Technologies available at IIT Bombay for COVID-19 mitigation
(updated October 2020)

Sanitization approaches
- UVC based portable sterilization unit & portable germicidal cabinet
- ECORSANI: Phytoformulations for walk-through sanitizers, hand rub and surface sanitizers
- Incineration device for safe disposal of masks / gloves in hospitals and quarantine centres
- Surface spray for decontamination and antiviral action
- Hand sanitization solution for Institute personnel

Medical Devices
- CPAP helmet for mildly distressed patients
- Mechanized ambu-bag for COVID patients with moderate respiratory difficulties
- Advanced ventilator for severely critical COVID-19 patients
- Vi-SWAAS: ICU ventilator for COVID patients

Personal protection
- DURAPROT: Wash resistant antibacterial & antiviral coatings for masks & textiles
- Biodegradable antiviral plastic like films for face shields
- PPE solutions: Face masks
- PPE solutions: Low-cost face shields
- PPE solutions: Aerosol box for hospitals
- Washable PPE coverall suit
- Urination attachment for PPE coverall suit
- Low cost temperature controller for PPE coverall suit

Anti-viral drug / molecule synthesis
- In-situ nasal gel formulations for pre-exposure prophylaxis of COVID-19
- Identification of global metabolite biomarkers in COVID-19 infected patients for targeted therapy
- Plasma proteomic analysis to identify biomarkers and therapeutic targets: A pilot study
- PICOVRID: Anti-viral nutraceuticals and phytopharmaceuticals
- NANOSURF: Aerosols for pneumonitis and ARDS complications of COVID-19
- TGuard: Anti-viral nutraceuticals and phytopharmaceuticals developed from palm-based constituents

Surveillance
- CORONTINE: Contact tracing app for asymptotic COVID carriers
- SAFE: App for quarantine adherence
- Privacy preserving contact tracing
- Contactless video surveillance at quarantine facilities

IT Solutions
- World Wide Help: Solution for user-friendly, cost effective and customized information access with humans-in-the-loop
- e-token and online ordering system
- Short-term projection of COVID-19 medical resources and inventory
- Lokacart: Platform for enabling MSMEs for e-commerce

Diagnostic approaches
- Single-round smart pooling technique for COVID-19 testing