Diploma, Anna Univ UG & PG Courses

Notes Available @

Syllabus

Question Papers

www.AllAbtEngg.com

Results and Many more...

CU 5292 Electromagnetic Interference and Compatibility

Important 2 Mark Questions

Unit I

- 1. What are the elements of interference?
- 2. Compare inter and intra EMI system.
- 3. List the types of susceptibility.
- 4. When does the coupling of EFT into electronic products occur?
- 5. What are basic differences are between conducted and radiated emissions?
- 6. What is Conducted coupling EMI?
- 7. How does EM radiation cause health hazards to human?
- 8. What is transient suppression?
- 9. How many types of EMI exist?
- 10. Define EMI and EMC.

Unit II

- 1. Mention the coupling mechanism employed for coupling electromagnetic source with supply network.
- 2. What is ground loop coupling?
- 3. Why does the magnetic flux due to the differential-mode current tend to subtract in the core?
- 4. List the typical modes of noise coupling.
- 5. Define ground coupled interference.
- 6. List examples for common ground impedance coupling.
- 7. Write the importance of field to cable coupling.
- 8. How field coupling affects the system?
- 9. Define the term cross talk.
- 10. Write the importance of field to cable coupling.

Unit III

- 1. State Murphys law.
- 2. Specify the grounding strategies for large system.
- 3. What is meant by shielding?
- 4. Why is a filter inserted between the sources and the load?
- 5. Classify EMI filters.
- 6. Define SEMCAP.
- 7. Draw the circuit diagram for isolation transformer.
- 8. What is an EMI gasket?
- 9. What are the advantages of multi point grounding?
- 10. What is the need for power supply filters to avoid CE?

Unit IV

1. Why EMI standards are required for residence?

Diploma, Anna Univ UG & PG Courses

Notes Available @

Syllabus

Question Papers <u>www.AllAbtEngg.com</u>

Results and Many more...

- 2. List few EMI standardizing organization.
- 3. Define class-B digital devices.
- 4. What does EMI standard address?
- 5. Define zoning.
- 6. How to avoid cross talk in PCB design?
- 7. Draw the general three-conductor transmission line, illustrating cross talk.
- 8. Explain the reference to a PCB layout the techniques to reduce trace impedance.
- 9. List the problems arise due to termination of PCB.
- 10. How does cable routing avoid EMI?

Unit V

- 1. What is the civilian STD test methods employed in testing antennas?
- 2. Give the various techniques used for measuring immunities of a system.
- 3. Write the use of decoupling capacitors.
- 4. Why is spectrum analyzer essentially a super heterodyne receiver?
- 5. What is the significance of narrow band test?
- 6. What is current probe? Give some guidelines to carry OATS.
- 7. How can you classify emission tests on the basis of bandwidth?
- 8. Name any two EMI standards.
- 9. List the possible errors in EMI testing.
- 10. What are class A devices with respect to FCC?