5/31

ctive 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

Which component in a computer is responsible for doing OR operations?

a. Memory.

b. ALU ✔

c. Output devices.

d. Control Unit.

Your answer is correct.

The correct answer is:
ALU

Response history

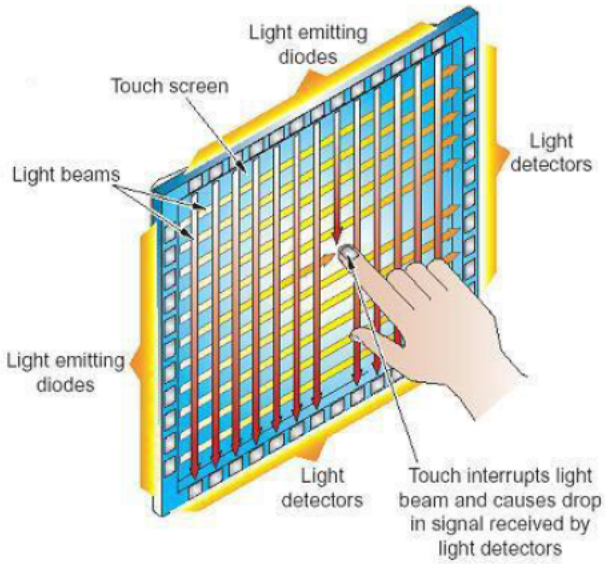
Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:07	Saved: ALU	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **2**

Correct

Mark 2.00 out of 2.00

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



a. Resistive

b. Surface Acoustic Wave

c. Infrared ✔

d. Capacitive

Your answer is correct.

The correct answer is:
Infrared

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:08	Saved: Infrared	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**2.00**

Question **3**

Correct

Mark 2.00 out of 2.00

The Arithmetic Logic Unit (ALU) of a computer contains a number of high speed storage elements called...

a. Bits

b. Semi-conductor memory

c. Registers ✔

d. Magnetic disk

e. Hard disks

Your answer is correct.

The correct answer is:
Registers

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:08	Saved: Registers	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**2.00**

Question **4**

Correct

Mark 2.00 out of 2.00

Which of the following terms is the most closely related to main memory?

a. Non-volatile

b. Control unit

c. Temporary ✔

d. Permanent

e. ALU

Your answer is correct.

The correct answer is:
Temporary

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:08	Saved: Temporary	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**2.00**

Question **5**

Correct

Mark 2.00 out of 2.00

The Control Unit is best described as:

a. Managing parallel processors.

b. Program to translate instructions into machine code.

c. Manages execution of current program. ✔

d. Paged memory management.

e. Multiple transistors on one chip.

Your answer is correct.

The correct answer is:
Manages execution of current program.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:10	Saved: Manages execution of current program.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**2.00**

Question **6**

Correct

Mark 1.00 out of 1.00

What is it called when the CPU carries out the action of an instruction?

a. Decoding the instruction

b. Fetching the instruction

Fetching the instruction

Fetching the instruction

Fetching the instruction

c. ✔

Executing the instruction

Your answer is correct.

The correct answer is:

Executing the instruction

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:10	Saved: Executing the instruction	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **7**

Correct

Mark 1.00 out of 1.00

What type of storage does a Hard Disk Drive (HDD) on a computer use?

a. Flash Memory

b. Electronically Erasable Programmable Read-Only Memory (EEPROM)

c. Magnetic Storage ✔

d. Random Access Memory (RAM)

Your answer is correct.

The correct answer is:
Magnetic Storage

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:10	Saved: Magnetic Storage	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **8**

Correct

Mark 1.00 out of 1.00

All user inputs (key press, mouse click, touch etc) are handled by the?

- [ ] Memory Unit
- [x] Input Unit ✔
- [ ] Central pocessing unit
- [ ] Control Unit

Your answer is correct.

The correct answer is:
Input Unit

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:11	Saved: Input Unit	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **9**

Correct

Mark 1.00 out of 1.00

When storing data within cells in memory, what form does the memory take?

- a. Assembly code
- b. C code
- c. Machine code
- d. Binary Code ✔

Your answer is correct.

The correct answer is:
Binary Code

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:12	Saved: Binary Code	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **10**

Correct

Mark 2.00 out of 2.00

Which of the following is true about the ROM in a computer?

- [x] a. ROM stores instructions for a computer to boot up. ✔
- [x] b. Information is stored on the ROM even if the component loses power. ✔
- [x] c. There are special kinds of ROM that can be electronically reprogrammed. ✔
- [ ] d. The CPU can directly access the data stored on the ROM.
- [ ] e. ROM is a fast type of memory where data and applications are temporarily stored.

Your answer is correct.

