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KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY
UNIVERSITY EXAMINATION, 2024/2025 ACADEMIC YEAR
FIRST YEAR, FIRST SEMESTER EXAMINATION
MASTER IN BUSINESS ADMIISTRATION

Date: 2nd April, 2024
Time: 8.30am –11.30am

KIS 3108   - INTRODUCTION TO INFORMATION SYSTEMS

INSTRUCTIONS TO CANDIDATES

ANSWER **QUESTION ONE (COMPULSORY)** AND **ANY OTHER THREE** QUESTIONS

QUESTION ONE (40 MARKS)

Modern Higher Education Institutions

Modern higher education institutions (HEI) are facing disruptive challenges of designing implementing and deploying of education management information systems (EMIS) so as to interface teachers, graduate students, other staff and administrators for specific purposes such as capturing daily workflows, analysing various activities, processes management, project management, etc. Quality of information systems is altogether different, but very important since it incorporates different variables that need to be considered in producing quality and beneficial management information systems. The management and administration of higher education institutions should undertake digitalization in the education sector whereby such initiative is expected to strengthen and streamline the information provided by EMIS. For such resolution to be achieved concerted efforts by various stakeholders of EMIS should be prompted to provide much required insights into resource utilization, budget allocations and spending and the value of the investment. In fact, the major challenges include capturing hard data, data accuracy, data analytics and even sustainability issues in managing education management systems specifically in various institutions. However, stronger and effective information systems can help institutions and stakeholders in proper planning for education system improvements.

In addition, higher education institution policies should clearly define the information sensitivity. further, it has been observed that information theft and loss of privacy are the biggest problems faced by the academic institutions. Information Technology specialists, system managers and HEI management should be aware of modern trends in data privacy, specifically with General Data Protection Regulation (GDPR) which is now fast becoming a statutory instrument all over the world. For instance, questions like "what is private data"? "What is sensitive information"? "Who has access to what"? "How the right of access is determined"? "How the right to erase information can be granted and by whom"? - need to be clearly answered by the policies and then policies should be effectively communicated through formal channels to sensitize users. Then, a data protection officer should be appointed to look into GDPR issues.

Also, users should be instructed to report back immediately if they found that they have access to any sensitive information. It is the first important step in dealing with data privacy issues. To manage the changing times and policies, a repository of changes in policies and regulations should be incorporated in the database.

a) Explain success and failure factors associated with education management information systems (EMIS) **(10 marks)**

b) The management and administration of higher education institutions should undertake digitalization in the education sector. Describe the various information systems resources required for digitization **(10 marks)**

c) Higher Education Institutions can rely on various management information systems. Discuss the various information systems that can be used in different management levels **(10 marks)**

d) Describe desirable qualities of information that will be produced by the Education Management Information Systems (EMIS **(10 marks)**

QUESTION TWO (20 MARKS)

a) The global business environment requires that organization apply the capability of information systems. Describe the emerging information technologies that can be used in the corporate business environment **(10 marks)**

b) The information in a database of an organization is vulnerable to attacks and misuse. Explain the various forms of information misuse in databases **(10 marks)**

QUESTION THREE (20 MARKS)

a) The global business environment requires that organization adopt management information systems. Describe the transformation changes to an organization that results from the use of management information systems.

(10 marks)

b) The management of an organization can decide not to make use of Management Information Systems (MIS) in its business processes. As someone with knowledge of MIS, advice the management on the strategic benefits of MIS.

(10 marks)

QUESTION FOUR (20 MARKS)

a) Even though the management must use ERP, there are challenges that need to be addressed. Establish the aspects for an effective ERP in an organization **(10 marks)**

b) The Business Process Re-engineering (BPR) is paradigm that has great benefits and therefore it is necessary to redesign the organizational structure. Explore the factors that are considered for BPR by the organizational management **(10 marks)**

QUESTION FIVE   (20 MARKS)

a)   The business application of the information system demands designing of a system suitable to the current situation. Describe the major steps that are involved in the design of an application system.
(10 marks)

b)   The information system has enabled the supermarket to keep costs low while fine-tuning its merchandise to meet customer needs. Explain the strategic approaches for competitive advantage
(10 marks)