

## Syllabus for Piped water Supply Management and Conservation Coordinator

<b>Course Name</b>	Piped water Supply Management and Conservation Coordinator
<b>Sector</b>	Plumbing
<b>Course Code</b>	PLM/2024/PWMC/275
<b>Occupation</b>	Jal Mitra
<b>Level</b>	4
<b>Job Description</b>	This job role is responsible for supervising the construction, maintenance, and repair of water conservation structures in villages, farms, and small communities, including tasks related to soak pits and kitchen gardens reusing grey water. Ensure functionality of IoT-based monitoring systems for rural water supply, demonstrate resource-efficient practices, assess the quality of water, apply health and safety measures, and support Village Water and Sanitation Committees in planning and community engagement.
<b>Course Duration</b>	510 Hrs (Theory- 90 Hrs + Practical- 210 Hrs, Employability Skill – 60 Hrs, OJT: 150 Hrs.)
<b>Trainees' Entry Qualification</b>	12th Grade Pass OR Pursuing 3 <sup>rd</sup> year of 3 Years Diploma in Civil Engineering after 10th OR 10 <sup>th</sup> + ITI with 2 years of relevant experience OR 8 <sup>th</sup> Grade Pass with 2 years of NTC and 2 Years relevant experience OR Previous relevant qualification of NSQF Level-3(Junior Plumber/ Assistant Plumber General) with minimum 8 <sup>th</sup> Grade Pass and 3 Years relevant Experience. OR Previous relevant qualification of NSQF Level-4 (Plumber General) with minimum 8 <sup>th</sup> Grade Pass with 1 Year relevant Experience.
<b>Trainers Qualification</b>	M.E./M.TECH IN CIVIL ENGINEERING OR CONSTRUCTION ENGINEERING / B.E./B.TECH IN CIVIL ENGINEERING OR CONSTRUCTION ENGINEERING / DIPLOMA IN CIVIL ENGINEERING 2 YEAR FOR M.E./M.TECH, BE/B.TECH, 4 YEARS FOR DIPLOMA

### Structure of Course:

Module No.	Module name	Outcome	Theory (Hrs)	Practical (Hrs)	Total (Hrs) [Multiple of 30]
1	Jal Jeevan Mission and Water supply system	Demonstrate the activities of the Jal Jeevan Mission along with the Water supply system	20	40	60
2	Water Quality Monitoring	Maintain and Monitor the Water Quality Standard	10	20	30
3	Operation & Maintenance of Water Supply System	Identify the Operation and Maintenance of the Water Supply System	05	25	30

Module No.	Module name	Outcome	Theory (Hrs)	Practical (Hrs)	Total (Hrs) [Multiple of 30]
4	Water Conservation	Perform construction, maintenance and repair of water conservation structure applying water conservation principle.	10	20	30
5	Grey Water Management	Perform Grey Water Management	05	25	30
6	Monitoring and Management of Water Distribution System	Monitor the Water Distribution System using the appropriate technology	20	40	60
7	Awareness Generation in Community Level	Implement water-related schemes through activities like coordinating with committees, organizing awareness campaigns, training workers, and maintaining records	10	20	30
8	Health & Safety	Apply safe working Practices	10	20	30
9	OJT	Work in real job situation with special emphasis on basic safety and hazards in this domain (OJT).	--	150	150
10	Employability Skill	As per guided curriculum	60	--	60
TOTAL:			150	360	510

### Module No. 1: Jal Jeevan Mission and Water supply system

**Outcome:** Demonstrate the activities of the Jal Jeevan Mission along with concept of Water supply system

#### Theory Content:

- Explain the relevance of Jal Jeevan Mission.
- State the key features of Jal Jeevan Mission.
- Explain the relevance of FHTCs (Functional Household Tap Connections)
- Knowledge of drinking water supply per capita per day
- Explain the service level to be provided to the population
- Benefits of JJM.
- List the roles and responsibilities of Nal Jal Mitras.
- Concept of availability of useable fresh water
- Explanation of surface water, ground water, glacier, well etc. as available fresh water
- Concept of water supply from ground water, treated surface water, sub-surface water, and spring water according to the geographic regions
- Concept of Piped Water Supply to the community as well as households

- Description of pipeline networking system for water supply
- Concept of centrifugal pump, multistate centrifugal pump, submersible pump etc. for water supply
- Explanation on surface water treatment system
- Explanation on sub-surface water & ground water extraction and supply system
- Explanation on under gravity flow water supply system
- Description of disinfection process (Chlorination technique) of supplied water
- Concept of supplied piped water to be properly used for drinking, cooking, washing hands & mouth etc.

