



دائرة اللوازم والمشتريات

عطاء رقم (T47 /2019.20)

أجهزة ولوازم مختبرات  
كلية الصيدلة



2019-2020

*موسى*

## عطاء أجهزة ولوازم مختبرات كلية الصيدلة

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ب- الجزء الثاني:

(1) جدول الكميات ومواصفات الفنية



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## الجزء الأول (1)

**إعلان طرح عطاء رقم (T47/2019.20)****أجهزة ولوازم مختبرات كلية الصيدلة**

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 [pnnp@aaup.edu](mailto:pnnp@aaup.edu) موبايل 0594996666. مقابل مبلغ غير مسترد مقداره 100 دولار أمريكي تدفع في إحدى البنوك المعتمدة وذلك اعتباراً من يوم ( الثلاثاء ) الموافق 14/7/2020.

## 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 ( الأحد ) 9/8/2020 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.



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## الشروط والتعليمات التنظيمية للعبء

(2)

1. على جميع المشاركين في العبء 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 الأمريكية بالاختصار (AAUP)".
3. يجب أن تكون الشركة المتقدمة للعبء 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 والتكيب 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 الأمريكية".
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 العبء ويصادر مبلغ الكفالة أو التأمين دخول العبء بالاضافة الى ذلك يتحمل فرق السعر و/أو اي أضرار أخرى قد تلحق بالجامعة نتيجة استنكافه ويحرم من لمشاركة في عطاءات الجامعة لمدة عام.
11. إذا تخلف المناقص الفائز عن تنفيذ العبء الذي احيل عليه او خالف شرطاً من شروط العقد يحق للجامعة مصادرة كفالة دخول العبء أو حسن التنفيذ أو جزء منها وتنفيذ العبء مباشرة من الجامعة أو اية جهة تراها مناسبة بالاسعار والشروط والطريقة المناسبة ويتحمل المناقص أي فروقات بالاسعار مضاف اليها 15% من اجمالي قيمة العبء.
12. يتحمل المناقص المتخلف دفع تعويض بدل اي عطل او ضرر قد يلحق بالجامعة نتيجة لذلك.



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13. تعاد كفالة حسن التنفيذ بعد استكمال التوريد وجميع شروط العقد أو أوامر الشراء وبموجب الوثائق الأصولية 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.
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 والموعد المحدد كآخر موعد لتقديم العروض.
22. يجب تعبئة جداول المواصفات المرفقة و لن ينظر بأي عرض لا يلتزم بتعبئة الجداول.

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



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### طريقة الدفع

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



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الجزء الثاني1. جدول الكميات والمواصفات الفنية  
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No.	Product	Qty	Unit Price USD	Total Price USD
1.	(3 digits) balance	6		
2.	(5 digits) analytical balance	1		
3.	Hotplate and stirrer	20		
4.	Benchtop PH meter.	35		
5.	Oven	4		
6.	Vacuum Oven	1		
7.	Vacuum Pump with Vac filter holder	3		
8.	Vortex mixer	4		
9.	Vibrator/shaker	1		
10.	Ultrasonic bath	3		
11.	Water bath	7		
12.	UV/VIS DOUBLE BEAM SPECTROPHOTOMETER	3		
13.	Spectrophotometer	8		
14.	MELTING POINT APPARTUS	5		
15.	Double block Thermocycler PCR	1		
16.	Gel Documentation System	1		
17.	PCR Cabinet	1		
18.	Fraction collector for lab	1		
19.	Kymograph	1		
20.	Water Distiller	1		
21.	Flaked ice maker	1		
22.	Rotary evaporator	1		
23.	Binocular Microscope	40		



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No.	Product	Qty	Unit Price USD	Total Price USD
24.	Bench top Centrifuge (16 tubes )	2		
25.	Mini Centrifuge	1		
26.	Bench top Centrifuge (small )	1		
27.	Refrigerated Centrifuge	1		
28.	Centrifuge hematocrite	2		
29.	Micro- heamatocrit centrifuge	1		
30.	Refractometer	4		
31.	FUME HOOD	3		
32.	Dissolution Testing Instrument	1		
33.	heating mantle	1		
34.	High Performance Liquid Chromatography (gradient )	1		
35.	High Performance Liquid Chromatography (Isocratic)	1		
36.	Digital polarimeter	2		
37.	FT Infrared Spectrophotometer	1		
38.	Freeze Dryers (lyophilizes	1		
39.	Flame analyzer - digital	1		
40.	Flame photometer	1		
41.	Gas Chromatograph	1		
42.	Filling and dosing of ampoules and vials	1		
43.	Bottle brushing machine	1		
44.	Manual Vial Capping Machine	1		
45.	Manual Vial De-capping Machine	1		
46.	Twin Jet Ampoule Sealer	1		
47.	Vertical Autoclave	1		
48.	fermentation/bioreactor	1		
49.	Incubator	5		
50.	Co2 incubator	1		
51.	LAMINAR Air FLOW- Horizontal	1		
52.	Paper electrophoresis system	1		
53.	Poly acrylamide gel Electrophoresis system	1		
54.	ERGOMETER	1		



No.	Product	Qty	Unit Price USD	Total Price USD
55.	Nerve muscle chamber and electrodes kits	1		
56.	12-channel ECG	1		
57.	Ophthalmoscope	25		
58.	Pulse oximeter	5		
59.	Stop watch clock	30		
60.	Bunsen burner	100		
61.	Optical inspection equipment	1		
62.	UV. Lamp and stand (chamber)	2		
63.	Coater for TLC plates	1		
64.	Sphygmomanometer (زنبقي) + Stethoscope	25		
65.	Spiro meter	1		
66.	Tunnel fork	25		
67.	Hammer	25		
68.	Torch	25		
69.	Thermometer (زنبقي)	50		
70.	Blindness book	2		
71.	Sonicator	1		
72.	Spatulas	1		
73.	Glucometers	20		
74.	Vacuum Distillation Set	1		
75.	Spaculum stanless M&L	100		
	<b>Total in USD</b>			

في حالة وجود استفسار يرجى تزويدنا بها من خلال البريد الالكتروني للرد عليها [pnnp@aaup.edu](mailto:pnnp@aaup.edu)



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## Item 1

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



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## Item 2

**(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	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
Capacity : <b>200 g</b> .	Yes/No	
Readability : <b>0.01mg</b>	Yes/No	
With cover		
Display :LCD .	Yes/No	
Unit : <b>Milligram, Gram, .....</b>	Yes/No	
Stainless steel pan (resistance to chemicals).	Yes/No	
Power : <b>AC adaptor (supplied) or internal rechargeable battery</b>	Yes/No	
Power : <b>220 V</b> .	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	



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## Item 3

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



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## Item 4

**Benchtop PH meter.**

Brand name , USA, Europe origin

- Applications : general laboratory use .
- Parameter : PH . mV , Temp ,
- Bench top .
- PH range : -1 – 14 .
- Temperature range : - 5 - 105 C° .
- PH and temperature probe ( plastic not glass ) .
- Accuracy : 2% .
- Temperature : manual by key or automatic recognized by probe ( ATC ) .
- Easy to read on a large screen .
- calibration : automatic one or two point for buffer ( 4 , 7 , 10 ) .
- memory :memory data and calibration memory .
- Include startup set buffer Solution . ( 4 , 7 , 14 ) .
- Stand for probes .
- Dust cover .
- Water proof .
- Complete system and ready to use with all necessary solution for (calibration, cleaning , storage ) and probe stand .

**Optional Accessories (quote it separately ) :****PH probe**❖ *Kindly your offer will not be taken into our consideration if you don't fill below table.*

Bench top PH meter	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	
Applications : general laboratory use .	Yes/No	
Parameter : PH . mV , Temp .	Yes/No	
PH range : -1 – 14 .	Yes/No	
Temperature range : - 5 - 105 C° .	Yes/No	
PH and temperature probe ( plastic not glass ) .	Yes/No	
Accuracy : 2% .	Yes/No	
Temperature : manual by key or automatic recognized by probe ( ATC )	Yes/No	
calibration : automatic one or two point for buffer (4,7,10 )	Yes/No	
memory data and calibration memory Easy to read on a large screen	Yes/No	
You price Include startup set buffer Solution . ( 4 , 7 , 14 )	Yes/No	
With Stand for probes , Dust cover , Water proof	Yes/No	
Complete system with all necessary solution for (calibration, cleaning storage ) and probe with probe stand .	Yes/No	
<b><u>Optional price : PH probe</u></b>	Price	



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## Item 5

## Oven

- Country of origin (USA , Europe ) and brand name .
- For general lab application .
- Volume 65 L .
- 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 .
- programme 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
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years Full warranty , 10 years availability for spare parts	Yes/No	
Country of origin ( USA , Europe )	Yes/No	
For general lab application .	Yes/No	
Microprocessor control	Yes/No	
Volume 70 L .	Yes/No	
Temp range : <b>up to 30 - 250°C</b>	Yes/No	
Adjustable parameter : time , temp , .... .	Yes/No	
Self diagnostics for any error .	Yes/No	
Clear display .	Yes/No	
resolution of display for set point and actual temperature values 0.1°C .	Yes/No	
program stored in case of power failure .	Yes/No	
Fast recovery time .	Yes/No	
Two shelves .	Yes/No	
With temperature calibration certificate .	Yes/No	
Price should be include installation and team training in site	Yes/No	
Date of manufacture the machine not less than 2020	Yes/No	



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## Item 6

## Vacuum Oven

- Country of origin (USA , Europe ) and brand name .
- For general lab application .
- Volume 45 L .
- 1700 w
- Temp range: up to 30 - 280°C
- Microprocessor control .
- Adjustable parameter : time , temp , .... .
- Self diagnostics for any error.
- Clear display .
- programme stored in case of power failure.
- Fast recovery time .
- Two shelves .
- Access port.
- With pumps and tubes and all accessories .

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

Oven	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years Full warranty , 10 years availability for spare parts	Yes/No	
Country of origin ( USA , Europe )	Yes/No	
• Volume 45 L .	Yes/No	
• 1700 w	Yes/No	
• Temp range: up to 30 - 280°C	Yes/No	
• Microprocessor control .	Yes/No	
• Adjustable parameter : time , temp , .... .	Yes/No	
• Self diagnostics for any error.	Yes/No	
• Clear display .	Yes/No	
• programme stored in case of power failure.	Yes/No	
• Fast recovery time .	Yes/No	
• Two shelves .	Yes/No	
• Access port.	Yes/No	
• With pumps and tubes and all accessories .	Yes/No	
Price should be include installation and team training in site	Yes/No	
Date of manufacture the machine not less than 2020	Yes/No	

1.5 + 1.14+( 2.3/2.4 /2.5) + (3.7/3.18 / 3.19 / 3.17)



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## Item 7

**Vacuum Pump with Vac filter holder**

- For biology lab application and chemistry.
- For filtration
- Vacuum pump .
- With waste bottle and overflow protection
- Complete , pump ,bottle , tube .
- 220v .
- With *Stainless Steel Analytical Vacuum Filter Holder Assembly with 250mL Funnel for 47mm Membrane Filters*

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

<b>Vacuum Pump</b>	<b>Yes/No</b>	<b>Comment</b>
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years warranty		
For biology lab application and chemistry .	Yes/No	
For filtration		
Vacuum pump .		
With waste bottle and overflow protection		
Complete , pump ,bottle , tube		
• <b>With <i>Stainless Steel Analytical Vacuum Filter Holder Assembly with 250mL Funnel for 47mm Membrane Filters</i></b>		
Price include instillation and training in site .	Yes/No	
10 years availability for spare parts	Yes/No	



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## Item 8

## Vortex mixer

- Brand name , USA, Europe origin
- Vortex Tube .
- Speed control : 200 – 2000 rpm .
- Two modes : touch or continuous of mixing .
- Universal rack that accommodate 1.5ml, 15ml,50ml tubes .

