INSTRUCTIONS TO CANDIDATES

Answer Questions ONE and ANY OTHER TWO
QUESTION ONE [20 MARKS]

You are business expert in a company that supports 4\textsuperscript{th} Industrial revolution. You are required to assist the IT department to re-engineer the existing automation in the company. Advice the top management on what should be done to achieve the objective. \hfill [20 marks]

QUESTION TWO [20 MARKS]

a. Is it possible for an input device to work as an output device at the same time? Give an example and a justification to your answer. \hfill [4 marks]
b. Hardware can be viewed as physical components that together defines a computer system. Discuss any FOUR categories of these computer hardware. \hfill [8 marks]
c. Discuss the current trends in information technology hardware. \hfill [8 marks]

QUESTION THREE [20 MARKS]

a. Software offer numerous benefit on a computer system, discuss the two general categories of these software giving examples in each case. \hfill [6 marks]
b. Mr Johnston wanted to accomplish the following task on a computer system: Watch his favourite movie, run and print his academic documents, create an advert, store company's and employee salaries information. Explain various software required for each task. \hfill [6 marks]
c. Can a computer system work without an operating system? Discuss \hfill [8 marks]

QUESTION FOUR [20 MARKS]

a. Differentiate between the following terms and concepts in relation to networking and data communication \hfill [12 marks]
   i. Data communication and Network
   ii. Simplex communication mode and Duplex communication mode
   iii. Guided media and unguided media

b. You are the manager of TechnoFirm Company whose branches are distributed in East and central Africa. Discuss suitable network that the company will recommend including the network topology you will adopt. \hfill [8 marks]

QUESTION FIVE [20 MARKS]

Usability and acceptance of Information technology has been criticized from different dimensions. Discuss theories that have tried to justify the acceptance of new technologies in an organization. \hfill [20 marks]