



قائمة بالأجهزة و الالات و المعدات التي تم الشراء من تمويل البرنامج و الجامعة منذ الفترة
من 2010/4/1 الى 2012/9/30:

الكمية	ميزان حساس كهربى أربع أرقام عشرية	بند (1) :
2	Analytical Balance	
	Maximum capacity:	210g
	Readability:	0.0001g
	Repeatability(S.D):	0.0002g
	Linearity(±):	0.0002g
	Pan size:	90mm

الكمية	ميزان حساس كهربى ثلاثة أرقام عشرية	بند (2) :
2	Analytical Balance	
	Maximum capacity:	350 g
	Readability:	0.001 g
	Repeatability(S.D):	0.001 g
	Linearity(±):	0.002 g
	Pan size:	140 mm

الكمية	ميزان حساس كهربى ثنائى أرقام عشرية	بند (3) :
1	Analytical Balance	
	Maximum capacity:	500 -750g
	Readability:	0.01 g
	Repeatability(S.D):	0.01 g
	Linearity(±):	0.02 g
	Pan size:	140 mm

عميد الكلية و مدير المشروع

أ.د/ ماهر حسب النبى خليل

المدير التنفيذي للمشروع

أ.د/مخلوف محمد محمود بخيت

الكمية	جهاز PCR عادى	بند (4) :																																														
2	<p>Thermal Cycler the smallest, lowest cost unit on the market. It is available with 25-48 x 0.2 ml or 25-48 x 0.5 ml microtube interchangeable block formats.</p> <p>KEY FEATURES</p> <ul style="list-style-type: none"> - Unparalleled block uniformity: $\pm 0.1^{\circ}\text{C}$ at 50°C, ensuring optimal reproduc - Fast test heating rate: up to $3.6^{\circ}\text{C}/\text{Sec}$ heating rate and $2.0^{\circ}\text{C}/\text{Sec}$ cooling - Password protection: Protect your program against unwanted modification - Heated lid: The selectable temperature range heated lid ($+100^{\circ}\text{C}$ to $+115^{\circ}\text{C}$ variety of height tubes and can be enabled or disable. 																																															
	<table border="1"> <thead> <tr> <th colspan="2">SPECIFICATION:</th> </tr> <tr> <th colspan="2">TEMPERATURE</th> </tr> </thead> <tbody> <tr> <td>Temperature range</td> <td>4°C to 99°C</td> </tr> <tr> <th colspan="2">PROGRAMMING</th> </tr> <tr> <td>Number of programs*</td> <td>99 (3 segment programs)</td> </tr> <tr> <td>Alphanumeric Key Pad</td> <td>Yes</td> </tr> <tr> <td>Program naming capability</td> <td>Alphanumeric</td> </tr> <tr> <td>Program password Protection</td> <td>Yes</td> </tr> <tr> <td>Display</td> <td>Large 4 line Alphanumeric</td> </tr> <tr> <td>Maximum number of segments/loop*</td> <td>80</td> </tr> <tr> <td>Maximum number of repeat cycles per program *</td> <td>99</td> </tr> <tr> <td>End of program alarm</td> <td>Yes (can be disabled)</td> </tr> <tr> <td>Pause facility</td> <td>Yes</td> </tr> <tr> <td>Incremental/Decremental timing & Temperature</td> <td>Yes</td> </tr> <tr> <td>Auto Restart on power failure</td> <td>Yes</td> </tr> <tr> <td>Run end time calculation</td> <td>Yes</td> </tr> <tr> <td>Variable programmable ramp rate steps</td> <td>$\pm 0.1^{\circ}\text{C}/\text{Sec}$</td> </tr> <tr> <td>Serial port RS 232 socket & PC connection</td> <td>Yes</td> </tr> <tr> <td>Voltage selection switch (230 V/120V)</td> <td>Yes</td> </tr> <tr> <th colspan="2">BLOCK TEMPERATURE:</th> </tr> <tr> <td>Block temperature range</td> <td>4°C to 99°C</td> </tr> <tr> <td>Heating ramp rate*</td> <td>$3.6^{\circ}\text{C}/\text{Sec}$.</td> </tr> <tr> <td>Uniformity at 50°C*</td> <td>0.2°C</td> </tr> </tbody> </table>	SPECIFICATION:		TEMPERATURE		Temperature range	4°C to 99°C	PROGRAMMING		Number of programs*	99 (3 segment programs)	Alphanumeric Key Pad	Yes	Program naming capability	Alphanumeric	Program password Protection	Yes	Display	Large 4 line Alphanumeric	Maximum number of segments/loop*	80	Maximum number of repeat cycles per program *	99	End of program alarm	Yes (can be disabled)	Pause facility	Yes	Incremental/Decremental timing & Temperature	Yes	Auto Restart on power failure	Yes	Run end time calculation	Yes	Variable programmable ramp rate steps	$\pm 0.1^{\circ}\text{C}/\text{Sec}$	Serial port RS 232 socket & PC connection	Yes	Voltage selection switch (230 V/120V)	Yes	BLOCK TEMPERATURE:		Block temperature range	4°C to 99°C	Heating ramp rate*	$3.6^{\circ}\text{C}/\text{Sec}$.	Uniformity at 50°C *	0.2°C	
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	Accuracy at 50 °C* ± 0.2°C Temperature set point adjustment 0.1°C End of program cooling below ambient YES * All specifications given are typical values under ambient temperature of 20°C.																																							
الكمية	جهاز PCR متدرج PCR Gradient	بند (5):																																						
1	<p>PCR Gradient : If experiments require a temperature gradient or the use of multi-well plates, the Amplitronyx 6 offers the widest gradient range available and allows for tool-free swapping of four different thermal blocks. Program a 36°C-wide gradient across the 0.2 ml and 0.5 ml blocks, or increase your throughput and experimental flexibility even more with 384-well and slide blocks. The temperature of the heated lid can be adjusted to suit your protocol, and up to 200 ten-stage/step programs for touchdown and standard amplification can be stored.</p> <p>Specifications</p> <table border="1"><thead><tr><th colspan="2">Sample Blocks:</th></tr></thead><tbody><tr><td>Capacity</td><td>0.2ml Gradient Block: 96 x 0.2ml tubes or 1 x 96-well plate 0.5ml Gradient Block: 54 x 0.5ml tubes 384-well Block: 1 x 384-well plate Flat Block: 4 Slides</td></tr><tr><td>Temperature Range</td><td>4 - 99°C</td></tr><tr><th colspan="2">Heated Lid:</th></tr><tr><td>Temperature</td><td>Auto / Adjustable</td></tr><tr><td>Pressure</td><td>Electro-Mechanical Pressure Adjustment</td></tr><tr><th colspan="2">Programming:</th></tr><tr><td>Display/Input</td><td>5.7" - STN ¼ VGA Color Touch Screen</td></tr><tr><td>Program Storage</td><td>200</td></tr><tr><td>Maximum Protocol Stages</td><td>10</td></tr><tr><td>Maximum Steps per Stage</td><td>10</td></tr><tr><td>Gradient Capable</td><td>36° Range Activated Between 30°C - 80°C</td></tr><tr><td>Maximum Programmed Dwell Time</td><td>∞</td></tr><tr><td>Pause Function</td><td>YES</td></tr><tr><td>Temperature Inc/Dec (Touchdown)</td><td>YES</td></tr><tr><td>Cycle Auto Time Extend</td><td>YES</td></tr><tr><td>Auto-Restart on Power Failure</td><td>YES</td></tr><tr><td>Calculated time of completion</td><td>YES</td></tr><tr><td>Temperature Control Modes</td><td>Block Temp Probe</td></tr></tbody></table>	Sample Blocks:		Capacity	0.2ml Gradient Block: 96 x 0.2ml tubes or 1 x 96-well plate 0.5ml Gradient Block: 54 x 0.5ml tubes 384-well Block: 1 x 384-well plate Flat Block: 4 Slides	Temperature Range	4 - 99°C	Heated Lid:		Temperature	Auto / Adjustable	Pressure	Electro-Mechanical Pressure Adjustment	Programming:		Display/Input	5.7" - STN ¼ VGA Color Touch Screen	Program Storage	200	Maximum Protocol Stages	10	Maximum Steps per Stage	10	Gradient Capable	36° Range Activated Between 30°C - 80°C	Maximum Programmed Dwell Time	∞	Pause Function	YES	Temperature Inc/Dec (Touchdown)	YES	Cycle Auto Time Extend	YES	Auto-Restart on Power Failure	YES	Calculated time of completion	YES	Temperature Control Modes	Block Temp Probe	
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		Sim Tube Sim Plate Sim Slide
Working Conditions:		
Operating Temperature	Ambient (12°C - 32°C)	
Relative Humidity	≤ 80%	
Power Requirements	533W at 115/230VAC +/- 10% and 50/60Hz	

