



MACHAKOS UNIVERSITY

University Examinations for 2019/2020

SCHOOL OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTING AND INFORMATION TECHNOLOGY

FIRST YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

CERTIFICATE IN ELECTRICAL ENGINEERING

EPC 118 : INTRODUCTION TO ICT

DATE:

TIME:

INSTRUCTIONS

Answer question ONE and any other TWO questions

Don't write on this question paper

QUESTION ONE (COMPULSORY) (30 MARKS)

- a) List **four** examples of pointing devices as used in computers. (2 marks)
- b) Outline **four** forms in which computers can input, process and output data/information. (4 marks)
- c) Differentiate between spreadsheets and word processing as used in I.C.T. (4 marks)
- d) Explain **two** roles played by computers in the engineering sector. (4 marks)
- e) Discuss the **three** components of the CPU. (6 marks)
- f) Upendo; Procurement Officer with Mwangaza Center of Excellence wants to purchase new computers for their new branch in Machakos city. Other than cost, outline **five** factors she should consider when purchasing the computers. (10 marks)

QUESTION TWO (20 MARKS)

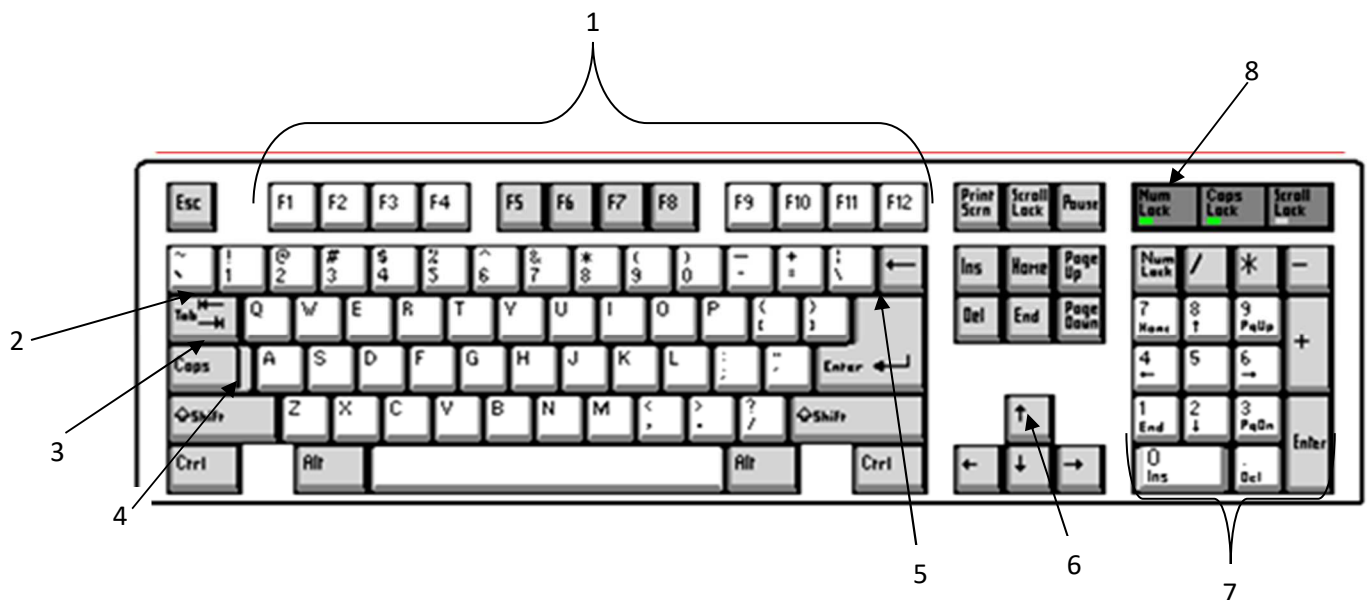
- a) List **four** examples of database programs available in the market today. (2 marks)
- b) Describe **three** functions of operating systems as used in computer software. (6 marks)
- c) Outline any **four** factors why employees can resist implementation of the use of computers or information systems in an organization. (4 marks)
- d) With the aid of diagrams, discuss **four** types of network topologies. (8 marks)

QUESTION THREE (20 MARKS)

- a) Tuko Mbele is on a mission to purchase new software for their use in their company. Other than cost, explain any three factors they should consider when purchasing the programs. (6 marks)
- b) The I.C.T personnel within Machakos University have noted with concern that the spread of computer virus within the campus is alarming:-
- i) Define the term *computer virus*. (2 marks)
 - ii) Outline any **three** possible sources of computer virus within the institutions computers (4 marks)
 - iii) Describe ways of controlling the spread of computer viruses in the institution. (4 marks)
- c) Classify the following devices as either input or output
- i) Plotter, Scanner, Digital camera, Barcode reader, Monitor, Speaker, Microphone, Keyboard. (4 marks)

QUESTION FOUR

- a) Explain **four** reasons why speech recognition input devices are not very popular among many computer users. (4 marks)
- b) Explain the **two** types of primary storage/memory. (4 marks)
- c) Differentiate between *optical* and *magnetic* scanners as used in computing. (4 marks)
- d) Outline the functions of the numbered keys. (8 marks)



QUESTION FIVE (20 MARKS)

- a) Define the term peripheral device. (2 marks)
- b) Describe the types of computers classified according to the type of data they process (6 marks)
- c) Describe the **three** main types of computer networks. (6 marks)
- d) Giving an example in each case, distinguish between impact and non-impact printers (6 marks)