**RESULTS OF THE WATER QUALITY PARAMETERS OF the institute**

**(SAMPLING DATE 23/12/19)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Parameters** | **Permissible Limit** | **Maximum Limit** | **P1** | **P2** | **P3** | **P7** | **P8** | **P11** |  **P12** | **P13** | **P14** |
|  **pH** | **6.5 to 8.5** | **No relaxation** | **7.46** | **7.52** | **7.92** | **7.28** | **7.21** | **7.34** | **7.42** | **7.58** | **7.36** |
|  **TDS (mg/l)** | **500** | **2000** | **475** | **359** | **468** | **686** | **724** | **662** | **408** | **582** | **641** |
| **Hardness (as CaCO3) (mg/l)** | **300** | **600** | **100** |  **160** | **80** | **140** | **150** | **120** | **90** | **100** | **110** |
|  **Alkalinity(as CaCO3) (mg/l)** | **200** | **600** | **320** | **370** | **350** | **260** | **250** | **270** | **300** | **270** | **230** |
| **Nitrate (mg/l)** | **50** | **No relaxation** | **0.06** | **0.32** | **0.07** | **0.09** | **0.04** | **0.27** | **0.11** | **0.18** | **0.10** |
| **Sulfate (mg/l)** | **200** | **400** | **54** | **42** | **59** | **47** | **51** | **39** | **34** | **37** | **29** |
| **Fluoride (mg/l)** | **1** | **1.5** | **0.828** | **0.807** | **0.784** | **0.662** | **0.669** | **0.754** | **0.812** | **0.794** | **0.679** |
| **Chloride (mg/l)** | **250** | **1000** | **145** | **30** | **135** | **280** | **300** | **275** | **110** | **215** | **260** |
| **Turbidity (NTU)** | **5** | **10** | **0.001** | **0.001** | **0.002** | **0.001** | **0.001** | **0.001** | **0.001** | **0.001** | **0.001** |
| **Arsenic (mg/l)** | **0.01** | **No relaxation** | **0.0023** | **0.0016** | **0.0019** | **0.0014** | **0.0016** | **0.0017** | **0.0021** | **0.0018** | **0.0014** |
| **Copper (mg/l)** | **0.05** | **1.5** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** |
| **Cadmium (mg/l)** | **0.003** | **No relaxation** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** |
| **Chromium (mg/l)** | **0.05** | **No relaxation** | **0.0032** | **0.0051** | **0.0029** | **0.0030** | **0.0028** | **0.0034** | **0.0027** | **0.0024** | **0.0011** |
| **Lead (mg/l)** | **0.05** | **No relaxation** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** |
| **Iron (mg/l)** | **0.3** | **1** | **0.14** | **0.17** | **0.21** | **0.23** | **0.25** | **0.22** | **0.16** | **0.20** | **0.15** |
| **Zinc (mg/l)** | **5** | **15** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** |
| **Fecal Coliform (cfu)** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |
| **E. Coli (cfu)** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** |

***Sampling Locations: P1 – Opp. Type 2 shop-C near water tank, P2- End of lane 37 near house 4098, P3 – Behind Helicopter building, P7 - Near water tank and main entrance of VH-Extension , type-1, P-8 Near Health Centre, P-11 - Behind mess and inside of Hall-10, P-12 - Near about 150 M of P-2 (end of lane-36), P13 – Near Visiting Faculty Apartment, P14 Near Hall 12,***

***BDL Below Detection Limit; NTU – Nephelometric Turbidity Unit; cfu- Colony forming Units in 100 ml of the sample***

***Detection Limits Pb 0.0001 mg/l, Cu 0.0001 mg/l , Cr 0.0005 mg/l ,Fe 0.0001 mg/l , Cd 0.0004 mg/l, As 0.0001 mg/l, Zn 0.0005 mg/l***