

Q.1 Create a database having two tables with the specified fields, to computerize a library system of a Delhi University College.

LibraryBooks (Accession number, Title, Author, Department, PurchaseDate, Price) 10

IssuedBooks (Accession number, Borrower)

a) Identify primary and foreign keys. Create the tables and insert at least 5 records in each table.

b) Delete the record of book titled "Database System Concepts".

c) Change the Department of the book titled "Discrete Maths" to "CS".

d) List all books that belong to "CS" department.

e) List all books that belong to "CS" department and are written by author "Navathe".

f) List all computer (Department = "CS") that have been issued.

g) List all books which have a price less than 500 or purchased between "01/01/1999" and "01/01/2004".

ANSWER 1

```
create database db;
```

```
use db;
```

```
create table LibraryBooks(  
Accession_number int(10) primary key,  
Title varchar(40) not null,  
Author varchar(20) not null,  
Department varchar(15) not null,  
PurchaseDate date,  
Price int(10));
```

```
create table IssuedBooks(  
Accession_number int(10) not null,  
Borrower varchar(30),  
foreign key(Accession_number) references LibraryBooks(Accession_number));
```

(a) Accession_number is the primary key for table LibraryBooks and it is the foreign key for table Issued books.

```
insert into LibraryBooks(1027,"Database System Concepts","Ankit ","CS",'2015-02-26',450);  
insert into LibraryBooks(5468,"Discrete Maths","Mohit Sharma",Science','2005-03-28',880);  
insert into LibraryBooks(8234,"Trigonometry","SL Loney","Mathematics",'2010-12-08',490)
```

```

insert into LibraryBooks(8886,"Neural Networks","Navathe","CS",'2018-11-18',1150);
insert into LibraryBooks(7796,"Panchatantra","Vishnu Sharma","Hindi",'2000-11-02',150);
insert into LibraryBooks(5048,"Rich Dad Poor Dad","Robert T
Kiyosaki","Finance",'2012-11-02',200);
insert into LibraryBooks(8236,"Advanced
Matrices",Navathe",Mathematics",'2002-11-20',2150);
insert into LibraryBooks(2132,"Physics","HC Verma","CS",'2001-10-26',450);
insert into LibraryBooks(1897,"Cloud Computing","Navathe","CS",'2011-12-01',2450);
insert into LibraryBooks(1556,"Matrices","SC Gupta ","mathematics",'2010-12-10',350);

```

```

insert into IssuedBooks values(1234,"kishor ");
insert into IssuedBooks values(1556,"sonu Singh");
insert into IssuedBooks values(8856,"Ankit dalal");
insert into IssuedBooks values(5598,"Arpit ");
insert into IssuedBooks values(1897,"sourav kumar");

```

(b)

```

set foreign_key_checks=Off;
delete from issuedbooks where accession_number=21826.46;.      delete from librarybooks
where title="Database System Concepts";.      set foreign_key_checks=on;

```

(c) update Librarybooks

```

set Depatment="CS"
where Title="Discrete Maths";

```

(d) select * from librarybooks

```

where Department="CS";

```

(e) select * from librarybooks

```

where Department="CS" and Author="Navathe";

```

(f)

```

select * from LibraryBooks as L,IssuedBooks as I
where L.Department="CS" and L.Accession_number=I.Accession_number;

```

(g) select * from Librarybooks

```

where price < 500 and purchasedate between '1999-01-01' and '2004-01-01';

```

