TERM-1 **Comptia A+ N+** Assignment

**Module 1 [Hardware and its components]**

**Topic: The Visible Computer**

**• Assignment Level Basic**

1. What is hardware?

Ans. Computer ke sabhi parts jisko ham physicaly touch kar sakte he usko

hardware kahte he. Ex. Computer, Mouse, Keyboard.

2. What is the purpose of Hardware?

Ans. Jo input, processing, output, secondary storage or communication jese

main karyo ko support provide karte he.

**• Assignment Level Intermediate**

1.list out two types of hardware.

Ans. Computer, Mouse, Keyboard, Cabinet, Harddisk…

**• Assignment Level Advance**

1.What is core hardware

Ans. North Bridge, South Bridge, CPU.

1. Do a practical of identifying hardware

Ans. Done In Lab.

**Topic: Category of components**

**• Assignment Level Basic**

1. What are the category of components in hardware?

Ans. Input device, output device, Storage device And Processing device

Components.

1. Why category is needed?

Ans. Yah hame kisi item ka dusro ko describe karne ka ek way deta he.

**• Assignment Level Intermediate**

1. Do a practical to identify the components in which category they come.

Ans. Done In Lab.

**Topic: Input Device**

**• Assignment Level Basic**

1. What is input device?

Ans. Input device vo computer ka ek parts he jiska upyoag data processing karvana hota he Ex. Keyboard, Mouse, Scanners.

1. Why input device needed?

Ans. Computer ke liye input device jaruri he kyunki vo computer se bat krne or computer me kuch add karne ke liye jaruri he.

**• Assignment Level Intermediate**

1. List out the input device.

Ans. Keyboard, Mouse, Scaner, Webcom.

1. Do a practical to identify input device and describe how it works.

Ans. Done In Lab.

**Topic: Output Device**

**• Assignment Level Basic**

1. What are output device?

Ans. Output device jo bhi data input device se input hota he usko output display par dikhane ka kam karta he.

2. how does output device work?

Ans. Output device computer signal Receiving karke or us signal ka upyog karke Output dikhane ka kam karta he.

**• Assignment Level Intermediate**

1. List out the output device.

Ans. Monitor, Printer, Speaker.

2. Do a practical to identify the output device and describe its working process.

Ans. Done In Lab.

**Topic: Motherboard**

**• Assignment Level Basic**

1. What is motherboard?

Ans. Motherboard Computer System ke Essential parts me se ek he.

2. Why it is called motherboard?

Ans. Usko motherboard kaha jata he kyunki vo main circuit board he.

**• Assignment Level Intermediate**

1. What it is called if we remove all components from the motherboard?

Ans. PCB Board.

2. Describe types of motherboard.

Ans. The different types of motherboard.

[1] AT MOTHERBOARD – ADVANCED TECHNOLOGY.

.[2] ATX MOTHERBOARD – ADVANCED TECHNOLOGY eXTENDED.

[3] MICRO ATX MOTHERBOARD – MICRO ADVANCED TECHNOLOGY

eXTENDED.

[4] ITX MOTHERBOARD – INFORMATION TECHNOLOGY eXTENDED.

**• Assignments level Advance:**

1. Do a practical by identifying parts of motherboard.

Ans. Done In Lab.

2. Do a practical by describing the data flow in motherboard.

Ans. Done In Lab.

3. Do a practical by removing all removable parts from the motherboard.

Ans. Done In Lab.

**Topic: CPU**

**• Assignment Level Basic**

1. What is CPU.

Ans. Computer ka primary component jo computer ke control center ka kam karta he.

2. Write the full form of CPU.

Ans. CPU Full Form – Central Processing Unit.

**• Assignment Level Intermediate**

1. What are the types of CPU?

Ans. Two types of CPU.

[1] PGA – PIN GRID ARRAY

[2] LGA – LAND GRID ARRAY

2. What do we need to keep the CPU Healthy?

Ans. Use hard to guess password, Always be suspicious of unexpected email and attachmenmts, Regularly download security updates, Understand the risk associated with file sharing, Use a firewall, Use anti-virus software, Use anty-spyware software, Protect your computer before heading home for breakes, Backup your important files, Turn off your computer when not in use.

**• Assignment Level Advance**

1. Do a practical to remove processor and apply thermal paste in it and install it again.

Ans. Done In Lab.

2. Do a practical to Identify CPU and its Sockets.

Ans. Done In Lab.

