3.	Dr.K.Kumar	Subject Expert
4.	Dr.D.Vennila	Subject Expert
5.	CA.N.N.ShanmugaVadivel	Industrial Expert
6.	Mr.R.Pavithran	Alumni
7.	Dr.N.Kuupuchamy	Co-Opted Members
8.	Dr.A.Hazel Verbina	Co-Opted Members
9.	Dr. R. Sowrirajan	Co-Opted Members
10.	Dr.D.Parasakthi	Co-Opted Members
11.	Dr.S.Kowsalya	Co-Opted Members
12.	Dr.M.Prakash	Member
13.	Dr.M.Ashok Kumar	Member
14.	Dr.P.Jayasubramanian	Member
15.	Dr.C.Eahambaram	Member
16.	Mrs.C.Radhiya Devi	Member
17.	Mrs.N.Revathi	Member
18.	Mrs.V.Jayashree	Member
19.	Mrs.L.Priya	Member
20.	Mr.M.Gunasekaran	Member
21.	Dr.T.Sumathi	Member
22.	Mrs.Neetu P M	Member
23.	Mrs.T.Sreegeetha	Member
24.	Mrs.C.MercyPraba	Member
25.	Dr.K.Dhivya	Member
26.	Dr.V.M.Tharaka Rani	Member
27.	S.Sivashankari	Student Representative
28.	V.Vigneshkumar	Student Representative

The HoD and Chairman of the Department of **Commerce with Computer Applications Dr. P. Suganya** welcomed and introduced all the members and appreciated them for their continuous support and contribution for the development of academic standard and enrichment of the syllabus.

Further Chairman informed the absence of the following member to attend the meeting and requested to grant leave.

1. Dr.K.Kumar, Principal, National College, Trichy - Subject Expert.

After a brief discussion, the items of the agenda were taken one by one for discussion and the following resolutions were passed.

Item 18.1: *To review and approve the minutes of the previous meeting held on 06.04.2024.*

The Chairman of the Board presented the minutes of the previous meeting held on 06.04.2024 and requested the members to approve. After brief discussion the following resolution was passed

Resolution:

Resolved to approve the minutes of the previous meeting held on 06.04.2024.

Item 18.2: *To review and approve the syllabi of II semester for the students admitted in UG & PG during the academic year 2024-2025.*

The Chairman presented the detailed syllabi of II semester for the students admitted during the academic year 2024-2025. The members deliberated in detail about the modifications required. After the discussion it was unanimously decided to adopt the following changes.

Changes Made:

M.Com Computer Applications		
Course Code	**Course**	**Changes and Reason**
24CMP2CA	Business Finance	In order to prepare students for the complexities and decision-making of contemporary finance, the following modifications were made as per the recommendation of Dr. D.M. Jagadeeshwaran's, University Nominee: • **Unit I**: Factors influencing financial decisions, functions of finance manager in 21st century, Time Value of money -Calculating present and future values. (Problem only). • **Unit II:** Lease Financing: Meaning-Features-Forms-Merits and Demerits (Theoryonly).

24CMP2CB	Relational Database Management System	To develop the abilities in managing data, analyse business information and make informed decisions following changes has been implemented as per Alumni Mr. R. Pavithran's recommendation: • **Unit III:** CODD's Rules Primary Key, Foreign key and candidate key. Join Operators: Inner Join-Natural Join-Outer Join • **Unit IV:** DDL commands-create, alter, drop the table, aggregate functions • **Unit V:** Transaction processing: Concurrency control-ACID property-serializability of scheduling-locking and timestamp-based schedulers. Database recovery: Transaction recovery-system recovery-two phase commit. Indexing: Structure-types. Hashing: static and dynamic.
24CMP2CP	RDBMS	To enhance the ability to analyze and troubleshoot massive data sets, 4 contents in join operations, primary and foreign key constraints were changed.
24CMP2DA	Information Security	University nominee Dr. D.M. Jagadeeshwaran recommended the following changes to tackle security issues: • **Unit I:** Software Assurance • **Unit II:** Threats: Definition-Types of Threats. Attacks and Definition-Types of Attacks • **Unit III:** Title changed as "Risk Control Practices" • **Unit IV:** Cryptanalysis-Cryptology • **Unit V:** Title "Personnel Security and Information Security Maintenance".
24CMP2DB	Banking Services	To enhance students' understanding of the recent trends in banking services, it is essential to explore the latest innovations, technological advancements, and evolving customer expectations that are shaping the future of the banking industry below changes were made as per the recommendation of Dr.D.Vennila, Subject Expert. • **Unit I:** Types of Banks, Small and Microfinance Banks was included • **Unit II:** Micro Credits was included • **Unit III:** was restructured under the title of "Information Security system in Banking" • **Unit IV:** Contents of Trends in Banking Services was reframed • **Unit V:** Changed as E-Payment and Settlement Services.

New Courses Introduced:

B. Com Computer Applications		
Course Code	**Course**	**Reason**
24CMU2CP	Financial Modeling with Spreadsheet	To gain knowledge in financial modeling skills, advanced excel proficiency, valuation techniques, scenario analysis abilities and for career readiness in finance.

Courses Removed:

B. Com Computer Applications		
Course Code	**Course**	**Reason**
235CM1A2CP	Spreadsheet Modeling	Simplified representation of data is enhanced with analytical tools.

After discussion the following resolution was passed with the above changes and modifications.

Resolution:

Resolved to approve the syllabi of II semester for the students admitted in UG & PG during the academic year 2024-25.

Item 18.3: *To review and approve the changes, if any, in the scheme and syllabi of IV semester for the students admitted in UG & PG during the academic year 2023-2024.*

The Chairman presented the scheme and syllabi of IV semester for the students admitted in UG and PG during the academic year 2023-2024. The details of changes made also presented as follows.

Changes Made:

B. Com Computer Applications		
Course Code	**Course**	**Changes and Reason**
235CM1A4CA	Database Management System	As recommended by Mr. R. Pavitran alumni, sequence was changed for effective understanding: • **Unit IV** and **Unit V** has been rearranged. Topics such as SQL Data Definition, Data Types, Constraints in SQL, Basic Retrieval Queries in SQL, • Insert, Update, and Delete operations in SQL moved to **Unit III.**

235CM1A4SP	Database Management System	To develop data management skills, improve efficient data organization and retrieval 5 contents in operators in SQL, Sorting operations, nested queries was modified.

