

## **Annexure-II**

### **Spares for Nitrogen & Oxygen Determinator.**

1. All essential spares including electronic boards and detectors for 5 years trouble free operation of the instrument should be quoted.

2. Gas connection tubing's and necessary cables should be provided. Connectors, threads required for gas and water connection are to be arranged by the supplier at the time of installation.

3. Necessary Tool Kit.

#### **4. Consumables for 5000 analysis**

Graphite Crucibles: 5000 pieces

Glass Wool : 500 gram

Quartz Wool: 100 gram

Tube of High Vacuum grease: 50 gram

Graphite Tip : 5 No.

Micro brush: 1 piece

O-ring 9 x 3 : 1 No.

O-ring 8 x 1.5: 1 No.

Reagent glass tubes: 3 No.

Reagent glass tube : 1 No.

Reagent quartz tube catalyst furnace : 1 No.

Cleaning Brush / Furnace Brush : 2 No.

#### **5. Calibration Standards:**

i) Steel Pin (1gram) : One Packet = 100 Pins : 10 Packets

N= 57 ppm , O: 112 ppm ( nearby with  $\pm 25$  ppm)

ii ) Steel Pin (1gram) : One Packet = 100 Pin : 10 Packets

N= 100 ppm , O: 100 ppm ( nearby with  $\pm 25$  ppm)

iii ) Steel Pin (1gram) : One Packet = 100 Pin : 10 Packets

N= 780 ppm , O: 35 ppm ( nearby with  $\pm 25$  ppm)

iv) Steel Pin (1gram) : One Packet = 100 Pin : 10 Packets

N= 210 ppm , O: 45 ppm ( nearby with  $\pm 25$  ppm)

6. Required gas tubings, regulators, electrical cables and connectors shall be supplied.