BATAAN PENINSULA STATE UNIVERSITY

Capitol Compound, City of Balanga, Bataan 2100

OFFICIAL BIDDING FORM

			OFFICIAL BIDDING FORM			
Item No.	Qty.	Unit	Specifications	Offer (Brand)	Unit Cost	Total Cost
1		Lot	STRUCTURAL PLATFORM			4,999,800.00
			Key Features			
			Supports any of the Structures experiment modules, providing			
			platform			
			Rigid design with adjustable feet and a low centre of gravity for			
			stability and accurate results			
			Includes measuring scales for easy and accurate positioning of			
			parts, changing experiments is as quick and simple as possible			
			• Includes a USB interface hub (with data acquisition Onboard			
			software) for connection to a suitable computer for display and			
			data acquisition			
			Comes with simulation, display and data acquisition software			
			• · ·			
			Laptop			
			Processor: Core i5			
			Ram: 8 Gb			
			Storage: 512Gb SSD			
			Screen: 15 inches			
			OS: windows 11			
			Bending Moments in Beams			
			Features			
			Fits to the Structures			
			Unique beam 'cut' and load cell system for an accurate			
			measurement of bending moment			
			Includes multiple loads for many combinations of loads			
			including uniformly distributed loads (UDLs)			
			Supplied with a storage tray			
			Works with software			
			 Direct reading of bending moment at the 'cut' for quick and 			
			simple experiments			
			Learning outcomes			
			• Bending moment at the cut due to a varying single point load			
			• Bending moment at the cut due to a moving single point load			
			Bending moment at the cut due to a uniformly distributed load			
			Influence lines and superposition			
			Items Included:			
			• Two supports, holding a beam of 0.8 m length and 0.5 m span			
			Bending moment load cell built into the centre span of the beam			
			• Cable			
			• Four mass hangers			
			• 50 x 20 g masses			
			• Two UDL bars			
			• Storage tray			
			• Comprehensive user guide			
			Shear Force in Beams			
			Learning outcomes			

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		Shear force at the cut due to a varying single point load			
		Shear force at the cut due to a moving single point load			
		Shear force at the cut due to a uniformly distributed load			
		Influence lines and superposition			
		Items Included:			
		• Two supports, holding a beam of 0.8 m length and			
		0.5 m span			
		Shear force load cell built into the centre span of the beam.			
		• Cable			
		Four mass hangers			
		• 50 x 20 g masses			
		• Two UDL bars			
		Storage tray			
		Comprehensive user guide			
		Deflection of beam and cantilevers			
		Key Features			
		Selectable beam fixing conditions, with fully adjustable load and			
		deflection measuring positions for increased experiment range			
		Includes beams of different material and cross-section for			
		comparison of elastic(Young's) modulus and Second Moment of			
		Area ('I' value)			
		High-resolution digital deflection indicator for maximum			
		measurement accuracy			
		• Includes Vernier caliper for cross-section measurement			
		Supplied with a storage tray to keep smaller items safe			
		Works with software data acquisition			
		Learning outcomes			
		Beam bending formula and structural 'stiffness'			
		Deflection due to point loads and UDLs (uniformly distributed			
		loads)			
		How beam fixings affect deflection of:			
		Simply supported beams			
		Fixed or 'encastre' beams			
		Cantilever beams			
		Propped cantilever			
		Shape of a deflected beam			
		Beam length and deflection			
		Beam material and deflection — the elastic (Young's) modulus			
		Beam cross-section and deflection — the Second Moment of			
		Area ('I' value)			
		Pure bending of a beam			
		Reciprocal theorem (Maxwell-Betti)			
		Items Included:			
		Two beam supports with two fixing methods			
		Support with digital deflection indicator of resolution 0.01 mm			
		• Five different beams of length 850 mm and nominal cross sections:			
		• Aluminium: 19 x 3.2 mm, 19 x 4.8 mm and 25.4 x 3.2 mm			
		• Brass: 25.4 mm x 3.2 mm			
		• Mild steel: 25.4 mm x 3.2 mm			
		• Cable			
		Nine mass hangers			
		• 50 x 20 g masses			
		Hexagon tools for beam fixings			
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		• Vernier caliper		
		• Storage tray		
		• Comprehensive user guide		
		Bending Stress in a Beam		
		Key Features		
		One of a range of experiment modules that teach structures		
		principles		
		Fits to the Structures platform for ergonomic use and space-		
		saving storage		
		Strain gauge amplifier and multiple strain gauges for a complete		
		measurement of strain at different positions around the beam		
		section		
		T-section beam for stability, with an off set neutral axis		
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		Includes Vernier caliper for beam cross-section measurement		
		Supplied with a storage tray to keep smaller items safe		
┣──		Works with software data acquisition		
 				
┣───		Learning outcomes		
┣──		Stress and strain relationship		
<u> </u>		Strain gauges as instruments		
ļ		Finding the neutral axis by experiment and calculation		
		How the beam cross-section dimensions affect the second		
		moment of area (I value) and neutral axis		
		Software		
		data acquisition applications		
		(data acquisition Onboard) for each experiment module, with		
		additional simulated experiments		
		The simulated experiments allow students to simulate the hands-on		
		laboratory experiments, verifying their results.		
		They also allow simulation of alternative set-ups, such as beams of		
		different cross-sectional shape and material properties.		
		Items Included:		
		• Two beam supports		
		• T-section beam with nine strain gauges. 0.85 m length and 0.7 m		
		span		
		Strain gauge amplifier, 16 input		
		• Load cell of maximum capacity 650 N		
		Nine 1 m strain gauge cables		
		• Two cables		
		Hexagon tools for beam fixings		
		• Vernier caliper		
		• Inclinometer		
		Storage tray		
		Comprehensive user guide		
		Includes:		
		Electronic Laboratory (1 (ONE) year subscription) should provide		
		actual demo during post qualifications		
<u> </u>		Key features		
		Provides automatic calculation, recording, charting and data		
		export remotely		
		An unlimited number of students can simultaneously acquire		
		and process live experimental data remotely from their		
		computer		
		can individually manipulate the experiment data remotely		
		clear, customisable display and layout	<u> </u>	
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Nothing Follows				
In	ndicate and attach the brand/samples/brochures of the items being offered	Total ABC		4,999,800.00
	• prints charts and data tables			
	Recording real-time calculated data			
	• Exporting data to be compatible to other software			
	Record data for printing and later analysis			
	Real-time traces of data			
	• Display of real-time data, in digital form or as an analogue meter			
	Data record set by time or intervals			
	• Input data manually or automatically			
	• To monitor, the connection status of students are time logged			

Note;

1. All Entries must be typewritten

2. Project duration must be completed within 210 calendar days from the commencement date

3. Warranty security shall be required from the contract awardee for a minimum period of three (3) months, in the case of Expendable Supplies/Expiration of the products must be at least one (1) year from the date of delivery

4. Price validity shall be for a period of 120 calendar days

After having carefully read and accepted your General Conditions, I/We quote on the item/s at prices noted above

5. G-EPS Registration Certificate shall be attached upon submission of the quotation

6. Bidders shall submit original brochures showing certifications of the product being offered

Printed Name with Signature

Telephone/Cellphone No.

E-mail Address