



دائرة اللوازم والمشتريات

عطاء رقم T47-2021.22

أجهزة مختبرات

2021-2022



عطاء أجهزة مختبرات

وثائق العطاء:

أ- الجزء الأول:

(1) دعوة العطاء

(2) الشروط والتعليمات التنظيمية للعطاء

(3) طريقة الدفع

ب- الجزء الثاني:

(1) جدول الكميات ومواصفات الفنية



الجزء الأول (1)

إعلان طرح عطاء رقم T47-2021.22

أجهزة مختبرات

تدعو الجامعة العربية الأمريكية الشركات المختصة الى المشاركة في العطاء المذكور أعلاه. يمكن الاستفسار أو الحصول على وثائق العطاء من دائرة اللوازم والمشتريات في الجامعة/ مبنى الدوائر الإدارية الطابق الثاني، هاتف- 04 2418888- تحويلة 1488 فاكس 04 2510972 بريد الكتروني pnp@aaup.edu مقابل مبلغ غير مسترد مقداره 100 دولار أمريكي تدفع في إحدى البنوك المعتمدة وذلك اعتباراً من يوم (الاربعاء) الموافق 15/6/2022.

ملاحظات :

1. تقديم عرضين: فني ومالي، وسيتم دراسة العروض فنياً ومالياً لاختيار العرض المناسب.
2. آخر موعد لتسليم العطاءات هو في تمام الساعة الثانية من يوم (الاربعاء) 29/6/2022 ولنفس المكان.
3. يجب تقديم كفالة دخول عطاء 5% من قيمة العطاء على شكل كفالة بنكية أو شيك بنكي مصدق لصالح الجامعة العربية الأمريكية.
4. الأسعار (دولار) وتشمل جميع الضرائب بما فيها ضريبة القيمة المضافة وعلى المورد تقديم الفواتير الضريبية وشهادة خصم المصدر.
5. الجامعة غير ملزمة بأقل الأسعار وبدون إبداء الأسباب.
6. رسوم الاعلان على من يرسو عليه العطاء.
7. بإمكانكم الاطلاع على النظام الداخلي لدائرة اللوازم والمشتريات من خلال زيارة صفحة الجامعة العربية الأمريكية على الانترنت. www.aaup.edu



الشروط والتعليمات التنظيمية للطاء

(2)

1. على جميع المشاركين في العطاء الالتزام التام بهذه الشروط والتعليمات، وهي تعتبر جزءاً لا يتجزأ من أي أمر شراء أو عقد يبرم مع المشارك الفائز ما لم ينص صراحة على خلاف ذلك في أمر الشراء أو العقد.
2. في هذه الشروط والتعليمات يرمز إلى "الجامعة العربية الامريكية بالاختصار (AAUP).
3. يجب أن تكون الشركة المتقدمة للطاء مسجلة رسمياً ومشتغلاً مرخصاً.
4. تقدم الأسعار (دولار) شاملاً لجميع الضرائب بما في ذلك ضريبة القيمة المضافة (VAT).
5. يلتزم المشارك الفائز بتقديم شهادات خصم المصدر والفواتير الضريبية اللازمة وأية مستندات قانونية أخرى تغطي عملية الشراء.
6. يجب أن تشمل الأسعار على جميع المصاريف المطلوبة من النقل والتركيب والتشغيل والفحص والصيانة والتدريب في المواقع المحددة في جدول المواصفات والكميات المرفق.
7. يجب أن تكون الأسعار المقدمة سارية المفعول لمدة لا تقل عن (90) يوماً من تاريخ تقديم العرض.
8. على المشارك الفائز تقديم كفالة حسن تنفيذ خلال أسبوع من تاريخ الاتفاقية بحيث تعادل (10%) من قيمة الاتفاقية على شكل كفالة بنكية صادرة عن إحدى البنوك العاملة في فلسطين أو شيك مصدق صادر لصالح "الجامعة العربية الامريكية".
9. إذا تخلف المناقص الفائز عن تقديم كفالة حسن التنفيذ عن الموعد المحدد في البند السابق فإنه يحق لـ (AAUP) إلغاء الإحالة.
10. إذا تخلف المناقص الفائز عن التوقيع على عقد التنفيذ و تسليم الكفالات والتأمينات المطلوبه منه خلال أسبوع من تاريخ قرار الاحالة، يعتبر مستنكفا عن تنفيذ العطاء ويصادر مبلغ الكفالة أو التأمين دخول العطاء بالاضافة الى ذلك يتحمل فرق السعر و/أو اي اضرار أخرى قد تلحق بالجامعة نتيجة استنكافه ويحرم من لمشاركة في عطاءات الجامعة لمدة عام.
11. إذا تخلف المناقص الفائز عن تنفيذ العطاء الذي احيل عليه او خالف شرطاً من شروط العقد يحق للجامعة مصادرة كفالة دخول العطاء أو حسن التنفيذ أو جزء منها وتنفيذ العطاء مباشرة من الجامعة أو اية جهة تراها مناسبة بالاسعار والشروط والطريقة المناسبة ويتحمل المناقص أي فروقات بالاسعار مضاف اليها 15% من اجمالي قيمة العطاء.
12. يتحمل المناقص المتخلف دفع تعويض بدل اي عطل او ضرر قد يلحق بالجامعة نتيجة لذلك.



13. تعاد كفالة حسن التنفيذ بعد استكمال التوريد وجميع شروط العقد أو أوامر الشراء وبموجب الوثائق الأصلية اللازمة للاستلام.
14. على المشاركين في العطاء ارفاق كتالوجات عن المنتج.
15. يلتزم من يرسو عليه العطاء بدفع غرامة تأخير بواقع (0.1%) عن كل يوم تأخير من قيمة الأعمال المنجزة عن الوقت المحدد في الاتفاقية، ويتم احتساب هذه الغرامات من الدفعات المستحقة له أو من كفالة حسن التنفيذ.
16. يحق لـ (AAUP) إلغاء العطاء دون إبداء الأسباب كما أن (AAUP) غير ملزمة بإحالة العطاء على أقل العروض سعراً دون إبداء الأسباب. ولها أن ترفض كل أو بعض العروض المقدمة لها دون أن يكون لأي من المشاركين الحق في الرجوع إليها بأي خسارة أو ضرر ناجم عن تقديم عرضه ولا يترتب على (AAUP) أي التزامات مادية أو غير مادية مقابل ذلك، كما يحق لـ (AAUP) تجزئة العطاء بما تراه مناسباً ودون ابداء أسباب.
17. يلتزم من يرسو عليه العطاء بتقديم كفالة بنكية (صيانة) بقيمة (5%) من قيمة الأعمال المنجزة صالحة لمدة عام من تاريخ تسليم الأعمال.
18. على المشارك في العطاء تقديم عرضه على أساس المواصفات الفنية المبينة في وثائق العطاء وبموجب الكميات المحددة في جدول الكميات المرفق.
19. لا يجوز للمشارك في العطاء أن يتنازل لأي طرف آخر عن كل أو جزء من أمر الشراء دون الحصول على إذن خطي من (AAUP) مع الاحتفاظ بكامل حقوق (AAUP) وفقاً لشروط أمر الشراء.
20. عند دراسة العروض يؤخذ بعين الاعتبار كفاءة المناقص من الناحيتين المالية والفنية وقدرته على الوفاء بالتزامات العطاء وخبرته في تقديم اللوازم المطلوبة والسمعة التجارية والتسهيلات التي يقدمها ويجوز استبعاد عرضه لنقص كل أو بعض هذه المتطلبات.
21. لا تقبل العروض أو التعديلات التي ترد بعد التاريخ والموعود المحدد كآخر موعد لتقديم العروض.
22. يجب تعبئة جداول المواصفات المرفقة و لن ينظر بأي عرض لا يلتزم بتعبئة الجداول.

- ❖ ويسمح بتقديم عرضين اثنين فقط كحد أقصى لكل بند.
- ❖ يجب تقديم عرضي الاسعار الفني والمالي بنسختين: الأولى ورقية، والأخرى الكترونية (محواسبة).
- ❖ تقديم العرضين المالي والفني الورقيين بالظرف المختوم، مع ضرورة وضع ختم الشركة والتوقيع على كل الصفحات (للعرض المالي بالذات).



(3)

طريقة الدفع

خلال (90) يوماً من التوريد والقبول والاستلام النهائي، مقابل تقديم الكفالات المطلوبة.



