Question-1

A primary key is a column in table that uniquely identifies each row. For Example, StudentID in Students table is primary key which identifies each student according to their IDs

Question-2

In Power BI there are actually two types of relationships that are commonly used. One to One relationship(one record in table A relates to one record in table b).Second relationship is One to Many or Many to One. It is when one record in table A relates to many values in table b or vice versa.

Question-3

Creating a relationship in Power-BI is very easy. First we go to model view below table view on the left hand side of the sheet. After going to model view we connect related columns to each other.

Question-4

Star schema it is when one fact table is directly connected to several dimension tables where joins are usually one to many.

Question-5

In sales dataset usually FactIntesrnetSales table is a fact table.

Question-6

Linked sales table to customers table with CustomerID where the relationship is one to many.

Question-7

The reason ProductID is a foreign key in Sales table because it refers to a record in another table which may contain some information about Products. It basically identifies which product was sold in each sales transaction.

Question-8

I uploaded all related tables and changed the datatype of ProductID to a whole-number in sales and Product table.

Question-9

Yes star schema really makes query better in performace because there are fewer joins, simplifies DAX, simpler relationships.

Question-10

I added a new column called TotalSales by creating a new measure.

Question-11

I would resolve it by identifying and deleting redundant relationships .I could also introduce bridge table. Avoid Bi-directional filtering unless necessary.

Question-13

I handled a many to many relationship by creating a bridge table between tables.

Question-14

Bi-directional filtering is powerful. But we must be careful because it can create ambiguous results. It is appropriate to use this filtering when dimension tables are connected via bridge table so that filtering can happen across both dimensions.