



## Chapter 3-2 - Answers

Q1 What is a receiver?

**A radio receiver is an electronic device that receives radio waves through an antenna and converts the information to a usable form.**

Q2 What is demodulation?

**The desired information is extracted from the carrier wave by demodulation.**

Q3 What is a detector used for?

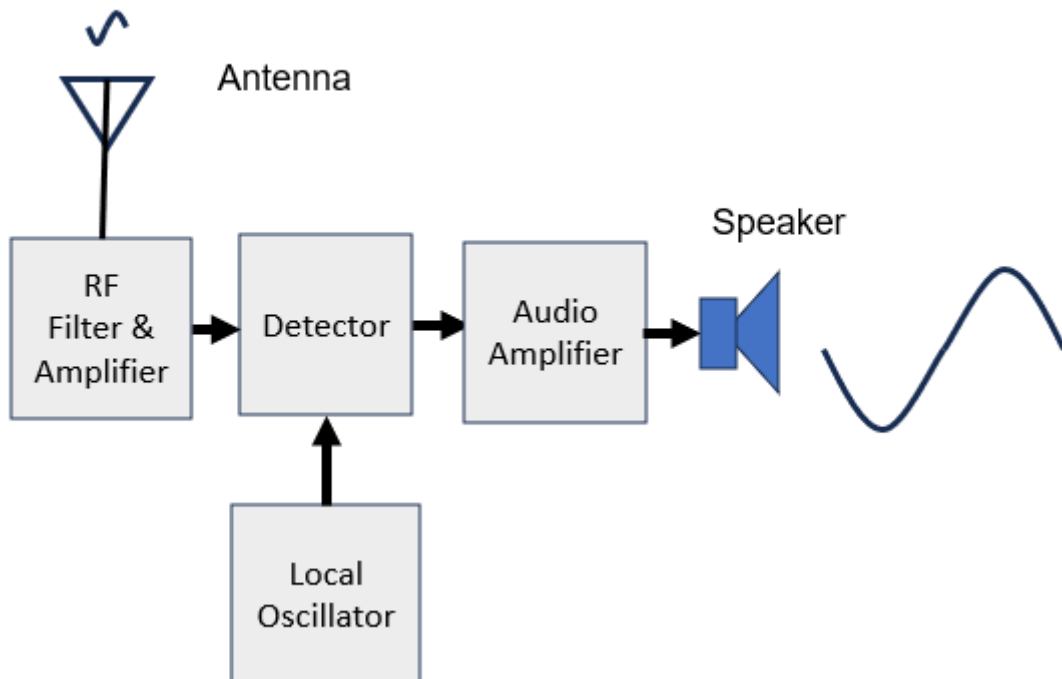
**A detector is used to extract information from an AM signal.**

Q4 What is a discriminator?

**A discriminator is used to extract information from a FM signal.**

Q4 Name all the parts of a simple receiver.

### Simple Receiver



Q5 There are three criteria for a receiver, name and explain each of these three.

**Receivers are rated on three criteria (the three Ss), their sensitivity, selectivity and stability,**

#### Sensitivity

**Receiver sensitivity indicates how faint an input signal can be to be successfully received by the receiver. Sensitivity is defined as the receiver's ability to detect a**

**signal at the input and give a signal-plus-noise ratio 10dB above the noise output of the receiver.**

#### Selectivity

**Selectivity is an important parameter in any radio receiver. Selectivity is necessary for the receiver to be able to select the wanted signal from the unwanted adjacent signal.**

#### Stability

**Frequency stability means the receiver must stay "tuned" to the incoming radio signal and must not "drift" with time or temperature.**

**The overall receiver gain must be carefully controlled so that spurious emissions are not produced within the receiver.**

Q6 What is meant by the term mode of operation in relation to a receiver?

**The *mode of operation* for a receiver defines the type of signals the receiver processes: e.g. AM, FM, SSB or CW (Morse code).**