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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),
```

```

(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