

**Quiz 02 Sec B**  
**May 22, 2024**

- 1) A Doctor's clinic wishes to update its computer system and needs to store the following details: Doctor: idNo, name, specialization, contact no, email address; Patient: patient ID, patient name, disease, contact No appointmentDate; Receptionist: idNo, name, birthdate, hiredate; CheckUp: checkup ID, date of check-up, follow up date, and disease. A checkup object also has the details of the doctor and the patient. Use your understanding of object-oriented programming concepts you have studied so far, to propose a solution that maximizes reusability and minimizes programming effort. Draw a UML class diagram to show your solution. Briefly explain your selection of classes and the relationships between the classes. The diagram should show the class names, variables with data types, and methods with return types for each class. (do not write code for this problem)
- 2) Write code for the class declaration and constructor of the checkup class, initializing the variables through the constructor. Constructor parameters and instance variables must have the same names.
- 3) Write piece of code for the toString() method of the checkup class, that displays the details of the class using format method.
- 4) Now, write a test class, CheckupTest.java, that:
  - a) Instantiates an object for each of the classes with values for the relevant attributes.
  - b) Takes input from the user and rewrites the initial values for the patient's name and contact no using their respective setter methods.
  - c) How will you display the patient's idNo and the name of the doctor.