**Ques 5.**

**mysql> create database product;**

**mysql> use product;**

**mysql> create table suppliers(**

**-> Sno int(8) primary key,**

**-> Sname varchar(20) not null,**

**-> Status char(20) not null,**

**-> Scity char(30) not null);**

**mysql> create table Parts(**

**-> PNo int(8) primary key,**

**-> Pname varchar(20) not null,**

**-> Colour varchar(20) not null,**

**-> Weight int(4) not null,**

**-> City char(20) not null);**

**mysql> create table Project(**

**-> Jno int(8) Primary key,**

**-> Jname char(20) not null,**

**-> Jcity char(20) not null);**

**mysql> create table Shipment(**

**-> Sno varchar(20) not null,**

**-> Pno int(8) not null,**

**-> Jno int(8) not null,**

**-> Quantity int(8) not null,**

**-> foreign key(Sno) references suppliers(Sno),**

**-> foreign key(Pno) references Parts(Pno),**

**-> Foreign key(Jno) references Project(Jno));**

**mysql> insert into suppliers values("101","S1",30,"London");**

**mysql> insert into suppliers values("102","S2",19,"New York");**

**mysql> insert into suppliers values("103","S1",22,"Paris");**

**mysql> insert into suppliers values("104","S2",70,"Los Angeles");**

**mysql> insert into suppliers values("104","S2",70,"Los Angeles");**

**mysql> insert into parts values( "501","P1","Black",16,"Paris");**

**mysql> insert into parts values( "502","P2","Red",40,"London");**

**mysql> insert into parts values( "503","P3","Gray",20,"London");**

**mysql> insert into parts values( "503","P2","Green",60,"Singapore");**

**mysql> insert into parts values( "505","P2","Black",10,"New York");**

**mysql> insert into project values(1001,"J1","London");**

**mysql> insert into project values(1002,"J2","New York");**

**mysql> insert into project values(1003,"J3","New York");**

**mysql> insert into project values(1004,"J4","Singapore");**

**mysql> insert into project values(1005,"J4","Delhi");**

**mysql> insert into shipment values(101,504,1002,250);**

**mysql> insert into shipment values(103,505,1003,100);**

**mysql> insert into shipment values(105,502,1003,500);**

**mysql> insert into shipment values(101,503,1001,300);**

**mysql> insert into shipment values(102,501,1005,750);**

**mysql> insert into shipment values(101,501,1002,100);**

**(a) Primary Key- Sno in table Suppliers**

**Pno in table Parts**

**Jno in table Project**

**Foreign Key- Sno in table Shipment**

**Pno in table Shipment**

**Jno in table Shipment**

**(b) mysql> select Sno from suppliers where scity="Paris" and Status>20;**

**(c) mysql> Select \* from suppliers where Sno in(select Sno from shipment where Pno in(select Pno from parts where Pname="P2")) Order by sno;**

**(d) mysql> Select Sname from suppliers where Sno in(Select distinct sno from shipment where Pno in(select Pno from parts where Pname!="P2"));**

**(e) mysql> select s.Sno, s.Pno, s.Jno, s.Quantity, s.quantity\*p.weight as "Total\_shipment\_weight" from shipment as s, parts as p where s.pno=p.pno;**

**(f) mysql> Select \* from shipment where quantity between 300 and 750;**

**(g) mysql> select Pno from parts where weight>16 or pno in(select pno from shipment where sno in(select s.sno from shipment as s, suppliers as su where s.sno=su.sno and su.sname="S2"));**

**(h) mysql> select city from parts where colour="Red" and Pno in(select pno from shipment where quantity>5);**

**(i) mysql> select \* from parts where pno in(select Pno from shipment where sno in(select sno from suppliers where Scity="London"));**

**(j) mysql> select Pno from shipment where sno in(select sno from suppliers where scity="London") and Jno in(Select jno from project where Jcity="London");**

**(k) mysql> select count(distinct(Jno)) as "No. of Project Supplied by supplier S1" from shipment where sno in(select sno from suppliers where Sname="S1");**

**(l) mysql> select count(\*) from parts where Pno in(Select Pno from shipment where sno in(select Sno from suppliers where sname ="S1")) and Pname="P1";**