

Requirement for repair and maintenance of Zebrafish Housing System

1. Description of Work:-

Modification and upgradation of existing **Zebrafish Housing System**, including sump replacement, advanced filtration, and monitoring upgrades. The system should include technical enhancements and consumables for one year.

2. Itemized Requirements

S. No.	Item Description	Quantity
1	Zebrafish Housing System Sump with fittings (Modified with lower shelf replacement)	1
2	Control Board with 7" TFT touch display	1
3	Magnetic Drive Pump – continuous duty rated, quiet, maintenance-free, energy efficient	1
4	Five-Stage Filtration System	1 set
a	Stage 1: 150-micron washable Dacron pad (mechanical filtration)	1
b	Stage 2: MBBR biological filtration media	1
c	Stage 3: 50-micron filter cartridge with pressure gauge	1
d	Stage 4: Activated carbon chemical filter (4mm pallet type)	1
e	Stage 5: UV sterilizer (SS316 housing, T5 lamp, 9000 hrs life)	1
5	pH Monitoring System – Continuous display	1
6	Conductivity Monitoring System – Continuous display	1
7	Degassing and Aeration System – Air pump-based oxygenation	1
8	Inclusive Consumables for 1 Year	—
a	50-micron reusable filter cartridges	4 nos.
b	Activated carbon (4mm pallet)	5 kg
c	150-micron washable filter pads	20 nos.

3. Technical Features (Post-Modification)

- Auto shutdown of pump and UV sterilizer on low water level.
- Auto restart upon high water level detection.
- Adjustable 10% automatic water refresh system.
- Adjustable water temperature control (heating only).
- Audio-visual alarm system for low water levels.
- Integrated continuous pH and conductivity monitoring.
- Degassing and oxygenation via air pump.
- 6-month warranty from date of reinstallation.

4. Additional Notes

- All modification works must be compatible with the current Zebrafish housing setup.
- Installation and testing should be conducted on-site.
- Support must be provided for operational training post-installation.