



المواصفات الفنية لمناقصة شراء أجهزة
علمية ومستلزماتها
شعبة العلوم النووية الأساسية

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NUCLEAR RESEARCH CENTER
Egyptian Atomic Energy Authority

القيمة التقديرية لمناقصة شراء أجهزة علمية ومستلزماتها

م	المسمى أو الوصف	العدد	سعر الوحدة (جنيه)	السعر التقريبي (جنيه)
1.	<p><u>وحدة قياس جرعات إشعاعية شخصية</u></p> <p>Sensor: CsI (TI) Radiacode 103 Radiation Detector Resolution: 8.4% FWHM approx... Count to dose rate: approx. 30 cps = 1 μSv/h for Cs-137 Energy range: (X-ray and Gamma) Simplified Spectrometry: via mobile or PC Nuclear Isotope Visualization Radiation Mapping: Interactive Color-Coded Radiation Mapping via mobile phone (not included) Spectrogram Functionality: Real-Time Radiation Spectrum Visualization via mobile or PC (not included) Dose rate assessment:- range (by Cs-137): 0.1-1000 uSv/h With error: \pm15% max and time (display update period):0.5s Accumulated dose assessment range: 0-10 Sv Non-volatile memory and Built-in battery Operating temperature range: -10 to +45°C Wire connection: -type: USB- cable: type C Wireless connection: yes Display: Monochrome Dust and moisture protection: code IP64 Hard Case: yes</p>	5		
2.	<p><u>وحدة تزويد الطاقة اللامتقطعة:</u></p> <p>Uninterruptible power supply (UPS) Specifications: Main Input Voltage: 220-240 V Output Voltage 220 V - 240 V Output connector type Hard wire 3-wire (1P + N + E) Provided equipment 1 USB cable + 1 RS-232 config Battery type: Lead-acid battery Battery voltage: 12-192 V Battery recharge time 5 h Battery charger power 235 W rated Maximum configurable power in VA: 10000 VA Maximum configurable power in W: 10000 W Output frequency 50/60 Hz +/- 3 Hz sync to mains Harmonic distortion 1 % Efficiency: 90 % (@full load) or more Bypass type Internal bypass (automatic and manual) Crest factor: optional</p>	1		

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3.	<p>ماكينة تشكيل خام بلاستيك لتصميم التجارب وتشكيل الدروع والأجزاء المعملية</p> <p>Specifications: Shell: Enclosed (Metal or Glass) Chassis: Die-Cast Aluminum Max Speed: 500 mm/s or more Acceleration: 20000 mm/s² or more Hotend Flow: 32 mm³/s or more Accuracy: ±0.1 mm at 100 mm or less Layer Thickness: extended range from 0.1 mm to 0.4 mm Leveling Method: Auto-Leveling Calibration: Full-Auto Calibration Build Volume(W×D×H): 256×256×256mm Supported Filament: Carbon/Glass Fiber Reinforced Filaments/PLA/PETG/ABS/ASA/TPU/PET/PC/PA Supported Filament Diameter: 1.75 mm Chamber Monitoring Camera: Yes Filament Run Out Sensor: Yes Spare Filament Detection Module: 1.75mm (optional) Power Loss Recovery: Yes Extruder: Dual-Gear, Direct drive Extruder Nozzle: 0.4 Brass-Hardened Steel Nozzle (Included) Hot End: All-Metal up to 320 °C or more (controlled) Heated Bed: removable, spare parts, adhesive liquids Heated Bed Temperature: 110 °C / adjustable Filament Cutter: Yes Touch Screen: yes Connectivity: USB (necessary) and Wi-Fi Slicing Software: Manufacturer based (internet downloadable) Input Format: STL, OBJ, 3MF, and STP (necessary), and GCODE, FBX, PLY, X3G, or VRML (optional) Tools and Manual: yes</p>	1		
	<p>تابع بند رقم 1 : مجموعة فوهة بثق بلاستيك</p> <p>Brass-Hardened Steel Nozzle Kit Set of five (0.2/0.4/0.6/0.8/1.0 mm) Hot End: All-Metal Max Hot End Temperature: 320 °C</p>	1		
	<p>تابع بند رقم 1 : فتيل ماكينة تشكيل بلاستيك من خام Matt PLA</p> <p>Required Colors (Navy Blue, Sunshine Yellow or Ruby Red) Mass: 1 kg each Diameter: 1.75 mm Tensile Strength – XY: 30 ± 1 MPa Breaking Elongation Rate – XY: 7.9% ± 1.1% Bending Modulus – XY: 2996 ± 159 MPa Bending Strength – XY: 75 ± 3 MPa Impact Strength – XY: 29.3 ± 2.9 kJ/m²</p>	20		

