

**Mumbai Educational Trust's
Institute of Information Technology
Java Programming**

Assignment #1

Using Java Programming do the following:

Create a class called Patient with following :

Data Members:

- a) patientId
- b) patientName
- c) bedType of type Int / Alternatively you can use Enum (Economy, Standard, Luxury)
- d) noOfDays

Member functions:

- a) Properties for respective members and Constructors
- b) getBillAmount

amount = noOfDays * bedType (price)

Where, bedType price will be:

If bedType is 1 then price = 500

If bedType is 2 then price = 350

If bedType is 3 then price = 200

Derive a class called InHousePatient (Hospital Employees) from above Patient class with following:

Data Members:

- a) discount (in percent)

Member functions:

- a) Constructor and Properties
- b) getBillAmount

Where getBillAmount will be overridden to add discount from the data member only if the billing amount exceeds 5000 else the discount will be 5%.

Create a test program for above classes and implement following utility functions.

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Implement Service Tax function which applies tax of 5% on Bill amounts > than 5000.
10% on Bill amount greater than 10000.

Note: Program should be according to convention followed in class codes.