**Topic: Monitor**

**• Assignment Level Basic**

1. What is Monitor?

Ans. Monitor ek electronic visual computer display he jisme ek screen, circuitry and vah case jisme circuitry close he uska smavesh he.

**• Assignment Level Intermediate**

1. List out the types of monitor.

Ans. 6 Types Of Monitor.

[1] LCD MONITOR [2] LED MONITOR

[3] OLED MONIOTOR [4] PLASMA MONITOR

[5] CRT MONITOR [6] TOUCH SCREEN MONITOR

2. Do a practical to identify monitor Technology.

Ans. Done In Lab.

3. What are the Technologies used in monitor.

Ans. Most desktop display liquid crystal display (LCD) or cathode ray tube (CRT) technology ka upyog karte he.

**• Assignment Level Advance**

1. Describe how does the crt monitor works.

Ans. A CRT works by electrically heating a tungsten coil which in turn heats a cathode in the rear of the CRT, casuing it to emit electrons which are modulated and focused by electrodes.

**Topic: system bus**

**• Assignment Level Basic**

1. What is system bus.

Ans. System bus is fact of computer architecture vo pure computer or upkarano ke bich data share karne ka kam karta he.

**• Assignment Level Intermediate**

1. List out the types of system bus.

Ans. There are three types of system bus.

[1] Control Bus [2] Address Bus [3] Data Bus.

2. Describe the working of system bus.

Ans. A system bus works by sharing data and other information between various aspects of the computer’s hardware.

3. Do a practical to identify the system bus.

Ans. Done In Lab.

**Topic:Chipset**

**• Assignment Level Basic**

1. What is chipset

Ans. Ek electronics chipset motherboard par components ke bich data ke flow ko manage karta he.

**• Assignment Level Intermediate**

1. What are the types of chipset?

Ans. There are two types of chipset.

[1] Northbridge [2] Southbridge

2. Which chipset does have direct contact with the cpu.

Ans. Isme do main bhag hote he Northbridge And Southbridge. Computer ke sabhi ghatak chipset ke madhyam se CPU ke sath sanchar karte he. Northbridge sidhe front side bus ke madhyam se processor se judta he.

3. Do a practical to identify the chipset.

Ans. Done In Lab.

**• Assignment Level Advance**

1. Describe how does the Northbridge chipset work.

Ans. Northbridge vah controller he jo CPU ko frontside bus ke madhyam se memory se interconnects karta he,

**Topic:Memory**

**• Assignment Level Basic**

1. What is memory?

Ans. Memory refers to the psychological processes of acquiring, storing, retaining and later retrirving information.

2. What are the types of memory?

Ans. The types of memory.

[1] Working memory [2] Sensory memory

[3] Short-term memory [4] Long-term memory

**• Assignment Level Intermediate**

1. Describe memory in detail.

Ans. Memory refers to the location of short-term data.

2. What are memory types.

Ans. There are three types of Memory.

[1] Primary Storage [2] Secondary Storage [3] Tertiary Storage

**• Assignment Level Advance**

1. Do a practical to identify memory types.

Ans. Done In Lab.

2. Do a practical to install memories in system.

Ans. Done In Lab.

3. Do a practical to identify main memory frequencies.

Ans. Done In Lab.

**Topic: System Unit**

**• Assignment Level Basic**

1. What is System Unit?

Ans. System unit computer ka ek hissa he jisme Motherboard, CPU, Ram And Other Components shamil he.

**• Assignment Level Intermediate**

1. How does system unit work?

Ans. The primary devices that perform operation And Produce results for complex calculations.

2. What are the components and system unity?

Ans. System unit ek computer ka parts he jisme primary device hote he jo complex calculation ke liye perform opration karte he or results produce karte he. Isme motherboard, CPU, RAM or other Components shamil he.

**• Assignment Level Advance**

1. Do a practical to identify system unit.

Ans. Done In Lab.

2. Do a practical to assemble and disassemble system unit.

Ans. Done In lab.

**Topic: BIOS**

**• Assignment Level Basic**

1. What is bios.

Ans. Computer ke sabse important startup program ke roop me BIOS ya basic Input or Output system built-in core software he jo system ko boot karne ke liye responsible he.

**• Assignment Level Intermediate**

1. What is the full form of bios.

Ans. BASIC INPUT OUTPUT SYSTEM.

2.Describe working process of BIOS.

Ans. BIOS vo program he jise computer ka microprocessor computer system ko chalu karne ke bad suru karne ke liye use hota he.

**• Assignment Level Advance**

1. Do a practical to reset bios when system is on.

Ans. Done In lab.