الجزء الثاني

1. جدول الكميات والمواصفات الفنية
أجهزة مختبرات

No.	Product	Qty	Unit Price USD	Total Price USD
1.	Thermocycler PCR	1		
2.	Horizontal Gel Electrophoresis	1		
3.	Electrophoresis generators- Electrophoresis generator PS 30	1		
4.	Mini wide horizontal tank natural colour MT-108	1		
5.	Gel Documentation System	1		
6.	Combs adapted to the SUB10 Mini-Plus Submarine Gel Electroph	1		
7.	Combs for SUB10 mini plus submarine tank 10 x 11.5 cm	1		
8.	Electroporation Transfection	1		
9.	CUY21(NepaGene)electroporator	1		
10.	Pipette puller	1		
11.	Fiber Optic Light Source	1		
12.	veterinary anesthesia machine	1		
13.	Mini centrifuge	1		
14.	Blotting system	1		
15.	Ultra low -25 C Deep Freezer	1		
16.	fluorescent microscope	1		
17.	Hotplate and stirrer	1		
18.	Dry bath (block heater)	1		
19.	Co2 incubator	1		
20.	Inverted microscope	1		
21.	LAMINAR Air FLOW- vertical	1		
22.	Digital PCR SYSTEM (Droplet)	1		
23.	Refrigerated Bench top Centrifuge	1		
24.	Bench top Centrifuge	1		
25.	THERMAL mixer	1		
26.	FUME HOOD	1		
27.	RNA/DNA Extraction Machine	1		
28.	(3 digits) balance	1		
29.	(5 digits) analytical balance	1		



30.	Oven	1		
31.	Water bath	1		
32.	Moisture Analyzer	1		
33.	Disintegration tester	1		
34.	Hardness tester	1		
35.	Friability tester	1		
36.	Tablet coating machine	1		
37.	Eliza reader	2		
38.	desktop tablet sugar coating machine	1		
39.	digital caliper	2		
40.	Pipette (10) ml	2		
41.	Micropipette (0.2-2 µl)	6		
42.	Micropipette (2- 20 µl)	6		
43.	Micropipette (20-200µl)	6		
44.	Micropipette (100-1000µl)	6		
Total				

في حالة وجود استفسار يرجى تزويدنا بها من خلال البريد الالكتروني للرد عليها ppn@aaup.edu



Item 1

Thermocycler PCR

- **Gradient Thermo Cycler**
- **Temperature**
 - range : 4 – 99 °C .
 - Accuracy at 90 C° : ± 0.3 °C .
 - Temp uniformity at 90 C° : ± 0.4 °C .
 - Average Ramp rate : 2.5 °C/sec .
 - Gradient range : 30 - 99 °C .
 - Thermal Gradient differential Range : 1 - 20 °C .
- **Sample block :**
 - block 96 samples .
 - Sample Capacity : 0.2 ml tubes or plate or strip / 0.5 ml tubes Plate or strip .
- **Display :**
 - LCD .
 - Textual and graphic display .
- **Program :**
 - Up to 99 cycles .
 - Program Memory : more than 300 .
 - With Self test program .
- **Heated lid**
- **Interface :**
 - USB
- **Power : 230 V .**
- **With temperature calibration certificate (NIST)**

❖ **Kindly your offer will not be taken into our consideration if you don't fill below table.**

Thermocycler PCR	Yes/NO	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	weeks	
3 years Full warranty		
Gradient Thermo Cycler	Yes/No	
Temperature	Yes/No	
◦ range : 4 – 99 °C .	Yes/No	
◦ Accuracy at 90 C° : ± 0.3 °C .	Yes/No	
◦ Temp uniformity at 90 C° : ± 0.4 °C .	Yes/No	
◦ Average Ramp rate : 2.5 °C/sec .	Yes/No	
◦ Gradient range : 30 - 99 °C .	Yes/No	
◦ Thermal Gradient differential Range : 1 - 20 °C	Yes/No	
Sample block :	Yes/No	



◦ block (96) samples .	Yes/No	
◦ Sample Capacity : 0.2 ml tubes or plate or strip / 0.5 ml tubes Plate or strip .	Yes/No	
Display :	Yes/No	
◦ LCD .	Yes/No	
◦ Textual and graphic display .	Yes/No	
Program :	Yes/No	
• Up to 99 cycles .	Yes/No	
• Program Memory : more than 300 .	Yes/No	
• With Self test program .	Yes/No	
Heated lid	Yes/No	
Interface :	Yes/No	
◦ USB	Yes/No	
Power : 230 V	Yes/No	
Complete and Ready to use with all accessories	Yes/No	
User's and service manual	Yes/No	
Price include installation and training in site	Yes/No	
Complete and Ready to use with all accessories	Yes/No	
User's and service manual .	Yes/No	
<i>Date of manufacture not less than 2022</i>	Yes/No	
10 years availability for spare parts	Yes/No	



Items 2 3 4

Horizontal Gel Electrophoresis

Two Gels size : (mid size) With safety lid + (mini size)

Buffer volume : 300 or 400 ml

2 sets of combs with different size

UV transparent tray.

casting trays and combs

Positive/ Negative electrode (with levelling bubble).

Power supply :

Power Supply suitable for above horizontal gel electrophoresis and basic applications

Power supply : 10 - 300 V, 4 – 500 mA, 80 W , with 1mA steps .

with a 3 digit LED display .

Programmable methods.

Timer control .

Pause and resume function.

Safety : no load detection, sudden load change detection, overload/short circuit detection and over voltage protection.

Complete system and ready to use.

❖ ***Kindly your offer will not be taken into our consideration if you don't fill below table.***

Horizontal Gel Electrophoresis with power supply	Yes/No	Comment
Manufacture for power supply and tank	Manufactur e	
Model for power supply and tank	Model	
Origin: USA, Europe , japan for power supply and tank	Origin	
Delivery time	Delivery time	
3 years Full warranty	Yes/No	
Complete set including :	Yes/No	
Two Gels size : (mid size) With safety lid + (mini size)	Yes/No	
Buffer volume : 300 or 400 ml	Yes/No	
2x 16 samples of combs & -WELLS		
UV transparent tray.		
casting trays and combs		
Positive/ Negative electrode (with levelling bubble).	Yes/No	
<i>Power supply :</i>	Yes/No	
Power supply : 10 - 300 V, 4 – 500 mA, 80 W , with 1mA steps .	Yes/No	
Power Supply suitable for above horizontal gel electrophoresis	Yes/No	
with a 3 digit LED display .	Yes/No	
timer control .	Yes/No	
Programmable methods .	Yes/No	
pause and resume function .	Yes/No	
Safety : no load detection, sudden load change detection, overload/short circuit detection and over voltage protection	Yes/No	
10 years availability for spare parts	Yes/No	
Complete and Ready to use with all accessories	Yes/No	
User's and service manual	Yes/No	
Price include installation and training in site	Yes/No	
<i>Date of manufacture not less than 2022</i>	Yes/No	



Item 7 6 5

Gel Documentation System

Origin : USA , ERUO .

Application : research lab (molecular genetics)

Complete system : include dark room , camera filters ,Pc hardware with software (operation and analysis)

Application : Chemiluminescence /Gel Documentation

Filters : UV transilluminator, epi white.

Preset control (filter ,lens ,light ..)

High resolution camera : 4 mega pixel resolution or more

Motorized Zoom lens with broad range filter

UV and white light source: with foldable white light

Fire wire / USB connectivity with fast data transfer.

3 position filter slider .

dark room with sliding as well as open door facility

Computer: Complete system, brand name HP or Dell , as manufacture recommendation or above specification , include operation and analysis software .

❖ **Kindly your offer will not be taken into our consideration if you don't fill below table.**

Gel Documentation System	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	time	
3years Full warranty	Yes/No	
Complete system : include dark room , camera , filters ,Pc hardware with software (operation and analysis)	Yes/No	
Application : Chemiluminescence /Gel Documentation	Yes/No	
Filters : UV transilluminator, epi white	Yes/No	
Preset control (filter ,lens ,light ..)	Yes/No	
High resolution camera : 4 mega pixel resolution or more	Yes/No	
Motorized Zoom lens with broad range filter	Yes/No	
UV and white light source: with foldable white light	Yes/No	
Fire wire / USB connectivity with fast data transfer.	Yes/No	
3 position filter slider .	Yes/No	
dark room with sliding as well as open door facility	Yes/No	
Computer:	Yes/No	
Complete system, brand name HP or Dell , as manufacture recommendation or above specification , include operation and analysis software .	Yes/No	
10 years availability for spare parts	Yes/No	
Complete and Ready to use with all accessories	Yes/No	
User's and service manual	Yes/No	
Date of manufacture not less than 2022	Yes/No	
Price include installation and training in site	Yes/No	



Items 8 9

Electroporation Transfection

DC Pulse Waveform : Square
Impedance Measurement : Max. 35Kohm .
Voltage : 0.1-99.9V (0.1V resolution)
Pulse Length : 05-99.9ms (0.01ms resolution) .
pulse Interval : 0.1-999.9ms (0.1ms resolution) .
Number of Pulses : 1-99 .
Safety Limit (High Current) : 1.60A
Measured Output (Automatic) : Voltage : 0.1-99.9V / Current : 1-999mA (1mA resolution) , .00-1.60A (0.01A resolution)
Memory : 60 programs
With suitable accessories for Mouse Embyo (In Utero)
With platinum electrodes

❖ **Kindly your offer will not be taken into our consideration if you don't fill below table.**

	1-1-1 Electroporation Transfection	Yes/No	Comment
Manufacture		Manufacture	
Model		Model	
Origin		Origin	
Delivery time		Delivery time	
Pulse Waveform : Square		Yes/No	
Impedance Measurement : Max. 35Kohm .		Yes/No	
Voltage : 0.1-99.9V (0.1V resolution)			
Pulse Length : 05-99.9ms (0.01ms resolution) .		Yes/No	
Pulse Interval : 0.1-999.9ms (0.1ms resolution) .		Yes/No	
Number of Pulses : 1-99 .		Yes/No	
Safety Limit (High Current) : 1.60A		Yes/No	
Measured Output (Automatic) : Voltage : 0.1-99.9V / Current 999mA (1mA resolution) , .00-1.60A (0.01A resolution)		Yes/No	
Memory : 60 programs			
With suitable accessories for Mouse Embyo (In Utero)		Yes/No	
With platinum electrodes		Yes/No	
Warranty		Yes/No	
Years availability for spare parts		Yes/No	



Item 10

Pipette puller

- Simple and easy to use.
- Digital display
- clearly shows status and setting.
- Heating value can be adjusted as needs, even after the needle is placed in the heater coil.
- Acrylic cover closes securely.
- Elapsed time (from the "START" to end.) shows on display.
- Thin-walled Glass Capillary .
- With Glass Capillary with Filament ($\phi 1\text{mm} \times 90\text{mm}$) , Spare Heater (Kanthal wire) .