Vortex mixer	Yes/NO	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years warranty 10 years availability for spare parts	Yes/No	
Application : General Laboratory .	Yes/No	
Vortex Tube .	Yes/No	
Speed control : 200 – 2000 rpm .	Yes/No	
Two modes : touch or continuous of mixing .	Yes/No	
Universal rack that accommodate 1.5ml, 15ml,50ml tubes	Yes/No	
User's and service manual .	Yes/No	
Price include installation and team training in site.	Yes/No	



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## Item 9

## Vibrator/shaker

Brand name , USA, Europe origin  
 Capacity : 8 or 10 flasks different sizes  
 vibration: orbit performs gentle mixing for small sample .  
 Variable speed: 150 - 2000 rpm .  
 Time : 0 - 120 min  
 With clip for flask and clamps .

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

Vibrator/shaker	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin: USA , Europe .	Origin	
Delivery time	weeks	
3 years Full warranty 10 years availability for spare parts	Yes/No	
Capacity : 8 or 10 flasks different sizes	Yes/No	
vibration: orbit performs gentle mixing for small sample .	Yes/No	
Variable speed: 150 - 2000 rpm .	Yes/No	
Time : 0 - 120 min	Yes/No	
With clip for flask and clamps .	Yes/No	
Capacity : 8 or 10 flasks different sizes	Yes/No	
vibration: orbit performs gentle mixing for small sample .	Yes/No	
<b>Complete and Ready to use with all accessories.</b>	Yes/No	
<i>Date of manufacture not less than 2020</i>	Yes/No	
<i>Price include installation and training in site</i>	Yes/No	
<i>With service and users manual</i>	Yes/No	



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## Items 10 – A

## Ultrasonic bath

- Good Brand name.
- Origin: USA, Europe, japan.
- For laboratory .
- Microprocessor control.
- Frequency : 37khz .
- With temperature control
- **12 L.**
- With cover .
- With basket (immersion basket )
- Anti chemical and corrosive stainless steel .
- With timer

يجب تعبئة الجدول بالأسفل بالإضافة الى تقديم عرض الشركة التقني

Ultrasonic bath	Compliance Yes / No ( if no put your comments )
Manufacture	Manufacture
Model	Model
Origin : USA , Europe	Origin
Delivery time	Delivery
3 years warranty, 10 years availability spare parts	Yes/No
cleaning dental and medical tools .	Yes/No
Microprocessor control .	Yes/No
Frequency : 37khz .	Yes/No
With temperature control	Yes/No
12 L.	Yes/No
With cover .	Yes/No
With basket (immersion basket )	Yes/No
Anti chemical and corrosive stainless steel .	Yes/No
With timer	Yes/No
On/off switch .	Yes/No
User's and service manual.	Yes/No
Price include installation and team training in site.	Yes/No
3 years warranty, 10 years availability spare parts	Yes/No
Date of manufacture not less than 2020	



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## Items 10 – B

## Ultrasonic bath

- Good Brand name.
- Origin: USA, Europe, japan.
- For laboratory .
- Microprocessor control.
- Frequency : 37khz .
- With temperature control
- 9 L.
- With cover .
- With basket (immersion basket )
- Anti chemical and corrosive stainless steel .
- With timer

يجب تعبئة الجدول بالأسفل بالإضافة الى تقديم عرض الشركة التقني

Ultrasonic bath	Compliance Yes / No ( if no put your comments )
Manufacture	Manufacture
Model	Model
Origin : USA , Europe	Origin
Delivery time	Delivery
3 years warranty, 10 years availability spare parts	Yes/No
cleaning dental and medical tools .	Yes/No
Microprocessor control .	Yes/No
Frequency : 37khz .	Yes/No
With temperature control	Yes/No
9 L.	Yes/No
With cover & basket (immersion basket )	Yes/No
Anti chemical and corrosive stainless steel .	Yes/No
With timer	Yes/No
On/off switch .	Yes/No
User's and service manual.	Yes/No
Price include installation and team training in site.	Yes/No
Date of manufacture not less than 2020	



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## Items 11

## Water bath

Brand name

Origin: Japan , USA , Europe

Volume : 17 L .

Control

- microprocessor temperature controller .
- temperature range : 5 – 100 C° with resolution 0.1 .
- integrated auto diagnostic 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 : easy-to-clean interior material 1.4301 (ASTM 304), corrosion resistant and proof

Exterior chamber : (349 x 288 x 219 mm) made of stainless steel, material no. 1.4301 (ASTM 304), laser-welded ,corrosion resistance and proof.

Shaking device :

- Shaker control : shaking frequency ( 10 – 130 oscillation /min ) with holder and clips Stainless steel --Gable cover .

Electrical :

- 220V 50Hz.
- 1500 W .

With temperature calibration certificate .

Optional:

- Shaker control : shaking frequency ( 10 – 130 oscillation /min ) with holder and clips Stainless steel –
- with cover .
- Rack for small tubes ( 0.2 ml , 0.5 , 2 ml , 5ml )
- Clips for small tubes ( 0.2 ml , 0.5 , 2 ml , 5ml )

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

WATER BATH	Yes/No	comments
Manufacture	Manufacture	
Model	Origin	
Origin: USA, Europe , japan	Model	
Delivery time	Time	
3 years Full warranty ,10 years availability for spare part	Yes / No	
Volume : 17 L .	Yes / No	
Control :	Yes / No	
microprocessor temperature controller .	Yes / No	
temperature range : 5 – 100 C° with resolution 0.1	Yes / No	
integrated autodiagnostic system with fault indicator	Yes / No	
Digital display (LED) of set and actual temperature	Yes / No	
Digital timer : 1 min- 95,59 hours	Yes / No	
Low water Sensor	Yes / No	

دائرة اللوازم والادوية  
PROCUREMENT AND PURCHASING  
DEPARTMENT

<b>Visual alarm</b> : Over temperature protection .	Yes / No	
<b>Interior chamber</b> :) easy-to-clean interior material 1.4301 (ASTM 304), corrosion resistant and proof	Yes / No	
<b>Exterior chamber:</b> made of stainless steel, material no. 1.4301 (ASTM 304), laser-welded ,corrosion resistance and proof.	Yes / No	
<b>Shaker control</b> : shaking frequency (10 – 130 oscillation /min ) with holder and clips .	Yes / No	
<b>Stainless steel cover .</b>	Yes / No	
<b>Electrical : 220 V 50Hz. 1500 W</b>	Yes / No	
<b>With temperature calibration certificate.</b>	Yes / No	
Price include installation training in site	Yes / No	
User's and service manual	Yes / No	
Date of manufacture the machine not less than 2020		
Optional : <ul style="list-style-type: none"> <li>- Rack for small tubes ( 0.2 ml , 0.5 , 2 ml , 5ml )</li> <li>- Clips for small tubes ( 0.2 ml , 0.5 , 2 ml , 5ml )</li>   <li>- <b>Shaker control</b> : shaking frequency (10 – 130 oscillation /min ) with holder and clips .</li>   <li>- <b>Stainless steel cover .</b></li> </ul>		



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## Item 12

## UV/VIS DOUBLE BEAM SPECTROPHOTOMETER

Origin: Japan , USA , Europe .

Double beam .

Clear Display .

Optical: **All reflecting optical system Quartz coated .**

Single monochromator .

Measurement modes : **scanning , Quantitative analysis with calibration curves , Time course measurement , Fixed wavelength , Wavelength: 190-1000 mm**

Wavelength accuracy: **± 0.1 nm .**

Light Source: **xenon**

Optics : **1200 – 1300 lines/mm**

Photometric Range: **3 A** , Photometric accuracy: **± 0.01 nm**

Lamp change : **automatic or fixed .**

Scanning speed : **8 to 10000 nm/min**

Detector: **Silicon photodiode.**

Data : **auto print , auto save to USB flash .**

Cuvettes : **should be supply with ONE Pair of 10 mm path quartz cuvettes included .**

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

UV/VIS DOUBLE BEAM SPECTROPHOTOMETER	Yes/No	Comment
Manufacture	Manufactur e	
Model	Model	
Origin: USA, Europe , japan	Origin	
Delivery time	Delivery time	
3 years Full warranty , 10 years availability for spare parts	Yes/No	
Application : <b>General and research lab.</b>	Yes/No	
Double beam	Yes/No	
Clear Display.	Yes/No	
Optical: <b>All reflecting optical system Quartz coated .</b>	Yes/No	
Single monochromator .	Yes/No	
Measurement modes : <b>scanning , Quantitative analysis with calibration curves , Time course measurement , Fixed wavelength .</b>	Yes/No	
Wavelength: <b>190-1000 mm</b>	Yes/No	
Wavelength accuracy: <b>± 0.1 nm .</b>	Yes/No	
Light Source: <b>xenon lamp</b>	Yes/No	
Optics : <b>1200 – 1300 lines/mm</b>	Yes/No	
Photometric Range: <b>3 A</b>	Yes/No	
Photometric accuracy: <b>± 0.01 nm</b>	Yes/No	
Lamp change : <b>automatic or fixed .</b>	Yes/No	
Scanning speed : <b>8 to 10000 nm/min</b>	Yes/No	
Detector: <b>Silicon photodiode.</b>	Yes/No	
Data: <b>auto print , auto save to USB flash .</b>	Yes/No	
with all accessories for Operation , With dust cover .	Yes/No	
Cuvettes : <b>ONE Pair of 10 mm path quartz cuvettes included</b>	Yes/No	
Price include installation training in site( at least run one sample )	Yes/No	
User's and service manual , <i>With all service and user password.</i>	Yes/No	
<i>Date of manufacture not less than 2020</i>	Yes/No	



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## Item 13

## Spectrophotometer

For simple and basic testing .

Application : **from Enzyme to phosphates .**

Wavelength **from 340 to 950 nm .**

Photometric Accuracy : **± 2%T .**

Spectral Slit Width : **20 nm .**

Wave length accuracy : **± 2.5 nm near 525 nm .**

Very easy to select filter .

Digital display : **LED**

Photometer range and display : **T ( 0- 100% ) - abs ( 0- 1.95 ) - CONc ( 0- 1999 ) - 0.1 to 1000 Concentration Factor**

Price should be include suitable cuvettes for our application and holder (to attached cuvettes and fit to spectrophotometer if needed ) Included with your main price offer .

