



# MACHAKOS UNIVERSITY

University Examinations for 2020/2021 Academic Year

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST YEAR SECOND SEMESTER EXAMINATION FOR

1920/101: CERTIFICATE IN INFORMATION COMMUNICATION TECHNOLOGY

MODULE 1

1601/101: ELECTRICAL ENGINEERING (POWER OPTION)

1501/101: MECHANICAL ENGINEERING

1704/101: BUILDING & CIVIL ENGINEERING

AUTOMOTIVE ENGINEERING

1802/101: FOOD & BEVERAGE

1801/101: GARMENT MAKING

1920/101: INTRODUCTION TO INFORMATION COMMUNICATION  
TECHNOLOGY

DATE: 7/9/2021

TIME: 11:30 – 2:30 PM

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## INSTRUCTIONS

Question One is compulsory. Choose only two questions from section B

### SECTION A (COMPULSORY)

#### QUESTION ONE (30 MARKS)

- (a) (i) Describe four attributes on effectiveness of data communication system in your organization. (4 marks)
- (ii) Explain three core principles of Information Security Control. (6 marks)
- (b) ICT policy should be appropriately enforced to ensure efficient utilization of ICT in an organization. Explain five enforcement measures that could be used. (10 marks)
- (c) Discuss five reasons that make some employees to lose their jobs when their employer installs a computerized system. (10 marks)

## **SECTION B (CHOOSE ONLY TWO QUESTIONS)**

### **QUESTION TWO (20 MARKS)**

- (a) Explain the importance of data back-up in an organization. (10 marks)
- (b) Describe five reasons that could necessitate the use of computer networks in organizations. (10 marks)

### **QUESTION THREE (20 MARKS)**

- (a) Discuss how computer viruses are spread and the impact they have in the computer industry today. (10 marks)
- (b) Describe five symptoms of a computer virus. (10 marks)

### **QUESTION FOUR (20 MARKS)**

- (a) Explain five areas of applications of ICT in health sector. (10 marks)
- (b) Racheal intends to use a switch to install a computer network with four computers and one printer in her house.
- (i) Draw the most probable network layout she could install. (4 marks)
- (ii) Explain three advantages of the network topology identified in (i). (6 marks)

### **QUESTION FIVE (20 MARKS)**

- (a) Umoja Company Ltd. Intends to secure its data. Explain five measures the company could implement. (10 marks)
- (b) Explain five advantages of embracing of ICT ethics in organizations. (10 marks)