

WATER QUALITY ANALYST EXAM NEED-TO-KNOW

This guide was created to provide information on the topics that are covered on the **Water Quality Analyst** examination.

A Water Quality Analyst certificate allows the holder to conduct testing for the 24 operational parameters listed under subsection 2(1) of the Drinking Water Testing Services regulation, O. Reg. 248/03 (e.g. testing for chlorine residual, turbidity, alkalinity, pH).

The Water Quality Analyst exam consists of 100 multiple-choice questions.

Water Quality Analyst Exam Knowledge Requirements

Topic	Number of Questions	Knowledge Requirements
Math	6	<ul style="list-style-type: none"> • Conversion of units • Alkalinity • Normality • Solutions • Concentrations • Area • Volume
Science	14	<ul style="list-style-type: none"> • Molecules • Chemical reactions • Chemical symbols • Organic & inorganic compounds • Bases & acids • Atomic weight • Water chemistry • Conductivity
Laboratory & Sampling	19	<ul style="list-style-type: none"> • Apparatus • Reagents • Sample Collection
Safety	9	<ul style="list-style-type: none"> • Lab safety • First-aid • Worker responsibility • WHMIS
Water Characteristics	15	<ul style="list-style-type: none"> • Colour • Hardness • Taste & odour • pH • Temperature • Turbidity
Bacteriological Testing	9	<ul style="list-style-type: none"> • Fecal coliform • Total coliform • Pathogenic bacteria

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Chemical Testing	6	<ul style="list-style-type: none">• Dissolved oxygen• Dissolved solids• Suspended solids• Fluoride
Disinfection	8	<ul style="list-style-type: none">• Chlorine residual testing• Break-point chlorination
Quality Assurance & Quality Control	11	<ul style="list-style-type: none">• Reliability• Sensitivity• Precision• Permanence• Accuracy• Calibration
Regulation	3	<ul style="list-style-type: none">• O. Reg. 170/03 – Ontario Drinking Water Systems Regulation