# <u>Kjeldahl Digestion & Distillation Unit</u> (NIN/ST/12/ Kjeldahl instrument/2017-18)

## **Specifications: Distillation Unit:**

- ❖ Automatic dilution, alkali addition, distillation and tube emptying provide ease of use
- ❖ Bellow pumps for accurate dispensing of reagents
- ❖ Variable output steam generator broadens application area to other volatile components
- ❖ Alkali resistant Poly Propylene Plastic Splash head for long life time
- ❖ Steam Addition for Equilibration feature for safe distilling of tubes with acid/salt cake contents.
- ❖ Built-in safety systems for user protection
- Possibility to pre-program alkali addition and distillation time supports the production of accurate results, independent of operator.
- ❖ The Distillation unit should equipped with sensors for safety door, tube platform, distillate temperature as well as level and overpressure sensors for the variable output steam generator.
- ❖ Distillation Time :3.5minutes at 30 mg N (6.5 minutes at 200 mg N)
- \* Reproducibility: 1% RSD (Including the Digestion Step)
- ❖ Recovery :> 99.5% at nitrogen levels between 1 − 200 mg N
- ❖ Reagent pump volumes: 0 − 150 ml
- $\bullet$  Delay: 0 1800 seconds
- $\bullet$  Steam addition for equilibrium : 0 15 seconds

## **Block Digestor:**

- ❖ 8 Place digestion system with built –in Electronic Temperature Control 100-440<sup>0</sup> C with anddigital display
- ❖ Temperature setting: 1 degree C
- Temperature readout : digital
- Over temperature protection
- ❖ Time setting per step : 1 1199 min
- ❖ Provision for measurement of actual temperature using external thermometer
- \* Exhaust system for handling tubes along with water aspirator, tube rack, heat shields & retainer plate.
- ❖ Safety features: Audible "ready" or "cycle over" alerts advice the user when the digestion application is completed. Audible "alarm" alerts advice the user when errors/interruptions occur within the running application program.
- Two set of tubes (16 No.) and tube racks two numbers
- Digital burette.
- ❖ Operating voltage AC 220 V, 50 Hz.
- ❖ Warranty: 3 years comprehensive warranty along with 2 years extended warranty.

#### Optional accessory:

### **SCRUBBER:**

- ❖ Should be convenient to use and to remove reagents with handles in the container.
- ❖ Container should be of glass with implosion resistant.
- Scrubber should not need tap water for operation to reduce dependency on water for analysis