



**UGANDA MARTYRS UNIVERSITY-MBALE BRANCH
FACULTY OF SCIENCE**

SEMESTER II-2018/19 EXAMINATIONS

SUBJECT : COMPUTER SCIENCE
PAPER : ADVANCED INFORMATION SYSTEMS
CODE :
COURSE : BAM III
DATE : ____/MAY/2019
TIME : 3 HOURS

INSTRUCTIONS:

The paper comprises of three **SECTIONs A AND B:**
Attempt **ALL** questions in **SECTION A.**

SECTION A: **[25 Marks]**

- 1). Identify the different types of computer-based information systems commonly applied in organizations today? (6 marks)
- 2i). Different levels of organizations are served by different groups of people and they often require different types of information. List and describe the various groups served in the various levels of the organization. (4 marks)
- ii). Give an illustration of the levels of management in organizations mentioned in 2i) above. (2 marks)
- iii). Express the advantages of having an organization divided into such levels. (3 marks)
- 4). With explanations, list down the various qualities of good information. (6 marks)
- 5). List down the various components of an information system? (4 marks)

SECTION B: **[75 Marks]**

Attempt **ANY THREE** questions in **SECTION.**

- 1a). What is a computer Network? (2 marks)

b). The following are the examples of the types of Physical Networks

- i. LAN
- ii. MAN
- iii. WAN

Write each of them in full.

(3 marks)

- c). Define a Network Operating System (NOS) and explain what it does on a network.
(4 marks)
- d). Briefly describe some of the functions provided by Network Operating System.
(8 marks)
- e). What is a Topology and give examples illustrating any four topologies used in Computer networks.
(8 marks)
- 2a).** The Organizational Responsibilities in Systems Development in any organization lies in the hands of an Analyst. A system development life cycle is a systems approach to problem solving and is made up of several phases, each comprising of multiple steps. Identify and explain the various activities carried out in the phases used in problem solving as mentioned above.
(18 marks)
- b). Explain some of the skills of a Systems Analyst
(7 marks)
- 3a).** Information is critical and indeed “The information we have is not what we want. The information we want is not the information we need, and the information we need is not available”. Information is a resource; It is scarce. It has a cost. It has alternative uses, and there is an opportunity cost factor involved if one does not process it.
- With the knowledge acquired by you at University, how would you justify the statement stated above?
(25 marks)
- 4a).** UMU has a database for managing the results of students. Give an explanation of what you understand by the following two terms:
- i). Database (1 marks)
 - ii). Database Management System (2 marks)
- b). Discuss reasons that led UMU to develop the said database. (10 Marks)
- c). Normalization is the method of organizing or structuring of data into tables. Explain: i). why data is usually organized in table form. (6 marks)
- ii). Identify some of the characteristics of a good database. (6 marks)

THE END& GOOD LUCK#####