



Govt. of India - Ministry of Railways
Indian Railways Institute of Mechanical & Electrical Engineering

Workshop Road, Jamalpur (Bihar) - 811214
 (An ISO 9001:2015, ISO 14001:2015 & ISO:50001:2011 Certified Institute)



Time Table

Course		21-SCMA-1	Course for directly recruited Chemical & Metallurgical Assistants		
Course Duration		12-04-2021 to 04-06-2021		TimeTable Duration	12-04-2021 to 04-06-2021
No. of Participants		50		Venue	Conference Hall
Course Director		AP(EM)		Course Counselor	CI(EM-2)
Time Duration					
Date	09:15:00 - 11:15:00	11:30:00 - 13:30:00	14:30:00 - 16:30:00	16:30:00 - 17:30:00	
SCMA- Week 1 (12-04-2021 to 22-04-2021) - AP(EM)					
12-04-2021	Introduction and Course Guidance	Introduction to Mechanical Engineering Department CI(EM-2)	Role of M&C in Indian Railways AP(EM)	Doubt clearance session-1	
13-04-2021	Crystal structure of metals and Phase Rule CI(EM-2)	Iron Carbon Diagram CI(EM-2)	Corrosion Basics CI(EM-3)	Doubt clearance session-1	
14-04-2021					
15-04-2021	Basics of Heat Treatment & TTT Diagram CI(EM-2)	Steel Making AP(EM)	Different types of Heat Treatment CI(EM-2)	Doubt clearance session-1	
16-04-2021	Corrosion causes and inhibition CI(EM-3)	Electric Arc Furnace Operation AP(EM)	Special Heat Treatment(2HRS) CI(EM-2)	Doubt clearance session-1	
17-04-2021	Saturday - Weekly Rest				
18-04-2021	Sunday - Weekly Rest				
19-04-2021	Different cutting and gouging processes in IR AP(EM)	Introduction to types of Steel and their properties CI(EM-2)	Visual Examination, DPT, MPT, Zygo LECT. (EM)	Doubt clearance session-1	
SCMA- Week 2 (19-04-2021 to 26-04-2021) - AP(EM)					
20-04-2021	Overview of Welding processes-I AP(EM)	Hardness Testing Theory , BHN, Rockwell, Vickers LECT. (EM)	Wagon & Coach Numbering System CI(C&W-1)	Doubt clearance session-1	
SCMA- Week 1 (12-04-2021 to 22-04-2021) - AP(EM)					
21-04-2021	Magnetic particle Inspection CI(EM-3)	Corrosion Prevention Techniques in IR CI(EM-3)	Impact Testing; Charpy, Izod Tests LECT. (EM)	Doubt clearance session-1	
22-04-2021	Overview of Welding processes-II AP(EM)	Refractory Management AP(EM)	Tensile Testing Basics LECT. (EM)	Doubt clearance session-1	
SCMA- Week 2 (19-04-2021 to 26-04-2021) - AP(EM)					
23-04-2021	Ultrasonic Testing CI(EM-2)	Eddy Current Testing Tecniqe CI(EM-3)	Types of Coaches and Wagons and their Identification CI(C&W-2)	Doubt clearance session-1	
24-04-2021	Saturday - Weekly Rest				
25-04-2021	Sunday - Weekly Rest				
26-04-2021	Wet Analysis of Elements-I CI(EM-2)	Eddy Current Testing Tecniqe CI(EM-3)	Wet Analysis of Elements-II CI(EM-2)	Doubt clearance session-1	
SCMA- Week 3 (27-04-2021 to 30-04-2021) - AP(EM)					
27-04-2021	Weldability of Mild Steel & Low Alloy Steels AP(EM)	Paints , its constituents and functions CI(EM-2)	Basic Concept of Foundry AP(EM)	Doubt clearance session-1	

