## Hindi Vidya Prachar samiti's

## R. J. College of Arts, Science & Commerce

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## 2. Merck Millipore MILLI-Q Water Purification Systems (Model: Direct Q-3)

## **TECHNICAL SPECIFICATIONS**

- Specifications for Merck Millipore Laboratory Water Purification System for model Direct Q 3 Type I Water
- The system is to generate Ultrapure water for analytical laboratory techniques directly from drinking/Tap water. The Prefiltration unit with 1 um depth filter should be provided. System must capable enough to tackle feed water specification as Conductivity < 2000 μS/cm, TOC < 2000 ppb, Chlorine < 3 ppm, Hardness < 300 ppm
- The system should guarantee the water purity of 18.2 M Ohm-cm
- There should be an advance warning of cartridge change on display of system.
- · The system should be able to remove all ionic and organic contents to trace levels in the feed water
- The system should be capable of Wall-mountable and completely assembled for easy installation
- The intermediate water quality should be delivered for regular lab work. Since requirement is very low, generation flow should not be more than 3 ltr/hr
- The storage tank should be of very low size and not be more than 6 ltr to avoid storing of water.
- System should incorporate graphic colour display and real-time monitoring of water purity.
- The system should be compatible to work with power supply of 240 V AC and 50 Hz.
- The cartridge should be all in Single pack only with RO pre-treatment and Ion Exchange resins. Multiple cartridges should be avoided so that a single pack can be replace easily.
- A 0.22µm screen Filter setup at the outlet of water purification unit to avoid particulate matter and to ensure safe bacteria level
- Operation and maintenance manual to be provided along with the instrument.
- System must have recirculation facility to keep water quality always in good quality when system is not in use.
- Vendor must provide catalogue and flow diagram with above details. The flow diagram must match with vendor's global/local website.
- Type I Water Specifications:-

 $\label{eq:conductivity} \begin{array}{ll} \text{Conductivity} & : \ 0.054 \ \mu\text{S/cm} \ @ \ 25 \ ^{\circ}\text{C} \\ \text{Resistivity} & : \ 18.2 \ M\Omega.\text{cm} \ @ \ 25 \ ^{\circ}\text{C} \\ \end{array}$ 

TQC : 10 ppb Bacteria : <0.1 cfu/ml

ONLY AUTHORISED DISTRIBUTOR OF MERCK MILLIPORE SHOULD SUBMIT THIS TENDER