**Practical:**

- Demonstration on pipeline network laying system
- Expression of various pumps (submersible pump, centrifugal pump) operating system
- Collection mechanism of ground water and sub-surface water
- Surface water treatment process
- Water disinfection (Chlorination technique) process

**Classroom Aids:**

Computer, Projector, Power point slides, Note book for participants, hardcopy of Guide notes.

**Tools, Equipments and other facilities:**

Tools for digging soil, tape measure, leveling tool, plumb bob, CPVC pipes and fittings, valves ,water treatment kits, submersible pump, centrifugal pump, 1000 Liter drum with lid storage tank

**Module 2: Water Quality Monitoring**

**Outcome:** Maintain and Monitor the Water Quality Standard

**Theory Content:**

- Concept of drinking water quality as per BIS 10500 norms
- Concept of chemical as well as bacteriological contaminations of drinking water
- Description of basic parameters of drinking water quality
- Concept of Physical parameters, Chemical parameters & Bacteriological parameters of drinking water quality
- Emphasized description on important parameters like Arsenic, Fluoride, Chloride, Iron etc.
- Explanation on outbreak of diseases by various chemical/bacteriological contaminations
- Brief concept on remedial measures of contaminations of water

**Practical Content:**

- Description of Water quality standard as per BIS 10500
- Demonstration on laboratory testing process of basic parameters of drinking water including field testing procedure of 'Free Residual Chlorine'

**Classroom aids:**

Computer, Projector, Power point slides, Note book for participants, hardcopy of Guide notes.

**Tools, Equipments and other facilities:**

water treatment kits, beaker, measuring cylinder made of glass, bleaching powder, storage tank

**MODULE 3: Operation & Maintenance of Water Supply System**

**Outcome:** Identify the Operation and Maintenance of the Water Supply System

**Theory Content:**

- Concept of pipeline maintenance including ferrule, tap connection etc.
- Explanation on pump operation, valve operation & control of OHR etc.
- Description on detailed distribution networking system
- Concept of maintenance of pumping machinery
- Description on leakage bursting of pipelines and its repairing mechanism
- Concept of OHR repairing & maintenance process
- Concept on construction of platforms for projection of community level water supply standposts, OHR, pump houses etc.

**Practical Content:**

- Demonstration on pipelines maintenance including ferrule, tap connection etc.
- Demonstration on pump operation, valve operation & control of OHR etc.
- Presentation of detailed distribution networking system
- Detailing on maintenance of pumping machinery
- Conceptualization on leakage bursting of pipelines and its repairing mechanism
- Demonstration of OHR maintenance process
- Training on masonry work for construction of OHR, pump houses, platforms for projection of community level water supply standposts etc.

**Classroom aids:**

Computer, Projector, Power point slides, Note book for participants, hard copy of Guide notes.

**Tools, Equipments and other facilities:**

Ferrules of different sizes, taps, basic plumbing tools, masonry items such as cement, sand, stonechips, bricks etc, basic masonry tools.

**MODULE 4: Water Conservation**

**Outcome:** Perform construction, maintenance and repair of water conservation structure applying water conservation principle.

**Theory Content:**

- Concept of various natural sources of water.
- Discuss the global, national and regional water crises scenario.
- Discuss the role of community and organizations in water conservation.
- Explain various water conservation structures and their applications, such as, contour trenches, ponds, watersheds, water basins, stop dams, etc.
- Knowledge on monitoring of wastage of water
- List the criteria for selection of a simple water conservation structure suitable for a village dwelling, farm or small community
- Discuss the procedures and precautions for conservation of rain water in water conservation structures.
- State the measures to be taken to avoid water contamination, erosion and sedimentation while collecting and storing water in water conservation structures.

**Practical Content:**

- Calculate the rain water harvesting potential based on annual rainfall for a catchment area including a rooftop, farm or small community.
- Demonstrate the tasks related to construction of water conservation structures by performing masonry works including bricklaying, preparation of mortar, concrete etc.
- Demonstrate the cleaning and maintenance activities that are performed regularly on water conservation structures.
- Show the steps to repair faulty water conservation structures

**Classroom aids:**

Computer, Projector, Power point slides, Note book for participants, hardcopy of Guide notes.

