

Uva Wellassa University, Sri Lanka

Faculty of Science and Technology

Computer Science and Technology Degree Program

End Semester Examination –February/March 2012

CST 221-2 Object Oriented Programming



**Uva Wellassa  
University**



Java

PART B - Essay Questions

1.
  - a) Why Java is called platform independent? (4 marks)
  - b) Differentiate among instance variable, class variable and local variable (6 marks)
  - c) What is a *class* and what is an *object*? (2 marks)
  - d) What are the characteristics of an object? (4 marks)
  - e) What does a constructor do? What are the syntactic differences between a *constructor* and a *method*? (4 marks)
  - f) How is *main()* method declared in Java? Discuss briefly the meaning of each part of the *main()* method declaration. (6 marks)
  - g) What are the differences between type conversion and casting? (4 marks)
  
2.
  - a) What is a package? How can you define your own package? (4 marks)
  - b) What are the core parts of Object Oriented Programming (OOP)? Describe them in brief (10 marks)
  - c) What are the differences between *abstract class* and *interface*? (6 marks)
  - d) What is the difference between *method overriding* and *method overloading*? Mention the rules associated with them. (6 marks)
  - e) What is multithreaded programming? What are the advantages of them? (4 marks)
  - f) Describe the complete lifecycle of a thread. (6 marks)
  - g) What is synchronization? When do we use it? (4 marks)