M.Com Computer Applications

Course Code	Course	Changes and Reason
235CM2A4CA	Accounting for Management	As recommended by Dr. M. Jegadeeshwaran, the University Nominee, the topic of constructing a balance sheet added in Unit II.
235CM2A4CB	Java Programming	Based on the suggestions of alumni Mr. R. Pavithran, the following revisions were made in order to understand the basic concepts: • **Unit I**: Basic concepts of Object-Oriented Programming (OOP) was included. • **Unit II**: The title was changed to "Classes, Interfaces, and Packages." Concepts of classes, interfaces, and packages has been added, and multithreaded programming moved to **Unit IV**. • **Unit IV**: The title was updated to "Multithreaded Programming and Exception Handling," with exception handling now included. I/O streams moved to **Unit V**.
235CM2A4CC	Setting up of Business Entities	In order to give students, the necessary abilities for navigating a variety of corporate structures, the following modifications were made based on the recommendations of industry expert CA N.N. Shanmuga Vadivel: • **Unit I:** Key features of startups- types of business entities and factors governing the selection of entities. • **Unit II:** Section on society formation and the differences between a Section 8 company, trust, and society. • **Unit IV:** Topic was renamed as "Application and Registration Procedures". • **Unit V:** Expanded content on converting business entities, including procedures for converting a private company to a public company, a public company to a private limited company, a Section 8 company to other types, an LLP to a company, a one-person company to a private company, and an unlimited liability company to a limited liability company and also added content on

Course Code	Course	Reason
		business closure, covering dormant companies, reasons, benefits, exemptions, and compliance requirements.
235CM2A4CP	Java Programming	To build foundational programming skills, foster problem-solving abilities, support versatile cross-platform development and to enhance skills in data handling, multi-threading and exception handling 6 contents are changed.
235CM2A4DB	Fin Tech Services	The following updates were made based on the guidance of University Nominee Dr. M. Jegadeeshwaran, aimed at providing students with up-to-date resources and insights into advancements and emerging trends in financial technology: • **Unit I**: India's FinTech insights, FinTech adoption and economic forces-key FinTech domains. • **Unit II**: Blockchain technology fundamentals, Ethereum smart contracts and security. • **Unit III**: Expanded content on cryptocurrency • **Unit IV**: Data analytics fundamentals, covering statistical analysis basics, python for data analysis, data visualization in Python, and sentiment analysis. • **Unit V**: Keras for neural networks, including setting up Keras, creating neural networks, training models, monitoring, and an introduction to artificial neural networks.

New Courses Introduced:

M.Com Computer Applications

Course Code	Course	Reason
235CM2A4DA	Big Data Analytics	The course was introduced to provide students a competitive edge in data-centric sectors and to analyze massive data sets and make data-driven decisions.

Courses Removed

Course Code	Course	Reason
225CM2A4DA	Big Data and Applications	The course was eliminated in favor of an upgraded course to meet the demands of rapidly changing technologies.

    After discussion the following resolution was passed with the above changes and modifications.

Resolution:

Resolved to approve the scheme and syllabi of IV semester for UG &PG admitted in admitted during the academic year 2023-24.

Item 18.4: *To consider and approve the changes, if any, in the scheme and syllabi of VI semester for the students admitted in UG during the academic year 2022-2023.*

The Chairman presented the scheme and syllabi for the VI semester for the students admitted in UG during the academic year 2022-2023. The details of changes made also presented as follows.

Discipline Specific Elective Courses:

The following Discipline Specific Elective Courses are offered to our students:

Course Code	Course	Department
225FI1A6DA	Investment Management	Department of Commerce Finance
225CI1A6DA	Enterprise Resource planning	Department of Commerce with Information Technology
225BI1A6DA	Retail Marketing	Department of Commerce with Business Analytics
225CO1A6DA	Organizational Behaviour	Department of Commerce
225FI1A6DB	Security Analysis and Portfolio Management	Department of Commerce Finance
225CI1A6DB	Fundamentals of Information Security	Department of Commerce with Information Technology
225BA1A6DB	Social Media Marketing	Department of Commerce with Business Analytics
225CO1A6DB	Industrial Relations and Labour Law	Department of Commerce

New Courses Introduced:

B. Com Computer Applications		
Course Code	**Course**	**Reason**
225CM1A6CA	Web Designing	To educate the students to design a well-structured website and web development for enhancing the professional skills.
225CM1A6SP	Web Designing	To create appealing websites and preparing the students for web development.

Courses Removed

Course Code	Course	Reason
195CM1A6CA	Internet & Web Designing	Students might concentrate on more complex, specialized subjects that better suit their academic and professional goals.
195CM1A6CP	Computer Applications – VI - HTML	To allow the students to concentrate on more advanced programming and software development

		skills, better preparing them for complex, real-world challenges.

After discussion the following resolution was passed with the above changes and modifications.

Resolution:

Resolved to approve the scheme and syllabi of VI semester for the students admitted in UG during the academic year 2022-23.

Item 18.5: *To consider and approve the syllabi of self-study of III semester for the students admitted during academic year 2024-2025.*

The Chairman presented the detailed syllabi of self-study for III semester to the students admitted during the academic year 2024-2025.

Sl.No.	Programme	Course Code	Course
1.	B. Com Computer Applications	24CMUSSA	Business Ethics
		24CMUSSB	Cyber Security and Cyber Law
2.	M. Com Computer Applications	24CMPSSA	Retail Marketing
		24CMPSSB	E-Commerce Technology

After discussion the following resolution was passed to approve the syllabi and accepted to adopt it in the III semester to the students admitted during the academic year 2024-2025.

Resolution:

Resolved to approve the syllabi and accepted to adopt in the III semester to the students admitted during the academic year 2024-2025.

Item 18.6: *To consider and approve the courses offered by NPTEL that are equivalent to the courses offered in our curriculum.*

The board discussed the courses offered by NPTEL that are equivalent to the courses offered in our curriculum.

Resolution:

Resolved to approve the courses that are equivalent to the courses offered by NPTEL in our curriculum.

Item 18.7: *To approve the panel of examiners for the Even semester of the academic year 2024-2025.*

The Chairman presented the panel of examiners for question paper setting, question paper Scrutiny and conduct of Practical and evaluation of answer scripts for the even semester of the academic year 2024-2025.

Resolution:

Resolved to approve the panel of examiners for question paper setting, question paper Scrutiny and conduct of Practical and evaluation of answer scripts for the even semester of the academic year 2024-2025.

Item 18.9: *To consider and approve any other item brought forward by the Chairman and the members of the board.*

i.   Presented the approved MOU with St. Joseph's College of Commerce (Autonomous), Bengaluru, to outline possibilities for faculty and student collaboration and to foster fruitful academic interactions.

ii. Dr. M. Jagadeeshwaran, University Nominee, recommended blended learning sessions by inviting industry experts for PG courses during academic year 2023-2024.

iii. The board suggested an interdisciplinary research projects for final UG and PG students to adopt research skill across discipline.
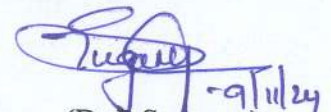
     After discussion the following resolution was passed to adopt and implement the same in the academic year 2024-2025.

Resolution:

Resolved to approve MoU, Blended Learning and interdisciplinary research projects during the academic year 2024-2025.

Finally, the Chairman thanked all the members for their cooperation and contribution in enriching the syllabus with active participation in the meeting and sought the same spirit in the future also. The meeting was closed with formal vote of thanks proposed by the Department CDC Member.

