

(*Knowledge for Development*)

**KIBABII UNIVERSITY**

**(KIBU)**

**UNIVERSITY EXAMINATIONS**

**2017/2018 ACADEMIC YEAR**

**END OF SEMESTER EXAMINATIONS**

**YEAR TWO SEMESTER ONE EXAMINATIONS**

**FOR THE DEGREE OF**

**BACHELORS OF SCIENCE**

**(INFORMATION Technology)**

**Course code:** BIT 215

**Course title:** SYSTEMS ANALYSIS AND DESIGN

**SUPPLEMENTARY/SPECIAL**

**DATE:**  **TIME:**

### INSTRUCTIONS TO CANDIDATES

Answer **Question ONE a**nd **ANY OTHER TWO QUESTIONS**

**Question One (30 Marks) [Compulsory]**

1. Compare and contrast between Management Information Systems (MIS) and Executive Information Systems (EIS). **[4 Marks]**
2. Explain the consequences of a system that lacks a system owner. **[4 Marks]**
3. Describe any one most critical goal in the communication building block. **[2 Marks]**
4. Explain the two most important advantages of object-oriented software technologies over structured software technologies. **[4 Marks]**
5. Discuss any two major cause of project failure. **[4 Marks]**
6. Describe any one characteristic of development costsand operating costs respectively. Identify any two examples of each kind of cost. **[8 Marks]**
7. i. What is user-entered development? **[1 Mark]**

ii. “User-entered development is critical to the success of the system development process”. Discuss **[3 Marks]**

**Question Two (20 Marks)**

1. **For each letter of the PIECES framework, create your own example of a problem that a system analyst might discover in an obsolete information system. [12 Marks]**
2. Each phase of a project includes specific deliverables that must be produced and delivered to the next phase. Using the hypothetical **FAST** methodology, identify the deliverables for the requirements analysis, logical design, and physical design and Integration phases. **[8 Marks]**

**Question Three (20 Marks)**

1. Describe the five high-level tasks involved in conducting system design for a development project to be built In-house. **[10 Marks]**
2. Explain why human factors are important in input design. **[2 Marks]**
3. Describe thebasic steps for designing output. **[8 Marks]**

**Question Four (20 Marks)**

1. The management of Kibabii University is considering developing a new library information system to replace the system currently in use. They may choose between purchasing a commercial off-the-shelf (COTS) software package or custom-built the system. Explain two pros and two cons of using off-the-shelf applications compared to custom-built applications. **[8 Marks]**
2. Describe any four different types of *stakeholders* who use or develop information systems, and give examples of each. **[12 Marks]**

**Question Five (20 Marks)**

1. Discuss the principles needed to be considered in input design. **[6 Marks]**
2. Describe three factors that should be considered in terms of the terminology used in computer dialogue. **[6 Marks]**
3. You have been invited for an interview for the position of a systems analyst at Intelcom Company. Describe the kind of knowledge and skills you should possess. **[8 Marks]**