



KINGDOM OF SAUDI ARABIA
THE SAUDI FUND FOR DEVELOPMENT
(SFD)



RFQ -PAL-0000045614



*Empowered lives.
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RFQ: Suppling Laboratories Equipment's for the Greek Orthodox Patriarchate School, Holy family school and Rosary Sisters School

PAL10-00099288

Project Name

Reconstruction, Furniture and Equipping of Three Schools

Funded By

Kingdom of Saudi Arabia

Through The Saudi Fund For Development (SFD)

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Annex 1: Technical Specifications

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- General

All material and equipment should be EISCO or equivalent

<https://www.eiscolabs.com/>

- Specification for Part A

Item No.	Description
1	Ammeter (أميتر) Cat No. & Origin Comprises: <ul style="list-style-type: none"> - Three range ammeter - Moving- coil movement. - Scale graduations: 0 - +3. - Voltage drop at full - scale deflection: 100mV approx. - Sockets: 4mm.
2	Apparatus to show force on a conductor in a magnetic field جهاز توضيح القوة المؤثرة على موصل في مجال مغناطيسي - A Strong U- shaped magnet. - A pair of brass rails with 4 mm socket terminals. - A Brass axle with plastic discs, which is free to roll along the rails and completes the electrical contact between them when a power supply is connected.
3	Ball and Ring: جهاز الكرة والحلقة - For demonstrating thermal expansion. Comprises: <ul style="list-style-type: none"> - A brass sphere (22-mm diameter approx.) mounted by a chain. - A brass ring: enables the ball to pass through when it is cold and will not pass through after being heated.
4	Bar Magnet: مغناطيس مستقيم - Pair of magnets with keepers <ul style="list-style-type: none"> - Rectangular section (15x6 mm). - 10 cm long. - AL Ni CO or equivalent
5	Bell Jar with pump – Plastic: ناقوس بلاستيكي مع مفرغة هواء <ul style="list-style-type: none"> - Made of high impact plastic, with a rubber casket and measures 35-cm high and about 20 cm in diameter at the base. - Hand – powered vacuum pump. - Manometer to register the degree of evacuation. - Vacuum release valve built into the handle.
6	Bifocal Hand Magnifier: عدسة يدوية مكبرة محدبة الوجهين <ul style="list-style-type: none"> - Biconvex lens - x2 magnification - Lens diameter: 60mm approx.

7	Calorimeter Set (electrical): مسعر كهربائي - Made of copper or aluminum. - With inner vessel (approx. 75x50mm) carried on cork supports - Outer vessel: approx. 100x 75mm dia. - One lid for outer vessel with central tubule for thermometer - One slit for stirrer - One stirrer - Electrical heating element.
8	Capillary Tubes Apparatus: مجموعة الأنابيب الشعرية For demonstrating the relationship between capillary pressures and the diameter of the capillary tube. The apparatus comprises the following: - Holder or frame to support the tubes. - Capillary tubes: a set of at least 5 capillary tubes of different bores. - Glass vessel or trough contains water as well the holder.
9	Cathode Rays Tubes (Set of 2 tubes): أنابيب الأشعة المهبطية Comprises the following 1- Maltese Cross Tube (shadow tube): to show that cathode rays travel in straight line. It comprises: - metallic cross mounted in the path of the cathode rays, rotary is preferred - Inside pressure below 0.01Torr. - Phosphorescence surface at the end of the tube. - The tube is mounted on a suitable base to be connected to Ruhmkorff inductor. 2- Deflection Tube: to demonstrate Thomson method for the value of elm. It comprises the following: - Longitudinal phosphorescent screen. - Mounted on a suitable base.
10	Compound Bar: -القضيب المزدوج To show the differential expansion of metals in a bimetallic strip. Comprising a length of bimetal strip 150x15mm in a wooden handle. - The strip is 1.0 mm thick.- 30 cm length overall approx.
11	Demonstration Aneroid Barometer: باروميتر توضيحي معدني Measuring system consists of : - Two flats highly evacuated metal cans, which react, to changes in the air pressure by deforming correspondingly. - An attached rubber ball (compression bulb) with tubing connection allows the air pressure to be altered arbitrarily. - Measuring range: 900 mbar- 1100 mbar (approx.). - Divisions: 1 mbar.
12	Demountable Transformer : محول كهرباء قابل للتفكيك - One iron core, U- shape. - One 600- turn coil for use on 240 V ac mains fitted with a self – resetting thermal fuse which protect it from damage .connection to the main is via 1.5 mm captive mains lead terminating in a moulded mains plug. - One tapped coil with three taps at: 0,10,20,30,40(approx.) - One tapped coil with three taps at: 0,100,400 - One tapped coil with four taps at: (0, 200, 800, and 1600). - One clamping device - Coils are casing with impact- resistant plastic of high mechanical and thermal resistance. Accessories: - A 20 - turn coil with a bulb in holder and insulated handle. - A melting (fusion) ring: hollow ring with insulating handle. - An aluminum solid rings

13	<p>Digital weather station: محطة أرصاد جوية رقمية</p> <p>Comprises the following:</p> <ul style="list-style-type: none"> - Time display. - Date, month, year calendar display. - Sunset/sunrise and moonset/moonrise display. - Supplied with one outdoor temperature transmitter which works on 433 MHz to a range of 25 m. - Weather forecasting with 3 weather icons. - Weather tendency indicator. - Relative air pressure h Pa with adjustable reference value. - Relative air pressure history of the past 48 hours. - Indoor temperature reading in C°/F° with min. and max. Recording. - Indoor humidity reading displayed as RH% with min. and max. Recording. - Outdoor temperature reading in C°/F° with min. and max. & time and date recording. - Wall mountable or table standing. - Power supply: - 3xAAA, 1.5 volt for weather station and 2xAAA, 1.5 volt for transmitter. - Instruction manual included.
14	<p>Digital wind speed and temperature meter, Hand held:</p> <p>جهاز قياس سرعة الرياح ودرجة الحرارة الرقمي</p> <ul style="list-style-type: none"> - Multi directional cups that eliminate the need to point directly into the wind. - 3 wind measurement modes: instant, maximum and average. - 4 measurement units: km/h, mph, knots and m/s. - Bar Graph in Beaufort scale. - 4 temperature modes: current, wind- chill, minimum and maximum. - Power by a replaceable lithium CR2032 battery. - Compass integrated. - User manual is required.
15	<p>Dynamo; Hand Operated: مولد كهربائي يدوي</p> <p>Dissectible form. Comprises:- A base plate.- Permanent magnet or electromagnet and an armature.- Carbon brushes or equivalent to give both A.C & D.C currents.- The dynamo can be used also as a motor.- A bulb holder and a suitable bulb fitted on the base.- Spare rubber belt.</p>
16	<p>Ebonite Rod: قضيب ابونايت</p> <p>For demonstrating the forces acting between electric charges. Dimensions : 300x13mm (approx.)</p>
17	<p>Electronic Balance: ميزان إلكتروني حساس - LCD display.</p> <ul style="list-style-type: none"> - Button switches for Zero / tare operation - Auto shut off to conserve battery life. - Housed in a high impact strength plastic case. - Weighing units: g - Automatic shut down after about 3 min. - Weighing range: not less than 500gm. - Readability: 0.1gm - Power: Both a.c adapter (220 V) and a 9 V alkaline battery (included). - Pan diameter: 15 cm approx

