## Section 2: UML

Model the following using UML notation on Dia modelling package or package of your choice:

- 1. Jane has called a technician to repair her television. How would the technician deal with the complexity of the television?
- 2. Identify the possible attributes to define the state of the following objects:
  - a) Tea cup
  - b) Stereo tape-recorder
- 3. Dr. James and Mr. Hyde went to the railway station to book two tickets in the Flying express for 3rd December by AC 1st class. Identify the following:
  - a) The possible receiver of the message in this situation
  - b) The possible method that the receiver can use
- 4. State whether the following situations demonstrate reusability:
  - a) Recycling paper
  - b) Pump reusability (same pump is used in a well and in a fuel station)
- 5. As a member of a team that is developing the billing system software for Diaz Telecommunications Inc., you have been assigned the task of creating a software module that accepts and displays customer details. Identify the class that you will create and the methods of the class.
- 6. As a member of a team that is developing an automated booking system for the Railways, you have been assigned the task of creating a module that accepts the details of a passenger and checks whether the ticket has been confirmed or is in the waiting list. The module then prints the list of confirmed passengers. Declare a class Ticket, which consists of three member functions, booking(), status(), and print().