

Reg No.: \_\_\_\_\_

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**

M.Tech S1 (R,S) Exam Dec 2020

Cluster: **Kollam**

Branch: Electronics and Communication

Specialisation: Communication Systems

**02EC6251.2 ELECTROMAGNETIC INTERFERENCE AND  
COMPATIBILITY**

Time: 3 Hrs

Max. Marks: 60

**PART A***(Answer All Questions)*

1. Define EMI & EMC.
2. Explain the different types of coupling involved in electromagnetic interference.
3. What are the characteristics of a good EMI filter.
4. Define Grounding . What are the different grounding considerations?

**(4 x 9=36)****PART B***(Answer Any Two from each question)*

5. (a) Explain analog and digital runs . List the rules for circuit grouping.  
(b) Write notes on absorptive cables and ribbon cables.  
(c) What are the good grounding practices to be followed for a EMI/EMC compliant PCB design?
6. (a) List the EMI/ EMC standards followed in various countries. Explain in detail any two.  
(b) What is open area test site measurements? Explain how radiated emission and radiated susceptibility can be measured.  
(c) With neat diagram explain how semi anechoic chamber can be used to test the electromagnetic interference from an equipment.

**(2 x 12=24)**