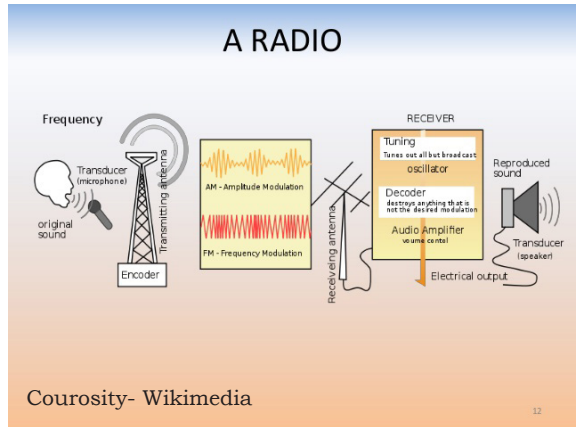


AM and FM Broadcasting

Generally in radio transmission, a microphone, a transmitter, a receiving transistor is used. The principle on which radio works is to put the desired information to be transmitted on the radio wave, which serve as a carrier.



There is a microphone which converts sound waves into electromagnetic waves that are then picked up by receiving transistor and fed into loud speaker which converts them back into sound wave.

There are two main ways of doing this – amplitude modulation (AM) and frequency modulation (FM). Amplitude modulation is used for long and medium wave broadcasts, while frequency modulation is for very high frequency broadcast. Modulation is the process by which the information to be transmitted is impressed on the radio wave, which serves as a carrier.

In AM the strength or the intensity of the radio frequency carrier is varied in accordance with the information, while in the FM the frequency of the carrier is varied instead of its

amplitude.

AM sound needs a band width of 20 KHz, while high quality FM requires a band width of 180 KHz for transmission.

The Fm broadcasting is being increasingly adopted as it provides listeners with high quality signals free from interference. FM broadcasting for local services is capable of expansion in a way which relieves much of the burden in the low, medium and high frequency bands and improve conditions for regional, national and international transmission.