3. RESEARCH OBJECTIVE

- To enhance the impedance bandwidth of a microstrip antenna by stacking or some other arrangement of rectangular patch antenna.
- To improve the gain and the directivity of a microstrip antenna with enhanced impedance bandwidth.
- Parasitic coupling between rectangular patches at radiating & non radiating edges of the antenna will also be analyzed by using stacking or air gap between them.
- Radiation characteristics VSWR, input impedance, return loss, smith chart, directivity, antenna gain, radiating efficiency and radiation pattern etc will be evaluated by using IE3D software.
- To optimize a microstrip antenna for any one of its radiation characteristics (like bandwidth, directivity, antenna gain etc) for a particular application.
- The microstrip patch antenna will be fabricated on low cost substrate FR4 (glass epoxy) which is easily available.
- The measured results (like return loss, VSWR etc) will be taken using vector network analyzer and compared with the simulated results using IE3D software.