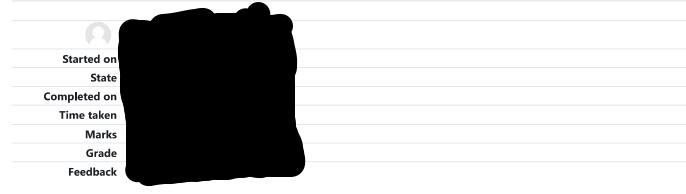
<u>Dashboard</u> / My courses / <u>COMS1015A-BCO1-S1-2023</u> / <u>Computing Components</u> / <u>Tutorial 8: Computing Components</u>



You are a highly motivated student, who takes full responsibility for your learning. A reflective learner, who recognises areas for development and is committed to personal improvement. An organised learner who always completes class work and homework to a very high standard.

Question 1
Correct
Mark 1.00 out of 1.00

In a computer, which component is responsible for performing the logical OR operation?

- a. Memory
- b. Output devices
- od. Control unit

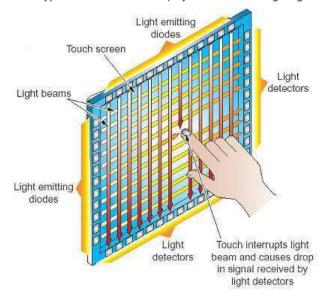
Your answer is correct.

The correct answer is: Algorithmic logic unit

Response	e history			
Step	Time	Action	State	Marks
1	8/05/23, 17:36	Started	Not yet answered	
2	8/05/23, 17:39	Saved: Algorithmic logic unit	Answer saved	
3	8/05/23, 18:02	Attempt finished	Correct	1.00

Question **2**Correct
Mark 1.00 out of 1.00

Which type of touch screen is displayed in the following diagram:



- a. Resistive
- b. Surface Acoustic Wave
- o. Capacitive
- d. Infrared

 ✓

Your answer is correct.

The correct answer is: Infrared

Response	history			
Step	Time	Action	State	Marks
1	8/05/23, 17:36	Started	Not yet answered	
2	8/05/23, 17:37	Saved: Infrared	Answer saved	
3	8/05/23, 18:02	Attempt finished	Correct	1.00

Question 3	
Correct	
Mark 1.00 out of 1.00	

Complete the below sentence:

The Arithmetic Logic Unit (ALU) of a computer is equipped with ..., which are high-speed storage elements.

- a. hard disks
- b. registers

 ✓
- oc. magnetic disk
- Od. bits
- e. semi-conductor memory

Your answer is correct.

The correct answer is: registers

Response	history			
Step	Time	Action	State	Marks
1	8/05/23, 17:36	Started	Not yet answered	
<u>2</u>	8/05/23, 17:38	Saved: registers	Answer saved	
3	8/05/23, 18:02	Attempt finished	Correct	1.00

Question 4	
Correct	
Mark 1.00 out of 1.00	

Among the following options, which term is most closely associated with main memory?

- O a. ALU
- b. Permanent
- oc. Control unit
- d. Temporary
- e. Non-volatile

Your answer is correct.

The correct answer is:

Temporary

Response	history			
Step	Time	Action	State	Marks
1	8/05/23, 17:36	Started	Not yet answered	
<u>2</u>	8/05/23, 17:39	Saved: Temporary	Answer saved	
3	8/05/23, 18:02	Attempt finished	Correct	1.00

Question 5	
Correct	
Mark 1.00 out of 1.00	

The control unit is best described as ...

- a. a program to translate instructions into machine code.
- b. paged memory management.
- oc. a device made by of multiple transistors on one chip.
- d. a device that manages parallel processors.
- e. a device which manages the execution of instructions.

Your answer is correct.

The correct answer is:

a device which manages the execution of instructions.

Respon	nse history			
Step	Time	Action	State	Marks
1	8/05/23, 17:36	Started	Not yet answered	
<u>2</u>	8/05/23, 17:40	Saved: a device which manages the execution of instructions.	Answer saved	
3	8/05/23, 18:02	Attempt finished	Correct	1.00

Question 6	
Correct	
Mark 1.00 out of 1.00	

What type of storage technology is utilized by a Hard Disk Drive (HDD) in a computer?

- a. Flash Memory
- oc. Electronically Erasable Programmable Read-Only Memory (EEPROM)
- d. Random Access Memory (RAM)

Your answer is correct.