18	Electroscope: كشاف كهربائي Comprises: - Constructed of metal. - Cardboard backing or equivalent which has degree marks printed on it. - Metal holder projects down into the case with a light metalized straw are balanced on this holder with a pin through its midpoint so it can swing freely. - Glass windows & Plated top disc.
19	Fire Extinguisher: طفاية حريق Dry chemical type - Total weights not less than 6 kg. - Effective on all three types of fires. - Wall mounting bracket
20	Force table طاولة القوى Comprises the following: - Aluminum (metal) circular table (diameter not less than 35 cm), with scaled rim. - The table is mounted on a suitable base with balancing screws. - The system is supplied with at least 4 pulleys with clamps. - The system is supplied with mass hangers and suitable threaded rod with shoulder (at least 4). Slotted masses: 4x10 gm, 4x20gm, 4x50 gm, 4x 100 gm, 4x200gm, 4x300gm.
21	Geoptic set: (Hartel Disk) المجموعة الضوئية (قرص هارتل) Comprises the following : - 12V –21 W light source with an adjustable focus emitting convergent, divergent and parallel beams. - Device allowing one to limit the number of beams as desired. - Complete disk accessories set. - Holders or screws for mounting optical components. - Optical disk with scale graduated in degrees. - Metal made mounting board: - Instruction manual.
22	Hand (Manual) Centrifuge: جهاز طرد مركزي يدوي - Cast iron, varnished , rotors in brass , nickel -plated with metal sleeves and centrifugal glasses - Capacity 4x15ml - Rotor speed : max 3000 rpm
23	Heat Conduction Apparatus: جهاز توصيل المواد الصلبة للحرارة For demonstrating the different rates of heat conduction of various metals.- Conductive Rods: aluminum, copper, iron, nickel, brass.- The five rods extend a star-shaped configuration from a brass hub carried by an insulated handle.- Every rod has a notch for holding wax.
24	High Voltage power supply (10KV): مصدر جهد عالي Continuously adjustable or externally controllable mains isolated high voltage source with center tab. - With built-in output voltage meter. - Outputs: 0 - 10 KV continuous, 200 mA max. (Short circuit current), via 4mm laboratory safety sockets. - Mains Voltage: 220-240 V, 50 Hz. - Weight: 2.5 Kg approx.
25	Hoffman Apparatus: جهاز تحليل الماء The apparatus comprises: - Outer graduated tubes with stopcock at the apex. - Reservoir: connected to the inner tube, capacity 200ml approx. - Electrodes: one pair each of platinum and carbon electrodes mounted in rubber stoppers. - Suitable stand and clamps.

26	Hook's Law: جهاز قانون هوك Comprises the following: - Base stand & Stand rod. - Not less than 12 cm mirror scale. - About 5cm spring with suitable holder. - Set of suitable slotted masses with hanger (not less than 4).
27	Hope's Apparatus: جهاز هوب - This apparatus used to demonstrate the maximum density of water. - It constructed of a central metallic cylinder fixed vertically on - Appropriate base with a ring-shaped outer metallic chamber. - Supplied with tow thermometers, one fixed horizontally at the top of the inner cylinder and the other fixed at the bottom of inner cylinder. - A pair of rubber stoppers needed for the thermometers.
28	Horseshoe Magnet: مغناطيس حذوة الفرس - ALCOMAX or equivalent - Pole gaps at least 20 mm. - Height: about 10 cm, With keeper
29	Hydraulic Press: مكبس هيدروليكي - For demonstrating the transmissibility of fluid pressure and to show how mechanical advantage may be obtained using inters connected cylinders of different diameters. - Based upon a pair of graduated glass syringes with ground pistons having capacities of 100cm ³ and 20 cm ³ (approx.) respectively, and a cross sectional area ratio of 3 to 1. - The pistons are provided with loading platforms.
30	Hydrometer: هيدروميتر (جهاز قياس الكثافة النوعية للسوائل) Comprises: - Made of glass - Direct reading with parallel graduated stem and shot-loaded bulb. - Range : 0.700 - 2.00 x 0.010, Overall length : 35cm (approx.)
31	Hygrometer (wet and dry): ميزان الحرارة المبلل والجاف Comprises the following: - Two thermometers : 1. Dry thermometer: Hg filled 2. Wet thermometer determines the dew point and the bulb are dipped in a wick of water reservoir. - Mounted on plastic case., Spare wicks, Hydrometric tables
32	Lab Burner-Gas Cartridge: موقد غاز مخبري متنقل Comprises the following:- Self-contained and fully portable.- The diameter of the head is not more 15-mm.- Supplied with not less than 200 gm Butane/propane cartridge having a self-sealing valve to allow replacement of burner head.- Purchased with two spare cartridges.
33	Laser: ليزر أحادي Comprising the following:- Monochromatic beam of wavelength about 670nm.- Adjustable focus. Powered by a battery.- Small (pen-like) and lightweight.- Internal generator to produce about 0.15mS pulses at approx. 1 MHz frequency.
34	Lens set: (set of 6) مجموعة عدسات في صندوق - The set contains six of the most important lens types. - It includes one of each the following: Plano -concave, convex-concave, doubles concave, concave-convex, Plano-convex, and double convex. , - The lens diameter is 50-mm approx. - The set comes in a protective box

