



MANIPAL INSTITUTE OF TECHNOLOGY
MANIPAL
(A constituent unit of MAHE, Manipal)

I SEMESTER M.TECH. (AVIONICS)
END SEMESTER PROCTORED ONLINE EXAMINATIONS, FEB 2022
SUBJECT: DIGITAL AVIONICS EMI/EMC [AAE 5152]
REVISED CREDIT SYSTEM
(09/02/2022)

Duration: 1 Hour 15 Minutes

Max. Marks: 20

Instructions to Candidates:

- ❖ **Answer ALL the questions.**
- ❖ **Missing data if any, may be suitably be assumed.**
- ❖ **Use of supplied data sheet is permitted**

Q. No	Question	Max. Marks
1 A	Explain flight management system in detail with all relevant diagrams.	(04)
1 B	Briefly explain inertial navigation in detail with all necessary diagrams and equations.	(03)
1 C	Give an overview on the evolution of military cockpits and display.	(03)
2 A	Define pyrotechnic in aerospace application? Explain any two methods of pyrotechnic initiator?	(04)
2 B	Explain the different methods of protecting avionic interfaces from lightning suppression?	(04)
2 C	List the Common approach to lightning protection On-ground Lightning EM Effects on Spacecraft?	(02)