**Tools, Equipments and other facilities:**

Masonry items such as cement, sand, stonechips, bricks etc, basic masonry tools. Rain water collecting tank, pvc pipes and fittings, rooftop space of sufficient size to collect and measure rain water

**Module No. 5: Grey Water Management**

**Outcome:** Perform Grey Water Management

**Theory Content:**

- Definition of grey water and its difference with potable of water in households.
- Types of grey water as per its sources.
- Environmental benefits of reuse of grey water
- Quality checking and estimation of grey water quantity coming from its different sources.
- Different uses of grey water
- Construction of structures related with reuse of grey water
- List of materials and tools needed for construction of soak pits with estimation of cost.
- Repair and maintenance technique of soak pits.
- Measures to be taken to prevent contamination of potable water by grey water.
- Selection of location of soak pit to avoid contamination
- Use of grey water in kitchen gardens.

**Practical Content:**

- Calculate the quantity of grey water generated by a village household per day.
- Check Potable water, Grey water and Sewage water quality by measuring kits..
- Design of a soak pit for a particular given capacity based on soil condition.
- Demonstrate the steps involved in the construction of soak pit used for seepage of grey water to soil and thereby ground water recharge.
- Demonstrate the steps involved in the construction of a kitchen garden for the reuse of grey water
- Detection of faults in soak pits and kitchen gardens and their corresponding remedial measures.

**Classroom aids:**

Computer, Projector, Power point slides, Note book for participants, hard copy of Guide notes.

**Tools, Equipments and other facilities:**

Dwelling unit using water on a daily basis for various purposes with available land for kitchen garden and soak pit, Potable water Grey water, and black water samples, water quantity measurement tools, tools for digging soil, tape measuring tape(5 meter and 30 meter), leveling tool, plumb bob, CPVC pipes and fittings, 1 feet diameter Hume/RCC pipe and fittings, valves (2-way and 3-way), RWH

structure, flush, sealing solution/paste, pegs, rope, boulders and round stones, masonry materials and tools, filter media, water quality measurement kits.

## **Module No. 6: Monitoring and Management of Water Distribution System**

**Outcome:** Monitor the Water Distribution System using the appropriate technology

### **Theory Content:**

- Types of sensors and their applications in water distribution network in rural area.
- Types of IoT based equipment used in remote water monitoring and management.
- Types of information available from the dashboards of remote water monitoring systems and their use.
- Troubleshooting of common faults that could occur in an IoT based remote water monitoring system.
- Discuss the health, safety and security guidelines to be adhered to while dealing with IoT based remote water monitoring

### **Practical Content:**

- Reading of the information available in the dashboards of remote water monitoring system and interpretation of those data.
- Perform the steps to check the cables for any damage or improper usage.
- Troubleshooting of the IoT based remote water monitoring system.
- Mock drill for safety and security to be adhered to while dealing with IoT based remote water monitoring

### **Classroom aids:**

Computer, Projector, Power point slides, Note book for participants, hard copy of Guide notes.

### **Tools, Equipments and other facilities:**

Computer, Analogue and digital sensors that measure temperature, water level, pressure etc, ground water level sensor, flow sensor, water level sensor inside water tank, bore-well, IoT based Piped Water Monitoring System

## **MODULE 7: Awareness Generation in Community Level**

**Outcome:** Implement water-related schemes through activities like coordinating with committees, organizing awareness campaigns, training workers, and maintaining records

### **Theory:**

- Discuss various solutions and schemes related to water conservation and efficient water usage.
- Discuss the role of community and importance of mobilizing community members for successful implementation of water conservation and efficient water usage practices and schemes.
- State the roles and responsibilities of village water and sanitation committee (VWSC) and other rural committees
- Discuss the social and behavioral change required at the community level.
- Discuss the possible ways to deal with grievances and problems appropriately and effectively
- Describe the process of estimation and costing of materials and labour.
- State the importance of maintaining records of materials consumed and inventory.
- Explain the basic accounting principles for micro enterprise.
- Explain how to calculate margins and cash- flow.