Date: 09.11.2024

(Dr.P.Suganya)

BoS Chairman/HoD
Department of Commerce (CA)
G. P. Arts and Science College
Coimbatore – 641 048

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Syllabus Revision

Faculty: Commerce

Board: Commerce with Computer Applications

Semester: II

Course Code / Name: 24CMP2CA / Business Finance

Unit	Existing	Changes
I	Business Finance: Meaning, Objectives, Scope ‑Time Value of money: Meaning, Causes Compounding Discounting Sinking Fund Deposit Factor Capital Recovery Factor Multiple Compounding Effective rate of interest Doubling period (Rule of 69 and Rule of 72) Practical problems.	(Introduction to business finance) Factors influencing financial decisions - Key areas of finance: personal, corporate, and public finance. Financial Markets- Types of financial markets: Money and Capital markets. Financial institutions: Banks, Investment firms, etc. Time Value of money: Calculating present and future values (Theory only)
II	(Risk Management) Risk and Uncertainty: Meaning Sources of Risk Measures of Risk Measurement of Return General pattern of Risk and Return Criteria for evaluating proposals to minimize Risk (Single Asset and Portfolio) Methods of Risk Management Hedging currency risk).	(Source of finance) Equity Shares, Preference Shares, Bonds, Debentures and Fixed Deposits – Features – Advantages and Disadvantages. (Theory only) Lease Financing: Meaning – Features – Forms – Merits and Demerits (Problem only)
III	(Startup Financing and Leasing) Startup Financing: Meaning, Sources, Modes (Bootstrapping, Angel investors, Venture capital fund) Leasing: Meaning Types of Lease Agreements Advantages and Disadvantages of Leasing Financial evaluation from the perspective of Lessor and Lessee.	(Leverage and Capital Structure) Leverage: Analysis of Operating Leverage and Financial Leverage-Combined Financial and Operating Leverage. (Problem only) Capital Structure: Concept of Capital Structure- Determinants- Theories of Capital Structure - Relevance and Irrelevance - Problems of Optimal Capital Structure (Theory only)
IV	(Cash, Receivable and Inventory Management) Cash Management: Meaning, Objectives and Importance Cash Cycle Minimum Operating Cash Safety level of cash Optimum cash balance Receivable Management: Meaning Credit policy Controlling receivables: Debt collection period, Ageing schedule, Factoring Evaluating investment in accounts receivable Inventory Management: Meaning and Objectives EOQ with price breaks ABC Analysis.	(Cost of Capital) Meaning- Definition- Concepts – Importance – Computation of Cost of Equity-Cost of Debt-Cost of Preference Capital- Cost of Internal Reserve - Weighted Average Cost of Capital. (Theory and Problem.
V	Capital Budgeting: Meaning, Steps involved, Complexities, Factors to be considered –sources of finance – Techniques to evaluate capital expenditure proposals: Discounted Pay Back Period, NPV, Profitability Index, Net Profitability Index and Internal Rate of Return – Capital rationing - Techniques of Risk analysis in Capital Budgeting.	

PERCENTAGE OF SYLLABUS REVISED : 75 %

COURSE FOCUSES ON:

[✓]	Skill Development	[✓]	Entrepreneurial Development
[✓]	Employability	[ ]	Innovations
[ ]	Intellectual Property Rights	[ ]	Gender Sensitization
[ ]	Social Awareness/ Environment	[ ]	Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Commerce
Board: Commerce with Computer Applications
Semester: II
Course Code / Name: **24CMP2CB / RELATIONAL DATABASE MANAGEMENT SYSTEM**

Unit	Existing	Changes
I	**Data base and E-R Models** Database System Applications-Database Systems Vs File Systems– View of data-Data Models-Database Languages–Database users &administrators. E-R Models: Basic concepts-Constraints-~~Keys~~– E-R diagram.	
II	**Database system Architecture and Data Structures:** Database System Architecture – Basic Concepts: Data System, Operational Data, Architecture for a Database System, Distributed Databases. Data Structures and Corresponding Operators: Introduction, Relational Approach, Hierarchical Approach, Network Approach.	
III	**Relational Approaches and Algebra:** Relational Approach: Relational Data Structure: Relation, Domain, Attributes, Key. Relational Algebra: Introduction, Traditional Set Operation – ~~Attribute Attribute names for derived relations~~ – Special Relational Operations.	CODD's Rules Primary Key, Foreign key and candidate key. UNION – UNION ALL – INTERSECT - MINUS. selection, projection, division and join. Join Operators: Inner Join – Natural Join – Outer Join.
IV	**DML and Normalization:** DML – adding a new Row/Record – Customized Prompts – Updating and Deleting an Existing Rows/Records – retrieving Data from Table – Arithmetic Operations –restricting Data with WHERE clause – Sorting. Normalization: Functional dependency, First, Second, Third normal forms, Boyce - Codd Normal Form, ~~Fifth Normal Form~~, Advantages of Normalization.	DDL commands- create, alter, drop the table. Aggregate functions
V	~~Hierarchical and Network Approach~~ ~~Hierarchical Approach: IMS data structure Physical Database, Database Description Hierarchical sequence External level of IMS: Logical Databases, the program communication block. Network Approach: Architecture of DBTG System. DBTG Data Structure: Sample Schema, Difference between subschema and schema DBTG Data Manipulation.~~	**Transaction processing and Database Recovery:** Transaction processing: Concurrency control-ACID property- Serializability of scheduling-Locking and timestamp-based schedulers. Database recovery: Transaction Recovery-System Recovery-Two phase Commit.Indexing: structure- types.Hashing: static and dynamic.

PERCENTAGE OF SYLLABUS REVISED   : 30 %

COURSE FOCUSES ON:

✓	Skill Development	✓ Entrepreneurial Development
✓	Employability	☐ Innovations
✓	Intellectual Property Rights	☐ Gender Sensitization
☐	Social Awareness/ Environment	☐ Constitutional Rights/ Human Values/ Ethics

Faculty: Commerce   **Board: Commerce with Computer Applications**
Semester: II
Course Code / Name: 24CMP2CP / RDBMS

S.No	Contents
1	Program to implement Data Definition Language (DDL) commands. (a) Create a table employee (b) To add column to existing table (c) Dropping a Column from a Table (d) Modifying Existing Columns (e) To Rename a column (f) Truncate table (g) Drop table (h) Describe table
2	Program to implement Data Manipulation Language commands (DML). (a) Inserting a single row into a table (b) View all rows and all columns (c) Updating all rows (d) Remove all rows
3	Write a SQL query to do the computations on table using the following aggregate functions. (a) avg (b) max (c) min (d) count
4	Implementation of different types of function with suitable examples (a)Number function (b)Character Function (c)Conversion Function (d)Date Function
5	Implementation of different types of operators in SQL (a)Arithmetic Operators (b)Logical Operators (c) Comparison Operator (d)Special Operator (e) Set Operation
6	Implementation of different types of Join operations. (a) Inner Join (b)Outer Join (c)Natural Join
7	Creation of table PAYROLL with the following fields and insert the values: Field name / Field type / Field size: Employee no. — Number — 8 Employee name — Character — 8 Department — Character — 10 Basic pay — Number — 8 with 2 decimal places HRA — Number — 6 with 2 decimal places DA — Number — 6 with 2 decimal places PF — Number — 6 with 2 decimal places Net pay — Number — 8 with 2 decimal places Queries 1. Updating the records to calculate the net pay. 2. Arranging the records of employees in ascending order of their net pay. 3. Displaying the details of the employees whose department is "sales". 4. Selecting the details of employees whose HRA>=1000 and DA<=900. 5. Selecting the records in descending order.
8	Creation of table Company with the following fields and insert the values: Field name / Field type / Field size: Company name — Character — 15 Proprietor — Character — 15 Address — Character — 25

	Supplier name	Character	15
	No of employees	Number	4
	GP percent	Number	6 with 2 decimal places

Queries:
1. Displaying all the records of the company which are in the ascending order of GP percent
2. Displaying the name of the company whose supplier name is "Telco".
3. Displaying the details of the company whose GP percent is greater than 20 and order by GP percent
4. Displaying the detail of the company having the employee ranging from 500 to1000

9	Creation of table Software with the fields and insert the values:		
	Field name	Field type	Field size
	Programmer name	Character	15
	Title	Character	20
	Language used	Character	15
	Software cost	Number	10 with 2 decimal places
	Development cost	Number	10
	Software sold	Number	3

Queries:
1. Displaying the details of software developed by "PRAVEENA".
2. Displaying the details of the packages whose software cost exceeds "1500".
3. Displaying the details of the software that are developed in "Java".
4. Displaying the price of costliest software developed in "Python".

