

Question - 2 Section - 5]

Answer

Yagi - Uda Antenna :-

A yagi-uda-antenna commonly known as yagi antenna, is a directional antenna consisting of multiple parallel element is a line, usually half wave dipoles made of metal rods.

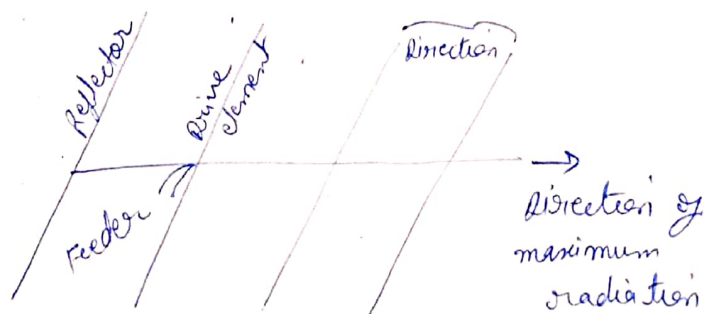
The yagi antenna or yagi-uda antenna or aerial is a particularly popular form of antenna where directivity and gain are required.

Although the yagi has become particularly popular for television reception, it is also used in many other applications, both domestic and commercial or professional.

~~The~~ gain

Yagi Antenna operating construction :-

- ⇒ The yagi antenna design has a dipole as the main radiating or driven elements to which power is applied directly from a feeder.
- ⇒ Further parasitic element are added which are not directly connected to the driven element but pick up power from the driven dipole element and re-radiate it. The phase is in such a manner that it affects the properties of the whole yagi antenna as a whole, causing power to be focused in one particular direction and removed from other.



(Basic concept of Yagi Antenna)