CHUKA   **UNIVERSITY**

UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF
BACHELOR OF SCIENCE IN APPLIED COMPUTER SCIENCE

ACSC 272: SOCIAL IMPLICATIONS OF INFORMATION TECHNOLOGY

STREAMS: BSC (ACSC)   **TIME: 2 HOURS**

DAY/DATE: WEDNESDAY 08/04/2020   **8.30 AM – 10.30 AM**

INSTRUCTIONS:

Answer question **ONE** and any other **TWO** questions.

QUESTION ONE (30 marks)

a) Describe the term digital divide, highlighting main empirical features that determine the moral status of a digital divide and argue why are social inequalities morally undesirable.
(10 marks)

b) Discuss global perspectives of information technology in relation to current issues and priorities being raised internationally by governments, civil society and the private sector in the context of developing an information society.   (10 marks)

c) Discuss transparency, ethical challenges and relationship between the society and big business in the global environment of the 21st century as influenced by technology using " living within glass houses" analogy.   (10 marks)

QUESTION TWO (20 marks)

a) Describe the virtual harms and real responsibility with reference to "Cyberspace case," reported by Julian Dibbell in 1993.   (10 marks)

b) Discuss the ethical issues in knowledge economy using the contraria's view: " New wine in old bottles" .   (10 marks)

QUESTION THREE (20 marks)

a) Explain four benefits of information technology on society. (8 marks)

b) Describe categories of information quality and information dimensions that are used to display characteristics of good information. (8 marks)

c) Define the following terms: (4 marks)
I . Information
II. Computer
III. Data
IV. Information Technology

QUESTION FOUR: (20 marks)

a) Discuss ethical challenges of information systems in line with aspects of outsourcing as applied by information technology managers, hence justify the use of outsourcing strategy in an organization. (10 marks)

b) Describe the impacts of internet technology in relation to socialization and empowerment of employees in a given organization. (10 marks)

QUESTION FIVE: (20 marks)

a) Define the term Protocol as applied in computer networks and outline the functions of a communication protocol. (4 marks)

b) Describe Star topology, Bus topology and Mesh network topologies, giving their advantages and limitations. (9 marks)

c) Distinguish the following terms as applied in computer technologies: (7 marks)

I. Intranet and extranet
II. LANs and WANs
III. Domain Name Service (DNS) and Uniform Resource Locator *(URL)*