The correct answer is: Magnetic Storage

Response	e history			
Step	Time	Action	State	Marks
1	8/05/23, 17:36	Started	Not yet answered	
<u>2</u>	8/05/23, 17:40	Saved: Magnetic Storage	Answer saved	
3	8/05/23, 18:02	Attempt finished	Correct	1.00

Question 7
Correct
Mark 1.00 out of 1.00

In a computer system, what component is responsible for handling all user inputs such as key presses, mouse clicks, and touches?

- Control unit
- Central pocessing unit
- Input device
- Memory unit

Your answer is correct.

The correct answer is: Input device

Response history					
Step	Time	Action	State	Marks	
1	8/05/23, 17:36	Started	Not yet answered		
<u>2</u>	8/05/23, 17:41	Saved: Input device	Answer saved		
3	8/05/23, 18:02	Attempt finished	Correct	1.00	

Question 8	
Correct	
Mark 1.00 out of 1.00	

In computer memory, what is the form of data storage within cells?

- a. Binary code
- b. Assembly code
- oc. Machine code
- d. C++ code

Your answer is correct.

The correct answer is: Binary code

Response history					
Step	Time	Action	State	Marks	
1	8/05/23, 17:36	Started	Not yet answered		
<u>2</u>	8/05/23, 17:41	Saved: Binary code	Answer saved		
3	8/05/23, 18:02	Attempt finished	Correct	1.00	

Question 9	
Correct	
Mark 1.00 out of 1.00	

Which of the following best describes the function of Read-Only Memory (ROM) in a computer system?

- a. ROM is a type of memory that allows users to read and write data freely.
- b. ROM is a type of volatile memory that loses its data when the computer is turned off.
- oc. ROM stores data and instructions temporarily for quick access by the CPU.
- d. ROM stores permanent data and instructions that cannot be modified by the user.
- e. ROM is a type of cache memory that stores frequently accessed data for faster processing.

Your answer is correct.

The correct answer is:

ROM stores permanent data and instructions that cannot be modified by the user.

Response history					
Step	Time	Action	State	Marks	
1	8/05/23, 17:36	Started	Not yet answered		
<u>2</u>	8/05/23, 17:56	Saved: ROM stores permanent data and instructions that cannot be modified by the user.	Answer saved		
3	8/05/23, 18:02	Attempt finished	Correct	1.00	

Question **10**Correct
Mark 1.00 out of 1.00

What happens if your computer runs out of RAM while running a program? (Select all the answers that are true)

- ☑ The program will run slower or even freeze and crash.

 ✓
- Nothing the program runs as expected.
- ▼ The whole computer will slow down enormously. ▼
- ☐ The computer will allocate more memory (virtual memory) by using HDD or SDD space. ✔
- The whole computer will freeze and crash immediately always.

Your answer is correct.

The correct answers are:

The program will run slower or even freeze and crash.,

The computer will allocate more memory (virtual memory) by using HDD or SDD space.,

The whole computer will slow down enormously.

Response history					
Step	Time	Action	State	Marks	
1	8/05/23, 17:36	Started	Not yet answered		
2	8/05/23, 17:43	Saved: The program will run slower or even freeze and crash.; The whole computer will slow down enormously.; The computer will allocate more memory (virtual memory) by using HDD or SDD space.	Answer saved		
3	8/05/23, 18:02	Attempt finished	Correct	1.00	

Correct

Question	1	1
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Mark 1.00 out of 1.00

Which of these are characteristics of ROM?

- ☑ a. It is used mainly in the start-up process of a modern. computer.
 ✓
- ☑ b. Information is not lost when power is switched off.
- $\hfill \hfill \hfill$
- d. All the above.

Your answer is correct.

The correct answers are:

It is used mainly in the start-up process of a modern. computer.,

Information is not lost when power is switched off.

Respor	Response history				
Step	Time	Action	State	Marks	
1	8/05/23, 17:36	Started	Not yet answered		
2	8/05/23, 17:44	Saved: It is used mainly in the start-up process of a modern. computer.; Information is not lost when power is switched off.	Answer saved		
3	8/05/23, 18:02	Attempt finished	Correct	1.00	

Question 12	
Correct	
Mark 1.00 out of 1.00	

Which of the following statements best describes the fetch-execute cycle in a computer system?

