MES GARWARE COLLEGE OF COMMERCE (AUTONOMOUS)

BBA-CA Programme (Autonomous)

Under the Guidelines of NEP 2020 and AICT

AY 2024-25

FY BBA(CA) – Semester – II		
Course Code: 23BA2-A022	**Subject: Relational Database Management System**	**Marks: 50 Credits: 2**

Course Objectives:

- To understand concept of RDBMS & use in business
- Enables students to understand relational database concepts and transaction management concepts in database system.
- To understand meaning and concept of Lock based and timestamp based protocol, Deadlock handling and Recovery of database

Course Outcome:

After completing the course, the student shall be able to

CO1: Ability to understand concepts of Relational Database management system and its implementation

CO2: Knowledge of Transaction based recovery system of database

CO3: understand concepts like lock-based recovery system, timestamp-based protocol and Deadlock handling.

Unit	Unit Title	Contents	No. of Lectures + CCE
I	Introduction To RDBMS	Introduction To RDBMS • Introduction to popular RDBMS product and their feature • Difference Between DBMS and RDBMS • Relationship among application programs and RDBMS	6
II	Transaction Management	Transaction Management • Transaction Concept • Transaction Properties • Transaction States • Concurrent Execution • Serializability	12
III	Concurrency Control & Recovery System	Concurrency Control & Recovery System • Lock Based Protocol - Lock, Granting Lock, Two-Phase locking protocol, • Timestamp Based Protocol • Deadlock Handling - Deadlock Prevention, Deadlock avoidance, Deadlock Detection, Deadlock Recovery • Failure Classification • Recovery & Atomicity Log-based recovery, checkpoints. • Recovery with concurrent transaction - Transaction Rollback, Restart recovery	12
Teaching lectures			**25**
Continuous Evaluation (CCE)			**5**
Total No of Lectures			**30**

Unit	Unit Title	Suggestive teaching methodology	Project (If any)	Outcome expected Conceptual understanding Knowledge/Skills/Attributes etc.	Weightage of Marks (%)

I	**Introduction To RDBMS**	Lecture - Demonstration and Practical Implementation in Laboratory	practical	1. Understanding of various RDBMS products() 2. Use of relational database 3. To get knowledge of Front End and Backend		20%
II	**Transaction Management**	Lecture - Demonstration and case study based learning		1. Understanding use of transaction and effect on database 2. Application of properties (Case solving) 3. Understanding of various states such as active, partially committed, Failed, aborted, committed 4. understand concept of reduction in waiting time 5. Conflict Serializability and View Serializability		40%
III	**Concurrency Control & Recovery System**	Lecture - Demonstration and case study based learning		1. To understand concept of shared and exclusive lock 2. To learn how to prevent deadlock situation 3. Understand what deadlock is and how it can occur when giving mutually exclusive access to multiple resources 4. To learn concepts related to hardware failures 5. Data recovery with different techniques 6. Restoring of data which is changed by mistake		40%

Suggested Books:

Sr. No.	Name of Book	Author	Publication	Place
1	Database Management System	Bipin Desai	Galgotia Publications	New Delhi
2	SQL/PLSQL the programming language of oracle	Ivan Bayross	BPB Publications	New Delhi
3	An Introduction to Database Systems	C. J.Date, A.Kannan, S.Swamynathan	Pearson Publications	North America
4	Database System Concepts	Silberschatz, Korth, Sudershan	McGraw-Hill	New York

Evaluation Method:

Unit	Evaluation Method	Marks (100)			Project/Practical (If any)
		Formative Assessment		Summative Assessment	
		CCE I (20)	CCE II (20)	SEMESTER (60)	
1	Assignment and lab course work	MCQ	Assignment		Practical in Computer Laboratory
2	Test and case study	MCQ	Assignment		Practical in Computer Laboratory
3	Test, and case study .	MCQ	Assignment		Practical in Computer Laboratory

FY BBA(CA) – Semester – II		
Course Code: 23BA2-C032	**Subject: PL-SQL**	**Marks: 50** **Credits: 2**

Course Objectives:

- Enables students to understand PL-SQL Concept and block Diagram
- Enables student to write PL/SQL programs that use: procedure, function, trigger, cursor and package

Course Outcome:

After completing the course, the student shall be able to

CO1: Ability to understand concepts PL-SQL Programming

CO2: Knowledge of PL/SQL programming in procedure, function, package, cursor and trigger

Unit	Unit Title	Contents	No. of Lectures + CCE
I	Basics of PL-SQL	Basics of PL-SQL • Overview of PL-SQL • Data Types in PL-SQL, • PL-SQL Block Diagram • Loops in PL-SQL • Exception Handling	10
II	PL-SQL Programming	PL-SQL Programming • Functions, • Procedures • Cursor • Trigger	20
Teaching lectures			**25**
Continuous Evaluation (CCE)			**5**
Total No of Lectures			**30**

