National Agricultural
Research Center

المركـــز الوطنـــي
للبحـوث الزراعيــة

Ref No : .....

Date : .....

الرقم : .....

التاريخ : .....

اعلان صادر عن المركز الوطني للبحوث الزراعية
يرغب المركز بطرح العطاءات التالية :

رقم العطاء	موضوع العطاء	ثمن نسخة دعوة العطاء	اخر موعد لبيع نسخة دعوة العطاء الساعة :12.30 ظهراً	أخر موعد لإيداع العروض الساعة 12.30 ظهراً
2025/10	تطوير الشبكة الداخلية وملحقاتها	(25) دينار	2025/09/30 الثلاثاء	2025/10/06 الاثنين
2025/13	بيت زراعي يشمل نظام زراعة بدون تربة ونظام تسميد	(25) دينار		
2025/14	اجهزة مخبرية	(25) دينار		
2025/15	معدات زراعية (فرامات تربة)	(25) دينار		

على من يرغب شراء نسخة دعوة العطاء مراجعة مقرر لجنة الشراء الرئيسية في المركز الوطني للبحوث الزراعية / البقعة (هاتف/301/4725071) مصطحبين معهم رخص المهن سارية المفعول والسجل التجاري وتفويض خطي باسم ورقم العطاء تخوله بشراء واستلام وثيقة العطاء .

ملاحظات:-

* سيتم موعد لاحق للزيارة الميدانية الخاصة بالعطاء رقم (2025/10 و 2025/13) لمعاينة الموقع.
*أجور الإعلان على من يرسو عليه العطاء مهما تكرر.
**للجنة المشتريات الحق بالغاء العطاء دون ابداء الاسباب ولا يترتب على هذا الالغاء اية مطالبات مالية وقانونية.
* الدخول على موقعنا الالكتروني www.narc.gov.jo للاطلاع على وثيقة العطاء .

المـديـر العـام

الاستاذ الدكتور إبراهيم محمد الرواشدة

هاتف: 4725071 6 (962+)، فاكس: 4726099 6 (962+)، ص. ب. (639)- البقعة 19381 الأردن
Tel. (+962) 6 4725071, Fax: (+962) 6 4726099, P.O. Box (639)- Baqa' 19381 Jordan
E-mail: director@narc.gov.jo, Website: www.narc.gov.jo

المركز الوطني للبحوث الزراعية
National Agricultural Research Center

نموذج استدراج اسعار

الرقم المتسلسل لطلب الشراء:.....

التاريخ : 2025/8/26

مديرية اللوازم والعطاءات

الرقم	قائمة اللوازم	المطلوب		المواصفات	السعر الافرادي	السعر الاجمالي
		الوحدة	الكمية			
1	Bench Top pH meter	عدد	1	حسب المواصفات المرفقة		
2	Bench Top EC meter	عدد	1	حسب المواصفات المرفقة		
3	Laboratory Soil Sample Shaker	عدد	1	حسب المواصفات المرفقة		
4	High-Precision Laboratory Analytical Balance (0.01g Readability)	عدد	1	حسب المواصفات المرفقة		
5	Ultrasonic Homogenizer	عدد	1	حسب المواصفات المرفقة		
6	Calcimeter	عدد	1	حسب المواصفات المرفقة		
7	Flame Photometer	عدد	1	حسب المواصفات المرفقة		
8	Spectrophotometer	عدد	1	حسب المواصفات المرفقة		

المجموع :- النهائي رقما ( ) كتابة ( ).

اسم و توقيع المورد: ... .

ختم المورد :.....

التاريخ:..... .

Benchtop pH Meter 1 بند

General Description:

A high-precision benchtop pH meter designed for accurate pH measurement in laboratory environments. It provides fast, stable readings with automatic temperature compensation (ATC) and multi-point calibration for enhanced accuracy.

Technical Specifications:

1. Bench top pH meter.
2. Measurement models: pH, mV with temperature.
3. Display type: LCD graphics.
4. ATC (Automated temperature combination).
5. Combination electrode with build-in temperature sensor (not two separate ones for both T and pH).
6. Two calibration points pH 4, 7.
7. pH range -2.000 to +20.000 ± 0.002
8. Temperature range -5 to 105 °C ± 0.1
9. Meter test certificate.
10. Epoxy-bodied refillable electrode, for quality control 12mm diameter (not glass).
11. Strong resistance for strong acids and alkalis.
12. Protective cover.
13. Holder.
14. Calibration solutions pH 4 & pH 7 1.0 L for each with certificate of analysis.
    Electrode storage solution 1.0 L KCl.

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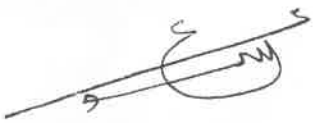
2. Benchtop Salinity Meter 2 بند

General Description:

A high-precision benchtop salinity meter designed for measuring salt concentration in water and aqueous solutions. It provides accurate readings in multiple units with automatic temperature compensation.