- a. It is the method by which a computer communicates with peripheral devices.
- b. It is the sequence of steps by which a CPU retrieves and executes instructions.

 ✓
- oc. It is the method by which a computer retrieves data from the internet.
- Od. It is the process by which data is stored in memory for later retrieval.
- e. It is the process by which a computer processes audio and video data.

Your answer is correct.

The correct answer is:

It is the sequence of steps by which a CPU retrieves and executes instructions.

Respoi	Response history					
Step	Time	Action	State	Marks		
1	8/05/23, 17:36	Started	Not yet answered			
<u>2</u>	8/05/23, 17:53	Saved: It is the sequence of steps by which a CPU retrieves and executes instructions.	Answer saved			
3	8/05/23, 18:02	Attempt finished	Correct	1.00		

Question 13	
Correct	
Mark 1.00 out of 1.00	

What type of parallel processing is exemplified by utilizing multiple processors to perform the same task on distinct sets of data?

- a. Bit level
- b. Instruction level
- od. Task level

Your answer is correct.

The correct answer is: Data level

Response history					
Step	Time	Action	State	Marks	
1	8/05/23, 17:36	Started	Not yet answered		
<u>2</u>	8/05/23, 17:46	Saved: Data level	Answer saved		
3	8/05/23, 18:02	Attempt finished	Correct	1.00	

Question 14	
Correct	
Mark 1.00 out of 1.00	

In a computer system, what component is responsible for storing the instruction that is currently being executed?

- a. Program counter
- b. Instruction register
- o. Main memory
- d. Bus

Your answer is correct.

The correct answer is: Instruction register

Response history					
Step	Time	Action	State	Marks	
1	8/05/23, 17:36	Started	Not yet answered		
2	8/05/23, 17:47	Saved: Instruction register	Answer saved		
3	8/05/23, 18:02	Attempt finished	Correct	1.00	

Question 15	
Correct	
Mark 1.00 out of 1.00	

What is the term used to describe the duration required for a sector of a magnetic disk to reach the appropriate position?

- a. Seek time
- b. Latency

 ✓
- oc. Access time
- od. Transfer rate

Your answer is correct.

The correct answer is: Latency

Response history					
Step	Time	Action	State	Marks	
1	8/05/23, 17:36	Started	Not yet answered		
<u>2</u>	8/05/23, 17:48	Saved: Latency	Answer saved		
3	8/05/23, 18:02	Attempt finished	Correct	1.00	

Question	1	6
Correct		

Mark 1.00 out of 1.00

Which of the following best characterizes Bit-level parallel processing?

- a. Manipulate bigger words in a single process.
- Ob. Tasks are executed in parallel
- o. Instruction blocks are executed simultaneously on multiple datasets.
- od. Instructions are executed in parallel

Your answer is correct.

The correct answer is:

Manipulate bigger words in a single process.

Response history				
Step	Time	Action	State	Marks
1	8/05/23, 17:36	Started	Not yet answered	
2	8/05/23, 17:48	Saved: Manipulate bigger words in a single process.	Answer saved	
3	8/05/23, 18:02	Attempt finished	Correct	1.00

Question 17	
Correct	
Mark 1.00 out of 1.00	

Which of the following types of auxiliary storage devices has the highest storage capacity?

- a. USB Flash Drives (Thumb Drives)
- b. Solid State Drives (SSDs)
- o. Optical Discs (CDs, DVDs, Blu-ray Discs)
- d. Memory Cards (SD, MicroSD)
- e. Hard Disk Drives (HDDs)

Your answer is correct.

Hard Disk Drives (HDDs) typically have the highest storage capacity among the types of auxiliary storage devices listed. HDDs use magnetic storage technology and spinning disks to read and write data, and can provide terabytes (TB) of storage space depending on the specific model and technology used. In contrast, SSDs, USB flash drives, memory cards, and optical discs generally have lower storage capacities. While the capacity of SSDs is increasing, at present they are still more expensive compared to HDDs with the same capacity.

The correct answer is: Hard Disk Drives (HDDs)

Response history					
Step	Time	Action	State	Marks	
1	8/05/23, 17:36	Started	Not yet answered		
<u>2</u>	8/05/23, 17:52	Saved: Hard Disk Drives (HDDs)	Answer saved		
3	8/05/23, 18:02	Attempt finished	Correct	1.00	

■ 6. COMS1015 Computing Components (COMPLETE)

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Low-Level Programming I ►