(1)	**GHRCEM , Practical Exam. 2025** **Sub: DBMS Class: TY BTECH AI/AIML Duration : 2 Hrs**
	N.B.:-1.write problem statement on Answer sheet, then write implementation steps in detail 2. Assume suitable data if necessary.
	Design and develop SQL statements for below problem statement. 1.Create Table**:** i) Teacher_ info{Teacher_ id, Teacher_ Name, Dept_ Name, Salary, Subject _taught} ,ii) Student_ info{Roll_ No, Student_ Name, Dept_ Name, Class, Result} 2. Insert 5 records in both above collections. 3. Find student name whose result is above 60% 4. Find student name whose name ends with "i" 5. Display name of teacher whose salary is between 20,000 to 50000. 6. Add "Join_ Date" field in Teacher_ info table. 7. Add "Address" field in Student_ info table. 8. Use "DROP" command 9. Find Name of students who lives in city "Pune" 10. Find Average salary of all teachers
(2)	**GHRCEM, Practical Exam. 2025** **Sub: DBMS Class: TY BTECH AI/AIML Duration : 2 Hrs**
	N.B.:-1.write problem statement on Answer sheet, then write implementation steps in detail 2. Assume suitable data if necessary.
	Design and develop SQL DML statements for below problem statement. 1. Create Table: Teacher_ info{Teacher_ id, Teacher_ Name, Dept_ Name, Sal, status} 2. Insert below values in respective fields of 'Teacher_ info' collection (Pic001, Ravi, IT, 30000, A) (Pic002, Aarti, IT, 40000, A) (Pic003, Narendra , COMP, 20000, B) (Pic004, Swati, ENTC, 15000, C) (Pic005, Sampada, IT, 35000, A) (Pic006, Mihir, IT, 25000, B) (Pic007, Malati, ENTC, 36000, A) 3. Display all contents of 'Teacher_ info'. 4. Display information of teacher whose salary is 35000. 5. Display information of teacher whose status is not equal to C. 6. Display information of teacher whose status is either A or Salary is 15000. 7. Find teacher name whose name ends with letter 'i'. 8. Create index for Teacher_Name column. 9. Find Average salary of all teachers 10. Change Department name as "COMP" of teachers who are teaching in IT department.

(3)	**GHRCEM , Practical Exam. 2025** **Sub: DBMS Class: TY BTECH AI/AIML Duration : 2 Hrs**
	N.B.:-1.write problem statement on Answer sheet, then write implementation steps in detail 2. Assume suitable data if necessary.
	Design and develop SQL DML statements for below problem statement. 1 .Create Table: Teacher_ info{Teacher_ id, Teacher_ Name, Dept_ Name, Sal, status} 2. Insert below values in respective fields of 'Teacher_ info' collection (Pic001, Ravi, IT, 30000, A) (Pic002, Aarti, IT, 40000, A) (Pic003, Narendra, COMP, 20000, B) (Pic004, Swati, ENTC, 15000, C) (Pic005, Sampada, IT, 35000, A) (Pic006, Mihir, IT, 25000, B) (Pic007, Malati, ENTC, 36000, A) 3. Display all contents of 'Teacher_ info'. 4. Display information of teacher whose salary is greater than 20000. 5. Sort Teachers according to descending order of their salary. 6. Increment the salary of all teachers by 1000 whose status is 'A'. 7. Find teacher name whose name contains letter 'a'. 8. Create index on Teacher_Name column. 9. Find Teacher name who has Highest Salary. 10. Find name of teachers whose salary is greater than average salary of all teachers.

(4)	**GHRCEM , Practical Exam. 2025** **Sub: DBMS** **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**
	N.B.:-1.write problem statement on Answer sheet, then write implementation steps in detail 2. Assume suitable data if necessary.
	Create table for following Diagram.  Book_Name Author Price Publication_Year 1. Java Robert 150 2005 2. .Net John 180 2006 3. XML Robert,Peter 200 2003 4. XML Kevin 150 2004 Implement queries using SQL expression. 1. List the name of Books whose price is greater than 180. 2. List the name of Books in descending order of Price. 3. List the titles of books published Robert. 4. Find the average price of all Book. 5. For each book whose price is greater than the average price, return the title of the book price exceeds the average price. 6. Execute all aggregate functions on book table. 7. Update book price of book XML to 225. 8. Add new column name “Publisher” in above table and also add publisher for the same. 9. Apply any two string operations on column Book_Name. 10. Create view named “BookInfo” containing column Book name and author only.