Technical Specifications:

- **Salinity Measurement Range:**
  - 0.00 to 100.00 ppt (parts per thousand)
  - 0.000% to 10.00% (salinity percentage)
  - 0.0 to 80.0 mS/cm (conductivity-based salinity measurement)
- **Salinity Accuracy:** ±0.1 ppt or ±0.01%



Salinity Resolution: 0.01 ppt / 0.01%
Temperature Compensation: Automatic (ATC) with a range of 0°C to 100°C

- **Calibration:** 1 to 3 points using standard NaCl solutions (e.g., 2.00 ppt, 5.00 ppt, 10.00 ppt)
- **Display:** Large LCD/LED with backlight
- **Probe Type:** Conductivity cell (graphite or platinum) with integrated temperature sensor
- **Electrode Features:**
  - Replaceable conductivity cell
  - High-accuracy platinum sensor for precise measurements
- **Data Storage:** Internal memory for at least 500–1000 readings
- **Connectivity:** USB, RS232, or Bluetooth for data transfer
- **Power Supply:** 100-240V AC adapter or rechargeable battery
- **Housing:** Durable, chemical-resistant plastic casing
- **Certifications:** CE, ISO 9001, GLP/GMP compliant

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3. Laboratory Soil Sample Shaker (20-Sample Capacity) 3 بند

General Description:
A high-performance laboratory soil sample shaker designed for efficient mixing and preparation of soil samples in standardized containers. This device provides consistent and reproducible shaking motion, ensuring homogeneity for subsequent analysis. Suitable for use in agricultural, environmental, and geotechnical laboratories.

Technical Specifications:

1. Capacity & Sample Holders:

- **Sample Capacity:** Holds up to 20 containers (e.g., 250 mL or 500 mL jars)
- **Container Compatibility:** Adjustable clamps to secure different container sizes
- **Holder Type:** Detachable and adjustable sample racks

2. Shaking Motion & Speed Control:

- **Shaking Motion Type:**
  - Orbital motion: Circular movement for uniform mixing
  - Reciprocating motion (optional): Linear back-and-forth movement
- **Orbital Diameter (Amplitude):** Adjustable, typically between **3 mm to 10 mm**
- **Speed Range:** 50 to 500 rpm (revolutions per minute)
- **Speed Accuracy:** ±1 rpm
- **Speed Control:** Digital control with fine-tuning capability

3. Timer & Operating Modes:

- **Timer Function:** Digital timer with a range of **0 to 99 hours**, including continuous operation mode
- **Operating Modes**

- Continuous operation
- Timed operation with auto-stop
- Programmable speed ramp-up/down for sensitive samples

4. Display & Controls:

- **User Interface:** Digital LCD or touchscreen display
- **Readouts:** Real-time display of speed, time, and operational status
- **Control Panel:** Touch or button-operated with memory storage for preset programs

5. Temperature & Environmental Conditions:

- **Operating Temperature Range:** 5°C to 40°C
- **Humidity Tolerance:** 20% to 80% RH (non-condensing)

6. Structural & Build Quality:

- **Frame Material:** Heavy-duty **stainless steel or powder-coated steel** for durability
- **Platform Material:** Corrosion-resistant **aluminum or stainless steel**
- **Vibration Reduction:** Equipped with **anti-vibration feet** and noise-dampening technology

7. Safety Features:

- Overload protection with automatic shutoff
- Non-slip platform surface to prevent sample movement
- Emergency stop button for quick shutdown
- Low-noise operation (<55 dB) for a quieter lab environment

8. Power Supply & Connectivity:

- **Voltage Compatibility:** 110V – 240V, 50/60 Hz
- **Power Consumption:** Typically **100W – 300W** depending on model
- **Connectivity Options (Optional):**
  - USB or Bluetooth for data logging
  - Remote control capability via PC software or mobile app

9. Certifications & Compliance:

- **ISO 9001, CE, and GLP/GMP compliance**
- Meets ASTM and standard laboratory safety regulations

tailed Specifications for a High-Precision Laboratory Analytical ance (0.01g Readability) 4 بند

eneral Description:
A high-precision analytical balance designed for laboratory use, offering **0.01g (two decimal places) readability** for accurate measurement of samples. It features advanced calibration, user-friendly controls, and a robust design to ensure reliability in scientific research, quality control, and industrial applications.