❖ ***Kindly your offer will not be taken into our consideration if you don't fill below table.***

<u>Pipette puller</u>	<u>Yes/NO</u>	<u>Comment</u>
<u>Manufacture</u>		
<u>Model</u>		
<u>Origin</u>		
<u>Delivery time</u>		
<u>3 years Full warranty</u>		
Simple and easy to use.		
Digital display		
clearly shows status and setting.		
Heating value can be adjusted as needs, even after the needle is placed in the heater coil.		
Acrylic cover closes securely.		
Elapsed time (from the "START" to end.) shows on display.		
Thin-walled Glass Capillary .		
<u>Price include installation training in site</u>		
<u>Date of manufacture not less than 2022</u>		
<u>10 years availability for spare parts</u>		



Item 11

Fiber Optic Light Source

- Led light .
- Light flux 600 lm.
- Max active light guide dia :9 mm
- Wide range power supply .
- Long lamp lime .
- Protection class II .
- Color temperature (k) : 5500 .

Kindly your offer will not be taken into our consideration if you don't fill below table.

<u>Fiber Optic Light Source</u>	<u>Yes/NO</u>	<u>Comment</u>
<u>Manufacture</u>		
<u>Model</u>		
<u>Origin</u>		
<u>Delivery time</u>		
<u>3 years Full warranty</u>		
• <u>Led light .</u>		
• <u>Light flux 600 lm.</u>		
• <u>Max active light guide dia :9 mm</u>		
• <u>Wide range power supply .</u>		
• <u>Long lamp lime .</u>		
• <u>Protection class II .</u>		
• <u>Color temperature (k) : 5500 .</u>		
<u>Price include installation training in site</u>		
<u>Date of manufacture not less than 2022</u>		
<u>10 years availability for spare parts</u>		



Item 12

veterinary anesthesia machine

application : veterinary

Respiration mode :

Manual mode, open closed mode, semi-open & semi-closed mode

Gas source:O2,quick inlet port

O2 FLUSH: 20L -75L /min

adjustable Flow meter: O2,

Airway pressure gauge:-20 to 100 cmH20

APL valve : adjustable easily,

Anaesthetic (isoflurane) vaporizer

Circle rebreathing system with CO2 absorption

easy to view Inspiration and expiration valve .

Breathing circuit pressure gauge .

With breathing bags .

With Anesthesia vaporizer .

Soda lime chamber .

Bains connector: open breath system, like Bains circuit and Jackson circuit

Portable stand with 5 castors

❖ **Kindly your offer will not be taken into our consideration if you don't fill below table.**

veterinary anesthesia machine	Yes/No	Comment
Manufacture	Manufac ture	
Model	Model	
Origin :	Origin	
Delivery time	Delivery time	
3 years warranty		
application : veterinary	Yes/No	
Respiration mode : Manual mode, open closed mode, semi-open & semi-closed mode	Yes/No	
Gas source:O2,quick inlet port	Yes/No	
O2 FLUSH: 20L -75L /min .	Yes/No	
adjustable Flow meter: O2.	Yes/No	
Airway pressure gauge:-20 to 100 cmH20.	Yes/No	
APL valve : adjustable easily, easy to view Inspiration and expiration valve	Yes/No	
With breathing bags .	Yes/No	
Anesthetic (isoflurane) vaporizer Circle rebreathing system with CO2 absorption		
Breathing circuit pressure gauge .	Yes/No	
With Anesthesia vaporizer . Soda lime chamber .	Yes/No	
Bains connector: open breath system, like Bains circuit and Jackson circuit	Yes/No	
Portable stand with 5 castors	Yes/No	
Price include installation and training on site	Yes/No	
10 years availability for spare parts	Yes/No	
Price include training in site .	Yes/No	



Item 13

Mini centrifuge

- Brand name
- Origin : USA , Europe .
- Bench top mini centrifuge with rotor.
- Brushless motor.
- Microprocessor control .
- Max Speed : 2900 RPM .
- Rotor : for microtube and PCR strip with adaptors 0.2 , 0.4 ,0.5 ml
- With Control and display .

❖ *Kindly your offer will not be taken into our consideration if you don't fill below table.*

Mini Centrifuge	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	weeks	
3 years Full warranty 10 years availability for spare parts	Yes/No	
For research lab genetics lab .	Yes/No	
Bench top mini centrifuge with rotor.	Yes/No	
Brushless motor.	Yes/No	
Microprocessor control .	Yes/No	
Max Speed : 2900 RPM .	Yes/No	
Rotor : for microtube and PCR strip with adaptors 0.2 , 0.4 ,0.5 ml	Yes/No	
With Control and display .	Yes/No	
Date of manufacture the machine not less than 2022		
User's and service manual .	Yes/No	
Price include installation and team training in site.	Yes/No	



Item 14

Blotting system

brand name

origin : USA . EURO

application : Genetics lab

turbo blotting machine

fast and semi dry .**4 or 2 gels / run .**

Mini protein cell include :

tank , lid power cables , electrode , mini cell buffer dam , 2 casting stands with 4 casting frames , 10 glass plates for**1mm thick gels , 10 well combs . gel release .**

Suitable higher power supply for above

Gel holder cassettes

Foam pad .

Cooling unit .

❖ **Kindly your offer will not be taken into our consideration if you don't fill below table.**

Blotting system	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years warranty		
Country of origin (USA , Europe)	Yes/No	
application : Genetics lab	Yes/No	
turbo blotting machine	Yes/No	
fast and semi dry .	Yes/No	
4 or 2 gels / run .	Yes/No	
Mini protein cell include :	Yes/No	
tank , lid power cables , electrode , mini cell buffer dam , 2 casting stands with 4 casting frames , 10 glass plates for	Yes/No	
1mm thick gels , 10 well combs . gel release .	Yes/No	
Suitable higher power supply for above	Yes/No	
Gel holder cassettes	Yes/No	
10 years availability for spare parts	Yes/No	
Price include training in site .	Yes/No	



Item 15

Ultra low -25 C Deep Freezer

Brand name.

Origin: USA, Europe , japan.

research lab application.

Up right .

Volume: minimum 280 L.

Temp . Range : up to – 25 C .

Shelves : 4 .

Fully programmable microprocessor controlled with membrane keypad and eye level control panel .

Refrigeration system : Cascade .

Minimum temperature recovery time after door opening.

lockable outer doors and lids are required .

Insulation: polyurethane 90 mm thick.

Must have battery back-up .

Audible and visible alarms for: Temp. High/low, filter check, self-diagnostics, door check, power failure, battery low ,

Smart diagnostics for simpler system diagnostics

Must use CFC-FREE, HCFC-FREE non-flammable refrigerants.

Freezers should have heated air vent and front panel air filter.

Heavy-duty lockable castors.

Noise Level: less than 50 (db).

Freezer must have standard quality test requirements and Electrical safety certified.

With Temperature calibration certificate.

Warranty: 3 years

Optional:

Analog chart recorder , data logger or Digital chart recorder , 7 different size Racks with Boxes. Online UPS enough for 30 minutes working time .

❖ *Kindly your offer will not be taken into our consideration if you don't fill below table.*

Ultra low -25 C Deep Freezer	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin: USA, Europe , japan	Origin	
Delivery time	Delivery time	
Warranty : 3 years	Yes/No	
For biology and research lab application.	Yes/No	
Up right .	Yes/No	
Volume: minimum 280 L.	Yes/No	
Temp . Range : up to – 25 C .	Yes/No	
Shelves : 4 .	Yes/No	
Fully programmable microprocessor controlled with membrane keypad and eye level control panel .	Yes/No	
: Temp monitoring system		



Refrigeration system : Cascade .	Yes/No	
Minimum temperature recovery time after door opening.	Yes/No	
lockable outer doors and lids are required .	Yes/No	
Insulation: polyurethane 135 mm thick.	Yes/No	
Must have battery back-up .	Yes/No	
Audible and visible alarms for: Temp. High/low, filter check, self-diagnostics, door check, power failure, battery low ,	Yes/No	
Smart diagnostics for simpler system diagnostics	Yes/No	
Must use CFC-FREE, HCFC-FREE non-flammable refrigerants.	Yes/No	
Freezers should have heated air vent and front panel air filter.	Yes/No	
Heavy-duty lockable castors.	Yes/No	
Noise Level: less than 50 (db) .	Yes/No	
Freezer must have standard quality test requirements and Electrical safety certified.	Yes/No	
With Temperature calibration certificate.	Yes/No	
Optional: Analog chart recorder , data logger or Digital chart recorder , 7 different size Racks with Boxes.Online UPS enough for 30 minutes working time	Yes/No	
10 years availability for spare parts	Yes/No	
Complete and Ready to use with all accessories	Yes/No	
User's and service manual	Yes/No	
Price include installation training in site	Yes/No	



