

- 7 a. Obtain the solution of wave equation for uniform plane wave in free space. (08 Marks)
b. Derive an expression for uniform plane waves in good conductor. (06 Marks)
c. Calculate intrinsic impedance η . $\sigma = 58 \text{ Ms/m}$, $\mu_r = 1$, $\epsilon_r = 1$ at frequency of 100 MHz. (06 Marks)
- 8 a. Derive an expression for transmission coefficient and reflection coefficient. (10 Marks)
b. With necessary expression, explain standing wave ratio. (10 Marks)