**Practical:**

- Dramatize co-ordination activities with the village Water and Sanitation Committees (VWSC) and gram panchayat for implementation of schemes for water conservation and efficient water usage.
- Demonstrate the activities involved in conducting workshops, distributing flyers, organizing rallies and other awareness building activities as part of promotion campaigns.
- Demonstrate the best practices for training of workers on performing various plumbing tasks correctly.
- Show how to maintain records of the materials consumed and inventory.
- Show how to maintain accounts for incomes/revenues, expenses, margins and cash-flows.

**Classroom aids:**

Computer, Projector, Power point slides, Note book for participants, hard copy of Guide notes.

**Tools, Equipments and other facilities:**

Smartphone, sample promotion media materials, stationary

**Module 8: Health & Safety**

**Outcome:** Apply safe working Practices

**Theory:**

- Discuss the specific safety and health related problems faced in domestic, commercial and institutional setups.
- List the various types of hazards (such as physical, fire, chemical compounds and electrical) that could affect the work process.
- List the various hazardous environments and common hazards that can occur during plumbing installation and maintenance along with their precautions and remedial measures.
- Discuss the importance of various types of personal protective equipment (PPE).
- Discuss where the general health and safety equipment commonly kept at the workplace.
- Discuss various causes of fire and precautionary activities (such as using extinguishers, water hose, sprinklers, sand bucket, wet blanket, etc. and materials such as water, powder, foam, CO<sub>2</sub>, fire extinguishing chemical, sand, blanket, etc. to prevent the fire accident.
- Discuss appropriate basic first aid treatment relevant to the condition e.g. shock, electrical shock, bleeding, minor burns, poisoning, eye injuries etc.
- Discuss potential injuries and health problems associated with incorrect handling of tools and equipment.

**Practical:**

- Perform inspection of a work area in order to identify risks and hazards.
- Apply various health and safety precautions to be taken during plumbing work.
- Apply personal and workspace hygiene and sanitation practices.
- Demonstrate the correct use of fire extinguishers.
- Dramatize, using role play, safe methods of freeing a person from electrocution.
- Perform appropriate first aid treatment for various conditions such as bleeding, burns, choking, electric shock and poisoning and injury.
- Demonstrate the process of providing cardiopulmonary resuscitation (CPR). Classroom aids: Computer, Projector, Power point slides, Note book for participants, hard copy of Guide notes.

**Tools, Equipments and other facilities:**

Personal protective equipment (such as eye protector, hard hats, safety belts, gloves, protective clothing), plumbing tools and materials, power tools, required machinery, fire extinguisher, first aid kit.

**Module No. 9: OJT**

**Outcome:** Work in real job situation with special emphasis on basic safety and hazards in this domain

**Practical Content:**

Assessor will check report prepared for this component of Practical training of the course and assess whether competency has been developed to work in the real job situation with special emphasis on basic safety and hazards in this domain. (The trainee is expected to undertake work in actual workplace under any supervisor / contractor for 150 Hours.)

**Module No. 10: Employability Skills (60 Hrs)**

Key Learning Outcomes

Introduction to Employability Skills

Duration: 1.5 Hours

1. Discuss the Employability Skills required for jobs in various industries
2. List different learning and employability related GOI and private portals and their usage

Constitutional values - Citizenship

Duration: 1.5 Hours

3. Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen
4. Show how to practice different environmentally sustainable practices.

Becoming a Professional in the 21st Century

Duration: 2.5 Hours

5. Discuss importance of relevant 21st century skills.
6. Exhibit 21st century skills like Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.
7. Describe the benefits of continuous learning.

Basic English Skills

Duration: 10 Hours

8. Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone
9. Read and interpret text written in basic English
10. Write a short note/paragraph / letter/e -mail using basic English

Career Development & Goal Setting

Duration: 2 Hours

11. Create a career development plan with well-defined short- and long-term goals

Communication Skills

Duration: 5 Hours

12. Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.
13. Explain the importance of active listening for effective communication



14. Discuss the significance of working collaboratively with others in a team

Diversity & Inclusion

Duration: 2.5 Hours

15. Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD

16. Discuss the significance of escalating sexual harassment issues as per POSH act.

Financial and Legal Literacy

Duration: 5 Hours

17. Outline the importance of selecting the right financial institution, product, and service

18. Demonstrate how to carry out offline and online financial transactions, safely and securely

19. List the common components of salary and compute income, expenditure, taxes, investments etc.

20. Discuss the legal rights, laws, and aids

Essential Digital Skills

Duration: 10 Hours

21. Describe the role of digital technology in today's life

22. Demonstrate how to operate digital devices and use the associated applications and features, safely and securely

23. Discuss the significance of displaying responsible online behavior while browsing, using various social media platforms, e-mails, etc., safely and securely

