

# **Laboratory Practice for rain water Sample Analysis**

**Group 6  
Pakistan**

**Male Declaration Training Program and Refresher course  
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# **Laboratory practice for rain water sample analysis**

## **E quipments used**

**pH meter**

**Spectrophotometer**

**distillation unit**

**atomic absorption spectrophotometer**

# Laboratory practice for rain water sample analysis

**Analysed parameter**

**pH**

**sulphate**

**sodium**

**magnesium**

**ammonical nitrogen**

**potassium**

**chloride**

**calcium**

# Laboratory practice for rain water analysis

**Method of analysis**

**Titrimetric method**

**Chloride , ammonical nitrogen**

**Spectrophotometer**

**Sulphate**

**AAS**

**Sodium , potassium, calcium, magnesium**

## Laboratory practice for rain water sample analysis

### Result

	pH		
Chloride	9.98 at 25oC	47.74mg/L	1.345meq/l
Calcium		1.00425 mg/l	0.050 meq/l
Magnesium		0.659 mg/l	0.055 meq/l
Sulphate		4.48 mg/l	0.093 meq/l
Ammonical Nitrogen		57.54 mg/l	4.11 meq/l
Sodium		3.52 mg/l	0.153 meq/l
Potassium		1.43 mg/l	0.037 meq/l

# Laboratory practice for rain water sample analysis

## Results

### Cation

Calcium ion 0.050meq/l

Magnesium ion 0.055meq/l

Ammonical Nitrogen 4.11 meq/l

Sodium 0.153meq/l

Potassium 0.037meq/l

### Anion

Chloride 1.345meq/l

Sulphate 0.093 meq/l

# Laboratory practice for rain water analysis

## Result

Sum of Anion	1.438meq/l
Sum of cation	4.405meq/l
Sum of anion and cation	5.843meq/l
Difference of anion and cation	2.967meq/l
R1	50.8%

# Laboratory practice of rain water sample result

Parameter	Concentration mg/l	Concentration $\mu\text{mol/l}$
Chloride	47.74	1346.69
Sulphate	4.48	46.67
Potassium	1.43	36.67
Sodium	3.52	152.85
Calcium	1.00425	25.12
Magnesium	0.659	27.46
Ammonium nitrogen	57.54	4110



Thanks