Unit	Unit Title	Suggestive teaching methodology	Project (If any)	Outcome expected Conceptual understanding Knowledge/Skills/Attributes etc.		Weightage of Marks (%)
I	Basics of PL-SQL	Lecture - Demonstration and Practical Implementation in Laboratory	practical	Understanding of various programming aspects Learning of different exceptions Writing of compact code (Small program writing)		40%

II	PL-SQL Programming	Lecture - Demonstration and Practical Implementation in Laboratory	practical	1. Understanding of exact data retrieval 2. Writing of triggers and packages(Small application using all contents)		60%

Suggested Books:

Sr. No.	Name of Book	Author	Publication	Place
1	Database Management System	Bipin Desai	Galgotia Publications	New Delhi
2	SQL/PLSQL the programming language of oracle	Ivan Bayross	BPB Publications	New Delhi
3	An Introduction to Database Systems	C. J.Date, A.Kannan, S.Swamynathan	Pearson Publications	North America
4	Database System Concepts	Silberschatz, Korth, Sudershan	McGraw-Hill	New York

Unit	Evaluation Method	Marks (100)			Project/Practical (If any)
		Formative Assessment		Summative Assessment	
		CCE I (10)	CCE II (10)	SEMESTER (30)	
1	Assignment and lab course work	MCQ	Assignment		Practical in Computer Laboratory
2	Assignment and Lab Course work	MCQ	Assignment		Practical in Computer Laboratory

Evaluation Method:

FY BBA(CA) – Semester – II		
Course Code: 23BA2-F072	**Subject: Business Mathematics**	**Marks: 50 Credits: 2**

Course Objectives:

- To develop the basic understanding of numbers & their operations.
- To understand the concept of Matrix.

Course Outcome:

After completing the course, the student shall be able to

CO1: Understand numbers & their operations with ratio and proportion.

CO2: Understand the Matrix in business.

Unit	Unit Title	Contents	No. of Lectures
I	Introduction to Mathematics	1.1 Number System 1.2 Ratio. 1.3 Proportion. 1.4 Percentage	**12**
II	Matrix	3.1 Definition and Types of Matrices. 3.2 Algebra of Matrices, Inverse of Matrix.	**13**
Total No. of lectures for teaching			**25**
Total No. of lectures for evaluation			**05**
Total No of Lectures			**30**

Unit	Unit Title	Suggestive teaching	Project (If	Outcome expected- Conceptual understanding Knowledge/Skills/Attributes etc.		Weightage of Mar
				CO	LO	

		method ology	**an y)**			**ks (%)**
I	Introd uction to Mathe matics	Problem Solving.	NA	Understand numbers & their operations with ratio and proportion.	Self-directed Learning, Problem Solving	30%
II	Matrix	Peer Learnin g, Quiz & Problem Solving.	NA	Understand the Matrices in business.	Reflective Thinking, Scientific Reasoning, Problem Solving	40%

Suggested Readings:

Sr. No.	**Name of Book**	**Author**	**Publication**	**Edition**	**Place**
1	Business Mathematics: Theory & Applications	J. S. Sharma	S. Chand	Second	New Delhi
2	Business Mathematics	Dr. A. Dikshit	Himalaya	First	New Delhi

Unit	**Evaluation Method**	**Marks (50)**			**Project/ Practical**
		Formative Assessment		**Summative Assessment**	
		CCE I (10)	**CCE II (10)**	**SEMESTER (30)**	
1	Introduction to Statistics	Assignment +	MCQ +		NA
2	Matrix				

Suggested Web/E-Learning Resources:

Sr. No.	**Topic of the lectures**	**Lectures (Available on You tube/Swayam/MOOC S etc)**	**Fil ms**	**Journals/Articles/Case Studies**
1	Introduction to mathematics	https://youtube.com/c/IcaiOrgtube		College e-library: https://sites.google.com/mespune.in/mesgarwarecollegeofcommercelib/f-y-bbaca?authuser=0
2	Matrix			

FYBBA CA- Semester- II			
Course Code: 23BA2-G042	**Subject: Personality Development**	**Marks: 50** **Credits: 2**	

Course Objectives:

- To develop reasonable knowledge about Personality Development.
- To build self-confidence and goal setting among the students.

Course Outcome:

After completing the course, the student shall be able to

CO1: Understand qualities required for a pleasing personality..

CO2: Build self-confidence and set their goals.

