

Code No: R31045

R10

Set No: 1

7. (a) Write short notes on the following:
- (i) Maximum usable frequency
 - (ii) Effect of earth's magnetic field on ionosphere propagation
- (b) A radio communication link is to be established via ionosphere. Take maximum virtual height to be 100Km at the midpoint of the path. Assume critical frequency to be 2×10^6 Hz and distance between stations to be 600Km. Find.
- (i) Optimum working frequency
 - (ii) Angle of elevation of beam
8. (a) Explain space wave propagation with its limitations.
- (b) A 150m antenna transmitting at 1.2MHz by ground wave has an antenna current of 8A. What voltage is received by the receiving antenna 40Km away, with a height of 2m.