(5)

GHRCEM , Practical Exam. 2025

Sub: DBMS **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**

N.B.:-1.write problem statement on Answer sheet, then write implementation steps in detail
2. Assume suitable data if necessary.

Create Table for following Diagram.

BookID	Book_Name	Author	Price	Publication_Year
1.	Java	Robert	150	2005
2.	.Net	John	180	2006
3.	XML	Robert,Peter	200	2003
4.	XML	Kevin	150	2004

Implement Following queries using SQL expression.

1. Create book table with primary key as Bookid and Book_name.
2. Find all book titles published after 2003.
3. Find all books with more than 1 authors:
4. Compute a list of (author, title) pairs
5. List the Books order by its Name.
6. For each book whose price is greater than the average price, return the title of the book price exceeds the average price.
7. Update publication year as 2008 for book "Java".
8. Fing highest and lowest price book name from table.
9. Add column "Date_of_publication" in book.

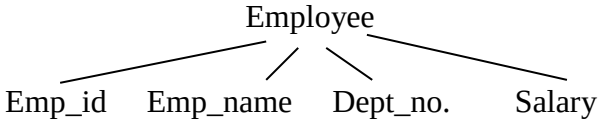
(6)

GHRCEM , Practical Exam. 2025

Sub: DBMS **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**

N.B.:-1.write problem statement on Answer sheet, then write implementation steps in detail
2. Assume suitable data if necessary.

Create table for following Diagram & Enter any 5 records.



Implement Following queries using SQL expression.

1. Find Average salary of all employees.
2. Find the Id and Name of Employees whose salary is Greater Than 10,000.
3. Find the employees with Highest salary.
4. Compute the list of Emp_name, Dept_no. order by Dept_no.
5. Compute the List of Emp_name, salary.
6. Count the no of employees department wise.
7. Find the name of employees whose salary is greater than the average salary of all employees.

(7)	**GHRCEM , Practical Exam. 2025** **Sub: DBMS Class: TY BTECH AI/AIML Duration : 2 Hrs**
.	N.B.:-1.write problem statement on Answer sheet, then write implementation steps in detail 2. Assume suitable data if necessary.
	Execute DDL statements which demonstrate the use of views. Try to update the base table using its corresponding view. Also consider restrictions on updatable views .
(8)	**GHRCEM , Practical Exam. 2025** **Sub: DBMS Class: TY BTECH AI/AIML Duration : 2 Hrs**
	N.B.:-1.write problem statement on Answer sheet, then write implementation steps in detail 2. Assume suitable data if necessary.
	Implement following Queries in SQL database. 1. Create Teacher dB. 2. Create table: Teacher_info{Teacher_id, Teacher_Name, Dept_Name, Sal, status} 3. Insert below values in respective fields of 'Teacher_info' collection (Pic001, Ravi, IT, 30000, A) (Pic002, Aarti, IT, 40000, A) (Pic003, Narendra, COMP, 20000, B) (Pic004, Swati, ENTC, 15000, C) (Pic005, Sampada, IT, 35000, A) (Pic006, Mihir, IT, 25000, B) (Pic007, Malati, ENTC, 36000, A) 4. Display all contents of 'Teacher_info'. 5. Display information of teacher whose salary is 35000. 6. Update Salary 25000 of teacher whose id is Pic004. 7. Display information of teacher whose status is either A and Salary is 15000. 8. Insert column Teacher_phone as new column. 9. Enter 2 phone no for any one row of table. 10. Create Index on teacher_Name column.

(9)

GHRCEM , Practical Exam. 2025

Sub: DBMS **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**

Implement following Queries in SQL database.

1. Create the database as student.
2. Create table stud as Roll. No., Name, Batch,marks, Address
3. Insert all the rows as documents into the tables.

Roll No.	Name	Batch	Marks	Address
1	Anita	T1	90	Pune
2	Om	T2	85	Nasik
3	Mini	T1	80	Mumbai
4	Rahul	T1	83	Raigad
5	Reena	T2	87	Pune

4. Select Roll No. and Name of students belong to city Pune?
5. Display the entire student from T1 batch.
6. Update marks by 5 of roll no 4.
7. Add column as Phone No. into table?
8. Insert one row in table with 2 phone numbers?