Unit	Unit Title	Contents	No of Lectures
I	Introduction to Personality Development	• Meaning of Personality, • Define Personality and different types of Personalities, , Personality Traits /Determinants. (Traits required to be successful) • Types of Personalities – Introvert, Extrovert & Ambivert person, Effective Communication & Its key aspects. • Developing Positive Personality, Importance of Empathy and Emotional Intelligence, Ethics and Values (National and International protocols for individuals as well as business)	13

		• Manners & Etiquettes.	
II	Goal Setting and Self Development	• Self-Assessment-Finding Own Personality type (Conduct any Personality Test like Myers Briggs' 16 Categories of Personalities. • Goal Setting- SWOT Analysis, Interpersonal skills, understanding people/Social behavior • Team Building- Be a team player, adapt in different cultural and work styles, Maintain professional and social relationships • Assertiveness, Decision making skills, Leadership & Qualities of Successful Leader.	12

No of Teaching Lectures						25 hours
Unit	Unit Title	Teaching methodology	Project (If any)	Outcome expected- Conceptual un Knowledge/Skills/Attributes etc.		05 hours
				Course Outcome(CO)	Learning Outcome (LO)	
1	Introduction to Personality Development	Lecture, Group Discussion, Videos, Case studies on Personality development		Understand the Fundamentalsof Personality Development	To study the natu meaning of perso To understand va affecting persona development of a	
2	Goal Setting and Self Development	Lectures, Group Activities Presentations. Videos on goal setting & self development		Understand the need of Global Competence and Self Development	To understand th Global Competer To decipher the characteristics of competent indivi encourage studen that characteristi themselves.	
No of Lectures for Evaluation						

Unit	aluation Method	Marks (50)			Project/ Practical(If an	30 hours
		Formative Assessment		Summative Assessment		
		CCE I(10)	CCE II (10)	SEMESTER(30)		
I	Introduction to Personality velopment	Assignment	Internal	Semester End	NA	
II	al setting & Self velopment				NA	
Total No of Lectures						

Sr No	Name of the Book	Author	Publication	Edition	Place
1	Personality development.	Swami Vivekananda	Adhyaksha Advaita Ashram	2009	New Delhi
2	Personality Development and Communication skills.	C Rajya Lakshmi Kalyani, D S Vittal, AnithaRaju	Himalaya Publishing House.	2006	New Delhi
3	Effective Life Management.	Swami Amartyananda	Advaita Ashrama	2012	New Delhi
4	Personality Development and Soft Skills.	BarunMitra	Oxford University Press	2013	New Delhi
5	Soft Skills- Personality Development for Life Success.	Prashant Sharma	BPB Publication	2017	New Delhi
6	Theories of Personality 4th Edition.	Hall CS, Lindsey G and Campbell J B	Wiley	2002	New Delhi

Suggested Readings:

SR	Films	Journals/Articles/Case studies		
		Youtube/Swayam/MOOCS etc)		
1	Introduction to Personality Development	Courses Personality Development - Course (swayam2.ac.in) Developing Soft Skills and Personality - Course (nptel.ac.in) Free Online Course: Personality Development from Swayam | Class Central	--	Personality Development Articles (managementstudyguide.com) Personal Development Articles (essentiallifeskills.net) Personal Development Articles | Everyday Power
2	Goal Setting and Self Development	Courses Personality Development - Course (swayam2.ac.in) Developing Soft Skills and Personality - Course (nptel.ac.in) Free Online Course: Personality Development from Swayam | Class Central		Personality Development Articles (managementstudyguide.com) Personal Development Articles (essentiallifeskills.net) Personal Development Articles | Everyday Power

gested Web/Elearning Resources:

Practical Slips

MES Garware College of Commerce
F.Y.B.B.A.(C.A) Semester-I
Lab Course: **Computer Lab Based On 23BA2-A011 and 23BA2-C031 (2cr.each)**
Code: 23BA2-H011

Q1. Write a program in C to find the square of any number using the function. [15]

Q2. Create a structure employee (id, name, salary). Accept details of n employees and write a menu driven program to perform the following operations. [25]

a) Search employee by id
b) Display all employees

Q3. Consider the following entities and their relationships. [40]

Client (client_no, client_name, address, birthdate)
Policy_info (policy_no, desc, maturity_amt, prem_amt, date)

Relation between Client and Policy_info is Many to Many

Constraint: Primary key, prem_amt and maturity_amt should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will return total maturity amount of policies of a particular client.
2) Write a cursor which will display policy date wise client details.