Item 16

fluorescent microscope

- **Brand name :**
- **Origin: USA. EUOPE. JAPAN.**
Example for our requested (axio 1mager 2 – z2) الموديل المعروض لدلالة فقط على المطلوب
- **Warranty : 3 years .**
- **Application : Research lab (for Cell structure visualization, and neurobiology research)**
- **For continuous operation .**
- **System include a device used to take optical sections in fluorescence imaging. These individual section images are combined together in a computer to create a 3D image.**
- **Optics :**
 - **Techniques : bright field , phase contrast, DIC , florescence**
 - **Magnification 6 objectives :**
 - (10x , 20x , 63x) water , (40x , , 63 x 100x) oil , (20x) air .
 - **Wide field focusing eyepieces of view with soft rubber eyecups and should be suitable for spectacle wearers. The eyepieces should be suitable for graticule insertion.**
 - **The filters should be easily insert able and removable in the reflector. Filters :**
Fluorescence for UV, Blue and Green (49 dpi , 38he(GFP) , 43HE(DSRED) , 50 (CY5) , 46HE(YFP) , 47 (CFP) , 62HE(BFP/GFP) AND DIC TRANS LIGHT)
- **Dust cover, all wires, cords, connectors and standard accessories needed for proper functioning of the microscope**
- **Optional :**
 - **With camera**
 - **With Computer and analysis software (Image capture and analysis software that shall be compatible with the camera)**

❖ **Kindly your offer will not be taken into our consideration if you don't fill below table.**

fluorescent microscope	Yes/No	Comments
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	weeks	
Warranty 3 years	Yes/No	
• Application : Research lab (for Cell structure visualization, and neurobiology research)	Yes/No	
• For continuous operation .	Yes/No	
• System include a device used to take optical sections in fluorescence imaging. These individual section images are combined together in a computer to create a 3D image.	Yes/No	



• Optics :	Yes/No	
• Techniques : bright field , phase contrast, DIC , florescence	Yes/No	
• Magnification 6 objectives :	Yes/No	
• (10x , 20x , 63x) water , (40x , , 63 x 100x) oil , (20x) air .	Yes/No	
• Wide field focusing eyepieces of view with soft rubber eyecups and should be suitable for spectacle wearers. The eyepieces should be suitable for graticule insertion.		
• The filters should be easily insert able and removable in the reflector. Filters : Fluorescence for UV, Blue and Green (49 dpi , 38he(GFP) , 43HE(DSRED) , 50 (CY5) , 46HE(YFP) , 47 (CFP) , 62HE(BFP/GFP) AND DIC TRANS LIGHT)		
• Dust cover, all wires, cords, connectors and standard accessories needed for proper functioning of the microscope		
User's and service manual .	Yes/No	
Price include installation and team training in site.	Yes/No	
References in Palestine are Attached to your offer	Yes/No	
10 years availability for spare parts	Yes/No	



Item 17

Hotplate and stirrer

- Brand name , USA, Europe origin
- Ceramic heating plate with protective layer and resistance to chemicals.
- Speed Control : up to 1000 rpm .
- Stirring volume : up to 2L .
- With stirrer bar
- Temperature range control : up to 200 C° .
- Optional price :
Heater , thermostat , stirring bar and stir bar removal , holding rod .

❖ **Kindly your offer will not be taken into our consideration if you don't fill below table.**

Hot plate stirrer	Yes/No	Comment
<u>Manufacture</u>	<u>Manufactur e</u>	
<u>Model</u>	<u>Model</u>	
<u>Origin</u>	<u>Origin</u>	
<u>Delivery time</u>	<u>Delivery time</u>	
<u>3 years Full warranty</u>		
<u>Ceramic heating plate with protective layer and resistance to chemicals.</u>	<u>Yes/No</u>	
<u>Speed Control : up to 1000 rpm .</u>	<u>Yes/No</u>	
<u>With stirrer bar</u>		
<u>Stirring volume : up to 2 L .</u>	<u>Yes/No</u>	
<u>Temperature range control : up to 200 C° .</u>	<u>Yes/No</u>	
<u>Power : 220 V .</u>	<u>Yes/No</u>	
<u>Price include installation training in site</u>	<u>Yes/No</u>	
<u>User's and service manual</u>	<u>Yes/No</u>	
<u>10 years availability for spare parts</u>	<u>Yes/No</u>	
<u>Optional price :</u>		
<u>Heater , Thermostat , stirring bar and stir bar removal , holding rod .</u>	<u>Price</u>	



Item 18

Dry bath (block heater)

Brand name .

Origin : USA , Europe .

For Heating test tubes .

Temp range : 5 – 165 C .

Uniform and stable temp : at 37c (0.1C±) .

Fast recovery time for pre-setting heating temp .

Heater 300 W .

Heating aluminium block size : (24x0.5 ml , 24x1.5 ml , 24 x 2 ml + 1x 96 well) .

❖ ***Kindly your offer will not be taken into our consideration if you don't fill below table.***

<u>Dry bath (block heater)</u>	<u>Yes/No</u>	<u>Comment</u>
<u>Manufacture</u>	Manufacture	
<u>Model</u>	Model	
<u>Origin</u>	Origin	
<u>Delivery time</u>	time	
<u>3 years Full warranty</u>	Yes/No	
For Heating test tubes and well plates	Yes/No	
Temp range : 5 – 165 C .	Yes/No	
Uniform and stable temp : at 37c (0.1C±) .	Yes/No	
Fast recovery time for pre-setting heating temp .	Yes/No	
Heater 300 W .	Yes/No	
Heating aluminium block size : (24x0.5 ml , 24x1.5 ml , 24 x 2 ml + 1x 96 well) .	Yes/No	
<u>10 years availability for spare parts</u>	Yes/No	
<u>Complete and Ready to use with all accessories</u>	Yes/No	



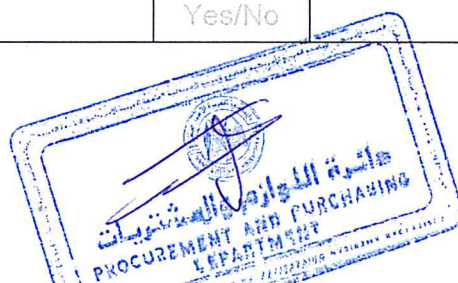
Item 19

Co2 incubatorBrand nameOrigin : USA, Europe .

- Temperature range up to +50 °C .
- Volume: 85 L .
- microprocessor temperature controller .
- Electronic microprocessor temperature controller with auto-diagnostic system , programme stored in case of power failure .
- Direct heat : 4 sides with back and door heating
- Clear display : temperature, time, CO2, humidity and set-up values .
- Fast recovery time for co2 and Temperature .
- Heater : 1500 W
- Alarm function : visual and acoustic alarm , integral fault diagnostics (CO2 and empty gas cylinder , humidity , temperature, open door)
- Serialization program.
- Co2 measurement : Infrared
- Internal chamber : made of stainless steel
- Inner glass door .
- 3 perforated stainless steel shelves
- Over temperature protection.
- digital electronic CO2-control with automatic zeroing (infrared measuring system) - adjustment range 0 - 10 % - resolution 0.1 %
- opening hole for test purposes
- interruption CO2-supply if the door opening .
- With one CO2 gas cylinder and hose and meter gauge and co2 filter .
- With one point calibration certificate.

❖ ***Kindly your offer will not be taken into our consideration if you don't fill below table.***

Co2 incubator	Yes/No	Comment
Manufacture	Man.	
Model	Model	
Origin	Origin	
Delivery time	D.time	
Country of origin (USA , Europe)	Yes/No	
3 years warranty	Yes/No	
Temperature range up to +50 °C .	Yes/No	
Volume: 85 L .	Yes/No	
microprocessor temperature controller .	Yes/No	
Electronic microprocessor temperature controller with auto-diagnostic system , programme stored in case of power failure .	Yes/No	
Direct heat : 4 sides with back and door heating	Yes/No	
Clear display : temperature, time, CO2, humidity and set-up values .	Yes/No	
Fast recovery time for co2 and Temperature .	Yes/No	
Heater : 1500 W	Yes/No	



Alarm function : visual and acoustic alarm , integral fault diagnostics (CO2 and empty gas cylinder , humidity , temperature, open door)	Yes/No	
Serialization program.	Yes/No	
Co2 measurement : Infrared	Yes/No	
Internal chamber : made of stainless steel	Yes/No	
Inner glass door .	Yes/No	
3 perforated stainless steel shelves	Yes/No	
Over temperature protection .	Yes/No	
digital electronic CO2-control with automatic zeroing (infrared measuring system) - adjustment range 0 - 10 % - resolution 0.1 %	Yes/No	
opening hole for test purposes	Yes/No	
interruption CO2-supply if the door opening .	Yes/No	
With one CO2 gas cylinder and hose and meter gauge and co2 filter .	Yes/No	
With one point calibration certificate.	Yes/No	
Price include installation and team training in site.	Yes/No	
User's and service manual .	Yes/No	
10 years availability for spare parts	Yes/No	



Item 20

Inverted microscope

- Brand name :
- Origin: USA. EUROPE. JAPAN.
- Warranty : 3 years .
- **Techniques** : bright field(BF) , phase contrast (PC) .
- **inverted microscope for application cell culture**
- **Nosepiece** : Quintuple (5 position) , backward-facing type .
- **Stand** :
Rugged and sturdy inverted stand with low positioned co-axial coarse and fine focus knobs with harmonic focusing. Transparent stage .
- **Eyepiece** :
2 eyepiece wide filed (*with pointer*) of view with swivelling eyepiece, rubber eyecups and should be suitable for spectacle wearers . tube is inclined 35° and rotate 360 °
- **Optics** : infinity optic
- **Objective** : Magnification : 4x , 10x , 20x , 40x, .
- **Light** : LED Illumination .
- **Stage** : large stage plate with mechanical stage of traveling. Should be able *to hold petridish and specimen slides or cell culture flask* .
- Dust cover, all wires, cords, connectors and standard accessories needed for proper functioning of the microscope .

