

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**SECOND YEAR EXAMINATION FOR THE AWARD OF
BACHELOR OF SCIENCE IN APPLIED COMPUTER SCIENCE**

ACSC 272: SOCIAL IMPLICATION OF INFORMATION TECHNOLOGY

STREAMS: BSc App CompSci Y2 S2

TIME: 2 HOURS

DAY/DATE :.....

INSTRUCTIONS:

- Answer question **ONE** and **TWO** other questions
- Sketch maps and diagrams may be used whenever they help to illustrate your answer
- Do not write anything on the question paper

- This is a **closed book exam**, No reference materials are allowed in the examination room

- There will be **No** use of mobile phones or any other unauthorized materials

- Write your answers legibly and use your time wisely

Question ONE (Compulsory) (30 Marks)

- i. Several comprehensive studies of the global digital divide point to a positive relationship between levels of economic development and the global digital divide. Highlight the non-economic indicators of the digital divide. **(2 marks)**
- ii. The Sales manager of Fintech Software Ltd is seeking your advice on Information systems and ethical choice.
 - a) What overview would you give the Sales manager regarding the candidate ethical principles? **(5 marks)**
 - b) The Marketing manager is not sure on the possible health problems computers can create. What specific advice would you give? **(5 marks)**
- iii. With the aid of a suitable diagram explain the relationship between ethical, social and political issues in an information society. **[6 marks]**
- iv. Zidisha is a small micro-enterprise that offers banking services in the country. The organization makes extensive use of technology to support all its activities and is considering acquiring the latest online banking technology for its business. It has reached a stage where the organization needs to know the technical solutions to

challenges posed by Internet technology for the protection of individual privacy. As an IS manager in the organization, what advice would you give? **(6 marks)**

- v. The Global Information Technology Report by the World Economic Forum features the networked readiness framework to measure the capacity of countries to leverage ICTs for increased competitiveness and well-being. Explain how the networked readiness framework translates into the networked readiness index (NRI). **(6 marks)**

Question Two (20 Marks)

- a) Consider an IT manager charged with completing a complex technical information systems project with only a limited budget, explain some of the possible approaches to this task in attempting to seek a solution to the problem **(4 marks)**
- b) Members of professional associations are expected to abide by a set of principles that set out minimum standards of competence, conduct and behavior. Describe the professional responsibilities of IT managers by considering some of their obligations to their staff under their supervision and the general public. **(6 marks)**
- c) Describe the negative social consequences of introducing information technologies and systems **(10 marks)**

Question Three (20 Marks)

BrightView is a company that provides landscaping services to both commercial entities and public authorities within the country. The main services that it provides are Design and Consultancy. The CEO of BrightView is a proponent of total quality management (TQM) and is interested in employee empowerment within the organization. The CEO has requested you to prepare an expression of interest (EOI) in order to have Elite Ltd formally engage your services as a consultant to give advice on the issue.

- a) Describe the reason for empowerment at the individual employee level **(8 marks)**
- b) What justification would you give in the EOI on how information technology can help managers play their role in employee empowerment? **(12 marks)**

Question Four (20 Marks)

World Economic Forum and Endurance IT Consultants Inc. have jointly organized a conference whose theme is "ETHICS IN THE DIGITAL ECONOMY". As a researcher in business information systems and technology, you have been invited to give a key note speech on

- a. The key technology trends that raise ethical issues. **(5 marks)**
- b. The basic concepts that form the underpinning of an ethical analysis of information systems and those who manage them. **(5 marks)**
- c. Kohlberg theory of ethical principles. **(5 marks)**
- d. The way the digital revolution is changing the nature of innovation. **(5 marks)**

What points would you be keen to include in your speech?

Question Five (20 Marks)

You have applied for a job as an IT assistant manager for a large not-for-profit corporation and have been invited to attend the interview. All applicants are required to make a presentation to the interview panel in order to display their knowledge of the **FIVE** main requirements of the job, namely the understanding of:

- Nonobvious Relationship Awareness (NORA)
- Who is liable for any economic harm if software fails?
- Management challenges arising from ethical and social implications of IT
- Offshoring of IT jobs as an ethical question.
- Computer crime and abuse.

Provide appropriate speaker notes for the above.