

CIVIL TECHNOLOGY

Demand for construction Lab

S. No	Name of items	Specification	Rate
1	Bricks (1st Class)	Standard Size	
2	Cement	50 Kg per Bag	
3	Apron	Standard size	
4	Face Mask	Latex Free, Hypoallergenic, Fiberglass free, Fluid Resistant	
5	Safety Goggles	compact & lightweight goggle designed to provide dust & liquid protection	
6	Gloves Rubber (Best Quality)	Natural High-Grade Rubber Latex	
7	Digital Balance	Capacity of 15-20Kg	
8	Vicat Apparatus	ASTM Standard	
9	Turbidity Meter	0 - 10,000 NTU	
10	PH Meter	Range -2.00 to +16.00	
11	Flakiness and Elongation Index Apparatus	British Standard	
12	Specific Gravity Apparatus for Fine Aggregates	ASTM Standard	
13	Casagrande Apparatus	ASTM Standard	
14	Cylindrical Molds	ASTM Standard (Height=12'', Dia 6'')	
15	Beam Molds	ASTM Standard (Length= 18'' Width=6'' Depth=6'')	

Demand for Public Health Lab

S. No	Name of items	Specification	Rate
1	Pipe	PPRC 25mm	
2	pipe	PPRC 32mm	
3	Pipe	GI ½ inch dia	
4	Pipe	GI ¾ inch dia	
5	Thread	Stander roll for pipe fitting	
6	Teflon tape	Standard size for pipe fittings (plumber's Tape)	
7	Mustard Oil		
8	Socket	PPRC 25mm	
9	Socket	PPRC 32mm	
10	Elbow 90°	PPRC 25mm	
11	Elbow 90°	PPRC 32mm	
12	Tee	PPRC 25mm	
13	Tee	PPRC 32mm	
14	Union	PPRC 25mm	
15	Union	PPRC 32mm	
16	Ball Valve	PPRC 32mm	
17	Pipe band 90°	PPRC 25mm	
18	Pipe band 90°	PPRC 32mm	
19	Elbow 45°	PPRC 25mm	
20	Elbow 45°	PPRC 32mm	
21	Over Cross	PPRC 25mm	
22	Over Cross	PPRC 32mm	
23	Screw Plug	PPRC 25mm	
24	Screw Plug	PPRC 32mm	
25	Conduit locker for ratchet die stock	0.5 inch to 1.5 inch	

Demand for Transportation Engineering Lab

S. No	Name of items	Specification	Rate	
1	Fire and Flash point Apparatus for Bitumen Test	ASTM Standard		
2	Ring and Ball Apparatus for Bitumen Test	ASTM Standard		
3	Measuring Tape	50 Meter Length		
4	Measuring Tape	100 Meter Length		
5	Bitumen	500 Kg		
Demand for Survey Lab				
1	Construction Safety Jackets	Standard Size for survey (yellow)		
2	Staff Rod	(Aluminium)		
3	Sopwith staff Buckle	ASTM Standard		
4	Level Book for Surveying			
5	Umbrella	Large size with stand for survey		

Electrical Technology

S.No	Name Of Item	Rate	
01	Diodes IN 4001 (605V), PN ^{pack} , IN 4740 (3-15V) zaner ^{pack} ,		
02	Capacitors (0.1uf, 0.33uf, 10uf,100uf, 25v)		
03	Buzzer (220V)		
04	Rewinding Wire 20 no, 24 no,		
05	Lm317,lm7805, (regulator IC)		
06	NE 555 (Timer IC)		
07	Ampere meter Digital		
08	Over load relay 0 to 30		
09	Cotton Waste		
10	Mosfet, n & p Channel		
11	TISI, DIAC ,DB2ER900, BTB four		
12	Multiplexing Circuit		
13	Frequncy counter kit		
14	Resister 1kohm,10kohm		
15	N/O & N/C bread board push batton		
16	LDR Pack		
17	Ics no Ls,7432 ,ls 7408,7404, 7402,7400,7486,74157 ,74086, 7445,7446,		
18	Led bulb (Multi Color)		
19	Led bulb with holder 15W (220V)		
20	Battery cell 1.5 large size		
21	Legal size paper		
22	A4 size paper		
23	Connecting wires for trainers PN type		
24	FET (2N5457)		
25	MOSFET (2N3797)		
26	TIRAC (B2134)		
27	UJT (2N4870)		
28	BJT (PNP & NPN)		