(10)

GHRCEM , Practical Exam. 2025

Sub: DBMS **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**

N.B.:-1.write problem statement on Answer sheet, then write implementation steps in detail
2. Assume suitable data if necessary.

Implement following Queries in SQL database Cassandra.

1. Create Emp database.
2. Employee table with columns as(Id, Name, Age, City, Salary)
3. Insert 5 rows into table.
4. Display content of table.
5. Select id, name whose stays in city=’Pune’.
6. Update City=’mumbai’ and Salary= 50000 whose id is 3?
7. Add column as Emp_email in table with List collection?
8. Insert 2 email addresses for any employee?

(11)

GHRCEM , Practical Exam. 2025

Sub: DBMS **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**

N.B.:-1.write problem statement on Answer sheet, then write implementation steps in detail
2. Assume suitable data if necessary.

Implement following Queries in SQL database.

1. Create Customer table as Cust_id, Cust_name, Address, City, State, Zipcode.
2. Insert following items into table:

Cust_id	Cust_name	Address	City	State	Zipcode
100	Ravi	Sinhgad Road	Pune	Maharashtra	411041
101	Sanket	Wagholi	PUNE	Maharashtra	412207
102	Poonam	Kharadi	Pune	Maharashtra	411014
104	Madhuri	swargate	Pune	Maharashtra	411041

3. Display all inserted items form customer.
4. Display details of customer whose customer id is 103 and name “sanket”
5. Give the address and zipcode of customer whose customer id is 103 and name “Rajesh Kumar.
6. Give the city of customer whose customer id is 102.
7. List the customer id,customer name and city of customer whose customer id is 100,101,104.
8. Display all details of customer whose who stays at Wagholi.
9. Update customer table by adding one attribute Product.
10. Delete customer with customer id 104 and Name Madhuri.

(12)

GHRCEM , Practical Exam. 2025

Sub: DBMS **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**

Implement following Queries in NoSQL database DynamoDB.

1. Create Bookstore table as Book_id, Book_Name, Author_Name, Price, Publication_year.

Insert following items into table:

2.

Book_id	Book_Name	Author_Name	Price	Publication_year
201	DBMS	S. Korth	400	2004
202	ADBMS	A Navathe	450	2003
203	Data Mining	M. Kamber	530	2005
204	Web mining	Springer	420	2004

3. display all inserted items from bookstore.
   1. List details of Books whose id is 203 and name "ADBMS"
   2. Give the Book_name and Author_Name of Books whose id is 201
   6. Give the Price of Book whose Author_Name is Springer.
   7. List the Book_id,Book_ name and Publication_year of Book whose customer id is 202,204
   8. Display all details of Books whose the customer id is 203.
   9. Update Books table by adding one attribute ISSN_NO.
   10. Delete Book with Book id 204.

(13)

GHRCEM , Practical Exam. 2025

Sub: DBMS **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**

Consider the following tables with appropriate data types and Constraints.
Sales_order (ordNo, ordDate, clientNo)
Client (clientNo, ClientName, addr)
Constraints: - Primary Key, ordDate should not be NULL
1. Add 5 rows in each table.
2. Add column amount into Sales_order table with data type int.
3. Delete the details of the clients whose names start with 'A' character.
4. Delete sales order details of client whose name is "Patil" and order date is "09/08/2023".
5. Delete all sales_record having order date is before '10 /02/2018'.

6. Display date wise sales_order given by clients.

7. Update the address of client to "Pimpri" whose name is 'Mr. Roy'

(14)	**GHRCEM , Practical Exam. 2025** **Sub: DBMS** **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**

Consider the following entities and their relationships. Create a RDB in 3 NF with appropriate data types and Constraints.

Hospital (hno ,hname , city, Est_year, addr, dno)

Dor (dno , dname , addr, Speciality)

Constraints: - Primary Key, Est_year should be greater than 1990.

1. Create above table and insert any 5 records in it.
2. Delete addr column from Hospital table.
3. Display dor name, Hospital name and specialty of dors from “Pune City”.
4. Display the names of the hospitals which are located at “Pimpri” city.
5. Display the specialty of the dors who are working in “Ruby” hospital.