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السعر التقريبي (جنيه)	سعر الوحدة (جنيه)	العدد	المسمى أو الوصف	م
		1	<p>Source Measure Unit Specifications: Voltage Source Specifications: ± 10 V Voltage Measure Specifications: ± 10 V Current Measure Specifications: ± 200 mA : ± 20 μA Shutter/Trigger: The Shutter/Trigger can be used either as an input or an output. Software: Control each SMU and Vsense channel independently, allowing you to perform many of the most common electrical measurements. Set voltage and measure current with two independent SMU channels (voltage source, current sense). Quickly and accurately measure voltages with the two Vsense channels. Easily set sampling rates for the SMUs and Vsense channels via the interface. Save your data as a portable spreadsheet (.csv) file or a text (.txt) file for analysis with your favourite software package. Output unit display for Four-Point Probe: Tower Desktop - Intel Core I7 - 32GB RAM - 1TB HDD+ 512 SSD/ Microsoft WIN. 11 Professional/ Optical Scroll, Multimedia Keyboard/ 19" TFT Monitor /DVD Writer/Wifi.</p>	.4
		1	<p>Four-Point Probe Plus Product Features: Voltage range : ± 100 μV to ± 10 V Current range : ± 20 μA to ± 200 mA (5 ranges) Sheet resistance range : 100 mΩ/square to 10 MΩ/square Probe Spacing: Soft-tipped probe; 1.27 mm Sharp-tipped probe; 1.6 mm Rectangular Sample Size Range: Long Edge Minimum: 4 mm Short Edge Maximum: 152 mm Circular Sample Size Range (Diameter) : 4 mm to 152.4 mm Maximum Sample Thickness : 10 mm Full Software 24 VDC power adapter USB-B cable USB memory stick pre-loaded with the user manual, software installer, QC data, and USB drivers. 400-450 nm FTO coated glass substrate (60 x 60 x 2.2 mm) 10 kΩ resistor test head Output unit display for Four-Point Probe: Tower Desktop - Intel Core I7 - 32GB RAM - 1TB HDD+ 512 SSD / Microsoft WIN. 11 Professional/ Optical Scroll, Multimedia Keyboard/ 19" TFT Monitor /DVD Writer/Wifi.</p>	.5

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م	المسمى أو الوصف	العدد	سعر الوحدة (جنيه)	السعر التقريبي (جنيه)
.6	<u>Hotplate Magnetic Stirrer With Temperature Probe and Support Stand</u> Provides excellent heating performance and efficient mixing Ceramic top plate with excellent corrosion resistance Max Stir Bar Length: 40 mm Specifications Top Plate Material: Ceramic Temperature: 50°C to 380°C Speed: 100 to 1500 rpm Top Plate Size: 180 x 180 mm Stirring Capacity; up to 20 L 220V, 50Hz	2		
.7	<u>Amino – bonded HPLC column for sugar analysis</u> Specification: Achieve outstanding peak shape and sensitivity in weak anion exchange, reversed phase and normal phase modes with Hypersil GOLD Amino LC Columns Length : 250 mm Diameter : 4.6 mm Particle Size: 5 µm	1		
.8	<u>C18 HPLC column for vitamins analysis</u> Specification : Fully porous C18 5 µm, 150 x 4.6 mm	1		
.9	<u>Digital vortex mixers with Digital display of Speed and Time</u> Specification: Continuous and Touch modes Speed range: 200 to 3000 rpm Precise speed control: ±5% rpm Quick set up to Max rpm: 3 seconds 1500 rpm (Touch) 6 seconds 3000 rpm (Continuous) Time set: up to 99 minutes 2 Timer modes -Down-counting for repeat tests -Timer: Continuous, Time set as 0 Various accessories for different vessels	1		
.10	<u>Deuterium HPLC UV Detector Lamp compatible with Vanquish Core HPLC (ThermoFisher)</u> Deuterium lamp emitting a 190-380 nm UV spectrum for UV detection in liquid chromatography systems.	1		
.11	<u>Electric Grinder for sample preparation</u> Stainless Steel Large Capacity Portable Grinder Sharp stainless-steel blades 4 kg capacity at least Compact and portable design 5 Adjustable Grinding Levels High Speed.	1		

