

ITCE101/ITNE110 - Computer Technologies
Midterm Exam Revision
Summer Semester - 2024/2025

Question1 : T&F questions

- 1- Processing is one of the information-processing cycle operations, and it's receiving data from the computer users
 - a. True
 - b. False
- 2- Computers can be classified based on the number of users they are designed for.
 - a. True
 - b. False
- 3- A bit is the smallest unit of data a computer can work with.
 - a. True
 - b. False
- 4- RAM and ROM are a permanent storage locations for storing data.
 - a. True
 - b. False
- 5- Printer and Monitor can be used in the second operation of the information-processing cycle.
 - a. True
 - b. False
- 6- All Computer should be classified only based on the number of users and size
 - a. True
 - b. False
- 7- Chipset, CPU and Memory can be attached to motherboard directly
 - a. True
 - b. False
- 8- Units are small memory elements to store data when it must be temporarily stored in the CPU during the execution of instructions
 - a. True
 - b. False

What does the acronym CPU stand for?

- a) Control Processing Unit
- b) Computer Processing Unit
- c) Central Processing Unit
- d) Computer Programming Unit

Answer: a) Central Processing Unit

Which of the following is an example/es of a long storage device?

- a) CD
- b) RAM
- c) Flash Drive
- d) A & C are correct

What is the base of the hexadecimal number system?

- a) 2
- b) 8
- c) 10
- d) 16

The maximum number of bits the CPU can process at once is called?

- a) bus size
- b) input size
- c) word size
- d) clock size

Which unit is used to measure computer processor speed?

- a) Byte
- b) Hz
- c) Second
- d) Bit

Which component is the main circuit board of the computer?

- a) CPU
- b) Hard drive

- c) Motherboard
- d) Power supply

Which type of memory temporarily stores data and instructions for the CPU?

- a) Hard drive
- b) RAM
- c) ROM
- d) SSD

What type of port is commonly used for connecting peripherals like mice and keyboards?

- a) RJ45
- b) HDMI
- c) USB
- d) VGA

Which of the following is a CPU package type?

- a) VGA
- b) DVI
- c) PGA
- d) RJ45

Question3 : Fill-in-the-Blank Questions

_____ creates a mirror image of the entire hard drive.

_____ is the collection of programs written and configured to provide the infrastructure, basic services, and hardware control that let other programs function properly.

___ ___ software protects the computer from viruses.

A ___ ___ enables you to locate files.

___ ___ utilities remove unnecessary files to save space.

___ ___ programs reorganize stored data in a more efficient manner.

A _____ is a fixed size unit of data used to swap content between RAM and virtual memory.

_____ program designed to run a computer's hardware and applications and manage its resources, such as its memory, processors, and devices.

_____ utilities decrease the size of files, resulting in faster downloads.

_____ is the central component of an operating system that manages operations of computer and hardware

The _____ utility automatically downloads and installs updates and packs.

_____ is any information processed by and sent from a computer is considered output.

A _____ is a chart that tells the processor what key has been pressed (Binary code is sent to the processor, example ASCII).

_____ enables the CPU to perform more than one instruction for each clock cycle.

A/An _____ is a type of hardware that enables users to see, hear, or feel the result of processing operations

A _____ can be used for improving memory performance by reducing the access time.

A _____ can be used for improving memory performance by reducing the access time.

A/An _____ Subcontracting of portions of a job to a third party to reduce cost, time, and energy.

Question4 : list of examples

1. List two examples of the applications of computers.
2. List three examples of input devices.
3. List two examples of system utilities .
6. List three examples of different types of Monitors.
7. List three examples of storage devices.
8. List three examples of different CPU packaging types.
9. List three examples of different types of expansion cards.
10. List three examples of different types of external connectors (or ports).

Question5 : Compare between

- 1- Compare between RAM and ROM in terms of speed and size.
- 2- Compare between Signed Numbers and Unsigned Numbers.
- 3- Compare between computer ethics and Unethical behavior.

4- Compare between these advantages speed & accuracy vs reliability

5- Compare between the northbridge and southbridge.

6- Compare between the transistors and registers roles

Question6 : Explain and discuss

1- Discuss how the resolution will have an impact on monitor quality.

2- Explain two of computers types in terms of data type , give an example for each one .

3- What meant by “ USB devices are hot-swappable ” and how the PnP improve the user experience .

4- Explain the role of RAM in details.

5- What is the database and Why it is crucial in computer systems

6- What is the user interfaces , list two examples and explain them

Question7 : Convert the following numbers as follow:

1- $(125)_{10} = (\dots)_2$

2- $(11C)_{16} = (\dots)_{10}$

3- $(15)_{16} = (\dots)_2$

4- $(11001)_2 = (\dots)_{10}$

5- $(11111)_2 = (\dots)_{16}$

6- $(25A)_2 = (\dots)_{10}$

7- $(10000)_2 = (\dots)_{10}$

8 - $(214)_{10} = (\dots)_1$