

PIPEFITTING: Intermediate





696



PIPEFITTING: INTERMEDIATE

TABLE OF CONTENTS

		SECTION 1 BASIC COMPETENCIES			
	1.	Learning Objectives	- 1		
	2.	Introduction	1.		
Unit 1	Par	ticipate in Workplace Communication			
	1.1	Learning Objectives	3		
	2,	Introduction	4		
	3.	Obtain and Convey Workplace Information	5		
	4.	Meetings and Discussions in a Workplace	14		
	5.	Complete Relevant Work Related Documents	22		
	6.	Unit Summary	29		
	7.	Points of Discussion	30		
	8.	Multiple Choice Questions	30		
Unit 2	wo	rk in a Team Environment			
Ullin &	1.	Learning Objectives	33		
	2.	Introduction	34		
	3.	Team Role and Scope	35		
	4.	Identify Own Role and Responsibility within Team	40		
	5.	Work as a Team Member	45		
	6.	Unit Summary	50		
	7	Points of Discussion	51		
	8.	Multiple Choice Questions	51		
Unit 3	Practice Career Professionalism				
Cim 5	1.	Learning Objectives	53		
	2.	Introduction	54		
	3.	Integrate Personal objectives with Organizational Goals	55		
	4.	Work Priorities for Set and Meet to Profession	61		
	5.	Maintain Professional Growth and Development	64		
	6.	Unit Summary	72		
	7.	Points of Discussion	73		
	8.	Multiple Choice Questions	73		
Unit 4	Pra	actice Occupational Health and Safety			
	Procedure				
	1.	Learning Objectives	75		
	2.	Introduction	76		
	3.	Hazards and Risks	77		
		Embate Herards and Pieke	81		

			88
		The state of the s	90
		Distriction of the last of the	96
		Processing	92
	9	Multiple Character Statement	97
		SECTION DOTTON	TENCIES
	1		99
	2	Introduction	99
Date -			
Unit 5		repare Construction	
	1.	9 - ofectives	101
	2.		102
	3.	, materials in ripetiting	103
	4.	Para in equipment of ivideerials	114
	5.	and inspect materials	117
	6.	respect too bescription	
	7.		120
	8.	Points of Discussion	120
	9.	Multiple Choice Questions	121
			121
Unit 6	P	rocedures, Specifications and	
	M	lanuals of Instruction	
	1.	Learning Objectives	
	2.	Introduction	123
	3.	Identify and Access Specification	124
	4,	Interpret Manuals for Pipefitting	124
	5.	Apply and Troubleshooting Information of Pipefitting	128
	6.	Store Pipefitter Manuals	Manual 132
	7.	Unit Summary	135
	8.	Points of Discussion	139
	9.	Multiple Choice Questions	139
		NIII CHEES AND CHEES CHEES CHEES CHEES CHEES	140
Unit 7	Int	terpret Technical Drawings and Pla	rie:
	1.	Learning Objectives	
	2.	Introduction	143
	3.	Drawing Symbols and Signs	144
	4.	Interpret Technical Drawings and Plans	145
	5.	Apply Freehand Sketching	153
	6.	Unit Summary	162
	7.	Points of Discussion	166
	8.	Multiple Choice Questions	167 167
Unit 8	Per	rform Mensuration and Calculations	
	1.	Learning Objectives	
	2.	Introduction	169
	3.	Select Measuring Instrument	170
	4.	Carry Out Measurements and Calculations	171
¥.	5.	Unit Summary	183
(3)	6.	Points of Discussion	196
	7.	Multiple Choice Questions	197
	100	The Choice Questions	197