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. Write a program in C to swap two numbers using function.
[15]

Q-2 Create a structure Student (id, name, marks). Accept details of n students and write a menu driven program to perform the following operations
[25]

a) Search student by id

b) Display all students

Q3. **Consider the following Item_Supplier database** **[40]**

Item (itemno, itemname)

Supplier (supplier_No , supplier_name, address, city)

Relationship between Item and Supplier is many-to-many with descriptive attributerate and quantity

Constraints: itemno ,supplier_No primary key

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write function to print the total number of suppliers of a particular item

2) Write a trigger which will fire before insert or update on rate and quantity less than or equal to zero**.** (Raise user defined exception and give appropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. Write a program in C to check a given number is even or odd using the function. **[15]**

Q2. Create a structure employee (eno, ename, salary). Accept details of n employees and write a menu driven program to perform the following operations options. **[25]**

1. Display all employees having salary > 5000
2. Display all employees

Q3. **Consider the following entities and their relationship.** **[40]**

Newspaper (name,language , publisher , cost)

Cities (pincode , city, state)

Relationship between Newspaper and Cities is many-to-many with descriptiveattribute daily required

Constraints: name and pincode primary key

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a trigger which will fire before insert on the cities table which check that the pincode must be of 6 digit. (Raise user defined exception and give appropriate message).

2) Write a procedure to calculate city wise total cost of each newspaper

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. Write a C program to Calculate the factorial of a number using recursion. [15]

Q2. Create a structure Book (Bno, Bname, Price). Accept details of n Books and write a menu driven program to perform the following operations options. [25]
1. Display all Books having price > 500
2. Display Book having maximum price

Q3 Consider the following entities and their relationships. [40]

Client (client_no, client_name, address, birthdate)
Policy_info (policy_no, desc, maturity_amt, prem_amt, date)

Relation between Client and Policy_info is Many to Many

Constraint: Primary key, prem_amt and maturity_amt should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure which will display all policy details having premium amount less than 5000.

2) Write a trigger which will fire before insert or update on policy_info having maturity amount less than premium amount. (Raise user defined exception and give appropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q. Write a C program to print Fibonacci series using user defined function. [15]

Q2. Create a structure Item (Ino, Iname, Price). Accept details of n Items and write a menu driven program to perform the following operations options. [25]

1. Display all Items having price > 800
2. Display Item record with Ino=2 [25]

Q3 Consider the following entities and their relationships. [40]

Library(Lno, Lname, Location, Librarian, no_of_books)Book(Bid, Bname, Author_Name, Price, publication)

Relation between Library and Book is one to many.Constraint: Primary key, Price should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will accept publication name from user and display total price ofbooks of that publication.

2) Write a cursor which will display library wise book details.(Use Parameterized Cursor)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. Write a program to find sum of digits of a given input number using user defined Function . **[15]**

Q2. Write a C program to accept student details by using Union. **[25]**

Q3 Consider the following entities and their relationships. **[40]**

Employee (emp_id, emp_name, address)

Investment (inv_no, inv_name, inv_date, inv_amount)

Relation between Employee and Investment is One to Many.Constraint: Primary key, inv_amount should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure which will display details of employees invested amount in "Mutual Fund"

2) Write a cursor which will display date wise investment details.

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1.Write a C Program to swap two numbers using pointers. **[15]**

Q2. Write a C program to find the size of the union. **[25]**

Q3 Consider the following entities and their relationships. **[40]**

Bill (billno, day, tableno, total)

Menu (dish_no, dish_desc,

price)

The relationship between Bill and Menu is Many to Many with quantity as descriptiveattribute.

Constraint: Primary key, price should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure to display menu details having price between 200 to 500 which were order on 'Saturday' .

2) Write a trigger which will fire before insert or update on Menu having price less than or equal to zero. (Raise user defined exception and give appropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. Program to count vowels and consonants in a string using pointer. **[15]**

Q2 Write a C program to declare, initialize an union, **[25]**

Q3 Consider the following entities and their relationships. **[40]**

Plan (plan_no, plan_name, nooffreecalls, freecalltime, fix_amt)Customer (cust_no, cust_name, mobile_no)

Relation between Plan and Customer is One to Many. Constraint: Primary key, fix_amt should be greater than 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will accept plan number from user and display all the detailsof the selected plan

2) Write a cursor which will display customer wise plan details.(Use ParameterizedCursor)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. Write a C Program to read array elements and print with addresses. [15]

Q2.Write a C program to demonstrate example of nested structure. [25]

Q3 Consider the following entities and their relationships. [40]

Project (pno, pname, start_date, budget, status)

Department (dno, dname, HOD, loc)

The relationship between Project and Department is Many to One.Constraint: Primary key.
Project Status Constraints: C – Completed, P - Progressive,I – Incomplete

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which accept department name and display total number of projects whose status is "p"(progressive).

2) Write a cursor which will display status wise project details of each department.

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

MES Garware College of Commerce
F.Y.B.B.A.(C.A) Semester-I
Lab Course: **Computer Lab Based On 23BA2-A011 and 23BA2-C031 (2cr.each)**
Code: 23BA2-H011

Q1. Write a C program to add two numbers using pointers. **[15]**

Q2. Create a structure Book (Bno, Bname, Price). Accept details of n Books and write a menu driven program to perform the following operations options. [25]
1. Display all Books having price > 500
2. Display Book having maximum price

Q3 Consider the following entities and their relationships. [40]

Gym (Name, city, charges, scheme)
Member (ID, Name, phoneNo,
address)

Relation between Gym and member is one to many.
Constraint: Primary Key, charges must be greater than
0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will accept member id and scheme from user and display charges paidby that member.