Power : 220V .

OPTIONAL :

*lamps*)

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

Spectrophotometer	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
3 years warranty 10 Yrs. availability spare parts	Yes/No	
Delivery time	Delivery time	
For simple and basic testing and teaching	Yes/No	
Wave length <b>from 340 to 950 nm .</b>	Yes/No	
Photometric Accuracy : <b>± 2%T .</b>	Yes/No	
Spectral Slit Width : <b>20 nm .</b>	Yes/No	
Wave length accuracy : <b>± 2.5 nm near 525 nm .</b>	Yes/No	
Very easy to select filter .	Yes/No	
Digital display : <b>LED</b>	Yes/No	
Photometer range and display : <b>T ( 0- 100% ) - abs ( 0- 1.95 ) - CONc ( 0- 1999 ) - 0.1 to 1000 Concentration Factor</b>	Yes/No	
Price should be include suitable cuvettes for our application and holder (to attached cuvettes and fit to spectrophotometer if needed ) .	Yes/No	
Power : 220 V .	Yes/No	
User's and service manual .	Yes/No	
<i>Optional price</i>		
<i>lamp</i>	price	



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## Item 14

**Melting Point Appartus**

- for educational use .
- Analog melting point .
- Temperature range : Ambient to 300°C .
- Number of samples : up to 3 simultaneously .
- with thermometer and pack of 200 melting point tubes sealed one aside (include with your Unit price )
- Electrical supply :220 v .

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

MELTING POINT APPARATUS	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
for educational use .	Yes/No	
Analog melting point .	Yes/No	
Temperature range : <b>Ambient to 300C .</b>	Yes/No	
Number of samples : <b>up to 3 simultaneously .</b>	Yes/No	
with thermometer and pack of 200 melting point tubes. sealed one aside	Yes/No	
Power : 220 V .	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	
3 years warranty	Yes/No	
10 years availability for spare parts	Yes/No	
Optional price		
<b>100 melting point tubes closed at one side..</b>	Price	
<b>Heater element</b>		
<b>Thermostat</b>		



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## Item 15

## Double block Thermocycler PCR

- **Double block 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 :**
  - Double block ( 48x48 Or more ) sample .
  - 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 )**  
optional :  
**Service kit or sensors for verification of temperature .**

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

Double block Thermocycler PCR	Yes/NO	Comment
Manufacture	Manufacturer	
Model	Model	
Origin	Origin	
Delivery time	weeks	
3 years Full warranty		
Double block 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	
◦ Double block ( 48 X 48 ) sample .	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 : <b>230 V</b>	Yes/No	
With temperature calibration certificate ( NIST )	Yes/No	
Authorization letter from the manufacture to represent them in this offer	Yes/No	
User's and service manual with service software password .	Yes/No	
Price include installation training in site with any starter kit .	Yes/No	
References in Palestine are Attached to your offer	Yes/No	
Date of manufacture not less than 2020	Yes/No	
10 years availability for spare parts	Yes/No	



## Item 16

**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 .

Stain free technology

UV transilluminator, epi white , trans 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 .

Computer must order with gel doc. system (not locally ) .

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

<b>Gel Documentation System</b>	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	time	
3 years Full warranty	Yes/No	
<b>Complete system : include dark room , camera , filters ,Pc hardware with software ( operation and analysis )</b>	Yes/No	
Application : <b>Chemiluminescence /Gel Documentation .</b>	Yes/No	
<b>Stain free technology</b>	Yes/No	
<b>UV transilluminator, epi white , trans white .</b>	Yes/No	
<b>Preset control (filter ,lens ,light .. )</b>	Yes/No	
<b>High resolution camera : 4 mega pixel resolution or more</b>	Yes/No	
<b>Motorized Zoom lens with broad range filter</b>	Yes/No	
<b>UV and white light source: with foldable white light</b>	Yes/No	
<b>Fire wire / USB connectivity with fast data transfer.</b>	Yes/No	
<b>3 position filter slider .</b>	Yes/No	
<b>dark room with sliding as well as open door facility</b>	Yes/No	
<b>Computer:</b>	Yes/No	
<b>Complete system, brand name HP or Dell , as manufacture recommendation or above specification , include operation and analysis software .</b>	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	
<i>Date of manufacture not less than 2020</i>	Yes/No	
Price include installation and training in site	Yes/No	



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Item 17

## PCR Cabinet

- Good Brand name.
- Origin: USA, Europe, japan.
- interior Dimensions: 60W x 60 D X 60 H cm
- Light : UV , White
- Two power outlets 220 v Type H
- UV Timer .
- Antimicrobial coated metal surfaces .
- 

Optional :

Separate Uv lamp with stand

يجب تعبئة الجدول بالأسفل بالإضافة الى تقديم عرض الشركة التقني

PCR Cabinet	Compliance Yes / No ( if no put your comments )
Manufacture	Manufacture
Model	Model
Origin : USA , Europe	Origin
Delivery time	Delivery
3 years warranty	Yes/No
interior Dimensions: 60W x 60 D X 60 H cm	Yes/No
Light : UV , White	
Two power outlets 220 v Type H	
UV Timer .	
Antimicrobial coated metal surfaces .	
User's and service manual.	Yes/No
<b>Optional :</b>	
<b>Separate Uv lamp with stand</b>	
Price include installation and team training in site.	Yes/No
3 years warranty, 10 years availability spare parts	Yes/No
Date of manufacture not less than 2020	



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## Item 18

## Fraction collector for lab

Good brand and origin .  
 Operating temperature from 0 to 40 degrees C  
 For different tubes and vials.  
 With all accessories

يجب تعبئة الجدول بالأسفل بالإضافة الى تقديم عرض الشركة التقني

Fraction collector for lab	Compliance Yes / No ( if no put your comments )
Manufacture	Manufacture
Model	Model
Origin : USA , Europe	Origin
Delivery time	Delivery
3 years warranty	Yes/No
Good brand and origin .	Yes/No
Operating temperature from 0 to 40 degrees C	
For different tubes and vials.	
With all accessories	
Price include installation and team training in site.	Yes/No
3 years warranty, 10 years availability spare parts	Yes/No
Date of manufacture not less than 2020	



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## Item 19

## Kymograph

- With display
- Easy to use .
- Easy height adjustment drum

Kymograph	Compliance Yes / No ( if no put your comments )
Manufacture	Manufacture
Model	Model
Origin : USA , Europe	Origin
Delivery time	Delivery
3 years warranty	Yes/No
Good brand and origin .	Yes/No
With display	
Easy to use .	
Easy height adjustment drum	
Price include installation and team training in site.	Yes/No
3 years warranty, 10 years availability spare parts	Yes/No
Date of manufacture not less than 2020	



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## Item 20

## Water Distiller

- Brand name
- Origin: Japan , USA , Europe
- Fully automatic Water distiller .
- Output capacity : 8L/Hour.
- Single distillation .
- Pyrogen free .
- PH : 5 - 6 .
- Conductivity approx. : from( 1.5- 2.5 ) $\mu$ S. cm<sup>-1</sup>.
- Power rating : 6 kw .
- Automatic cleaning mode .
- Safety Water level sensor ( min and max level ) for tap water chamber ( tank of distillation )
- protection sensor for Over temperature of heaters.
- Wall mounted ( supplied with all necessary connection and hoses to connect to inlet and outlet water ) .
- Tap water flow ( min ) : 2 liters. min<sup>-1</sup> .
- Tap water Pressure min-max : 20 – 600kPa.
- Complete Reservoir level control with the accessories can be fitted to tank to turn the still off when reservoir is full and restart it when the level of water distiller reduced ( without reservoir ) .
- Three phase .
- Price include installation and team training in site .
- Price include all necessary accessories to working the distiller .
- service and user manuals Included .

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

Water Distiller	Yes/No	Comment
Manufacture	Manufacture	
Origin	Origin	
Model	Model	
Cat No	Cat No	
3 yrs warranty	Date of manufacture	
Delivery time	time	
Application : for life science	Yes / No	
Output capacity 8 L/ H	Yes / No	
Single distillation	Yes / No	
Pyrogen free	Yes / No	
PH : 5-6	Yes / No	
Conductivity approx. : from( 1.5- 2.5 ) $\mu$ S. cm <sup>-1</sup> .	Yes / No	
Power rating : 6 kw	Yes / No	
Safety Water level sensor ( min and max level ) for tap water chamber ( tank of distillation )	Yes / No	
protection sensor for Over temperature of heaters	Yes / No	
Automatic cleaning mode ( for internal chamber )	Yes / No	
Wall mounted ( supplied with all necessary connection and hoses to connect to inlet and outlet water	Yes / No	
input of Tap water flow ( min ) : 2 liters. min <sup>-1</sup> .	Yes / No	
Tap water Pressure min- max : 20 - 600kPa.	Yes / No	
three phase		
Price include installation and team training in site	Yes / No	
Price include all necessary accessories to working of water distiller	Yes / No	
Date of manufacture not less than 2020		



## Item 21

## Flaked ice maker

- Origin : USA , Europe .
- Application : General Laboratory .
- Flake Production for 24 H : 395lbs.
- Storage tank : 80 lbs. .
- Dimensions: 24.25" W x 24" D x 33" H
- BTU Per Hour: 3,000 .
- Power : 220 V.
- Water cooling .

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

Flaked ice maker	Yes/NO	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years warranty 10 years availability for spare parts	Yes/No	
Application : <b>General Laboratory</b> .	Yes/No	
Flake Production for 24 H : <b>395lbs.</b>	Yes/No	
Storage tank : <b>80 lbs.</b>	Yes/No	
Dimensions: <b>24.25" W x 24" D x 33" H</b>	Yes/No	
BTU Per Hour: <b>3,000</b> .	Yes/No	
Power : <b>220 V.</b>	Yes/No	
Plz specify water consumption during run ( L/H )	( L/H )	
Water cooling .		
Authorization letter from the manufacture to represent them in this offer .	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	Yes/No	
<i>Date of manufacture not less than 2020</i>		



## Item 22

## Rotary evaporator

Origin: USA, Europe , japan

Rotvapor :

Vertical condenser

Motorized electronic Quick-Action Jack

**Automatic lifting of the Evap flask during a power failure**

**Speed: 20-230 RPM**

**Secure and safe combi-clip for Vapor duct and flask**

**Flask Sizes: 50ml to 3000 ml Capacity .**

**1 litter evaporating flask and 1 litter receiving flask .**

**Clip for Evaporation Flask**

**Heating Bath :**

**Heating bath : High Alloy stainless steel .**

Capacity : 3 liter flask as a standard

**Temperature: 5 to 95 C .**

Digital Display of Heating bath Actual and Set temperature.

