1. Which of the following components determines the speed of a bus?

A. Bit size and multiplier

B. Crystal frequency and bit size

C. Crystal frequency and multiplier

D. CPU capability and cache size

2. Which of the following can contribute to ESD damage?

A. Case fans

B. Carpet

C. Touching the computer case while working on a computer

D. ESD mats

3. Which of the following is the most appropriate interface to connect an optical mouse and keyboard to a computer?

A. IEEE 1394

B. USB

C. Serial

D. eSATA

E. PS2

4. What is the type of most RAM used in most notebook computers?

A. SODIMM

B. DIMM

C. RIMM

D. SIMM

5. Of the following technologies, which is best for drive redundancy and data availability.

A. SATA

B. PATA

C. RAID

D. SCSI

6. Another technician ordered a fan for a computer case. It has arrived, and you need to install it. The original fan has been removed. Where should you connect the fan power connection?

A. AC outlet

B. P1 power supply connector

C. Front panel power

D. Motherboard

7. To configure two drives for MAXIMUM performance, which of the following RAID types should be used?

A. RAID 0

B. RAID 1

C. RAID 5

D. RAID 10

8. A technician would like to load an Operating System CD on startup. What setting must be changed in the BIOS?

A. TPM

B. Password

C. Boot Sequence

D. Virtualization

9. Which two components need to support hardware based virtualization?

A. DRAM

B. SSD

C. CPU

D. BIOS

10. Which of the following memory feature allows for the protection against random inconsistencies in the transfer of the data?

A. Low Latency

B. Dual Channeling

C. ECC

D. Compression

11. Which of the following expansion slots would support the highest transfer speeds for high-end graphics cards?

A. PCIe

B. AGP 8x

C. PCI

D. AGP

E. ISA

12. You are replacing two DDR3 DIMMs in an Intel dual-channel motherboard. Into which slots should you put them?

A. Two different-colored slots

B. Two identical-colored slots

C. Separate banks

D. Slots 1 and 4

13. Of the following choices, which is fastest?

A. L1 cache

B. L2 cache

C. L3 cache

D. Triple-channel DDR3

14. Which of the following safety devices would be employed to prevent static discharge between a computer and a technician?

A. Non-magnetic Screwdriver

B. Voltmeter

C. Electrical Tape

D. ESD mat

15. A technician is tasked with selecting components to build a computer that will be used for computer aided drafting and computer aided modeling. Which of the following components are the best choices? (Select TWO).

A. Triple Channel Memory

B. MIDI Sound Card

C. TV Tuner

D. Discrete graphics

E. Onboard graphics

16. Which of the following will help protect against brown outs?

A. Power Supply

B. Anti-static strap

C. Surge Protector

D. Battery Backup

17. PATA data cables are available in two different types. The types are distinguished by the number of conductors. Which two types are available?

A. 80

B. 68

C. 7

D. 40

18. Which of the following CPU features allows the operating system to see a core as dual processors?

A. Dual memory channel

B. 64-bit support

C. Hyper threading

D. Multicore processing

19. After a technician has assembled a new computer, it is necessary to configure the BIOS. At which point must a key be pressed to start the BIOS setup program?

A. Before the computer is powered on

B. During the windows load process

C. As the computer boots and during the POST

D. After the POST, but before the Windows starts to load

20. What type of data connector is used for a SATA 3G drive?

A. 40-pin, 40-wire ribbon cable

B. 40-pin, 80-wire ribbon cable

C. 7 pins with an *L*-shaped connector

D. 15 pins with an *L*-shaped connector

21. A technician is not able to boot to Windows OS. A “Non-bootable device found” message appears on the screen when the computer restarts. Which of the following is the most possible cause of the error message?

A. MBR is corrupt on the HDD

B. HDD is set to Cable Select

C. The OS is corrupt

D. A bootable HDD is not recognized in the BIOS

22. Why are SSDs reliable and therefore suitable to be installed in computers used in industrial workspaces?

A. The encrypted data on SSDs are more secure than it is with other drive technologies

B. They consume less power and have no moving parts

C. Data is accessed from the drive faster than it is on other drives

D. The drive motors have larger storage capacity and can be mirrored

23. When adding an additional internal SATA hard drive to a system, which of the following BIOS settings should be confirmed?

A. TPM status

B. Clock Speed

C. Port status

D. Bus speed

24. A technician is troubleshooting and IDE hard drive that is emitting a humming sound. They suspect that it is a faulty connector. Which of the following voltages should be supplied through the power connector to an IDE hard drive (select two)?

A. 3V

B. 5V

C. 5.5V

D. 9V

E. 12V

F. 20V

25. Which two categories are used to classify CPU architecture? (Choose two.)

A. PnP

B. RISC

C. ATX

D. CISC

E. XIF

**Last Name : ….................................................................**

**First Name : ….................................................................**

Instructions: Indicate the right answer by **ONLY** putting A, B, C, D or E in the table below. Please use Capital Letters.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question No.** | **Answer** | **Question No.** | **Answer** |
| **1** |  | **14** |  |
| **2** |  | **15** |  |
| **3** |  | **16** |  |
| **4** |  | **17** |  |
| **5** |  | **18** |  |
| **6** |  | **19** |  |
| **7** |  | **20** |  |
| **8** |  | **21** |  |
| **9** |  | **22** |  |
| **10** |  | **23** |  |
| **11** |  | **24** |  |
| **12** |  | **25** |  |
| **13** |  |  | |