2) Write a trigger which will fire before insert or update on Gym having charges less than1000. (Raise user defined exception and give appropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

MES Garware College of Commerce
F.Y.B.B.A.(C.A) Semester-I
Lab Course: **Computer Lab Based On 23BA2-A011 and 23BA2-C031 (2cr.each)**
Code: 23BA2-H011

Q1. Write a C program to input and print array elements using pointer.

[15]

Q2. C program to find number of lines in a file.
[25]

Q3 Consider the following entities and their relationships. **[40]**

Student (rollno, sname, class, timetable)
Lab (LabNo, LabName, capacity, equipment)

Relation between Student and Lab is Many to One.
Constraint: Primary Key, capacity should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will accept Lab number from user and display total number of studentallocated in that lab.

2) Write a cursor which will display lab wise student details.

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

MES Garware College of Commerce
F.Y.B.B.A.(C.A) Semester-I
Lab Course: **Computer Lab Based On 23BA2-A011 and 23BA2-C031 (2cr.each)**
Code: 23BA2-H011

Q1. Write a C program to find number is Armstrong or not . (Use function) **[15]**

Q2. C program to create, open and close a file. **[25]**

Q3 Consider the following entities and their relationships. **[40]**

Wholesaler (w_no, w_name, address, city)Product (product_no, product_name, rate)

Relation between Wholesaler and Product is Many toMany with quantity as descriptive attribute.

Constraint: Primary key, rate should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will accept wholesaler name from user and will display total number of items supplied by him.

2) Write a trigger which will fire before insert or update on product having rate less than or equal to zero (Raise user defined exception and give appropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1Write a C program to write text (characters) into file and print. [15]

Q2. Create a structure Book (Bno, Bname, Price). Accept details of n Books and write a menu driven program to perform the following operations options. [25]
1. Display all Books having price > 500
2. Display Book having maximum price

Q3 Consider the following entities and their relationships. [40]

Country (CId, CName , no_of_states, area, location,

population)Citizen(Id, Name, mother_toung, state_name)

Relation between Country and Citizen is one to many.Constraint: Primary key, area should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will display name of the country having minimum population.
2) Write a cursor which will display county wise citizen details.

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. C program to compare contents of two files. **[15]**

Q2. Create a structure Item (Ino, Iname, Price). Accept details of n Items and write a menu driven program to perform the following operations options. **[25]**

1. Display all Items having price > 800
2. Display Item record with Ino=2

Q3 Consider the following entities and their relationships. **[40]**

College (code, college_name, address)

Teacher (teacher_id, teacher_name, Qualification, specialization, salary, Desg)

Relation between Teacher and College is Many to One.

Constraint: Primary Key, qualification should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure which will accept teacher name from user and display his/her college details.

2) Write a trigger which will fire before insert or update on Teacher having salary less than orequal to zero (Raise user defined exception and give appropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. C program to read Content of a File using getc() using C Program. **[15]**

Q2. Create a structure Item (Ino, Iname, Price). Accept details of n Items and write a menu driven program to perform the following operations options. **[25]**

1. Display all Items having price > 800
2. Display Item record with Ino=2

Q3 Consider the following entities and their relationships. **[40]**

Driver (driver_id, driver_name,
address)Car (license_no, model, year)

Relation between Driver and Car is Many to Many with date and timeas descriptive attribute.

Constraint: Primary key, driver_name should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will display the total number of person who are using "Swift" car

2) Write a trigger which will fire before insert or update on year. If year value is more than current year. (Raise user defined exception and give appropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

MES Garware College of Commerce
F.Y.B.B.A.(C.A) Semester-I
Lab Course: **Computer Lab Based On 23BA2-A011 and 23BA2-C031 (2cr.each)**
Code: 23BA2-H011

Q.1C program to convert All Characters in Upper Case of a File using C Program. **[15]**

Q2. Create a structure student with members (rollno , name and marks). Create a structure array of 10 students and display the students with max and min marks.
[25]

Q3 Consider the following entities and their relationships. **[40]**

Game (game_name, no_of_players, coach_name)
Player (pid, pname, address, club_name)

Relation between Game and Player is Many to Many.
Constraint: Primary key, no_of_players should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure which will display games details having number of players more than 5.
2) Write a trigger which will fire before insert or update on Game having no_of_players less than or equal to zero. (Raise user defined exception and give appropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. C program to delete a specified file using remove() function **[15]**

Q2. Define a structure student with members (rno, name and DateOfBirth). DateOfBirth is another structure nested within student. Create one student, set the data of the student and display the data.