10	Create a table customer and order to implement primary key and foreign key constraints.
11	Generate a table for railway reservation with necessary fields. Insert the data values and use DCL and TCL commands like GRAND, REVOKE, COMMIT, ROLLBACK and SAVE POINT commands.
12	Construct a table for library management system with two table masters and transaction and create a report based on the date of return column.

PERCENTAGE OF SYLLABUS REVISED : **50%**

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Innovations
✓	Intellectual Property Rights		Gender Sensitization
	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics

<center>**Syllabus Revision**</center>

Faculty: Commerce   **Board: Commerce with Computer Applications**
Semester: II
Course Code / Name: 24CMP2DA / Information Security

Unit	Existing	Changes
I	**Introduction to Information Security** History of Information Security-Components of an Information System-Balancing Information Security and Access-Approaches of Information Security Implementation-Security in the System Development Life Cycle: ~~The System Development Life Cycle~~-Traditional Development Methods-Software Design Principles.	Software Assurance
II	**Threats and Attacks** Compromises to Intellectual Property: ~~Software Privacy~~- Copyright Protection and User Registration-~~Power Irregularities~~-Espionage or Trespass-Hackers–Password Attacks-Forces of Nature-Human Error or Failure- Information Extortion-Sabotage or Vandalism-Software Attacks-Technical Hardware/Software Failures or Errors-~~Thefts~~.	Threats: Definition -Types of Threats. Attacks: Definition-Types of Attacks. Software Piracy Theft
III	~~**Planning and Risk Management**~~ Information Security Planning and Governance-Information Security Policy, Standards and Practices- Security Blueprint- Design and Security Architecture: Spheres of Security-Levels of Controls-Defense in Depth-Security Training and Awareness. Overview of Risk Management-Risk Identification-Risk Assessment and Control	Planning for Security and Risk Management Risk Control Practices
IV	**Security Technology** Access Control: Access Control Mechanisms. Firewalls-Cryptography-Foundation of Cryptography-Cipher Models-Physical Access Controls-Fire Security- Interpretation of Data-Securing Mobile and Portable Systems	Cryptanalysis-Cryptology
V	~~**Security and Maintenance**~~ Positioning and Staffing the Security Functions-Credentials for Information Security Professionals-Employment Policies and Practices. Information Security Maintenance: Security Management and Maintenance Models-Digital Forensic.	Personnel Security and Information Security Maintenance Security Considerations

PERCENTAGE OF SYLLABUS REVISED   **: 15 %**

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability	☐	Innovations
✓	Intellectual Property Rights	☐	Gender Sensitization
☐	Social Awareness/ Environment	☐	Constitutional Rights/ Human Values/ Ethics

Faculty: Commerce
Semester: II   (I M.Com CA)
Course Code / Name: 24CMP2DB / BANKING SERVICES

Unit	Existing	Changes
I	**Indian Banking System** Overview of Indian Banking system – Structure – Functions – Key Regulations in Indian Banking sector –RBI Act, 1934/ 2006 –Banking Regulation Act, 1949– Negotiable Instruments Act 1881/ 2002 – Definition: Banking-Customer-Relationship between Banker and Customer- Rights, Duties and obligations of a banker.	Types of Banks-Small and Micro finance Banks
II	**(Sources and Applications of Bank Funds)** Different forms of Deposits and Non-Deposit sources-Borrowing of funds by banks-Application of bank funds – Investments and Lending functions, Principles of bank lending- Types of lending-Different types of loans and Advances -Methods of granting advances- Secured and Unsecured advances.	Micro Credits
III	**Investment Management** –Asset and Liability Management – Financial Distress – Signal to borrowers –Risk Management – Types of Risk - Credit risk, operational and Market risk- Risk Management Methodology – Forex – Credit market –and solvency risks – NPA's Provision – Current issues on NPA's	**Information Security Systems in Banking** Information security - Software based security systems - Hardware based security systems (smart card, M chip) –Cryptography-Digital Signatures-Physical Security-Cyber Attacks- Control and Administration- Miscellaneous (Non -Technical issues).
IV	**(Diversification in Banking Activities)** Diversification of banks into securities market, Mutual funds, Insurance business, Capital market, Clearing corporation, Merchant banking- Take-out Finance-Securitization- Reverse Mortgage Loans.	**Trends in Banking Services** Internet banking: Meaning-Historical Perspective-Policy- Know your Customer (KYC) Norms-Applications. Products and Services: **Phone banking (IVR)**- Mobile Banking-Kiosk Banking-Virtual banking-Neo Banking-Open banking- Modules-ATMs, Debit/Credit/Smart cards/ Prepaid Instruments -Core Banking Solutions (CBS) -Point of Sale (PoS)- Other Information Technology enabled Services (OITeS). -Forex services
V	**E-banking services:** Delivery channels of Banking services-Branches- ATM- Phone banking, Kiosks- PC banking through Personal financial software and Proprietary software- Internet banking- Online Banking- Interactive TV-Smart card and E- Cash. Electronic Banking- Components/ Types- Advantages and Limitations-Digital currency: Characteristics- Types- Pros and Cons..	**E-Payments and Settlements services** Payment and Settlement Systems Act 2007-E-Commerce-E-payments-ECS (Debit and credit clearing) National Electronic Clearing System (NECS)-NEFT-RTGS-UPI-IMPS-Aadhaar enabled Payment System. SFMS-CFMS-SWIFT-PDO-NDS-, Clearing Operations-eCHEQUES-CTS.

PERCENTAGE OF SYLLABUS REVISED　　　　　**: 60 %**

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability	✓	Innovations
☐	Intellectual Property Rights	☐	Gender Sensitization
☐	Social Awareness/ Environment	☐	Constitutional Rights/ Human Values/ Ethics

Syllabus – New Course

**Faculty: Commerce** **Board: Commerce with Computer Applications**
Semester: II
Course Code / Name: 24CMU2CP / Financial Modeling with Spreadsheet

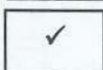| S.No.	Contents
1	Compute Present Value.
2	Compute Future Value.
3	Prepare Trend Analysis and Forecasting.
4	Evaluate the Liquidity Ratio.
5	Compute the Efficiency Ratio.
6	Measure the Leverage Ratio and Coverage Ratio.
7	Compute Profitability Analysis with Sparkline Chart.
8	Measure Compound Annual Growth Rate (CAGR).
9	Predict the Coefficient of Variation.
10	Calculate Portfolio Standard Deviation.
11	Prepare Correlation Analysis and Identify Positive or Negative Correlations.
12	Evaluate the Capital Asset Pricing Model (CAPM).

