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**GARISSA UNIVERSITY**

**UNIVERSITY EXAMINATION 2020/201 ACADEMIC YEAR TWO**

**SECOND SEMESTER EXAMINATION**

**SCHOOL OF SCHOOL OF PURE AND APPLIED SCIENCES**

**DIPLOMA IN INFORMATION TECHNOLOGY**

**COURSE CODE: DIT 021**

**COURSE TITLE: APPLICATION DEVELOPMENT**

**EXAMINATION DURATION: 2 HOURS**

**DATE: 19/08/2021 TIME: 12.00-2.00 PM**

**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 term Application development. (2 Marks)
2. Describe processes involved in creating an Application. (9 Marks)
3. Explain **four** roles of an Application Support Engineer. (8 Marks)
4. List **three** roles of an application developer. (3 Marks)
5. Distinguish between logical and physical design. (2 Marks)
6. Explain **three** major aspects involve in implementation of a system. (6 Marks)

**QUESTION TWO**

1. Define the term Business Requirement in the context of software engineering. (2 Marks)
2. Explain **four** benefits of Business Requirement to an application developer. (8 Marks)
3. List any **five** characteristics of application development projects. (5 Marks)
4. Discuss **five** fact finding techniques. (5 Marks)

**QUESTION** **THREE**

1. Discuss **four** methods used to develop systems. (4 Marks)
2. Explain **three** types of mobile apps. (6 Marks)
3. [G-Coach](https://parcelkiosk.com/) ltd is one of our clients who approached us to [get a web application designed and developed](https://www.netsolutions.com/web-development-company) to offer better parcel delivery services to customers. As they approached us, we started the discussion with an important parameter: *analyzing the business needs.* What do you think the business requirement might be for this parcel delivery web application services? (5 Marks)
4. Highlight **five** roles of a system analyst. (5 Marks)

**QUESTION** **FOUR**

1. Explain **five** causes of organization change in an organization. (10 Marks)
2. Describe the process of organization change in any organization. (5 Marks)
3. Describe **five** techniques to handle the change properly and to deal with resistance to change. (5 Marks)

**QUESTION** **FIVE**

1. Describe the term Application Support. (3 Marks)
2. With the aid of a diagram, describe the system development life cycle. (10 marks)
3. Differentiate between program testing and system testing. (2 Marks)
4. Explain **five** aims of feasibility study. (5 Marks)