1. Develop a conceptual data model reflecting the following requirements: (11/01/22)
    a. Identify the main entity types.

The main entity types are **staff**, **clinic**, **owner, pet**, and **examination**.

b. Identify the main relationship types between the entity types identified in "a".

staff manages **clinic**
owner owns **pet**
pet is registered with **clinic**
staff performs **examination**

c. Determine the multiplicity constraints for each relationship identified in "b".

Each **staff** manages 0 or 1 **clinics**.
Each **clinic** is managed by 1 **staff**.

Each **owner** owns 1 or more **pets**.
Each **pet** is owned by 1 **owner**.

Each **pet** is registered with 1 **clinic**.
Each **clinic** has multiple registered **pets**.

Each **staff** performs multiple **examinations**.
Each **examination** is performed by 1 **staff**.

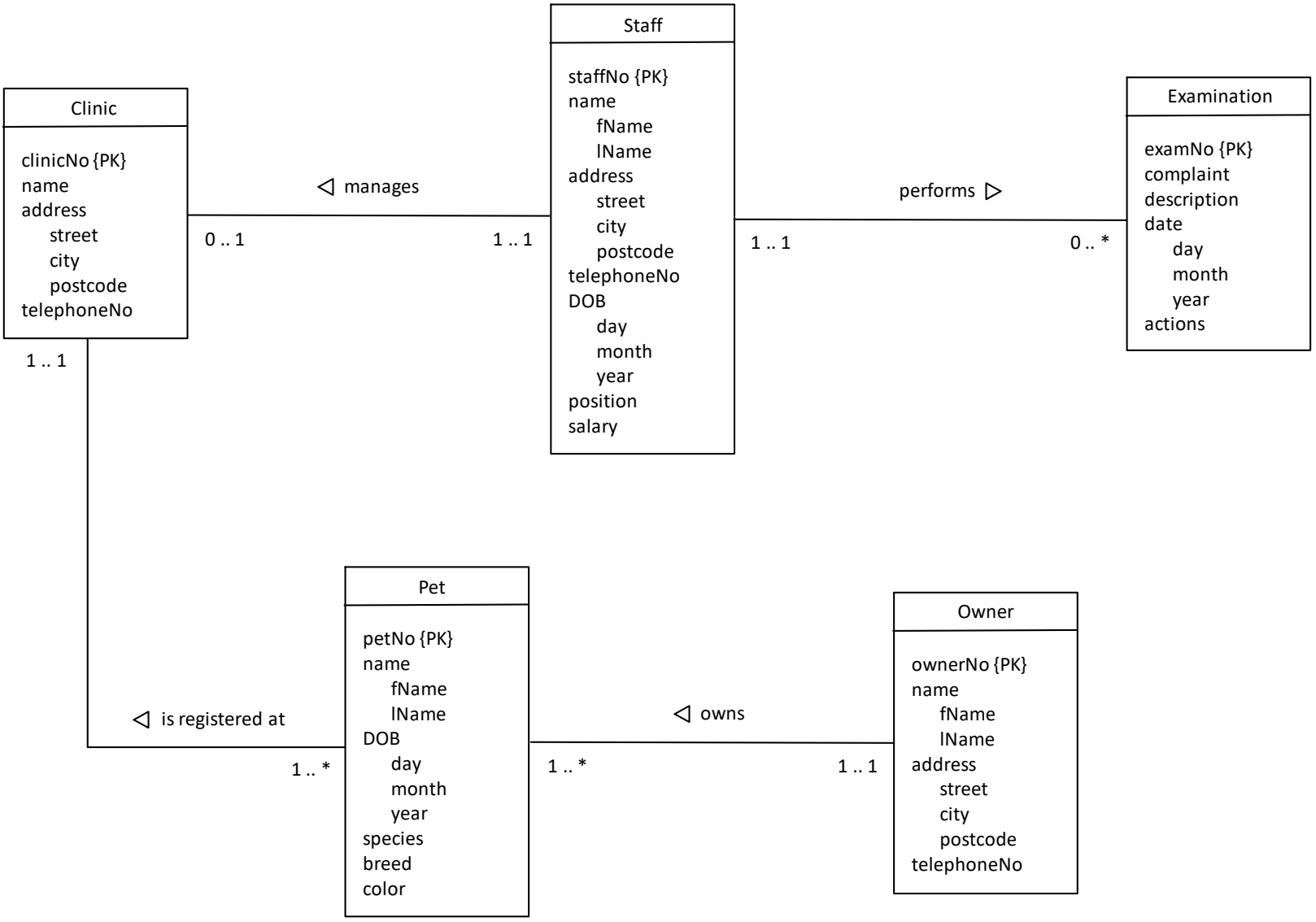
d. Identify attributes and associate them with entity or relationship types.

staff has a staffNo, name, address, telephoneNo, DOB, position, and salary.
clinic has a clinicNo, name, address, and telephoneNo.
owner has an ownerNo, name, address, and telephoneNo.
pet has a petNo, name, DOB, species, breed, and color.
examination has an examNo, complaint, description, date, and actions.

e. Determine candidate and primary key attributes for each (strong) entity type.

The candidate keys for **staff** are staffNo and telephoneNo. The chosen primary key will be staffNo.
The candidate keys for **clinic** are clinicNo and telephoneNo. The chosen primary key will be clinicNo.
The candidate keys for **owner** are ownerNo and telephoneNo. The chosen primary key will be ownerNo.
The only candidate key for **pet** is petNo, so the primary key will be petNo.
The only candidate key for **examination** is examNo, so the primary key will be examNo.

f. Generate the E-R diagram for the conceptual level (no FKs as attributes).


Staff
staffNo {PK}
name
fName
lName
address
street
city
postcode
telephoneNo
DOB
day
month
year
position
salary
Clinic
clinicNo {PK}
name
address
street
city
postcode
telephoneNo
manages
0 .. 1
1 .. 1
1 .. 1
Clinic
1 .. 1
Examination
examNo {PK}
complaint
description
date
day
month
year
actions
performs
1 .. 1
0 .. *
is registered at
1 .. *
Pet
petNo {PK}
name
fName
lName
DOB
day
month
year
species
breed
color
owns
1 .. *
1 .. 1
Owner
ownerNo {PK}
name
fName
lName
address
street
city
postcode
telephoneNo