**Power 1350W .**

**Vacuum Pump**

**Vacuum Pump : Chemical-resistant PTFE diaphragm**

**Flow rate of 2 m3/h**

**vacuum of < 9 mbar**

**With Silencer, 2m of tubing**

**Gas ballast Function for easy Cleaning**

cooling for Condenser Temperature: 0°C to +100 °C

uses and integral circulating pump Coolant reservoir (filling port and drain valve)

Complete system with all accessories to run

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

Rotary evaporator	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin: USA, Europe, japan .	Origin	
Delivery time	weeks	
2 years Full warranty	Yes/No	
Rotvapor :	Yes/No	
Vertical condenser	Yes/No	
Motorized electronic Quick-Action Jack	Yes/No	
<b>Automatic lifting of the Evap flask during a power failure</b>	Yes/No	
<b>Speed: 20-230 RPM</b>	Yes/No	
<b>Secure and safe combi-clip for Vapor duct and flask</b>	Yes/No	
<b>Flask Sizes: 50ml to 3000 ml Capacity .</b>	Yes/No	
<b>1 litter evaporating flask and 1 litter receiving flask .</b>	Yes/No	
<b>Clip for Evaporation Flask</b>	Yes/No	
<b>Heating Bath :</b>	Yes/No	
<b>Heating bath : High Alloy stainless steel .</b>	Yes/No	
Capacity : 3 liter flask as a standard	Yes/No	
<b>Temperature: 5 to 95 C .</b>	Yes/No	
Digital Display of Heating bath Actual and Set temperature.	Yes/No	
<b>Power 1350W .</b>	Yes/No	
<b>Vacuum Pump</b>	Yes/No	
<b>Vacuum Pump : Chemical-resistant PTFE diaphragm</b>	Yes/No	
<b>Flow rate of 2 m3/h</b>	Yes/No	
<b>vacuum of &lt; 9 mbar</b>	Yes/No	

With Silencer, 2m of tubing	Yes/No	
Gas ballast Function for easy Cleaning	Yes/No	
cooling for Condenser	Yes/No	
Temperature: 0°C to + 95 °C	Yes/No	
uses and integral circulating pump	Yes/No	
Coolant reservoir (filling port and drain valve)	Yes/No	
You total price Complete system with all accessories to run	Yes/No	
User's and service manual.	Yes/No	
Price include installation and team training in site.	Yes/No	
Date of manufacture not less than 2020	Yes/No	



## Item 23

**Binocular Microscope**

Origin: USA , Europe , japan .

Observation modes:

- Bright field .

Optical system :

- infinity optical system .

Head :

- Two Eyepieces WF 10X/18
- Tube inclination 30 ° .
- Rotation 360 ° .
- Interpupillary : 48 -75 mm .
- Quadruple reverse angle Nosepiece .
- Anti fungus coating for : objectives , eyepieces , and observation tube .

Illumination :

- White LED illumination ( adjustable ) .
- koehler illumination .

Objectives :

- Infinity objectives .
- 4x/0.10 , 10x/0.25 , 40x/0.65, spring loaded , 100x/1.25, oil, spring loaded .

Focusing :

- adjustable coaxial coarse and fine focusing knob with upper stop .

Condenser :

- Abbe Brightfield condenser N.A 1.25, with integrated iris diaphragm and filter tray .
- Condenser and light intensity adjustable.

Stage :

- Double layer mechanical stage size : 130 mm X 130 mm .
- Stage movement up/down 20 mm .
- X/Y moving : 76 mm-30mm .

Power :

- 220V , 50 HZ .

Include :

- Dust cover , filter , immersion oil , ) disposable delicate task wipers to clean something , such as optics , instruction manual and service manual .

Optional :

**Digital camera with adaptor and Software , 3 MP. And all accessories .**

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

Binocular Microscope	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin: USA , EUPRE , japan .	Origin	
Delivery time	weeks	
3 years Full warranty 10 years availability for spare parts	Yes/No	
Observation modes:	Yes/No	
• Bright field .	Yes/No	
Optical system :	Yes/No	
• infinity optical system	Yes/No	
Head :	Yes/No	
• Two Eyepieces WF 10X/18	Yes/No	
• Tube inclination 30 °	Yes/No	
• Rotation 360	Yes/No	
• Interpupillary 48-75 mm .	Yes/No	
• Quadruple reverse angle Nosepiece .	Yes/No	

• Anti fungus coating for : objectives , eyepieces , and observation tube .	Yes/No	
Illumination :	Yes/No	
• White LED illumination ( adjustable ) .	Yes/No	
• koehler illumination .	Yes/No	
Objectives :	Yes/No	
• Infinity objectives .	Yes/No	
• 4x/0.10 , 10x/0.25 , 40x/0.65, spring loaded , 100x/1.25, oil, spring loaded .	Yes/No	
Focusing :	Yes/No	
• adjustable coaxial coarse and fine focusing knob with upper stop .	Yes/No	
Condenser :	Yes/No	
• Abbe Brightfield condenser N.A 1.25, with integrated iris diaphragm and filter tray .	Yes/No	
• Condenser and light intensity adjustable.	Yes/No	
Stage :	Yes/No	
• Double layer mechanical stage size : 130 mm X 130 mm .	Yes/No	
• Stage movement up/down 20 mm .	Yes/No	
• X/Y moving : 76 mm-30mm .	Yes/No	
Power :	Yes/No	
• 220V , 50 HZ .	Yes/No	
Include :	Yes/No	
• Dust cover , filter , immersion oil , ) disposable delicate task wipers to clean something delicate , such as optics ,instruction manual and service manual .	Yes/No	
Price include installation and team training in site.	Yes/No	
Optional : <b>Digital camera with adaptor and Software , 3 MP. And all accessories .</b>		
Date of manufacture the machine not less than 2020		



## Item 24

**Bench top Centrifuge (16 tubes )**

- **Origin : USA , Europe .**
- **Bench top centrifuge.**
- **Brushless motor .**
- **Microprocessor control .**
- **Control and display :**
  - Digital display .
  - actual values are indicated During centrifugation .
  - Speed display : RPM x 100, input in steps of 100
  - 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 **or** fixed angle
  - swing out rotor with buckets and lids for buckets ( cover for bucket) .
  - Two size of buckets : 4 buckets ( **volume 5 ml test tube** ) and 4 buckets ( **15 conical tube** ) .
  - MAX Speed : RFC 2.400 for two types of above tubes volume and buckets.
- **Safety :**
  - Emergency lid lock release .
  - Imbalance switch-off .
  - Automatic rotor recognition .
- **Power : 220 V .**

Optional price :

**swing out rotor .**

**Thermal fuse .**

**buckets and lids for buckets ( cover for bucket ) : 4 buckets ( volume 5 ml ) and 4 buckets ( volume 15 ml )**

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

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	
Control and display	Yes/No	
<b>actual values are indicated During centrifugation .</b>	Yes/No	
<b>Speed display : RPM x 100, input in steps of 100</b>	Yes/No	
<b>RCF key : indication during run .</b>	Yes/No	
<b>Time ( t/min ) : 1 - 99 min, continuous operation .</b>	Yes/No	
<b>Impulse key: For short centrifugation operations .</b>	Yes/No	
Centrifuge chamber : <b>stainless steel</b> .	Yes/No	
Rotor :	Yes/No	
<b>Easily exchangeable rotors . Capability to use two types of rotor swing out or fixed angle</b>	Yes/No	
<b>swing out rotor with all accessories to work with tubes buckets and lids for buckets (cover for bucket)</b>	Yes/No	



Include in your price Two size of buckets : Two size of buckets : 4 buckets ( <b>volume 5 ml test tube</b> ) and 4 buckets ( <b>15 conical tube</b> ). <b>with max speed : 2,400 RCF</b>	Yes/No	
Safety :	Yes/No	
<b>Emergency lid lock release, Imbalance switch-off .</b>	Yes/No	
<b>Automatic rotor recognition</b>	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	
<i>Optional price</i>		
<b>swing out rotor</b>	price	
<b>Thermal fuse .</b>	price	
<b>buckets and lids for buckets ( cover for bucket) :</b> <b>4 buckets ( volume 5 ml ) and 4 buckets ( volume 15 ml )</b>	price	





## Item 25

## 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 2020		
User's and service manual .	Yes/No	
Price include installation and team training in site.	Yes/No	



## Item 26

**Bench top Centrifuge (small )**

- **Origin : USA , Europe .**
- **Bench top centrifuge.**
- **Brushless motor .**
- **Microprocessor control .**
- **Control and display :**
  - Digital display .
  - actual values are indicated During centrifugation .
  - Speed display : RPM x 100, input in steps of 100
  - RCF key : indication during run .
  - Time ( t/min ) : 1 - 99 min, continuous operation .
- **Rotor :**
  - fixed angle
  - capacity : 8x **15 conical tube** ).
  - MAX Speed : 6000 rpm
- **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.*

Centrifuge	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	weeks	
3 years warranty 10 years availability for spare parts	Yes/No	
• <b>Bench top centrifuge.</b>	Yes/No	
• <b>Brushless motor .</b>	Yes/No	
• <b>Microprocessor control .</b>	Yes/No	
• <b>Control and display :</b>	Yes/No	
- Digital display .	Yes/No	
- actual values are indicated During centrifugation .	Yes/No	
- Speed display : RPM x 100, input in steps of 100	Yes/No	
- RCF key : indication during run .	Yes/No	
- Time ( t/min ) : 1 - 99 min, continuous operation .	Yes/No	
• <b>Rotor :</b>	Yes/No	
- fixed angle	Yes/No	
- capacity : 8x <b>15 conical tube</b> ).	Yes/No	
- MAX Speed : 6000 rpm	Yes/No	
• <b>Safety :</b>	Yes/No	
Power : 220 V .	Yes/No	
User's and service manual	Yes/No	
Price include installation and team training in site.	Yes/No	



Item 27

**Refrigerated Centrifuge**

- Brand name and USA , Germany country of origin
- For PCR and research lab .
- Bench top centrifuge with rotor.
- Brushless motor.
- Microprocessor control .
- CFC Free cooling.
- Max Speed : 15 ,000 RPM or more .
- Temp Range : ( -10 or lower to +35 °C )
- Control and display :
  - Actual values are indicated During centrifugation .
  - Speed display : RPM x ( 100, input in steps of 10) and RCF .
  - Time ( t/min ) : 1 - 99 min .
  - Programmable acceleration decacceleration .
- Centrifuge chamber: stainless steel.
- Rotor :
  - Easily exchangeable rotors: Capability to use two types of rotor swing out or fixed angle .
  - Type Size : 0.2 ml / 2ml .
- Safety :
  - Emergency lid lock release.
  - Imbalance switch-off .
  - Automatic rotor recognition.
  - Motor over heating protection .
  - Power : 220 V , 50 HZ .

