NIQ for the purchase of Milli Q water Purification System with the following Technical Specification for Type I and Type III water:

**UltraPure (Type I) water:**

- Ultrapure Water (Type I) Flow Rate (L/min)........up to 1 (Programmable flow rate)
- Ultrapure Water Resistivity (MΩ-cm at 25°C).....18.2
- Microorganisms (cfu/mL).................................<0.1
- Particulates < 0.22 µm (/mL)..............................< 1
- Pyrogen Levels (EU/mL)..............................<0.001 [with UF]
- RNase Level (ng/mL)..............................< 0.01 [with UF]
- DNase Level (pg/µL)..............................< 4 [with UF]
- TOC (ppb)..............................................< 5 [with UV]

**Pure (Type III) water:**

- Ionic Rejection..........................................> 95 to 99%
- Organics ..................................................>99%
- Flow Rate (L/hr)............................................3
- Bacteria......................................................>99%

1. Purification stage may be single unit or multiple units with a pretreatment unit.
2. Output capacity should be at least 8 lt/hr for type I water
3. Unit should be able to process tap water with feed water acceptance of up to 2000 micro Siemens conductivity, Fouling Index (SDI) < 12, Total Chlorine < 1 ppm
4. Unit should have Automatic low/high pressure cut off for input water
5. Type III water should be stored in reservoir of 50 lt. Reservoir should have sensor rod float switch, programmed to have high and low level cutoff based on water level in the tank.
6. Type III water should pass through specific cartridge for removal of trace ionic and organic contaminants.
7. To prevent deterioration of water quality during periods of non-use, the ultrapure water system will be able to recirculate water to maintain high water quality.
8. Multi color monitor displaying: resistivity, level of water in reservoir, volume dispensed and alarms for purification pack replacement or water quality less than set point.
9. To comply with Standard requirements, the resistivity meter shall be able to display the non-temperature-compensated resistivity.
10. Water purification system should meet internationally-recognized safety norms, shall be listed with Underwriters Laboratories (both UL and ULC), and should carry the CE mark, indicating compliance with European Union EC Directives.
11. The water system should incorporate a built-in Quick Reference Guide and user manual for immediate understanding of the main operations.
12. 0.22 micron PVDF membrane filter in stack disc configuration
13. Minimum four years of warranty must be given (including the year of installation)
14. All consumables for operation of the unit must be provided for up to four years (including year of installation)
Terms and Conditions:

- Technical and financial bids should be in separate sealed envelope and supercribed by NIQ number and date.
- Sealed quotations should be addressed in the Name of Dr. Prashant Mishra and reach to Head, Department of Biochemical Engineering and Biotechnology, Indian Institute of Technology Delhi, Hauz Khas. New Delhi-110016 by **March 5, 2013**.
- The prices should be quoted at FOB
- Propriety and agency certificate will be required wherever applicable.
- Institute reserves the right to accept or reject any or all the quotation without showing any reasoning.
- Minimum four years of warranty must be given (including the year of installation)
- All consumables for operation of the unit must be provided for up to four years (including year of installation)