❖ **Kindly your offer will not be taken into our consideration if you don't fill below table.**

Inverted microscope	Yes/No	Comments
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	weeks	
Warranty 3 years	Yes/No	
Techniques : bright field(BF) , phase contrast (PC) ,	Yes/No	
Nosepiece : Quintuple (5 position) , backward-facing type . Stand : Rugged and sturdy inverted stand with low positioned co-axial coarse and fine focus knobs with harmonic focusing. Transparent stage .	Yes/No	
Eyepiece : 2 eyepiece wide filed (with pointer) of view with swivelling eyepiece, rubber eyecups and should be suitable for spectacle wearers . tube is inclined 35° and rotate 360 ° .	Yes/No	
Optics : infinity optic	Yes/No	
Objective : Magnification (BF & PC) : 4x , 10x , 20x , 40x .	Yes/No	
Light : LED Illumination .	Yes/No	
Stage : large stage plate with mechanical stage of traveling. Should be able to hold petridish and specimen slides or cell culture flask	Yes/No	
Dust cover, all wires, cords, connectors and standard accessories needed for proper functioning of the microscope	Yes/No	
User's and service manual .	Yes/No	
Price include installation and team training in site.	Yes/No	
References in Palestine are Attached to your offer	Yes/No	
10 years availability for spare parts		



Item 21

LAMINAR Air FLOW- vertical**Brand name .****Horizontal Laminar flow .****Bench top : 4 ft .****light : UV , Florescence****Air purification : HEPA Filter : 99.999 %efficiency removal 0.3 um practical I removal .****Microprocessor control .****Filter replacement warning signal .****Door should be made of tempered safety glass sliding door or wind screen .****Noise Level : <40 dBA .****Working area : good quality Stainless steel .****Blower : High efficient centrifugal type with lifetime lubricated bearings .****Electric supply : 220 V .****Should have FDA CE approval .****Optional price :****HEPA filter . UV Lamp . Fluorescent light .**❖ **Kindly your offer will not be taken into our consideration if you don't fill below table.**

LAMINAR Air FLOW- vertical .	Yes/No	Comment
Manufacture	Manufactur e	
Model	Model	
Delivery time	Delivery time	
Warranty : 3 years.	Yes/No	
For research lab application.	Yes/No	
Brand name .	Yes/No	
Origin :	Yes/No	
Horizontal Laminar flow .	Yes/No	
Bench top : 4 ft .	Yes/No	
light : UV , Florescence	Yes/No	
Air purification : HEPA Filter : 99.999 %efficiency removal 0.3 um practical I removal .	Yes/No	
Microprocessor control .	Yes/No	
Filter replacement warning signal .	Yes/No	
Door should be made of tempered safety glass sliding door or wind screen .	Yes/No	
Noise Level : <40 dBA .	Yes/No	
Working area : good quality Stainless steel .	Yes/No	
Blower : High efficient centrifugal type with lifetime lubricated bearings	Yes/No	
Electric supply : 220 V .	Yes/No	
Should have FDA CE approval .	Yes/No	
Optional price :	Yes/No	
HEPA filter . UV Lamp Fluorescent light .	Yes/No	
Complete and Ready to use with all accessories	Yes/No	
User's and service manual	Yes/No	
Price include installation training in site	Yes/No	



Item 22

Digital PCR SYSTEM (Droplet)

Application : **Cancer biomarker studies , Pathogen detection , Next generation sequencing , Gene expression analysis.**

Complete system include : **Droplet generator , Droplet reader , computer , software .**

SAMPLE SIZE : 20 UL .

Generator Capacity : 1 to 8 samples / cartridge

Droplet per 20 UI : 20,000

reader capacity : up 96 samples .

Sample illumination : LED

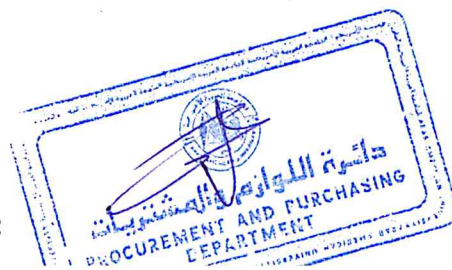
Detection channel : FAM (EvaGreen), HEX (VIC)

Precision : 10% .

Easy access to previously stored sealing protocols .

❖ *Kindly your offer will not be taken into our consideration if you don't fill below table.*

Droplet digital PCR SYSTEM	Yes/NO	Comment
Manufacture		
Model		
Origin		
Delivery time		
3 years Full warranty		
Application : Cancer biomarker studies , Pathogen detection , Next generation sequencing , Gene expression analysis.		
Complete system include : Droplet generator , Droplet reader , computer , software .		
SAMPLE SIZE : 20 UL		
Generator Capacity : 1 to 8 samples / cartridge		
Droplet per 20 UI : 20,000		
reader capacity : up 96 samples .		
Sample illumination : LED		
Detection channel : FAM (EvaGreen), HEX (VIC)		
Precision : 10%		
User's and service manual with ALL software password .		
Price include installation and full training in site		
<i>Date of manufacture not less than 2022</i>		
10 years availability for spare parts		
Complete with all standers accessories to working with our application		



Item 23

Refrigerated Bench top Centrifuge

- Origin : USA , Europe .
- Bench top centrifuge.
- Brushless motor .
- Microprocessor control .
- MAX Speed : RFC 24,500 & 16000 RPM
- Low noise 50 Db
- Temp Range : (-10 or lower to +35 °C)
- Control and display :
 - Digital display .
 - actual values are indicated During centrifugation .
 - Speed display : RPM or RFC , input in steps of 10
 - RCF key : indication during run .
 - Time (t/min) : 1 - 99 min, continuous operation .
 - Impulse key: For short centrifugation operations .
- Centrifuge chamber: stainless steel.
- Rotor :
 - Easily exchangeable rotors : Capability to use two types of rotor swing out and fixed .
 - swing out rotor with buckets and lids .
 - samples : tubes (15 ml : 17 Ø x20 l ml , speed 4500 RPM) , angle 90 .
 falcon tube ((50 ml : 29 Ø x115 l ml , speed 4500 RPM) , angle 90 .
 EDTA tube ((4-7 ml : 13 Ø x100 l ml , speed 5000 RPM) , angle 90

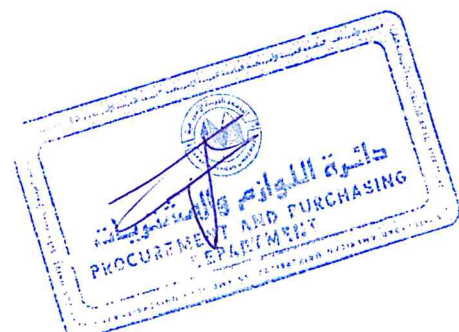
 EDTA tube ((1,5 -5 ml : 13 Ø x75l ml , speed 5000 RPM) , angle 90 .
 EDTA tube ((8,5 -10 ml : 16 Ø x100l ml , speed 4000 RPM) , angle 90 .
 PCR PALTE 96 + PCR strip 0.2 (speed 4000 RPM) , angle 90 .
 - fixed rotor with bio-containment
samples : tubes (2 ml , 1.5 ml , 0.5 ml , 0.2 ml , speed 14000 RPM) , angle 45 .
 tubes (, 15 ml , 50 ml , speed 9000 RPM) , angle 35 .
- Safety :
 - Emergency lid lock release .
 - Imbalance switch-off .
 - Automatic rotor recognition .
- Power : 220 V .

❖ **Kindly your offer will not be taken into our consideration if you don't fill below table.**

Refrigerated Centrifuge	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	weeks	
3 years warranty 10 years availability for spare parts	Yes/No	
Bench top centrifuge with rotor .	Yes/No	
Brushless motor .	Yes/No	
Microprocessor control .	Yes/No	
• Temp Range : (-10 or lower to +35 °C)		
• Low noise 50 Db		



<ul style="list-style-type: none"> Control and display : <ul style="list-style-type: none"> - Digital display . - actual values are indicated During centrifugation . - Speed display : RPM or RFC , input in steps of 10 - RCF key : indication during run . - Time (t/min) : 1 - 99 min, continuous operation . - Impulse key: For short centrifugation operations 	Yes/No Yes/No	
Centrifuge chamber : stainless steel .	Yes/No	
Rotor :	Yes/No	
Easily exchangeable rotors : Capability to use two types of rotor swing out or fixed angle	Yes/No	
<ul style="list-style-type: none"> Rotor : <ul style="list-style-type: none"> - Easily exchangeable rotors : Capability to use two types of <u>rotor swing out</u> and fixed . - swing out rotor with buckets and lids . - samples : tubes (15 ml : 17 Ø x20 l ml , speed 4500 RPM) , angle 90 . falcon tube ((50 ml : 29 Ø x115 l ml , speed 4500 RPM) , angle 90 . EDTA tube ((4-7 ml : 13 Ø x100 l ml , speed 5000 RPM) , angle 90 . EDTA tube ((1,5 -5 ml : 13 Ø x75l ml , speed 5000 RPM) , angle 90 . EDTA tube ((8,5 -10 ml : 16 Ø x100l ml , speed 4000 RPM) , angle 90 . PCR PALTE 96 + PCR strip 0.2 (speed 4000 RPM) , angle 90 . - fixed rotor with bio-containment <u>samples</u> : tubes (2 ml , 1.5 ml ,0.5 ml , 0.2 ml , speed 14000 RPM) , angle 45 . tubes (, 15 ml , 50 ml, speed 9000 RPM) , angle 35 . 	Yes/No	
Safety :	Yes/No	
Emergency lid lock release, Imbalance switch-off .	Yes/No	
Automatic rotor recognition	Yes/No	
Power : 220 V .	Yes/No	
User's and service manual .	Yes/No	
Price include installation and team training in site.	Yes/No	
	Yes/No	



