



## FACULTY OF ENGINEERING & TECHNOLOGY

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# Topics Covered

Mobile Computing – Classification  
Personal Digital Assistant (PDA)  
Smartphones  
Tablet PC and iPads



# Mobile Computing - Classification

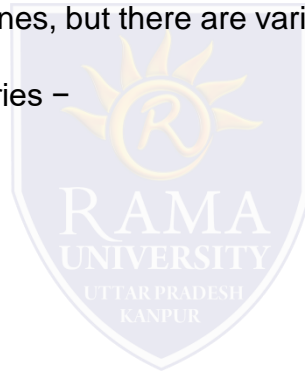
Mobile computing is not only limited to mobile phones, but there are various gadgets available in the market that are built on a platform to support mobile computing.

They are usually classified in the following categories –

Personal Digital Assistant (PDA)

Smartphones

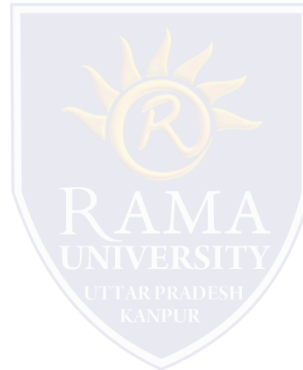
Tablet PC and iPads



# Personal Digital Assistant (PDA)

The main purpose of this device is to act as an electronic organizer or day planner that is portable, easy to use and capable of sharing information with your computer systems.

PDA is an extension of the PC, not a replacement. These systems are capable of sharing information with a computer system through a process or service known as synchronization. Both devices will access each other to check for changes or updates in the individual devices. The use of infrared and Bluetooth connections enables these devices to always be synchronized.



# Smartphones

This kind of phone combines the features of a PDA with that of a mobile phone or camera phone. It has a superior edge over other kinds of mobile phones.

Smartphones have the capability to run multiple programs concurrently. These phones include high-resolution touch screens, web browsers that can access and properly display standard web pages rather than just mobile-optimized sites, and high-speed data access via Wi-Fi and high speed cellular broadband.

The most common mobile Operating Systems (OS) used by modern smartphones include Google's Android, Apple's iOS, Nokia's Symbian, RIM's BlackBerry OS, Samsung's Bada, Microsoft's Windows Phone, and embedded Linux distributions such as Maemo and MeeGo.



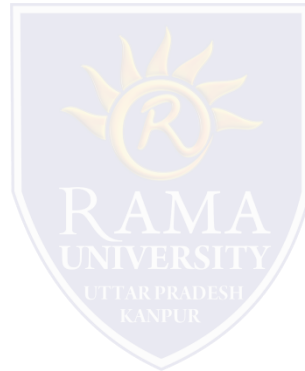
# Tablet PC and iPads

- This mobile device is larger than a mobile phone or a PDA and integrates into a touch screen and is operated using touch sensitive motions on the screen. They are often controlled by a pen or by the touch of a finger. They are usually in slate form and are light in weight. Examples would include ipads, Galaxy Tabs, Blackberry Playbooks etc.



# Tablet PC and iPads

- They offer the same functionality as portable computers. They support mobile computing in a far superior way and have enormous processing horsepower. Users can edit and modify document files, access high speed internet, stream video and audio data, receive and send e-mails, attend/give lectures and presentations among its very many other functions. They have excellent screen resolution and clarity.



# MCQ

Which of the following memory device stores information such as subscriber's identification number in GSM?

- a) Register
- b) Flip flop
- c) SIM
- d) SMS

Which of the following feature makes impossible to eavesdrop on GSM radio transmission?

- a) SIM
- b) On the air privacy
- c) SMS
- d) Packet switched traffic

Which of the following does not come under subsystem of GSM architecture?

- a) BSS
- b) NSS
- c) OSS
- d) Channel

Which of the following subsystem provides radio transmission between mobile station and MSC?

- a) BSS
- b) NSS
- c) OSS
- d) BSC

\_\_\_\_\_ manages the switching function in GSM.

- a) BSS
- b) NSS
- c) OSS
- d) MSC

