Republic of the Philippines University of the Philippines Mindanao <u>Mintal, Tugbok District, Davao City</u> Tel No. (082) 293-0016 local 103 Fax No. 293-0185

Date: 19 August 2015

ADDENDUM NO. <u>01-2015</u>

Name of Contract: Supply of Laboratory, Research and Teaching Equipment

This Addendum is issued to change the Delivery Schedule for Lot 3 from 45 calendar days to 60 calendar days and the Technical Specifications of Item #5 – Spectrophotometer Microtiter Plate Reader as follows:

Particulars	Revised Specifications
Item No 5 – Spectrophotometer	UV-VIS Spectrophotometer
	Real Double Beam Spectrometer-simultaneous measurement
Lot 2- Centrifuge and	of sample and reference signals
Spectrophotometers	Wavelength Range from 190 to 1100 nm
SP 	Fixed Spectral Bandwidth of 1.4 nm
	Quartz coated optics
	Fast scanning speed up to 12000 nm/min
	Pre-adjusted and voltage-stabilized light sources, easy
	access, easy to change by a separate lamp cover
	Optical System:
	Monochromator with imaging grating and aspheric quartz
	coated optics Internal Holmium oxide filter
	Light Source:
	Combination of Halogen and Deuterium lamp
	Lamp change selectable between 300 and 450 nm
	Scanning Mode:
	Scanning speed and data interval selectable
	Minimal integration time 1 ms
	Modes available: Energy, absorption, transmission
	reflectance
	Sample compartment dimensions (WxHxD) not less than
	364 x 185 x 260 mm for mounting of accessories, with
	carrying rails inside.
	Second cell position directly in front of the detector area fo
	measuring turbid samples
	PC connection via USB
	Complete control of the spectrometer and the accessories by
	software
	Guarantees the GLP suitable operation up to the complete
	conformance with FDA 21CFR Part 11
	Windows 7 compatible 32 bit and 64 bit software
	Automatic accessory recognition
	Self-Check System (SCS) to checking main device
	parameters for trouble-free operation of the analysis system
	Spectral Bandwidth fixed at 1.4nm
	UV Resolution (toluene-hexane) ≥ 1.6
	Wavelength Accuracy (Deuterium line at 656 nm) ±0.
	nm Wayslangth Accuracy (with Halmium Oxide filter) +0.5
	Wavelength Accuracy (with Holmium Oxide filter) ±0.5
	hm
	Wavelength Reproducibility (with Holmium Oxide filter)
	0.02 nm

Particulars	Revised Specifications
Item No 5 – Spectrophotometer	Photometric Accuracy
	VIS at 546 nm with Neutral glass filter Hellma F4 ±0.003A
Lot 2- Centrifuge and	UV with Potassium dichromate according Ph.Eur. ±0.01A
Spectrophotometers	Photometric Reproducibility ≤ 0.0005 nm
•	Stray Light
	198 nm (KCI Merck 1.08164.0001): $\leq 0.3\%$ T
	$220 \text{ nm (Nal)}: \leq 0.03 \% \text{ T}$
	240 nm (Nal): $\leq 0.03 \% T$
	$340 \text{ nm (NaNO_2)}: \le 0.02 \% \text{ T}$
	Baseline Stability at 500 nm \leq 0.0001 (RMS)
	Long-term stability at 500 nm ±0.0005 A/h
	Scanning speed 12000 nm/min

For guidance and information of all concerned.

ANTONIO R. OBSIOMA, Ph.D. Chair, Bids & Awards Committee

Received by:	
Signature over Printed Na	me