Pwani
University College

A Constituent College of Kenyatta University

INSTITUTIONAL BASED

UNIVERSITY EXAMINATIONS 2010/2011 ACADEMIC YEAR

YEAR I SESSION II EXAMINATION FOR THE DIPLOMA IN IT

SCT D105: SYSTEMS ANALYSIS & DESIGN

SESSION I I   TIME: 2 HRS

DAY/TIME: WEDNESDAY 7.00AM– 10.00AM DATE: 03.08.11 (TF2)

INSTRUCTIONS

- **SECTION 1-(30 MARKS)** - Answer **ALL** questions in section 1
- **SECTION 2 –(40 MARKS)** – Choose **ANY TWO** questions
- Marks are indicated in brackets ( )

SECTION 1 – (30 MARKS)
Answer ALL the questions in this section

Q. 1)   Define the following terms:-

a) Information Technology.
b) System
c) Software
d) Information
e) Prototype   (10 mks)

Q.2)   Describe the roles of a Systems Analyst in relation to information Systems
Management.   (2 mks)

Q. 3)   Describe an Information System in relation to information technology.
(3 mks)

Q.4)   Outline five reasons why an organization would undertake a system
       upgrade project.   (5 mks)

Q.5)   Describe the characteristics of a good information system   (4 mks)

Q.6)   Differentiate between Enterprise computing systems and Transaction
       processing systems.   (2 mks)

Q.7)   What is the importance of prototyping essential in systems development
                                                                      (2 mks)

Q.8)   List down at least four critical sections found in an IT department of a
developed organization.   (2 mks)

SECTION 2 – (40 MARKS)
Choose ANY TWO questions

Q. 1) The Principal of Pwani University College would like to computerize their
operations. A Systems Analyst is required to commend the various types of
components and systems to be implemented.

   a) Outline the Systems Development life Cycle   (5 mks)

   b) Briefly describe the activities and type of report the systems analyst will
      undertake and prepare at each level of the system development cycle.
                                                                      (10 mks)

   c) Prepare a diagrammatic entity relation model outlining the business
      processes of the student admission section.
            (5 mks)

Q.2)   Safaricom Limited would like to open a branch at Kilifi Town to promote
       their new product MPESA. They have approached you to setup an
       information system to suit their operations. With your basic understanding
       of information systems.

   a) Why would you recommend them do a systems analysis before starting
      their operations.   (5 mks)

   b) Briefly outline the steps you will take to understand the business operations
      of Safaricom MPESA service.   (7 mks)

c) What are some of the factors that may affect the systems project. (8 mks)

Q.3)   Ahadi Kenya limited Company would like to shortlist candidates for a systems Analyst position. This is position reporting to the IT Manager and attracts a good remuneration/salary.

   a) Discuss why you are the best candidate for the job.   (6 mks)

   b) Assuming that you are hired for the job. Prepare an orientation report highlighting some of the expertise you would bring into the company.   (6 mks)

   c) Highlight the challenges you anticipate you face and how you would handle them.   (6 mks)