The following items are required for students practicals 2020/21

S.No	Name of item	Rate	Quantity
1	Cartridge fuse 20 amps with base		
2	Sold ring wire		
3	Cable Clip (4mm,6mm,8mm,10mm)		
4	Hacksaw blade (double edge)		
5	P.V.C wire 7/052 Two core		
6	Concrete drill Bits (1/4,3/16)		
7	P.V.C wire 07/029 Three core (copper) Khan PAK Cable		
8	Massonary Bits (1/8,5/32,3/16,3/8)		
9	P.V.C wire 07/036 Three core (copper) Khan PAK Cable		
10	Electric bell out & in door connection with hand set		
11	LED Bulb with Holder pended Type Thierd		
12	Magnetic coil		
13	Rawal Plug (8 Nos,6 Nos)		
14	P.V.C Pipe 1/2 inch		
15	Single pole circuit breaker 15 Ampere		
16	Single pole circuit breaker 30 Ampere		
17	Two pole circuit breaker 30 Ampere		
18	Three pole circuit breaker 60 Ampere r		
19	Change over main switch four pole (England)		
20	Soldering gun 220 volt pak made (High Quality)		
21	52 Pecs premium socket set mm (Taiwan)		
22	52 Pecs premium socket set inches (Taiwan)		
23	Ring spanner set double age mm size		
24	Ring spanner set double age inches size		

**DEMAND OF TRAINING /CONSUMABLE MATERIAL FOR WELDING SHOP OF
MECHANICAL TECHNOLOGY**

S No	Name of Items	Rate		
1.	MS plate 1* 3/16 (Polished)	per Kg		
2.	Angle iron 1*3/16 (Polished)	per Kg		
3.	MS plate 2* 3/16 (Polished)	per Kg		
4.	MS plate 2* 3/8 (Polished)	per Kg		
5.	MS Plate 1 ½*1/4 (Polished)	per Kg		
6.	MS Plate 3/16*11/2 (Polished)	per Kg		
7.	MS PLATE 1 ½/5/16 (Polished)	per Kg		
8.	MS Plate 2*3/16 (Polished)	per Kg		
9.	MS Plate 1 ½*1/8 (Polished)	per Kg		
10.	Hand hack saw blade double ended	Per Doz		
11.	GI Pipe 1inch	per feet		
12.	GI Pipe 3/4inch	per feet		
13.	Square pipe 1*1inch	per feet		
14.	Square pipe 1 ½,*1 ½inch	per feet		
15.	Cast iron sheet ½ inch thickness	Per kg		
16.	Electrode 12 No	per pkt		
17.	MS Gas welding rod	per Kg		
18.	Calcium carbide	per Kg		
19.	Emery paper	Per Doz		
20.	Apron	Per no		
21.	Cutting grinder disc 14inch	Per No		
22.	Vice nuts (Gotka) as per sample	Per No		
23.	Cylinder refilling acetylene, oxygen (each)	Per no		
24.	Twist Drill (Diamond/Carbide)	Per set		
25.	Tape & die set 5/16,3/8,1/4	Per set		
26.	Welding screen glass black 4 ¼*3 1/4	Per No		
27.	Welding screen glass white 4 ¼*3 1/4	Per No		
28.	Electric arc welding transformer 500 V	01 No		
29.	Detergent soap	Per doz		
METAL SHOP				
1.	MS Flate 1* 3/16 (Polished)	Per Kg		
2.	Angle iron 1*3/16	Per Kg		
3.	MS Flate 2* 3/16 (Polished)	Per Kg		
4.	MS Flate 2* 3/8 (Polished)	Per Kg		
5.	MS Flate 1 ½*1/4 (Polished)	Per Kg		
6.	MS Flate 3/16*11/2 (Polished)	Per Kg		
7.	MS Flate 1 ½/5/16 (Polished)	Per Kg		
8.	MS Flate 2*3/16 (Polished)	Per Kg		
9.	MS Flate 1 ½*1/8 (Polished)	Per Kg		
10.	Hand hack saw blade double ended	Per Doz		
11.	Emery paper	Per Doz		
12.	Apron	Per No		
13.	Cutting grinder disc 14 inch	Per No		
14.	Twist Drill (Diamond/Carbide)	Per set		
15.	Tape & die set 5/16,3/8,1/4,	Per No		
16.	Cutting disc hand grinder 8 inch	Per No		
FOUNDRY SHOP				
01	Molasses	Per Kg		
02	Aluminum scrap	Per Kg		
03	Crucible No 40	Per No		
04	Apron leather (medium size)	Per No		
05	Parting Sand	Per Kg		
06	Hand electric blower	Per No		
07	Used Mobil oil	Per Ltr		
08	Copper scrap	Per kg		