The correct answers are:
ROM stores instructions for a computer to boot up.,

Information is stored on the ROM even if the component loses power.,

There are special kinds of ROM that can be electronically reprogrammed.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:13	Saved: ROM stores instructions for a computer to boot up. ; Information is stored on the ROM even if the component loses power. ; There are special kinds of ROM that can be electronically reprogrammed.	Answer saved	
3	23/05/22, 22:20	Saved: ROM stores instructions for a computer to boot up. ; Information is stored on the ROM even if the component loses power. ; There are special kinds of ROM that can be electronically reprogrammed. ; The CPU can directly access the data stored on the ROM.	Answer saved	
4	23/05/22, 22:32	Saved: ROM stores instructions for a computer to boot up. ; Information is stored on the ROM even if the component loses power. ; There are special kinds of ROM that can be electronically reprogrammed.	Answer saved	
5	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**2.00**

Question **11**

Correct

Mark 1.00 out of 1.00

What are registers used for?

a. To make sure that the CPU runs properly.

b. To temporarily hold bits of data needed by the CPU. ✔

c.

To make the CPU faster.

To make the CPU faster.
To make the CPU faster.
To make the CPU faster.

d. To check that students are in their tuts.

Your answer is correct.

The correct answer is:
To temporarily hold bits of data needed by the CPU.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:21	Saved: To temporarily hold bits of data needed by the CPU.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **12**

Correct

Mark 2.00 out of 2.00

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

- [x] The computer will allocate more memory (virtual memory) by using HDD or SDD space. ✔
- [x] The whole computer will slow down enormously. ✔
- [x] The program will run slower or even freeze and crash. ✔
- [ ] The whole computer will freeze and crash immediately always.
- [ ] Nothing the program runs as expected.

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	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:24	Saved: The computer will allocate more memory (virtual memory) by using HDD or SDD space. ; The whole computer will slow down enormously. ; The program will run slower or even freeze and crash.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**2.00**

Question **13**

Correct

Mark 1.00 out of 1.00

All GPUs (graphics processing units) contain ALU

Select one:

- True ✔
- False

The correct answer is 'True'.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:26	Saved: True	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **14**

Correct

Mark 1.00 out of 1.00

ALUs have **always** contained their own storage units called registers.

Select one:

- True
- False ✔

The correct answer is 'False'.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:28	Saved: False	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **15**

Correct

Mark 2.00 out of 2.00

Which of these are characteristics of ROM?

- [x] a. It is used mainly in the start-up process of a modern. computer. ✔
- [x] b. Information is not lost when power is switched off. ✔
- [ ] c. The processor can directly access information stored on ROM.
- [ ] 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.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:29	Saved: All the above.	Answer saved	
3	23/05/22, 22:44	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	
4	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**2.00**

Question **16**

Correct

Mark 1.00 out of 1.00

The process of getting information or instructions is called?

a. Executing.

b. Decoding.

c. Storing.

d. Fetching. ✔

Your answer is correct.

The correct answer is:
Fetching.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:29	Saved: Fetching.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **17**

Correct

Mark 1.00 out of 1.00

The parallel approach to solving a problem is always faster.

Select one:

- True
- False ✔

The correct answer is 'False'.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:34	Saved: False	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **18**

Correct

Mark 1.00 out of 1.00

Using different processors to do the same task on different sets of data is an example of what type of parallel processing?

a. Task level.

b. Data level. ✔

c. Bit level.

d. Instruction level.

Your answer is correct.

The correct answer is:
Data level.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:40	Saved: Instruction level.	Answer saved	
3	23/05/22, 22:41	Saved: Data level.	Answer saved	
4	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **19**

Correct

Mark 1.00 out of 1.00

SIMD is an example of a data level approach to parallel processing. What does it stand for?

a. Single Input Multiple Data.

b. Single Instruction Many Data.

c. Simple Instruction Multiple Data.

d. Single Instruction Multiple Data. ✔

Your answer is correct.

The correct answer is:
Single Instruction Multiple Data.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:42	Saved: Single Instruction Multiple Data.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **20**

Correct

Mark 1.00 out of 1.00

Which of the following is responsible for storing the instruction that is currently being executed?

a. Program counter.

b. Main memory.

c. Bus.

d. Instruction register. ✔

Your answer is correct.

The correct answer is:
Instruction register.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:45	Saved: Instruction register.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **21**

Correct

Mark 1.00 out of 1.00

What is the term for the time it takes for the sector of a magnetic disk to be in position?

a. Seek time.

b. Access time.

c. Transfer rate.

d. Latency. ✔

Your answer is correct.

The correct answer is:
Latency.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:47	Saved: Latency.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **22**

Correct

Mark 1.00 out of 1.00

Which of these describes Bit level parallel processing?

a. Manipulate words in bigger process. ✔

b. Instruction blocks are executed on multiple datasets. simultaneously.

c. Instructions are executed in parallel.

d. Tasks are executed in parallel.

Your answer is correct.

