**EE** **785** **Electromagnetic** **Interference** **and** **compatibility**

Seminar topics

1. CE/CS tests of different standards Test set ups and their significance
2. Filter design for conducted EMI
3. Filter design using Ferrite cores; material specifications, selection
4. Conducted Susceptibility: design using MoVs, transient suppressors etc
5. Neutral Grounding
6. Grounding of distributed systems
7. Grounding of Power systems
8. Earthing Practices
9. Cross-talk on PCBs and mitigating techniques
10. Designing PCBs for Conducted EMI
11. PCB design guidelines and their significance
12. RE/RS tests, standards and their significance
13. Shielding techniques for the EMI
14. EFT, EMP tests, their significance and designing system for compliance
15. Ionizing radiations and their effects on humans
16. Non-ionizing radiation and their effects on humans
17. Antenna designs for SAR reduction
18. Non-thermal effects of Non-ionizing radiation.
19. Cellular towers and hazards?
20. Induction heating and eddy currents
21. Dielectric heating and its usage

Each group must submit a write-up of minimum 4-5 pages and Present with illustrative PPTs, typically for 10 minutes.