EMBU UNIVERSITY COLLEGE

(A CONSTITUENT COLLEGE OF THE UNIVERSITY OF NAIROBI)

TRIMESTER EXAMINATIONS 2013/2014

FIRST YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN COMPUTER SCIENCE

DIS 104: FUNDAMENTAL OF INFORMATION SYSTEMS

DATE: AUGUST 13, 2014 TIME: 5.00 – 7.00PM

INSTRUCTIONS:

Answer Question ONE and ANY Other TWO Questions.

QUESTION ONE

a) Define the following terms: (4 marks)

    i.) Information system

    ii.) Information Technology

    iii.) Grid Computing

    iv.) On-demand computing

b) List the **four** major types of systems stating the level of management where each system is used in an organization (4 marks)

c) Explain any **three** business models that have been brought about by internet technologies. (6 marks)

d) Explain the role played by the following specialists in an organization (6 marks)

    i.) Systems analysts

    ii.) Chief Information Officer (CIO)

iii.)   Programmers

e) Information systems in an organization require security and control solutions. Discuss any **two** reasons why these solutions are important.   (4 marks)

f) There are **four** reasons why IT makes a difference to the success of business. Explain these reasons   (6 marks)

QUESTION TWO

a) As much as Electronic Commerce is a blessing, it is also a curse. In your words, support this statement   (4 marks)

b) Describe the **three** major components of a decision-support system   (6 marks)

c) In your own words, describe any **five** challenges encountered when developing information systems in an organization. Further, explain how you overcome each challenge you have stated.   (10 marks)

QUESTION THREE

a) Show how information systems that make use of information and communications technologies support: (4 marks)

   i.)   Flattening of organizations

   ii.)   Separation of work from location

b) Describe the **three** major components of a decision-support system   (6 marks)

c) IT is a source of opportunity and advantage but also uncertainty & risk in an organization. Critically discuss this statement   (10 marks)

QUESTION FOUR

a) Describe any **three** problems associated with traditional filing approach and how databases address those problems   (6 marks)

b) There are **three** important dimensions to information systems that need to be understood and balanced. Explain these dimensions. (6 marks)

c) Discuss the following enterprise applications. Include the business value of the application and challenges encountered when implementing them (8 marks)

    i.) Enterprise system

    ii.) Customer relationship system

QUESTION FIVE

a) Discuss the **five** moral dimensions of the information age (10 marks)

b) If used appropriately, information systems can improve an organization's competitiveness. Discuss how organizations can achieve competitive advantage using information systems.

(10 marks)

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