**A3 set 2**

Define a class **Teacher** with the following private instance variables, name, date of birth (is of type **DATE**) and appropriate constructor and display function. Define a separate DATE class with 3 integers year, month, date and override toString() method. Derive 2 classes from Teacher class namely **PartTimeTeacher** (with an instance variable ‘int hrs’ representing number of hours the teacher has worked) and **FullTimeTeacher** (with an instance variable ‘double basic’ representing the basic salary).

For PartTimeTeacher, the salary is calculated based on the number of hours the teacher has worked. For 1 hr = the amount is Rupees 2000.00.

For FullTimeTeacher, the salary is calculated as follows. salary=Basic +HRA( 10% of basic)+DA(60% of basic). Define display method in both the subclasses that will display the salary of teacher. When the ‘display()’ of subclass is called it should also execute the ‘display()’ from the superclass.

Write a separate driver class to create objects of each class and test the methods.

**5M**