S No	Description	Qty	Rate	
1.	MS round 1inch dia (Polished)	Per kg		
2.	MS round 1 ½ inch dia (Polished)	Per kg		
3.	Power hacksaw blade	Per No		
4.	Emery paper	Per doz		
5.	Shaper Cutting tool ¾*6	Per No		
6.	Apron (medium size) standard	Per No		
7.	Gear blank aluminum 3 inch Dia	Per kg		
8.	Gear blank aluminum 4 inch Dia	Per kg		
9.	Gear blank MS bar 3 inch Dia (Polished)	Per kg		
10.	Hand hacksaw blade	Per No		
11.	Kerosene oil	Per ltr		
12.	Mobile oil	Per ltr		
13.	Grinder wheel	Per No		
14.	Grinder wheel diamond tip	Per No		
15.	Lath cutting tool 5/8*6 inch	Per No		
16.	Lath cutting tool 1/2*6 inch	Per No		
17.	Square rod 1*1, (Polished)	Per kg		
18.	square 1½*1½ (Polished)	Per kg		
19.	End Milling cutter 1 inch Dia	Per No		
20.	End Milling cutter ¾ inch Dia	Per No		
21.	End Milling cutter ½ inch Dia	Per No		
22.	Surface Milling cutter 3*3	Per No		
23.	Slot Milling cutter ½*1/4	Per No		
24.	Convex Milling cutter 3*1/4	Per No		
25.	Concave Milling cutter	Per No		
26.	Angular Milling cutter(single, double)	Per No		
27.	Milling cutter 2, module	Per set		
28.	Milling cutter 2.5 module	Per set		
29.	Milling cutter 3, module	Per set		
30.	Vernier caliper digital 8 inch	Per No		
31.	Dial Vernier caliper(Mitutoyo) 6 inch	Per No		
32.	Vernier caliper 6inch	Per No		
33.	Vernier caliper 8 inch	Per No		
34.	Vice 6 inch (poland)	Per No		
35.	Screw wrench set 6,8,10 &12 inch (6 no each)	Per Set		
36.	Baby screw driver set 1/16 to ½ inch	Per no		
37.	Twist drill set 1/16 to ½ inch	Per set		
METROLOGY LAB				
1.	Steel Rule (Metric scale)	Per No		
2.	Hook Rule	Per No		
3.	Flexible Rule	Per No		
4.	Cast-Iron Surface Plate	Per No		
5.	Granite Surface Plate	Per No		
6.	Outside Micrometer	Per No		
7.	Inside Micrometer (Rod Type)	Per No		
8.	Inside Micrometer (Caliper Type)	Per No		
9.	3-Point Internal Micrometer	Per No		
10.	Depth Micrometer (Fix)	Per No		
11.	Depth Micrometer (Adjustable)	Per No		
12.	Thread Micrometer	Per No		
13.	Micrometer Height Gauge	Per No		
14.	Venire Micrometer with Metric scale	Per No		
15.	Dial Indicator with stand	Per No		
16.	Venire Height Gauge (only Metric Scale)	Per No		
17.	Venire Depth Gauge (Hook Type)	Per No		
18.	Dial Thickness Gauge	Per No		
19.	Dial Bore-Gauge	Per No		
20.	Bevel Protractor	Per No		
21.	Universal Bevel Protractor	Per No		
22.	Dial Protractor	Per No		

METROLOGY LAB

S No	Description	Rate	
23	Steel Protractor	Per No	
24	Fix Gauges (Radius)	Per No	
25	Fix Gauges (Snap)	Per No	
26	Fix Gauges Plug)	Per No	
27	Fix Gauges (Ring)	Per No	
28	Adjustable Gauges	Per No	
29	Thread Gauges	Per No	
30	Standard No wire gauge	Per No	
31	Small Hole Gauges	Per No	
32	Digital Micrometer	Per No	
33	Digital Vernier Caliper	Per No	
34	Digital Height Gauge	Per No	
35	Digital Depth Caliper	Per No	
36	Digital Depth Micrometer	Per No	
37	Gauge Block Set (3mm)	Per No	
<u>WOOD WORK SHOP</u>			
01	Soft wood (China Wood) 2*1*6 inch (8 cft)	Per/cft	
02	Nail 1,1½”,2,2 ½,3 inch	Per kg	
03	Circular saw blade (Diamond 7”)	Per No	
04	Jack planer cutter (Diamond 9”)	Per No	
05	Bend saw blade ¾” x 60”	Per No	
06	Measuring tap size 3 meter	Per No	
07	Bench vice (China No:1 quality) 7and 8 inch size	Per No	
08	Triangular file 6”	Per No	
09	Combination pliers heavy duty (8inch size)	Per No	