2. Do a practical of Hard resetting the BIOS.

Ans. Done In lab.

3. Do a practical of identifying BIOS chip from the motherboard.

Ans. Done In lab.

**Topic: CMOS**

**• Assignment Level Basic**

1.What is CMOS?

Ans. CMOS Vo Computer motherboard par memory ka ek small amount he jo basic input or output system BIOS settings ko store karta he.

**• Assignment Level Intermediate**

1. What is the full form of CMOS?

Ans. Complementary Metal Oxide Semiconductor.

2. Describe the working process of CMOS.

Ans. Same signal jo ek type ke transistor ko on karta he, dusre type ke transistor ko off karne ke liye upyoag kiya jata he. B

**• Assignment Level Advance**

1. Do a practical of identifying cmos.

Ans. Done In lab.

2. Do a practical of installing cmos.

Ans. Done In lab.

3. How do we know that cmos is not working.

Ans. Done In lab.

**Topic: Boot process**

**• Assignment Level Basic**

1.What is Boot Process?

Ans. Booting ek Computer ko shuru karne ki process he jese ki button jesa hardware se ya software se command dhwara shuru kiya jata he.

**• Assignment Level Intermediate**

1. What is the first process of boot?

Ans. Operating system ne main memory ma load karke fir computer user se commands lene ke liye ready he.

2. What is the final stage in the boot process?

Ans. Boot ke final process me OS ko hardware or machine ka sab control diya jata he taki vah sabhi work ko dekh sake.

3. Describe the boot process in Linux?

Ans.

**• Assignment Level Advance**

1. Describe about working with the grub bootloader.

Ans. Iska kam boot time par BIOS se lena, khud ko load karna, linux kernel ko memory me load karna or fir execution ko kernel me badlna he.

2. Describe working process of boot loader.

Ans. Boot loader ka upyoag program memory me ek alag program ke roop me kiya jata he jo tab execution hota he jab kisi new application ko baki program memory me again load karne ki jarur hoti he.

**Topic: SMPS**

**• Assignment Level Basic**

1. What is SMPS?

Ans. SMPS vo monitor ke bina hmare computer ke sabhi bhago ko power supply karta he.

2. What is the process of SMPS?

Ans. It also convert AC Current To DC Current.

**• Assignment Level Intermediate**

1. DO a practical to install SMPS.

Ans. Done In Lab.

2. How many sata connectors are there in normal smps?

And. 3 sata connectors are there in normal SMPS.

**• Assignment Level Advance**

1. Do a practical to troubleshoot a smps without plugging it to the system.

Ans. Done In Lab.

2. How many pins does atx power connector have?

Ans. 24 Pins

**Topic: RAM**

**• Assignment Level Basic**

1. What is RAM?

Ans. Temporarly catche file storage memory.

2. What is the full form of RAM?

Ans.RANDOM ACCESS MEMORY.

**• Assignment Level Intermediate**

1. What are the types of ram?

ANS. There are two types of RAM.

[1] STATIC RAM (SRAM) [2] DYNAMIC RAM (DRAM)

2. Do a practical to identify RAM.

Ans. Done In Lab.

**• Assignment Level Advance**

1. Do a Practical to identify ram and install it in a proper system.

Ans. Done In Lab.

**Topic: Device and cable**

**• Assignment Level Basic**

1. What are the types of devices?

Ans. There are three types of device.

[1] Input device [2] Output device [3] Storage device

2. What are the types of cable?

Ans. There are two types of cable.

[1] SATA CABLE [2] PATA CABLE

**• Assignment Level Intermediate**

1. What cables are used to connect printer?

Ans. USB 2.0 cable are used to connect printer.

2. What was the first cable founded by Apple for data transfer?

Ans. Thunder Bolt Cable.

**• Assignment Level Advance**

1. Do a practical to identify the sata cables.

Ans. Done In Lab.

2. Do a practical to identify and install the cables in the system.

Ans. Done In Lab.

**Topic: Expansion card and slots**

**• Assignment Level Basic**

1. Why expansion card needed?

Ans. The primary purpose of an Expansion card is to provide or Expand on features not offered by the motherboard.

2. Why expansion slots needed?

Ans. Computer user ko apne Computer me new device add karn ke liye Expansion card jruri he.

**• Assignment Level Intermediate**

1. What are the types of expansion card?

Ans. Types of Expansion card.