[25]

Q3. Consider the following Item_Supplier database **[40]**

Company (name , address , city , phone , share_value)
Person (pname ,pcity)

Relationship between Company and Person is M to M relationship with descriptive attribute No_of_shares i

Constraints: name,pname primary key

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a trigger before insert or update on No_of_shares field should not be zero.(Raise user defined exception and give appropriate message)

2) Write a function to display total no_of_shares of a specific person.

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. C program to remove a specific line from the text file
[15]

Q2. Write C program to accept the details of employee and display them using structure. Details consist of Employee ID, Name, Designation, Department, Salary.

[25]

Q3. **Consider the following entities and their relationship.**

[40

]Student (s_reg_no, s_name, s_class)

Competition (comp_no, comp_name, comp_type)

Relationship between Student and Competition is many-to-many with descriptiveattribute rank and year.

Constraints: primary key, foreign key, primary key for third table(s_reg_no, comp_no,year),s_name and comp_name should not be null,comp_type can be sports or academic.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will accept s_reg_no of student and returns total number of competition in which student has participated in a given year.

2) Write a cursor which will display year wise details of competitions.
(Use parameterized cursor)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. C program to replace the specified line in an existing text file **[15]**

Q2. Write C program to accept the details of employee and display them using structure. Details consist of Employee ID, Name, Designation, Department, Salary.

[25]

Q3 Consider the following entities and their relationships. **[40]**

Game (game_name, no_of_players, coach_name)Player (pid, pname, address, club_name)

Relation between Game and Player is Many to Many.
Constraint: Primary key, no_of_players should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will return total number of football players of "Sports Club".

2) Write a cursor which will display club wise details of players.

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

MES Garware College of Commerce
F.Y.B.B.A.(C.A) Semester-I
Lab Course: **Computer Lab Based On 23BA2-A011 and 23BA2-C031 (2cr.each)**
Code: 23BA2-H011

Q1. Write a accept a number n from user and display first n terms of Fibonacci series using Function. **[15]**

Q2. Write C program to accept batting information of cricket team using structure. It contains player name and runs scored by player. Calculate total runs scored by cricket team.

[25]

Q3 Consider the following entities and their relationships. **[40]**

Driver (driver_id, driver_name, address)Car (license_no, model, year)

Relation between Driver and Car is Many to Many with date and timeas descriptive attribute.

Constraint: Primary key, driver_name should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure to display car details used on specific day.

2) Write a cursor which will display driver wise car details in the year 2018.

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

MES Garware College of Commerce
F.Y.B.B.A.(C.A) Semester-I
Lab Course: **Computer Lab Based On 23BA2-A011 and 23BA2-C031 (2cr.each)**
Code: 23BA2-H011

Q1. Write a C program to accept the values of x and y and then display x^y using function. **[15]**

Q2. Write a C program to read information of student. It contains Name, Roll number, Birthday, admission date. Calculate age of student at the time of admission.

[25]

Q3 Consider the following entities and their relationships. **[40]**

College (code, college_name, address)

Teacher (teacher_id, teacher_name, Qualification, specialization, salary, Desg)

Relation between Teacher and College is Many to One.

Constraint: Primary Key, qualification should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will accept college name from user and display total number of "Ph.D"qualified teachers.

2) Write a cursor which will display college wise teacher details.

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. Write a java script code to accept a string and write a function to calculate length of string

[15]

Q2. Write C program to accept the details of employee and display them using structure. Details consist of Employee ID, Name, Designation, Department, Salary.
[25]

Q3 Consider the following entities and their relationships. **[40]**

Country (CId, CName , no_of_states, area, location,

population)Citizen(Id, Name, mother_toung, state_name)

Relation between Country and Citizen is one to many.Constraint: Primary key, area should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure to display name of citizens having mother toung "Marathi " and from"India";

2) Write a trigger which will fire before insert or update on country having no_of_state lessthan equal to zero. (Raise user defined exception and give appropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. Write a C Program to accept a number and write a function to calculate sum of digits ofthat number using function. [15]

Q2. Write C program to read the details of two workers and calculate total payment of workers using structure.
[25]

Q3 Consider the following entities and their relationships. [40]

Wholesaler (w_no, w_name, address, city)Product (product_no, product_name, rate)

Relation between Wholesaler and Product is Many toMany with quantity as descriptive attribute.

Constraint: Primary key, rate should be > 0.
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure which will display details of products supplied by "Mr. Patil"
2) Write a cursor which will display wholesaler wise product details.(Use Parameterized cursor)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. Write a program to copy one file to the other **[15]**

Q2. Write C program to read the details of two workers and calculate total payment of workers using structure.
[25]

Q3 Consider the following entities and their relationships. **[40]**

Student (rollno, sname, class, timetable)
Lab (LabNo, LabName, capacity, equipment)

Relation between Student and Lab is Many to One.

