



Valve Maintenance and Piping System Protection Timed Syllabus

Section	Topic	TOTAL # Questions	Word Count	Minutes
Valve Maintenance				
1	Valve Materials	1	463	4.9
2	Threaded Connections	1	381	4.2
3	Welded and Brazed Connections	1	441	4.7
4	Flanged Connections	1	133	2.1
5	Valve Installation	1	208	2.7
6	Repairing Gate Valves	1	516	5.3
7	Repairing Globe and Angle Valves	2	662	7.5
8	Repairing Ball Valves	1	266	3.2
9	Maintaining Plug Valves	1	318	3.7
10	Maintaining Check Valves	2	347	4.9
11	General Maintenance	1	275	3.3
Special Valves				
12	Special Valves	1	100	1.8
13	Butterfly Valves	2	630	7.3
14	Diaphragm Valves	1	667	6.6
15	Pop Safety Valves	1	654	6.5
16	Relief Valves	1	487	5.1
17	Safety Relief Valves	2	757	8.3
18	Pressure-Reducing and Regulating Valves	2	537	6.5
19	Quick-Opening Valves	1	151	2.3
Actuators and Accessories				
20	Valve Actuators	1	604	6.0
21	Diaphragm Actuators	1	228	2.9
22	Piston Actuators	1	211	2.8
23	Electric Actuators	1	246	3.1
24	Actuator Installation	1	478	5.0
25	Actuator Maintenance and Repair	1	328	3.7
26	Bourdon Tube	1	249	3.1
27	Bimetallic Gauge	1	288	3.4
28	Bellows Gauge	1	86	1.7
29	Flowmeters	1	412	4.4
30	Rotating Unions	1	113	1.9
31	Accumulators	1	585	5.9
32	Air Receivers	1	107	1.9



Valve Selection					
33		Application Considerations and Studying the Total System	1	364	4.0
34		Valve Applications	2	432	5.6
35		Valve Materials	1	282	3.4
36		Valve Identification	2	570	6.8
37		Soldered Valve Connections	1	186	2.6
38		Threaded Valve Connections	1	262	3.2
39		Flanged Valve Connections	1	266	3.2
40		Tool Selection	2	507	6.2
41		Valve Location	1	174	2.5
42		Positioning the Valve	1	180	2.5
Piping System Protection					
43		Protecting Hot Pipelines	1	149	2.2
44		Heat Conduction, Convection, and Radiation	1	393	4.3
45		Installing and Maintaining Insulation	1	254	3.1
46		Tracing	1	345	3.9
47		Installing Steam Tracers	1	161	2.3
48		Electric Tracing, Tracing Valves, and Fittings	1	247	3.1
49		Protection From Freezing	2	395	5.3
50		Protection From Corrosives	1	318	3.7
51		Active and Passive Protection	2	293	4.4
52		Inspection of Piping Protection	1	228	2.9
53		Hangers and Supports	1	200	2.7
Totals:			63	18134	214.1
Time Required to Complete Course:					210