

SOUTH EASTERN UNIVERSITY OF SRI LANKA**FINAL EXAMINATION IN BACHELOR OF BUSINESS ADMINISTRATION / BACHELOR OF
COMMERCE – 2008/2009****SEMESTER – I, MAY - 2010****MIS 4107 SOFTWARE ENGINEERING**Answer **all** questions.

Time: Three hours.

1

Explain why the waterfall model of the software process is not an accurate reflection of software development activities.

- a) What are the major components of software engineering framework. Explain why.
- b) What is software and software engineering?
- c) Explain in detail the prototype model. (20 marks)

2

a) Using examples, explain the following terms

- i Object and object class,
- ii Encapsulation
- iii Inheritance
- iv Polymorphism

- b) Explain the factors influencing speed of technology transfer.
- c) Distinguish the terms 'assessment' and 'prediction'.
- d) Briefly explain the term 'improving process of software'. (20 marks)

3

- a) Explain why the intangibility of software poses special problems for software project management.
- b) Explain why the process of project planning is an iterative one and why a plan must be continuously reviewed during a software project.
- c) Explain two types of project size of estimation matrices.
- d) Briefly explain project estimation techniques. (20 marks)

4

- a) Explain why it is useful to draw a distinguishing line between a requirements definition and a requirement specification
- b) Explain requirement capturing technique in detail.
- c) Explain in detail about functional and non functional requirements with suitable examples.
- d) Two factors are dominant in quality of designing the software. They are coupling and cohesion. Explain.

(20 marks)

5

- a) Discuss the differences between verification and validation in software testing
- b) Explain the term repository model in software architecture.
- c) Explain the major software maintain activities in detail
- d) Software Quality is of utmost importance in the modern dynamic competitive environment. Explain

(20 marks)