Water testing is essential to understand the quality of water used for agriculture, drinking or other purposes. Here is a list of major water testing parameters.

In which Biocare's guidance center, farmers are given facilities to test water for pH, **Total Dissolved Solids (TDS**), **Electrical Conductivity (EC), Hardness, Alkalinity, Chlorides (Cl)** etc.

1. Physical Parameters

Turbidity: Measures the clarity of water, indicating the presence of suspended particles.
Color: Determines the presence of impurities that affect water's appearance.
Odor: Checks for unpleasant smells caused by contaminants.
Temperature: Impacts chemical reactions and microbial activity.

2. Chemical Parameters

pH: Measures the acidity or alkalinity of water.
Total Dissolved Solids (TDS): Indicates the total concentration of dissolved substances.
Electrical Conductivity (EC): Measures the ability of water to conduct electricity, which is related to the dissolved salt content.
Hardness: Measures the concentration of calcium and magnesium salts.
Alkalinity: Determines the water's ability to neutralize acids.
Dissolved Oxygen (DO): Indicates the amount of oxygen available for aquatic life.
Chemical Oxygen Demand (COD): Measures the total amount of chemicals in the water that can oxidize.
Biochemical Oxygen Demand (BOD): Shows the amount of oxygen required by microorganisms to decompose organic matter.
Chlorides (Cl): Indicates the concentration of chloride salts.
Sulphates (SO_4): High levels may indicate contamination.
Nitrates (NO_3): Excess nitrates can result in water pollution and impact human and plant health.
Fluorides (F): Important in drinking water analysis to prevent fluorosis.
Phosphates (PO_4): Indicates the potential for eutrophication in water bodies.

3. Microbiological Parameters

4. Additional Parameters (Based on Use)

These parameters can be divided into different testing packages, depending on whether the water is intended for drinking, agricultural use, or industrial purposes.

Water Testing Report

1. Client Information

Client Name:
Location:
Date of Sampling:
Sample ID:
Type of Water Sample: (e.g., Groundwater, Surface Water, Irrigation Water, Drinking Water)

2. Sample Information

Sampling Location:
Sample Collected By:
Sample Collection Method:
Date and Time of Collection:
Purpose of Testing: (Drinking, Irrigation, Industrial, etc.)

3. Test Parameters and Results

Parameter	Unit	Test Method	Result	Permissible Limits (If applicable)	Remarks
Physical Parameters					
pH	-	(Method used)	(Result)	(As per standards)	(OK/Not OK)
Chemical Parameters					
Total Dissolved Solids (TDS)	mg/L	(Method used)	(Result)	(As per standards)	(OK/Not OK)
Electrical Conductivity (EC)	µS/cm	(Method used)	(Result)	(As per standards)	(OK/Not OK)
Hardness	mg/L	(Method used)	(Result)	(As per standards)	(OK/Not OK)
Chlorides (Cl)	mg/L	(Method used)	(Result)	(As per standards)	(OK/Not OK)
Alkalinity	mg/L as CACO3	(Method used)	(Result)	(As per standards)	(OK/Not OK)
Special Parameters (if any)					

4. Analysis and Interpretation

Overall Water Quality: (Good, Fair, Poor, Not Suitable for Use)
Parameters Exceeding Limits: (List the parameters that are not within permissible limits)
Recommendations: (Steps to improve water quality if any parameters are unsatisfactory)

5. Conclusion

Final Water Quality Assessment: (Based on the results, provide a summary of water suitability for the intended purpose)

Follow-up Action (if needed): (Suggestions for treatment or resampling if required)

Tested by:

Laboratory Name:
Tested By:
Date of Report:
Contact Information: