#### PG CHEMISTRY – BEST PRACTICE

#### **<u>1. Title:</u>** Water Quality Analysis

#### 2. Goals:

- To check whether the water quality is in compliance with the standards, and hence, suitable or not for the designated use.
- ✤ To monitor the efficiency of a system, working for water quality maintenance
- To check whether up gradation / change of an existing system is required and to decide what changes should take place.
- ✤ To monitor whether water quality is in compliance with rules and regulations.

#### 3. Context:-

- The objective of water quality monitoring is to obtain quantitative information on the physical, chemical, and biological characteristics of water via statistical sampling
- The aim of laboratory analyses is to obtain accurate and precise data for your water quality monitoring program in a safe College.

#### 4. The Practice:-

- Parameters that are frequently sampled or monitored for water quality include temperature, dissolved oxygen, pH, conductivity, and turbidity.
- The water samples collected and from different areas of College and analysed in the chemistry lab for every month

#### The Following parameters were checked:

1. Turbidity 2. P<sup>H</sup> 3.Total Dissolved Solids 4.Total Hardness 5.Sodium 6.Potassium 7.Calcium

Collected by: A.Kiran Kumar II M.Sc Date Collected: 2-11-2022

Time: 7.40AMSample Identification: Zoology DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
P <sup>H</sup>	7.5	
Hardness	456	ppm
TDS	174	ppm
Conductivity	350	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

## Collected by: A.Kiran Kumar II M.Sc Date Collected: 2-11-2022

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	7.5	
Hardness	456	ppm
TDS	174	ppm
Conductivity	453	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Collected by: K.Rajesh II M.Sc Date Collected: 3-12-2022

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	7.8	
Hardness	456	ppm
TDS	174	ppm
Conductivity	453	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Submitted By: Dr.T.Bhagya Kumar

Collected by: Ch.Venkateswarlu I M.Sc Date Collected: 3-12-2022

# Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
РН	7.8	
Hardness	456	ppm
TDS	174	ppm
Conductivity	453	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Submitted By: Dr.T.Bhagya Kumar

## Collected by: Ch.Venkateswarlu I M.Sc Date Collected: 4-1-2023

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	7.4	
Hardness	556	ppm
TDS	174	ppm
Conductivity	453	μS/cm
Calcium	69	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Submitted By: K.P.T.Vijaya Bhaskar

**Analytical Report:** 

Collected by: Ch.Venkateswara Rao II M.Sc Date Collected: 4-1-2023

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	257	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Submitted By: K.P.T.Vijaya Bhaskar

Collected by: Ch.Venkateswara Rao II M.Sc Date Collected: 3-02-2023

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
РН	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	257	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Collected by: Ch.Venkateswara Rao II M.Sc Date Collected: 1-03-2023

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
РН	6.8	
Hardness	456	ppm
TDS	177	ppm
Conductivity	257	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

## Collected by: Ch.Venkateswara Rao II M.Sc Date Collected: 01-03-2023

# Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	6.8	
Hardness	356	ppm
TDS	173	ppm
Conductivity	257	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Submitted By: K.P.T.Vijaya Bhaskar

Collected by: B.Sony Pavan II M.Sc Date Collected: 2-04-2023

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
РН	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	257	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Submitted By: K.P.T.Vijaya Bhaskar

## Collected by: B.Sony Pavan II M.Sc Date Collected: 02-04-23

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	295	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Submitted By: Dr.T.Bhagya Kumar

#### Collected by: Ch.Venkateswarlu I M.Sc Date Collected: 01-05-2023

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	7.7	
Hardness	452	ppm
TDS	174	ppm
Conductivity	295	μS/cm
Calcium	61	mg/l
Sodium	92	mg/l
Potassium	23	mg/l

Submitted By: Dr.T.Bhagya Kumar

Collected by: Ch.Venkateswarlu I M.Sc Date Collected: 01-05-2023

# Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	6.7	
Hardness	356	ppm
TDS	174	ppm
Conductivity	295	µS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Collected by: Ch.Venkateswarlu I M.Sc Date Collected: 03-06-2023

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
РН	6.8	
Hardness	346	ppm
TDS	174	ppm
Conductivity	295	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

## Collected by: O.Manikanta II M.Sc Date Collected: 03-06-2023

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	495	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

## Collected by: O.Manikanta II M.Sc Date Collected: 02-07-2023

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
РН	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	495	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

## Collected by: O.Manikanta II M.Sc Date Collected: 02-07-2023

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	395	µS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Collected by: O.Manikanta II M.Sc Date Collected: 01-08-2023

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	395	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Submitted By: K.Swathi

# Collected by: O. Srikanth II M.Sc Date Collected: 01-08-2023

Time: 7.40AMSample Identification: UG ChemistryAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	7.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	375	μS/cm
Calcium	65	mg/l
Sodium	85	mg/l
Potassium	30	mg/l

Submitted By: K.Swathi

Collected by: T.Srikanth II M.Sc Date Collected: 02-09-2023

Time: 7.40AMSample Identification: Inter BlockAnalysed Lab:PG Chemistry

Analysis	Result	Units
РН	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	375	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

## Collected by: T.Srikanth II M.Sc Date Collected: 02-09-2023

# Time: 7.40AMSample Identification: MCA DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
РН	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	375	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Collected by: Ch.Venkateswarlu I M.Sc Date Collected: 04-10-2023

Time: 7.40AMSample Identification: Botany DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	7.8	
Hardness	456	ppm
TDS	174	ppm
Conductivity	345	μS/cm
Calcium	63	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Collected by: Ch.Venkateswarlu I M.Sc Date Collected: 04-10-2023

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	7.9	
Hardness	356	ppm
TDS	174	ppm
Conductivity	345	μS/cm
Calcium	55	mg/l
Sodium	95	mg/l
Potassium	24	mg/l

Collected by: G.Mahesh II M.Sc Date Collected: 01-11-2023

Time: 7.40AM	Sample Identification: Autonomous
Analysed Lab:	PG Chemistry

Analysis	Result	Units
PH	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	340	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Collected by: G.Mahesh II M.Sc Date Collected: 01-11-2023

Time: 7.40AMSample Identification: Near Office RoomAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	385	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Collected by: D.Prasanth Raju II M.Sc Date Collected: 02-12-2023

Time: 7.40AMSample Identification: UG Chemistry DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
РН	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	385	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Collected by: D.Prasanth II M.Sc Date Collected: 02-12-2023

Time: 7.40AMSample Identification: PG Chemistry DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
РН	6.9	
Hardness	456	ppm
Conductivity	385	μS/cm
Turbidity	Not Observed	
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

# Collected by: Ch.Venkateswarlu II M.Sc Date Collected: 01-01-2024

Time: 7.40AMSample Identification: Commerce DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	7.6	
Hardness	456	ppm
Conductivity	278	μS/cm
Turbidity	Not Observed	
Calcium	62	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Submitted By: K.Swathi

Collected by: Ch.Venkateswarlu II M.Sc Date Collected: 01-01-2024

Time: 7.40AMSample Identification: MBA DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	6.9	
Hardness	456	ppm
TDS	174	ppm
Conductivity	278	μS/cm
Calcium	60	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Submitted By: K.Swathi

Collected by: Ch.Venkateswarlu II M.Sc Date Collected: 02-02-2024

Time: 7.40AMSample Identification: Physics DepartmentAnalysed Lab:PG Chemistry

Analysis	Result	Units
PH	7.6	
Hardness	458	ppm
TDS	174	ppm
Conductivity	274	μS/cm
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	20	mg/l

Collected by: Ch.Venkateswarlu II M.Sc Date Collected: 02-02-2024

Time: 7.40AM	Sample Identification:	<b>Commerce Department</b>
Analysed Lab:	PG Chemistry	

Analysis	Result	Units
PH	7.9	-
Hardness	456	ppm
Conductivity	274	μS/cm
Turbidity	Not Observed	-
Calcium	65	mg/l
Sodium	95	mg/l
Potassium	24	mg/l



