

Code: 17ECMC1T6A

I M.Tech-I Semester-Regular Examinations-February 2018

**EMI/EMC
(MICROWAVE & COMMUNICATION ENGINEERING)**

Duration: 3 hours

Max. Marks: 60

Answer the following questions.

- 1.a) Define EMI, EMC, Intra and Inter system EMI. 8 M
b) Discuss about Radiation hazards to Humans. 7 M
(OR)
- 2.a) Explain the classification of electromagnetic environment. 8 M
b) Explain Electromagnetic Pulse. 7 M
- 3.a) Discuss the various types of coupling sources encountered in Electromagnetic environment. 8 M
b) Explain the effects of Radiative coupling in an environment. 7 M
(OR)
- 4.a) Discuss about emissions related to cables and their Coupling. 8 M
b) Write about Automotive transients. 7 M

- 5.a) Explain Basic Properties of EMI Filters. 7 M
- b) Explain the effect of EMI Filter Placement for Conducted Susceptibility. 8 M
- (OR)
- 6.a) Explain the working principle of Shielding. 7 M
- b) What is Gasketing and sealing? 8 M
- 7.a) List out EMC regulations and explain the need for regulations. 7 M
- b) Compare FCC and CISPR conducted emission limits for Class A and Class B digital devices. 8 M
- (OR)
- 8.a) Explain the construction details of the Shielded Anechoic chamber. 8 M
- b) Write about Line Impedance Stabilization networks. 7 M