Name:	Danish singh sambyal
UID:	23BCS11172
Subject:	ADBMS
Section:	622-b

Ans1:

Code:

CREATE TABLE Departments (dept_id INT PRIMARY KEY,dept_name VARCHAR(50) NOT NULL UNIQUE);

CREATE TABLE Courses (course_id INT PRIMARY KEY,course_name VARCHAR(100) NOT NULL,dept_id INT NOT NULL,FOREIGN KEY (dept_id) REFERENCES Departments(dept_id));

INSERT INTO Departments (dept_id, dept_name) VALUES

(1, 'Computer Science'),

(2, 'Electrical'),

(3, 'Mechanical'),

(4, 'Civil'),

(5, 'Electronics');

Select * from Departments;

INSERT INTO Courses (course_id, course_name, dept_id) VALUES

(101, 'DBMS', 1),

(102, 'Operating Systems', 1),

(103, 'Power Systems', 2),

(104, 'Digital Circuits', 2),

(105, 'Thermodynamics', 3),

(106, 'Fluid Mechanics', 3),

```sql
(107, 'Structural Engineering', 4),

(108, 'Surveying', 4),

(109, 'Embedded Systems', 5),

(110, 'VLSI Design', 5);

Select * from Courses;

SELECT dept_name

FROM Departments

WHERE dept_id IN (

    SELECT dept_id

    FROM Courses

    GROUP BY dept_id

    HAVING COUNT(*) >= 2

);

GRANT SELECT ON Courses TO viewer_user;
```

(a) Department's detail:

dept_id	dept_name
4	Civil
1	Computer Science
2	Electrical
5	Electronics
3	Mechanical

(b) Courses detail:

course_id	course_name	dept_id
101	DBMS	1
102	Operating Systems	1
103	Power Systems	2
104	Digital Circuits	2
105	Thermodynamics	3
106	Fluid Mechanics	3
107	Structural Engineering	4
108	Surveying	4
109	Embedded Systems	5
110	VLSI Design	5

(c)

dept_name	≡
Civil	
Computer Science	
Electrical	
Electronics	
Mechanical	