35	Liquid Level Apparatus: جهاز الأواني المستطرقة To show that the level of liquid in communicating vessels is constant irrespective of the size or the shape of the vessels. The apparatus comprising: <ul style="list-style-type: none"> - Glass tubes of differing shapes and cross-sectional area are interconnected to each other. - Suitable base to mount the tubes on it.
36	Low Voltage Power Supply: مصدر فرق جهد منخفض Comprises the following: Power supply unit for continuously adjustable dc and ac. <ul style="list-style-type: none"> - Out put Voltages: <ul style="list-style-type: none"> 0-25 V a.c, 10A continuously adjustable. 0-25 V a .c, 10A continuously adjustable 6 v a.c, 10 A. 12 V a.c, 10 A. - Over load protection: 1 automatic cut-out, primary 0.8 A - 1 automatic cut-out, secondary 10 A. - Spare fuses. & To be operated from 220V/50Hz.
37	Magnet Ring (Floating) set of 5 : مجموعة مغناط حلقيّة Comprises the following : <ul style="list-style-type: none"> - Ceramic or ALNICO made. - Wooden rod on a base.
38	Magnetic Field Chamber: حجرة توضيح المجال المغناطيسي - This apparatus allow s three-dimensional demonstration of a magnetic field by means of iron filling suspended in silicon oil. - Comprises a moulded acrylic box (98 x 55 x55 mm approx.) having a tunnel 10-mm internal diameter extending 70 mm from one end of the box. - The rectangular shape makes it suitable for use on overhead projector. - Supplied with bar magnet 50 x 7mm (length x diameter).
39	Magnetic Needle: الإبرة المغناطيسية Comprises the following <ul style="list-style-type: none"> - Steel brass bearing - Color coding: halves of two different colors - Needle length: not less than 7cm. - Suitable stand.
40	Micro ammeter (Moving Coil Galvanometer) : (ميكرواميتر) جلفانوميتر ذو الملف المتحرك Moving coil instrument, for measurement of DC current. Comprises <ul style="list-style-type: none"> - 2 connection sockets for 4-mm plugs. - A centre Zero Galvanometer 50 μA-0-50 μA graduated every 2μA. - Scale length: 80mm approx. - Zero Adjustment Moving - Coil movement.
41	Micrometer: ميكروميتر Comprises <ul style="list-style-type: none"> - With sensing screw - Measuring range 0-25mm approx. - Pitch of thread 10mm. - Reading 0-01mm
42	Mirrors, set of 2 mirrors -مرايا (مجموعة من مرآتين) Concave (spherical) :Front surface silver coated to eliminate double images ,diameter 60mm approx. focal length(approx.):150mm- Convex (Spherical) :Front surface , silver plated to eliminate double images , diameter 60mm focal length (approx.) : 150mm

43	Multimeter (digital) : الملتيميتر الرقمي - DC volts: 200mV - 1000V in 5 ranges - AC volts : 2-700V in 4 ranges - AC, DC current. 20mA, 2000mA, 10A. - Resistance: 200 Ohm -2000K Ohm. in 5 ranges - Diode test : 2V at 0.8A or less - Transistor tester. - Continuity buzzer tester. - Power supply: 2x1.5V batteries or 9V battery. - One meter long test probe leads (2) - Instruction booklet.
44	Optical Bench Set: المنضدة الضوئية Iron casting or aluminum alloy of triangular section. Length about 100cm.Complete with the basic provided accessories. - Additional accessories: - Circular table 100mm dia. - Lens holder, adjustable V shape - Universal lens holder - Centering point cross - Iris diaphragm - Micrometer slit - Object screen - Adjustable slit - Object slide with holder - Filter holder - Candle holder - Stand for lens holder
45	Oscilloscope: راسم الذبذبات Comprises the following : - Cathode ray tube. - Dual traces at least 20 MHz. - Sweep mode: automatic or normal. - Coupling : DC/AC/HF/LF (TV -frame) - Power supply: 220 V. - Complete with: handbook, 2 input leads, spare fuses, plugs, suitable probes.
46	Primary and secondary Coils: ملفات الحث الابتدائي والثانوي - Wire coils are wound on hollow wood forms. - Primary coil fits inside the secondary coil, which is mounted on a hard wood base with binding posts. - Soft iron core included. - Ratio between primary and secondary coils is about 1 to 10.
47	Prisms, (set of 2) منشور زجاجي (مجموعة من منشورين) 45 clear glass with refractive index 1.52 approx. polished faces. Hypotenuse 35mm approx. - 60x60x60 clear glass with refractive index 1.52 approx. polished faces length of side 38mm approx.
48	Rheostat: مقاومة متغيرة Comprising: - Insulated, heat - resistance, unbreakable tube. - Cast - metal end checks supporting the tube. - Sliding contact. - Three 4mm socket terminals to enable the unit to be used as rheostat or potentiometer. - Touch protection cover. - Resistance: 100 Ohm, A (max.) not more than 2A.

49	Ripple Tank: حوض الأمواج Comprises: <ul style="list-style-type: none"> - One glass plate and spacers for refraction. - Two levelling wedges. - Instruction booklet in English or Arabic language. - Built in side front transparent screen - Built in inclined plane mirror to reflect the image through the screen. - Light source. - Ripple Tank Supply Unit: to provide at least two alternatives A.C. outputs. - Over all dimensions: Not less than 40x50x40 cm.
50	Ruhmkorff ملف رومكورف Comprises the following:- On and Off switching for the primary currents- Condenser in a suitable case. Throughout insulation.- Spark gap: 50 mm. - Discharge points mounted on suitable pillars.
51	Single generator مولد ذبذبات <ul style="list-style-type: none"> - It produces sine, triangle, and square waves. - It has a separate TTL/CMOS output. - Frequencies from law as 0.5 Hz, up to 5 MHz, in 7 ranges. - LCD 4-digit display. - Accuracy + 10 ppm, + 1count. - Variable amplitude output (max 10Vp-p into 50W) with course and fine adjustment - VCG input, variable DC offset & duty cycle. - 50 W + 10% output impedance. - It comes with: BNC cables leading to insulated clips – power cord – spare fuse – instruction manual
52	Spectral Gas Tubes (set of 5) أنابيب طيف الغازات (5 أنابيب) Gas filled discharge tubes for studying typically spectra of (H ₂ , O ₂ , N ₂ , CO ₂ , He) gases. Comprises the following: <ul style="list-style-type: none"> - Each tube provided with metal end caps. - Constricted along the middle portion to concentrate the discharge glow. - Dimensions: 220x15mm-dia approx. - Supplied with suitable holder or stand
53	Stop Watch (Electronic) : ساعة وقف الكترونية Comprises the following : <ul style="list-style-type: none"> - LCD 6 digits display. - The display registers up to one hour. - Separate readings give you minutes, seconds, and fractions down to 0.01 second. - Start , stop , winder and reset buttons - Water, shock proof
54	Student refractor Telescope تلسكوب Comprises : <ul style="list-style-type: none"> - Focal length: not less than 630mm. - Eyepiece: not less than 150x viewing. - barlew lens : 3x - finer scope : 2x - Erecting prism.