Item 24

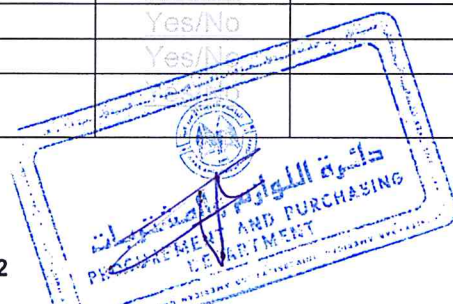
Bench top Centrifuge

- **Origin : USA , Europe .**
- **Bench top centrifuge.**
- **Brushless motor .**
- **Microprocessor control .**
- **MAX Speed : RFC 24,500 & 16000 RPM**
- **Low noise 50 Db**
- **Control and display :**
 - Digital display .
 - actual values are indicated During centrifugation .
 - Speed display : RPM or RFC , input in steps of 10
 - RCF key : indication during run .
 - Time (t/min) : 1 - 99 min, continuous operation .
 - Impulse key: For short centrifugation operations .
- **Centrifuge chamber: stainless steel.**
- **Rotor :**
 - Easily exchangeable rotors : Capability to use two types of rotor swing out and fixed .
 - **swing out rotor** with buckets and lids .
 - samples : tubes (15 ml : 17 Ø x20 l ml , speed 4500 RPM) , angle 90 .
 falcon tube ((50 ml : 29 Ø x115 l ml , speed 4500 RPM) , angle 90 .
 EDTA tube ((4-7 ml : 13 Ø x100 l ml , speed 5000 RPM) , angle 90

 EDTA tube ((1,5 -5 ml : 13 Ø x75l ml , speed 5000 RPM) , angle 90 .
 EDTA tube ((8,5 -10 ml : 16 Ø x100l ml , speed 4000 RPM) , angle 90 .
 PCR PALTE 96 + PCR strip 0.2 (speed 4000 RPM) , angle 90 .
 - **fixed rotor** with bio-containment
 samples : tubes (2 ml , 1.5 ml ,0.5 ml , 0.2 ml , speed 14000 RPM) , angle 45 .
 tubes (, 15 ml , 50 ml, speed 9000 RPM) , angle 35 .
- **Safety :**
 - Emergency lid lock release .
 - Imbalance switch-off .
 - Automatic rotor recognition .
- **Power : 220 V .**

❖ **Kindly your offer will not be taken into our consideration if you don't fill below table.**

<u>Centrifuge</u>	<u>Yes/No</u>	<u>Comment</u>
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	weeks	
3 years warranty 10 years availability for spare parts	Yes/No	
Bench top centrifuge with rotor .	Yes/No	
Brushless motor .	Yes/No	
Microprocessor control .	Yes/No	
• Low noise 50 Db		



• Control and display :	<u>Yes/No</u>	
<ul style="list-style-type: none"> - Digital display . - actual values are indicated During centrifugation . - Speed display : RPM or RFC , input in steps of 10 - RCF key : indication during run . - Time (t/min) : 1 - 99 min, continuous operation . - Impulse key: For short centrifugation operations 	<u>Yes/No</u>	
Centrifuge chamber : stainless steel .	<u>Yes/No</u>	
Rotor :	<u>Yes/No</u>	
<u>Easily exchangeable rotors : Capability to use two types of rotor swing out or fixed angle</u>	<u>Yes/No</u>	
<ul style="list-style-type: none"> • Rotor : <ul style="list-style-type: none"> - Easily exchangeable rotors : Capability to use two types of <u>rotor swing out and fixed .</u> - swing out rotor with buckets and lids . - samples : tubes (15 ml : 17 Ø x20 l ml , speed 4500 RPM) , angle 90 . falcon tube ((50 ml : 29 Ø x115 l ml , speed 4500 RPM) , angle 90 . EDTA tube ((4-7 ml : 13 Ø x100 l ml , speed 5000 RPM) , angle 90 . EDTA tube ((1,5 -5 ml : 13 Ø x75l ml , speed 5000 RPM) , angle 90 . EDTA tube ((8,5 -10 ml : 16 Ø x100l ml , speed 4000 RPM) , angle 90 . PCR PALTE 96 + PCR strip 0.2 (speed 4000 RPM) , angle 90 . - fixed rotor with bio-containment <u>samples</u> : tubes (2 ml , 1.5 ml ,0.5 ml , 0.2 ml , speed 14000 RPM) , angle 45 . tubes (, 15 ml , 50 ml, speed 9000 RPM) , angle 35 . 	<u>Yes/No</u>	
Safety :	<u>Yes/No</u>	
<u>Emergency lid lock release, Imbalance switch-off .</u>	<u>Yes/No</u>	
<u>Automatic rotor recognition</u>	<u>Yes/No</u>	
Power : 220 V .	<u>Yes/No</u>	
User's and service manual .	<u>Yes/No</u>	
Price include installation and team training in site.	<u>Yes/No</u>	
	<u>Yes/No</u>	



Item 25

THERMAL mixer

- Brand name ,
- Speed control : 200 – 2000 RPM .
- With heating up to 90 c .
- up to 18 to 30 samples at one time
- Universal rack for small and large samples

<i>Thermal Mixer</i>	Yes/NO	Comment
<i>Manufacture</i>	<i>Manufacture</i>	
<i>Model</i>	<i>Model</i>	
<i>Origin</i>	<i>Origin</i>	
<i>Delivery time</i>	<i>Delivery time</i>	
<i>3 years warranty 10 years availability for spare parts</i>	<i>Yes/No</i>	
<i>Application : General Laboratory .</i>	<i>Yes/No</i>	
<i>Vortex Tube .</i>	<i>Yes/No</i>	
<i>Speed control : 200 – 2000 RPM</i>	<i>Yes/No</i>	
<i>With heating up to 90c .</i>		
<i>up to 18 to 30 samples at one time</i>		
<i>up to 18 samples at one time</i>		
<i>Universal rack</i>	<i>Yes/No</i>	
<i>User's and service manual .</i>	<i>Yes/No</i>	
<i>Price include installation and team training in site.</i>	<i>Yes/No</i>	



Item 26

FUME HOOD

Hood to protects operator from toxic vapor and environment

Application : **for general purpose**

Working Dimension : **130 cm w x 70 cm D x 75 cm .**

Microprocessor control (clear and simple) .

Construction and Material: **Made of good quality melamine board with good acid and alkali resistance function anti chemical, heat, fire resistant and easily cleanable .**

Sash : **Tempered Glass vertical rising sash.**

electric socket (water proof) .

Lighting: **fluorescent lamp with vapor proof design .**

Blower :

Built-in centrifugal blower for air suction in hood, silent (compatible with above specification) .

Adjustable air speed.

casters and locking for casters .

with stand .

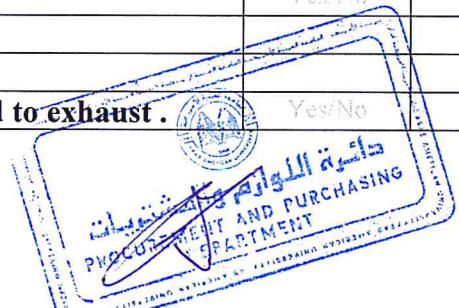
Noise level : **55 db.**

Ducting :

- chemical resistant rigid and flexible ductwork from hood to exhaust .
- التركيب يشمل توصيل الجهاز لتمديدات وتركيب في الموقع المخصص

❖ *Kindly your offer will not be taken into our consideration if you don't fill below table.*

Fume hood	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
5years Full warranty	Yes/No	
Hood to protects operator from toxic vapor and environment	Yes/No	
Application : for general purpose chemistry Lab	Yes/No	
Working Dimension : 130 cm w x 70 cm D x 75 cm .	Yes/No	
Microprocessor control (clear and simple) .	Yes/No	
Construction and Material: Made of good quality melamine board with good acid and alkali resistance function anti chemical, heat, fire resistant and easily cleanable .	Yes/No	
Sash : Tempered Glass vertical rising sash.	Yes/No	
electric socket (water proof) .	Yes/No	
Lighting: fluorescent lamp with vapor proof design .	Yes/No	
Blower : Built-in centrifugal blower for air suction in hood, silent (compatible with above specification) . Adjustable air speed.	Yes/No	
casters and locking for casters .	Yes/No	
with stand .	Yes/No	
Noise level : 55 db.		
Ducting : chemical resistant rigid and flexible ductwork from hood to exhaust .	Yes/No	



