

**Electrical Engineering
& Maintenance**

Section (A): Generation		
Power Generation Systems	P/E/T	ME2
Plant Electrical Equipment; Designing and Sizing	P/E/T	ME6
MV and LV Switchgear & Distribution	P/E/T	ME20
Power House Protection and Control	P/E/T	ME17
Section (B): Motors		
Electrical Motor Control, Operation, Protection, Testing and Maintenance	P/E/T	ME3
Motor Control and Protection Through PLC	P/E/T	ME13
Electrical Submersible Pumps (ESP) Installation and Maintenance	E	ME10
Variable Speed Drives (VSD) for Industrial Control	P/E/T	ME15
Section (C): Cables		
Power Cables; Selection, Testing, Fault Locations and Cables Welding	P/E/T	ME8
Overhead Transmission Lines Problems and Maintenance	P/E/T	ME18



Section (D): Power Plants		
<i>Uninterruptible Power Supply (UPS) and Batteries Maintenance</i>	<i>P/E/T</i>	<i>ME12</i>
<i>Power Electronics Applications in Power System</i>	<i>P/E</i>	<i>ME19</i>
<i>Electrical Documentations and Drawings Standardization</i>	<i>P/E/T</i>	<i>ME21</i>
<i>Modern Power Management System</i>	<i>P/E</i>	<i>ME22</i>
<i>Fundamentals of Distribution Systems</i>	<i>P/E/T</i>	<i>ME16</i>
<i>Distribution Network Design and Planning</i>	<i>P/E/T</i>	<i>ME23</i>
Section (E): Transformers and ESP		
<i>Electrical Power Transformers; Testing, Maintenance and Protection</i>	<i>P/E/T</i>	<i>ME11</i>
Section (F): Protection		
<i>Advanced Electrical Protection Relays and Systems</i>	<i>P/E/T</i>	<i>ME5</i>
<i>Electrical Installation in Hazardous Areas</i>	<i>P/E/T</i>	<i>ME7</i>
<i>Electric Earthing & Lightning Electrical Safety System</i>	<i>P/E/T</i>	<i>ME9</i>
<i>Fault Analysis in Electrical Networks</i>	<i>P/E/T</i>	<i>ME24</i>



Mechanical Engineering & Maintenance

Section (A): Maintenance Management

Root Cause Failure Analysis	E	MM2
Global Maintenance (Maintenance Management Skills and Techniques)	E	MM5
Reliability Centered Maintenance (RCM)	E	MM45
Preventive & Predictive Maintenance & Implementation	E	MM46
Shutdown and Turnaround Planning	E	MM47

Section (B): Mechanical Maintenance

Bearing Identification, Fitting and Servicing	E/T	MM1
Mechanical Shaft to Shaft Alignment	E/T/P	MM3
Basics of Rotating Equipment Operation & Maintenance	T	MM4
"Advanced" Pumps; Centrifugal & Positive Displacement	E	MM48
Gas Turbine & Turbo Expander; Operation, Maintenance & Troubleshooting	E/T	MM9
Gas Compressors Operation, Maintenance & Troubleshooting	E/T	MM10
Vibration Analysis (Measurement and Protection)	E/T/P	MM17
Heat Exchanger Design, Construction, Maintenance and Applications	E	MM21
Fundamentals of Lubrication and Applications	E/T	MM37
Hydraulic Circuits Theory	E/T	MM36
Mechanical Seals and Dry Gas Seals Technology	E/T	MM38
Valves Technology "Manual and Control Valves"	E/T	MM49
Reciprocating Engines; Diesel & Gas	E/T	MM51
العدد و القياسات فى الصيانة الميكانيكية	E/T	MM52