❖ 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	
• For PCR and research lab .	Yes/No	
• Bench top centrifuge with rotor.	Yes/No	
• Brushless motor.	Yes/No	
• Microprocessor control .	Yes/No	
• CFC Free cooling.	Yes/No	
• Max Speed : 15 ,000 RPM or more .	Yes/No	
• Temp Range : ( -10 or lower to +35 °C )	Yes/No	
• Control and display :	Yes/No	
- Actual values are indicated During centrifugation .	Yes/No	
- Speed display : RPM x ( 100, input in steps of 10) and RCF .	Yes/No	
- Time ( t/min ) : 1 - 99 min .	Yes/No	
- Programmable acceleration decacceleration .	Yes/No	
• Centrifuge chamber: stainless steel.	Yes/No	
• Rotor		



- Easily exchangeable rotors: Capability to use two types of rotor swing out <b>or</b> fixed angle .		
- Type Size : 0.2 ml / 2ml .		
- <b>Safety :</b> - Emergency lid lock release. - Imbalance switch-off . - Automatic rotor recognition. - Motor over heating protection .		
Power : 220 V .	Yes/No	
User's and service manual .	Yes/No	
Price include installation and team training in site.	Yes/No	



## Items 28 - 29

## HEMATOCRITE CENTRIFUGE

- Brand name
- Origin : USA , Europe .
- Bench top.
- Brushless motor.
- Up to 24 samples
- Microprocessor control .
- Max Speed : 13000 RPM .
- With speed and time controller
- Door lock

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

HEMATOCRITE 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	
Bench top.	Yes/No	
Brushless motor.	Yes/No	
Up to 24 samples	Yes/No	
Microprocessor control .	Yes/No	
Max Speed : 13000 RPM .	Yes/No	
With speed and time controller	Yes/No	
Door lock	Yes/No	
Bench top.		
User's and service manual .	Yes/No	
Price include installation and team training in site.	Yes/No	



Item 30

## Refractometer

- Brand name
- For pharmaceutical educational lab
- Origin : USA , Europe .
- Microprocessor control .
- Complete with all accessories

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

❖	❖ Refractometer	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 pharmaceutical educational lab	Yes/No	
	Microprocessor control .	Yes/No	
	Complete with all accessories	Yes/No	
	User's and service manual .	Yes/No	
	Price include installation and team training in site.	Yes/No	



*[Handwritten signature]*

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## Item 31

## FUME HOOD

Hood to protects operator from toxic vapor and environment

Application : **for general purpose chemistry Lab**

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.**

Sink, Tap Water, Drainage: **At least one sink made of porcelain required inside the hood with inlet and outlet arrangement.**

With Gas line water line and 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	Manufactur e	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years Full warranty	Yes/No	
Hood to protects operator from toxic vapor and environment	Yes/No	
Application : <b>for general purpose chemistry Lab</b>	Yes/No	
Working Dimension : <b>130 cm w x 70 cm D x 75 cm .</b>	Yes/No	
Microprocessor control ( clear and simple ) .	Yes/No	
Construction and Material: <b>Made of good quality melamine board with good acid and alkali resistance function anti chemical, heat, fire resistant and easily cleanable .</b>	Yes/No	
Sash : <b>Tempered Glass vertical rising sash.</b>	Yes/No	
Sink, Tap Water, Drainage: <b>At least one sink made of porcelain required inside the hood with inlet and outlet arrangement.</b>	Yes/No	
With Gas line water line and electric socket ( water proof ) .	Yes/No	
Lighting: <b>fluorescent lamp with vapor proof design .</b>	Yes/No	
Blower : <b>Built-in centrifugal blower for air suction in hood, silent (compatible with above specification) .</b> <b>Adjustable air speed.</b>	Yes/No	
casters and locking for casters .	Yes/No	
with stand .	Yes/No	
Noise level : <b>55 db</b>		
Ducting : <b>chemical resistant rigid and flexible ductwork from hood to exhaust .</b>	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	
Date of manufacture <b>not less than 2020</b>	Yes/No	

## Item 32

## Dissolution Testing Instrument

- Brand name
- Origin : USA , Europe .
- Display : clear Display showing number of tests and hardness result
- Speed : 10 to 300 rpm
- With stirrer
- 6 or 8 ( volume :1liter ) borosilicate glass vessel .
- No. of Protocol : Minimum 20
- Temperature Range : 30o C to 40o C
- Temperature Accuracy :  $\pm 0.2o$  C
- Sample Interval : 23 hrs. 59 min
- Bath : Clear Acrylic Moulded water bath

Dissolution Testing Instrument	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	weeks	
3 years Full warranty 10 years availability for spare parts	Yes/No	
• Display : clear Display showing number of tests and result	Yes/No	
• Speed : 20 to 300 rpm	Yes/No	
• No. of Protocol : Minimum 20	Yes/No	
• Temperature Range : 25o C to 40o C	Yes/No	
• Temperature Accuracy : $\pm 0.2o$ C	Yes/No	
• Sample Interval : 23 hrs. 59 min	Yes/No	
• Bath : Clear Acrylic Moulded water bath	Yes/No	
User's and service manual .	Yes/No	
Price include installation and team training in site.	Yes/No	





Item 33

## Heating Mantle

- Table top heating mental .
- Made from flexible fabrics .
- Fit easy into tight spaces .
- Max temp : 450 C□ .
- The mantles cover the bottom half of single and multi-neck flasks, allowing for full view of contents .
- With temp. controller .
- For flask 250 ml .
- Power : 220V .

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

Heating mental	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
Table top heating mental .	Yes/No	
Made from flexible fabrics .	Yes/No	
Fit easy into tight spaces .	Yes/No	
Max temp : 450 C□ .	Yes/No	
The mantles cover the bottom half of single and multi-neck flasks, allowing for full view of contents	Yes/No	
For flask 250 ml .	Yes/No	
Temperature control included	Yes/No	
Power : 220 V .	Yes/No	
3 years warranty	Yes/No	
10 years availability for spare parts	Yes/No	
Optional price		
Thermostat ..		
Heater element		



## Items 34 -35

### High Performance Liquid Chromatography (Isocratic & gradient operations )

Brand

Origin: USA , EUR , JAPAN .

warranty : 5 years

يمكن تقديم جهازين أو جهاز يجمع الحالتين كالتالي :

- A. High Performance Liquid Chromatography ( Isocratic ) .  
B. High Performance Liquid Chromatography ( gradient operations ) .

- system equipped with a suitable Solvent Delivery Pump with manual , Column Compartment, PDA Detector, pc , software , UPS , compete system
- capable of working in both Isocratic & gradient operations
- application : Pharmaceutical lab ( educational )

HPLC Pump (or delivery system)

- High Pressure binary gradient Two pump Integrated System.
- The machine should be operable both in isocratic and gradient mode.
- Flow Precision:  $\leq 0.1\%$  or better.
- Flow Accuracy:  $\pm 1.0\%$  or better

Manual Injector

- Loop Size volumes should be of 5ul, 20ul, and 200 ul etc. with suitable syringe.

Column Oven

- Should have provision for housing at least four or more columns of 30 cm length.
- Temperature setting rage: Ambient- 60oC or better

PDA Detector

- Operating modes: Direct Current pulsed amperometric detector (PAD) scan.
- Potential Range:  $\pm 200\text{mV}$  in 10mV steps (DC,PAD,Scan)
- Column Oven: 70° C above ambient to 450 °C, 0.10° c resolution.
- Auxiliary Electrode: Stainless steel.
- PAD Mode
- Scan Cycles: Half, Full, Continuous .
- Time event programming: DC & PAD .
- **Standard flow cell: 0.08uL min. volume, flow rate 25uL/min-2mL/min**

Hardware

Good brand name Computer like HP, Dell or Lenovo should be supplied and compatible with above system and not less than manufacture recommendations

- \* **Complete system with software and all accessories and ready to use .**
- \* **With HPLC Start up kit includes tubing's nuts , wrenches , ferrules .**
- \* **Your offer must be clear model numbers or catalog numbers for each parts from Hplc with origin for like ( detector , ..... )**
- \* **السعر يجب ان يشمل جميع متطلبات التركيب والتشغيل والتدريب في الموقع المخصص**
- \* **APPLICATION TRAINING يجب ان يشمل دورة تدريبه على التطبيقات في بلد المنشأ**
- \* **يجب ان يشمل السعر دورة صيانة في بلد المنشأ**
- \* **يجب ان تشمل الكفالة زيارة واحدة على الأقل لكل سنة كفالة تفقد للجهاز**

**Kindly your offer will not be taken into our consideration if you don't fill below table and clear system configuration with the origin for each parts .**

High Performance Liquid Chromatography (Isocratic & gradient operations )	Yes/No	Comments
Manufacture		
Model	Model	
Origin	Origin	
Delivery time	week	

Warranty 5 years		
<ul style="list-style-type: none"> <li>system equipped with a suitable Solvent Delivery Pump, Column Compartment, PDA Detector, pc , software , UPS , compete system</li> </ul>	Yes/No	
<ul style="list-style-type: none"> <li>capable of working in both Isocratic &amp; gradient operations</li> </ul>	Yes/No	
<ul style="list-style-type: none"> <li>application : Pharmaceutical lab ( educational )</li> </ul>	Yes/No	
<p>HPLC Pump (or delivery system)</p> <ul style="list-style-type: none"> <li>High Pressure binary gradient Two pump Integrated System.</li> <li>The machine should be operable both in isocratic and gradient mode.</li> <li>Flow Precision: <math>\leq 0.1\%</math> or better.</li> <li>Flow Accuracy: <math>\pm 1.0\%</math> or better</li> </ul>	Yes/No	
<p>Manual Injector</p> <ul style="list-style-type: none"> <li>Loop Size volumes should be of 5ul, 20ul, and 200 ul etc. with suitable syringe.</li> </ul> <p>Column Oven</p> <ul style="list-style-type: none"> <li>Should have provision for housing at least four or more columns of 30 cm length.</li> <li>Temperature setting rage: Ambient- 60oC or better</li> </ul>	Yes/No	
<p>PDA Detector</p> <ul style="list-style-type: none"> <li>Operating modes: Direct Current pulsed amperometric detector (PAD) scan. <ul style="list-style-type: none"> <li>Potential Range: <math>\pm 200\text{mV}</math> in 10mV steps (DC,PAD,Scan)</li> </ul> </li> <li>Column Oven: 70° C above ambient to 450 °C, 0.10° c resolution. <ul style="list-style-type: none"> <li>Auxiliary Electrode: Stainless steel.</li> </ul> </li> <li>PAD Mode</li> <li>Scan Cycles: Half, Full, Continuous .</li> <li>Time event programming: DC &amp; PAD .</li> </ul> <p>Standard flow cell: 0.08uL min. volume, flow rate 25uL/min-2mL/min</p>	Yes/No	
<p>Hardware</p> <p>Good brand name Computer like HP, Dell or Lenovo should be supplied and compatible with above system and not less than manufacture recommendations</p>	Yes/No	
<b>Complete system with software and all accessories and ready to use</b>	Yes/No	
<b>With HPLC Start up kit includes tubing's nuts , wrenches , ferrules .</b>		
<b>Price include service training for one engineer at manufacture with all cost .</b>		
<b>Price should be include application training for one person at manufacture with all cost .</b>		
<b>Your offer must be clear model numbers or catalog numbers for each parts from prep Hplc with origin for like (detector , box , ..... )</b>	Yes/No	
السعر يجب ان يشمل جميع متطلبات التركيب والتشغيل والتدريب في الموقع المخصص مع تشغيل الجهاز على فحص واحد على الأقل	Yes/No	
يجب ان تشمل الكفالة زيارة واحدة على الأقل لكل سنة كفالة تفقد للجهاز	Yes/No	
User's and service manual 10 years availability for spare parts	Yes/No	
Price include installation and team training in site with training application.	Yes/No	