الكمية	جهاز تقطير كهربى مزدوج	بند (6):																				
2	<p>Double distilled water</p> <ul style="list-style-type: none">Fully automatic operationHigh purity pyrogen free outputLow temperature distillateOperates from any raw water supplyReservoir level controlSimple conversion to pre-treated feedSupplied with wall mounting bracket <p>Safety features allow unattended operation, Simple to clean Produces 4 liters/hour double distilled water for higher purity levels. The first stage distillation is carried out in a glassware set mounted at the front of the cabinet allowing easy access for decaling. The distilled water is fed to a second set of glassware mounted at the rear and distilled a second time. The rear glassware is fitted with a level sensor to ensure the heater is only activated when there is sufficient water in the boiler.</p> <p>SPECIFICATION:</p> <table><tr><td>Output, l/hr</td><td>4, double</td></tr><tr><td>pH</td><td>5.0 – 6.5</td></tr><tr><td>Conductivity, μScm</td><td>1.0 – 1.5</td></tr><tr><td>Resistivity, mOhm cm</td><td>0.7 – 1.0</td></tr><tr><td>Temperature, °C</td><td>25 - 35</td></tr><tr><td>Pyrogen content</td><td>Pyrogen free</td></tr><tr><td>Water supply</td><td>2 l/min 3-100psi (20-700kPa)</td></tr><tr><td>Electrical supply -</td><td>220 or 240V, 50-60Hz, single phase</td></tr><tr><td>Max. power, kW</td><td>6</td></tr><tr><td>Dimensions(w x d x h)</td><td>550x410x410 mm</td></tr></table>	Output, l/hr	4, double	pH	5.0 – 6.5	Conductivity, μScm	1.0 – 1.5	Resistivity, mOhm cm	0.7 – 1.0	Temperature, °C	25 - 35	Pyrogen content	Pyrogen free	Water supply	2 l/min 3-100psi (20-700kPa)	Electrical supply -	220 or 240V, 50-60Hz, single phase	Max. power, kW	6	Dimensions(w x d x h)	550x410x410 mm	
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الكمية	جهاز Gel Documentation System	بند (7):										
2	<p><u>Electrophoresis gel documentation system:</u> <u>Specification :</u></p> <table border="1" data-bbox="352 510 1353 1850"> <tr> <td data-bbox="352 510 632 954">Camera & optics</td> <td data-bbox="632 510 1353 954"> 1.4megapixels /16-bit performance (65 536 grey levels) Dynamic range : 4.8 OD Extreme sensitivity Scientific grade camera with electronically variable shutter speed ultra high sensitivity for fluorescence Scientific grade camera-chip quality: grade 0.zero defect Progressive scan –low dark current USB super – fast connection 6times optical zoom –manual (focusing gauge) or motorized configurations (auto focus) </td> </tr> <tr> <td data-bbox="352 954 632 1211">D55 DARKROOM</td> <td data-bbox="632 954 1353 1211"> FIRE READER D55 Steel and stainless steel darkroom Epoxy-painted for chemical resistance 3 position filter wheel 8-watt built-in roll-out transilluminator UV timer & security switch White light epi-illumination </td> </tr> <tr> <td data-bbox="352 1211 632 1507">Software</td> <td data-bbox="632 1211 1353 1507"> Fire Reader 1D software “One touch” fully automated image acquisition program Image enhancement, annotation and illustration. 3 image analysis modules: - 1D Molecular weight (MW, volume, intensity, ...) - Colony counting - Distance calculation (RF, IEF, ...) </td> </tr> <tr> <td data-bbox="352 1507 632 1693">Transilluminator</td> <td data-bbox="632 1507 1353 1693"> -Transilluminator UV surface: 20x20cm standard transilluminator. -Single wavelength dual intensity -Ethidium bromide filter for stained gels </td> </tr> <tr> <td data-bbox="352 1693 632 1850">Computer</td> <td data-bbox="632 1693 1353 1850"> P4, 3MHz/1024Cach, 4GB Ram, Hard 1024 GB,CD drive, LCD monitor 23", Scanner K.B and Mouse </td> </tr> </table>		Camera & optics	1.4megapixels /16-bit performance (65 536 grey levels) Dynamic range : 4.8 OD Extreme sensitivity Scientific grade camera with electronically variable shutter speed ultra high sensitivity for fluorescence Scientific grade camera-chip quality: grade 0.zero defect Progressive scan –low dark current USB super – fast connection 6times optical zoom –manual (focusing gauge) or motorized configurations (auto focus)	D55 DARKROOM	FIRE READER D55 Steel and stainless steel darkroom Epoxy-painted for chemical resistance 3 position filter wheel 8-watt built-in roll-out transilluminator UV timer & security switch White light epi-illumination	Software	Fire Reader 1D software “One touch” fully automated image acquisition program Image enhancement, annotation and illustration. 3 image analysis modules: - 1D Molecular weight (MW, volume, intensity, ...) - Colony counting - Distance calculation (RF, IEF, ...)	Transilluminator	-Transilluminator UV surface: 20x20cm standard transilluminator. -Single wavelength dual intensity -Ethidium bromide filter for stained gels	Computer	P4, 3MHz/1024Cach, 4GB Ram, Hard 1024 GB,CD drive, LCD monitor 23", Scanner K.B and Mouse
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الكمية	تاتك لحفظ ونقل النيتروجين السائل	بند (8):
2	<u>Liquid nitrogen container for storage</u> <u>Specification</u> <ul style="list-style-type: none">• Capacity : 12liters• Static evaporation rater : 0.09 liter / day• Static holding time 133 days• Neck diameter 50 mm Number of canisters : 6	