Subject: Demand for RAC shop 2020-2021 consumable

Sir,

The following items are need for RAC practical used by the students of RAC technology

S.NO	NAME OF ITEM	Specification/ Type	Rate	
01	Relay Electric Wire	Pakistani		
02	Relay Danfass	Germany		
03	Potential Relay	Pakistani		
04	Overload(1/5,1/3,1/6,1/4)Hp	Pakistani		
05	Condenser Size(1/4,1/5,1/3) 04 each	Pakistani		
06	Fan Capacitor 3.5	Pakistani		
07	Compressor Oil	Pakistani		
08	Coil Capillary Tube (0.31 And 0.047) Refrigerator+Ac) 03 each	Pakistani		
09	Hand Valve	Pakistani		
10	Digital Thermostate	Pakistani		
11	Tube Flaring Tool Set	China		
12	Swiging Tool ¼” And 1/2”	Pakistani/China		
13	Tube Bender Single ¼”,5/16”,3/8”	Pakistani		
14	Magnet Contactor For Double+Triple Pole	China		
15	Evaporator Def Size (19x45inch) (15x39”) (14x16”)	Pakistani		
16	Flexible Pipe Double For Oxygen Gas	Pakistani		
17	Spark Light For Gas Welding	Pakistani		
18	Tube Cutter ¼”,1/2” With Frame 04 each	China		
19	Silver Ammonium (Welding Rod)	Pakistani		
20	Dungre / overall (Paint +Shirt)	Pakistani		
21	Halmet plastic (Yellow)	Pakistani		
22	Soft gloves (Leather)	Pakistani		
23	Guggles (White)	Pakistani		
24	Mask (Rubber type)	Pakistani		
25	Shes (Rubber)	Pakistani		

DEMAND FOR ALL COMPUTER HARDWARE LABS

S NO	Name of item	Specification	Rate	
01	Cramping Tools	NEW RJ45 network tool RJ45 Cable cramping tool network for RJ45 Cat6 cat5 plug RJ45 plier		
02	New RJ45 Connector	8P8C EZ RJ45 Connector cat6 RJ45 Ethernet cable plug RG45 Cat5e 8P8C Cat6 network unshielded cat5 terminal		
03	Sensor	37 sensors kit Arduino		
04	Toners	85A		
05	Toner Ink	Black Powder Ink		
06	External Hard drive	Fast file Transfer with super speed USB 3.0, Plug & Play, 1TB storage capacity, Compatible with USB 3.0 & 2.0 Powered by USB Connection.		
07	Switches	16 Port 10/100/1000 Ethernet Switch connect up to 16 devices minimum, Plug & Play technology for simple setup		
08	External DVD Rom	RD/RW Combo Drive/ Super Drive along with lens		
09	USB Pin stick 3.0	64GB		
10	Color Printer EPSON/HP	Compact Integrated Tank Design build printer, Along with Extra High Yield Ink Bottles, spill free & Error free Refilling, Borderless printing up to 4R, may print Certificate and Photo Paper Pages up to 280 Grams		
11	Computer Pages Double A	A4 70 gms		
12	Computer Pages Double A	Legal 70 gms		
13	Scanner HP/EPSON	Flatbed with transparent materials adapter 455 x 304 x 70 mm (17.91 x 11.97 x 2.76 inches) 4800 x 9600 dpi, 48 bit 12 dpi to 999,999 enhanced dpi at 100 percent scaling		
14	Ethernet Cable	CAT 6E Double PVC 305 meters		
15	Screw Drivers	Phillips 8 inches, 6 inches, 4 inches Flat 8 inches, 6 inches, 4 inches		
16	Pliers	Combination plier		
17	Arduino Starter Kit	Arduino Projects Book, Arduino UNO, USB cable, Breadboard 400 Pins, Easy-to-assemble wooden base, 9V battery snap, Solid core jumper wires (70), Stranded jumper wire (1), Phototransistors (6), 10KΩ Potentiometers (6), Push buttons (10), Temperature sensor TMP36, Tilt sensor, Alphanumeric LCD (16x2-character display), LEDs (1 x Bright White, 1 x RGB, 8 x Red, 8 x Green, 8 x Yellow and 3 x Blue), Small DC motor (6/9V), Small servo motor, Piezo capsule, H-bridge motor driver L293D, Optocouplers 4N35 (2), MOSFET Transistors IRF520 (2), Capacitors (5 x 100nF, 3 x 100μF, 5 x 100pF), Diodes 1N4007 (5), Transparent gels (red, green, blue), 40 pin male header strip, Resistors (20 x 220Ω, 5 x 560Ω, 5 x 1KΩ, 5 x 4.7Ω, 10 x 10KΩ, 5 x 1MΩ, 5 x 10MΩ), Bluetooth module HC-06, 8 Channel 5v relay module, MAX7219 Dot Matrix Module For Arduino Microcontroller 4 In One Display with 5P Line, LCD Display (Blue Back-light) 2004 Basic 20x4 Character, DHT11 (Digital Humidity), HC-SR04 Ultrasonic Sensor Module, Smoke/Gas Sensor Module Mq-2, HC-SR501 PIR Human Motion detector sensor, Soil moisture sensor, Water level sensor, Sound Sensor.		

