

**Q1** Design a UML class diagram for a simplified doctor appointment manager. Decide on the classes, their attributes, and their methods based on the roles described.

**Patient** - Manages personal information.

**Doctor** - Manages available slots, and prescribes patients.

**Nurse** - Assists with patient care and coordinates daily medical activities.

**Appointment** - Tracks appointment specifics such as timing, doctor, and patient details.

**Prescription** - Details on what has been prescribed

**Note:** Define each class, including attributes and methods that you think are appropriate based on the class's role. Use proper UML notation to represent classes, relationships, and visibility (public, private, protected). Also ensure encapsulation.