الكمية	حضانة ميكروبيولوجية	بند (9):
2	<u>Laboratory Equipment thermostatic Cabinet Incubators</u> <ul style="list-style-type: none">▪ plastic interior▪ Housing:▪ Power coated sheet▪ Micro processor control time and temperature▪ Adjustable start delay 1 min to – 99.59 h▪ Adjustable working time for current temperature 1 min to 99.59h▪ Temperature sensor failure alarm▪ failure control system Forced air circulation <u>Specifications:</u> Air circulation : forced Chamber volume : 195L Door : solid Temperature range : 3...+ 50 Controller : Microprocessor with external display Exterior dimensions (mm) : W x H x D: 595x2090 x610 Interiors dimensions (mm) : W x H x D:510x920x450 Shelves : 3	Power

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الكمية	جهاز الزراعة الميكروبية تحت تعقيم و الامان الحيوى المستوى الثانى	بند (10)*:
2	<p><u>MICROBIOLOGICAL SAFETY CABINETS Safety</u> <u>Bio Air- Class I and Class II type A2:</u> <u>Technical Specifications</u></p> <ul style="list-style-type: none">• Fully EN12469 certified by Tüv Hamburg (Class II Type A2; Class I pending).• State of the art microprocessor control system.• Main switch w/removable key.• Soft touch keyboard.• Bar graph for exhaust and down flow airflow conditions permanent display (Class II).• Bar graph for exhaust air flow conditions permanent display (Class I).• Alarms for low air flow and wrong front window position.• Sloped front and back wall for the most comfortable access.• Front access for filter maintenance and service.• C-shaped support stand for the easiest one ma installation procedure• Easy retrofit option kits. <p><u>Mechanical and functional specifications :-</u></p> <ul style="list-style-type: none">• Sloped front design for the highest operational comfort. Sloped back side of the working chamber for the best down flow distribution (cabinet carcass EN12298 tested and certified for air tightness)• Utilities inlets from the top of the cabinet.• Stainless Steel internal surfaces with 2B finishing (including spillage tray). Solid work surface (3 sections) and special designed front grill.• Exhaust grill (Class I) with high aerodynamic efficiency for a reduced turbulence exhaust air pattern inside the cabinet• Comfortable 200mm front opening.• Easy to install retrofit options through lateral sides.• Exposed exhaust Hepa filter for easy visual integrity check.• H14 class High Efficiency Particulate Air filters with 99.999% efficiency on .3micron particles (most penetrating particle diameter) (EN1822-1 and EN 13091:1999 tested and certified).• Both exhaust and main filters (Class II type A2) are equipped with a micromesh membrane located downstream which acts as airspeed equalizer expansion plenum, as well as a clear indicator of filter damages.• Filter change and maintenance from the front of the cabinet.• Exhaust transitions easily installable.• Anti-blow-back valve available as add-on option• Key operated. The key can be removed when the unit is in SAFE mode, in order to avoid unwanted operation. In case of power failure, the cabinet is re-set to original working conditions.• Self calibration cycle performed when cabinet is switched on.• High speed rinse and set up cycle performed, before reaching the SAFE operating mode.• Visual display of SAFE conditions. Pre-warning before actual alarm conditions are reached(visual and acoustic alarms)• Soft touch control with keys for standard service utilities. Interconnected UV and fluorescent lights.• For Class II type A2 models, the exhaust and recirculation flow rates ensure 25 air changes/min	

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	<p>in the working area (30% 70% split)</p> <ul style="list-style-type: none">• For Class II type A2 models, the front barrier air speed is $\geq 0.5 \text{ m/sec}$• For Class I model, the total exhausted air flow ensures a minimum average front speed $\geq 0.7 \text{ m/sec}$• Aperture protection Factor (Apf) $\geq 1.5 \times 10^5$• Clean ability Index CC grade. (EN 12296 tested and certified)• Light intensity on work surface $> 900 \text{ lux}$.• Noise level $\leq 60 \text{ dB(A)}$ 1.2 mt Model (ISO 11201, ISO 4871 and ISO EN 3744 tested and certified)• Work surface displacement (vibration) $< 0.005 \text{ mm RMS}$ between 20Hz and 20,000Hz (ISO 5349 tested and certified)• 230V, 50Hz• Max power (for each power point) 3Amps.• Microprocessor equipped with analogical watch dog.• CE certification according to Machinery Directive 89/392/EEC, 91/368/EEC, 93/44/EEC 93/68/EEC.
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الكمية	فرن تعقيم أطباق زجاجية بالهواء الساخن	بند (11):
1	<p>The Hot Air Sterilizers:</p> <p>The Hot Air Sterilizers are manufactured to conform with the strict requirements of hot air sterilization in laboratories and hospitals .with Digital Controls/DIG and stainless steel /SS</p> <p>Features:</p> <ul style="list-style-type: none">- 75 liters- Direct reading thermostat with- 120 minute run-back timer- Temperature range: 40 to 250C- Fluctuation +/- 0.75C- Fan circulation- Easy clean powder coated body- Stainless steel chamber- Safety overheat thermostat- Full two year warranty- C.E. compliant <p>Heating:</p> <p>Heated by Incoloy sheathed elements positioned around the fan.</p> <p>Controls:</p> <p>The basic control system comprises of a direct reading thermostat and overheat thermostat both with calibrated scales and tamper proof locks. They also include main switch with indicator and heat and overheat indicators. Timing is via a simple 120 minute mechanical run back timer. The digital system comprises a PID microprocessor digital controller with dual display of both temperature and set point and a separate digital timer that is programmed for automatic run back at temperature. As an option the units can be fitted with an audible alarm that signals when the process is complete and for additional safety a door lock is available.</p>	

