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

**(SAMPLING DATE 24/09/19)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Parameters** | **Permissible Limit** | **Maximum Limit** | **P1** | **P2** | **P3** | **P7** |  **P8** | **P11** | **P12** | **P13** | **P14** |
|  **pH** | **6.5 to 8.5** | **No relaxation** | **7.23** | **7.18** | **7.54** | **7.41** | **7.25** | **7.31** | **7.54** | **7.38** | **7.35** |
|  **TDS (mg/l)** | **500** | **2000** | **471** | **362** | **459** | **654** | **757** | **665** | **398** | **583** | **632** |
|  **Hardness (as CaCO3) (mg/l)** | **300** | **600** | **80** |  **180** | **70** | **120** | **150** | **110** | **80** | **100** | **100** |
|  **Alkalinity (as CaCO3) (mg/l)** | **200** | **600** | **330** | **390** | **310** | **250** | **260** | **250** | **310** | **270** | **230** |
|  **Nitrate (mg/l)** | **50** | **No relaxation** | **0.08** | **0.34** | **0.06** | **0.07** | **0.05** | **0.21** | **0.07** | **0.11** | **0.09** |
|  **Sulfate (mg/l)** | **200** | **400** | **51** | **49** | **57** | **54** | **52** | **42** | **34** | **39** | **32** |
|  **Fluoride (mg/l)** | **1** | **1.5** | **0.784** | **0.792** | **0.851** | **0.647** | **0.672** | **0.774** | **0.798** | **0.768** | **0.652** |
|  **Chloride (mg/l)** | **250** | **1000** | **160** | **30** | **135** | **270** | **300** | **290** | **100** | **215** | **265** |
| **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** | **0.0021** | **0.0013** | **0.0020** | **0.0017** | **0.0014** | **0.0016** | **0.0023** | **0.0016** | **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** | **0.0035** | **0.0047** | **0.0033** | **0.0030** | **0.0027** | **0.0034** | **0.0029** | **0.0025** | **0.0001** |
|  **Lead (mg/l)** | **0.05** | **No relaxation** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** | **BDL** |
|  **Iron (mg/l)** | **0.3** | **1.0** | **0.12** | **0.18** | **0.20** | **0.24** | **0.26** | **0.22** | **0.12** | **0.21** | **0.19** |
|  **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***