55	System to study free fall : مجموعة دراسة السقوط الحر Comprises the following : - Support (not less than 1.25 m) - Ball receptacle. - Electromagnet to hold the ball. - 2 Highly sensitive photoelectric sensors. - Graduated ruler (1.25 m length). - Stable cast base. - 3 Screws to adjust the support in vertical plane. - A control box which is necessary to control the operation of electromagnet and the photoelectric sensor lamps. - Digital Timer with 7 functions suitable to be fitted with the photo gates & the electromagnet. - Instruction manual.
56	Tellurium (Earth - Moon-Sun Model): نموذج الأرض والشمس والقمر To demonstrate on a large scale the relative movements of the Sun, Earth, and Moon, to understand the causes of a number of phenomena.
57	Tuning Fork on Resonance Box (pair) : شوكة رنانة مع صندوق رنين (زوج) Nickel plated and have threaded shanks - Wooden resonance box - A hammer for striking the fork - Characteristic frequency : at least 440 Hz - Length of tuning fork: approx. 20 cm.
58	Tuning Forks : Set of 8 forks شوكات رنانة مختلفة (8 شوكات) - Steel , prong length ranges between 85mm (f = 512Hz) and 120mm (f = 256Hz) - Frequency: 256Hz, 288Hz, 320Hz, 341Hz, 384Hz, 426Hz, 480Hz, 512Hz.
59	Van de Graaff Generator مولد فان ديغراف - Voltage: 100 kV approx.- Short-circuit current: 10-15mA. - Motor driven, operates on 220 V a.c or low voltage source 0-24 v D.C.- Collecting sphere diameter: 19 cm, sphere detachable.- Conductor (Discharge) sphere on stem and insulating base.- One spare belt at least.- A set of accessories provide with 4mm pegs which fit into the top of the sphere such as: head of hair –point discharger- Perspex cylinder 150x50 mm diameter approx., with metal caps and four metalized spheres....- Instruction booklet.
60	Voltaic cell: العمود البسيط Comprises the following : - A glass jar. - Two electrodes, one made of copper and the other of zinc. - Electrodes dimensions: 10 cm long x 3 cm width. - A suitable Acid-proof cap with adjustable clamps.
61	Atomic structure Models of inorganic /organic compounds: نماذج ذرات لبناء الجزيئات - Comprises at least 120 kinds of atoms - Each atom ball is made of plastic and printed in different color (at least 8 colors) - For the assembly of ball / stick and calotte models - Instructional booklet - Suitable case or box - Sample is required

62	Beakers: Set of three volumes (كأس زجاجية (مجموعة من 3 أحجام) Comprises : - Borosilicate glass or equivalent - Tall shape - With graduation , pouring lip and rim - Capacity : A: 100 ml. B:250 ml C:500 ml
63	Burette: سحاحة Comprises: - Straight bore - Interchangeable polypropylene or equivalent stopcock with moulded screw thread - Capacity: 50ml x 0.1ml subdivision with zero mark at the top
64	Burette Clamp: ماسك للسحاحة - With rubber rollers - For two burette - Clamping capacity:10-30mm (approx.)
65	Clamp, Universal : ماسك متغير السعة - With cork padding - Pressed steel - For tubes up to 80 mm
66	Distillation Apparatus جهاز تقطير كامل 1. Liebig Condenser: مكثف تقطير لبيج - Cone size: 14/23. - Borosilicate glass or equivalent. - Length: 35 cm approx. - Socket and Cone size: 24/29. 2. Receiver Adapter : رأس استقبال - Borosilicate glass or equivalent. - Connects condenser with quick fit size 24/29. 3. Still Head: رأس تقطير - Borosilicate glass or equivalent. - With thermometer socket, size 14/23. - Connects to condenser and R.B. flask, quick fit size 24/29. 4. Thermometer Adapter (Sleeve): وصلة لميزان الحرارة - Made form Teflon or equivalent - Cone size: 14/23 5.Flat Bottom Flask : دورق كروي مسطح القاعدة Comprises - Borosilicate glass or equivalent with ground rim - Capacity : 250ml - Grind size:24/29 N.B. distilling head and thermometer adapter could be in one piece.
67	Distillation Flask: دورق تقطير Comprising :- Borosilicate glass or equivalent.- With side arm at an angle 75° to the vertical axis.- Quick fit type , size 24/29 - Capacity: 100 ml.
68	Double 45 Clamp: ماسك مزدوج بزواوية 45 - For attaching at right angles stand tubes and rods up to 16 mm diam. - Made from cast alloy





69	Erlenmeyer Flask: (set of 3) دورق مخروطي Comprises: - With rim - Narrow neck - Graduated - Capacity: A: 100 ml. B: 250 ml. C: 500 ml.
70	Graduated measuring Cylinder, (set of 3) with detachable plastic base مخبار مدرج مع قاعدة بلاستيك - Borosilicate glass, with spout. - Capacity: A: 50ml. B: 100 ml. C: 250 ml. - With safety ring to prevent damage in case the cylinder should tip over.
71	Pipette Filler: معبئ الماصة Comprises: - Made of polypropylene or equivalent - Has a bulb and three pinch valves - Accept a wide range of pipette diam.
72	Pipette: ماصة مدرجة Comprises: - Glass, straight form - Graduated and calibrated for delivery from zero line to the jet with permanent stained graduations - Capacity: 10ml x 0.1 ml subdivision
73	Portable pH Meter (with electrode): pH Checker: مقياس درجة الحموضة - For checking pH of samples in test tubes. - Range: 0-14pH. - Resolution: 0.01 pH. - Calibration: automatic or manual two points. - Operating temp.: 0-50 C. - Power requirements: 2 mercury cells or equivalent. - Spare electrode. - Pocket size.
74	Retort Stand: Base & Rod: حامل معدني مع قاعدة وقضيب معدني A: Base - Steel base with tapped hole in the centre of one short side. - Dimension: 100x160 mm approx. B: stand Rod: - Stainless steel. - 45 cm long (approx.) - 10mm diameter approx.





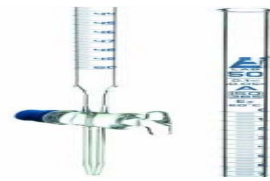

75	Rocks and Minerals Set: عينات صخور ومعادن Individually numbered specimens in a partitioned cardboard box. With index. - Rocks: 1. Basalt. 2. Chalk. 3. Coal. 4. Conglomerate. 5. Dolerite 6. Gabber. 7. Gneiss. 8. Granite. 9. Limestone. 10. Marble. 11. Mudstone .12. Sandstone .13. Schist. 14. Shale. 15. Slate. 16. Tuff. - Minerals: 1. Appetite .2. Anhydrite .3. Baryte .4. Biotite (Mica). 5. Calcite .6. Fluorite .7. Galena .8. Graphite. 9. Gypsum. 10. Hematite. 11. Malachite .12. Muscovite (Mica). 13. Orthoclase (Feldspar). 14. Pyrite 15. Quartz .16. Talc.
76	Stand Ring: حلقة معدنية - From malleable iron or equivalent - With boss head. - Diameter. 70mm approximately.
77	Test Tubes: أنابيب اختبار Pack of 100 tubes.- Borosilicate glass.- With rim.- 150 x15 mm (length x dia.)
78	Test tube Rack: قاعدة حامل الأنابيب - Plastic or Welded steel wire epoxy coated. - Capacity: at least 20 places for tubes up to 20mm diam.
79	Thermometers: (set of 2) موازين حرارة (زوج) - One of mercury and the other of red liquid. - Scale: Double graduated Celsius and Fahrenheit : - -20 °C - +110 °C, - 0 °F - 230°F. - Length 30.5 cm approx. - A suspension ring for easy immersion and no-roll collar to prevent breakage. - A storage case for each one.
80	Thermometer, Maximum & Minimum: ميزان حرارة ذو النهايتين Comprises: - Mercury filled - Dual scale , each calibrated in degrees Celsius and Fahrenheit - Plastic casing - Push-button index resetting system without magnet - Range: -40 to 50C (-40 to 120 F).
81	Tripod Stand: Triangular : منصّب ثلاثي القوائم - Stainless steel. - Triangular top. - Length of one side: 12cm approximately. - Height: 20 cm approximately.
82	Wire Gauze, Ceramic centre: شبكة تسخين - Made of heavy-gauge galvanized iron wire with a ceramic centre. - This gauze protects glass ware and dishes from burner flames. - Dimensions: (10 x 10 cm)