[1] SERIAL PORT [2] PARALLEL PORT [3] USB PORT

[4] AUDIO PORT [5] SATA PORT [6] IDE (PATA) PORT

[7] DISPLAY PORTS & CABLE [8] FIRE WIRE PORT [9] LAN PORT

2. What are the types of expansion cards?

Ans. Types of Expansion cards.

**• Assignment Level Advance**

1. Do a practical to identify the types of expansion slots.

Ans. Done In Lab.

2. Do a practical to install the Graphics card.

Ans. Done In Lab.

3. Do a practical to install LAN card.

Ans. Done In lab.

**Topic: I/O Ports**

**• Assignment Level Intermediate**

1. What is I/O ports?

Ans. I/O (INPUT/OUTPUT) Ports vo Computer par ek socket hota he jisme ek cable pluge kiya jata he.

2. List out the I/O ports available.

Ans. There are types of I/O ports.

Serial ports, Parallel ports, Universal serial bus (USB) port, Firewire port, Ethernet port, etc…

3. Do a practical to identify the I/O ports.

Ans. Done In lab.

**Topic: BIOS & CMOS**

**• Assignment Level Basic**

1. What is BIOS?

Ans. BIOS (BASIC INPUT OUTPUT SYSTEM) Built-in core processor software he jo aapke system ko boot karne ke liye responsible he.

2. What is CMOS?

Ans. CMOS (COMPLEMENTARY METAL-OXIDE-SEMICONDUCTOR) vo Computer Motherboard par mamory ki ek small amount he jo basic INPUT/OUTPUT system settings kpo store karta he.

**• Assignment Level Intermediate**

1. What is the role of BIOS in i/o?

Ans. Computer system chalu hone ke turant bad BIOS computer hardware ko OS se identifies karta he, configures, test and Connects karta he.

2. What is the role of i/o in CMOS?

Ans. This enables the data bandwith to scale with transistor performance, independent of the length of the line.

**• Assignment Level Advance**

1. Do a practical to reset BIOS.

Ans. Done In Lab.

2. Do a practical to remove cmos.

Ans. Done In Lab.

**Topic: Laptop & storage**

**• Assignment Level Basic**

1. What is laptop?

Ans. Laptop ek personal computer he jise aasani se le jaya ja sakte he or alag alag jagah pe use kiya ja sakta he.

2. Why laptop is used widely now a days?

Ans. Laptop is employed widely thanks to its portable nature.

**• Assignment Level Intermediate**

1. Describe the working process of laptop?

Ans. Laptop ek desktop computer ke sabhi input or output capabilities ko jodta he, jisme iski display screen, keyboard, speaker, data storage, disk drive, or pointing device or ek processor or operating system ek smaller device me shamil he.

2. What is storage?

Ans. Ek hardware device jiska upyog digital data or applications ko store karne ke liye kiya ja sakta he usko storage device kahte he.

3. List out the types of storage.

Ans. [1] PRIMARY STORAGE [2] SECONDARY STORAGE [3] TERTIARY STORAGE

**• Assignment Level Advance**

1. Do a practical to identify types of storage.

Ans. Done In Lab.

2. Do a practical to disassemble and assemble the storage.

Ans. Done In Lab.

3. Do a practical to install the storage devices.

Ans. Done In Lab.

**Topic: Printer**

**• Assignment Level Basic**

1. What is printer?

Ans. Printer jisko computer printer bhi kaha ja sakta he.electronic device ko jo

computer se text files or image ko accepts karta he or unhe paper or film jese madhyam me transfer karta he.

2. Why is printer needed?

Ans. Printer ek esa device he jo Computer se text and graphic Output accepts karta he or information ko paper par transfer karta he.

**• Assignment Level Intermediate**

1. Describe the working process of printer.

Ans. In short, printer work by converting digital images and text into physical copies.

2. What are the types of printer.

Ans. There are two types of printers.

[1] Laser Printer [2] Inject Printer

**• Assignment Level Advance**

3. Do a practical to install the printer.

Ans. Done In Lab.

4. Do a practical to Troubleshoot the improper printing.

Ans. Done In Lab.

**Topic: Storage devices**

**• Assignment Level Basic**

1. What is storage device?

Ans. Ek hardware device jiska upyog digital data or applications ko store karne ke liye kiya ja sakta he usko storage device kahte he.

2. Why we need storage device.

Ans. Computer ke liye ek storage device apne user ko computer device par data or application ko store or safely access karne me Saksham banata he.

**• Assignment Level Intermediate**

1. List out the types of storage devices.

Ans. Types of storage device.