Item 36

## Digital polarimeter

- Application : general lab and pharmaceutical lab
- Measurement Mode(s) : Optical Rotation, Specific Rotation, Concentration
- Measuring Range : +/-89°
- Accuracy : 0.002° up to 1°
- Wavelength : 254 to 850 nm
- Complete System ready to use with all accessories

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

Digital polarimeter	Yes/No	Comment
Manufacture	Manufactur e	
Model	Model	
Origin: USA, Europe , japan	Origin	
Delivery time	time	
Warranty : 3 years.	Yes/No	
• Application : general lab and pharmaceutical lab		
• Measurement Mode(s) : Optical Rotation, Specific Rotation, Concentration		
• Measuring Range : +/-89°		
• Accuracy : 0.002° up to 1°		
• Wavelength : 254 to 850 nm		
• Ready to use With all stander accessories to wok completely		
Complete System ready to use with all accessories	Yes/No	
User's and service manual	Yes/No	
Price include installation training in site	Yes/No	
Date of manufacture not less than 2020		



## Item 37

## FT Infrared Spectrophotometer

- Brand name .
- Pharmaceutical lab application .
- Origin : USA , Europe . japan .
- Wavelength Range : 7800 to 350  $\text{cm}^{-1}$  .
- Wavenumber Accuracy : Within  $\pm 0.01 \text{ cm}^{-1}$
- Resolution : 0.4  $\text{cm}^{-1}$  .
- Optical System : Single Beam.
- Sample Chamber WDXH mm : 200 × 260 × 185 .
- Light Source: High-intensity ceramic source .
- Price include instillation and team training on site
- Warranty 3 years with preventive maintenance .
- Complete System ready to use with all accessories and machine to work completely
- يجب ان يشمل السعر تسعير الأجهزة الملحقة

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

Infrared Spectrophotometer	Yes/No	Comment
Manufacture	Manufactur e	
Model	Model	
Origin: USA, Europe , japan	Origin	
Delivery time	time	
Warranty : 5 years.	Yes/No	
Wavelength Range : 7800 to 350 $\text{cm}^{-1}$ .	Yes/No	
Wavenumber Accuracy : Within $\pm 0.01 \text{ cm}^{-1}$	Yes/No	
Resolution : 0.4 $\text{cm}^{-1}$ .	Yes/No	
Optical System : <b>Single Beam.</b>	Yes/No	
Sample Chamber WDXH mm : 200 × 260 × 185 .	Yes/No	
Light Source: <b>High-intensity ceramic source .</b>	Yes/No	
Complete System ready to use with all accessories and machine to work completely	Yes/No	
User's and service manual	Yes/No	
Price include instillation and team training on site		
Price include installation training in site	Yes/No	
Date of manufacture not less than 2020		



Item 38

## Freeze Dryers (lyophilizes )

- Good Brand name.
- Origin: USA, Europe, japan.
- Benchtop
- Ice Holding Capacity : 3 Liter .
- Temperature : - 55 C
- Temperature measurement : ice condensation , shelf , product )
- One shelf
- chamber with internal condenser coils, all made from high-grade stainless steel
- Refrigeration system : 0.5kw
- Refrigerant : CFC free
- Noise : 54Db .
- WITH VACUME PUMP 90 LLMIN
- With vacuum control
- With drain Valve
- ❖ *your offer will not be taken into our consideration if you don't fill below table.*

Freeze Dryers (lyophilizes )	Compliance Yes / No ( if no put your comments )
<u>Manufacture</u>	<u>Manufacture</u>
<u>Model</u>	<u>Model</u>
<u>Origin : USA , Europe</u>	<u>Origin</u>
<u>Delivery time</u>	<u>Delivery</u>
<u>3 years warranty, 10 years availability spare parts</u>	<u>Yes/No</u>
<u>benchtop</u>	<u>Yes/No</u>
<u>Ice Holding Capacity : 3 Liter</u>	<u>Yes/No</u>
<u>Temperature : - 55 C</u>	<u>Yes/No</u>
<u>Temperature measurement : ice condensation , shelf , product )</u>	<u>Yes/No</u>
<u>One shelf</u>	<u>Yes/No</u>
<u>chamber with internal condenser coils, all made from high-grade stainless steel</u>	<u>Yes/No</u>
<u>Refrigeration system : 0.5kw</u>	<u>Yes/No</u>
<u>Refrigerant : CFC free</u>	<u>Yes/No</u>
<u>Noise : 54Db .</u>	<u>Yes/No</u>
<u>WITH VACUME PUMP 90 LLMIN</u>	<u>Yes/No</u>
<u>With vacuum control</u>	<u>Yes/No</u>
<u>With drain Valve</u>	<u>Yes/No</u>
<u>Complete System ready to use with all accessories</u>	<u>Yes/No</u>
<u>220 V</u>	<u>Yes/No</u>
<u>User's and service manual.</u>	<u>Yes/No</u>
<u>Price include installation and team training in site.</u>	<u>Yes/No</u>
<u>Date of manufacture not less than 2020</u>	



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Items 39 - 40

## Flame photometer

- Brand name .
- Pharmaceutical lab application .
- 4 elements (Na 0.1-500 ppm, K 0.1-500 ppm, Li 0.1-500 ppm & Ca 0.50-500 ppm ) .
- All accessories for measuring all the four elements must be included
- Minimum sample: 2 ml/element .
- CALIBRATION : Linear with 2 standards Non linear with 6-8 standards,
- Reproducibility: Low conc.  $\pm 1\%$  . High Conc.  $\pm 1\%$
- time: 2-15 sec
- built-in Air compressor

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

❖ Flame photometer	Yes/No	Comment
<u>Manufacture</u>	Manufactur e	
<u>Model</u>	Model	
<u>Origin: USA, Europe , japan</u>	Origin	
<u>Delivery time</u>	time	
<u>Warranty : 3 years.</u>	Yes/No	
<u>All accessories for measuring all the four elements must be included</u>		
<u>Minimum sample: 2 ml/element .</u>		
<u>elements (Na 0.1-500 ppm, K 0.1-500 ppm, Li 0.1-500 ppm &amp; Ca 0.50-500 ppm ) .</u>		
<u>Reproducibility: Low conc. <math>\pm 1\%</math> . High Conc. <math>\pm 1\%</math></u>		
<u>time: 2-15 sec</u>		
<u>built-in Air compressor</u>		
<u>Complete and Ready to use with all accessories</u>	Yes/No	
<u>User's and service manual</u>	Yes/No	
<u>Price include installation training in site</u>	Yes/No	
<u>Date of manufacture not less than 2020</u>		



## Item 41

## Gas Chromatograph

- Brand name .
- Pharmaceutical lab application

- *Gas Chromatograph Oven*

1. Usable volume : 14L or More
2. Automatic cooling under processor control
3. Temperature range : 10 to 450°C or more, , resolution: 0.1°C
5. Ramp Rate: 0° to 50°C/min in 2°C/min increments through computer program & display on monitor.
7. Overheat Protection: Built-in Alarm and Auto shut off of heating control.
8. power must turn off automatically when the door is opened .

- *Detector*

*Flame Ionization Detector – 1 Set*

- With Built-in Signal Amplifier Unit and Integrator output.
- Sensitivity: Better than 0.1ppm for Hexane
- Operating Temperature : 5°C above ambient to 450°C,  $\pm 0.2^\circ\text{C}$  through computer programming

*Thermal Conductivity Detector TCD - 1 Set*

- With Built-in Signal Amplifier Unit and Integrator output.
  - Filament : Dual Path 4 Tungsten-Rhenium Filaments
  - Operating Temperature: 5°C above ambient to 450°C,  $\pm 0.2^\circ\text{C}$  through computer programme.
  - Sensitivity : Better than 1 PPM Oxygen
- (Usable for both Packed Column and Capillary Column. Any one injection at a time)

- *Inlet*

Maximum no. of installation: three

Must provide leak tests .

- ❖ *Packed inlet*

- Maximum Temperature : 200 oC
- Pressure setting range : 0.01 - 150 psi or better
- Total flow setting range : 0.1-100 ml/min or better
- Flow stability <  $\pm 0.05\text{ml/min}$
- Pressure stability <  $\pm 0.05\text{psi}$
- Temperature set point : 0.1°C or better
- Temperature stability <  $\pm 0.1^\circ\text{C}$

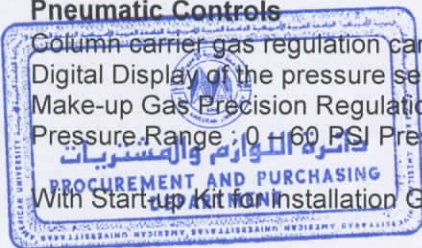
- ❖ *Capillary inlet*

(Split/Splitless switchable)

- Maximum Temperature : 400oC
- Pressure setting range : 0.01 ~ 150 psi
- Splitless time set point : 0.01min
- Total Flow stability <  $\pm 0.05\text{ml/min}$
- Pressure stability <  $\pm 0.05\text{psi}$
- Temperature set point : 0.1°C
- Temperature stability <  $\pm 0.1^\circ\text{C}$
- Maximum spilt ratio: 7,500
- Septum purge: Fixed

- *Pneumatic Controls*

- Column carrier gas regulation can be set within  $\pm 0.1\text{ PSI}$ .
- Digital Display of the pressure set to the column.
- Make-up Gas Precision Regulation and Digital Pressure Display and Control.
- Pressure Range : 0 - 60 PSI Pressure Accuracy :  $\pm 0.1\text{ PSI}$  Pressure Readability :  $\pm 0.1\text{ PSI}$  .
- With Start-up kit for installation GC to Complete and Ready to use with all accessories





- all consumables like filters, tubing, fittings etc should be included in the quotation.
- The necessary software for data acquisition, control, chromatographic data analyses and evaluation, reporting etc. should be included in the quotation.
- ❖ **your offer will not be taken into our consideration if you don't fill below table.**

