1) Which of the following is NOT a type of motherboard expansion slot?
   a) ISA        b) PCI        c) AGP        d) ATX

2) Which IRQ does COM1 commonly use?   a) 3        b) 4        c) 6        d) 7        e) 14

3) Which of the following is NOT a type of computer hard drive?   a) IDE        b) FDD        c) SCSI        d) EIDE

4) Which of the following retains the information it's storing when the power to the system is turned off?   a) CPU        b) ROM        c) RAM        d) DRAM        e) DIMM

5) How can you tell that a particular ribbon cable should only be used to connect a floppy drive?   a) it's white        b) it has a red line along one edge        c) it's wider than all the other ribbon cables        d) it has a twist in it

6) What is BIOS an acronym for?   a) bootstrap initial operating system        b) basic input output startup        c) boot initial operating startup        d) basic input output system

7) Which of the following is NOT a type of RAM?   a) SIMM        b) DIMM        c) ROM        d) SLIPP

8) What does FDISK do?   a) performs low-level formatting of the hard drive        b) fixes bad sectors on the hard drive        c) recovers lost clusters on the hard drive        d) creates partitions on the hard drive

9) What type of connector is used to plug a telephone line into a modem?   a) COM1        b) RJ-45        c) RJ-11        d) RJ-10

10) What is different between AT and ATX power supplies?   a) They are identical except for their shape.        b) AT supplies use a single P1 power connector while ATX uses P8 and P9.        c) AT power supplies run on 120V AC current while ATX uses 220V AC        d) AT supplies use P8 and P9 power connectors while ATX uses a single P1 connector.
11. What are the four key functions of a computer system?  
   a) input, processing, output, and storage  
   b) keyboard, display, memory, and disk drive  
   c) word processing, spreadsheets, database, and contact management  
   d) read, write, calculate, and display  
   e) bits, bytes, words, and OSI

12. The hard disk drive magnetic surface is divided in concentric circles called tracks, and each track is divided into segments called sectors. What is the name given to the set of tracks that have the same spatial position on all discs present in the hard disk drive?
   Side  
   Face  
   Cylinder  
   Head

13. How many information bytes can be stored in a sector?
   128  
   256  
   512  
   1024

14. The hard disk drive capacity is defined by its formatting pattern. We call the hard disk drive formatting pattern as:
   FAT  
   VFAT  
   Cluster  
   Geometry

15. What is the maximum storage capacity on FAT-16 system?
   504 MB  
   2 GB  
   8.4 GB  
   10 GB

16. Where is stored the location of the first cluster of a file?
   Directory  
   FAT
17. What happens if we install a UDMA/133 hard disk drive using a 40-wire flat-cable?

- The computer doesn't turn on.
- The hard disk drive isn't recognized by the computer BIOS.
- This installation isn't possible.
- **The hard disk drive will work with a transfer rate lower than the maximum rate it supports.**

18. What is Serial ATA?

- A hard disk drive interface.
- **A new serial port standard.**
- The transferring method used on SCSI hard disk drives.
- An extension to the USB bus.

19. What feature DOES NOT belong to Serial ATA standard?

- Serial transmission.
- **4-wire cable.**
- 150 MB/s or 300 MB/s transfer rates.
- Master and Slave configuration.

20. What does active partition mean?

- Single partition.
- Partition with all the hard disk drive capacity.
- Partition with an operating system installed.
- **Partition that will be used to boot the operating system.**

21. Which of the following is not an input device?
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Keyboard</td>
<td>Joystick</td>
<td>Microphone</td>
<td><strong>Monitor</strong></td>
</tr>
<tr>
<td><strong>22.</strong></td>
<td>Approximately how many bytes make one Megabyte</td>
<td></td>
<td></td>
<td><strong>One Million</strong></td>
</tr>
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<td></td>
<td></td>
<td></td>
<td>Ten Thousand</td>
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<td></td>
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<td>One Hundred</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>One Thousand</td>
<td></td>
</tr>
<tr>
<td><strong>23.</strong></td>
<td>Which part is the &quot;brain&quot; of the computer?</td>
<td></td>
<td></td>
<td><strong>CPU</strong></td>
</tr>
<tr>
<td></td>
<td>Monitor</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>RAM</strong></td>
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<td></td>
<td></td>
<td><strong>ROM</strong></td>
</tr>
<tr>
<td><strong>24.</strong></td>
<td>The capacity of your hard drive is measured in</td>
<td></td>
<td></td>
<td><strong>Gigabytes</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>MHz</td>
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<td>Mbps</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>52X</td>
</tr>
<tr>
<td><strong>25.</strong></td>
<td>How much information can a CD (Compact Disk) usually store?</td>
<td></td>
<td></td>
<td><strong>650 Mb</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>150 Mb</td>
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<td></td>
<td>10 Mb</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.4 Mb</td>
</tr>
<tr>
<td><strong>26.</strong></td>
<td>What is the permanent memory built into your computer called?</td>
<td></td>
<td></td>
<td><strong>ROM</strong></td>
</tr>
<tr>
<td></td>
<td>CD-ROM</td>
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</tr>
<tr>
<td></td>
<td>ROM</td>
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<tr>
<td></td>
<td>CPU</td>
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</tr>
<tr>
<td></td>
<td>RAM</td>
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</tbody>
</table>
27. Which device allows your computer to talk to other computers over a telephone line as well as access the internet?

- Hard Drive
- Modem
- CD-ROM drive
- RAM

Question 28:

Which of the following is NOT a type of motherboard expansion slot?

