A) Chapter 10 Text book:

Problems: 9, 10, 13, 15, 31, 33

B) A plane wave of frequency 1 MHz and power 20 kWatts is incident on seawater \((\sigma = 4S/m, \varepsilon_r = 81)\). Determine the following:

(i) Loss tangent
(ii) Skin depth \(\delta\)
(iii) Wavelength
(iv) Phase velocity
(v) Power at depth of 10 meters

What frequency range can be used for undersea communication between two submarines that are 80 meters apart?