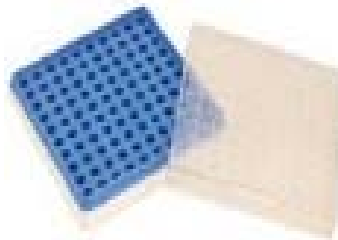




83	Dissecting Set : طقم تشريح Comprises the following : <ul style="list-style-type: none"> - One all-metal scalpel, carbon steel, 35mm (approx.) blade. - One all-metal scalpel, carbon steel, 45mm (approx.) blade. - Two dissecting needles, stainless steel straight. - One seeker, stainless steel, bent. - One forceps, blunt points, stainless steel, 125mm (approx.) length - One forceps, sharp points, stainless steel, 125mm (approx.) length - One scissors, open shanks, straight, fine points, stainless steel , 112mm (approx.) length - One scissors, open shanks, straight points, stainless steel, 130mm (approx.) length. - One sectioning razor, right-handed, flat ground/ hollow ground sides. - Complete in conceives roller case. - Sample is required.
84	Human Brain Model مجسم دماغ الإنسان The model comprises the following: <ul style="list-style-type: none"> - Made from unbreakable material. - Dissect able into two parts at least. - Size: 140x160x140mm approx.
85	Human Ear Model: مجسم الأذن Enlarged at least 3 times, made of unbreakable plastic all the parts of the ear are shown the external ear represented by the auditory canal pinna and tympanum. The middle ear represented the Mlles Incas and stapes into nal ear represented by cochlea and the semicircular canals Altogether the model separate into (4) parts at least can be removed easily. Mounted on suitable base. Dimensions. Height 210mm. Width 320mm depth 220 mm (approx.). With a descriptive key both in Arabic and English language, with dust cover
86	Human Eye Model: مجسم عين الإنسان <ul style="list-style-type: none"> - Enlarged 5 times at least - Dissectible into 5 parts at least - The lens and the vitreous are glass made. - Other parts are made of unbreakable plastic - Mounted on suitable base - Dimensions about : 21 x 18 x18cm(h x w x d) - Dust cover - Features are numbered with key in English / Arabic languages
87	Human kidney Model: مجسم الكلية Mode of unbreakable plastic, dissected into two parts enlarged at least (3) times shows all the anatomical features of the cortex, medal and the renal blood vessels mounted on a suitable base, provided with a descriptive key both in Arabic and English Language, with approx. dimensions (8 x 12) with dust cove.
88	Human Skeleton Model: مجسم الهيكل العظمي <ul style="list-style-type: none"> - Natural cast of human (adult) 70cm approx. - From unbreakable solid plastic - The skull can be removed and dissected into 3 parts - Arm and legs can be removed - The spine and the skull are mounted by means of flexible metal rod through the vertebral canal. - The skeleton is mounted on a 5-leg safety stand - Dust cover - Parts numbered with key in English L Arabic language.







89	Human Torso (sex less) مجسم جسيم الإنسان Detailed life - size - dissect able in 18 parts at least - Mounted on a suitable base - The following parts can be taken out, breast cover, two lung halves, heart (2 parts) stomach, liver, large intestine with small intestine and appendix, half kidney. - Head detachable - Eye and half - brain with arteries can be taken out - Dimensions (approx.) 90 x 40 x 30 cm. - Features numbered with key in English / Arabic language - Dust cover - Made from unbreakable plastic
90	Sphygmomanometer جهاز قياس ضغط الدم For measuring blood pressure by a compact aneroid pressure gauge instead of a mercury manometer. Comprises;- Occluding cut is enclosed in a stout cloth sleeve with wide Velcro strips.- The gauge and inflating bulb are incorporated in one unit with the captive air bleed screw.- Dimensions; about 25mm dia.- Scale reading: 0 - 300mmhg.- cuff (length x w 0 about 550 x 145mm- Self - coiling connecting tubing 300mm.- Supplied in a vinyl zip case or equivalent.- Supplied with suitable Featherweight Stethoscope.
91	Refrigerator ثلاجة مختبر مقاس 6 قدم على الاقل نوع سامسونج او ما يعادله
92	Digital tesla meter Tesla meter HT208 المدى : 200 MT الى 2000 MT نسبة الخطأ : 2% V امدادات الطاقة: 9 الحجم: 160 mm × 88mm × 36mm سهولة الاستخدام والصيانة واخذ القراءة ويتناسب مع المنهاج الدراسي http://www.cnrinch.com/digital-Tesla-meter-China-ht208.htm
93	Handheld Gauss Meter, Tesla Meter with USB وحدات القياس: Tesla, Gauss, kA/cm, A/cm or Oersted قائمة اللغة الإنجليزية والألمانية نسبة الخطأ: 2% USB امدادات الطاقة : وصلة http://www.wuntronic.com/en/index.php?site=2&xid=67&subid=109&pid=181
94	Hand Microtome قدرة القطع بدقة 10 نانو قدرة قطع اجسام تصل الى 1 سم سهل الاستخدام http://www.chescientific.com/edu/product_817.aspx http://www.radicalindia.com/microtomes1.html
95	Microtome Accessories سهولة الصيانة وتغيير الشفر وتتنظيف الجهاز سهولة الاستخدام - مناسب للاستخدام في المختبرات المدرسية
96	Microtome Blade عالي الجودة مناسب للاستخدام المدرسي مقاوم للصدأ الذي ينشأ من الشرائح الرطبة وسوء التخزين صغير الحجم http://www.paramountblades.com/microtome.htm http://www.opticsplanet.com/leica-blades-disp-microtom-818-pk50-14035838383.html
97	ميكروتوم يدوي





- Specification for Part B

1	BALANCE CHEMICALS	
	For use in chemist's shop and intermediate classes, designed and manufactured for rough handling. Beam with notches graduated for rider use with zero at center. Six-point arrestment. The beam is raised for working. Knives and planes best quality agate. pans are of stainless steel concave inwards. with the following parameters:	
	Capacity : 200 gm.	
	Sensitivity : 0.2 mg.	
	Pan Diameter : 7.5 cm.	
	Model: CH 0002 Balance Chemical	
2	BALANCE COUNTER	
	It has equal arms, durable handy and precision instrument commonly used by factories laboratories for general weightment. Body made of cast iron and pans are of metal die pressed.	
	Model CH 0016A 2 kg, 5kg, 10kg	
3	CRUCIBLE	
	porcelain, squat, glazed inside and outside except base, with lid.	
	Model: CH 0076B 25 ml.	
4	BASIN, EVAPORATING, SILICA	
	Round bottom, with spout, translucent.	
	Model: CH 0078C 70 ml.	