Technical Specifications:

1. Measurement Capabilities:

- **Maximum Weighing Capacity:** 200g – 500g (varies by model)
- **Readability (Precision):** 0.01g (two decimal places)
- **Repeatability (Standard Deviation):** ±0.01g
- **Linearity:** ±0.02g
- **Stabilization Time:** ≤2 seconds for fast and precise measurements

2. Calibration & Accuracy:

- **Calibration Method:**
  - Internal automatic calibration (for high-accuracy models)
  - External calibration using standard calibration weights
- **Tare Function:** Full-range tare capability
- **Auto-Zero Function:** Maintains accuracy over extended use

3. Weighing Pan & Construction:

- **Pan Size:** Minimum 100 mm – 150 mm diameter
- **Material:** Stainless steel, corrosion-resistant for easy cleaning
- **Protective Draft Shield:** Transparent glass shield with removable panels to reduce air interference

4. Display & User Interface:

- **Display Type:** Large LCD or LED display with backlight
- **Readouts:** Weight measurement, unit selection, battery level indicator, and calibration status
- **Touch or Button Controls:** Easy-to-use interface for efficient operation

5. Weighing Modes & Units:

- **Units of Measurement:** g (grams), mg (milligrams), oz (ounces), ct (carats), dwt (pennyweight), and more
- **Weighing Functions:**

- Piece counting mode
- Percentage weighing
- Density determination (optional)
- Dynamic weighing for unstable samples (e.g., liquids, powders)

6. Environmental Conditions & Sensitivity Adjustments:

- **Operating Temperature:** 15°C – 35°C
- **Humidity Range:** ≤80% RH, non-condensing
- **Anti-Vibration Technology:** Built-in stabilization system to compensate for environmental disturbances

7. Power Supply & Connectivity:

- **Power Source:**
  - AC Adapter (110V – 240V, 50/60Hz)
  - Rechargeable battery (optional for portability)
- **Data Connectivity:**
  - USB, RS232, or Bluetooth for data transfer
  - Compatible with external printers and PC software for data logging

8. Safety & Compliance:

- **Overload Protection:** Prevents damage from excessive weight
- **Auto Shutoff:** Power-saving function after a period of inactivity
- **Certifications:** CE, ISO 9001, GLP/GMP compliance

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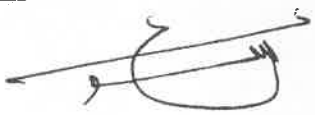
5. Ultrasonic Homogenizer (Ultrasonicator) 5 بند

General Description:
An **ultrasonic homogenizer (ultrasonicator)** is a high-frequency sound energy device designed for **sample preparation, emulsification, cell disruption, nanoparticle dispersion, and degassing** in laboratory applications. It operates using ultrasonic cavitation, generating localized high-energy zones to break down samples efficiently.

1. Ultrasonic Power & Frequency

- **Ultrasonic Power Output:** 100W – 2000W (adjustable based on model)
- **Power Control:** Stepless or digital adjustable from 10% – 100%
- **Frequency:** 20 kHz – 40 kHz (typical range for laboratory sonicators)
- **Frequency Stability:** ±1 kHz

2. Probe (Horn) & Tip Options



Material: High-grade titanium alloy (Ti-6Al-4V) for durability and chemical resistance
Probe Sizes: 3 mm – 25 mm (interchangeable for different sample volumes)

- **Probe Tip Geometry:**
  - Standard tip for general homogenization
  - Microtip for small volumes (0.2 – 5 mL)
  - Flat or stepped tip for increased efficiency

3. Sample Volume Capacity

- **Small Volume:** 0.2 mL – 50 mL (microtip applications)
- **Medium Volume:** 50 mL – 500 mL (standard applications)
- **Large Volume:** 500 mL – 5 L (high-power models with cooling options)

4. Temperature Control & Cooling System

- **Temperature Monitoring:** Built-in temperature sensor (0°C – 100°C)
- **Cooling Mechanism:** Water bath or circulating chiller option for heat-sensitive samples
- **Automatic Temperature Control:** Adjustable temperature limit to prevent overheating

5. Operation Modes & Pulse Function

- **Continuous Mode:** For high-intensity sonication
- **Pulse Mode:** Adjustable pulse on/off cycles (0.1 – 99.9 sec) to reduce sample heating
- **Amplitude Control:** Digital or manual adjustment from 20% – 100%

6. Display & User Interface

- **Display Type:** Large LCD or touchscreen with real-time feedback
- **Parameter Monitoring:** Power, time, amplitude, temperature, and frequency stability
- **Programmable Settings:** Multiple stored protocols for repeatable experiments

7. Safety Features

- Overload protection for transducer and power supply
- Over-temperature shutoff to protect sensitive samples
- Automatic frequency tuning for consistent performance
- Soundproof enclosure option to reduce noise levels

8. Power Supply & Connectivity

- **Input Voltage:** 110V – 240V, 50/60Hz
- **Power Consumption:** 100W – 2000W (based on model)
- **Data Logging & Connectivity:**
  - USB, RS232, or Bluetooth for remote control and data export
  - Compatible with PC software for experiment tracking