**Assignment 1**

**PART A**

a. 5 full functional dependencies

B -> D

{A, B} -> C

{A, C} -> D

{B, C} -> A

{A, D} -> B

{C, D} -> A

b. All Candidate Keys.

(A, C)

(B, C)

(C, D)

(A, B)

(A, D)

**PART B**

Finding all foreign keys in the schema

|  |  |
| --- | --- |
| TABLE NAME | FOREGIN KEY |
| Product | Supplier, Category |
| Employee | ReportsTo |
| Orders | Customer, Employee, ShipVia |
| Order\_Details | Order, Product |

**PART C**

a. 5 functional dependencies

JobID -> DriverID

DriverID-> DriverName

DriverName -> TaxiID

ClientID -> ClientName

{TaxiID, ClientID} -> JobPickUpAddress

b. Primary key

JobID

c. 5 Candidate Key

(JobDate, JobTime)

(JobDate, DriverName)

(JobDate, DriverID)

(JobDate, ClientName, JobPickUpAddress)

(JobDate, TaxiID, ClietnID)