Unit 1

What is the objective to study DBMS?
The difference between file system and database system.

Give examples DBMS?
Three-tier architecture of DBMS.

Two-tier architecture of DBMS

One-tier architecture of DBMS

Write are the Full form of DDL, DML and DCL?

Explain DDL, DML, DCL and TCL.

Unit 2

Write SQL query to get the Student name whose salary is between 1000 and 2000.
Write SQL query to get the Students Name and address from Student table.
Write SQL query to get the Students Name who have got marks greater than 90 from Student table
Explain Union and Intersection in DBMS.
Explain join in DBMS.
Explain Cartesian Product in DBMS with example.
Explain Select and Project.

Unit 3

What is partial functional dependency?
What is transitive functional dependency?
What is full functional dependency?
Explain 1NF, 2NF, 3NF, BCNF, 4NF with Example.
What is the difference between 3NF and BCNF.
R(C, S, Z)
$CS \rightarrow Z$
$Z \rightarrow C$
Find the list of candidate key.
Find Normal Form

Emp(ename, did, empid, salary)

ename, did->salary

did, empid-> salary

ename -> empid

empid->ename

Find the Normal Form

R(A,B,C,D,E)

A->BC

BC->E

E->DA

Unit 4

What is concurrent schedule?
What is deadlock?
What do you mean by serializable schedule.

What is serial schedule?
What do you mean by ACID property?
check the given schedule is serializable or not.
Consider the following schedule for transaction T1, T2, T3

T1	T2	T3
r(x)		
	r(y)	
		r(y)
	w(y)	
w(x)		
		w(x)
	r(x)	
	w(x)	

Unit 5

What is temporary update problem?
Explain Two Phase Locking Protocol .
What is the objective to do concurrency control?
Explain Dirty read problem.
What is concurrency control?
What is Lost Update problem?
Explain validation-Based Protocol.

Unit 6

What do you mean by research?
Explain Quantitative data Analysis
Explain Quantitative data Analysis
Importance of research in social aspect.