

Water Quality Analyst Need to Know Guide

The Water Quality Analyst (WQA) Level 1 examination is intended for water laboratory technicians. The examination consists of 100 multiple-choice questions. A 70% passing grade is required.

The following information is a guide to assist water laboratory technicians in which areas to study for the examination. The manuals recommended to study from are:

Water Quality - Principles and Practices of Water Supply Operations
American Water Works Association (AWWA) www.awwa.org/

Standard Methods for the Examination of Water and Wastewater, 20th Ed.,
AWWA/APHA/WEF www.standardmethods.org/

Water Treatment Plant Operation, Volume 1&2, California State
University www.owp.csus.edu

Topics Covered in the Water Quality Analyst Examination

# of Questions	Topics
11	Science - Basic Scientific Principles, Chemistry, and Water Questions
9	Microbiology - MTF, membrane filtration (MF) techniques, pathogens and coliforms
9	Apparatus - Laboratory Equipment
8	Safety - Occupational Health & Safety, WHMIS, and First Aid
8	Chlorine Residuals - Methods & Terminology
8	Collection of Sample - Water Sampling
5	QA/QC - Quality assurance & control
5	pH - calibration, standards etc.
5	Alkalinity - Techniques & Terminology
4	Turbidity - Techniques & Terminology
3	Conductivity - Techniques & Terminology
3	Regulation - Ontario Water Resources Act
2	Hardness - Techniques & Terminology

2	Dissolved Solids - Total Dissolved Solids
2	Reagents - Apparatus, reagents and media
2	Suspended Solids - Total Suspended Solids
2	Odour
1	Dissolved Oxygen - Total Dissolved Oxygen
1	Colour
1	Temperature
1	Fluoride
5	Math/Calculations - Basic math skills, volume and flow calculations
3	Expression of Results - Conversions