(15)	**GHRCEM , Practical Exam. 2025** **Sub: DBMS** **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**

Create following Pateint and Bed table

PCODE	NAME	ADDR	DISEASE
11	Raghav	pimple gurav	listeria
12	Abhay	pune	norovirus
13	Mr.Roy	mumbai	cholera
14	Sachin	pimple gurav	dengue
15	Priya	nashik	listeria

Bed Table

BNO	RNO	LOC	PCODE
1	105	3rd floor	11
2	102	2nd floor	12
3	103	4th floor	13
4	104	1st floor	11
5	105	3rd floor	14
6	106	2nd floor	15

Implement following queries:

1. Display the details of patients who are from “Pimple Gurav”
2. Delete the details of patient whose Bed_No is 1 and RoomNo is 105.
3. Display unique disease of patients.
4. Find the name of patient whos name contains letter “a”
5. Find total number of beds.

16	GHRCEM , Practical Exam. 2025 Sub: DBMS Class: TY BTECH AI/AIML Duration : 2 Hrs

Create following customer and loan table

CNO	CNAME	ADDR	CITY
101	Dhiraj	kharadi	pune
102	Patil	kalptaru	pimpri
103	Abhay	west	pimpri
104	Raghav	rt	nashik
105	Dhanu	bvh	pune

LNO	LAMT	CNO
1	120000	101
2	100000	102
3	30000	103
4	120	104
5	1000000	105

Implement following queries:

1. **Add Phone_No column in customer table with data type int.**
2. **Delete the details of customer whose loan_amt<1000.**
3. **Find details of all customers who are staying at Nashik**
4. **List all customers whose name starts with 'D' character.**
5. **Find loan taken by customer “102”**
6. **Finad total loan given by bank.**

(17)	**GHRCEM , Practical Exam. 2025** **Sub: DBMS** **Class: TY BTECH AI/AIML** **Duration : 2 hrs**
	Create following table and insert 5 records in it. **Emp(eno ,ename ,designation ,salary, Date_Of_Joining)** **Dept(dno,dname ,loc)** **The relationship between Dept & Emp is one-to-many. Constraints: - Primary Key, ename should not be NULL, salary must be greater than 0.** **Implement following queries:** 1. **Find maximum salary of employee.** 2. **Find name of employee working in "Sales" department.** 3. **Delete the details of Employee whose designation is 'Manager'.** 4. **Implement any 3 aggregate function on salary column** 5. Create index on column eno.

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GHRCEM , Practical Exam. 2025

Sub: DBMS **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**

1. Consider the following table:

Order:

Order_ID	CustomerID	OrderDate
10308	2	2018-09-18
10309	3	2018-09-19
10310	4	2018-09-20

Customer

CustomerID	CustomerName	ContactNo	State
1	Vijay	9873456782	Maharashtra
2	Sanket	1234567890	Maharashtra
3	Abin	9812345607	Kerla
4	Ram	1209876543	Chennai

1. Create Above order and Customer table.
2. Perform Inner Join, Left Outer Join, Right Outer Join.
3. Find Name, and Order date of Customer who live in state Maharashtra.
4. Add column contact no in customer table and insert record for all customers.
5. Find name of states which start with letter ‘M’.
6. Find Orderid and Customer name of Customers who live in state “Maharashtra”
7. Display customer table state wise in descending order.
8. Find the contact no which consist of letter “45”.

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GHRCEM , Practical Exam. 2025

Sub: DBMS **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**

Write and execute suitable database triggers .Consider row level and statement level triggers.

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GHRCEM , Practical Exam. 2025

Sub: DBMS **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**

Create MongoDB Document & Implement CURD Operations on it.

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GHRCEM , Practical Exam. 2025

Sub: DBMS **Class: TY BTECH AI/AIML** **Duration : 2 Hrs**

N.B.:-1.write problem statement on Answer sheet, then write implementation steps in detail
2. Assume suitable data if necessary.

Implement following Queries in SQL database.

1. Create Bookstore table as Book_id, Book_Name, Author_Name, Price, Publication_year.
2. Insert following items into table:

Book_id	Book_Name	Author_Name	Price	Publication_year
201	DBMS	S. Korth	400	2004
202	ADBMS	A Navathe	450	2003
203	Data Mining	M. Kamber	530	2005
204	Web mining	Springer	420	2004

3. Display inserted items from bookstore.
4. Display details of Books whose id is 203 and name “ADBMS”
5. Give the Book_name and Author_Name of Books whose id is 201
6. Give the Price of Book whose Author_Name is Springer.
7. List the Book_id, Book_ name and Publication_ year of Book whose customer id is 202,204
8. Display all details of Books whose the customer id is 203.
9. Delete Book with Book id 204.
10. Find Average price of all books.