OJT Syllabus for Fuel Dispensing Pump Maintenance Assistant

Course Name	Fuel Dispensing Pump Maintenance Assistant		
Sector	Electronic & Hardware		
Course Code	ELE/2024/FDMA/365		
Level	3 (RPL&OJT)		
Occupation	Fuel Dispensing Pump Maintenance Assistant		
Job Description	The Fuel Dispensing Pump Maintenance Assistant will be responsible		
	for looking after various aspects of fuel dispensing equipment, including		
	ISO standards, 5S methodology, pump and metering unit functions,		
	fault finding, rectification, nozzle types, valve functions, electrical		
	connections, machine operations, and assembly procedures.		
Course Duration	Total Duration 210 Hrs (OJT-210)		
Trainees' Entry Qualification	Grade 10		
	OR		
	Grade 8 pass and pursuing continuous schooling in regular school with		
	vocational subject		
	OR		
	8th grade pass with 2 yrs relevant experience		
	OR		
	5th grade pass with 5 years relevant experience		
	OR		
	Previous relevant Qualification of NSQF Level 2 with one yr experience		
	OR		
	Previous relevant Qualification of NSQF Level 2.5 with 6 months		
	experience		
Trainers Qualification	Class 10 th pass with 5 years' experience in petrol pump		

Structure of Course: (In OJT Mode)

Module No.	Module name	Outcome	Compulsory/ Elective	Total (Hrs) (OJT)
1	Basics of ISO,5S Methodology & Soft Skill	Explain the fundamental of ISO and 5S methodology	Compulsory	30
2	Pump and Metering unit	Demonstrate the functions of pump and metering unit along with fault finding and rectification	Compulsory	30
3	Mechanical & Electronics Register	Explain the functions of Mechanical and electronics register assembly	Compulsory	30
4	Delivery Nozzle & pipeline fittings	Recognize the different nozzle and functions of different valves	Compulsory	30
5	Electrical connections	Illustrate the electrical connection in fuel dispensers with fault finding and rectification	Compulsory	30
6	Basic concepts of machines	Demonstrate the basic operations of Lathe, drill and welding machines	Compulsory	30
7	General assembly and testing	Describe general assembly of dispensing pump and calibration procedure	Compulsory	30
		TOTAL		210

SYLLABUS:

SI.	SI. Module Content				
No.		Content			
1	Basics Of ISO,5S Methodology & Soft Skill	Knowing Each Other History of Petrol Pump , Brief introduction on Dispensers Types of Petrol Pumps Fundamentals Of ISO & IMS, Basics of 5S, Kaizen , 3M Keeping of Tools under 5S Methodology Safety requirement at Fuel Dispensing Pump			
2	Pump and Metering unit	Functions of Pump Unit Types of Pumps Briefing on connections and Internal Spare Parts Fault Findings & Rectification Functions of Metering Unit Briefing on connections and Internal Spare Parts Fault Findings & Rectification			
3	Mechanical & Electronics Register	Details of Mechanical Register Assembly (MRA) Functions of Quantity Wheel, Totalizer etc. Fault Findings & Rectification Details of Electronic Register Assembly (ERA) Functions of Display Card, Controller Card & Key Pad etc Soldering Fault Findings & Rectification			
4	Delivery Nozzle & pipeline fittings	Manual Nozzle Auto-cut off Nozzle Fitment of Hose, Hose Coupling & Swivel Joint etc Functions of Angular Check Valves & Pressure Vacuum Valve & Vent Hood etc Functions of Fill Cap, Dip Cap & Silica Jel etc Fault Findings & Rectification			
5	Electrical connections	Electrical Connections regarding Fuel Dispensers Fault Findings & Rectification Operational knowledge of Measuring Instruments like Vernier Caliper, Micro Meter, Volt Meter & Amp Meter, Clamp Meter, Tacho meter Etc.			
6	Basic Concepts of Machines	Basic Operations of LATHE , Drill & Welding Machines ,Press etc, Fault Findings & Rectification Maintenance of Machines			
7	General assembly and testing	Schematic Diagram of Dispensing Pump Handhold Training on Fitment Of All Sub-Assemblies Of Dispensers Volume & Liquid Measurement Calibration And Sealing Procedure Certification/Approval & Statutory Requirement Job Report Writing			

List of Tools, Equipment & materials needed for 30 Trainees

SI No	Items Name	Specification	Qty
1	Apron		30
2	Safety shoes		30 pairs
3	Helmet		30
4	Vernier calipers		4
5	Micrometer		2
6	Tacho meter		2
7	Multimeter		6
8	Clamp meter		15
9	Soldering iron		4
10	Desoldering pump		4
11	Fire fighting equipment		4
12	Dispensing pump set		2
13	Test set up (Both mechanical &		5
	Electronics		
14	Suitable no of testing equipment's		15 sets
	including capacity measures		
15	Tools and tackles (Allen key, adjustable		10 sets
	range, plier, hammer, cross head		
	screwdriver, spanner, tester)		
16	Storage tank with diesel		2
17	Working tables		5
18	Computer with internet		1
19	LCD projector		1
20	White board		1
21	Marker		As required
22	Flip chart		As required
23	Sanitizer		As required

Marks Distribution

Outcome	Outcome Code	Total Th marks	Total Pr marks
Explain the fundamental of ISO and 5S methodology	ELE/1026/OC1	40	100
Demonstrate the functions of pump and metering unit along with fault finding and rectification	ELE/1026/OC2	40	100
Explain the functions of Mechanical and electronics register assembly	ELE/1026/OC3	40	100
Recognize the different nozzle and functions of different valves	ELE/1026/OC4	40	100
Illustrate the electrical connection in fuel dispensers with fault finding and rectification	ELE/1026/OC5	40	110
Demonstrate the basic operations of Lathe, drill and welding machines	ELE/1026/OC6	50	100
Describe general assembly of dispensing pump and calibration procedure	ELE/1026/OC7	40	100