



Shahid Beheshti University of Medical Sciences
School of Public Health and Safety

School of Public Health & Safety Laboratories

Environmental Microbiology Laboratory

Department of Environmental Health Engineering





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All microbial tests of environmental samples including drinking water, food, wastewater, sludge, etc. are done in this laboratory.

Laboratory expert information

Name/Last Name	E-mail	Telephone
Negin Rezaei Arshad	rezaeiarshad75@gmail.com	(+98)21 22 43 20 40 (171)

Laboratory tools and equipment

Autoclave
Incubator
Oven
Electron microscope
Loop microscope
Digital colony counter
Digital Balance
Heather Stirrer
Laboratory vortex
spectrophotometer



Pipettor (dispenser)
Filtration set + Vacuum pump
Bain-marie
Refrigerator freezer
Freezer -20 °C
Freezer -80 °C
Laboratory hood
Anaerobic jar
Field sampling set
Cool box

Microbiology laboratory services

Parameter	Method
Washing and sterilizing the equipment	-
Preparation of culture medium	-
Sampling, maintenance and storage of samples	-
7 hour fecal coliform test	microbial culture



Total coliforms count	Multi-tube fermentation
Thermo-tolerant coliforms count	Multi-tube fermentation
Coliforms Presence/Absence (P/A)	microbial culture
Heterotrophic plate count (HPC)	microbial culture
Recovery of microorganisms	microbial culture
Pseudomonas aeruginosa	microbial culture
Klebsiella	microbial culture
Identification of algae	Microscopic observations

Food laboratory services

Parameter	Method
Total count of microorganisms	plate count
Total coliforms count	Multi-tube fermentation
Thermo-tolerant coliforms count	Multi-tube fermentation
Salt measurement	Argentometry
Nitrite measurement	Colorimetry
Glycerin measurement	Titration



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Borax measurement	Colorimetry
Furfural measurement	Colorimetry
Investigating the presence of antibiotics	Antibiogram
Peroxide value measurement	Titration
Investigating the presence of mould and yeast	microbial culture
Acidity measurement	Titration
Investigation of food fraud	-