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السعر التقريبي (جنيه)	سعر الوحدة (جنيه)	العدد	المسمى أو الوصف	م
		2	<p>مقياس كهرباء متعدد - معتمد</p> <p>Digital Multimeter Fluke certified</p> <p>AC volts ranges (40 Hz to 500Hz): 4.000 V, 40.00 V, 400.0 V, and 1000 V Their AC voltage Resolution: 0.001, 0.01, 0.1, and 1, respectively DC volts ranges: 4.000 V, 40.00 V, 400.0 V, and 1000 V Their AC voltage Resolution: 0.001 V, 0.01 V, 0.1 V, 1 V, , respectively AC millivolts range: 400.0 mV resolution: 0.1 mV DC millivolts range: 400.0 mV resolution 0.1 mV Diode test range: 2.0 V Resistance range (Ohms): 400.0 Ω, 4.0 kΩ, 40.0 kΩ, 400.0 kΩ, 4.0 MΩ, 40.0 MΩ Resistance range resolutions:0.1 Ω, 1 Ω, 10 Ω, 100 Ω, 1 kΩ, 10 kΩ, respectively Capacitance ranges: 40.0 nF, 400.0 nF, 4.0 μF, 40.0 μF, 400.0 μF, 1 mF Capacitance resolutions: 0.01 nF, 0.1 nF, 1 nF, 0.01 μF, 0.1 μF, 1 μF, respectively Frequency ranges: 50.0 Hz, 500.0 Hz, 5.0 kHz, 50.0 kHz, 100.0 kHz Frequency resolutions 0.01 Hz, 0.1 Hz, 0.001 kHz, 0.01 kHz, 0.1 kHz, respectively Duty Cycle 1% to 99% AC current ranges (40 Hz to 400 Hz): 400.0 μA, 4000 μA, 40.0 mA, 400.0 mA, 4.0 A, and 10.0 A AC current resolution: 0.1 μA, 1 μA, 0.01 mA, 0.1 mA, 0.001 A, and 0.01A, respectively DC current: 400.0 μA, 4000 μA, 40.00 mA, 400.0 mA, 4.0 A, and 10.0 A DC current resolution 0.1 μA, 1 μA, 0.01 mA, 0.1 mA, 0.001 A, 0.01 A, respectively Temperature ranges: 50 °C- 400 °C, 0 °C- 50 °C, -55 °C- 0 °C Temperature accuracy ranges 2% ±1 °C, ±2 °C, 9% ±2 °C Backlight: Yes Preferred 17B+</p>	.12
		1	<p>سنج موازين عيارية</p> <p>Weight set 1mg-200g</p> <p>1 x 1mg, 2 x 2mg, 1 x 5mg, 1 x 10mg, 2 x 20mg, 1 x 50mg, 1 x 100mg, 2 x 200mg, 1 x 0.5g, 1 x 1g, 2 x 2g, 1 x 5g, 1 x 10g, 2 x 20g, 1 x 50g, and 1 x 100g Calibration certificate without expiration date or valid for at least 5 years, and traceable to international system of unit.</p>	.13

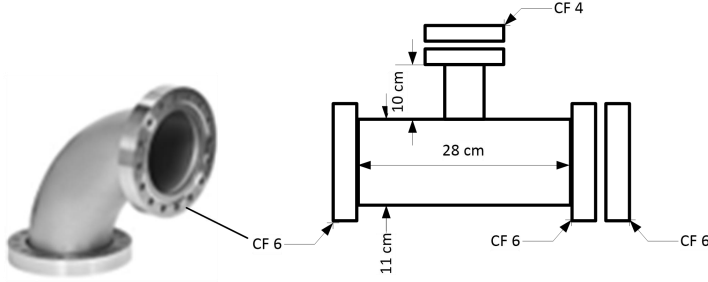
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السعر التقريبي (جنيه)	سعر الوحدة (جنيه)	العدد	المسمى أو الوصف	م
		5	<p>Work Station</p> <p><u>Product Features:</u></p> <ul style="list-style-type: none"> - Tower Desktop - Intel Core I7 12700 (or higher) - 32GB RAM - 1TB HDD+ 512 SSD - GBIB Compatible <p><u>Specifications</u></p> <ul style="list-style-type: none"> • Storage Type: SSD+HDD (Hybrid) • RAM Size: 32 GB • Total Internal Memory: 1.512 TB • Operating System Version: Original Microsoft WINDOWS 11 Professional (Egypt Support) • Original Microsoft Office2024 Professional plus (Egypt Support) • Operating System: Windows • Processor Type: Core I7 • Model Series: Brand name • Processor Version Number/Generation: 12th Gen. • Number Of Cores: Octa Core • Compatible with Advanced Visual Basic • RAM Type: DDR4 • Processor Brand: Intel • Features: Personal, Intel, USB • HDMI Output: Yes • Number Of USB Ports: 8 • Number Of HDMI Ports: 2 • Multimedia Keyboard • Optical Scroll, Wired Mouse • 19" TFT Monitor <p><u>Out Put Result:</u></p> <ul style="list-style-type: none"> • Functions: Print, copy, scan, fax • Print speed black (ISO, A4): Up to 40 ppm • Duplex printing: Automatic (default) • Print quality black (best): Fine Lines (1200 x 1200 dpi) • Display: 2.7" (6.86 cm) intuitive color touchscreen (CGD) • Memory: 512 MB • Scan resolution, optical: Up to 1200 x 1200 dpi • Duplex ADF scanning 	.14