DEMAND FOR ALL COMPUTER HARDWARE ELECTRONICS LABS

S NO	Name of item	Specification	Rate	
01	UT33C+ Palm Size Multimeter	DC voltage (V) 200mV/2V/20V/200V/600V AC voltage (V) 200V/600V DC current (A) 200 μ A/20mA/200mA/10A Resistance (Ω) 200 Ω /2k Ω /20k Ω /200 Ω /2k Ω /20k Ω /200k Ω /20M Ω Temperature -40°C~1000°C \pm (1%+4) - 40°F~1832°F		
02	UNI-T UT256B Digital Fork Multimeter Auto True RMS 200A AC DC Clamp NCV Tester	Current clamp meter: voltmeter Multimeter AC DC current: digital clamp ammeter Measuring current range: AC 0~200A / DC 0~200A Measuring capacitance range: 60nF / 600nF / 6 μ F / 60 μ F / 600 μ F / 6mF / 60mF Measuring inductance range: none Measuring resistance range: 600 / 6k / 60k / 600k / 6M / 60M ohms Measuring voltage range: AC 6V / 60V / 600V / 750V / DC 6V / 60V / 600V / 1000V		
03	0-9999 Ohm Simple Resistance Box Precision Variable Decade Resistor Teaching Instrument	Attenuation Range / Mini Step: 0 to 9999ohm, 1 ohm step Shell material: Plastic Dimensions: 14x10x5cm/5.51x3.94x1.97inch		
04	High Power Wirewound Potentiometer Rheostat Variable Resistor 25W 300 OHM	Applicable to power equipment which the AC voltage is not exceeding 380V and the DC voltage is not over 220V. Adjust the voltage and current in a circuit Rated power temperature: +70 degrees°C Using temperature range: -50°C--+315°C Rated power:25W Resistance:300 OHM Overall size:70*43mm		
05	Screw Gauge - 0-25mm Outside Metric Micrometer	Medium Size		
06	Bread Board Connecting Wires			
07	CPN NR2-36 Electric Thermal Overload Relay 28A-36A	Power frequency: 50-60hz Rated current: 28-36A Rated insulation voltage: 690v phase break protection: yes, Manual and automatic reset: yes, AC 15 220V rated current A 2.73 AC 15 380V rated current A 1.58 DC-13 220V rated current A 0.2		
08	Watt Meter Micro Power Monitor	Power applied: 220V 50Hz Max 10A (Less than 2.2KW) Precision: 1.0 Constant: 6400imp/kWh Power consumed: <1W Operating Temperature: 0-45 Deg C		
09	Magnets	Bar Magnet Round Magnet Solenoids		
10	Bread Boards			
11	Voltmeters	Small Compact Size 2.5*2.5 Inches AC Ranges from 0-500Volts DC Ranges from 0-500 Volts		
12	Ammeters	AC ranges from 0-20 Ampere		

GOVERNMENT COLLEGE OF TECHNOLOGY SWABI

No.GCT/SWB/Tender/

Dated: ____/____/2021

DEMAND FOR PHYSCIS LAB

S NO	Name of item	Rate	
01	Jib Crane		
02	Universal Frame		
03	Dirac Crane		
04	Toggle Joint Apparatus		
05	Supporting Blocks		
06	Simple Roof Truss Apparatus		
07	Bell Crank Lever		
08	Steel Yard (uncalibrated)		
09	Torsion Apparatus		
10	Screw Jack		