The correct answer is:
Manipulate words in bigger process.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:48	Saved: Manipulate words in bigger process.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **23**

Correct

Mark 1.00 out of 1.00

What are the two main parts of the CPU according to the von Neumann architecture?

a. Input/output units and Control Unit.

b. Control Unit and Arithmetic/logic unit. ✔

c. Arithmetic/logic unit and Memory unit.

d. Control Unit and Memory Unit.

Your answer is correct.

The correct answer is:
Control Unit and Arithmetic/logic unit.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:48	Saved: Control Unit and Arithmetic/logic unit.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **24**

Correct

Mark 1.00 out of 1.00

Which of these is the ALU responsible for in the Fetch-Execute cycle?

a. Executing the instruction. ✔

b. Decoding the instruction.

c. Fetching the instruction.

Your answer is correct.

The correct answer is:
Executing the instruction.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:49	Saved: Executing the instruction.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **25**

Correct

Mark 1.00 out of 1.00

One of the principles on which the Von Neumann architecture was built is that data and instructions were logically the same and could be stored in the same place.

Select one:

- True ✔
- False

The correct answer is 'True'.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:53	Saved: True	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **26**

Correct

Mark 1.00 out of 1.00

A bit pattern, 01011100, is stored at an address in memory. Which of the following is true?

a. The bit pattern is being used to represent an integer number.

b. The bits in the bit patterns address are numbered from left to right.

c. We cannot determine the address from what is given. ✔

d. The bit patterns address is also 01011100.

Your answer is correct.

The correct answer is:
We cannot determine the address from what is given.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:55	Saved: We cannot determine the address from what is given.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **27**

Correct

Mark 1.00 out of 1.00

At which stage of the Fetch-Execute cycle is the program counter updated to hold the address of the next instruction to be executed?

a. Decode instruction.

b. Execute instruction.

c. Get data.

d. Fetch instruction. ✔

Your answer is correct.

The correct answer is:
Fetch instruction.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 22:58	Saved: Fetch instruction.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **28**

Correct

Mark 1.00 out of 1.00

What type of memory stores the instructions a computer needs to correctly turn itself on?

a. Cache.

b. Read Only Memory. ✔

c. Random Access Memory.

Your answer is correct.

The correct answer is:
Read Only Memory.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 23:01	Saved: Read Only Memory.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **29**

Correct

Mark 2.00 out of 2.00

From slowest to fastest what is generally the order of the following auxiliary storage devices?

a. Magnetic tape drive, hard disk drive, solid state drive. ✔

b. Hard disk drive, solid state drive, magnetic tape drive.

c. Solid state drive, magnetic tape drive, hard disk drive.

Your answer is correct.

The correct answer is:
Magnetic tape drive, hard disk drive, solid state drive.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 23:02	Saved: Magnetic tape drive, hard disk drive, solid state drive.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**2.00**

Question **30**

Correct

Mark 1.00 out of 1.00

Pipelining can be used in an instruction level parallelism setup.

Select one:

- True ✔
- False

The correct answer is 'True'.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 23:04	Saved: True	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **31**

Correct

Mark 1.00 out of 1.00

What parallel architecture is best suited for a task such as increasing the brightness uniformly in an image?

a. Instruction level parallelism.

b. Task level parallelism.

c. Bit level parallelism.

d. Data level parallelism. ✔

Your answer is correct.

The correct answer is:
Data level parallelism.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 23:05	Saved: Instruction level parallelism.	Answer saved	
3	23/05/22, 23:12	Saved: Bit level parallelism.	Answer saved	
4	23/05/22, 23:47	Saved: Data level parallelism.	Answer saved	
5	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **32**

Correct

Mark 1.00 out of 1.00

Access to memory is much faster than access to registers in the ALU (Arithmetic/Logic Unit).

Select one:

- True
- False ✔

The correct answer is 'False'.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 23:12	Saved: False	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **33**

Correct

Mark 1.00 out of 1.00

In a von Neumann architecture what unit would be best suited to perform multiplications?

a. Control Unit.

b. Memory Unit.

c. Central processing unit. ✔

d. Input Unit.

Your answer is correct.

The correct answer is:
Central processing unit.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 23:13	Saved: Central processing unit.	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

Question **34**

Correct

Mark 1.00 out of 1.00

One of the principles on which the von Neumann architecture was built is that data and instructions were logically the same and could be stored in the same place

Select one:

- True ✔
- False

The correct answer is 'True'.

Response history

Step	Time	Action	State	Marks
1	23/05/22, 22:07	Started	Not yet answered	
2	23/05/22, 23:13	Saved: True	Answer saved	
3	**23/05/22, 23:50**	**Attempt finished**	**Correct**	**1.00**

◄ 6. COMS1015 Computing Components (COMPLETE)

Jump to...

Lesson 5: Low-Level Programming ►