****

**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS**

**UNIVERSITY EXAMINATION FOR THE DEGREE**

**2ND YEAR 2ND SEMESTER 2016/2017 ACADEMIC YEAR**

**MAIN SCHOOL BASED**

**COURSE CODE: SCS 205**

**COURSE TITLE: SYSTEMS ANALYSIS AND DESIGN**

**EXAM VENUE: LAB 5 STREAMS: (BEd)**

**DATE: 28/4/17 EXAM SESSION: 2.00-4.00 PM**

**TIME: 2 HOURS**

**Instructions:**

1. **Answer question 1 (compulsory) and any other 2 questions.**
2. **Candidates are advised not to write on the question paper.**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room.**

**Question one**

1. There are many reasons why a systems design method introduced in an organization might fail or does not meet expectations. Identify and explain any five reasons ( 15marks)
2. Define the term feasibility study and explain any THREE types of feasibility studies ( 10 marks)
3. Describe the following terms giving examples: ( 5 marks)
4. Information system
5. Information technology

**Question Two**

1. With the help of a diagram and a one way arrow, describe the stages involved in systems development (12 marks)
2. Describe the relevance of information systems to school administrator ( 8 marks)

**Question Three**

1. Outline the differences and similarities between evolutionary prototyping and incremental approaches to systems development. ( 8 marks)
2. Explain the difference between a waterfall and an iterative/incremental System Development Life Cycle. Illustrate your answer with diagrams. (12 marks)

**Question Four**

1. Explain what a prototype is and describe how it can be used in Requirements gathering ( 6 marks)
2. Outline the advantages and disadvantages of prototyping? ( 6 marks)
3. Define the term stakeholder and Identify **two** types of stakeholder other than business analysts describing their roles and responsibilities. ( 8 marks)

***Question Five***

1. Describe any technique for gathering requirement giving atleast its two advantages (5 marks)
2. Describe the relevance of a systems analyst in systems development (5 marks)
3. Explain any Four ethical issues in systems development ( 10 marks)