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م	المسمى أو الوصف	العدد	سعر الوحدة (جنيه)	السعر التقريبي (جنيه)
.15	Rotary Vane Dual Stage Mechanical Vacuum Pump Specifications: <ul style="list-style-type: none"> Displacement; 3.7 m³h⁻¹ Ultimate pressure: 4 x 10⁻³ mbar / 3 x 10⁻³ Torr Motor power 50/60Hz:450 / 550W Nominal rotation speed: 50/60Hz 1500 / 1800 rpm Weight (without oil):25 kg / 55 lb Oil capacity min/max:0.42 / 0.7 litres Recommended oil: Ultragrade 19 Inlet flange: NW25 Exhaust flange: NW25 Noise level:48 dB(A) @ 50 Hz Operating temperature range:12 – 40 °C 220V, 50 Hz. 	1		
.16	Rotary Vane double stage vacuum Pump Specifications: Rotary Vane double stage vacuum Pump, of speed 19 m ³ /hr. Vacuum range 3x10 ⁻³ hPa. Complete with temperature sensor, integrated gas ballast, 220 V, 50 Hz. Complete with 10 KF-clamps and 5 Cu rings 160.	1		
.17	High Voltage DC Power Supply مصدر جهد عالي Specifications: <ul style="list-style-type: none"> Input Voltage : DC220V±10% 50/60Hz Output Peak Voltage :0-10kVAC Output Peak Current : 0-100mA Output Peak Power: 1000W Output Frequency : 10-30kHz Waveform : Sine Wave High voltage stability Case Material : Aluminum Case Size : W443*D503*H133(MM) Safety: Against Arc 	1		
.18	Edwards LV10K Fine Control Needle Valve صمام تفريغ عالي يلوى Specifications: <ul style="list-style-type: none"> Maximum flow rate: (approx) 0.1 l s⁻¹ Maximum inlet pressure: 2000 mbar / 1500 Torr Maximum leak rate: 10⁻⁷ mbar l s⁻¹ / 8 x 10⁻⁸ Maximum leak Vacuum connection: NW10 With its fixing Clamps and O rings. 	1		
.19	Conflat Flange (CF) Elbow 90 Degrees, CF 6 inches Stainless Steel Fittings Specifications: Conflat, Flange, (CF6) Elbow, 90 Degrees, CF 6 inches Stainless Steel Fittings These 90 degree elbow vacuum fittings have two rotatable 6 inch conflat (CF) flanges. Can be used for ultra-high vacuum. With its copper gasket to achieve high vacuum seal and can operate down to 10 ⁻¹³ torr (10 ⁻¹¹ Pa) and can be heated to 450 °C for bake-out.	1		

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م	المسمى أو الوصف	العدد	سعر الوحدة (جنيه)	السعر التقريبي (جنيه)
.20	غرفة تفريغ عالي High vacuum chamber Specifications: High vacuum chamber (CF6) 28 cm long with its copper gasket to achieve high vacuum seal and can operate down to 10^{-13} torr (10^{-11} Pa) and can be heated to 450 °C for bake-out.	1		
				
.21	ترمومتر رقمي Digital Thermometer Specifications: <ul style="list-style-type: none"> • LCD digital Display • Measuring range: - 70 to 1100°C • Resolution: 0.1°C • Probe: Type K • Auto off • Battery: 3 x 1.5 volt AAA, 10,000 hours 	1		
.22	Surface Roughness Tester Specifications: Handheld Surface Roughness Tester, Inductive 21 Roughness Parameters, Connected With Printer Via Bluetooth, Display Roughness Values, Profile And Curve, Memory Of Maximum 100 Results, Automatic Power Off.	1		