

GARISSA UNIVERSITY

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

SCHOOL OF BIOLOGICAL AND PHYSICAL SCIENCE

FOR THE DIPLOMA IN INFORMATION TECHNOLOGY

COURSE CODE: DIT 009

COURSE TITLE: SYSTEM ANALYSIS AND DESIGN

EXAMINATION DURATION: 2 HOURS

DATE: 08/08/18

TIME: 9.00-11.00 AM

INSTRUCTION TO CANDIDATES

- The examination has FIVE (5) questions
- Question ONE (1) is COMPULSORY
- Choose any other THREE (3) questions from the remaining FOUR (4) 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 TWO (2) printed pages

SEM 11, 17/18 main exam (06/08-10/08/18)

Good Luck – Exams Office

please turn over



QUESTION ONE (COMPULSORY)

a)	What is system analysis and design?	[2 Marks]
b)	State three roles of System analyst.	[3 Marks]
c)	Explain three importance of system study.	[3 Marks]
d)	Explain four types of systems.	[8 Marks]
e)	State three types of models.	[3 marks]
f)	State three uses of models.	[3 Marks]
g)	Explain two types of information systems.	[4 Marks]
QUES	STION TWO	
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]
QUE	STION THREE	
a)	Distinguish between Logical and Physical design of systems.	[4 Marks]
b)	Explain three types of decisions used in level of organization.	[6 Marks]
c)	Name the three methods/techniques which are used for developing computer based systems.	
		[3 Marks]
d)	What is system controls?	[2 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	s and Design.
		[2 Marks]
QUES	TION FIVE	

- a) Consider the problem of obtaining money from an ATM cash machine. You need to determine that the user of the ATM is a valid user, and that the user of the ATM has enough money in their account to complete the transaction.
 - i. Draw a context diagram of the ATM system. [5 Marks]
 - Draw a data flow (level 1) diagram to illustrate the logical flow of data and the processes necessary for the transaction.
 [10 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]