

GARISSA UNIVERSITY

UNIVERSITY EXAMINATION 2017/2018 ACADEMIC YEAR <u>ONE</u> <u>SECOND</u> SEMESTER EXAMINATION

SCHOOL OF COMPUTER AND INFORMATION SCIENCE

FOR THE DIPLOMA INFORMATON TECHNOLOGY

COURSE CODE: DIT009

COURSE TITLE: SYSTEM ANALYSIS AND DESIGN

EXAMINATION DURATION: 3 HOURS

DATE: 11/04/18

TIME: 09.00-12.00 PM

INSTRUCTION TO CANDIDATES

- The examination has SIX (6) questions
- Question ONE (1) is COMPULSORY
- Choose any other THREE (3) questions from the remaining FIVE (5) questions
- Use sketch diagrams to illustrate your answer whenever necessary
- Do not carry mobile phones or any other written materials in examination room
- Do not write on this paper

This paper consists of THREE (3) printed pages

SEM 11, 17/18 main exam (06/04-19/04/18)

Good Luck – Exams Office



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QUESTION ONE (COMPULSORY)

(a) Define the term system analysis and design	[2 marks]
(b) State three roles of System analyst	[3 marks]
(c) Distinguish between a computer program and an information system.	[4 marks]
(d) Identify the three levels of the organizational hierarchy and state the types of inform	mation
systems that serve each level.	[8 marks]
(e) State four types of models	[4 marks]
(f) Explain two types of information systems.	[4 marks]

QUESTION TWO

(a) Name the **three** methods/techniques which are used for developing computer based systems.

	[3 marks]
(b) State four guidelines of system testing	[2 marks]
(c) With the aid of a diagram, explain the system development life cycle.	[10 marks]

QUESTION THREE

(a) Explain the meaning of system theory as used in system analysis and design.	[3 marks]
(b) Differentiate between system analysis and system design.	[6 marks]

(c) Fozia the ICT manager for Jomba Company recommended the system administrator to carry out a research on system planning. Explain three types of feasibility. [6 marks]

QUESTION FOUR

- (a) With the aid of a diagram, describe the system development life cycle. [10 marks]
- (b) List **three** tools and techniques used in describing the system design of a system. [3 marks]
- (c) Differentiate between Structured Methodology from Object Oriented Methodology of analysis and Design. [2 marks]



QUESTION FIVE

(a) State four ways of fact-finding techniques in system analysis and design	[2 marks]
(b) Differentiate between decision table and decision tree.	[4 marks]
(c) Draw a decision table for the following statement;	[5 marks]
"If it rains or predicted, carry an umbrella".	
(d) Differentiate between soft system thinking and Hard thinking system.	[4 marks]

QUESTION SIX

(a) Explain the meaning of system development.	[2 marks]
(b) Distinguish between Open and closed system.	[4 marks]
(c) Discuss the three types of feasibility study.	[6 marks]
(d) List three tools and techniques use to collect data in system analysis and design.	[3 marks]

