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**KIRIRI WOMENS' UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**UNIVERSITY EXAMINATION, 2024/2025 ACADEMIC YEAR**  
**FIRST YEAR, FIRST SEMESTER EXAMINATION**  
**FOR THE BACHELOR OF ECONOMICS AND FINANCE**

Date: 11<sup>th</sup> December, 2024

Time: 2.30pm –4.30pm

**KFC 2100: ECONOMICS COMPUTER APPLICATIONS**

**INSTRUCTIONS TO CANDIDATES**

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

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**QUESTION ONE (30 MARKS)**

- a) A computer is a machine that can be programmed to automatically carry out sequences of arithmetic or logical operations (computation). Modern digital electronic computers can perform generic sets of operations known as programs. These programs enable computers to perform a wide range of tasks. Discuss the role of computers in Organizations. (4 Marks)
- b) A computer is an electronic device that accepts data, performs operations, displays results, and stores the data or results as needed, it is made up of a combination of hardware and software resources that integrate and provide various functionalities to the user. Discuss the following terms, operating system, input devices & Internal Hardware. (6 Marks)
- c) The data processing cycle consists of a series of steps where raw data is fed into a system to produce actionable insights. Each step is taken in a specific order, but the entire process is repeated in a cyclic manner. Discuss the IPO Model (6 Marks)
- d) Information System (IS), an integrated set of components for collecting, storing, and processing data and for providing information, knowledge, and digital products. It is an interconnected set of components used to collect, store, process and transmit data and digital information. Outline any four components that make up an IS (4 Marks)
- e) Information technology (IT) is a set of related fields that encompass computer systems, software, programming languages and data and information processing and storage. IT forms part of information and communications technology (ICT). Describe the terms. BIT, SERVER & NETWORK. (6 Marks)

- f) Computer applications refers to the practical use of computers various fields. An application enables users to perform specific tasks. Discuss the significance of computer applications to business in the world today. (4 Marks)

### **QUESTION TWO (20 MARKS)**

- a) Software is a generic term used to refer to applications, scripts and programs that run on a device. It can be thought of as the variable part of a computer, while hardware is the invariable part. Giving examples, discuss the following types of software; driver software, system software, middleware and programming software/language. (8 Marks)
- b) As most companies and firms began to do business online. Organizations and firms have started to move the bulk of data to offsite servers or the cloud, this increases the risks and threats to information systems. Discuss any such risks/threats. (8 Marks)
- c) An information system is a combination of software, hardware, and telecommunication networks to collect useful data, especially in an organization. Computers are considered to be systems, highlight some key characteristics on computers. (4 Marks)

### **QUESTION THREE (20 MARKS)**

- a) Business firms and other organizations rely on information systems to carry out and manage their operations, interact with their customers and suppliers, and compete in the marketplace. Information systems are used to run interorganizational supply chains and electronic markets. Draw/Illustrate an information System. (10 Marks)
- b) A system is a group of interacting or interrelated elements that act according to a set of rules to form a unified whole. A system, surrounded and influenced by its environment, is described by its boundaries, structure and purpose and is expressed in its functioning. Describe a process, procedure, architecture and algorithm. (10 Marks)

### **QUESTION FOUR (20 MARKS)**

- a) Information systems are commonly divided into two broad categories: systems that support an organization's business activities and systems that support managerial decision making. Operations information systems are generally concerned with process control, transaction processing, communications (internal and external) and productivity. Management information systems provide feedback on organizational activities and help to support managerial decision making. Managerial decision making can occur at the Operational, tactical and strategic levels of an organization.

- i) Discuss two operational information systems (4 Marks)
- ii) Discuss any two Management Information Systems (4 Marks)
- b) Every year, new trends emerge in the dynamic Information Technology industry, and it is significant for professionals to be informed of these recent emerging trends and all that they entail. The ability to understand these concepts and notions can help an IT expert improve their professional standing in the field they work in and assist them with understanding what potential upgrades there are for their industry. Expound on any four trends. (8 Marks)
- c) Enterprise resource planning (ERP) is software used by a company to manage key parts of operations. ERP's have become very popular to their scalability and integration. Discuss Enterprise Resource Planning operations support System. (4 Marks)

**QUESTION FIVE (20 MARKS)**

- a) Discuss the disadvantages of computers. (8 Marks)
- b) Computer applications help organizations achieve specific objectives. Microsoft Office Suite is among the world's most popular computer-based applications. Discuss some key office applications and their use in the business today. (8 Marks)
- c) Cybersecurity is now a growing trend in the information technology industry. Organizations can develop suitable cybersecurity strategies to protect their confidential data from unauthorized threats, thereby avoiding financial losses. List such strategies that organizations can adopt to safeguard data. (4 Marks)