Gas Chromatograph	Compliance Yes / No ( if no put your comments )
Manufacture	Manufacture
Model	Model
Origin : USA , Europe	Origin
Delivery time	Delivery
5 years warranty, 10 years availability spare parts	Yes/No
• <b>Brand name .</b>	Yes/No
• <b>Pharmaceutical lab application</b>	Yes/No
• <b>Gas Chromatograph Oven</b>	Yes/No
1. Usable volume : 14L or More	Yes/No
2. Automatic cooling under processor control	Yes/No
3. Temperature range : 10 to 450°C or more, , resolution: 0.1°C	Yes/No
5. Ramp Rate: 0° to 50°C/min in 2°C/min increments through computer program & display on monitor.	Yes/No
7. Overheat Protection: Built-in Alarm and Auto shut off of heating control.	Yes/No
8.power must turn off automatically when the door is opened .	Yes/No
• <b>Detector</b>	Yes/No
Flame Ionization Detector – 1 Set	Yes/No
- With Built-in Signal Amplifier Unit and Integrator output.	Yes/No
-Sensitivity: Better than 0.1ppm for Hexane	Yes/No
- Operating Temperature : 5°C above ambient to 450°C, ±0.2°C through computer programming	Yes/No
Thermal Conductivity Detector TCD - 1 Set	Yes/No
- With Built-in Signal Amplifier Unit and Integrator output.	Yes/No
- Filament : Dual Path 4 Tungsten-Rhenium Filaments	Yes/No
- Operating Temperature: 5°C above ambient to 450°C, ±0.2°C through computer programme.	Yes/No
- Sensitivity : Better than 1 PPM Oxygen	Yes/No
(Usable for both Packed Column and Capillary Column. Any one injection at a time)	Yes/No
• <b>Inlet</b>	Yes/No
Maximum no. of installation: three	Yes/No
Must provide leak tests .	Yes/No
❖ <b>Packed inlet</b>	Yes/No
- Maximum Temperature : 200 oC	Yes/No
- Pressure setting range : 0.01 - 150 psi or better	Yes/No
- Total flow setting range : 0.1-100 ml/min or better	Yes/No
- Flow stability < ±0.05ml/min	Yes/No
- Pressure stability < ± 0.05psi	Yes/No
- Temperature set point : 0.1°C or better	Yes/No
- Temperature stability < ±0.1°C	Yes/No
❖ <b>Capillary inlet</b>	Yes/No
(Split/Splitless switchable)	Yes/No
- Maximum Temperature : 400oC	Yes/No
- Pressure setting range : 0.01 ~ 150 psi	Yes/No
- Splitless time set point : 0.01min	Yes/No

- Total Flow stability < $\pm 0.05$ ml/min	Yes/No
- Pressure stability < $\pm 0.05$ psi	Yes/No
- Temperature set point : 0.1°C	Yes/No
- Temperature stability < $\pm 0.1$ °C	Yes/No
- Maximum spilt ratio: 7,500	Yes/No
- Septum purge: Fixed	Yes/No
• <b>Pneumatic Controls</b>	Yes/No
- Column carrier gas regulation can be set within $\pm 0.1$ PSI.	Yes/No
- Digital Display of the pressure set to the column.	Yes/No
- Make-up Gas Precision Regulation and Digital Pressure Display and Control.	Yes/No
<b>Pressure Range : 0 – 60 PSI Pressure Accuracy : <math>\pm 0.1</math> PSI Pressure Readability : <math>\pm 0.1</math> PSI</b>	Yes/No
• With Start-up Kit for installation GC to Complete and Ready to use with all accessories	Yes/No
• all consumables like filters, tubing, fittings etc should be included in the quotation.	Yes/No
• The necessary software for data acquisition, control, chromatographic data analyses and evaluation, reporting etc. should be included in the quotation.	Yes/No
<b>Price include service training for one engineer at manufacture with all training cost .</b>	Yes/No
User's and service manual.	Yes/No
Price include installation and team training in site.	Yes/No
Date of manufacture not less than 2020	



Items 42- 45

**filling and dosing machine**

- origin USA , Europe and good brand name .
- For pharmaceutical lab application .
- use in laboratory and small batch production environments.
- can be filled automatically Bottles, vials ampules and other small containers.
- Semi or full automatic .
- Setting up is easy using the menu-driven LCD displays.
- With A peristaltic dispensing unit designed to enable quick, easy, and hygienic filling of mobile liquids.
- XYZ Distributor to create complete peristaltic filling machine offering quick, easy, and hygienic filling of whole trays of vials or bottles automatically.
- With all accessories and ready to work .
- *Optional price :*  
*Bottle brushing machine for cleaning the bottles and vials .*
- *Manual vial capping and decamping machine*

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

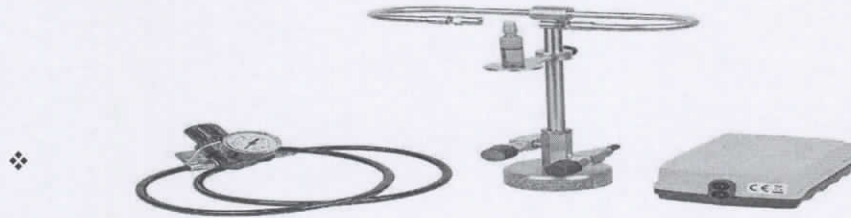
filling and dosing machine	Compliance Yes / No ( if no put your comments )
Manufacture	Manufacture
Model	Model
Origin : USA , Europe	Origin
Delivery time	Delivery
3years warranty, 10 years availability spare parts	Yes/No
<ul style="list-style-type: none"> <li>• <b>Pharmaceutical lab application</b></li> </ul>	Yes/No
origin USA , Europe and good brand name .	Yes/No
For pharmaceutical lab application .	Yes/No
<b>use in laboratory and small batch production environments.</b>	Yes/No
<b>can be filled automatically Bottles, vials ampules and other small containers.</b>	Yes/No
<b>Semi or full automatic .</b>	Yes/No
<b>Setting up is easy using the menu-driven LCD displays.</b>	Yes/No
<b>With A peristaltic dispensing unit designed to enable quick, easy, and hygienic filling of mobile liquids.</b>	Yes/No
XYZ Distributor to create complete peristaltic filling machine offering quick, easy, and hygienic filling of whole trays of vials or bottles automatically	Yes/No
<i>Optional price :</i> <i>Bottle brushing machine for cleaning the bottles and vials .</i>  <i>Manual vial capping and decamping machine</i>	Price
Complete with all standard accessories.	Yes/No
User's and service manual .	Yes/No
Price include installation and team training in site.	Yes/No



## Item 46

## Twin Jet Ampoule Sealer

- Ampoule Sealer is a hand operated unit, designed for use with natural or bottled gas and air.
- Ampoule size ml ; 1- 50 open or closed .
- Output : 10 per minutes
- gas bottles and tall tubes for gas and air .
- Complete with all accessories



❖ your offer will not be taken into our

consideration if you don't fill below table.

❖ Twin Jet Ampoule Sealer	Compliance Yes / No ( if no put your comments )
Manufacture	Manufacture
Model	Model
Origin : USA , Europe	Origin
Delivery time	Delivery
3years warranty, 10 years availability spare parts	Yes/No
• <b>Pharmaceutical lab application</b>	Yes/No
Ampoule Sealer is a hand operated unit, designed for use with natural or bottled gas and air.	
Ampoule size ml ; 1- 50 open or closed .	
Output : 10 per minutes	
Gas bottles and tall tubes for gas and air .	
Complete with all standard accessories.	
User's and service manual .	
Price include installation and team training in site.	Yes/No

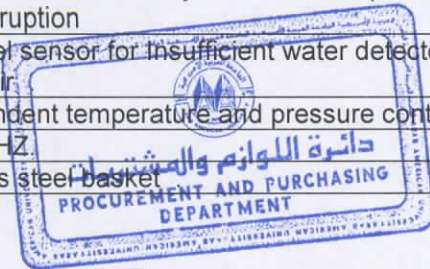


## Item 47

## Vertical Autoclave

- laboratory application .
- vertical Stem sterilizer and mobile .
- Microprocessor control .
- Chamber capacity : chamber volume not less than 70 L
- Cycles: Unwrapped , Wrapped and Porous Loads, Rubber and Heavy duty , liquid .
- Safety Features :Door Safety Features prevents the operator from opening the door if chamber is pressurized or temperature in the chamber is above safety level or any danger may happen to the operator , with Over Heat protection, Safety Valve , Low Water Indicator .
- Manual mode in malfunction case or emergency .
- Built in Vacuum pump for pre and post vacuum.
- Display for ( cycle , Temp, pressure ,time , status ) .
- Auto shutoff at end of cycle .
- User friendly display .
- Cycle information recovery in the case of power failure or cycle interruption
- Water level sensor for Insufficient water detector in chamber or reservoir .
- Interdependent temperature and pressure control .
- Power :3 ph.
- 2 Stainless steel basket .
- cleaning material for cleaning of internal chamber and reservoir tank ( enough to 10 run cycles ).
- With one back biological indicator ( enough to 10 run cycles ) .
- with calibration certificate .
- Complete with all standard accessories.
- Operation and service manuals .

Vertical Autoclave 70 L	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years warranty	Yes/No	
laboratory application .	Yes/No	
Vertical Stem sterilizer .	Yes/No	
Microprocessor control .	Yes/No	
Chamber capacity : chamber volume not less than 85 L	Yes/No	
Cycles: Unwrapped , Wrapped and Porous Loads, Rubber and Heavy duty , liquid .	Yes/No	
Safety Features :Door Safety Features prevents the operator from opening the door if chamber is pressurized or temperature in the chamber is above safety level or any danger may happen to the operator , with Over Heat protection, Safety Valve , Low Water Indicator .	Yes/No	
Manual mode in malfunction case or emergency .	Yes/No	
Built in Vacuum pump for pre and post vacuum.	Yes/No	
Display for ( cycle , Temp, pressure ,time , status ) .	Yes/No	
Auto shutoff at end of cycle .	Yes/No	
Cycle information recovery in the case of power failure or cycle interruption	Yes/No	
Water level sensor for Insufficient water detector in chamber or reservoir.	Yes/No	
Interdependent temperature and pressure control .	Yes/No	
220 V ,50HZ.	Yes/No	
2 Stainless steel basket	Yes/No	



cleaning material for cleaning of internal chamber and reservoir tank ( enough to 10 run cycles ).	Yes/No	
with calibration certificate .	Yes/No	
With one back biological indicator ( enough to 10 run cycles )		
Complete with all standard accessories.	Yes/No	
User's and service manual .	Yes/No	
Price include installation and team training in site.	Yes/No	



## Item 48

## fermentation/bioreactor

- Good brand and origin .
- Main application microbial metabolite production
- Volume up to 5 to 10 liters .
- Microprocessor .
- With all hoses and accessories .

fermentation/bioreactor	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years warranty	Yes/No	
• Good brand and origin .		
• Main application microbial metabolite production		
• Volume up to 5 to 10 liters .		
• Microprocessor .		
• With all hoses and accessories .		
• Price include instillation and training on site		
• With user and service manual		
• Price include run one test on lab of aaup .		



## Item 49

## Incubator

- origin (USA , Europe ) and brand name .
- For general lab application .
- Volume 80 L .
- Temp range: up to 80 C .
- Microprocessor control .
- Adjustable parameter : time , temp , .... .
- Self diagnostics for any error.
- Clear display .
- Double door one of them glass door .
- 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.