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الكمية	جهاز أتوكلاف كهربى راسى 60-75 لترا	بند (12):
1	<p>Autoclave: Autoclave high pressure autoclave is suitable for general lab</p> <p>Features :-</p> <ul style="list-style-type: none">- full automatic control- Secure design- Automatic working for heating , ventilation , pressure, sterilization , exhaust- Adjustable exhaust speed of pressure- Manual valve is possible to operate passively- Double safety device with high pressure for heating- Accurate electronic timer- Standard basket (2ea) is basically provided- Four kind of model with different capacity <p>Specifications:-</p> <ul style="list-style-type: none">- Temp.Range : Ambient to 130c- Temp.Accuracy : -/+ 1c- Operating Pressure : 1.0 to 1.35kg/cm- Temp.Controller : Digital P.I.D controller- Timer: Electronic Type 0-60 min- Pressure Gage : Mechanical Type 0-5kg/cm- Air Exhaust : Adjustable Valve- Safety Device : Over Heat Protector- Monitor Unit : Audible & Visible Device- Basket : Xtandard type 3EA- Dimensions (in) : Dia 450 x 630 mm (out) : 770 x 570 x 910 (H)- Capacity : 60-75 Liter- Heater : 4.5kw- Power : 220 V.18A,60Hz	

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الكمية	جهاز Recirculating Cooler/Chiller	بند (13):
2	Recirculating Cooler/Chiller: Technical specifications	
	Working Temperature Range	-20 to +40°C
	Temperature Control	PID
	Temperature Stability	±0.5°C
	Display	LED
	Display Resolution	0.1°C
	Integrated Programmer	Not available
	Heater Capacity	0W
	Cooling Capacity	20 10 0 -5 -20 °C 300 250 200 150 100 W
	Refrigerant	R134a
	Pump	Capacity Pressure: 350mbar Flow rate: 15L/min
	Digital Interfaces	RS232
	Filling Volume	3 to 4.5L
	Suitable Fluids	Water, water-glycerol & JULABO thermal bath fluids
	Fittings	Barbed fittings for tubing of 8 and 12mm internal diameter
	Pump Connections	M16x1 male
	Dimensions (W x L x H)	25 x 50 x 60cm
	Weight	41kg
	Ambient Temperature	5 to 40°C
	Classification according to DIN 12876-1	-----
	Available mains power	230V/50Hz; 115V/60Hz; 230V/60Hz

عميد الكلية و مدير المشروع

أ.د/ ماهر حسب النبي خليل

المدير التنفيذي للمشروع

أ.د/مخلوف محمد محمود بخيت

الكمية	بند (14) :	جهاز تفريد كهربى افقى متعدد 14 سم																				
2	<p><u>Horizontal gel Electrophoresis:</u> The TVG-SYS Vari-gel midi system is ideal for standard preparatory and analytical electrophoresis techniques.</p> <p><u>Includes :-</u></p> <ul style="list-style-type: none"> - Gel casting tray for Vari-gel (10X7cm)- GT 7 - GT 10 Gel casting tray for Vari-gel gel unit (10x10cm) - GT15 Gel casting tray for Vari-gel (15X10) <p><u>Specifications:</u></p> <table border="1"> <tr> <td>Unit Dimensions (W x D x H)</td> <td>31.5 x 14.5 x 7cm</td> </tr> <tr> <td>Gel Size (W x L)</td> <td>see Trays</td> </tr> <tr> <td>Buffer Volume</td> <td>650ml</td> </tr> <tr> <td>Buffer Recirculation Ports</td> <td>2</td> </tr> <tr> <td>Maximum Sample Capacity</td> <td>80</td> </tr> <tr> <td>Combs</td> <td>2</td> </tr> <tr> <td>Comb Thickness</td> <td>1, 1.5 or 2mm</td> </tr> <tr> <td>Comb Throughput</td> <td>1 to 20 samples</td> </tr> <tr> <td>Recommended Running Voltage</td> <td>75 to 125V</td> </tr> <tr> <td>Power Output Connectors (diameter)</td> <td>Shrouded, 4mm</td> </tr> </table>	Unit Dimensions (W x D x H)	31.5 x 14.5 x 7cm	Gel Size (W x L)	see Trays	Buffer Volume	650ml	Buffer Recirculation Ports	2	Maximum Sample Capacity	80	Combs	2	Comb Thickness	1, 1.5 or 2mm	Comb Throughput	1 to 20 samples	Recommended Running Voltage	75 to 125V	Power Output Connectors (diameter)	Shrouded, 4mm	
Unit Dimensions (W x D x H)	31.5 x 14.5 x 7cm																					
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الكمية	بند (15) :	جهاز تفريد كهربى افقى متعدد تبريد 20 سم																						
1	<p><u>MAXI Horizontal gel Electrophores:</u> A complete 15cm wide Vari-gel system with 4 removable gel trays, 15 x 7, 15 x 10, 15 x 15 and 15 x 20cm (W x L); 2 x 1mm, 15-sample combs; aluminum casting gates and colored loading strips</p> <p><u>Specification</u></p> <table border="1"> <tr> <td>Unit Dimensions (W x L x H)</td> <td>31.5 x 19 x 7cm</td> </tr> <tr> <td>Gel Size (W x L)</td> <td>15x20, 15x15, 15x10 and 15x7 cm</td> </tr> <tr> <td>Buffer Volume</td> <td>950ml</td> </tr> <tr> <td>Buffer Recirculation Ports</td> <td>2</td> </tr> <tr> <td>Comb Thickness</td> <td>1, 1.5 or 2mm</td> </tr> <tr> <td>Maximum Sample Capacity</td> <td>180</td> </tr> <tr> <td>Combs</td> <td>2</td> </tr> <tr> <td>Comb Thickness</td> <td>1, 1.5 or 2mm</td> </tr> <tr> <td>Comb Throughput</td> <td>1 to 30 samples</td> </tr> <tr> <td>Recommended Running Voltage</td> <td>75 to 150V</td> </tr> <tr> <td>Power Output Connectors</td> <td>Shrouded, 4mm</td> </tr> </table>	Unit Dimensions (W x L x H)	31.5 x 19 x 7cm	Gel Size (W x L)	15x20, 15x15, 15x10 and 15x7 cm	Buffer Volume	950ml	Buffer Recirculation Ports	2	Comb Thickness	1, 1.5 or 2mm	Maximum Sample Capacity	180	Combs	2	Comb Thickness	1, 1.5 or 2mm	Comb Throughput	1 to 30 samples	Recommended Running Voltage	75 to 150V	Power Output Connectors	Shrouded, 4mm	
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أ.د/مخلوف محمد محمود بخيت