24. Create sample word documents, excel sheets and presentations using basic features

25. utilize virtual collaboration tools to work effectively

Entrepreneurship

Duration: 7 Hours

26. Explain the types of entrepreneurship and enterprises

27. Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan

28. Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement

29. Create a sample business plan, for the selected business opportunity

Customer Service

Duration: 5 Hours

30. Describe the significance of analyzing different types and needs of customers

31. Explain the significance of identifying customer needs and responding to them in a professional manner.

32. Discuss the significance of maintaining hygiene and dressing appropriately

Getting Ready for apprenticeship & Jobs

Duration: 8 Hours

33. Create a professional Curriculum Vitae (CV)

34. Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively

35. Discuss the significance of maintaining hygiene and confidence during an interview

36. Perform a mock interview

37. List the steps for searching and registering for apprenticeship opportunities

## Learning Outcome – Assessment Criteria

Module No.	Outcome	Assessment Criteria
1	Demonstrate the activities of the Jal Jeevan Mission along with the Water supply system	<p><b>After completion of this module students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify the objective of Jal Jeevan Mission and the role of Jal Mitra</li> <li>• identify the different sources of useable water</li> <li>• develop planning of pipeline networking system for water supply</li> <li>• Identify different water purification and disinfection (chlorination) process.</li> <li>• Describe the function of centrifugal pump, multistate centrifugal pump, submersible pump etc. used for water supply system.</li> </ul>
2	Maintain and Monitor the Water Quality Standard	<p><b>After completion of this module students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Check the quality of water as per BIS 10500</li> <li>• Identify different types of chemical and bacteriological contaminants usually present in raw water and their effect on human body.</li> <li>• Describe the remedial measures to be taken for contaminated water.</li> </ul>
3	Identify the Operation and Maintenance of the Water Supply System	<p><b>After completion of this module students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify the fixtures such as ferrule, taps etc. used in piped network system</li> <li>• Explain the different pump and valve operations</li> <li>• Suggest the maintenance and repair procedure of piped network system</li> <li>• Describe functioning of Pump house and Overhead water reservoir.</li> </ul>
4	Describe the concept of water conservation	<p><b>After completion of this module students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Describe the need of conservation of water</li> <li>• Identify the different types of water conservation structures.</li> <li>• Explain the importance of rain water harvesting</li> <li>• Describe the process of maintenance of water conservation structures.</li> </ul>
5	Perform Grey Water Management	<p><b>After completion of this module students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Identify grey water coming from village dwellings, farms and small communities.</li> <li>• Give necessary management of grey water for its appropriate reuse</li> </ul>

Module No.	Outcome	Assessment Criteria
		<ul style="list-style-type: none"> <li>• Participate in the activities involved in construction of soak pits and kitchen gardens for reuse of grey water in households and communities.</li> <li>• Participate in the activities involved in repair and maintenance of soak pits and kitchen gardens for reuse of grey water in households and communities.</li> </ul>
6	Monitor the Water Distribution System using the appropriate technology	<p><b>After completion of this module students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Define the role of sensors and IoT based equipment in remote water monitoring and management.</li> <li>• Demonstrate the parameters involved in assessing the functionality of IoT based remote monitoring systems used in rural water supply network.</li> </ul>
7	Describe water conservation solutions and community mobilization with record-keeping	<p><b>After completion of this module students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Describe water conservation solutions and schemes.</li> <li>• Illustration of Community Mobilization, Social and Behavioral Change, and Roles of Committees</li> <li>• Demonstrate coordination activities with Village Water and Sanitation Committees (VWSC) and gram panchayats</li> <li>• Calculate margins and cash flow for water conservation projects.</li> <li>• Maintain accurate records of materials consumed and inventory.</li> <li>• Use of communication techniques in workshops and awareness-building activities.</li> <li>• Describe water conservation solutions, community mobilization, and record-keeping.</li> <li>• Collaborate with VWSC, gram panchayats, and other stakeholders during practical demonstrations and awareness-building activities.</li> </ul>
8	Apply safe working Practices	<p><b>After completion of this module students will be able to:</b></p> <ul style="list-style-type: none"> <li>• Maintain procedures to achieve a safe working environment in line with occupational health and safety regulations and requirements according to workplace policy.</li> <li>• Recognize any unsafe situations according to workplace policy, and assess his report accordingly.</li> <li>• Take necessary precautions on fire and safety hazards and report according to workplace policy and procedures.</li> <li>• Prepare report/record in the event of accident or sickness of any staff, including accident details according to accident/injury procedures</li> </ul>

