



THE OPEN UNIVERSITY OF SRI LANKA  
DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE  
B.SC. DEGREE PROGRAMME 2011/2012

**CLOSED BOOK TEST – 1**

**CPU2242: OBJECT ORIENTED PROGRAMMING USING C++ AND JAVA**

DURATION: ONE AND HALF HOURS ONLY (1.5 HRS)

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Date: 02<sup>nd</sup> September, 2011

Time: 4.00 pm – 5.30 pm

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Answer ALL Questions.

**Q1).**

- i. What is meant by *Pseudo code*, *Source code* and *Object code*?
- ii.
  - a. When the program is running it produces a number that is too large to fit into the space allocate for it in memory. What type of error is this?
  - b. A program runs without any errors being reported but outputs results that are wrong, what type of error is this?
- iii.
  - a. Briefly describe the process of designing a program.
  - b. If programs can be designed, using the process described in the above question ((iii) a), why are there be a software crisis?

**Q2).**

- i. List the major differences between the *procedure-oriented* and *object-oriented* techniques.
- ii. What are the differences in analyzing requirements at *domain analysis* and *object oriented analysis* phase?
- iii. What is the first Object Oriented Programming language and what are the Object Oriented concepts implemented in it?

**Q3).**

- i. List the limitation of C++ compared with Java.
- ii. What is the Java platform?
- iii. What is meant by java bytecode?
- iv. Discuss the role of the Java Virtual machine (JVM)

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