

23.08.2023

Amendment No. 3**Sub: Amendment to the referred tender enquiry****Ref.: HITES/PCD/AIIMS-IV/70/Mix/2023-24, dated 09.08.2023 read with amendment no 1 and 2 dated 11.08.2023 and 22.08.2023 respectively.**

The following changes are being incorporated in the below mentioned Tender ID only

1) 2023_HITE_163943_20 - Real Time PCR Machine.

**SECTION VII
TECHNICAL SPECIFICATIONS****Item No.20****Technical specification of REAL TIME PCR MACHINE may be reads as:**

Sl. No	Technical Specification
1	Open system capable of performing both real time PCR and end point analysis.
2	Thermal Cycling in Peltier-based system / air based heating or cooling technology with rotor system.
3	Block/Rotary Format 96 or more well compatible with 96 samples or more (0.1 ml/0.2ml), at least 4 or 8-tube (0.1 ml/0.2ml) strips with optical flat/Compatible caps and Individual (0.1 ml/0.2ml) tubes with optical flat/Compatible caps
4	Supported volume range: 10µl to 50 µl.
5	Filters (wide band) - Five-excitation filters, five-emission filters.
6	Excitation source- LED / Xenone.
7	Detection: CCD/PMT
8	Block ramp rate (at peak): at least 2°C/sec
9	Temperature Range : 4°C - 99° C
10	Should be factory calibrated for handling various commonly used fluorescent dyes such as SYBR Green, FAM, VIC, JOE, HEX, TET, NED, TAM RA, ROX, Texas Red, Cy3, Cy5, Quasar 670, 705 and calibration for any other dye in the wavelength of 300- 700nm should be possible without any additional filter sets.
11	Reaction should be run in the form of plate, individual tube and tube strips with optical flat caps.

12	Should have feature of performing relative and absolute quantitation, Melting curve analysis (at high resolution), gradient/primer optimization and multiplex-PCR, SNP analysis, dissociation curve analysis, pathogen detection and plus/minus assays etc.
13	Data collection: Standard- Collect data for all 5 filters for all wells regardless of plate setup. Plate setup may be altered after run completes. Expert: Collect data for selected individual filter or group of filters for all wells regardless of plate. Plate setup may be altered after run completes.
14	Details of data acquisition during run for all dyes should be provided and ensured Temperature accuracy: Maximum (+/- 0.25°C of set point/display temperature, measured at 3 minutes after clock start).
15	Run time: —40 min (fast mode-expert), <2 hrs (standard & emulation mode) for 40 cycles.
16	The software should be inclusive of Multi-componenting Algorithm designed to provide precise deconvolution of multiple dye signals in each well to ensure minimal crosstalk when using multiple fluorophores for multiplex assays.
17	Dedicated licensed full version software for primer and probe design with comprehensive assay design and development guidelines for quantitative and qualitative real-time assays should be provided to enable designing of custom oligo assays.
18	Software for analysis of comparative Ct, standard curve, relative standard curve, allelic discrimination/SNP genotyping.
19	Must be supplied with laptop having i7 processor 1 TB Hard disk with 8 GB RAM, Windows 11 or latest.
20	Should be supplied with suitable online UPS with 1 hour back up.
21	The IQ, OQ and PQ of the instrument should be performed at the time of installation.
22	Should be BIS or CE-IVD or US FDA certified.
23	There should be 21CFR compliant software to get features like security access, auditing and e signature.
24	Electrical specification: 220 Volt, 50 Hz, Single phase A.C
25	It should be supplied with a warranty and CMC as per tender terms.
26	Any periodic calibration pertaining to the optics should be done by the vendor during warranty period.

All other contents of the Tender enquiry including terms & conditions remain unaltered.

Note:

- I. Prospective Bidders are also advised to check the website regularly prior to the closing date and time of online submission of bids.**