Module No.	Outcome	Assessment Criteria
		<ul style="list-style-type: none"> <li>• Demonstrate Personal Protective Equipment (PPE) and use the same as per related working environment.</li> <li>• Demonstrate basic first aid &amp; CPR and use them under different circumstances.</li> <li>• Identify different fire extinguishers and to use the same as per requirement in a mock drill</li> </ul>
9	OJT	Assessor will check report prepared for this component of Practical training of the course and assess whether competency has been developed to work in the real job situation with special emphasis on basic safety and hazards in this domain. (The trainee is expected to undertake work in actual workplace under any supervisor / contractor for 150 Hours.)
10	Employability Skill	As per guided curriculum

**List of Tools, Equipment & materials needed for 30 Trainees (Practical)**

Sl No	Items Name	Qty
1	Tools for digging soil	6 nos
2	Tape measure (5 meters and 30 meters)	4 nos
3	Leveling tool	4 nos
4	Plumb bob	4 nos
5	CPVC pipes and fittings	As required
6	Valves (2-way and 3-way)	4 nos each
7	Water treatment kits	4 nos
8	Submersible pump	1 no
9	Centrifugal pump	1 no
10	1000-liter drum with lid	1 no
11	Storage tank water treatment kits	1 no
12	Beaker (for measuring liquids)	6 nos
13	Measuring cylinder made of glass	10 nos
14	Bleaching powder	As required
15	Storage tank ferrules of different sizes	4 nos each
16	Taps	10 nos
17	Basic plumbing tools	4 nos
18	Masonry items such as cement, sand, stone chips, bricks, etc.	As required
19	Basic masonry tools	10 nos
20	Rainwater collecting tank	1 no
21	PVC pipes and fittings	10 nos
22	Dwelling unit using water on a daily basis	2 nos
23	Water quantity measurement tools	10 nos
24	1-foot diameter Hume/RCC pipe and fittings	10 nos
25	RWH structure	1 no
26	Flush	4 nos
27	Sealing solution/paste	As required
28	Pegs and rope	As required
29	Boulders and round stones	As required

SI No	Items Name	Qty
30	Water quality measurement kits	10 nos
31	Computer	1 no
32	Analogue and digital sensors (temperature, water level, pressure, etc.)	4 nos each
33	Groundwater level sensor	4 nos
34	Flow sensor	4 nos
35	Water level sensor inside water tank	2 nos
36	Bore-well	1 no
37	IoT-based Piped Water Monitoring System	2 nos
38	Smartphone	1 no
39	Personal protective equipment (eye protector, hard hats, safety belts, gloves, protective clothing)	30 nos
40	Power tools	1 no
41	Fire extinguisher	2nos
42	First aid kit	1 no

### Marks Distribution

Outcome	Outcome Code	Total Th marks	Total Pr marks	Total OJT marks
Demonstrate the activities of the Jal Jeevan Mission along with the Water supply system	PLM/3003/OC1	40	90	0
Maintain and Monitor the Water Quality Standard	PLM/3003/OC2	10	60	0
Identify the Operation and Maintenance of the Water Supply System	PLM/3003/OC3	10	70	0
Perform construction, maintenance and repair of water conservation structure applying water conservation principle.	PLM/3003/OC4	20	70	0
Perform Grey Water Management	PLM/3003/OC5	10	70	0
Monitor the Water Distribution System using the appropriate technology	PLM/3003/OC6	40	90	0
Implement water-related schemes through activities like coordinating with committees, organizing awareness campaigns, training workers, and maintaining records	PLM/3003/OC7	10	70	0
Apply safe working Practices	PLM/3003/OC8	10	70	0
OJT	PLM/3003/OC9	0	0	300
Employability Skills – 60 Hrs	DGT/VSQ/N0102	50	0	0