MURANGA UNIVERSITY COLLEGE
(A constituent College of Jomo Kenyatta University of Agriculture & Technology)

MAIN CAMPUS

SPECIAL/SUPPLEMENTARY UNIVERSITY EXAMINATIONS

2015/2016 ACADEMIC YEAR

SECOND YEAR FIRST SEMESTER EXAMINATIONS

FOR THE DEGREE OF
BACHELOR OF BUSINESS INFORMATION TECHNOLOGY

COURSE CODE: ICS 2302

COURSE TITLE: SOFTWARE ENGINEERING

DATE: **TIME:**

INSTRUCTIONS TO CANDIDATES

Question ONE (1) is (compulsory) AND any other TWO

MRUC observes ZERO tolerance to examination irregularities

Question ONE (compulsory)

a) Explain keys features and practices that distinguish the Extreme Programming approach to software development. (8 marks)

b) In analysing requirements, the software engineer must determine what the customer requires from the new software. In doing this the analyst will produce a requirement specification document.

i.) Define the term requirement engineering (3 marks)

ii.) Highlight four reasons why requirement enginerring is difficult (4 marks)

c) Compare and constrast software inspection and software testing . (8 marks)

d) Explain why SRS also known as the black box specification of system. (4 marks)

e) Highlight three activities of risk assessment in software management (3 marks)

Question TWO

a) Outline five factors that as a software project manager you would need to consider when selecting and building a project team to undertake a new development project. In the case of each factor, discuss relevant issues that need to be taken into consideration to lower any risks. (12 marks)

b) Briefly describe each of the four elements of the design model. (8 marks)

Question THREE

a) Sometimes it is necessary to re-engineer a system. Describe what is meant by re-engineering, and explain why it may be essential and how it might be undertaken. (10 marks)

b) Explain what is meant by "Software Evolution" and discuss the need to plan for the future evolution of software during its initial development. (10 marks)

Question FOUR

a) Define requirements elicitation in the context of software development and describe four approaches to requirements elicitation. Outline the key steps involved in each approach. (12 marks)

b) Discuss the various strategies of design. Which design strategy is most popular and practical? (8 marks)