Incubator 80 L	Yes/No	Comment
Manufacture	Manufactur e	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
2 years Full warranty	Yes/No	
Country of origin ( USA , Europe )	Yes/No	
For general lab application and microbiology .	Yes/No	
Microprocessor control	Yes/No	
Volume 80 L .	Yes/No	
Temp range : up to 80 C .	Yes/No	
Adjustable parameter : time , temp , .... .	Yes/No	
Self diagnostics for any error .	Yes/No	
Clear display .	Yes/No	
Double door one of them glass door .	Yes/No	
resolution of display for set point and actual temperature values 0.1°C .	Yes/No	
program stored in case of power failure .	Yes/No	
Fast recovery time .	Yes/No	
Two shelves .	Yes/No	
With temperature calibration certificate .	Yes/No	
10 years availability for spare parts	Yes/No	
Service and user manual	Yes/No	
Price should be include installation and team training in site	Yes/No	
Date of manufacture the machine not less than 2020		





## Item 50

## Co2 incubator

Brand name

Origin : 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
- Humidity control : up to 95 % rh
- 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 two 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	
Humidity control : up to 95 % rh	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 two 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	

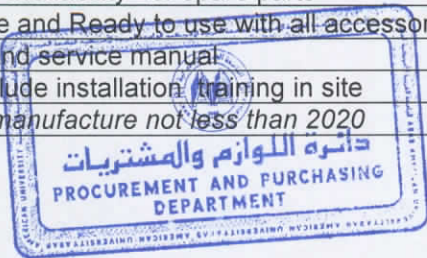


## Item 51-A

**LAMINAR Air FLOW- Horizontal**

- **Brand name .**
- **Origin : USA , Europe .**
- **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 .**
- **Utility device : Air and gas cocks .**
- **Working area : good quality Stainless steel .**
- **Blower : High efficient centrifugal type with lifetime lubricated bearings .**
- **Electric supply : 220 V .**
- **Optional price :**
- **HEPA filter . UV Lamp . Fluorescent light .**

<b>LAMINAR Air FLOW- Horizontal .</b>	<b>Yes/No</b>	<b>Comment</b>
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	
Brand name .	Yes/No	
Horizontal Laminar flow .	Yes/No	
Bench top : <b>4 ft .</b>	Yes/No	
light : <b>UV , Florescence</b>	Yes/No	
Air purification : <b>HEPA Filter : 99.999 %efficiency removal 0.3 um practical I removal .</b>	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 : <b>&lt;40 dBA .</b>	Yes/No	
Utility device : <b>Air and gas cocks .</b>	Yes/No	
Working area : <b>good quality Stainless steel .</b>	Yes/No	
Blower : <b>High efficient centrifugal type with lifetime lubricated bearings</b>	Yes/No	
Electric supply : <b>220 V .</b>	Yes/No	
Should have FDA CE approval .	Yes/No	
Optional price :	Yes/No	
<b>HEPA filter .</b>	Yes/No	
<b>UV Lamp .</b>	Yes/No	
<b>Fluorescent light .</b>	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	
Date of manufacture not less than 2020	Yes/No	



## Item 51-B

**LAMINAR Air FLOW- vertical**

- Brand name .
- Origin : USA , Europe .
- 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 .
- Utility device : Air and gas cocks .
- 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	Manufacture	
Model	Model	
Delivery time	Delivery time	
Warranty : 3 years.	Yes/No	
For biology and research lab application.	Yes/No	
Brand name .	Yes/No	
Origin : USA , Europe .	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	
Utility device : Air and gas cocks .	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 .	Yes/No	
UV Lamp .	Yes/No	
Fluorescent light .	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	
Date of manufacture not less than 2020		



  
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## Items 52-53

## Horizontal Gel Electrophoresis

*Small units:*

Complete set including :  
2 sets of : 16-well combs, UV transparent tray, safety lid, casting trays and combs , Positive/ Negative electrode ( with levelling bubble ).

*medium units:*

Complete set including :  
2 sets of : 32-well combs, UV transparent tray, safety lid, 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	Manufacture	
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	
<i>Small units:</i>	Yes/No	
Complete set including :	Yes/No	
2 sets of : 16-well combs, UV transparent tray, safety lid, casting trays and combs , Positive/ Negative electrode ( with levelling bubble ).	Yes/No	
<i>Medium units:</i>	Yes/No	
Complete set including :		
2 sets of : 32-well combs, UV transparent tray, safety lid, 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	
Date of manufacture not less than 2020	Yes/No	



## Item 54

## ERGOMETER

Origin: USA, EURO.

- user weight up to : 120 kg .
- wide and clear display .
- direction of walking : forward and reverse .
- display : speed , time, distance , heart rate , calories evaluation and pace ..
- Emergency stop .with side hand rear .
- **It operates independently from the mains supply .**
- **Adjustable seat and pedals.**

\* يرجى التكرم بتعبئة الجدول بالأسفل بالإضافة الى تقديم عرض تقني خاص بالشركة

ERGOMETER	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin for machine , origin for motor	Origin	
Delivery time	Delivery time	
3 years for motor and machine warranty and 10 years availability for spare parts	Yes/No	
Applications : rehabilitation.	Yes/No	
user weight up to : 120 kg .	Yes/No	
wide and clear display .	Yes/No	
direction of walking : forward and reverse .	Yes/No	
display : speed , time, distance , heart rate , rpm , distance in km and calories to burn.	Yes/No	
It operates independently from the mains supply	Yes/No	
Adjustable seat and pedals	Yes/No	
Price include user and service manual ,	Yes/No	
Price include installation and training in site .	Yes/No	





Item 55

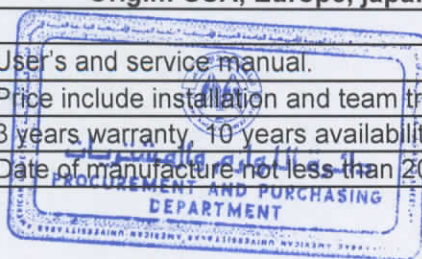
## Nerve muscle chamber and electrodes kits

Physiological lab 1

- **Good Brand name.**
- **Origin: USA, Europe, japan.**
- **Pharmaceutical educational lab**
- **Nerve and Muscle Kits are ideal for conducting experiments using isolated animal nerve, skeletal, smooth and cardiac muscle preparations.**
- Teaching Force Transducer (0-500g)
- Animal Nerve Stimulating Electrode
- Nerve Chamber
- Stimulator Cable
- Differential Pod Input Cables (2)
- **With data acquisition (DAQ) device engineered for precise, consistent, reliable data acquisition for an entire generation of scientists and educators, offering a simple and flexible solution for almost all types of physiological data acquisition.**
- **With all accessories to work completely**

يجب تعبئة الجدول بالأسفل بالإضافة الى تقديم عرض الشركة التقني

	Compliance Yes / No ( if no put your comments )
Manufacture	Manufacture
Model	Model
Origin : USA , Europe	Origin
Delivery time	Delivery
3 years warranty	Yes/No
• <b>Good Brand name.</b>	Yes/No
• <b>Origin: USA, Europe, japan.</b>	
• <b>Pharmaceutical educational lab</b>	
• <b>Nerve and Muscle Kits are ideal for conducting experiments using isolated animal nerve, skeletal, smooth and cardiac muscle preparations.</b>	
• Teaching Force Transducer (0-500g)	
• Animal Nerve Stimulating Electrode	
• Nerve Chamber	
• Stimulator Cable	
• Differential Pod Input Cables (2)	
• <b>With data acquisition (DAQ) device engineered for precise, consistent, reliable data acquisition for an entire generation of scientists and educators, offering a simple and flexible solution for almost all types of physiological data acquisition.</b>	
• <b>With all accessories to work completely</b>	
• <b>Good Brand name.</b>	
• <b>Origin: USA, Europe, japan.</b>	
User's and service manual.	Yes/No
Price include installation and team training in site.	Yes/No
3 years warranty, 10 years availability spare parts	Yes/No
Date of manufacture not less than 2020	



## Item 56

## 12-channel ECG

- Graphic Display and Diagnostics ECG Recorder
- Clear display
- 12-channel ECG for printing and recording
- Automatic, manual mode and long ECG recording
- Real-time and synchronized mode
- 10 user-defined profiles
- Indication of contact of each electrode
- Pacemaker detection and Defibrillation protection
- With electrodes and roll paper dust cover gel and all accessories to work completely *optional* :
- Trolley

12-channel ECG	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years for motor and machine warranty and 10 years availability for spare parts	Yes/No	
• <b>Graphic Display and Diagnostics ECG Recorder</b>	Yes/No	
• <b>Clear display</b>	Yes/No	
• <b>12-channel ECG for printing and recording</b>	Yes/No	
• <b>Automatic, manual mode and long ECG recording</b>	Yes/No	
• <b>Real-time and synchronized mode</b>	Yes/No	
• <b>10 user-defined profiles</b>	Yes/No	
• <b>Indication of contact of each electrode</b>	Yes/No	
<i>optional</i> :		
• <b>Trolley</b>		
Price include user and service manual ,	Yes/No	
Price include installation and training in site .	Yes/No	



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## Item 57

## Ophthalmoscope

Brand name.  
3 years warranty, 10 years availability spare parts.  
Origin: USA, EURO , Japan

3.5 V power sources  
Ophthalmic  
With extra one lamp.  
Complete set ready to use .

السعر يشمل التوريد والتركييب ويجب أن يتم توضيح جميع متطلبات التركيب في عرض السعر من مساحة وملحقات

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

Ophthalmoscope	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin: USA , Europe ,japan	Origin	
Delivery time	weeks	
3 years Full warranty	Yes/No	
<b>Brand name</b>	Yes/No	
<b>3.5 V power sources</b>	Yes/No	
<b>Ophthalmic set</b>	Yes/No	
<b>With charger and power cord .</b>	Yes/No	
<b>With battery</b>	Yes/No	
<b>Hard storage case .</b>	Yes/No	
<b>With extra one lamp.</b>	Yes/No	
<b>Complete set ready to use .</b>	Yes/No	
User's and service manual .	Yes/No	
Price include installation with training in site	Yes/No	
<b>Complete and Ready to use with all accessories.</b>	Yes/No	
10 years availability for spare parts	Yes/No	
Date of manufacture not less than 2018	Yes/No	
في حال وجود أية قطعة ضرورية لتشغيل الجهاز غير موضحة يرجى ذكرها وتوضيحها في العرض غير ذلك تعتبر الشركة بتحمل وجود أية نواقص	Yes/No	



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## Item 58

## Pulse oximeter

Brand name.

3 years warranty, 10 years availability spare parts.

Origin: USA, EURO , Japan

**Light weight****Adult paediatric****Clear display****Range : 0 to 100****Saturation : 70 to 100**

السعر يشمل التوريد والتركيب ويجب أن يتم توضيح جميع متطلبات التركيب في عرض السعر من مساحة وملحقات

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

Pulse oximeter	Yes/No	Comment
Manufacture	Manufacture	
Model	Model	
Origin	Origin	
Delivery time	Delivery time	
3 years for motor and machine warranty and 10 years availability for spare parts	Yes/No	
Light weight	Yes/No	
Adult paediatric	Yes/No	
Clear display	Yes/No	
Range : 0 to 100	Yes/No	
Saturation : 70 to 100	Yes/No	
Price include user and service manual ,	Yes/No	
Price include installation and training in site .	Yes/No	