PERCENTAGE OF SYLLABUS REVISED   **: 100%**
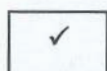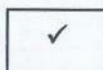
COURSE FOCUSES ON:

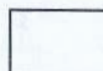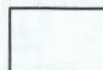|			
✓	Skill Development	✓	Entrepreneurial Development
✓	Employability	✓	Innovations
	Intellectual Property Rights		Gender Sensitization
	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics
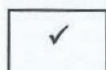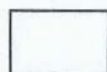
Syllabus Revision

Faculty: Commerce   **Board: Commerce with Computer Applications**
Semester: II
Course Code / Name: 235CM1A4CA / DATABASE MANAGEMENT SYSTEM

Unit	Existing	Changes
I	**Database System Architecture** Database System Architecture – Basic Concepts: Database System – Operational Data - Data Independence - Architecture for a Database System – Distributed Databases. Storage Structures: Representation of Sample Data. Data Structures and Corresponding Operators: Introduction - Relation Approach – Hierarchical Approach - Network Approach. Case Study on Storage Structure	
II	**Relational Approach** Relational Approach: Relational Data Structure – Relation – Domain - Attributes - Keys – Types. Relational Algebra: Introduction - Traditional Set Operation– Special Relational Operations. ~~Embedded SQL: Introduction Operations not involving cursors - involving cursors Dynamic statements~~ ~~Case Study on Relational operations.~~	Relational Calculus Relational Calculus: Tuple-Oriented and Domain -Oriented Relational Calculus.
III	~~**Normalization**~~ ~~Query by Example: Introduction Retrieval operations Built in Functions update operations QBE Dictionary. Normalization: Functional dependency First Second Third normal forms~~ ~~Case Study on Normalization.~~	SQL Data Definition and Data Types-Constraints in SQL-Basic retrieval queries in SQL- Insert, Update and Delete operations in SQL. Embedded SQL: Introduction – Operations not involving cursors and involving cursors –Dynamic statements. Case Study on Relational operations
IV	~~**Hierarchical Approach and IMS Data manipulation**~~ ~~Hierarchical Approach: IMS data structure Physical Database Database Description Hierarchical sequence. External level of IMS: Logical Databases Program communication block. IMS Data manipulation: DL/I Operations - DL / I Examples~~	Normalization Query by Example: Introduction – Retrieval operations - Built–in Functions - update operations – QBE Dictionary. Normalization: Functional dependency – First - Second - Third normal forms.
V	~~**Network Approach & DBTG System**~~ ~~Network Approach: Architecture of DBTG System. DBTG Data Structure: The set construct Hierarchical and Network Examples - Singular sets - Sample Schema. DBTG Data Manipulation.~~	Hierarchical and Network Approach Hierarchical Approach: IMS data structure – Physical Database - Database Description– Hierarchical sequence. External level of IMS: Logical Databases - Program communication block. Network Approach: Architecture of DBTG System – DBTG Data Manipulation

PERCENTAGE OF SYLLABUS REVISED   : 20 %

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability	✓	Innovations
☐	Intellectual Property Rights	☐	Gender Sensitization
☐	Social Awareness/ Environment	☐	Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Commerce   **Board: Commerce with Computer Applications**
Semester: IV
Course Code / Name: 235CM1A4SP / Database Management System

S.No.	Contents
1	Program to create DDL Commands in SQL.
2	Program to create DML Commands in SQL.
3	Program to create different types of operators in SQL.
4	Program to perform the following sorting operations using ORDER BY 1.Ascending 2.Descending
5	Program to perform Nested Query in SQL.
6	Program to perform the following different types of functions. 1.Number 2.Character 3.Conversion 4.Date
7	Program to perform the following Aggregate Functions in SQL 1.Maximum 2.Minimum 3.Sum 4.Average 5.Count
8	Preparation of table "Company" with the following fields and insert the values for 10 employees. **Field name** — **Field type** — **Field size** Company name — Character — 15 Proprietor — Character — 15 Address — Character — 25 Supplier Name — Character — 15 No of employees — Number — 4 GP Percent — Number — 6 with 2 decimal places Queries: 1. Displaying all the records of the company which are in the ascending order of GP percent. 2. Displaying all the records of the company which are in the descending order of GP percent. 3. Displaying the name of the company whose supplier name is "Telco". 4. Displaying the details of the company whose GP percent is greater than 20 and order by GP Percent. 5. Displaying the detail of the company having the employee ranging from 300 to 1000.
9	Preparation of table named "Employee" with the following fields and insert the values. **Field name** — **Field type** — **Field size** Employee Name — Character — 15 Employee Code — Number — 6 Address — Character — 25 Designation — Character — 15 Grade — Character — 1 Date of Joining — Date — - Salary — Number — 10 with 2 decimal places Queries: 1. Displaying name of the employees whose salary is greater than "Rs.12,000". 2. Displaying the details of employees in ascending order according to Employee Code. 3. Displaying the total salary of the employees whose grade is "A". 4. Displaying the details of the employee earning the highest salary. 5. Displaying the names of the employees who earn more than "Rohit".

	Creation of table named Student with the following fields and insert the values:		
	Field name	**Field type**	**Field size**
	Student Name	Character	15
	Gender	Character	6
	Roll No.	Character	10
	Department Name	Character	15
	Address	Character	25
10	Percentage	Number	4 with 2 decimal places

Queries:
1. Calculating percentage of the students.
2. Displaying the names of the students whose percentage is greater than 70
3. Displaying the details of the student who got the highest percentage.
4. Displaying the details of the students whose percentage is between 40 and 60.
5. Displaying the details of the students whose percentage is greater than the percentage of Roll No = 222CM005.

	Creation of the table named PRODUCT with the following fields and insert the values:		
	Field name	**Field type**	**Field size**
	Product no	Number	6
	Product name	Character	15
	Unit of measure	Character	15
	Quantity	Number	6 with 2 decimal places
	Rate	Number	4 with 2 decimal places
11	Total amount	Number	8 with 2 decimal places

Queries:
1. Updating the statements to calculate the total amount and selecting the record.
2. Selecting the records whose unit of measure is "Kg".
3. Selecting the records whose quantity is greater than 10 and less than or equal to 20.
4. Calculating the entire total amount by using sum operation.
5. Calculating the number of records whose unit price is greater than 50 with count operation.

	Creation of table PAYROLL with the following fields and insert the values:		
	Field name	**Field type**	**Field size**
	Employee no.	Number	8
	Employee name	Character	8
	Department	Character	10
	Basic pay	Number	8 with 2 decimal places
	HRA	Number	6 with 2 decimal places
	DA	Number	6 with 2 decimal places
12	PF	Number	6 with 2 decimal places
	Net pay	Number	8 with 2 decimal places

Queries
1. Updating the records to calculate the net pay.
2. Arranging the records of employees in ascending order of their net pay.
3. Displaying the details of the employees whose department is "sales".
4. Selecting the details of employees whose HRA>=1000 and DA<=900.
5. Selecting the records in descending order.

