Basic Functions of Devices- Smartphones and Computer

**Computer:** A computer is an electronic device that accepts inputs, performs functions at high speed and gives output instantly.
Input Devices: Keyboard, Mouse, USB Port
Output Devices: Monitor, Printer

**Basic Parts of a Computer:**
- **Monitor** (the screen of your computer), **Keyboard** (A device through which you can input text and data in computer), **Mouse** (To navigate from various features on screen), **CPU** i.e. Central Processing Unit (The Brain of Computer).

**Laptop**
A laptop is nothing but a portable PC.

**Basics of a laptop:**
- Screen
- Keyboard
- Touchpad
- Power Button
- AC Power Input
- CPU Cooling Fan

**Switching On the laptop:** Few laptops have an auto switch on feature (MacBook) as soon as you lift the screen, others have a power button in the keyboard.

**Switching OFF the Laptop:** Broadly there are four ways to shut off your computer:
1) **Shut Down:** This is a power off state mode we all are familiar with, here the PC almost has no power.
2) **Sleep:** The PC enters in a low power state, and when you turn it back on it will get back to life quickly. Usually people use this feature when they have to take a short break.
3) **Hibernate:** Hibernate is the same as sleep function with only difference of longer time to get back to life and uses much less power than sleep.
4) **Hybrid:** This mode is suitable for desktops and not laptops. This is a combination of both sleep and hibernate with best features like low power consumption and faster restart.

**Switching On and Switching Off a Computer:**
Click on the power button present at the CPU. Wait for a few seconds and the computer will start automatically. Put in the password (if any) and you are ready to use it. Once done make
sure all the files are saved and no processor is running in the background. To switch off the computer click on the start button on windows and select shutdown.

**Shortcut:** Click on Windows Logo Key on your keyboard or + X

**Operating System:** Windows vs macOS

The biggest difference is the software and user experience. Windows is the most widely used OS. On the other hand MacOS has its own environment with seamless connection to other apple products.

Launch year: Windows was launched in 1985, Mac was launched in 2001.
Usage: Windows is most widely used as compared to Mac.
Power Button: We have a Power Button in windows while Mac doesn't have any power button.
Storage Space: Windows gives you the liberty to expand your storage space while that is missing in Macbook.
Virus: Windows are more prone to virus while mac is more safe, even if connected with a virus infected device.

Any other operating system apart from Windows & Mac?

LINUX

<table>
<thead>
<tr>
<th>Windows</th>
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<td>MS Word</td>
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**Digital Etiquette:** Do you remember those school days when we were asked to remove our shoes outside the computer lab so that the computers don’t get infected with a virus. It was indeed a myth but the etiquette was followed widely. That was the era when digital education was in its juvenile phase. Even in the 21st Century, it is very crucial for us to follow the basic digital etiquette.

**Basic Rules to follow in lab:**

- Don’t move the monitor, CPU or Keyboard from their place.
- Don't change the cables.
- Avoid bringing food and drink items in a lab.
- If you encounter any problem don't try to fix yourself. Inform your teacher or lab attendant.
- Do not change the default settings of the computer.
- Never change or add a password to your computer in the lab, you can do it on your personal computer/laptop.

**Smartphone**

A smartphone is a mobile phone that includes advanced functionality beyond making phone calls and sending text messages. Most smartphones have the capability to display photos, play videos, check and send email, and surf the Web. Modern smartphones, such as the iPhone and Android based phones can run third-party applications, which provides limitless functionality. While smartphones were initially used mostly by business users, they have
become a common choice for consumers as well. Thanks to advancements in technology, modern smartphones are smaller and cheaper than earlier devices. The camera in smartphones are much better today than in the past with increased camera Megapixels (MP) and RAM (Random Access Memory) that has directly increased the performance of smartphones.

**Basic Features of Smartphone:**
- Internet Access
- Communication
- Social Media
- Health & wellness tracking
- Mobile payments
- Picture & Video Editing
- Mobile Payments

**Android Vs iOS:** They are basically an Operating System of a smartphone. Android is run by Google and iOS is run by Apple. They have virtual assistants such as Google Assistant and Siri respectively.

**Processor:** It is also called the chipset which is the heart and soul of the Smartphone. Every action you do on a smartphone, say opening WhatsApp this goes directly to the processor and the processor gives the visual output all within a fraction of seconds.

"Processor is nothing but the brain of the smartphone"

Some processors you must know:
- Apple A14 Bionic
- Snapdragon 888 Qualcomm
- Exynos 2100 Samsung

According to the data of Stastista.com India has over 760 million smartphone users. We all know the basic functions of Smartphones however you should follow the below mentioned etiquettes while using smartphones:

- Never use your smartphone while charging.
- Keep your smartphone on silent mode while attending lectures, training or formal events.
- Avoid clicking unknown links you may receive on text messages or various other messaging apps.
- Make sure to remove all the background apps when not using your smartphone.
Activity 1: Features of Smartphone
When: during the session
How: Write 10 basic features of smartphones that you use and like the most

1. __________________
2. __________________
3. __________________
4. __________________
5. __________________
6. __________________
7. __________________
8. __________________
9. __________________
10. _________________

Activity 2: My Computer
When: during the session
How: Use this space below to draw and describe your computer.
**Activity 3: Buying a laptop**

When: during the session  
How: find the best laptop that you would like to buy in the assigned budget  

Account balance: Rs. 30,000  
Laptop Price: ______________________________________________________________  
To be purchased from: _______________________________________________________

Features:  
___________________________________________________________________________  
___________________________________________________________________________  
___________________________________________________________________________

Reason to Purchase (Brief):  
___________________________________________________________________________  
___________________________________________________________________________  
___________________________________________________________________________  
___________________________________________________________________________

**Activity 4: Debate “Windows Laptops vs MacBook laptops”**  
When: during the session  

___________________________________________________________________________  
___________________________________________________________________________  
___________________________________________________________________________  
___________________________________________________________________________  

Quiz:

1) Which of the following is an output device?
   a) Mouse
   b) Keyboard
   c) Pen Drive
   d) Monitor

2) Which of the following is not an Operating system in a Smartphone?
   a) Android
   b) Windows
   c) Oxygen
   d) Nitrogen

3) What is the name of a virtual assistant in Apple Phones (iOS)?
   a) Miri
   b) Chiri
   c) Siri
   d) Diri

4) When you read the statement that “A Smartphone has a 48 MP camera”, what does MP stand for?
   a) Multipixel
   b) Megapixel
   c) Masterpixel
   d) Minipixel

5) What is the full form of RAM?
   a) Rotational account memory
   b) Random access memory
   c) Random artificial memory
   d) Router access memory

Answer: 1-d, 2-d, 3-c, 4-b, 5-b