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**GARISSA UNIVERSITY**

**UNIVERSITY EXAMINATION 2018/2019 ACADEMIC YEAR FOUR**

**SECOND SEMESTER EXAMINATION**

**SCHOOL OF INFORMATION SCIENCE AND TECHNOLOGY**

**FOR THE DEGREE OF BACHELOR OF INFORMATION SCIENCE**

**COURSE CODE: COM 410**

**COURSE TITLE: DATA PROCESSING**

**EXAMINATION DURATION: 2 HOURS**

**DATE: 06/02/2020 TIME: 09.00-11.00 AM**

**INSTRUCTION TO CANDIDATES**

* **The examination has FIVE (5) questions**
* **Question ONE (1) is COMPULSORY**
* **Choose any other TWO (2) 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 *please turn over***

**QUESTION ONE (COMPULSORY)**

1. Define the following terms **[6 marks]**
	1. Information system
	2. Data base
	3. Data processing
2. Differentiate between **[6 marks]**
	1. Serial organization and direct access
	2. Data and information
	3. Server based and client based
3. Explain three uses of information by businesses and other organizations **[6 marks]**
4. Explain three objectives of security in information system **[6 marks]**
5. Explain three roles of computer network in an organization **[6 marks]**

**QUESTION TWO**

Garissa University intends to develop an information system to assist in day to day operations

1. Explain the benefits of computerized information system **[6 marks]**
2. Explain three tools you will apply to collect data **[6 marks]**
3. Explain the phases in developing the system **[8 marks]**

**QUESTION THREE**

1. Explain four advantages of DBMS over file management system **[8 marks]**
2. Distinguish the following terms **[6 marks]**
	1. Data velocity and data variety
	2. Relational database and hierarchical data bases
	3. Private cloud and public cloud
3. Explain the characteristics of cloud computing **[6 marks]**

**QUESTION FOUR**

1. Explain the stages in data processing **[5 marks]**
2. Explain the threats to information system and the control measures against these threats **[7 marks]**
3. Explain the levels of management and the type of MIS that support each of these levels **[8 marks]**

**QUESTION FIVE**

1. Define ERP **[2 marks]**
2. Explain the characteristics of emerging technologies in data processing **[6 marks]**
3. Explain the following emerging technologies **[12 marks]**
	1. Cloud computing
	2. Mobile computing
	3. Fiber optics