

15P1WPH212 Soft ferrites

Subject Code	15P1WPH212	
Credits	3	Contact Hours: 03
Module No.	Subtitle of the Module	Topics
1.	ferrites	Introduction, Magnetism in ferrites, Manufacture process, Raw materials, Mixing, Processing of the pre-sintered powder, Sintering.
2.	Electric and magnetic properties	Magnetization, Complex permeability, Hysteresis, Eddy Current phenomena, Residual loss.
3.	Some soft ferrites	Introduction, Survey and classification, mechanical and thermal properties, magnetic and electrical properties, Magnetic circuit theory , Magnetic losses, Distortion and inter modulation.
4.	Ferrite antennas	Introduction, Antenna circuit theory, Induced emf, effective height, Signal strength, Noise power, Signal –to –noise ratio, Band width and impedance requirements.

Recommended Reading (Books/Journals/Reports/Websites etc.: Author(s), Title, Edition, Publisher, Year of Publication etc. in IEEE format)	
1.	Soft Ferrites: Properties and Applications by Eric Charles Snelling
2.	Soft Ferrites: Properties and Applications by Eric Charles Snelling