[1] Hard disk [2] SSD [3] Pen Drive [4] SD Card

[5] Floppy disk [6] Memory card [7] Multimedia Card

[8] CD [9] DVD

2. Describe the working process of storage devices.

Ans. Storage device hardware he jiska upyog data files ko store karne, port karne or nikalne ke liye kiya jata he.

**• Assignment Level Advance**

1. Do a practical to Remove storage devices and reinstall it and make a gpt disk.

Ans. Done In Lab.

**Topic: ATA**

**• Assignment Level Intermediate**

1. What is ATA?

Ans. Advance Technology Attachment (ATA) is a standard physical interface for connecting storage device within a computer.

**• Assignment Level intermediate:**

1. Describe working of ATA.

Ans. ATA Harddisk or CD-ROM ko Motherboard se internally connect karne or basic Input/Output kam karne ki anumati deta he.

**• Assignment level Advanced:**

1. Do a practical to identify and install ATA cables.

Ans. Done In Lab.

**Topic: SATA**

**• Assignment Level Basic**

1.What is SATA?

Ans. Serial Advanced Technology Attachment (SATA) vo ek command or

Transport protocol he jo defines karta he ki computer ke motherboard mass storage device ke bich data kese Transfer kiya jata he.

**• Assignment Level Advance**

1. Describe the working of SATA.

Ans. SATA 7 pin data cable or 15 pin drive power connector cable ka upyog karke sata ek drive or uske host ke bich ek bar me data transfer karta he.

2. Do a practical to identify sata.

Ans. Done In Lab.

3. Do a practical to install SATA.

Ans. Done In Lab.

4. Where does SATA is used.

Ans. Computer ke motherboard or mass storage device jese HHD, SSD ke bich.

**Topic: SCSI**

**• Assignment Basic**

1. What is SCSI?

Ans. Small Computer System Interface (SCSI) is a set of parallel interface standards used to attach disk drives and other peripherals to a Computer.

2. WHy SCSI needed?

Ans. SCSI network server me upyogi he jaha hard disk ko aasani se raid configuration ke roop me sthapit kiya ja sakta he.

**• Assignment level Intermediate:**

1. What is the rpm of SCSI?

Ans. SCSI drives 10,000 or 15,000 RPM version me aate he.

2. Do a Practical to install scsi.

Ans. Done In lab.

**Topic: Laptop**

**• Assignment Level Basic:**

1. What is laptop?

Ans. . Laptop ek personal computer he jise aasani se le jaya ja sakte he or alag alag jagah pe use kiya ja sakta he.

2. What are the types of laptop?

Ans. There are four types of laptops.

[1] Notebook Laptops [2] Ultraportable Laptops

[3] Subnotebook Laptops [4] Desktop Replacement Laptops

3. Diffrent names of laptop.

Ans. Different names of laptops.

[1] Laptop [2] Microcomputer [3] Minicomputer

[4] Notebook Computer [4] Palmtop

**• Assignment level Intermediate:**

1. What are the parts of laptop?

Ans. Display screen, base panel, top panel, speaker CPU, HDD, Motherboard,

Keyboard, Opticle drive, RAM, Colling Fan, Battery, Computer Memory,

Heat sink, etc…

2. Do a practical of identifying parts of the laptop.

Ans. Done In Lab.

**• Assignment level Advance.**

1. Do a practical to disassemble the laptop.

Ans. Done In Lab.

2. Do a practical to change the RAM in the laptop.

Ans. Done In Lab.

**TOPIC: PRINTER**

**• ASSIGNMENT LEVEL BASIC:**

1. WHAT IS PRINTER?

Ans. Printer jisko computer printer bhi kaha ja sakta he.electronic device ko jo

computer se text files or image ko accepts karta he or unhe paper or film jese madhyam me transfer karta he.

2. IS IT A INPUT DEVICE OR OUTPUT DEVICE?

Ans. Ek input device processings ke liye computer system ko information snd karte he or ek output device us processing ke results ko reproduces ko displays karta he.

**• Assignment level intermediate:**

1. Describe the types of printer.

Ans. There are two types of printers.

[1] Laser Printer [2] Inkject Printer

2. Describe inkjet printer.

Ans. Ek inkjet printer ek computer peripheral he jo kagaj par ink ki bundo ko spraying kar text documents or photo ki hardcopy ready karta he.

**• Assignment level Advanced:**

1. Do a practical of network installation of the printer.

Ans. Done In Lab.

2. Do a practical to troubleshoot the printer of no cartridge error.

Ans. Done In Lab.