الكمية	جهاز تفريد كهربى راسى تبريد 20سم	بند (16) :
1	Maxi-Gel Electrophoresis Units: Twin-plate maxi -gel unit tank, lid, 2 x (20.5 x 20cm; W x H) plain glass plates, 4 x 1mm spacers, 2 x spacer aligners 2 x (20.5 x 20cm) notched glass plates, 1 x dummy plate, 2 x 1mm thick 24-sample combs, casting base and 2 x silicone seals. Technical specifications	
	Unit Dimensions (W x D x H)	28.5 x 15 x 27.5cm
	Inner Tank Dimensions (W x D x H)	27 x 12.5 x 25cm
	Plate Dimensions (W x H x T)	20.5 x 20 x 0.4cm
	Standard Spacer Dimensions (W x H x T)	2 x 20 x 0.1cm
	Active Gel Dimensions (W x H)	16.5 x 17.5cm
	Maximum Sample Capacity	2 x 48
	Recommended Buffer Volume	Inner Buffer 700ml Chamber Gel Tank 4200ml
	Recommended Running Conditions for Denaturing/Native PAGE Gel	Voltage 175 - 225V (8.75 - 11.25V/cm) Current 20 - 30mA Time 2.5 - 3.5h
	Snap-lock Connectors for Cooling Coil	Inner Diameter n/a Outer Diameter n/a
	Quick-fit Tubing	Inner Diameter n/a Outer Diameter n/a
	Casting Base Silicone Seal Dimensions (W x L x H)	1.7 x 22.5 x 0.8cm
	Power Output Connectors (diameter)	Shrouded, 4mm
	Recommended Power Supplies	Consort EV243
	No Of Sample	1,10 ,18 ,24 ,36 , 48

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الكمية	جهاز تفريد كهربى راسى 10سم	بند (17) :
2	Mini-Gel Electrophoresis Units: Twin-plate mini-gel unit with GRM and cooled gel tank, with built-in cooling coil and quick-fit tubing, plus lid, 2 x (10 x 10cm; W x H) plain glass plates, 4 x 1mm spacers, 2 x spacer aligners, 2 x (10 x 10cm) notched glass plates, 1 x dummy plate, 2 x 1mm thick 12-sample combs, casting base and 2 x silicone seals Technical specifications	
	Unit Dimensions (W x D x H)	28 x 15 x 18cm
	Inner Tank Dimensions (W x D x H)	16.5 x 11 x 15cm
	Plate Dimensions (W x H x T)	10 x 10 x 0.2cm
	Standard Spacer Dimensions (W x H x T)	1 x 10 x 0.1cm
	Active Gel Dimensions (W x H)	8 x 8.5cm
	Maximum Sample Capacity	2 x 20
	Recommended Buffer Volume	Inner Buffer Chamber 90ml Gel Tank 1600ml
	Recommended Running Conditions for Denaturing/Native PAGE Gel	Voltage 100 - 150V (10 - 15V/cm) Current 10 - 15mA Time 1 - 1.75h
	Snap-lock Connectors for Cooling Coil	Inner Diameter 10mm Outer Diameter 12mm
	Quick-fit Tubing	Inner Diameter 10mm Outer Diameter 12mm
	Casting Base Silicone Seal Dimensions (W x L x H)	1.5 x 11 x 0.8cm
	Power Output Connectors (diameter)	Shrouded, 4mm

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الكمية	جهاز هزاز فلاسكات زجاجية	بند (18) :																																										
3	<table border="1"> <tr> <td>Shaker type:</td> <td>Orbital</td> </tr> <tr> <td>Tray dimensions (W x D mm):</td> <td>00 x 360</td> </tr> <tr> <td>Bench Dimensions (W x D x H mm):</td> <td>430 x 395 x 151</td> </tr> <tr> <td>Orbit / Stroke (mm):</td> <td>32</td> </tr> <tr> <td>Speed rev per min / strokes per min:</td> <td>Adjustable 20 - 400</td> </tr> <tr> <td>Micro Digital Control:</td> <td>Included</td> </tr> <tr> <td>Digital Speed/Time Indication:</td> <td>Included</td> </tr> <tr> <td>Countdown Timer:</td> <td>Included</td> </tr> <tr> <td>Slow Speed Start Up:</td> <td>Included</td> </tr> <tr> <td>Maintains Last Setting on Power Up:</td> <td>Included</td> </tr> <tr> <td>Non slip tray:</td> <td>Included</td> </tr> <tr> <td>Approx Number of Erlenmeyer Flasks:</td> <td></td> </tr> <tr> <td>2 liter</td> <td>4</td> </tr> <tr> <td>1 liter</td> <td>4</td> </tr> <tr> <td>500ml</td> <td>12</td> </tr> <tr> <td>250ml</td> <td>12</td> </tr> <tr> <td>150ml</td> <td>21</td> </tr> <tr> <td>125ml</td> <td>21</td> </tr> <tr> <td>50ml</td> <td>42</td> </tr> <tr> <td>Max Speed with non slip tray (flasks):</td> <td>140 rpm</td> </tr> <tr> <td>Electrical:</td> <td>220-240v 50-60Hz</td> </tr> </table>	Shaker type:	Orbital	Tray dimensions (W x D mm):	00 x 360	Bench Dimensions (W x D x H mm):	430 x 395 x 151	Orbit / Stroke (mm):	32	Speed rev per min / strokes per min:	Adjustable 20 - 400	Micro Digital Control:	Included	Digital Speed/Time Indication:	Included	Countdown Timer:	Included	Slow Speed Start Up:	Included	Maintains Last Setting on Power Up:	Included	Non slip tray:	Included	Approx Number of Erlenmeyer Flasks:		2 liter	4	1 liter	4	500ml	12	250ml	12	150ml	21	125ml	21	50ml	42	Max Speed with non slip tray (flasks):	140 rpm	Electrical:	220-240v 50-60Hz	
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الكمية	جهاز هزاز وخط أنابيب Vortex	بند (19) :																																										
2	<p>Vortex: (vibrating stirrer.) Speed frequency 40HZ (from 0 - 2400 rpm) ;Vibrating shaker mixing canted of test tube or small flask. ;Manual and continuous operation, in both cases it is possible to vary shaking frequency Working on 220 V, 50 Hz .</p>																																											
الكمية	جهاز ميكروتوم تشريح	بند (20) :																																										
1	<p>Rotary MICROTOMES: Rotary Microtome (Erma Type): Is a standard Microtome at a moderate cost. Has a well designed mechanism with latest cam drive system, enclosed in a metal cover and fitted on a heavy base. Feed adjustment: 1 to 25 microns in step of 1 micron Feed excursion: 25 mm. Opening of object clamp : 30x15mm. Over all size: 35x27x22 cms. approx. Accessories: 1. 120 mm Knife with back and handle -1</p>																																											

