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Assignment:

Understanding of Hardware and Its Components

Section 1: Multiple Choice

Q.1 Which of the following is NOT a component of the CPU?

1. ALU

2. RAM

3. CU

4. 1 and 3 both

ANS – (2) RAM

Q.2 What is the function of RAM in a computer?

ANS – The function of the RAM[Random Access Memory] is to store the program , program function for the CPU , it is store in internal memory.

Q.3 Which of the following is a primary storage device?

1. HDD

2. SSD

3. SD card

4. 1 and 2 both

ANS – (4) 1 & 2 Both

Q.4 What is the purpose of a GPU?

ANS – The purpose of the GPU[Graphic Processing Unit] is the provide our device a better display with good quality , it Controls the quality of video to.

Section 2:True or False

Q.5 The motherboard is the main circuit board of a computer where other components are attached.

ANS – True

Q.6 A UPS (Uninterruptible Power Supply) is a hardware device that provides emergency power to a load when the input power source fails.

ANS – True

Q.7 An expansion card is a circuit board that enhances the functionality of a component.

ANS – True

Section 3:Short Answer

Q.8 Explain the difference between HDD and SSD.

|  |  |
| --- | --- |
| Hard Disk Drive | Solid State Drive |
| 1. In HDD we can purchase good storage in low price. 2. In HDD there is a moving parts like motor , palter , read & write head , etc.. 3. It generates more heat due to moving parts. 4. It consume more power due to moving parts. 5. It stores data in magnetic disk. | 1. In SSD we can purchase good storage but very expensive. 2. In SSD there is no moving parts because it is totally chip base 3. It generates less heat because there is no moving part. 4. It consume less power due to chip base . 5. It store data in flash memory. |

Q.9 Describe the function of BIOS in a computer system.

ANS – The main function of the BIOS (Basic Input/Output System) is to handle the system setup , load on the drivers and the OS(Operating System) booting.

Q.10 List and briefly explain three input devices commonly used with computers.

ANS -

→ Keyboard

→ Webcam

→Mice

→Camera

→ Pendrive

→ Scanner

→ Joystick

Section 4:Practical Application

Q.11 Identify and label the following components on a diagram of a motherboard:

• CPU

• RAM slots

• SATA connectors

• PCI-E slot

ANS – All parts are identified

Q.12 Demonstrate how to install a RAM module into a computer.

ANS – First you have to check that which RAM is able to install in the computer on the motherboard in the ram slot there is written that which ram is to be Attached.

Section 5:Essay

Q.13 Discuss the importance of proper cooling mechanisms in a computer system. Include examples of cooling methods and their effectiveness.

ANS – The importance of a proper cooling mechanism is that in which the computer functions the heavy program or any kind of a gaming it needs to be cool when the CPU heats the cooling mechanism helps the cpu to cool down at that time the system needs to be cool down for a while otherwise it can harm the data store in it.

Mainly there are two types of cooling methods (1)AIR, (2) LIQUID

AIR Cooling system

The most The common type of cooling system is one of the air cooling system because it is Cheap then other system . It have heat sinks that provides the heat to get out and having a cooling fan through which they can blow cool air through it.

Although it contains fan that makes noise .

LIQUID Cooling System

This type of Systems are generally used in heavy programming pcs like gaming pcs or high end pcs . This type of cooling system generally helps in multi tasking programming . This cooling system is better at cooling and Makes less noise because there is no fan but cooling liquid that helps to maintain the temperature of the PC .

Q.14 Explain the concept of bus width and its significance in computer architecture.

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