PERCENTAGE OF SYLLABUS REVISED   **: 50%**

COURSE FOCUSES ON:

[✓] Skill Development	[✓] Entrepreneurial Development
[✓] Employability	[✓] Innovations
[ ] Intellectual Property Rights	[ ] Gender Sensitization
Social Awareness/ Environment	[ ] Constitutional Rights/ Human Values/ Ethics

Dr. N.G.P. ARTS AND SCIENCE COLLEGE

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18th

Syllabus Revision

Faculty: Commerce   **Board: Commerce with Computer Applications**
Semester: IV
Course Code / Name: 235CM2A4CA / ACCOUNTING FOR MANAGEMENT

Unit	Existing	Changes
I	**Introduction to Management Accounting** Meaning-Definition – Characteristics - Scope-Objectives -Functions - Advantages -Limitations and Tools and Techniques of Management Accounting. Distinction between Financial Accounting and Management Accounting - Distinction between Management Accounting and Cost Accounting.	
II	**Financial Statement Analysis and Ratio Analysis** Financial Statement Analysis - Comparative -Common Size - Trend analysis. Ratio Analysis: Meaning - Advantages - Limitations. Classification of Ratios- Liquidity Ratio- Solvency Ratio- Profitability Ratio-Turnover Ratio- Analysis of Capital Structure.	Construction of Balance Sheet
III	**Working Capital and Cash Flow Analysis** – Working Capital: Meaning-Concepts-Classifications-Importance-Factors Determining Working Capital Requirements-Computation of Working Capital Requirements. Cash Flow Statement: Meaning –Importance –Difference between Cash Flow and Fund Flow Analysis –Advantages –Limitations –Computations of Cash from operations – Cash Flow Statement.	
IV	**Marginal Costing and Standard Costing** Marginal Costing: Introduction – Concepts- Marginal Costing and Break-Even Analysis – Managerial Applications of Marginal Costing – Significance and limitations of Marginal Costing. Standard Costing: Meaning-Features-Merits and Demerits- Steps - Analysis of Variances- Classifications of Variances.	
V	**Budgeting and Budgetary Control** Meaning– Definition –Nature- Essentials –Merits-Demerits Classification of Budgets – Preparation of Production Budget- Material Purchase and Sales Budget - Flexible Budget-Cash Budget-Master Budget-Zero Base Budget.	

PERCENTAGE OF SYLLABUS REVISED   **: 5 %**

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability		Innovations
	Intellectual Property Rights		Gender Sensitization
✓	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics

Faculty: Commerce　　　　**Board: Commerce with Computer Applications**
Semester: IV
Course Code / Name: 235CM2A4CB / Java Programming

Unit	Existing	Changes
I	**Java Features and Structure** Introduction to Java - Features of Java – Java Environment - Lexical Issues or tokens Data Types - Variables - Arrays - Operators – Conditional Statements-Iterative Statements-General Structure of a Java Program.	Basic concepts of OOP are included.
II	**Operators and Control Statements** Operators and Control Statements: Operators, Arithmetic Operators, Increment and Decrement Operators, Comparison Operators, Logical Operators, Operator Precedence; Control Flow Statements, If-else Statement, Switch Statement, For Loop, While Loop, Do…While Loop, Break Statement Continue Statement.	-
III	~~**Arrays and Multithreaded Programming**~~ Arrays - creating an array- One dimensional array – Strings – Extending a class using Inheritance. ~~Multithreaded Programming: Creating Threads-Extending thread classes-Stopping and blocking a thread-Life cycle of a thread.~~	Unit title has been changed to "Classes, Interfaces, and Packages." Concepts of classes, interfaces, and packages are included. Multithreaded programming has been shifted to the IV unit.
IV	~~**Input/Output Files**~~ Files - Concept of Streams - Stream Classes - Input Stream Classes - Output Stream Classes - Character Stream Classes - Using Streams - Other Useful I/O Classes - Using the File Class.	Unit title has been changed to "Multithreaded Programming and Exception Handling." Multithreaded programming has been moved from the III unit. I/O streams has been shifted to the V unit. Exception handling has been included.
V	~~**Applets**~~ Applets: Introduction - Local and Remote Applets - Building Applet Code - Applet Life Cycle - Creating an Executable Applet - Designing a Web page - Applet tag - Applet to HTML File - Running the Applet	Unit title has been changed to "I/O in Java and Java Applets." I/O streams has been moved from the IV unit. Graphics have been included.

PERCENTAGE OF SYLLABUS REVISED　　　　　　**: 40 %**

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability	✓	Innovations
	Intellectual Property Rights		Gender Sensitization
	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Commerce **Board: Commerce with Computer Applications**
Semester: III
Course Code / Name: 235CM2A4CC/ Setting up of Business Entities

Unit	Existing	Changes
I	**Startups in India** Types of business ~~organizations~~ – Factors governing selection of an ~~organization Startups~~ – Evolution – Definition of ~~a~~ Startup – Startup landscape in India – Startup India policy – Funding support and incentives – Indian states with Startup policies –Exemptions for startups – Life cycle of a Startup – ~~Important points for~~ Startups – Financing options available for Startups – Equity financing – Debt financing – IPO – Crowd funding – Incubators - Mudra banks – Successful Startups in India.	Definition of Startup - Evolution- Startup landscape in India - Startup India policy - Funding support and incentives - Indian states with Startup policies - Exemptions for startups - Life cycle of a Startup - Salient features of Startups -Types of business companies – Factors governing selection of a companies.
II	**Not-for-Profit Organizations** Formation and registration of NGOs – Section 8 Company – Definition – Features –Exemptions – Requirements of Section 8 Company – Application for incorporation –Trust: Objectives ~~of a trust~~ – Persons who can create a trust – Differences between a public and private trust – Exemptions available to trusts – Formation of a trust – Trust deed –Society – Advantages – Disadvantages – Formation of a society – Tax exemption to NGOs.	
III	**Limited Liability Partnership and Joint Venture** Limited Liability Partnership: Definition – Nature and characteristics – Advantages and disadvantages – Procedure for incorporation – LLP agreement – Annual compliances of LLP - Business collaboration: Definition – Types – Joint venture: Advantages and disadvantages – Types – Joint venture agreement - Successful joint ventures in India – ~~Special Purpose Vehicle Meaning Benefits Formation.~~	
IV	**Registration and Licenses** Registration and Licenses: Introduction – Business entity registration – Mandatory registration – PAN – Significance – Application and registration of PAN – Linking of PAN with Aadhar – TAN – Persons liable ~~to apply for TAN~~ – Relevance of TAN – Procedure to apply for TAN – GST: ~~Procedure for~~ registration – Registration under Shops and Establishment Act – MSME registration – Clearance from Pollution Control Board – FSSAI registration and license – Trade mark, Patent and Design registration.	Application Procedure. Registration Procedure
V	~~Environmental Legislations in India~~ ~~Geographical Indication of Goods (Registration and Protection) Act, 1999: Objectives, Salient Features - The Environmental Protection Act, 1986: Prevention, control and abatement of environmental pollution - The Water (Prevention And Control of Pollution) Act, 1974 and The Air (Prevention and Control of Pollution) Act, 1981: The Central and State Boards for Prevention and Control of Water Pollution - Powers and Functions of Boards - Prevention and Control of Water Pollution - Penalties and Procedure.~~	Conversion of Business Entities and Closure of Business Conversion of Business: Private Company into a Public Company - Public Company into Private Limited -Section 8 company into any other kind - LLP into Company - One Person Company to Private Company - Unlimited Liability Company into a Limited Liability Company. Closure of Business: Dormant Company - Reason - Benefits and Exemptions - Compliance.