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	<p>2. Object Holders -3 3. Honing Glass Plate -1 4. Knife Holder tightening key -1 5. Oil can for Lubrication -1 Presentation : The complete unit is securely packed in a strong wooden cabinet Rotary Microtome (Erma Type): Is a standard Microtome at a moderate cost. Has a well designed mechanism with latest cam drive system, enclosed in a metal cover and fitted on a heavy base. Feed adjustment: 1 to 25 microns in step of 1 micron Feed excursion: 25 mm. Opening of object clamp : 30x15mm. Over all size: 35x27x22 cms. approx.</p>
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الكمية	جهاز تقطير كهربى مفرد :	بند (21) :																		
1	<p><u>Single distilled water</u></p> <ul style="list-style-type: none">• Fully automatic operation• High purity pyrogen free output• Low temperature distillate• Operates from any raw water supply• Reservoir level control• Simple conversion to pre-treated feed• Supplied with wall mounting bracket• Safety features allow unattended operation• Simple to clean• Produces 4 liters/hour single distilled water for higher purity levels. <p><u>SPECIFICATION:</u></p> <table><tr><td>Output, l/hr</td><td>4, single</td></tr><tr><td>pH</td><td>5.0 – 6.5</td></tr><tr><td>Conductivity, μScm</td><td>1.0 – 1.5</td></tr><tr><td>Resistivity, mOhm cm</td><td>0.7 – 1.0</td></tr><tr><td>Temperature, °C</td><td>25 - 35</td></tr><tr><td>Pyrogen content</td><td>Pyrogen free</td></tr><tr><td>Water supply</td><td>2 l/min 3-100psi (20-700kPa)</td></tr><tr><td>Electrical supply -</td><td>220 or 240V, 50-60Hz, single phase</td></tr><tr><td>Max. power, kW</td><td></td></tr></table>	Output, l/hr	4, single	pH	5.0 – 6.5	Conductivity, μ Scm	1.0 – 1.5	Resistivity, mOhm cm	0.7 – 1.0	Temperature, °C	25 - 35	Pyrogen content	Pyrogen free	Water supply	2 l/min 3-100psi (20-700kPa)	Electrical supply -	220 or 240V, 50-60Hz, single phase	Max. power, kW		
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الكمية	ميكروسكوب أبحاث كهربى ثلاثى العينية بكاميرا تصوير رقمية متصل بمبيوتر	بند (22) :																		
1	<p><u>Trinocular Microscope Systems:</u> <u>Sturdy stand with plastic hand rest:</u></p> <ul style="list-style-type: none">-Trinocular tube, 30C inclined 360C rotatable.-Wide field eyepiece WF 10x/18mm with pointer and eye guard.-Quadruple Nosepiece (Ball bearing type).-LP series DIN Semi plan Achromatic .objectives 4x,10x,40x, 100 (SL)-Stage rectangular size 150x 135mm with mechanical stage cross travel 76x 50mm on ball bearing with co-axial control Sub-stage ABBE condenser NA 1.25 with aspheric .-Iris diaphragm and special day light blue filter-Co-axial coarse and fine focusing mechanism with tension control-Illumination system 12V-20W Halogen with intensity control																			

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	<p>-Universal power supply. -Packed in moulded Styrofoam box, with operation manual, dust cover . -Working on 220v. 50hz. -DIGITAL CAMERA: من نفس ماركة صنع الميكروسكوب The camera has a resolution of 8MPixels (12Mpixels through interpolation), it is provided with 3X optical zoom and a very bright 3" LCD display. The system also includes a specific adaptor that allows the utilization on all microscopes and stereomicroscopes models with diameter of the eyepiece holder of 23mm or 30mm . A complete series of digital imaging software will allow you to process, file and work with the captured images. The camera also comes with a 1GB memory card. Software: It has a simple user interface and can be used for image acquisition, line measurements and documentation.</p>
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الكمية	ميكروسكوب تشريح ستريو ثلاثي العينية كهربي بكاميرا تصوير رقمية متصل بكمبيوتر	بند (23) :
1	<p>Stereo Trinocular Microscope Systems:</p> <p>Microscope Body: Stereo Trinocular turret microscope body, rotatable 360°, eyetube inclination 45°. Interpupillary distance adjustment from 54mm – 75mm. Dioptric adjustment on the left eyetube.</p> <ul style="list-style-type: none">○ Objectives: 0.5x and 1x objectives.○ Working Distance: 225mm (8.85"), when used with PX stand.○ Magnification: varies based on eyepieces selected.○ Eyepiece Options: 5x, 10x, 12.5x, 15x, 20x, 30x,45x.○ Supplemental objectives and eyepieces can provide:<ul style="list-style-type: none">▪ Extended Magnification Range: 5x – 30x▪ Extended Working Distances: 300● Microscope Stand: Extended working distance basic pole stand with "FX" focusing holder and integrated incident illuminator port on a plain base. Supplied with one 94.5mm diameter reversible black and white stage plate and two stage clips. Pole is 10" tall.● Illumination Options: Microscope system does not include any built-in illumination. However, the following illuminator options may be added.<ul style="list-style-type: none">○ Fiber optic ring illuminator provides cool illumination with variable intensity control.○ Flexible dual arm illuminators hold their shape once positioned. Each includes focusing tips and has variable intensity control. <p>Illumination system 12V-20W Halogen with intensity control. -Universal power supply -Packed in moulded Styrofoam box, with operation manual, dust cover . -Working on 220v. 50hz. ○ –Side digital camera. من نفس ماركة صنع الميكروسكوب. ● Included: Microscope includes eyesheilds, owner's manual and dust cover.</p>	
الكمية	ميكروسكوب أبحاث كهربي ثنائي العينية	بند (24) :

