## SPECIFICATIONS OF PHACOEMULSIFICATION MACHINE

- 1. Fully programmable, peristaltic or venturi system.
- 2. LCD Screen 15 inch or more, with touch screen facility.
- 3. Phaco Handpiece: Piezoelectric 4-6 crystals, Slim & Lightweight, Autoclavable Handpiece.
- 4. Ultrasound Facilities: Ability to drive Longitudinal or Torsional or Transversal Hand Piece with least heat generation at wound site.
- 5. Capability to perform MICS with 1.8 2.2mm incision size.
- 6. Ultrasound Frequency: 28 KHz and above.
- 7. Ultrasound Mode: Linear, Pulse, Burst.
- 8. Hand Piece Compatibility with Tips: straight or angled.
- 9. Aspiration Flow rates: should be up to 50 CC/Min or more.
- 10. Vacuum Level: Should have vacuum levels of up to 600 mm Hg or more.
- 11. Pulse Rate: Up to 250 Pulses/Sec or more with variable on-off time.
- 12. Foot pedal should be wireless, multifunctional, programmable & waterproof. Unit must have foot Pedal with Complete programmability. Should provide function of switching of programmes and bottle height control.
- 13. Anterior Vitrectomy: Ability to drive a 20 G and 23G cutter for anterior vitrectomy with cut rate range up to 2500 cuts per minute or more.
- 14. Voice confirmation during mode changes.
- 15. Reflux via footswitch.
- 16. Bipolar coagulation.
- 17. Motorized Infusion Pole.
- 18. Mechanisms to ensure extremely stable anterior chamber without surge and intraocular pressure maintenance for all grades of cataract at all vacuum levels. Active fluidics should detect and compensate for dynamic changes during surgery.
- 19. Ability to store multiple different surgeons' surgical parameters.
- 20. Other Features/Equipments: Console with original instrument tray and Stable Castors, Coaxial Irrigation Aspiration, Bi-manual irrigation aspiration, Sterilization tray, Test Chambers, Tubing Sets.
- 21. Power supply: 220-240 V, 50 Hz.
- 22. Online UPS with at least 30 minutes of backup should be provided.
- 23. Warranty : 5 years.
- 24. CMC after warranty: 5 years.
- 25. USFDA/European CE with four digit notified number/BIS approved.
- 26. Demonstration to be given inhouse for the technical acceptance of the equipment.
- 27. Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/Para number of catalogue/dasta sheet.
- 28. Standards and Safety certificates (including electrical safety) to be provided.
- 29. Rate of consumables to be freezed for 5 years.
- 30. List of important spare parts and accessories with their part numbers and costing.

Accessories and consumables :

- 1. Phaco Handpiece-02
- 2. Phaco tips 10
- 3. Phaco irrigation sleeves: Silicon: 20
- 4. Wrench (metallic): 2
- 5. Test chambers: 5
- 6. Bimanual irrigation & Aspiration: 2 pairs

- 7. Additional tips for Bimanual irrigation & Aspiration: 10 pairs
- 8. Coaxial Irrigation Aspiration 02
- 9. Additional tips for Coaxial Irrigation Aspiration: 10
- 10. Disposable Cassettes (if applicable) with tubing system set: 60
- 11. Diathermy Handpiece 2
- 12. Bipolar forceps 2
- 13. Trolley with locking wheels14. Anterior vitrectomy cutter 6
- 15. All the other standard accessories shall be provided