5	BURNER BUNSEN - EISCO or equivalent Nickel plated burner tube with rotatable air regulator & cylindrical rifflid connector, mounted on casted base. Burner tube 12.5 mm. dia., base 75 mm. dia. , overall height 150 mm., connector 10 mm. o.d. To be used with LPG gas.	
	Model: CH 0086A Burner Bunsen	
6	WASH BOTTLES Polyethylene, translucent & unbreakable. The cap is fitted with a flexible polyethylene delivery tube which can be aimed wherever required.	
	Model: CH 0180B 250 ml.	
7	BEAKERS, GLASS Low form, with spout made of borosilicate glass, graduated. Including the following pieces:	
	CH 0126D 50 ml.	
	CH 0126E 100ml.	
	CH 0126G 250 ml.	
8	BRUSHES TEST TUBE Bristle, Head size 50x19 mm. on galvanized wire, overall size 230 mm. Including the following pieces:	
	CH 210A Brushes Test Tube, Bristle	
	CH 210B Brushes Test Tube, Nylon	
9	BURETTES, GLASS KEY Burettes with single straight bore, Glass Key stopcock blue ceramic graduation.	
	Capacity ml. Sub. Div. ml. Tolerance ml.	
	CH 0236C 50 0.10 0.05	
10	MCT TWIN RACK Twin Purpose Rack use for holding the centrifuge tube. The transparent top of the tubes stored. Each face of the base has unique alpha-numeric index for easy identification of the tube.	
	Capacity Holes	
	CH 0286B 1.5 ml. 108	

11	MCT BOX					
	Polycarbonate and autoclavable. One size can hold 64 MCTs of 1.5 ml. & the other can hold 100 MCTs of 0.5 ml. These boxes are designed to work at temperatures ranging from -190* C to +121*C. The transparent cover provides a good view of the contents inside & is numbered for better inventory control.					
			Capacity	Holes		
	CH 0288A		0.5 ml.	100		
12	CORK STOPPER BARK					
	Bottom(mm.)		Top(mm.)	Length (mm.)	Pack size	
	CH 0310A	4	6	13 &	10	
13	STOPPER RUBBER ONE HOLE					
	Assorted containing sizes as follows.					
	7 pieces each of 9, 11, 13, 15, 17 mm. bottom dia and 3 pcs. Each of 18, 19, 21, 23, 25 mm. bottom dia. With one hole. Pack of 50.					
	CH 0316		Rubber Stopper One Hole			
14	CYLINDER MEASURING GRADUATED					
	Borosilicate glass, Class- B, Hexagonal base with spout a blue ceramic graduation. Including the following pieces:					
			Capacity	Graduation		
	CH 0345A		25 ml	0.5		
	CH 0345E		500 ml	5.0		
15	FILTER PAPER					
	As good as WHATMAN No. 1, Pack of 100. Including the following sizes:					
	CH 0392A		9 cms.			
	CH 0392B		11 cms.			
16	FLASK BOILING WITH JOINT					
	Borosilicate glass, round bottom, interchangeable joint. Including the following pieces:					
			Capacity	Socket Size		
	CH 0404B		100 ml.	19/26		
	CH 0404D		500 ml.	24/29		
	CH 0404F		1000 ml.	24/29		






17	FLASK CONICAL	
	Borosilicate glass, Erlenmeyer, with teflon liner screw cap.	
	CH 0430D 250ml.	
18	PIPETTES GRADUATED DISPOSABLE	
	Translucent pipettes with precise graduation and good chemical resistance. Length 15.5 cm. Capacity 3x0.5 ml.	
	CH 0577 Pipettes Graduated Disposable.	
19	PERIODIC CHART	
	Periodic table of the elements. Printed on polyart plastic sheet, coloured fitted with plastic roller. Showing 112 elements with pictures in multicolor.	
	CH 0597A Periodic Chart, Size 75x100 cm	
20	ORGANIC AND INORGANIC STUDENT SET MODEL	
	Atoms (Balls) having different colors are made of hard plastic. Each atom has holes set at the correct angles to accept the plastic tube bonds. Bond links made of flexible plastic tubes with various lengths. Medium grey links used for single covalent bonds. long grey links are used for double or triple covalent bonds.	
	The details of atoms are given as under	
	6 Black carbon (4 holes)	
	10 White hydrogen (1 holes)	
21	PAPER INDICATOR	
	For Schools and colleges. Packed in card board / plastic case of 5 books each with 20 leaves. Total 100 leaves. Including the following pieces:	
	CH 0625A Neutral Litmus Paper	
	CH 0625E Starch	
22	BASE RETORT STAND RECTANGULAR	
	Steel base with tapped hole 10x 1.5 mm. metric thread in the center of one short side. Finished in blue color and fitted with rubber feet.	
	CH 0649C Length 25 cm . Width 16 cm.	

23	ALUMINIUM ROD	
	A range of Aluminum rods to suit all Stand bases.	
	CH 0658A Length 50 cm . Dia. 12 mm.	
24	TEST TUBE STAND	
	Made from aluminum sheet, anodized and 3 tier.	
	CH 0712B Dia. 15 . No. of Holes 12 18 24 36 48	
25	TEST TUBE HOLDER	
	Wooden, with spring for closing jaws, 18 cms. Accepts tubes of 11-19 mm. dia. And 26 cms. Accepts tubes up to 30 mm. Including the following pieces:	
	CH 0726A 18 cms. Length	
	CH 0726B 26 cms. Length	
26	TUBING SODA GLASS	
	Soda glass, supplied in length of 0.5-meter approx. and in pack of 10 tubes. Including the following sizes:	
	CH 0745D 7 mm.	
	CH 0745F 10 mm.	
	CH 0745H 15 mm.	
27	TUBES DELIVERY	
	Glass, outside dia. 6 mm. Set of 4 comprising of	
	1 Short, straight, 70 mm. length	
	1 long, straight, 170 mm. length.	
	1 90° bend, arms, 60 mm. and 160 mm. length	
	1 90° bend, arms, 60 mm. length	
	CH 0750 Tubes Delivery, Set of 4	

