# University of Cape Town Department of Computer Science

## Computer Science CSC115F

### **Class Test 2**

•	Answer	all	questions.
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- All questions that refer to elements of programming make reference to the Java programming language as studied in class.
- Good luck!

Marks:	40	<ul> <li>Approximate marks per question are shown in brackets</li> </ul>
Time:	40 minutes	• The use of calculators is permitted
	Surname	Initials
NAME:		
STUDEN	VT NO:	COURSE CODE: CSC

This paper consists of 1 questions and 3 pages (including this cover page).

			Mark A	llocation			
Quest	Marks	Internal	External	Quest	Marks	Internal	External
1	[10]						
	Total				Total		
				Gran	nd Total		
				Fina	al Mark		
Interna	al Exami	ner:		Extern	al Exami	iner:	

#### **Section 1. Selection**

#### Question 1. [10 marks]

a)	Write a method for the XOR operation, which is true if exactly one argument
	is true using only "if" statements, tests for equality where needed and "return"
	statements. Use the following template:

```
public boolean xor ( boolean a, boolean b )
{
}
```

[2]

b)	Assume choice is a character variable. Write a switch statement to execute method1() and method3() if choice has a value of 'b'; method2() if choice has a value of 'c'; and method1() if choice has a value of 'd'. The order of statements is not important - reorder them so that your switch statement uses a minimum number of break statements.

[4]

		Explain what it is	i. 1	
it occurs.	of code to illustrat	Write a fragment	ii.	
	revent/avoid the p	Fix your code to	iii.	