

CL3\_Q1. Differentiate between circular and elliptical polarization states of electromagnetic waves.

CL3\_Q2. Find the energy density of electromagnetic wave, if the electric field of amplitude 6.2 V/m oscillates with a frequency of  $2.4 \times 10^{10}$  Hz.

CL3\_Q3. Discuss the energy density in electromagnetic waves and how is it related with the Poynting vectors?

CL3\_Q4. Give expressions for two electric field wave functions that can produce circular polarization.

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