KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2022/2023 ACADEMIC YEAR
SECOND YEAR, FIRST SEMESTER EXAMINATION
FOR THE BACHELOR OF SCIENCE IN MATHEMATICS
(SPECIAL EXAMINATION)
KCS 205 SYSTEM ANALYSIS AND DESIGN

DATE: 14TH AUGUST, 2024
TIME: 2:30PM – 4:30PM

INSTRUCTIONS TO CANDIDATES
ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS
QUESTION ONE (30 MARKS

a) Explain different things that the system analyst needs to capture and document during system investigation and survey. (4 Marks)

b) Distinguish between functional system requirement and technical system requirements; give examples in each of them. (6Marks)

c) State and explain the three most common methods of system investigation used during data collection to develop a system. (6 Marks)

d) Explain the roles of the following system project team skills. (6 Marks)
     i)   System administrator
     ii)   System designer

e) Briefly discuss different activities that a system developer has to undergo during system development life cycle. (8 Marks

QUESTION TWO (20 MARKS

a) Explain factors to consider when designing an effective questionnaire during system planning. (5 Marks)

b) Explain four advantages of using a Prototype methodology model of develop a system. (5 Marks)

c) Explain reasons as to why conducting feasibility study is important when developing a system. (10Marks)

QUESTION THREE (20 MARKS

a) Explain different factors that the system developer involves during the system design phase. (10 Marks)

b) By use of a well-drawn diagram to describe how waterfall model methodology of developing systems works. (10 Marks)

QUESTION FOUR (20 MARKS

a) Documentation in system planning and development is the umbrella term that encompasses all written documents and materials dealing with a system product's development and use. Discuss the objectives of this system documentation. (10 Marks)

b) Identify and explain any five types of feasibility that should be carried out by a system developer. (10 Marks)

QUESTION FIVE (20 MARKS

a) Explain any four main differences between management information systems (MIS) and decision support systems (DSS). (4 Marks)

b) Describe the four types of systems maintenance. (8 Marks)

c) Discuss the four system implementation methods that can be used during implementation phase. (8 Marks)