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2	<p><u>Binocular Research Microscope:</u> Sturdy stand with plastic hand rest: -Binocular tube, 30C inclined 360C rotatable. -Wide field eyepiece WF 10x/18mm with pointer and eye guard. -Quadruple Nosepiece (Ball bearing type). -LP series DIN Semi plan Achromatic .objectives 4x,10x,40x, 100 (SL) -Stage rectangular size 150x 135mm with mechanical stage cross travel 76x 50mm on ball bearing with co-axial control Sub-stage ABBE condenser NA 1.25 with aspheric . -Iris diaphragm and special day light blue filter -Co-axial coarse and fine focusing mechanism with tension control -Illumination system 12V-20W Halogen with intensity control -Universal power supply -Packed in moulded Styrofoam box, with operation manual, dust cover . -Working on 220v. 50hz</p>
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الكمية	جهاز طرد مركزي 10000 الى 15000 لفة	بند (25) :
3	<p><u>Micro centrifuge:</u> Small micro centrifuge for research, biotechnology and medical laboratory</p> <ul style="list-style-type: none"> • Bright LCD - Display • Large capacity 24 x 1,5 – 2,2 ml • Top speed 10000- 14.800 rpm = 16.163 x g • min. 200 rpm = 2 x g • Short acceleration and deceleration • Low temperature increase during run • Easy handling, big buttons • Short- and continuous run, 99 min. timer • Two acceleration and deceleration curves • Motorized lid lock • Maintenance-free induction drive motor • RoHS conform 	
الكمية	جهاز مقلب مغناطيسي بسخان	بند (26) :
2	<p style="text-align: center;">مقلب مغناطيسي متعدد السرعات ودرجات الحرارة بالموصفات الآتية:</p> <ul style="list-style-type: none"> • Heating-speed: 10-1200rpm • Temperature: 370°C • Plate diameter: 155mm • Stirrer water volume: 10liters • Electric 200v, 50 Hz/60hz • Each of the speed and heating regulations separated • High strength driving 	

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	<ul style="list-style-type: none"> Magnet type (pcm) driving by amono – phase motor for continuous regulation screend against radio frequencies working on 220v, 50hz 														
الكمية	وحدة تشغيل كهربى جيل الالكتروفوريس 250الى300فولت														
3	<p>بند (27) :</p> <p><u>Power Supply :</u></p> <ul style="list-style-type: none"> <u>PROOGAMME CONSTANT VOLTAGE AND CURRENT</u> <u>ALARM CAN BE SET AT THE END OF PROGRAM</u> <u>AUTO CUT-OFF FUNCTION</u> <p>These inexpensive, compact Omni PAC Midi power supplies are ideal for routine horizontal and mini vertical Electrophoresis. Microprocessor control allows user programming, of up to ten programs, and can be set-up to run in constant voltage and constant current modes. Two gel chambers can be connected at any one time. An optional timer can be set to end the run and sound an alarm. Safety features include shrouded plugs and socket no load detection and ground leakage detection.</p> <table border="1"> <tr> <td colspan="2">Technical specification</td> </tr> <tr> <td>Max voltage</td> <td>300v</td> </tr> <tr> <td>Max. current</td> <td>700mA</td> </tr> <tr> <td>Max. watt</td> <td>150w</td> </tr> <tr> <td>Output type</td> <td>Constant voltage or current</td> </tr> <tr> <td>Timer</td> <td>1-999 mins</td> </tr> <tr> <td>Operation voltage</td> <td>110/220v</td> </tr> </table>	Technical specification		Max voltage	300v	Max. current	700mA	Max. watt	150w	Output type	Constant voltage or current	Timer	1-999 mins	Operation voltage	110/220v
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الكمية	وحدة تشغيل كهربى جيل الالكتروفوريس 500الى600فولت								
1	<p>بند (28) :</p> <p><u>Power Supply :</u></p> <ul style="list-style-type: none"> <u>PROOGAMME CONSTANT VOLTAGE AND CURRENT</u> <u>ALARM CAN BE SET AT THE END OF PROGRAM</u> <u>AUTO CUT-OFF FUNCTION</u> <p>These inexpensive, compact Omni PAC Midi power supplies are ideal for routine horizontal and max vertical Electrophoresis. Microprocessor control allows user programming, of up to ten programs, and can be set-up to run in constant voltage and constant current modes. Two gel chambers can be connected at any one time. An optional timer can be set to end the run and sound an alarm. Safety features include shrouded plugs and socket no load detection and ground leakage detection.</p> <table border="1"> <tr> <td colspan="2">Technical specification</td> </tr> <tr> <td>Max voltage</td> <td>600v</td> </tr> <tr> <td>Max. current</td> <td>800mA</td> </tr> <tr> <td>Max. watt</td> <td>300w</td> </tr> </table>	Technical specification		Max voltage	600v	Max. current	800mA	Max. watt	300w
Technical specification									
Max voltage	600v								
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	Output type	Constant voltage or current																																										
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الكمية	جهاز حمام مائي و هزاز بند (29) :																																											
1	<p>Shaking water bath: Grant quality and design combined with the temperature stability and functions you need in a linear shaking bath for your laboratory.</p> <p>Specification:</p> <table border="1"> <tr> <td>Minimum working volume</td> <td>9 liters</td> </tr> <tr> <td>Temperature range °C</td> <td>ambient + 5 to 99</td> </tr> <tr> <td>Stability (DIN 58966) @ 37°C °C</td> <td>± 0.1</td> </tr> <tr> <td>Uniformity @ 37°C °C</td> <td>± 0.1</td> </tr> <tr> <td>Temperature setting/display °C</td> <td>digital/3-digit LED</td> </tr> <tr> <td>Temperature display resolution °C</td> <td>0.1</td> </tr> <tr> <td>Shaking speed range orbital rpm</td> <td>–</td> </tr> <tr> <td>linear strokes/min</td> <td>40 to 400**</td> </tr> <tr> <td>Orbital shaking radius rpm</td> <td>–</td> </tr> <tr> <td>Linear shaking stroke length mm</td> <td>18</td> </tr> <tr> <td>Shaking speed setting/display</td> <td>digital/3-digit LED</td> </tr> <tr> <td>Shaking speed display resolution rpm</td> <td>–</td> </tr> <tr> <td>strokes/min</td> <td>1</td> </tr> <tr> <td>Timer function min</td> <td>1 to 120</td> </tr> <tr> <td>Variable high temperature alarm setting</td> <td></td> </tr> <tr> <td>Tank dimensions l/w/d mm</td> <td>505/300/200</td> </tr> <tr> <td>Shaking tray area mm</td> <td>375 x 235</td> </tr> <tr> <td>Flask immersion min./max. mm</td> <td>0/90</td> </tr> <tr> <td>Heater power/overall consumption</td> <td>220-240 V/110-120 V kW 1.4/1.5</td> </tr> <tr> <td>Supply voltage</td> <td>V 220-240 or 110-120 (50-60 Hz)</td> </tr> <tr> <td>Safety over temperature/low liquid level</td> <td>fixed resettable cut out</td> </tr> </table>		Minimum working volume	9 liters	Temperature range °C	ambient + 5 to 99	Stability (DIN 58966) @ 37°C °C	± 0.1	Uniformity @ 37°C °C	± 0.1	Temperature setting/display °C	digital/3-digit LED	Temperature display resolution °C	0.1	Shaking speed range orbital rpm	–	linear strokes/min	40 to 400**	Orbital shaking radius rpm	–	Linear shaking stroke length mm	18	Shaking speed setting/display	digital/3-digit LED	Shaking speed display resolution rpm	–	strokes/min	1	Timer function min	1 to 120	Variable high temperature alarm setting		Tank dimensions l/w/d mm	505/300/200	Shaking tray area mm	375 x 235	Flask immersion min./max. mm	0/90	Heater power/overall consumption	220-240 V/110-120 V kW 1.4/1.5	Supply voltage	V 220-240 or 110-120 (50-60 Hz)	Safety over temperature/low liquid level	fixed resettable cut out
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الكمية	ميكروسكوب كهربى طلابى تعليمى بند (30) :	
30	<p>Head: Monocular, Eyepieces: Wide Field WF10x/18 mm. Objectives: Achromatic DIN: 4x, 10x, 40x,100x Specimen stage: Double layer with mechanical sliding stage, 125x130 mm. Focusing system: Rack and pinion mechanism, with coaxial coarse and fine control knobs. Fine adjustment graduation 0.002 mm. Vertical movement range: 20 mm. Tension control on right side; upper stage drive stop on left side. Condenser: N.A. 1.25. Fitted with iris diaphragm. Illumination: 5w fluorescent tube.</p>	
الكمية	جهاز pH meter بند (31) :	

