

**Question:**

(a) Create table **SUBJECT** and insert appropriate values.

Column Name	Data Type	Size	Constraints
SubjectCode	Varchar2	6	Not null, Primary key
SubjectName	Varchar2	15	Not null
DeptCode	Varchar2	3	Foreign key Department(DeptCode)
Semester	Varchar2	4	Not Null

**Code:**

```
CREATE TABLE SUBJECT(  
    SubjectCode VARCHAR2(6) PRIMARY KEY,  
    SubjectName VARCHAR2(15) NOT NULL,  
    DeptCode VARCHAR2(3) ,  
    Semester VARCHAR2(4) NOT NULL,  
    FOREIGN KEY (DeptCode) REFERENCES DEPARTMENT(DEPTCODE)  
);
```

**Output:**

```
SQL> DESC SUBJECT;  
Name                               Null?   Type  
-----  
SUBJECTCODE                        NOT NULL VARCHAR2(6)  
SUBJECTNAME                        NOT NULL VARCHAR2(25)  
DEPTCODE                           VARCHAR2(3)  
SEMESTER                           NOT NULL VARCHAR2(4)
```

**Question:**

Column Name	Data Type	Size	Constraints
RollNo	Number	6	Not Null, Foreign key Student
Sub_code	Varchar2	8	Not null

Marks                Number                3                <=100

Pass Marks                Number                2

Primary key (rollno,Sub\_code)

**Code:**

```
CREATE TABLE RESULT(  
    RollNo NUMBER(6) NOT NULL,  
    Sub_code VARCHAR2(8) NOT NULL,  
    Marks NUMBER(3),  
    CHECK(Marks <= 100),  
    Pass_Marks NUMBER(2) ,  
    PRIMARY KEY (RollNo,Sub_code),  
    FOREIGN KEY(RollNo) REFERENCES STUDENT(ROLLNO)  
);
```

**Output:**

```
SQL> DESC RESULT;
```

Name	Null?	Type
ROLLNO	NOT NULL	NUMBER(6)
SUB_CODE	NOT NULL	VARCHAR2(8)
MARKS		NUMBER(3)
PASS_MARKS		NUMBER(2)

## Insert Rows.

Table: SUBJECT

SubjectCode	SubjectName	DeptCode	Semester
CS301	Data Structure	CSE	SEM3
CS302	Computer Organization	CSE	SEM3
CS501	Discrete Mathematics	CSE	SEM5
CS502	Data Communication	CSE	SEM5
ECS501	Data Base systems	ECE	SEM5
EC501	Analog Signals	ECE	SEM5
CS503	Operating Systems	CSE	SEM5

## Code:

```
ALTER TABLE SUBJECT MODIFY SUBJECTNAME VARCHAR2(25);
INSERT INTO SUBJECT VALUES('CS301','Data Structure','CSE','SEM3');
INSERT INTO SUBJECT VALUES('CS302','Computer Organization','CSE','SEM3');
INSERT INTO SUBJECT VALUES('CS501','Discrete Mathematics','CSE','SEM5');
INSERT INTO SUBJECT VALUES('CS502','Data Communication','CSE','SEM5');
INSERT INTO SUBJECT VALUES('ECS501','Data Base Systems','ECE','SEM5');
INSERT INTO SUBJECT VALUES('EC501','Analog Signals','ECE','SEM5');
INSERT INTO SUBJECT VALUES('CS503','Operating Systems','CSE','SEM5');
```

## Output:

SUBJEC	SUBJECTNAME	DEP	SEME
CS301	Data Structure	CSE	SEM3
CS302	Computer Organization	CSE	SEM3
CS501	Discrete Mathematics	CSE	SEM5
CS502	Data Communication	CSE	SEM5
ECS501	Data Base Systems	ECE	SEM5
EC501	Analog Signals	ECE	SEM5
CS503	Operating Systems	CSE	SEM5

**Table: Marks**

RollNo	Sub_code	Marks obtained	Pass Marks
1001	CS501	68	40
1002	CS501	76	40
1003	CS501	91	40
1001	CS502	38	40
1002	CS502	81	40
1003	CS502	82	40
1023	CS301	92	40
1029	CS301	83	40
1500	CS301	65	40
1023	CS302	75	40
1029	CS302	71	40
1500	CS302	35	40
2001	ECS501	67	30
2002	ECS501	72	30
2101	EC501	77	40

**CODE:**

```
INSERT INTO RESULT VALUES(1001,'CS501',68,40);
INSERT INTO RESULT VALUES(1002,'CS501',76,40);
INSERT INTO RESULT VALUES(1003,'CS501',91,40);
INSERT INTO RESULT VALUES(1001,'CS502',38,40);
INSERT INTO RESULT VALUES(1002,'CS502',81,40);
INSERT INTO RESULT VALUES(1003,'CS502',82,40);
INSERT INTO RESULT VALUES(1023,'CS301',92,40);
INSERT INTO RESULT VALUES(1029,'CS301',83,40);
INSERT INTO RESULT VALUES(1500,'CS301',65,40);
INSERT INTO RESULT VALUES(1023,'CS302',75,40);
INSERT INTO RESULT VALUES(1029,'CS302',71,40);
INSERT INTO RESULT VALUES(1500,'CS302',35,40);
INSERT INTO RESULT VALUES(2001,'ECS501',67,30);
INSERT INTO RESULT VALUES(2002,'ECS501',72,30);
INSERT INTO RESULT VALUES(2101,'EC501',77,40);
```

**Output:**

```
SQL> select * from RESULT;
```

ROLLNO	SUB_CODE	MARKS	PASS_MARKS
1001	CS501	68	40
1002	CS501	76	40
1001	CS502	38	40
1002	CS502	81	40
1003	CS502	82	40
1023	CS301	92	40
1029	CS301	83	40
1500	CS301	65	40
1023	CS302	75	40
1029	CS302	71	40
1500	CS302	35	40

ROLLNO	SUB_CODE	MARKS	PASS_MARKS
2001	ECS501	67	30
2002	ECS501	72	30
2101	EC501	77	40
1003	CS501	91	40

```
15 rows selected.
```