EASTERN UNIVERSITY, SRI LANKA
DEPARTMENT OF MATHEMATICS
SECOND YEAR EXAMINATION IN SCIENCE (2010/2011)
FIRST SEMESTER (April , 2013)

OC 251 – PRACTICAL WORKS ON OC 206

(REPEAT)

Answer **all** questions

Time: Two hours

1) Write the java code to print following patterns using *for loops*:

*	1
***	222
*****	33333
*******	4444444
*********	555555555
(a)	(b)

2) Write a java code to calculate the monthly telephone bills as per the following rule:

   Minimum Rs. 200 for upto 100 calls;

   Plus Rs. 0.60 per call for next 50 calls;

   Plus Rs. 0.50 per call for next 50 calls;

   Plus Rs. 0.40 per call for any call beyond 200 calls.

3) Define a class student with the following specification in a java code

   Private members of class student

admno	integer
sname	20 character
eng. math, science	float
total	float
ctotal()	a function to calculate eng + math + science with float return type.

   Public member function of class student

Takedata()	Function to accept values for admno, sname, eng, science and invoke ctotal() to calculate total.
Showdata()	Function to display all the data members on the screen.

4) Define a class *Publication* which has attributes title and price, functions: getData() and print().

Derive the following sub-classes from the Publication class:

a sub-class *Book* which has an attribute: accession number and functions: getData() and print( ).

a sub-class *Magazine* which has an attribute: volume number and functions: getData() and print( ).

With the *Magazine* sub-class as base, derive another sub-class *Journal* which has an attribute: Journal Name and functions: getData() and print().

In *main( )* create an object for the class *Journal*. Invoke the getData() and print() functions for this object.