Every 1 hr of lecture is followed by a 5 minute break

28-04-2021	Polymer, Rubber and composites used in IR and their properties CI(EM-2)	Radiography Testing LECT. (EM)	Introduction to Composites CI(EM-2)	Doubt clearance session-1
29-04-2021	Plastics Materials and its applications in IR CI(EM-3)	Different Types of Rubbers in IR CI(EM-3)	Different Paints used in IR and Painting Schedule of coaches and wagons CI(EM-2)	Doubt clearance session-1
30-04-2021	Painting Schedule of Coaches and Wagons CI(EM-2)	Paint Testing-I CI(EM-2)	Rubber Testing CI(EM-2)	Doubt clearance session-1
01-05-2021	Saturday - Weekly Rest			
02-05-2021	Sunday - Weekly Rest			
SCMA- Week 4 (03-05-2021 to 07-05-2021) - AP(EM)				
03-05-2021	Bio Toilet 2h CI(EM-3)	Fundamentals of Mech. Engg. Drawing CI (WMT)	Characteristics of Lube Oil & its Testing LECT. (EM)	Doubt clearance session-1
04-05-2021	Lube Oil System (ALCO) LECT(DSL)	Fuel Oil System LECT(DSL)	Characteristics of Fuel Oil and its Testing LECT. (EM)	Doubt clearance session-1
05-05-2021	HHP Loco Basics LECT(DSL)	HHP Transmission Sysytem LECT(DSL)	Coolant Water Testing CI(EM-3)	Doubt clearance session-1
06-05-2021	IMS in IR-I CI(EM-2)	MODULE EXAMINATION- 2HR	Calibration & Measuring Instruments CI (WMT)	Group Activities
07-05-2021	Welding Defects-I AP(EM)	Precision Measurement 2h CI (WMT)	IMS in IR-II CI(EM-2)	Doubt clearance session-1
08-05-2021	Saturday - Weekly Rest			
09-05-2021	Sunday - Weekly Rest			
SCMA- Week 5 (10-05-2021 to 17-05-2021) - AP(EM)				
10-05-2021	Class on YOGA VL Subodh Kumar Gupta	Welding Power Source CI (ELECT)	Failure Investigation LECT. (EM)	Doubt clearance session-1
11-05-2021	Welding Defects-I AP(EM)	Basic Principle of Spectrograph CI(EM-2)	Macro & Micro Structure LECT. (EM)	Doubt clearance session-1
12-05-2021	Gas Chromatography CI(EM-2)	Weldability of Stainless Steels AP(EM)	Stainless Steel Welding and associated problems AP(EM)	Doubt clearance session-1
13-05-2021	Wear Element Analysis of Lube Oil and DGA CI(EM-3)	Electric Loco Basics CI (ELECT)	IS Codification of Electrodes AP(EM)	Doubt clearance session-1
14-05-2021				
15-05-2021	Saturday - Weekly Rest			
16-05-2021	Sunday - Weekly Rest			
17-05-2021	Types of Composite Materials CI(EM-2)	testing of Composites & FRP Materials CI(EM-2)	Testing of Transformer Oil and DGA-I CI(EM-3)	Doubt clearance session-1
SCMA- Week 6 (18-05-2021 to 31-05-2021) - AP(EM)				
18-05-2021	Basics of Stores Working LECT. (EM)	Basics of Pass Rule , Leave Rule CI(EM-3)	Leave Rule , Pass Rule -II CI(EM-3)	Doubt clearance session-1
19-05-2021	Introduction to E-Office PMECH	Layout and parts of a computer TVP	Fundamental of computer & Basics of MS word TVP	Doubt clearance session-1
20-05-2021	Basics of Rajbhasha Niti CI(EM-3)	Industrial Safety VL	Introduction to RTI, Procedure Filing & Case study CI(EM-3)	Doubt clearance session-1
21-05-2021	Manual of Office procedures CI(EM-2)	D&AR CI(EM-3)	NABL Accreditation CI(EM-2)	Doubt clearance session-1
22-05-2021	Saturday - Weekly Rest			

Every 1 hr of lecture is followed by a 5 minute break

23-05-2021	Sunday - Weekly Rest			
24-05-2021				
25-05-2021				
26-05-2021				
27-05-2021				
28-05-2021				
29-05-2021	Saturday - Weekly Rest			
30-05-2021	Sunday - Weekly Rest			
31-05-2021	Bio Diesel CI(EM-3)	ETP & Waste Management CI(EM-3)	Leadership and Ethics DEAN	Doubt clearance session-1
SCMA- Week 8 (01-06-2021 to 05-06-2021) - AP(EM)				
01-06-2021	Project Review	Project Review	Project Review	Group Activities
02-06-2021	Project Review	Project Review	Project Review	Group Activities
03-06-2021	Project Review	Project Review	Project Review	Group Activities
04-06-2021	Class on YOGA VL Subodh Kumar Gupta	MODULE EXAMINATION- 2HR	Valedictory Session & Feedback- I	Valedictory Session & Feedback

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