

Sr.No.:	Topics	Status
1	Basics of EMI - EMC	
2	Decibels Understanding & Conversions	
3	Detectors - PK, AVG, QP etc...	
4	How to read the EMC Test Report ?	
5	Maxwell's equations	
6	Magnetic Interaction	
7	Electrical Interaction	
8	Phenomenon - PORT by PORT basis	
9	Coupling Mechanisms	
10	Modes of Couplings - DM & CM	
11	Separating DM & CM Noises for the CE measurements	
12	Radiated Emission - DM & CM Noise calculations	
13	Using Current Probe for the Limit line during Product Development	
14	Crosstalk - NEXT & FEXT calculation	
15	RS Models - Near Field & Far Field calculation	
16	Conducted Immunity	
17	Conducted Emission - DM & CM Noises	
18	Understanding Regulations & EMC Directive	
19	EU Market requirements - CE Marking	
20	NAM Market requirements - FCC Marking	
21	Other Market requirements - C-Tick, CCC etc..	
22	Understanding RED & FCC for Radio Modules	
23	Specific CISPR Standard applicable	
24	Industry specific ISO/CISPR/SAE Standard - Automotive	
25	AIS-004 understanding	
26	AIS-048 understanding	
27	FMVSS - 49 CFR 571.101	
28	ISO 21498-2 :2021	
29	ISO 16750-2	
30	ISO 7637 All Parts	
31	ISO 11451 & 11452 all parts	
32	RED - ETSI 301489 Parts	
33	CISPR 12	
34	CISPR 25	
35	IEC / UL 60730-1 Annex H understanding	
36	Vehicle level Testing for Battery Vehicles	
37	MIL-STD-461	
38	DO-160G for Aerospace Sections 15 thru 25(Exclude 24)	
39	Industry specific ISO/CISPR/SAE Standard - Railway Domain	
40	DEF STAN 59-41 Control & Management - Parts 1 & 2	
41	DEF STAN 59-41 Testing - Parts 3 -to- 5	
42	DEF STAN 59-41 Design Guidelines - Parts - 6 & 7	
43	Test Equipments for Emission Measurements	
44	Understanding ALSE & LISN	
45	Test Equipments fo Immunity testing	
46	Generic Standard 61000-4-xx understanding	

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47	Test setups & Severity for the tests	
48	Acceptance Criteria Understanding	
49	Behaviour of conductors wrt frequency	
50	Behaviour of Passive Parts wrt frequency	
51	Equipment layout & Grounding	
52	PCB Layout Rules	
53	Ground & Power Planes	
54	Fourier Spectrum & Emissions from Logic Circuits	
55	DM & CM Noises Calculations from Digital circuits	
56	Digital circuit decoupling	
57	Switching Mode Power Supply - Design concepts	
58	Digital circuits - Design for Immunity	
59	Filter design basics	
60	Bode plot, margins, transfer functions, Q & Stability	
61	Reactance Paper & Plotting for L & C	
62	Power line filters - Design & Exercises	
63	Signal line filters - Design	
64	Special components - Nonlinear frequency response	
65	Ferrites, CMC, GDT, MOV, Transorbs etc..	
66	Cabling, grounding of cables, screen cables, Interfaces	
67	DC-DC Convertors design concepts	
68	Transformer design	
69	Leakage Inductance calculations from Transformers & CMCs	
70	Snubber circuit design calculations	
71	RCD Clamping requirement & Calculations	
72	PCB Antenna design & Calculations	
73	Shielding requirements	
74	Skin Depth & Attenuation	
75	Shielding Effectiveness calculations for NF & FF	
76	Apertures, slots & Seams	
77	Shielding Hardware, Gaskets	
78	System EMC requirements	
79	Bonding	
80	Earthing	
81	Low Freq Tests - Harmonic Emission	
82	Low Freq Tests - Flicker Emission	
83	Magnetic field and Power quality Immunity	
84	Bulk Current Injection - Automotive ESA Test procedure	
85	Automotive Transients - Immunity test procedures OEM Specific	
86	EMC Assurance & Management	
87	OEM Specific Standards - NISSAN & RENAULT	
88	OEM Specific Standards - TATA MOTORS TST/TS/WI/257	
89	OEM Specific Standards - VOLVO 515-0003	
90	OEM Specific Standards - DaimlerChrysler DC 10615	