## <u>DETAILED SYLLABUS FOR THE POST OF METER READER IN KERALA</u> <u>WATER AUTHORITY - Cat No:279/2025</u>

MODULE	SUB HEADING	MARKS
1. SAFETY	1. Importance of safety and general precautions required for the trade. 2. Safety attitude development of the trainee by educating them to use Personal Protective Equipment (PPE).	5 Marks
2. Carry out cutting of Pipes of Different Dia in different angle and Joining of pipes by gas welding, Soldering and Brazing	1. Method of gas welding 2. Joining of Pipe in same dia by gas welding. 3. Method of soldering and brazing, flux users& Type of flux 4. Hard & soft solders -their properties, composition and uses	10 Markes
3. Construct Masonry brick wall and RCC casting. Brick wall cutting for concealing pipe line.	<ol> <li>Concept of bricks, lime and cement</li> <li>Preparation of mortars with various materials of varying composition</li> <li>Common brick joints.</li> <li>Plain cement concrete, RRC and Its proportion</li> <li>Grades of coarse aggregate and fine aggregate,</li> <li>Identify plumbing services required for each type of building according to usage.</li> </ol>	15Markes
4. Construct complete pipe line circuit with different types of Joints and fixing Cocks & valve on Pipe line.	1. Types of fittings for different joints & different pipes.:- CI,HCI,AC,AC Pressure, DI, GI Pipes 2. Joints:- Flange joint, Socket joint 3. Description of pipe fittings. 4. Methods of joining and their uses.	10Markes
5. Perform Water analysis test, Water Pressure test and Water distribution system by using Pipe line.	<ol> <li>Sources of water</li> <li>Hard &amp; Soft water, temporary hardness &amp;permanent hardness.</li> <li>Water purification stages and methods.</li> <li>Expansion of water on freezing and heating.</li> <li>Pressure of water on the sides of cistern or tank.</li> <li>Water hammer in pipes.</li> </ol>	10 Markes
6. Install and maintain different Electric pumps.	1. Plumber's materials Lead, tin, Zinc, solder, copper, red lead and their uses 2. Water supply system of a small town 3. Types of pumps suction head, Centrifugal pump 4. Contamination of water in a well.	10Markes
7. Construct inspection chamber, manhole, gutter, septic tank, socket	Inspection chamber, septic tank, description of drains, cesspools, soak pits     Layout of drainage system	10Markes
8. Perform removal of	1. Method of dismantling and renewal of	10Markes

leakage pipe line.	the valves and pipes	
	2. Leaks in pipes and noises in plumbing.	
	3. Installation of water meters.	
	4. Air lock in pipes and its removal	
9. Perform fitting and	1. Lay out of one pipe system &Two pipe	10Markes
maintenance of Fixture	system	
at different place	2. Method of testing leakage	
_	3. Different types of traps, ventilation,	
	antisyphonage and sinks.	
	4. Fire hydrants and their fittings.	
10. Carry out fitting,	1. Heat and Temperature.	10Markes
fixing & laying	2. Method of transmission of heat	
installation of hot & cold	3. Heating system by different thermal	
water pipe line	units.	
	4. Domestic hot and cold water	
	5. Repairs to service main. Domestic	
	boilers and Geysers.	
	6. Method of ventilating pipe. Precaution	
	against air Poisoning.	
	7. Fixing of solar water system	

TOTAL 100 MARKS

NOTE: - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper.