

**Department of Electronics and Communication Engineering**

**SUBJECT: MWE (EC 401)**

**ASSIGNMENT-I**

1. Find the inter relationship between group velocity ‘Vg’ & phase velocity ‘Vp ?
2. Differentiate between TE, TM & TEM waves/ modes?
3. Find the inter relationship between group velocity ‘Vg’ & phase velocity ‘Vp?
4. Derive expressions for electric and magnetic field components in parallel plate wave guide?
5. Derive expressions for the characteristics of TE and TM mode in parallel plate wave guide?
6. Derive an expression for the attenuation of TE waves in a waveguide consisting of two parallel Conducting planes separates by a distance ‘a’.
7. Derive expressions of TE mode field components in circular wave guide?
8. Explain the characteristics of TE & TM mode in rectangular wave guide?
9. Discuss the propagation of TE waves in rectangular waveguides. Obtain expressions for the electric and magnetic field components?

**Note**: Last date for submission of assignment-I is 26-08-2018