

**UNIVERSITY COLLEGE TATI (UC TATI)****FINAL EXAMINATION QUESTION BOOKLET**

COURSE CODE	: DNT 1033
COURSE	: INTRODUCTION TO COMPUTER TECHNOLOGY
SEMESTER/SESSION	: 2 – 2024/2025
DURATION	: 3 HOURS

Instructions:

1. This booklet contains 5 questions. Answer **ALL** questions.
2. All answers should be written in answer booklet.
3. Write legibly and draw sketches wherever required.
4. If in doubt, raise your hands and ask the invigilator.

DO NOT OPEN THIS BOOKLET UNTIL YOU ARE TOLD TO DO SO

THIS BOOKLET CONTAINS 6 PRINTED PAGES INCLUDING COVER PAGE

QUESTION 1

- a) Describe **THREE (3)** components of a computer. (6 marks)
- b) Green computing involves reducing the electricity consumed and environmental waste generated when using a computer. State **THREE (3)** strategies to reduce the environmental impact. (3 marks)
- c) Identify the category of computer for following:
- i. Controls access to the hardware, software, and other resources on a network. (1 mark)
 - ii. The fastest, most powerful computer. (1 mark)
- d) List **THREE (3)** examples of mobile computers. (3 marks)
- e) Web browser allows users to access web pages. Give **THREE (3)** example of web browser. (3 marks)
- f) Differentiate the process between download and upload. (4 marks)
- g) Discuss **TWO (2)** reasons why it is important to install web browser plugin. (4 marks)
- h) Given the URL www.yahoo.com. Answer the questions following:
- i. State sub-domain (1 mark)
 - ii. State top-level domain (1 mark)
 - iii. State second domain (1 mark)

QUESTION 2

- a) Describe system software. (2 marks)
- b) Describe the use of following application software: (2 marks)
- i. Productivity software (2 marks)
 - ii. Database software
- c) Differentiate between open-source and proprietary software. (4 marks)
- d) List **FOUR (4)** examples of malicious software (malware). (4 marks)
- e) State **FOUR (4)** examples of storage. (4 marks)
- f) By illustrate of diagram of hard disk structure, label:
- i. Sector (2 marks)
 - ii. Cluster (2 marks)
- g) Discuss **THREE (3)** use of tape in industry. (6 marks)

QUESTION 3

- a) Data representation is a fundamental concept in computing that refers to the various ways that information can be expressed digitally. List **TWO (2)** examples of data representation. (2 marks)

b) Based on Figure 1, answer following questions:

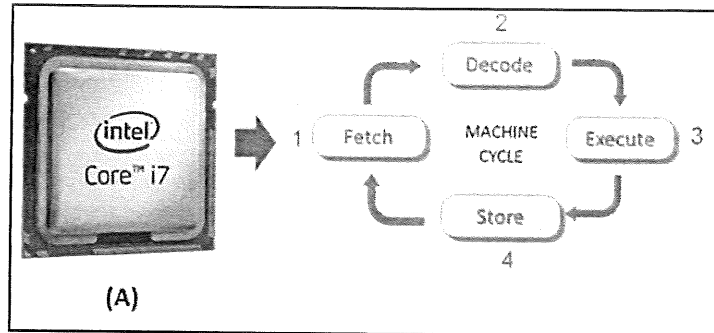


Figure 1: Machine Cycle in (A)

- i. Name the component (A). (1 mark)
- ii. Determine the unit of measurement for the speed of (A). (1 mark)
- iii. The machine cycle in (A) refers to the basic sequence of steps the CPU follows to execute an instruction. Describe **FOUR (4)** steps of machine cycle. (8 marks)

c) Based on Figure 2, answer following question:

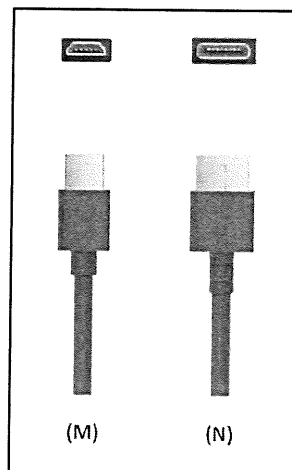


Figure 2: Type of USB (M) and USB (N)

- i. State the type of USB (M) (1 mark)
- ii. State the type of USB (N) (1 mark)

QUESTION 4

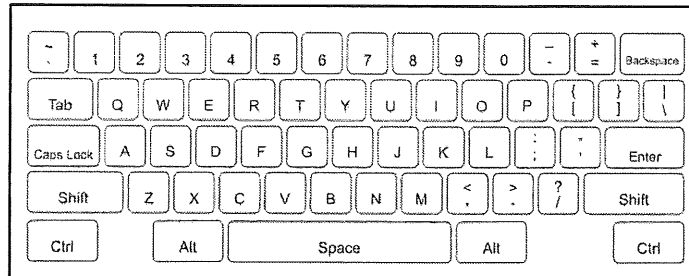


Figure 3: Keyboard

- a) Figure 3 shows a standard computer keyboard typically has about 101 to 104 keys, depending on the layout and design. Describe **FOUR (4)** types of keys on keyboard with examples. (8 marks)
- b) An input device refers to hardware that transmits data to a computer or other devices. Identify the appropriate input technology for the following scenarios (you are required to write the full name): (1 mark)
- i. A business receives digital and paper invoices from a variety of suppliers. They employ _____ technology to make their accounting process more efficient. (1 mark)
 - ii. An educational institution conducts a standardized multiple-choice exam for students. To efficiently grade the exams, they employ _____ technology. (1 mark)
 - iii. A grocery store uses _____ scanners at checkout and for inventory management. (1 mark)
 - iv. An architectural firm uses _____ printer to create high-quality design drawings and presentations for clients.
- c) List **FOUR (4)** examples of output devices. (4 marks)

