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UID:	23BCS11898
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