## **ABSTRACT**

Antenna is one of important thing in radio communication system. Therefore, antenna becomes a very paid attention peripheral in telecommunication world, especially in radio communication. The growth of telecommunication asking for an have high frequency antenna with the energy of delivery and acceptance which, so that able to transmit signal better. Seeing the condition, writer interested to make an easy, cheap, efficient and with quality antenna by basing on a Hypothesis.

In this final project, had been implemented Pentagonal Binomial Unidirectional Antenna prototype which has bandwidth specification 77.09% or 1536.88 MHz limited by VSWR  $\leq$  1.5 with antenna impedance is (51.54-j2.062)  $\Omega$  at 1680.13 MHz, unidirectional radiation pattern, ellipse polarization, and gain reach until 9.90 dBi in frequency 1680.13 MHz

The project hoped become prototype can be use that the function maximally.