PERCENTAGE OF SYLLABUS REVISED : 40 %

Syllabus Revision

Faculty: Commerce　　　　**Board: Commerce with Computer Applications**
Semester: IV
Course Code / Name:　235CM2A4CP / Java Programming

S.No	Contents
1	Write a Java program to store company names and their quoted prices, and identify the company with the lowest quote.
2	Write a Java program to demonstrate various arithmetic operations.
3	Develop Java program to handle Bank Account Operations.
4	Implement a Java program to calculate Depreciation.
5	Create a Java program to reverse a given string.
6	Develop a Java program to prepare the mark list using Inheritance.
7	Create a Java program to demonstrate the concept of Multi-Threading.
8	Write a Java program to convert a list of strings to uppercase or lowercase using streams.
9	Write a Java program that throws an exception and catch it using a try-catch block.
10	Develop a Java applet that displays time in an Applet window.
11	Create a Java applet to create a simple spread sheet.
12	Develop a Java applet that receives an integer in one text field, and computes its factorial Value and returns it in another text field, when the button named "Compute" is clicked.

PERCENTAGE OF SYLLABUS REVISED　　　　: 50%

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability	✓	Innovations
	Intellectual Property Rights		Gender Sensitization
	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics

COURSE FOCUSES ON:

[✓] Skill Development	[ ] Entrepreneurial Development
[✓] Employability	[ ] Innovations
[ ] Intellectual Property Rights	[ ] Gender Sensitization
[ ] Social Awareness/ Environment	[ ] Constitutional Rights/ Human Values/ Ethics

Syllabus Revision

Faculty: Commerce　　　　　　　**Board: Commerce with Computer Applications**
Semester: IV
Course Code / Name: 235CM2A4DB/ FinTech Services

Unit	Existing	Changes
I	**~~Fintech Introduction~~** Transformation–FinTech Evolution: Infrastructure, Banks Startups and Emerging Markets ~~Collaboration between Financial Institutions~~ and Startups–FinTech vs BFSI-Emerging Economics: Opportunities and Challenges-Various financial Models and Classifications.	**Basics of FinTech** 1.0 Infrastructure - 2.0 Banks- 3.0 and 3.5 Startups and Emerging Markets- Typology. Fin Tech for Startups, Investors and Consumers. Fin Tech Domains- Progress of Technology in Financial Markets.
II	**~~Crypto currencies and Block chain~~** Crypto Currency: ~~Evolution of Crypto currencies-A brief on~~ ICO's-Block chain Frameworks Block chain Implementation: ~~Block chain as a Financial System-Block chain for Provenance Tracking~~-Block chain for Inter organizational Record / Asset-keeping	**Payments and Cryptocurrencies** Payments: Individual, RTGS and E-Wallet - ABCDs of Alternative Finance. Crypto Currencies: Introduction- Types-Legal - Regulatory Implications.
III	**Financial Innovations** Digital Finance and Alternative Finance - Introduction – ~~Brief~~ History of Financial Innovation – Digitization of Financial Services - FinTech & Funds- Crowd funding–Regards, Charity and Equity - P2P and Marketplace Lending – New Models and New Products - ~~ICO~~	
IV	**Data Analytics in Finance:** ~~An~~ Introduction ~~to Data Analytics~~- Role of Analytics in the Modern World- Types of Analytics: Descriptive, Diagnostic, Predictive, Prescriptive-Data Analytics and Ethical Issues, –Application of Data Analytics in Finance - Methods of Data Protection.	
V	**~~Machine Learning~~** ~~Machine Learning-Evolution of ML- Trends in ML- Best Practices of Machine Learning-Machine Learning in future-Machine Learning Algorithms: Classification-Regression-Forecasting-Clustering, Neural Networks: Perception Learning-Back propagation Learning-Object Recognition, Deep Learning~~	**RegTech and TechFin** FinTech Regulation- Evolution of RegTech-RegTech Ecosystem in Financial Institutions and Startups- Regulatory Sandboxes- Smart Regulations-Redesigning financial structure-AI in Smart Regulations and Fraud Detection- AI and Governance - New Challenges of AI.

PERCENTAGE OF SYLLABUS REVISED　　　　　**: 60 %**

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability	✓	Innovations
	Intellectual Property Rights		Gender Sensitization
	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics

Faculty: Commerce   **Board: Commerce with Computer Applications**
Semester: IV
Course Code / Name: 235CM2A4DA / Big Data Analytics

Unit	Contents
I	**Introduction of Digital and Big Data** Definition of Digital Data-Classification of Digital Data-Definition of Big Data-Characteristics of Data-Evolution of Big Data-Challenges with Big Data. Big Data: Volume, Velocity, Variety-Traditional Business Intelligence (BI) versus Big Data-Top Challenges Facing Big Data-Importance of Big Data Analytics-Terminologies Used in Big Data Environments.
II	**The Big Data Technology Landscape** NoSQL-Hadoop: Features of Hadoop-Key Advantages of Hadoop-Versions of Hadoop-Overview of Hadoop Ecosystems-Hadoop Distributors-Hadoop versus SQL-Hadoop Overview-Hadoop Distributed File System-Processing Data with Hadoop-Interacting with Hadoop Ecosystem.
III	**MongoDB and Cassandra** Definition of MongoDB-Terms Used in RDBMS and MongoDB-Data Types in MongoDB-MongoDB Query Language: Insert Method, Save() Method. Cassandra: Definition-Features of Cassandra-CQL Data Types-CRUD Operations-Collections-Using a Counter-Time to Live(TTL)-Alter Commands-Import and Export.
IV	**Hive and Pig** History of Hive and Recent Releases of Hive-Hive Features-Hive Data Units-Hive Architecture-Hive Data Types-Hive File format-Hive Query Language(HQL)-User-Defined Function(UDF).Pig: Key Features of Pig-Pig on Hadoop-Pig Latin Overview-Data Types in Pig-Execution Modes of Pig-HDFS Commands-Relational Operators-Eval Function-Complex Data types-Piggy Bank-User -Defined Functions-Pig versus Hive.
V	**Jasper Report and Machine Learning** Definition of Jasper Reports-Jaspersoft Studio. Machine Learning: Definition-Machine Learning Algorithms: Regression Model-Clustering-Collaborative Filtering-Association rule Mining-Decision Tree.

