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# KIRIRI WOMEN'S UNIVERSITY OF SCIENCE AND TECHNOLOGY UNIVERSITY EXAMINATION, 2023/2024 ACADEMIC YEAR FIRST YEAR, FIRST SEMESTER EXAMINATION FOR THE DIPLOMA IN BUSINESS INFORMATION TECHNOLOGY DBT 1004 – BUSINESS INFORMATION SYSTEMS

Date: 13<sup>TH</sup> APRIL 2022 Time: 2:30PM – 4:30PM

# **INSTRUCTIONS TO CANDIDATES**

# ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS QUESTION ONE (30 MARKS)

- a) Differentiate between system software and application software. (2 Marks)
- b) Explain how internet and WWW have changed the roles played by information systems in organizations. (3 Marks)
- c) Explain the relevance of artificial intelligence and expert systems in our society. (5 Marks)
- d) Highlight the five hardware units of a computer system.
- e) Briefly explain the general challenges of information systems in any organization (5 Marks)
- f) Explicate any five objectives of decision support systems. (5 Marks)
- g) List five components of a computer-based information system and explain the roles each plays.

(5 Marks)

(5 Marks)

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

- a) Explicate some of the most common security techniques used to control computer-based information systems in an organization. (6 Marks)
- b) Briefly explain any six characteristics of a wide area network. (6 Marks)
- c) By use of a well labeled diagram to describe how parallel methodology of system development works. (8 Marks)

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

- a) Explain the factors that must considered while selecting the internet service provider of your choice. (6 Marks)
- b) Define what is an information system? By use of a diagram, describe the basic components of an organizational information system. (6 Marks)
- c) Discuss different activities that system analysts and system designers have to undergo through during system development life cycle. (8 Marks)

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

- a) Use diagrams to describe the difference between point to point topology and daisy chain topology. (6 Marks)
- b) Highlight and briefly describe six major types of business information systems. (6 Marks)
- c) Discuss reasons why most system designers prefer using prototype method of developing systems over waterfall model methodology. (8 Marks)

### **QUESTION FIVE: (20 MARKS)**

- a) Elucidate the major applications of internet technology in the society. (6 Marks)
- b) Discuss various information system threats that may cause destruction and loss of data within the systems. (6 Marks)
- c) Explain the differences between management information systems and decision support systems.

(8 Marks)