- ISA
- PCI
- AGP
- ATX

Question 29:

Which IRQ does COM1 commonly use?

- 3
- 4
- 6
- 7
- 14

30. Which of the following is NOT a type of computer hard drive?

- IDE
- EIDE
- SCSI
- FDD

Question 31:
Which of the following retains the information it's storing when the power to the system is turned off?

- [ ] CPU
- [x] ROM
- [ ] RAM
- [ ] DRAM

Question 32:

How can you tell that a particular ribbon cable should only be used to connect a floppy drive?

- [ ] it has a twist in it
- [ ] it has a red line along one edge
- [ ] it's wider than all the other ribbon cables
- [ ] it's white

33. Which IRQ does the system timer commonly use?

- [x] 0
- [ ] 1
- [ ] 10
- [ ] 15
- [ ] None. It doesn't use an IRQ.

34. What is BIOS an acronym for?

- [ ] basic input output system
- [ ] boot initial operating startup
- [ ] basic input output startup
- [ ] bootstrap initial operating system
35. Which of the following is NOT a type of RAM?

- DIMM
- SIMM
- **ROM**
- SLIPP

36. What type of connector is used to plug a telephone line into a modem?

- RJ-11
- RJ-45
- RJ-10
- COM1

37. What are the four key functions of a computer system?

- **input, processing, output, and storage**
- keyboard, display, memory, and disk drive
- word processing, spreadsheets, database, and contact management
- read, write, calculate, and display
- bits, bytes, words, and OSI

Quiz Hardware

1/ Memory

1. **How is access time measured on SDRAM memories?**
   Correct Answer: Thus a characteristic called CL, Cas Latency.

2. **What is access time?**
   Correct Answer: It is the time taken by the memory to store or retrieve a piece of data.

4. **How RAM memory is accessed by the CPU?**
   Correct Answer: Thru the chipset (north bridge) or the CPU, depending on the CPU model.

5. **What are RAS and CAS?**
   Correct Answer: Synchronization signals, used by asynchronous RAM memories.
6. What is FPM? What are its main features?
Correct Answer: A RAM memory type. Its main feature is the ability to access data present on the same row without the need to active again the RAS signal.

7. What is EDO? What are its main features?
Correct Answer: A RAM memory type, faster than FPM. Its main feature is to use one less clock cycle to read data that are present on the same row.

8. What is SDRAM? What are its main features?
Correct Answer: A RAM memory type that, among other things, has an internal counter and two matrixes of capacitors.

9. What is RDRAM? What are its main features?
Correct Answer: Rambus DRAM. A kind of memory that uses a narrow 16-bit bus but at a very high clock rate, achieving a high performance.

10. Why does the PC-100 standard was created?
Correct Answer: Because the first -10 SDRAM memories couldn't work correctly at 100 MHz.

1. How is access time measured on SDRAM memories?
- From what is marked on the memory chip.
- Thus a characteristic called CL, Cas Latency.
- By calculating the CPU clock.
- By diving the CPU clock period by what is marked on the memory chip.

2. What is access time?
- It is the time taken by the memory to store or retrieve a piece of data.
- It is the number marked on all memory chips.
- It is the memory clock.
- It is the transaction period between the CPU and the memory.

3. What is the minimum amount of time the CPU takes to access the RAM memory?
- There is no minimum time, it can access the memory immediately.
- 1 clock cycles.
- 2 clock cycles.
- 3 clock cycles.

4. How RAM memory is accessed by the CPU?
Directly.
Thru the cache controller.
Thru the chipset (north bridge) or the CPU, depending on the CPU model.
Thru the south bridge chip

5. What are RAS and CAS?
Two configurations available on the PC setup.
Two lines available on the PC local bus.
Two lines available on the PCI bus to control memories.
Synchronization signals, used my asynchronous RAM memories.

6. What is FPM? What are its main features?
A RAM memory type that was used only with 486 processors. It has an advance address decoding feature.
A RAM memory type. Its main feature is the ability to access data present on the same row without the need to active again the RAS signal.
An old memory type. It is the only RAM memory to have an access cycle using an x-y-y-y format.
A RAM memory using tiny capacitors.

7. What is EDO? What are its main features?
It is a type of RAM memory that could only be used with the first Pentium processors. It is faster than FPM.
A RAM memory type. Data is available on its output for more time, forcing the CPU to fetch them immediately.
A RAM memory type, faster than FPM. Its main feature is to use one less clock cycle to read data that are present on the same row.
Advance RAM memory. It has an x-3-3-3 access cycle.

8. What is SDRAM? What are its main features?
A RAM memory type that, among other things, has an internal counter and two matrixes of capacitors.
An advanced memory type that can only be used with Pentium II.
An advanced memory type that can only be used with Intel chipsets starting with "440" (e.g. 440BX, 440GX and 440ZX).
Faster RAM memory using x-2-2-2 access cycles.

9. What is RDRAM? What are its main features?

- Random DRAM. Another name for the Dynamic RAM memories.
- Rambus DRAM. It features a high-performance 64-bit bus, allowing it to achieve 3.2 GB/s or greater transfer rates.
- Rambus DRAM. A RAM memory type that can only be used with Pentium 4 processors.
- Rambus DRAM. A kind of memory that uses a narrow 16-bit bus but at a very high clock rate, achieving a high performance

10. Why does the PC-100 standard was created?

- To label 100 MHz SDRAM memories, helping out users.
- Because the first -10 SDRAM memories couldn't work correctly at 100 MHz.
- To sell more memory.
- To make SDRAM memories compatible with Intel CPUs.