	T	Annexure A
Technical Specification for Multimode Microplate Reader	Criteria Matching( Yes/No)	Remarks
Make and Model		
A Multimode Reader with following Detection Chemistries in Monochromator Mode (no filters required) - UV-VIS Absorbance, Fluorescence Intensity (Top and Bottom), Luminescence.		
Band width for Absorbance - 4.0 nm for entire wavelength.		
• System should offer excitation light source as Xenon Flash lamp.		
System should have PMT for Fluorescence & Luminescence & Silicon Diode for Absorbance.		
<ul> <li>The system should have advance Cooled PMT for Fluorescence and Luminescence to reduce background noise for excellent sensitivity and wide dynamic range.</li> </ul>		
• System should offer Path Check Sensor correction facility to automatically normalize well absorbance equal to 1cm path length of a cuvette for spectrophotometric Data's.		
Well Scanning up to 20x20 in all modes should be possible.		
System should offer programmable Orbital microplate shaking methods.		
• System should offer temperature control in the microplate chamber from 5°C above ambient to 65 °C or Better.		
System should offer ability to read 6 to 384 well plates.		
• System should perform Spectral Scanning, Kinetic Reading and End-point reading.		
• The system should have built-in near-field communication (NFC) functionality in the reader enabling to pull up custom protocols with a single tap or similar technology should be available.		
• The system should be quoted with low volume (2 µl) plate to read minimum 24 spots at a time.		
Absorbance photometric performance :		
Wave length range – 230- 1000		
Wavelength Selection: Monochromator preferred, tunable in 1.0		
nm increments.		
Dynamic Range: 0-4 Abs or better.		
Fluorescence Performance :		
Reading Capabilities: Top & bottom of a Microplate Wavelength Range: 250 – 850 nm or Better.		
Travelengal hange. 250 050 mm of better.	l	

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Wavelength Selection: Monochromator preferred, tunable in 1.0	
nm increments.	
Dynamic range > 5 logs or better.	
Sensitivity – Top Read - 96 wells 1.0 pM or better, Bottom Read – 96	
wells 2.0 pM or better.	
Luminescence Performance :	
Flexibility to select Stop and Glow Luminescence mode	
Wavelength range: 300 – 850 nm or better	
Wavelength Selection: Monochromator preferred.	
Dynamic range > 6 decades or better.	
Sensitivity – ( ATP Glow ) - 96 wells 2 pM or better.	
• The system should be supplied with the latest desktop PC and	
monitor i5 or i7 with 2 TB SSD.	
The system should be supplied with Data analysis software.	
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software.	
The system should have inbuilt high-resolution touchscreen	
interface with embedded touch software allowing to set up custom	
protocols, take advantage of preloaded protocols and experiment.	
<ul> <li>Special supplies: Dark plates for top optics reading in</li> </ul>	
fluorescent mode	
Company must provide a compliance statement supported by	
technical literature and website.	
Authorisation certificate from the OEM must be included in the	
technical bid	
Unpacking and shifting of the instrument including manpower	
during installation must be in the vendor scope.	
User list must be enclosed for the quoted model supplied to any	
other institute/Organization in Delhi and NCR.	
Certificate for spare availability upto 10 years for quoted model to	
be provided from OEM alonwith the technical bid.	
Min.3 Customer satisfactory / performance certificate for specific	
quoted model from the end user should be included in the quote.	
Warranty 5 years including all spares , PM kit and calibrations of	
instrument on regular basis as and when required.	
Consumables required during installation to setup the new	
instrument must be quoted along with the instrument.	
AMC & CMC Charges for the next 5 years after standard warranty	
must be quoted in optional item	