Unit 9	Maintain Tools and Equipment				
	1.	Learning Objectives		199	
	2.	Introduction	A	200	
	3.	Check Condition of Tools and Equipment		201	
	4.	Perform Basic Preventive Maintenance of Pipefitter		221	
	5.	Store Tools and Equipment		224	
	6.	Role Model		227	
	7.	Unit Summary		228	
	8.	Points of Discussion		228	
	9.	Multiple Choice Questions		228	
		SECTION 3 CORE COMPETENCIES			
	1.	Learning Objectives		231	
	2.	Introduction		231	
Unit 10	C	ut, Bevel and/or Thread Pipes			
	1.	Learning Objectives		233	
	2.	Introduction		234	
	3.	Plan and Prepare For Work		235	
	4.	Prepare and Layout Pipes		243	
	5.	Cut, Bevel and Thread Pipes		249	
	6.	Perform Housekeeping for Pipefitting		255	
	7.	Unit Summary		256	
	8.	Points of Discussion		257	
	9.	Multiple Choice Questions		257	
Unit 11	Ins	stall and Fit Up Underground and			
	O	verhead Piping System			
	1.	Learning Objectives		259	
	2.	Introduction		260	
	3.	Plan and Prepare for Underground Piping System		260	
	4.	Underground Piping Materials		268	
	5.	Install and fit-up Underground Piping System		272	
	6.	Unit Summary		288	
	7.	Points of Discussion		289	
	8.	Multiple Choice Questions		289	
Unit 12	Perform Tack Welding				
	1.	Learning Objectives		291	
	2.	Introduction		292	
	3.	Prepare Welding Materials and Tools		293	
	4.	Set up Welding Equipment		302	
	5.	Perform Tack Welding		307	
	6.	Perform Housekeeping		313	
	7.	Unit Summary		315	
	8.	Points of Discussion		315	
	9.	Multiple Choice Questions		316	
	Ind	ex		317	

INDEX

A

Acrylonitrile Butadiene Styrene (ABS) 109 Active listening 7, 30 antibacterial sanitizer 81 Atmosphere 10

В

Bar code 6 Body movement 11, 30 Boring hole 209

C

caliper gauge 174, 175, 198
Career development 54, 55, 68
Chlorinated Polyvinyl Chloride (CPVC) 109
Cold chisel 206, 207
Communication 6, 7, 9, 10, 11, 28, 29, 30
Company protocol 26
Competencies 143
Computer software 64
Continuing education 68

D

dangerous chemical 77, 96
Decontamination 94
diameter 174, 176, 177, 190, 191, 192, 194
Disaster drill 92
Documentation 16, 18
Drainage pipe stack vent 137
Dripping faucet 133

E

Economy of labor migration 16 electrical equipment 80, 86 Employee skill 28 Employee training 65, 66

F

Federal employee 11 Financial career 63 Financial industry 63, 73 Flameproof 301 Fraction 188 Framing square 179, 180

G

Gas welding 296, 297 Gas welding goggles 302, 317 Globalization 13

H

Hacksaw 203, 204
Hammer drill 208, 209
Hand drill 207, 208
Hand gestures 10
Hazard 298, 299, 300
hazard analysis process 79, 97
Hazard and Risk 77, 82
Household service 16
Human resource 62
Human resource management 13

I

identifying hazard 81 Improve quality 6 inside caliper 176, 177, 179 Interaction 16 internal dimension 176 International standard organization (ISO) 299

L

Language learning process 8 Language variety 9 Leadership 13, 29 Legal document 24 length 172, 174, 175, 180, 189, 190, 192, 194

M

Maintenance department 6
Managerial training 67
measuring instrument 173
Measuring instrument 173, 175
Measuring instruments 173
measuring tool 174
Micrometer caliper 178, 179
Municipal water system 134

P

Physical and financial records 24
Pipe fitting 109, 110
Pipe threader 204, 205, 230
Piping plan symbol 127
plumbing business 77
Plumbing business struggle 135
plumbing material 110
Plumbing tool 203
potential source 82
Professional certification 71, 72
Protective clothing 301, 317

R

Rapid transmission 9 Reward 17

S

safe and healthy workplace 77 Safe operating procedure 12 Safety symbols 299 Sledgehammer 207, 217, 218 Spill control procedure 94 Steel trolley 110

T

Tangible thing 21 Team environment 34 Teamwork 34, 45 Threshold limit value 84 Toilet tank 137 Try square 211

W

Waste material 316
Water supply 203, 212, 213
Work environment 13, 20
Workplace 6, 7, 10, 11, 12, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 28, 29
Workplace communication 30
Workplace hazard 77, 97

