

# CHUKA UNIVERSITY

## FIRST YEAR FIRST SEMESTER EXAMINATIONS FOR MASTERS OF COMPUTER SCIENCE

### COSC 812: STRATEGIC INFORMATION SYSTEMS

#### CANDIDATE INSTRUCTIONS

- Answer all questions in section A and any other two questions from section B.
- No Reference Material is allowed in the exam Room.

#### SECTION A (COMPULSORY)

##### QUESTION 1 (COMPULSORY) [30 MARKS]

- a) *“Office automation differs in degrees, though benefits could be almost similar”*. Taking three different organizations with different degrees of automation, Discuss the statement (5marks)
- b) Discuss five reasons why an organization would opt to in house develop their information system instead of in-house development. (5marks)
- c) Current organizations require Expert systems to assist in offering intelligent solutions, for strategic benefits. Outline FIVE of such systems and the intelligent information that they provide. (5marks)
- d) Discuss FOUR measures that the Government of Kenya is putting forward towards increasing the use of ICT in Kenya. (4marks)
- e) With regard to organisational change management, discuss FIVE benefits of ICT in change management (5marks)
- f) ICT has a number of impacts in society, which in turn revolutionize the way businesses are done in society. Discuss some of the impacts of ICT in the following areas, and how they have revolutionized the way the society is thinking.
- i) Multimedia industry (3marks)
  - ii) Manufacturing (3marks)

#### SECTION B (Answer two question from this section)

##### QUESTION 2 [15 MARKS]

- a) Mzalendo Cooperative society wanted to change their banking systems from manual to computerised system, for strategic advantage purposes. They chose to use the following system development steps.

- i) Data gathering
- ii) Prototyping
- iii) System coding

Explain how ICT would be used in each of the following steps of system development for strategic advantage (explain how you will do things differently from the traditional norms stating their advantages). (9marks)

- b) Explain SIX citizen pressures to the Kenyan Government that necessitated them to developing National ICT policy. (6marks)

### **QUESTION 3 [15 MARKS]**

A newly established fashion industry organization, asked for your services in developing some of the objectives in their strategic plan.

- i) Suggest THREE ICT objectives that they can include in their strategic plan, which are in line with their industry. (3marks)
- ii) For each of the suggested objective, discuss (in not less than half a page each) how it is aligned to the business strategy. (6marks)
- iii) Suggest TWO strategies each, that the industry would use to achieve their set objectives. (6marks)

### **QUESTION 4 [15 MARKS]**

- a) To be a strategic leader, there are a number of strategies that one can employ in the course of their duties. Discuss five of such strategies that one would use (5marks)
- b) During organization change management, ICT plays an important role. Describe FIVE roles of ICT during change management (5marks)
- c) There are a number of ethical issues that have affected ICT officers in the course of their duties. Discuss FIVE ethical challenges that the ICT officers are likely to face, hence suggest a way of mitigating each of the ethical issues. (5marks)

### **QUESTION 5 [15 MARKS]**

- a) You have been called upon to be part of a team to develop ICT policy document for a chain of healthcare institutions. You have been tasked to write the following sub-sections of the policy document.
  - i) Internet access

- ii) Securing medical data
- iii) Harnessing with emerging technologies
- iv) Integration with other organizations
- v) Decommissioning of ICT equipment

Write the sub-sections of the policy document. Ensure that each sub-section is about half of a page and should have at least: - a statement, TWO strategic objectives, and an expected outcome. (15marks)