Distinguish, differentiate, compare and explain what is the main difference between Internal and External modem in the computer network. Comparison and Differences.

Difference between Internal and External Modem

S.No.	Internal Modem	External Modem
1	Has built-in UART.	Doesnt Have built-in UART. They use the computers serial port as UART.
2	Low in Price.	Comparatively high in price.
3	No external accessory has to buy.	In an external modem, RS232 interface cable has to buy.
4	It is difficult to move the internal modem to another computer.	The external modem can be moved easily.
5	The internal modem is powered by PC.	The external modem needs plugs into the wall to power on.

Internal Modem

These hardware boards you plug into an expansion slot in your PC's system unit. Internal modems are convenient because they don't take up desk space, and they use the computers power supply so they are on whenever the computer is on.
An internal modem plugs into an expansion slot inside your PC. The phone jacks are accessed through a port on the back of the system unit.

External Modem

These are connected to the PC by plugging a cable into a port on the system unit. External modems also have their own power cords. You must turn on the modem when you want to make a connection. One benefit of an external modem is that you can move it to another computer if necessary.
An external modem has controls and status lights on the front that you can use to monitor transmissions.

Which factors to consider while choosing internal or external modem?

Apart from choosing an internal or external modem, some main factors that one should consider are:

- Speed: A modem's speed, called the baud rate, is measured in bits per second (bps). Currently, speeds range from 56Kbps onwards, but the development of faster modems is going on.
- Cost: The faster the modem, the higher the cost. External modems generally cost higher than internal modems.
- Compression Standard: This allows modems to compress data before transmitting it, effectively increasing transmission speeds.

If you only use your modem to send and receive email messages, you may be able to do it with a modem as slow as 14.4Kbps. But if you use your modem to transmit and download heavy files (having images, sound, and animation) you should go for the fastest modem available.