

**SYLLABUS
FOR
SHORT-TERM COURSE**

IN

BASIC PLUMBING TECHNIQUES

**UNDER
STATE COUNCIL FOR VOCATIONAL TRAINING (SCVT)
DEPARTMENT OF TECHNICAL EDUCATION VOCATIONAL
& INDUSTRIAL TRAINING HIMACHAL PRADESH,
SUNDERNAGAR.**

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Group Instructor
Govt. I. T. I. Ghumarwin (H.P.)

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1987 Plumber

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Principal
Govt. I.T.I. Ghumarwin
Distt. Bilaspur (H.P.)

BASIC PLUMBING TECHNIQUES

This program is aimed at training candidates for the job of a "PLUMBING" in the "CONSTRUCTION" Sector/Industry and aims at building the following key competencies amongst the learner.

1. Pre-requisites to Training : 8th Class Pass or above from Recognized Board.
2. Batch Size/ Intake : 10 to 20 Trainees per Batch
3. Course Duration : 150 Hours.

4. Introduction

Plumbing worker has a significant role in water supply System and sanitation works in villages, cities and towns. Taps connection for drinking water from main water resources and drainage arrangement has become common things for health point view. Fixing of sanitary fittings too is vital.

5. Objectives

At the end of the course the trainee shall be,

1. able to do Assist in plumbing works for any structure,
2. able to fix all sorts of taps, fittings, toilet arrangements and drainage works,
3. able to know the operation of tools

6. Skills to be provided

1. Handling and use of plumbing tools,
2. Handling different water works using plumbing techniques and methods in pipe laying, pipe joining and water meters, etc.
3. Finding water leakage problems and their remedies in pipe lines and repairs.


7. Employment Opportunities


a. Wage

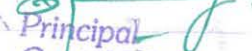
After completing the short term course the student can join with any plumbing work in construction work, private hotels / hospitals and in industries as a Assistant Plumber to take care of water/sanitation system.

b. Self

Now days almost all villages and towns have water works and drainage problems like major cities. The plumber services are more required like fitting taps, pipe connection, drainage pipe connection, erection of wash basins, sinks, urinal flushing arrangements and attending day to day servicing to repair the pipes and leakage Works on contract basis in cinema halls, hotels, hospitals & Industries etc.


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BASIC PLUMBING TECHNIQUES
Duration 150 Hours**

Hours for Training	Theory	Practical
30 Hours	Introduction of Course, Types of works to be done in Basic Plumbing Techniques works.	Importance of the Course, safety precautions to be taken while doing
	Use of Plumber hand tools, names of the tools	First aid, usage of tools and determine the materials from which they are made.
	Types of traps and its uses	Fixing of floor traps/boatel trap in bath and kitchen.
30 Hours	Description of soil waste pipe, vent pipe and its importance, siphon pipe and its importance	Cutting of pipes Different Material, Fixing of waste pipe with bends, junction, jointing, fixing of vent pipe.
	Values used in plumbing system (sluice valve), reflux valve, scour valve, air valve, pressure relief valve.	Simple pipe connections using G.I. pipe to the sanitary fittings. Use different types of valves and fittings.
20 Hours	Water main street line in water storage as well as soil pipe and drainage system.	Laying and jointing of cast iron pipes (lead pouring and lead caulking), (C.I. Socket pipe heavy, duty joining molten Cloth, lead.)
20 Hours	PVC/CPVC description of ISI specifications of pipes.	Practicing on cutting and shaping PVC/CPVC pipes to sizes, use and fixing of PVC/CPVC Pipes.
20 Hours	Methods applied for lift pump valves and taps used in service connection, air lock in the pipes and its removal.	Installing Electric pump, finding out the defects and rectifying the same. Fixing of showers in toilets.
30 Hours	Storage tanks for general water supply purpose. Steel tanks, masonry tanks automatic float switch underground tanks.	Erecting simple water supply system as per layout. Introducing valves where ever necessary and connecting to the storage tanks.
	Causes for damage in taps, valves and water meter and tank, etc. methods of rectification and modification.	Reconditioning of taps, valves, flushing tanks. Testing for correct functioning, Repair all Leakages work etc.

Reference Books:-

1. Plumbing and Sanitary Engineering (Trade Theory & Trade Practical).
2. Public Health and Engineering.
3. Plumber Trade Theory/Trade Practical by NIMI.

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