



**INDIAN INSTITUTE OF TECHNOLOGY BOMBAY**  
**MATERIALS MANAGEMENT DIVISION**  
**Powai, Mumbai 400076**

**Purchase Requisition No. 1000006363 (SRM/Rfx No. 6100000099)**

**Technical Specifications of Next-Generation Sequencing (NGS) System**

Next-Generation Sequencing (NGS) system should be a simple bench top instrument with broad range of applications, which include genomic sequencing, transcriptional and target specific sequencing.

1. **The read length and throughput:** The system should be capable of generating throughput ranging from 10 GB to 15 GB per run with read length of 200 bp with good quality scores for various applications.
2. **Sample multiplexing:** The system should be able to multiplex from 96 to 384.
3. **Workflow:** The sample preparation workflow including template generation should be automated and user friendly.
4. **Software:** The instrument should be supplied with a licensed/specific software required for the workflow preparation/ data acquisition/ instrument quality check/data analysis.
5. **UPS:** The UPS with back up time of 2 hours or more at full load should be supplied (5 KVA). The UPS should take care of main instrument and computational system.
6. **Consumables essential for testing the instrument performance:** entire consumables required for performing Exome sequencing (5 samples) and Transcriptome sequencing (5 samples) along with all the required standard reagents should be provided for initial testing.

7. **Training:** Onsite training to our staff for a week, twice in an year
8. **Warranty:** Instrument should have a warranty of at least two years.

**Terms and conditions:**

- Vendors should provide contact information and copy of purchase order of 5 installations in centrally funded institutes.
- The system should be quoted in INR with FOR (DDP) IIT Mumbai.
- Vendor will be direct delivery and installation on site at IIT Bombay.
- Vendor would make every effort to set-up the instrument at IIT Bombay, within one month of release of PO. A clear time-line of installation, testing, application engineer visits should be provided.
- The quoted models should match all the specifications.
- Vendor must give in writing about any new versions due to be released soon and the period for which the quoted version would be supported.

**Optional to be included:**

- (i) All the system supplied should have warranty for at least two years (Year-1 and 2). Additionally a separate cost should be provided for AMC (Year-3).

**Miscellaneous to be included:**

- (i) Service support should be available for 6 days a week.
- (ii) Service person should report within 12 hours of breakdown call.
- (iii) Provide details of service support available in the Mumbai and in India, along with name and phone number of Service Engineer and Application specialist, along with their experience record and length of association with your company.

- (iv) Supplier should also provide a list of users (name, phone number and e-mail addresses) in India for the items quoted in the bid.
- (v) Please provide certificates from existing users (at least 5) about the performance of the machine, quality of service and application support.

**Note : Optional Items will not be consider for calculating L1.**