- Specification for Part C

1	MICROSCOPES INCLINED	
	Versatile type, high performance model designed to meet the demanding requirement of higher education. The wide field eye pieces gives a nice and sharp image. Packed in wooden case or Styrofoam.	
	Specifications:	
	Mechanical Tube Length 160 mm.	
	45* Inclined Head 360* Rotatable	
	Eyepieces WF 10X	
	Objectives 4X, 10X, 40X (S)	
	Achromatic 10X, 40X (S) (Oil)	
	Focus Coarse and fine adjustment	
	Adjustment Coaxial coarse and fine focus adjustment	
	Square Area 110x 115 mm.	
	Stage Abbe 1.25 NA condenser with iris diaphragm	
	Eliminator Built- in incandescent lamp 20 W - 220 V. LED illumination	
	Options Eyepieces WF 15X with fixed pointer Detachable Mechanical stage.	
	BI 0010C Microscope Inclined Model MB-6	
2	MICRO COVER GLASSES	
	Made from clear and optically glass, the cover glasses are uniform in size and free from scratches and striations. Packed in plastic box for easy handling. Pack of 10 gms.	
	BI 0094C Size 22 x 22 mm.	







3	SLIDE BOX WOODEN	
	For keeping 75x25 mm. glass slide in vertical position in wooden grooves individually. Teakwood frame, plywood bottom, hinged top lined with printed index sheet and bottom with velvet. Fitted with clips.	
	BI 0116B 50 slides	
4	DISSECTING TRAYS	
	Made of Aluminum sheet, without wax.	
	BI 0186M 30X20 cms.	
5	HEART & LUNGS MODEL - 7 PARTS	
	Model shows larynx 2-parts removable, wind pipe with bronchial tree, heart 2-parts, removable, subclavian artery and vein, venacave, aorta, pulmonary artery, oesophagus, 2 lungs front halves removable and diaphragm. On base. Numbered with English key Card.	
	AM 0068B Hearts & lungs model - 7 parts	
6	HUMAN HEART- 4 PARTS EISCO	
	Enlarged, sectioned so that both ventricles and atria open to expose the valves. Large blood vessels near the heart and musculature of the heart are shown. Separates into 4 parts. On base. Numbered with English Key Card.	
	AM 0074 Human Heart - 4 Parts Eisco	
7	HUMAN SKIN - 4 PARTS	
	Enlarged approx. 70 times. Layers of the skin can be removed. Showing first rudiments of hair (exposed and in section) sweat gland and sense organs of skin. Separate into 4 parts. Mounted on base.	
	AM 0089B Human skin - 4parts	
8	HUMAN ABDOMEN SECTION	
	Traverse section model of human abdomen at level of omentum foramen. On base.	
	AM 0096 Human abdomen section	
9	URINARY ORGANS KIDNEY WITH BLADDER -EISCO	
	Natural size. Kidneys, ureters, adrenal glands and bladder with prostate as well as the large abdominal right kidney sectioned to show all anatomical details, mounted on base.	
	AM 0112 Urinary Organs Kidney with Bladder	






10	FEMALE PELVIS SECTION - 2 PARTS	
	Median section of a female, one half of genital organs with bladder and rectum is removable, one half is shown at the normal position in the pelvis. On base. Numbered with English Key Card.	
	AM 0117B Female Pelvis Section - 2 Parts	
11	MALE PELVIS SECTION - EISCO	
	Natural Size. Rectum, bladder with prostate and testicular ducts and external and genital organs. On base. Numbered with English Key Card.	
	AM 0118 Male pelvis Section - Eisco	
12	PERIOD OF GESTATION SET	
	Set of nine models, most accurate, mounted on stand consists of the following stages.	
	1. An embryo 6 day old, considerably enlarged.	
	2. Uters with embryo in 1 st month of gestation.	
	3. Uters with embryo in 3rd month of gestation.	
	4. Uters with foetus, in 4th month.	
	5. Uters with foetus, placenta and umbilic cord.	
	6. Uters with foetus, in 5th month pregnancy.	
	7. Uters with foetus, in 7th month pregnancy.	
	8. Uters with foetus, in 8th month pregnancy.	
	9. Uters with foetus, in 9th month pregnancy.	
	AM 0122 Period of Gestation- Set of 9	
13	ANIMAL CELL - EISCO	
	Enlarged 20,000 times. The model shows the recently discovered principle of the delicate structure of an animal cell. In addition to the organellae like nucleus, endoplasmic reticulum mitochondria, ribosomes respectively polysomes and Golgi apparatus. the model also shows centrioles, lysosomes and fat vacuoles. the presentation of the process of extrusion of a Golgi vesicle and pinocytic signs shown by the cell dynamics. For teaching purpose high degree of segmentation of a cell. On base of size 500 x 370 x 240 mm.	
	ZM0002 Animal Cell - Eisco	
14	FISH DISSCTION - PERCH	
	Showing all the general anatomy after dissection mounted on stand. Numbered with English Key Card.	
	ZM 0018A Fish Dissction - Perch	






15	DNA MODEL KIT- EISCO	
	Easy to construct the three-dimensional model of DNA. Emphasizing the base pair sequence and function of DNA. The sturdy, colorful bases snap together in the correct sequence, and the pairs attach to a center rod representing hydrogen bonds. Two flexible strands signifying alternating pentose and phosphate units attach to the end of each pair, forming the double helix. Once completed the, the model can be rotated on its sturdy base. Includes enough materials to construct one models, a printed instruction manual.	
	ZM 0058 D.N.A. Model Kit - Eisco	
16	DICOT SEED GERMINATION (PEA)	
	Model showing germination of dicot plant (pea) seeds of development. On base. Numbered with English Key Card.	
	BM 0046 Dicot Seed Germination(pea)	
17	MICROSCOPE SLIDE SET BASIC BOTANY	
	Set of 25, an introductory set of botanical specimens representing the major plant groups. Supplied in Box.	
	Chlamydomonas, E	
	Spirogyra, vegetative filaments, E	
	Spirogyra, conjugation, E	
	Fucus, dioecious, antheridial and oogonial	
	Mucor, conjugation	
	Conceptacles on one slide, VS	
	Saccharomyces (yeast), budding, E	
	Penicillium, mycelium and conidia, E	
	Marchantia (liverwort), thallus, antheridia, VS	
	Marchantia thallus, archegonia, VS	
	Mnium(moss), antheridial head, VS	
	Marchantia developing sporogonium, VS Mnium, archegonial head, VS	
	Dryopteris(fern), prothallus with antheridia	
	Dryopteris, pinnule with sori, TS and archegonia, E	
	Pinus (pine), leaf, TS	
	Allium (onion), root apex, mitosis, LS	
	Zea, (maize), leaf, TS	
	Helianthus (sunflower), young root, TS Zea, stem, TS	
	Helianthus , stem, TS	

