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

**(SAMPLING DATE 26/11/19)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Parameters** | **Permissible Limit** | **Maximum Limit** | **P1** | **P2** | **P3** | **P7** | **P8** | **P11** |  **P12** | **P13** | **P14** |
|  **pH** | **6.5 to 8.5** | **No relaxation** | **7.98** | **7.75** | **8.25** | **7.78** | **7.53** | **7.92** | **8.05** | **7.74** | **7.36** |
|  **TDS (mg/l)** | **500** | **2000** | **478** | **585** | **457** | **659** | **769** | **686** | **404** | **582** | **646** |
| **Hardness (as CaCO3) (mg/l)** | **300** | **600** | **100** | **180** | **80** | **110** | **150** | **130** | **120** | **100** | **110** |
|  **Alkalinity(as CaCO3) (mg/l)** | **200** | **600** | **350** | **390** | **320** | **260** | **270** | **250** | **300** | **270** | **250** |
| **Nitrate (mg/l)** | **50** | **No relaxation** | **0.06** | **0.29** | **0.05** | **0.08** | **0.04** | **0.24** | **0.09** | **0.11** | **0.10** |
| **Sulfate (mg/l)** | **200** | **400** | **51** | **42** | **55** | **49** | **38** | **31** | **43** | **39** | **28** |
| **Fluoride (mg/l)** | **1** | **1.5** | **0.874** | **0.812** | **0.749** | **0.728** | **0.669** | **0.769** | **0.828** | **0.818** | **0.724** |
| **Chloride (mg/l)** | **250** | **1000** | **145** | **45** | **135** | **280** | **300** | **275** | **100** | **200** | **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** | **0.0019** | **0.0015** | **0.0021** | **0.0019** | **0.0011** | **0.0017** | **0.0026** | **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** | **0.0038** | **0.0051** | **0.0032** | **0.0029** | **0.0035** | **0.0041** | **0.0028** | **0.0025** | **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** | **0.19** | **0.26** | **0.21** | **0.12** | **0.19** | **0.20** |
| **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***