

## Plumbing and Sanitary Works

### Course Code NARQ40040-PROCESS: Session Plan

Day	Session	Subject
1	I	Registration & Inauguration
	II	About the Institute, rules & regulations of training/institute
	III & IV	Micro lab – Ice breaking exercise
2	I	Achievement Motivation – Confidence building
	II	Why self employment – Advantages over wage employment, Entrepreneurship Development – What, Why & How? – Introduction
	III & IV	Entrepreneurial competencies – Importance, explanation with examples, case study for identification of different competencies
3	I	Problem solving–explanation through case studies and exercises, Creativity – Creative thinking
	II	Time management
	III & IV	Risk taking and Goal setting - Ring Toss exercise
4	I	Role of Plumber, Description of trade ,
	II	Types of Fitting, Types of Solvent, Types of Solution-Theory
	III & IV	Site Drainage system – Blockage, use of chemicals
5	I	Examining the sketches, drawings and specifications
	II	Use and store of tools and equipment's in a safe manner
	III & IV	Knowledge of measurements and its conversion to other system – Theory & Practical
6	I-IV	Adhesives – Types & application. Pipes – Types, Dimension, uses. Joints– Types, uses, applications and bathroom fittings
7	I	Tower building – Eradicating dependency syndrome
	II- IV	Chamber connection - Chasing
8	I-II	Knowledge of various types of pipes with color code and selection of pipe as per work specific uses, Pipe fittings, methods of joint. Types of pipe and fittings. Chain Wrench
	III-IV	Installing PVC pipe work including selection of pipes, measurement of pipes and fitting, bending of pipes to given specification, making joints by using adhesive or couplings.
9	I to IV	Methods of laying pipes in building through floors, beams and columns.
10	I	Effective communication skills
	II to IV	Locating and marking pipe positions, pipe connections, holes for pipes in walls and floors
11	I-IV	Methodology of cutting for openings in walls and floors for accommodating pipes/pipe fittings using hand/power tools
12	I-IV	Cut openings in walls and floors to accommodate pipes and pipe fittings using hand or power tools
13	I	Significance of ventilation of fresh water pipes and soil pipes
	II-IV	Assembling and installing sanitary fixtures including installation of sinks, bath tubs, water closets with cistern
14	I	Experience sharing – Interaction with successful entrepreneur
	I to IV	Sensor wash Basin & Urinals fitting & Installation- Theory & Practical
15	I-III	Installation of domestic water pumps - Adjusting of ball valves to prevent overflow, connection to soil pipes
	IV	Market survey – Theory
16	I to IV	Market survey – Collection of information and field visits of Industry and construction site visit

17	<b>I &amp; II</b>	Market survey – Report writing, presentation, group discussion & a
	<b>III &amp; IV</b>	Rules, regulations, procedures and specification of products by the Municipality/ Corporation regarding the standards of plumbing
	<b>Post Evening</b>	<b>Midterm evaluation test</b>
18	<b>I to III</b>	Assembling, installing, & repairing pipes, fittings and fixtures of heating, water, sanitary and drainage systems as per the required specifications
	<b>IV</b>	Assembling, installing, & repairing pipes, fittings and fixtures of heating, water, sanitary and drainage systems as per the required specifications
19	<b>I to IV</b>	Joining pipes using threaded fittings, flanged fittings, methods of flared, wiped, slip, sleeve or clamp joints, using solder, plastic solvent and box joints
20	<b>I to IV</b>	Assembling and installing valves, pipe fitting and pipes composed of materials such as iron, steel, brass, copper, lead and nonmetals such as vitrified clay, cement, plastic or PVC using hand tools & power tools.
21	<b>I</b>	Marketing management – 4Ps of marketing, managing the customers
	<b>II-IV</b>	Test systems by water or air and reading pressure gauges to determine the fulfilling of the specification of the system. Determination of the faults if any.
22	<b>I to IV</b>	Installing of European type W.C., Indian type W.C., Bath Fitting
23	<b>I to IV</b>	Installing and repairing plumbing fixtures such as water tanks, bidets, showers, urinals, water drainage systems, gutters, fall pipes and soil pipes-Connection of chambers.
24	<b>I &amp; II</b>	Working at heights – Use of ladders and scaffolds, safe working practices including material storage, manual lifting, and inspection of tools. Working of stepladders, scaffold towers, ladders, bamboo scaffold etc.
	<b>III</b>	Pipe support and pipe fixing brackets
	<b>IV</b>	Installation of Solar water system
25	<b>I &amp; II</b>	Orientation to plumbing works in commercial/industrial setup
	<b>III &amp; IV</b>	Boat making exercise – systematic approach
26	<b>I to IV</b>	Installation of rainwater harvesting system
27	<b>I to IV</b>	Carrying out simple system design work and estimating installation cost and repair cost
28	<b>I &amp; II</b>	Visit to servicing units of successful entrepreneurs
	<b>III</b>	Costing, pricing – Fixed cost, variable cost, breakeven point etc.
	<b>IV</b>	Maintenance of records & book keeping – Methodology
29	<b>I &amp; II</b>	Banking– Deposits & advances, lending schemes/Government schemes
	<b>III &amp; IV</b>	Business plan/project report preparation
	<b>I</b>	Human Relations
30	<b>II</b>	Launching formalities – Steps in launching of an enterprise Pitfalls and their control
	<b>III</b>	Final Evaluation Test
	<b>IV</b>	Feedback & Valedictory