	Cucurbita (marrow), stem LS for sieve tubes	
	Tilia (lime), young and old stem, TS	
	Ranunculus (buttercup), flower bud, LS Prunus (cherry), leaf, TS	
	Pollen grains, wind and insect distribution, E	
	BI 0294 Microscope Slide Set Basic Botany	
18	MICROSCOPE SLIDE SET BASIC PLANT ANATOMY Set of 20, an introductory set covering the major aspects of vascular plant structure. Supplied in Box. Helianthus (sunflower), young Prunus (cherry), leaf, TS and old root. Monocot, epidermis, E. for stomata Vicia (bean), young root, TS Vicia, root apex, LS Psamma (marram grass), leaf, TS Zea (maize), stem, TS and LS Lilium, anther, TS Cucurbita (marrow), stem LS and LS Lilium, ovary, TS and LS Helianthus, stem, bundles, TS Lilium, ovary, various stages, TS Helianthus, old stem, TS and LS Capsella, mature cotyledon stage, LS Tilia (lime), young and old stem, TS Stigma Tilia, old stem, RLS Pollen grains Dicotyledon stem apex, LS Zea seed, LS BI 0296 Microscope Slide Set Basic Plant Anatomy	
19	SYRINGE HYPODERMIC - DISPOSABLE Sterilized, plastic, individual pack and graduated with luer fitting. BI 0356C 5ml.	
20	GLOVES Latex examination gloves, Pack of 100 BI 0370A Small	

- Specification for Part D

1	BALANCES SPRING - DUAL SCALE	
	As per details given in Cat. No. PH 0022 but with Dual Scale, in Metric and Newton range.	
	PH 0024A 100 gm. / 1 N	
2	WEIGHTS	
	Weights brass set of 9, with hooks on both sides as illustrated. Capacity 500 gm. ; 1x200 gm. 2x100 gm., 1x50 gm. 1x20 gm. 2x10 gm. 2x5 gm.	
	PH 0040 Weights	
3	METER SCALE, HARDWOOD	
	One meter, graduated on both edges in centimeters and millimeters, one edge reading 0 to 100 left to right, the other edge in reverse.	
	PH 0064A One Meter- Horizontal Reading	
4	VERNIER CALLIPER	
	IME type, Improved design, plated steel with dual scale 0-15 cm x 0.1 mm. and 6 x 1/128 inches, provided with thumb movement for easy motion of jaws, in velvet box/ plastic case.	
	PH 0080 Vernier calliper	
5	SET OF GEOMETRICAL MODELS	
	Set of 12, made of solid wood, four shapes in three different sizes, volume 50cc in yellow colour, 100cc in red colour and 150cc in green colour supplied in wooden case.	
	PH 0101 Geometrical Models	
6	METAL BLOCKS	
	For density determinations, set of twelve in assorted sizes, shapes and masses. The set comprises tow each of brass, iron, aluminium, copper, zinc and lead. Masses vary from 12 to 25 gm.	
	PH 0113 Metal blocks	

7	BELL IN VACUUM	
	For use pump plate not less than 15 cm. dia. Electric bell operating on 4-6 volts AC/DC, suspended on rubber cord in bell jar. Fine coiled wire connections to terminals mounted in rubber bung sealing the jar.	
	PH 0176A Bell Jar 22 x 15 cm	
8	NEWTONS COLOR DISC	
	For demonstrating that white light may be composed from all the spectral colors by rotation of multi-colored disc. Comprising a multi-colored disc, 180 mm. diameter, mounted on metal stand and driven by belt with the help of driving wheel, fitted with a handle, individually packed.	
	PH 0582A Newtons Color Disc mounted As above, disc 200 mm. dia.	
9	CROCODILE CLIPS, STANDARD	
	Spring-loaded, serrated jaws, with screw to clamp end of lead held in tubular extension, both sides insulated. Length 50 mm. and jaws open 9 mm.	
	PH 0962A Red Colour	
	PH 0962B Black Colour	
10	CROCODILE CLIP	
	Made in steel and can be covered by screw or soldering. Fully covered with insulated sleeves. Length 35 mm. and jaws open 5 mm. Available in Red/Black/ Yellow/ Blue/ Green colors.	
	PH 0966 Crocodile Clip	
11	BATTERY ELIMINATORS	
	With power transistors, as a result the dropout at full load is few millivolts. Multiple tapping output 2, 4, 6, 8, 10, & 12 V D.C. and A.C. Operates on 220 Volts A.C.	
	PH 0970B Current 2 Amp.	
12	BATTERY ELIMINATORS-EISCO	
	Regulated, multiple tapping output 1.5, 3, 4.5, 6, 9, 12 Volts A.C./D.C. Both A.C. and D.C. can be taken simultaneously.	
	PH 0971A Current 1 Amp.	

13	LIGHT EMITTING DIODE (LED)	
	5 mm. standard high quality LED indicators with diffused lens. Maximum voltage 3.0 V D.C. PCB or panel mount. Pack of Ten.	
	PH 1019A Red	
14	FLASH LAMP BULBS, ROUND	
	With M.E.S. cap, suitable for flash lamps, spotlights and panel lamps etc. Supplied in Packets of ten except for € which is supplied singly.	
	PH 1014A Volts 1.25 Amp. 0.25	
15	CROCODILE LEAD set -EISCO	
	The set consists of 10 leads in assorted colours, each with a plastic sleeved clip at both ends. Length of leads 360 mm. Max current rating 0.5A continuous.	
	PH 1052 Crocodile lead set of 10	
16	VOLTMETERS	
	Moving Iron, AC/DC. Any single range 0-1.5, 3, 5, 10, 25, 50, 100, 150, 250, 300 volts.	
	PH 1088 Voltmeter	
17	Circuit Kit For Teaching Series And Parallel Circuits	
	Complete circuit kit includes everything you need to get started Comes with a switch, (2) 'C' Batteries w/ Holders, (2) Light Holders, (5) Bulbs, and bulk wire for connecting Perfect for lab groups.	
	دائرة كهربائية	
18	<p>Earth min : مجسم الكرة الأرضية</p> <p>Cross Sectional Model Earth</p> <p>Breaks down into 7 parts for further study</p> <p>Different colors for different layers.</p> <p>When upper crust is removed, inner core with layers can be seen.</p> <p>When layers one by one are removed you can find the periphery of each layer.</p> <p>Includes: (1) Model</p> <p>Showing the layers inside the Earth with 7 detachable parts showing the interiors of Earth. Different colors for different layers. When upper crust is removed, inner core with layers can be seen. When layers one by one are removed you can find the periphery of each layer.</p>	