Fume hood	Yes/No	Comment
Price include installation and training in site	Yes/No	
Complete and Ready to use with all accessories	Yes/No	
User's and service manual	Yes/No	
<i>Date of manufacture not less than 2022</i>	Yes/No	



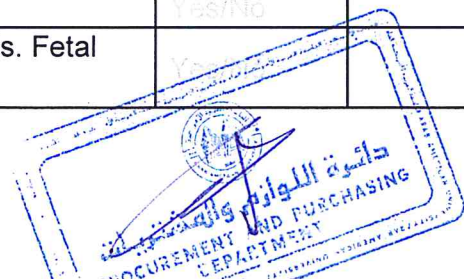
Item 27

RNA/DNA Extraction Machine

- **Brand name** :
- **Origin: USA. EUOPE. JAPAN.**
- Warranty : 3 years .
- **General: automated isolation of genomic DNA/RNA from whole human blood and other tissue samples**
- **Application : Research lab (for purification of nucleic acid DNA & RNA, proteins and cell isolation) (DNA and RNA extraction. High throughput sequencing compatible quality and)**
- volumes : 200 ul up to 3mL
- Yield: Samples need to be in a least concentration of 50 ng/Microliter, total DNA yield of (at least) 3micrograms of dsDNA.
- Extraction of nucleic acids from 3-4 cc blood .
- Sample can be whole blood, fetal amniotic fluid cells. Fetal cells circulating in maternal blood.
- Automated magnetic bead technology .
- fast with minimum hands-on time .
- with UV lamp : easy and effective decontamination (exposure time up to 16 hour)
- Open System for reagents and consumables and software for extraction protocols
- Heating and cooling function
- 6 or 12 samples /run or **Number of Samples: Up to 16**
- Procedure duration: up to 60 minutes.
- **Magnetic Particle Size: ca. 1µm**
- Can run two purification methods simultaneously
- Internal memory for ca. 150 protocols
- Complete system with all reagents and consumables and software .

❖ **Kindly your offer will not be taken into our consideration if you don't fill below table.**

RNA/DNA Extraction Machine	Yes/No	Comments
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	weeks	
Warranty 3 years	Yes/No	
<ul style="list-style-type: none"> • General: automated isolation of genomic DNA/RNA from whole human blood and other tissue samples 	Yes/No	
<ul style="list-style-type: none"> • Application : Research lab (for purification of nucleic acid DNA & RNA, proteins and cell isolation) (DNA and RNA extraction. High throughput sequencing compatible quality and) 	Yes/No	
<ul style="list-style-type: none"> • volumes : 200 ul up to 3mL 	Yes/No	
<ul style="list-style-type: none"> • Yield: Samples need to be in a least concentration of 50 ng/Microliter, total DNA yield of (at least) 3micrograms of dsDNA. 	Yes/No	
<ul style="list-style-type: none"> • Extraction of nucleic acids from 3-4 cc blood . 	Yes/No	
<ul style="list-style-type: none"> • Sample can be whole blood, fetal amniotic fluid cells. Fetal cells circulating in maternal blood. 	Yes/No	



• Automated magnetic bead technology .	Yes/No	
• fast with minimum hands-on time .		
• with UV lamp : easy and effective decontamination (exposure time up to 16 hour)		
• Open System for reagents and consumables and software for extraction protocols		
• Heating and cooling function		
• 6 or 12 samples /run or Number of Samples: Up to 16		
• Procedure duration: up to 60 minutes.	Yes/No	
• Magnetic Particle Size: ca. 1µm		
• Can run two purification methods simultaneously		
• Internal memory for ca. 150 protocols		
• Complete system with all reagents and consumables and software .		
User's and service manual .	Yes/No	
Complete system with all reagents and consumables and software .		
Price include installation and team training in site.	Yes/No	
References in Palestine are Attached to your offer	Yes/No	
10 years availability for spare parts	Yes/No	



Item 28

(3 digits) balance

- Brand name , USA, Europe origin
- Capacity : 2000 g .
- with cover
- Readability :0. 001 g
- 3 digits .
- Internal & external calibration .
- Display :LCD .
- Unit : Milligram, Gram,
- Stainless steel pan (resistance to chemicals) .
- Power : AC adaptor (supplied) or internal rechargeable battery.
- With calibration certificate .

❖ *Kindly your offer will not be taken into our consideration if you don't fill below table.*

3 digit Balance	Yes/No	Comment
Manufacture	Manufactur e	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years warranty and 10 years availability for spare parts	Yes/No	
Capacity : 2000 g .	Yes/No	
Readability :0.001g	Yes/No	
With cover	Yes/No	
Display :LCD .	Yes/No	
Unit : Milligram, Gram,	Yes/No	
Stainless steel pan (resistance to chemicals).	Yes/No	
Internal & external calibration	Yes/No	
Power : AC adaptor (supplied) or internal rechargeable battery	Yes/No	
With calibration certificate .	Yes/No	



Item 29

(5 digits) analytical balance

- Brand name , USA, Europe origin
 - Capacity : 200 g .
 - with cover
 - Readability :0. 01 mg
 - Display :LCD .
 - Unit : Milligram, Gram,
 - Stainless steel pan (resistance to chemicals) .
 - Power : AC adaptor (supplied) or internal rechargeable battery.
 - With calibration certificate .
- ❖ *Kindly your offer will not be taken into our consideration if you don't fill below table.*

Balance	Yes/No	Comment
Manufacture	Manufactur e	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
Capacity : 200 g .	Yes/No	
Readability :0.01mg	Yes/No	
With cover		
Display :LCD .	Yes/No	
Unit : Milligram, Gram,	Yes/No	
Stainless steel pan (resistance to chemicals).	Yes/No	
Power : AC adaptor (supplied) or internal rechargeable battery	Yes/No	
Power : 220 V .	Yes/No	
Internal and external calibration .		
User's and service manual .	Yes/No	
Price include installation and team training in site.	Yes/No	
3 years warranty	Yes/No	
10 years availability for spare parts	Yes/No	



Item 30

Oven

- Country of origin (USA , Europe) and brand name .
- For general lab application .
- Volume 6 0L .
- Temp range: up to 30 - 250°C
- Microprocessor control .
- Adjustable parameter : time , temp ,
- Self diagnostics for any error.
- Clear display .
- resolution of display for setpoint and actual temperature values 0.1°C .
- program stored in case of power failure .
- Fast recovery time .
- Two shelves .
- Access port.
- With temperature calibration certificate.

❖ **Kindly your offer will not be taken into our consideration if you don't fill below table.**

Oven	Yes/No	Comment
<u>Manufacture</u>	<u>Manufacture</u>	
<u>Model</u>	<u>Model</u>	
<u>Origin</u>	<u>Origin</u>	
<u>Delivery time</u>	<u>Delivery time</u>	
<u>3years Full warranty</u>	Yes/No	
<u>Country of origin (USA , Europe)</u>	Yes/No	
<u>For general lab application .</u>	Yes/No	
<u>Microprocessor control</u>	Yes/No	
<u>Volume 60 L .</u>	Yes/No	
<u>Temp range : up to 30 - 250°C</u>	Yes/No	
<u>Adjustable parameter : time , temp ,</u>	Yes/No	
<u>Self diagnostics for any error .</u>	Yes/No	
<u>Clear display .</u>	Yes/No	
<u>resolution of display for set point and actual temperature values 0.1°C</u>	Yes/No	
<u>program stored in case of power failure .</u>	Yes/No	
<u>Fast recovery time .</u>	Yes/No	
<u>Two shelves .</u>	Yes/No	
<u>With temperature calibration certificate .</u>	Yes/No	
<u>10 years availability for spare parts</u>	Yes/No	
<u>Service and user manual</u>	Yes/No	
<u>Price should be include installation and team training in site</u>	Yes/No	



Item 31

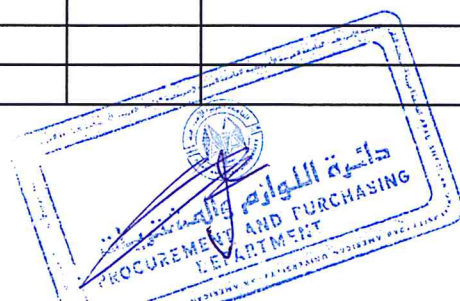
Waterbath

- **Volume**
 - 22 L .
- **Control**
 - microprocessor temperature controller .
 - temperature range : 5 – 99.9 C□ with resolution 0.1 .
 - integrated autodiagnostic system with fault indicator .
 - Digital display (LED) of set and actual temperature
 - Digital timer : 1 min- 95,59 hours .
 - Low water Sensor .
- **Visual alarm :**
 - Over temperature protection .
- **Interior chamber (I x w x h) :**
 - (570 x 439 x 293 mm) easy-to-clean interior material 1.4301 (ASTM 304), corrosion resistant and proof
- **Exterior chamber (I x w x h) :**
 - (349 x 288 x 219 mm) made of stainless steel, material no. 1.4301 (ASTM 304), laser-welded ,corrosion resistance and proof.
- **Electrical :**
 - 220V 50Hz.
 - 1700 W .
- **With separate thermometer .**
- **Cleaning spray for cleaning water bath .**

Optional price :

- **Shaking device :**
 - Shaker control : shaking frequency (10 – 130 oscillation /min) with holder and clips for flasks volume (100 , 200 , 300 ,500 ml) .
 - Adaptor for flacon tube 15 , 50 ml .
 - 1.5 ml , 2ml .
 - **Stainless steel Gable cover**
- **Kindly your offer will not be taken into our consideration if you don't fill below table.**

WATER BATH	Yes/No	Comments
Manufacture		
Model		
Origin		
3years Full warranty		
Control :		
temperature range : 5 – 99.9 C□ with resolution 0.1 .		
integrated autodiagnostic system with fault indicator .		
Digital display (LED) of set and actual temperature		
Digital timer : 1 min- 95,59 hours .		