Constraint: Primary Key, capacity should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure to display details of students which perform practical sessions in a given Lab.

2) Write a trigger which will fire before delete on Lab (Raise user defined exception and giveappropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

MES Garware College of Commerce
F.Y.B.B.A.(C.A) Semester-I
Lab Course: **Computer Lab Based On 23BA2-A011 and 23BA2-C031 (2cr.each)**
Code: 23BA2-H011

Q1. Write a C program to display only special characters from a file. **[15]**

Q2 Write a 'C' program to create a structure containing Student Roll No., Name and Marks. Display student information having marks greater than 40.
[25]

Q3 Consider the following entities and their relationships. **[40]**

Gym (Name, city, charges, scheme)
Member (ID, Name, phoneNo, address)

Relation between Gym and member is one to many.
Constraint: Primary Key, charges must be greater than 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure to display member details of gym located at "Pimpri'"

2) Write a cursor which will display gym wise member details.(Use Parametrized Cursor)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1. Write a program to copy one file to the other [15]

Q2. Write a 'C' program to create a structure containing Student Roll No., Name and Marks. Display student information having marks greater than 60. [25]

Q3 Consider the following entities and their relationships. [40]

Project (pno, pname, start_date, budget,

status)Department (dno, dname, HOD, loc)

The relationship between Project and Department is Many to One.Constraint: Primary key.

Project Status Constraints: C – Completed, P - Progressive,I – Incomplete

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure to display the name of HOD who has completed maximum project.

2) Write a trigger which will fire before insert or update on project having budget less than or equal to zero. (Raise user defined exception and give appropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

MES Garware College of Commerce
F.Y.B.B.A.(C.A) Semester-I
Lab Course: **Computer Lab Based On 23BA2-A011 and 23BA2-C031 (2cr.each)**
Code: 23BA2-H011

Q1. Write a C program to display the file in reverse. [15]

Q2. Define a structure student with members (rno, name and DateOfBirth). DateOfBirth is another structure nested within student. Create one student, set the data of the student and display the data.

[25]

Q3 Consider the following entities and their relationships. [40]

Plan (plan_no, plan_name, nooffreecalls, freecalltime, fix_amt)Customer (cust_no, cust_name, mobile_no)

Relation between Plan and Customer is One to Many.
Constraint: Primary key, fix_amt should be greater than 0.
Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure to display the plan having minimum response.

2) Write a trigger which will fire before insert or update on mobile number having length less than or greater than10. (Raise user defined exception and give appropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

MES Garware College of Commerce
F.Y.B.B.A.(C.A) Semester-I
Lab Course: **Computer Lab Based On 23BA2-A011 and 23BA2-C031 (2cr.each)**
Code: 23BA2-H011

Q1. Write a 'C' program to display alternate character in existing file. [15]

Q2. Create a structure employee with members (id , name and sal). Create a structure array of 10 employees and display the emp with max and min salary. [25]

Q3 Consider the following entities and their relationships. [40]

Bill (billno, day, tableno, total)

Menu (dish_no, dish_desc,

price)

The relationship between Bill and Menu is Many to Many with quantity as descriptiveattribute.

Constraint: Primary key, price should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which accept a table number and display total amount of bill for a specific table

2) Write a cursor which will display table wise menu details.

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

Q1 Write a C program to find the factorial of a number. (Use recursion) **[15]**

Q2. Create a structure student with members (rollno , name and marks). Create a structure array of students as requires. Accept the data and display the data of the students. [25]

Q3 Consider the following entities and their relationships. [40]

Employee (emp_id, emp_name, address)

Investment (inv_no, inv_name, inv_date, inv_amount)

Relation between Employee and Investment is One to Many.Constraint: Primary key, inv_amount should be > 0.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a function which will return total investment amount of a particular client.
2) Write a trigger which will fire before insert or update on Investment having investment amount less than 50000. (Raise user defined exception and give appropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10]**

MES Garware College of Commerce
F.Y.B.B.A.(C.A) Semester-I
Lab Course: **Computer Lab Based On 23BA2-A011 and 23BA2-C031 (2cr.each)**
Code: 23BA2-H011

Q1. Write a C program to read an integer, find the sum of digits of a given integer using recursive function. [15]

Q2. Create a structure student with members (rollno , name and marks). Create a structure array of 10 students and display the students with max and min marks.
[25]

Q3 Consider the following entities and their relationships. **[40]**

Library(Lno, Lname, Location, Librarian, no_of_books)Book(Bid, Bname, Author_Name, Price, publication)

Relation between Library and Book is one to many.Constraint: Primary key, Price should not be null.

Create a RDB in 3NF and write PL/SQL blocks in Oracle for the following:

1) Write a procedure to display names of book written by "Mr. Patil" and are from "DPULibrary".

