

## MAASAI MARA UNIVERSITY

## REGULAR UNIVERSITY EXAMINATIONS 2017/2018 ACADEMIC YEAR

# SCHOOL OF SCIENCE AND INFORMATION SCIENCES DEPARTMENT OF COMPUTING AND INFORMATION SCIENCES THIRD YEAR FIRST SEMESTER EXAMINATION FOR DEGREE IN INFORMATION SCIENCES

**COURSE CODE: COM 312** 

**COURSE TITLE: SOFTWARE ENGINEERING II** 

DATE: 25<sup>TH</sup> APRIL 2018 TIME: 8:30AM-10:30AM

#### **INSTRUCTIONS TO CANDIDATES:**

ANSWER ALL QUESTIONS IN SECTION A AND ANY 2 QUESTIONS IN SECTION B

This paper consists of 3 printed pages. Please turn over.

## SECTION A COMPULSORY [30 MARKS] QUESTION ONE

a) Define the terms i. Software [2 Marks] [2 Marks] ii. **Software Engineering** b) Distinguish between the following Software Engineering and System Engineering [4 Marks] c) State and explain two types of Software products [4 Marks] d) Discuss any three Issues of professional responsibility of a software engineer [6 Marks] e) Explain the importance of dependability and state Principal dimensions of dependability [5 Marks] f) Distinguish between the following terms as used in software "Software" design" and "software implementation" [4 Marks] g) Explain the Computer-aided software engineering (CASE)

## SECTION B ANSWERS ANY TWO QUESTIONS [40 MARKS] QUESTION TWO [20 MARKS]

a) Define the term software process [2 Marks]
b) Discuss the Four Generic activities in all software processes are: [8 Marks]
c) Discuss the three kinds of critical systems [6 Marks]
d) Distinguish between "Context models" and "Process models" of systems model
[4 Marks]

tool

[3 Marks]

#### **QUESTION THREE [20 MARKS]**

a) Outline five possible models used to document the design	[5 Marks]
b) Discuss Three CASE classification	[6 Marks]
c) Explain what is Software Requirements engineering	[2 Marks]
d) Discuss any two kinds of requirements	[4 Marks]
e) Define the term Ethnography and state the Two kinds of	
Ethnography	[3 Marks]

### **QUESTION FOUR [20 MARKS]**

aj	Define the term software process model	[2 Marks]
b)	State and explain three Generic software process models	[9 Marks]
c)	Discuss the two kinds of Evolutionary development	[4 Marks]
d)	l) Explain Component-based software engineering and state its process	
	stages	[5 Marks]

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