

Code: **ECMC2T4**

I M.Tech-II Semester-Regular Examinations-August 2014

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

Duration: 3 hours

Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

- 1 a) Explain the effects of EM radiation on daily life. 7 M
- b) What are the effects of Electromagnetic radiation on human body. 7 M
- 2 a) Explain briefly about manmade noise. 7 M
- b) What is ESD? And explain how to protect the equipment from ESD? 7 M
- 3 a) What is passive inter modulation? 7 M
- b) Explain the transients in power supply lines. 7 M

- 4 a) What is anechoic chamber; with a neat diagram explain the testing of equipment. 10 M
- b) Explain the drawbacks of the OATS. 4 M
- 5 a) Differentiate the terms conducted interference and Radiated Interference. 7 M
- b) Explain the design regulations of power line filters. 7 M
- 6 a) What is a potential? And explain potential difference in circuits. 7 M
- b) Draw and explain various types of grounding and bonding techniques. 7 M
- 7 a) Explain the method of multiple shielding and derive the necessary equation for efficacy. 10 M
- b) What are the different types of protecting equipment's available other than shielding. 4 M
- 8 a) Explain EMC standards reference to civilian. 7 M
- b) Explain how to choose suitable components for emission free circuit. 7 M