PERCENTAGE OF SYLLABUS REVISED   **: 100%**

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability	✓	Innovations
☐	Intellectual Property Rights	☐	Gender Sensitization
☐	Social Awareness/ Environment	☐	Constitutional Rights/ Human Values/ Ethics

Syllabus- New Course

Faculty: Commerce
Semester: VI
Course Code / Name: 225CM1A6CA / WEB DESIGNING

Board: Commerce with Computer Applications

Unit	Contents
I	**Overview of Internet:** Introduction to Internet – Internet Access / Dial–Up Connection – Internet Services Features – World Wide Web (WWW) – Web Page – Hyper Text – HTML Tags –Web Browsing – Browser – Internet Addressing – IP Address – Domain Name.– Electronic Mail – Uniform Resource Locator (URL) – Internet Protocols –TCP/IP – FTP – HTTP – Telnet – Gopher – WAIS..
II	**HTML and HTML Tags :** Introduction to HTML-Web Page Basics – Set up a Web Page – Display a Web Page in a Web Browser – Start a New Paragraph – Start a New Line – Insert Blank Spaces – Header tags – Pre–format Text – Comment – Special Characters –Format Text – Emphasize – Superscript and Subscript – Font Style and Size –Color – Margins – Mono Spaced Font – Block Quote – Lists – Ordered List –Unordered List – Nested List – Definition List
III	**Links and Tables :** Links: Link to another Web Page – Link within a Web Page – Link to an Image –Link to a File – E–mail Link – Link to an FTP Site – Change Link Colors – Create Keyboard Shortcuts – Change the Tab Order. Tables: Create a Table – Add aBorder – Caption – Column Groups – Row Groups – Color – Background Images –Aligning Data – Size of a Table – Size of a Cell – Span Cells – Cell Spacing andCell Padding – Borders – Text Wrapping – Nested Tables – Wrap Text around aTable. Case Study on Education blog
IV	**Frames and Forms :** Introduction to Frames – Creating Frames – Frame Considerations – Link to a Frame – Scroll Bars – Resizing Frames – Frame Borders – Frame Margins – Nested Framesets – Inline Frame. Designing a forms Images – Add an Image – Background Image – Border – Wrap Text Around an Image – Aligning the Image – Horizontal Rule – Use Images in List – Convert an Image to GIF or JPEG . HTML style using CSS. . Case Study on Company Blog
V	**Markup Languages: XHTML 1.0:** Basic XHTML Syntax and Semantics: Document Type Declaration-While Space in Character Data. Heading: h1 and Friends- Spacing: pre and br- Images: The img Element- Links -The \<a\> Element- comments- Nesting Elements - Frames- Forms. Defining XHTMLs Abstract Syntax: XML - Element Type Declarations – Attribute List Declarations - Entity Documents - DTD Files- Creating HTML Documents. Case Study on Blogging application

PERCENTAGE OF SYLLABUS REVISED : **100%**

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability	✓	Innovations
✓	Intellectual Property Rights		Gender Sensitization
	Social Awareness/ Environment		Constitutional Rights/ Human Values/ Ethics

Syllabus - New course

Faculty: Commerce **Board: Commerce with Computer Applications**
Semester: VI
Course Code / Name: 225CM1A6SP / WEB DESIGNING

S.No.	Contents
1	Preparation of web pages for a business organization using HTML Frames
2	Preparation of Program using HTML to display the ordered list and unordered list of a Departmental Store.
3	Program to display Image and text using HTML tag for an advertisement of a Company Product
4	Preparation of table to display list of products using HTML Tag.
5	Preparation of document using Formatting and alignment to display Sales Letter.
6	Preparation of Resume using HTML Tag.
7	Preparation of website of your department with minimum five links using HTML.
8	Preparation of document using Form to support Local Processing of Order form.
9	Create web Pages using Anchor tag with its attributes for external links
10	Write a Program in to create your own Style Sheets using CSS.
11	Develop a XHTML page containing frames.
12	Create a Program using HTML picture tag.

PERCENTAGE OF SYLLABUS REVISED   **: 100%**

COURSE FOCUSES ON:

✓	Skill Development	✓	Entrepreneurial Development
✓	Employability	✓	Innovations
✓	Intellectual Property Rights	☐	Gender Sensitization
☐	Social Awareness/ Environment	☐	Constitutional Rights/ Human Values/ Ethics

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FACULTY OF COMMERCE

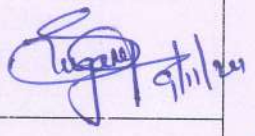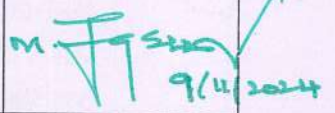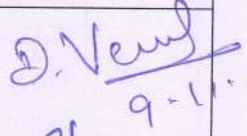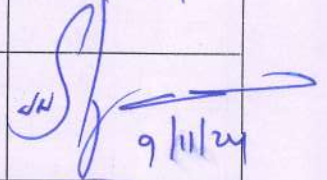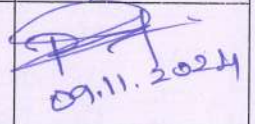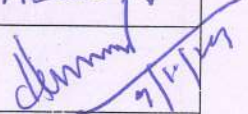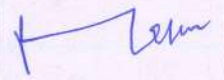**Name of the Board:** Commerce with Computer Applications

EIGHTEEN BOARD OF STUDIES MEETING - ATTENDANCE

Venue: Commerce Lab   **Date:** 09.11.2024   **Time:** 10.00 a.m.

S.NO.	NAME	POSITION	SIGNATURE
1.	Dr.P.Suganya Associate Professor & Head Department of Commerce with Computer Applications	Chairman	9/11/24
2.	Dr.M.Jegadeeshwaran Associate Professor, Department of Commerce Bharathiar University, Coimbatore.	University Nominee	M.T 9/11/2024
3.	Dr.K.Kumar Principal, National College (Autonomous), Trichy.	Subject Expert	ABSENT
4.	Dr.D.Vennila Associate Professor (SG) Avinashilingam Institute for Home Science & Higher Education for Women, Coimbatore.	Subject Expert	D.Venl 9-11-24.
5.	CA.N.N.ShanmugaVadivel, N.N. SHANMUGA VADIVEL& Co., Coimbatore.	Industrial Expert	9/11/24
6.	Mr.R.Pavithran Senior Systems Engineer, Cognizant Technologies, Coimbatore.	Alumni	09.11.2024
7.	Dr.N.Kuppuchamy Associate Professor and Head, Department of Tamil		ABSENT
8.	Dr.A.Hazel Verbina Professor and Head (i/c), Department of English	Co-Opted Members	9/11/24
9.	Dr. R. Sowrirajan Assistant Professor and Head, Department of Mathematics		

No.	Name / Designation	Role	Signature
10.	Dr.D.Parasakthi Professor and Head, Department of Commerce	Co-Opted Members	
11.	Dr.S.Kowsalya Associate Professor and Head Department of Corporate Secretaryship		
12.	Dr.M.Prakash Professor	Member	
13.	Dr.M.Ashok Kumar Professor, COE	Member	
14.	Dr.P.Jayasubramanian Professor	Member	
15.	Dr.C.Eahambaram Associate Professor	Member	
16.	Mrs.C.Radhiya Devi Assistant Professor	Member	
17.	Mrs.N.Revathi Assistant Professor	Member	
18.	Mrs.V.Jayashree Assistant Professor	Member	ABSENT
19.	Mrs.L.Priya Assistant Professor	Member	ABSENT
20.	Mr.M.Gunasekaran Assistant Professor	Member	
21.	Dr.T.Sumathi Assistant Professor	Member	
22.	Mrs.Neetu P M Assistant Professor	Member	
23.	Mrs.T.Sreegeetha Assistant Professor	Member	
24.	Mrs.C.Mercy Praba Assistant Professor	Member	
25.	Dr.K.Dhivya Assistant Professor	Member	
26.	Dr.V.M.Tharaka Rani Assistant Professor	Member	
27.	S.Sivashankari 221CM061	Student Representative	
28.	V.Vigneshkumar 232CM024	Student Representative	

BoS Chairman/HoD
Department of Commerce (CA)
Dr. G. P. Arts and Science College
Coimbatore – 641 048