

**SOUTH EASTERN UNIVERSITY OF SRI LANKA**

**FIRST EXAMINATION IN BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY FOR MANGEMENT STUDIES-2009/2010**

**SEMESTER – II , FEBRUARY -2012**

**ITMS 1253R - OBJECT ORIENTED SYSTEM ANALYSIS AND DESIGN**

Answer all questions

Time: 3 Hours

Q-1

- a) Explain the characteristic of system in detail. (5 Marks)
  - b) Many Information Systems are very successful and failure. Explain your arguments. (10 Marks)
  - c) What process or task spans phases of the life cycle? Explain with suitable lifecycle model. (10 Marks)
- (Total marks=25)

Q-2

- a) Briefly explain the terms
    - Object and Class
    - Inheritance
    - Polymorphism
    - Encapsulation
 (10 Marks)
  - b) Explain some fact finding techniques. (10 Marks)
  - c) Distinguish the term functional and Non function requirement with suitable example (05 Marks)
- (Total marks=25)

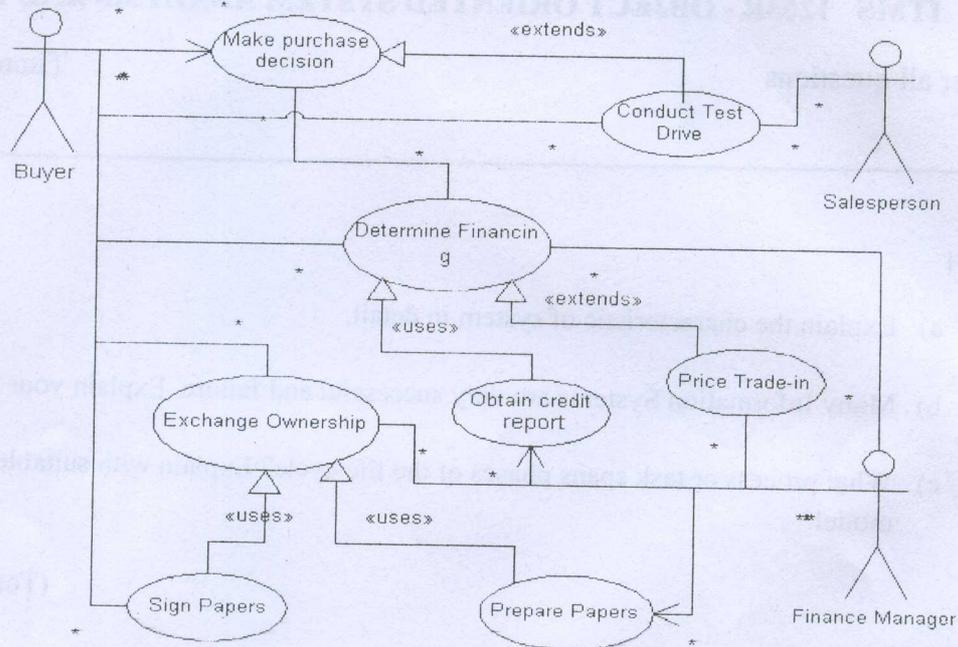
Q-03

- a) Define the term Data modeling (05 Marks)
- b) What is a logical and physical models (05 Marks)

c) Why do software engineers use, "Use Cases" for developing object oriented system? Explain.

(05 Marks)

d) Explain the following use case diagram



(05 Marks)

(Total marks=20)

Q-04

a) Explain Black Box Specifying control techniques with example.

(05 Marks)

b) What are the main purposes of using Statechart diagrams in specifying operation?

(05 Marks)

(Total marks=10)

Q-05

a) Explain what you mean by Software implementation and define 3 types of software implementation.

(05 Marks)

b) Explain component diagram and deployment diagram using a real time software example?

(05 Marks)

c) Differentiate the terms software testing and software maintenance

(05 Marks)

d) Benefits of using UML sequence diagrams

(05 Marks)

(Total marks=20)