2) Write a trigger which will fire before insert or update on book having price less thanor equal to zero. (Raise user defined exception and give appropriate message)

Q4. Viva / Oral **[10]**

Q5. Lab Book **[10**

FYBBA CA Semester-II		
Course Code: 23BA2-I062	Subject : English for Business Communication	Marks : 50 Credits : 2
Course Objectives : To develop effective soft skills. To know the recent trends in corporate communication.		
Course Outcome : After completing the course, the student shall be able to CO1: Demonstrate effective soft skills CO2: Demonstrate the use of recent trends in corporate communication		
Unit	Unit Title	Contents
I	Introduction to Soft Skills	1.1.Concept ,need and functions of soft skills Effective Presentation skills and overcoming nervousness Using body language effectively Negotiation skills Group discussion and debates Listening skills
II	Recent trends in corporate Communication	Email- Types, Components, Do's and Don’ts. Social Media Communication Branding Communication and Signage communication Emotional Intelligence and Critical thinking Resume writing and interview preparation (physical and virtual).

Unit	Unit Title	Teaching methodology	Project (If any)	Outcome expected- Conceptual understanding Knowledge/Skills/Attributes etc.		Weightageof Marks (%)
				Course Outcome(CO)	Learning Outcome (LO)	
1	Introduction to Soft Skills	PPT, discussion, demonstration	-	Students will be able to demonstrate soft skills through activities	Conceptual understanding, reflective skills	50%
2	Recent trends in corporate Communication	PPT, discussion and demonstration, social media activity	-	Students will be able to understand the recent trends through activities	Conceptual skills, reflective learning, creativity	50%

Unit	Evaluation Method	Marks (100)			Project/Practical(If any)
		Formative Assessment		Summative Assessment	
		CCE I(10)	CCE II(10)	SEMESTER(30)	
I	Home Assignments	10 M			-
II	Descriptive Paper	-	10 M	30 M	-

Suggested Readings:

Sr. No	Title of Book	Author/s	Publication
1	Business Communication	Meenakshi Raman , Prakash Singh	Oxford
2	Business Communication	HomaiPradhan , N.S. Pradhan	Himalaya
3	Business Communication	R.K. Madhukar	Vikas
4	Business Communication – Connecting at work	HorySankarMukerjee	Oxford
5	Business Communication Today	Courtland L. Bovee , John V. Thill , AbhaChatterjee	Pearson
6	Hand Book of internal Communication	Eileen Scholes	Infinity Books
7.	Soft Skills for Everyone	Jeff Butterfield	Cengage Learning, India

Suggested Web/E learning Resources:

SR NO	pic	Lectures (Available on Youtube/Swayam/MOOCS etc)	Films	Journals/Articles/Case studies
1	Introduction to Soft Skills	1. https://www.youtube.com/watch?v=6NADEfJOVNo 2. https://onlinecourses.nptel.ac.in/noc21_hs76/preview	-	-
2	Recent trends in Communication	https://archive.nptel.ac.in/courses/109/105/109105144/	–	–

Environment Awareness Part-II

F. Y. BBA,BBA-IB,BBA-DI		
Course Code: 23BA2-J082	**Course Title: Environmental Awareness Part-II**	**Marks: 50** **Credits: 2**

Course Objectives:

1. To create awareness regarding Environmental issues
2. To encourage them to take steps for the conservation of environment for sustainability
3. To motivate students in changing their attitude towards environment
4. To encourage them to take steps for environment protection and preservation

Course Outcome:

CO1:Awarenesss will be created among students for identification of environmental issues

CO2: Environmental Ethical Norms will be followed by students for sustainability

CO3: Students precautionary behavior will get developed towards environment

CO4: Eco –friendly behavior will get developed.

Syllabus Content

S.No.	Content	Total No of Lectures
1	Lectures on Field visit and Importance of environment Pre –Study before the field Visit, Elements of Environment Advance Environmental topics Lecture on preparation on Environmental report	10 Hrs
2	Actual Field Visit	10 Hrs
3	Preparation of Report	10 Hrs
	Total	30

Teaching Methodology

Sr. No	Online/Offline	Experts	Study Material

			Online(share link)
1	**Actual visit to Various places Eg. Mula Mutha River , Taljai Tekdi , Pu.La Deshpande Garden , Empress Garden , Kamla Nehru Park**	**Dr. Neha Joshi Dr. Nirbhay Pimple Prajakta Abhang**	**PPT on related subjects and format project report**

Evaluation Method:

Unit	**Evaluation Method**	**Marks (50)**			**Project/Practical (If any)**
		Assessment		**Summative Assessment**	
1	Checking the Project Report			Marks 50 -	**Project -**

Prof. Dr. Sulabha Patole

Officiating Principal