



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

**SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE**

SSE-415: DEVELOPMENT OF LARGE SOFTWARE SYSTEMS

DATE: THURSDAY, 19TH APRIL 2012

TIME: 8.00 A.M. – 10.00 A.M.

INSTRUCTION:

ANSWER QUESTION ONE(1) AND ANY OTHER TWO (2) QUESTIONS.

QUESTION ONE

- (a) Describe characteristics of User interface design. [5 marks]
- (b) Discuss the software quality management system. [4 marks]
- (c) Explain the use of Gantt chart in scheduling. [5 marks]
- (d) ATM Machines is a special purpose interface. Justify your answer. [2 marks]
- (e) Describe the various activities during software project planning. [5 marks]
- (f) Explain how a software developer can add value to an organization. [2 marks]
- (g) Explain the characteristics of a software engineer. [5 marks]
- (h) Differentiate between Product and Process matrices. [2 marks]

QUESTION TWO

- (a) What do you understand by Software Development life Cycle (SDLC)? Discuss the waterfall model with suitable diagram. Why it is important to adhere to a life cycle model while developing a large software product? [13 marks]
- (b) Outline the major responsibility of software project manager in an organization. [7 marks]

QUESTION THREE

- (a) A software has to be develop for automating the manual library of a university. The system should be stand alone in nature .based on above scenario design following
- i. Software life cycle model diagram.
 - ii. Proper scheduling chart for the system
- [12 marks]
- (b) Describe the role of management in software development [8 marks]

QUESTION FOUR

- (a) What are the Project estimation techniques? [6 marks]
- (b) Discuss the Constructive Cost Model (COCOMO) for effort estimation. [7 marks]
- (c) Explain the concept of Function points (FP). Why FPs are becoming more acceptable in Industry ? [7 marks]

QUESTION FIVE

- (a) What is software quality? Discuss software quality attributes. [10 marks]
- (b) Why CMM is the better choice than ISO 9001? [5 marks]
- (c) Explain any five capability maturity model. [5 marks]