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2	جهاز pH بالمواصفات الآتية:	
	<ul style="list-style-type: none">pH measuring range: 2.000 to 19.999pHpH resolution: 0.001pHpH accuracy: ± 0.03pHTemperature range: -10°C to 105°CTemperature resolution: 0.1°CTemperature accuracy: $\pm 0.5^{\circ}\text{C}$Auto temp sensor range: -10°C to 105°CWith auto calibration (3-point, 2-point, 1point) upon choice selectionAutomatic buffer recognition	
الكمية	جهاز UV-Spectrophotometer متصل بكمبيوتر	بند (32) :
2	جهاز Spectrophotometer متصل بكمبيوتر بالمواصفات الآتية:	
	<ul style="list-style-type: none">Optical system: the split beam monitoring ratio systemWavelength range: 190~1100nmWavelength accuracy: ± 1nmWavelength reproducibility: ≤ 0.2nmSpectral band width: 2nmStray light: $\leq 0.05\%T$Photometric accuracy: ± 0.002ABS (0~0.5A) ± 0.004ABS (0~0.5A)$\pm 0.3\%T$ (0~100%T) Photometric reproducibility: ≤ 0.001 ABS (0~0.5A) : ≤ 0.002 ABS (0~0.5A) : $\leq 0.15\%T$ (0~100%T)	

الكمية	جهاز HPLC	بند (33) :
1	<ul style="list-style-type: none">High Performance Liquid Chromatography – HPLC1. Quaternary Pump with built in DegasserSpecificationsFlow Rate Range: 0.001 mL/min to 9.999 mL/minFlow Rate Accuracy: $\pm 2\%$Flow Rate Precision: $\pm 0.3\%$Pressure Range: 0 to 5800 psiSolvent Capacity: Quaternary	

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	<ul style="list-style-type: none">• Gradient Delay Volume: 785 μL• Degasser Type: Vacuum membrane• Degasser Capacity: 4 channels• Degasser Volume: < 500 μL per channel <p>2. <u>Auto sampler with column oven</u> <u>Specifications</u></p> <ul style="list-style-type: none">• Sample capacity: 200 vials in five removable trays• Standard vial: 1.8 mL volume• Injection precision: < 1.0% RSD• Sample carryover: < 0.1% , 6 mL flush volumes can be set for internal and/or external needle wash• Minimum sample volume:1 μL• Needle height control: Programmable in 0.1 mm increments• Column oven : Settable in 1oC increments from 5o - 95oC• Tray temperature control: Settable in 1oC increments from 0o - 60oC <p>3. <u>Photodiode Array (PDA) Detector</u> <u>Specifications</u></p> <ul style="list-style-type: none">• Wavelength Range: 190 nm to 800 nm• Wavelength Accuracy: \pm1 nm at 254 nm• Digital Wavelength Resolution:1.2 nm• Absorbance Range: 2.0 AU to +4. AU• Short Term Noise*:\leq 6 μAU/cm• Drift*: \leq 1 mAU/h• Linearity: deviation \leq 5% up to 2.0 AU at 256 nm• Scan Rate: 0.5, 1, 2, 4, 5, 10, or 20 Hz (user selectable)• Cell Dimensions: 50 mm• Light Source: Deuterium and tungsten-halogen lamps, pre-aligned <p>4. <u>Refractive Index (RI) Detector</u> <u>Specifications</u></p> <ul style="list-style-type: none">• Method of detection :Deflection• Refractive index range :1.00 to 1.75 RIU• Attenuator range :0.25 to 512 μRIU• Linearity range : 600 μRIU• External Communication :Ethernet• Cell volume :8 μL• Maximum flow rate :10 mL/min• Pressure rating : 75 psi <p>5. Hypersil GOLD column (4.6 x 100 mm) 6. Description: 300x7.7 Carbohydrate Pb++ 8u HyperRez XP Column 7. brand PC with Updated Spec. & HP Laser Printer & Software</p>
الكمية	بند (34) : فرن احتراق Muffle
1	<u>Muffle:</u>

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Specifications:		
Operating range	temp	100 to 1100° C
Capacity		180 cu. in.
Temp range		ambient to 1100° C
Temp uniformity		+/- 5° C
Over-temperature control		Optional
Rise time		60 minutes to 1100° C
Temp accuracy	control	+/- 1° C
Temp display		Clear, blue-white LCD
Temp stability		+/- 0.1° C
Control type		P320 Digital Controller with 9 programs and 4 ramp/soak pairs
Watts		1200
Power	VAC	110
	Hz	50 / 60

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