Equipment for teaching

1. **240 Core Cluster** (Custom Built)
   CPU (240 Cores): 60 x Intel E3-1225v2, 3.6 GHz Max Turbo, Quad-Core Processors (64-bit), 8MB Cache supporting AVX, SSE4.1, SSE 4.2, Security instructions and VT extensions for Virtualization
   Graphics: Directx 11 with OpenGL 3 Graphics Kernel clocked at 650 base /1250 MHz dynamic, 16 Unified ShaderUnits (EUs) with 1700MB Max Graphics RAM (P 4000)
   Memory: 2GB x 60 DDR3 1333MHz(Expandable)
   HDD Solid State Storage: 32GB x 60 High Performance SSDs expandable
   LAN: 60 x RJ45 Gigabit LAN
   OS Support: Windows, Linux and Android (Multi-boot option)
   Accessories: Rack, Cables, Cable ducts/Managers, Cooling Fans, Powersupplies
   Head Node: Xeon E3-1225v2 - Quad Core
   Base Frequency: 3.2GHz/Gigaflops -102.4
   Single Core Max Turbo: 3.6GHz/Gigaflops - 115
   60 Systems can do 60 x 102.4 = 6144 Gigaflops at base frequency (6 Teraflops)

2. Intel Storage: 48TB NAS/SAN Box (Fully Populated)

3. Desktop PCs with Intel E3-1225v2, 3.6 GHz Max Turbo, Quad-Core Processors (64-bit), 8MB Cache, 4GB Main memory:

4. Other Equipment
   a Vane Thermo Anemometer: VT 200 @ Rs 35,000 x 4
   b WATER SAMP, NISKIN 5L @ US$ 1386.05 x 2 x 60 (Exchange Rate)
   c Digital Automatic Weather Monitoring Station
   d High Resolution GPS Radiosonde
   e Bucket thermometers; salinometers; Secchi disc; grab samplers etc