## 1. Item Name: Tilting Head 3D Digital Microscope for High Resolution Damage assessment - (Quantity - 1)

## **Technical Specifications**

- Full HD or 4K CMOS Sensor
- 1/1.9 inch or 1.8 inch or closer
- 2. megapixel or better
- Total pixels: 1800x1200 or better
- 50 Frame/Sec at 1800 x 1200 Resolution or better
- High Intensity LED Lighting
- Motorised rotary head/axis focus (dynamic focus)
- Inclination stand/Tilt observation  $\pm 60^{\circ}$  or higher
- Motorized XY-Axis Stage
- $\pm$  3% or better accuracy and repeatability in X, Y and Z axis
- Different Lens combination to meet different ranges upto 2000X or higher
- Software for 2D/3D Profile generation, roughness and Measurements
- Profiling and Data accession for model generation
- Capable of HD Imaging, HD 3D Topography, Profiles, Coordinates, Thickness, Roughness, Volume, Surface Texture, Spectral Analysis, Color Analysis.
- With dedicated compatible computer, latest software for acquisition and analysis, cables etc.,

## **Terms and Conditions:**

- The equipment must have One Year warranty. Quote must include warranty / AMC cost for the 2<sup>nd</sup> and 3<sup>rd</sup> Year. Total cost for 3 years will be considered for the finance bid price comparison.
- The Quote must also include installation and delivery at IIT Madras.
- All necessary manuals, perpetual license of software (necessary for operation and maintenance) must be provided. Software Key must be provided for installation at other systems, in case of fault in the supplied system or software reinstallation situations.
- ONE DAY training on the equipment utilization and maintenance must be provided.
- Quote must include essential cables, connectors, standard samples, consumable needed.
- The bidder must either be OEM or legal representatives of the OEM in India
- The supplier must have supplied and installed similar equipment / instrument at least 3 in last 3 Years. Proof of supply and installation and location of the installation must be mentioned in the quote.