WATER BATH	Yes/No	Comments
Low water Sensor .		
Visual alarm :		
Over temperature protection .		
Interior chamber (l x w x h) :		
(570 x 439 x 293 mm) easy-to-clean interior material 1.4301 (ASTM 304), corrosion resistant and proof		
Exterior chamber (l x w x h) :		
(349 x 288 x 219 mm) made of stainless steel, material no. 1.4301 (ASTM 304), laser-welded ,corrosion resistance and proof.		
VOLUME : 22 LITERS		
Electrical : 220V 50Hz. 1700 W		
Cleaning spray for cleaning water bath .		
Optional price :		
• Shaking device :		
- Shaker control : shaking frequency (10 – 130 oscillation /min) with holder and clips for flasks volume (100 , 200 , 300 ,500 ml) .		
- Adaptor for flacon tube 15 , 50 ml .		
- 1.5 ml , 2ml .		
- Stainless steel Gable cover		
Price include installation and training in site		



Item 32

Moisture Analyzer

Brand name , USA, Europe , japan

Capacity : 50 g .

instrument to determine relative humidity for small samples of different materials .

Readability :0. 001 g

Heating : halogen

Chamber size : height 8mm and 90 diameter .

Temp : up to 150 C .

Products : up to 900 products

Weighings : up to 1000 weighings and Programs : up to 100 drying programs

results obtained using the moisture analyzer : % M , % D , % R , g (sample mass after drying.)

Display :clear display

With calibration certificate .

Kindly your offer will not be taken into our consideration if you don't fill below table.

Moisture Analyzer	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years warranty and 10 years availability for spare parts	Yes/No	
Capacity : 50 g .	Yes/No	
instrument to determine relative humidity for small samples of different materials .	Yes/No	
Readability :0. 001 g	Yes/No	
Heating : halogen	Yes/No	
Chamber size : height 8mm and 90 diameter .	Yes/No	
Temp : up to 150 C .	Yes/No	
Products : up to 900 products	Yes/No	



Moisture Analyzer	Yes/No	Comment
Weighings : up to 1000 weighings and Programs : up to 100 drying programs	Yes/No	
results obtained using the moisture analyzer : % M , % D , % R , g (sample mass after drying.)	Yes/No	
Display :clear display	Yes/No	
System must be ready and complete with all accessories to work completely	Yes/No	
Price include instillation and training in site with service and user manual		



Item 33

Disintegration tester

Brand name , USA, Europe , , japan

tablet disintegration tester.

With two basket clear view and easy clean .

With magnetic coupling.

Quick lock

Digital heart (independent) .

Low liquid level .

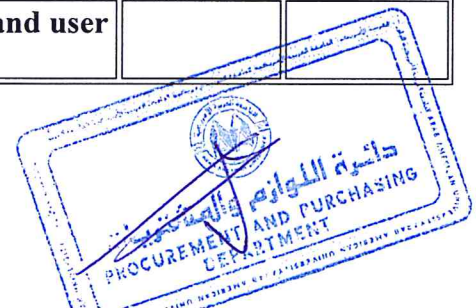
Basket for large tablet and capsules

Clear display

Complete system with all accessories and ready to use

- **Kindly your offer will not be taken into our consideration if you don't fill below table.**

Disintegration tester	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years warranty and 10 years availability for spare parts	Yes/No	
tablet disintegration tester.	Yes/No	
With two basket clear view and easy clean .	Yes/No	
With magnetic coupling.	Yes/No	
Quick lock	Yes/No	
Digital heart (independent) .	Yes/No	
Low liquid level .	Yes/No	
Basket for large tablet and capsules	Yes/No	
Clear display	Yes/No	
System must be ready and complete with all accessories to work completely	Yes/No	
Price include instillation and training in site with service and user manual		



Item 34

Hardness tester

Brand name , USA, Europe , japan .

- Measuring units : breaking force , diameter , weight , thickness
- LCD display .
- Test ranges : 0 – 300 N
- TEST SPEED : 1 -40mm / min 0.5± .
- Units: N, KP,Kg , lbs .
- Batch test .

Kindly your offer will not be taken into our consideration if you don't fill below table.

Hardens tester	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years warranty and 10 years availability for spare parts	Yes/No	
LCD display .	Yes/No	
Test ranges : 0 – 300 N	Yes/No	
TEST SPEED : 1 -40mm / min 0.5± .	Yes/No	
Units: N, KP,Kg , lbs .	Yes/No	
Batch test .	Yes/No	
	Yes/No	
System must be ready and complete with all accessories to work completely	Yes/No	
Price include instillation and training in site with service and user manual		



Item 35

Friability tester

Brand name , USA, Europe , japan .

Stainless steel housing .

Two drums variable speed : 20 55 rpm .

With abrasion drum

Kindly your offer will not be taken into our consideration if you don't fill below table.

Friability tester	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years warranty and 10 years availability for spare parts	Yes/No	
Stainless steel housing .	Yes/No	
Two drums variable speed .	Yes/No	
With abrasion drum	Yes/No	
System must be ready and complete with all accessories to work completely	Yes/No	
Price include instillation and training in site with service and user manual		



Item 36

Tablet coating machine

Brand name , USA, Europe , japan .

Complete system : stainless steel coating pan , drive unit control panel , gun , hot air blower , stainless steel body .

Simple

Pan size : from 8” to 18 “

Operation temp : 30 – 80 C .

Spray System : The Unit with pump with Spray gun & silicon tubing’s. Pump is a Variable speed pump provided with digital controller for precise speed regulation and rapid priming facility

Speed Controller : Speed Knob between 0 to 40 RPM.

Exhaust Blower : 0.25 HP, 1400 RPM Single Phase Exhaust blower of 100 CFM for venting the heat out of your working room.

Gear Motor Drive 0.5 HP, 1370 RPM/ Sturdy & Maintenance Free Geared Motor for continuous operation.

Single phase

- *Kindly your offer will not be taken into our consideration if you don’t fill below table.*

	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years warranty and 10 years availability for spare parts	Yes/No	
Complete system : stainless steel coating pan , drive unit control panel , gun , hot air blower , stainless steel body .	Yes/No	
Simple	Yes/No	
Pan size : from 8” to 18 “	Yes/No	
Speed : 0- 30 rpm .	Yes/No	



	Yes/No	Comment
Single phase	Yes/No	
	Yes/No	
	Yes/No	
	Yes/No	
	Yes/No	
	Yes/No	
	Yes/No	
Price include instillation and training in site with service and user manual		



Item 37

Eliza reader

Origin: USA , Europe , Japan .
 Wide applicability for life science .
 Open system Kits .
 Could Read: 6-, 12-, 24-, 48-, 96 plate " flat , U , V " shape .
 Fully Automatic ELIZA microplate reader
 Read Method: Endpoint, kinetic,.
 5 filters or more : between 400 - 750 nm
 Light Sources: Xenon Flash Lamp .
 Photometric range : 0.0–3.5 OD .
 Accuracy : ≤1.0% or 0.010 from 0.000–3.000 OD at 490 nm .
 Linearity : ≤1.0% from 0.0–2.0 OD ; ≤2.0% from 0.0–3.0 OD .
 Resolution : 0.001 OD .
 LAMP : Tungsten halogen lamp
 With wide and clear Display
 Built in Shaker .
 Incubator with programmable temperature control.
 Fast microplate reading speeds
 Stores 100 user entered tests.
 Complete and Ready to use with all accessories.

Optional Price:
 Lamp .

- *Kindly your offer will not be taken into our consideration if you don't fill below table.*

Eliza reader	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin: USA , Europe .	Origin	
Delivery time	weeks	
3years Full warranty	Yes/No	
Brand name	Yes/No	
Open system Kits .	Yes/No	
Could Read: 6-, 12-, 24-, 48-, 96 plate " flat , U , V " shape .	Yes/No	
Fully Automatic ELIZA microplate reader	Yes/No	
Read Method: Endpoint, kinetic,.	Yes/No	
5 filters or more : between 400 - 750 nm	Yes/No	
Light Sources: Xenon Flash Lamp .	Yes/No	
Photometric range : 0.0–3.5 OD .	Yes/No	
Accuracy : ≤1.0% or 0.010 from 0.000–3.000 OD at 490 nm .	Yes/No	
Linearity : ≤1.0% from 0.0–2.0 OD ; ≤2.0% from 0.0–3.0 OD .	Yes/No	
Resolution : 0.001 OD .	Yes/No	



LAMP : Tungsten halogen lamp	Yes/No	
With wide and clear Display	Yes/No	
Built in Shaker .	Yes/No	
Incubator with programmable temperature control.	Yes/No	
Fast microplate reading speeds	Yes/No	
Stores 100 user entered tests.	Yes/No	
Complete and Ready to use with all accessories.	Yes/No	
Price include installation and training in site .	Yes/No	
User's and service manual .	Yes/No	
Optional Price:	Yes/No	
Lamp.	Yes/No	
	Yes/No	

