



CENTRE FOR PROFESSIONAL AND ADVANCED STUDIES

(Established by Government of Kerala)

H.O: School of Medical Education (Annex) Arpookara, Gandhinagar, Kottayam, Kerala

Pin: 686008 Tel: 0481-2595478

Website: www.cpas.ac.in; Email: info@cpas.ac.in

No. 2171/2022/CPAS HO

Dated 20.12.2022

NOTICE INVITING TENDER

Competitive tenders in sealed covers are invited from registered/ approved firms for the supply of Laboratory Equipments mentioned in the attached list to following departments under CPAS.

1. Department of Biomedical Instrumentation, SME,Gandhinagar.
2. Medical Laboratory Technology,SME,Gandhinagar
3. Bachelor of Physiotherapy, SME,Angamaly.
4. Medical Laboratory Technology,SME,Manimalakunnu.
5. Medical Laboratory Technology,SME,Puthuppally.
6. Department of Pharmaceutical Sciences,Cheruvandoor.
7. Institute of Nursing Education, SME, Gandhinagar.
8. Institute of Nursing Education, SME, Pala.
9. Institute of Nursing Education, SME, Manimalakunnu.
10. Institute of Nursing Education, SME, Pathanamthitta.
11. Department of Physiology, SME,Gandhinagar.
12. College of Teacher Education, Thottakad.
13. College of Teacher Education, Vaikom.
14. University College of Engineering, Muttam,Thodupuzha.
15. Department of Microbiology, SME,Gandhinagar.

Tender number and date shall be entered on the envelope containing tenders and are submitted to DIRECTOR, CENTRE FOR PROFESSIONAL AND ADVANCED STUDIES, GANDHINGAR P.O, KOTTYAM, KERALA – 686008.

Last date of receipt of Tender - 03.01.2023 , 2 pm

Date of opening of Tender - 03.01.2023 , 2.30 pm

Cost of Tender form - Rs.600/-

EMD - 2.5 % of the total amount quoted.

For more Details, Contact Numbers: 9446053629, 9645406842.

Other Conditions

- 1 .The firm shall enter their GST Number in the tender.
2. The tender form can be download from the our website www.cpas.ac.in – downloads

3. The cost of Tender forms shall be remitted to the account No. 36906228308 (SBI, Medical College, Kottayam branch IFSC SBIN 0070111) and produce the receipt along with tender.
4. The EMD to be submitted along with tenders shall be remitted to the account No 36906228308 (SBI, Medical College, Kottayam branch IFSC SBIN 0070111) and produce the receipt
- 5 .The amount quoted should include GST, packing charges, transportation charges loading unloading charges installation charge etc.
6. A preliminary agreement in stamp paper worth Rs. 200/- need to be submitted.
7. It is desirable to enclose pictures of the equipment along with tender.
8. Articles shall be delivered to the respective centres within 10 days of receipt of supply order.
9. If the tender opening day be a holiday tenders will be opened in the next working day.
10. Tenders receiving after the stipulated time will not be accepted.
11. Supply order will be issued on the basis of lowest rate for each item. Hence the firms participating in tenders should be willing to supply the items partially.
12. The quality, specifications etc. of the instruments will be ascertained after checking the same.
- 13 .The undersigned reserves the right to reject any or all tenders without assigning any reason.

Sd/-
DIRECTOR
CENTRE FOR PROFESSIONAL ADVANCED STUDIES

* This is a computer system (Digital File) generated letter. Hence there is no need for a physical signature.

**CENTRE FOR PROFESSIONAL AND ADVANCED STUDIES
GANDHINAGAR P.O.,KOTTAYAM**

List of laboratory equipment.

1. Department of Biomedical Instrumentation, SME, CPAS, GNR						
Sl.No	Item	Specification	Qty	Rate	Total Amount	Actual Expense including GST
1	ECG cum Heart rate monitor	Measuring range:30-300heartbeats per minute, Accuracy: ±2 heart beats/minute, Heart rate display-16×2 LCD display, Tachycardia limit range: 0-255 heart beats/minute, Bradycardia limit range: 0-255 heart beats/minute, ECG Acquisition module: Real time ECG acquisition with 200 samples/sec 8-bit A/D Converter with USB interface, Electrodes : Surface or clamp(Ag-AgCl) electrodes, test points-7 nos., Dimensions(mm): W 326×D 252×H 52, Power supply: 110V-260VAC,50/60Hz	1			
2	12 Lead ECG Stimulator	Generating Range: 30-300 heart beats/minute, ECG Amplitude Range: 200mV-4V DC, Heart beat indication: Both LED and Audible(Buzzer) controls, Bipolar leads :Lead I, Lead II, Lead III, Unipolar Leads :avR, avL, avF, Chest leads(V1-V6)Separate output channels Left arm(LA), Right arm(RA), Left leg(LL), Right leg(RL) and chest leads(V1-V6)for representing Standard Limb and chest leads configuration. A separate point indicated (12leads) to view the all 12 lead standard ECG waveforms simultaneously, Test point:1 no,Low pass filter: cut off frequency 5 KHz, Dimensions(mm): W326× D 252× H52, Power supply:110V-260V AC,50/60HZ	1			
3	Electro Myograph Trainer Kit	CMRR:>100dB,Filter(Band pass): 1Hz-10KHz,Notch filter :50Hz, Simulated EMG indication:Visible LED,Electrodes: Surface Electrodes (Ag-AgCl),Test Point:6 nos., Dimensions(mm): W 326×D 252× H 52, Power supply: 110V-260V AC, 50/60 Hz	1			
4	Electro Encephalograph Simulator(Trainer Kit)	EEG Amplifier, No.of Channels:Single, Gain control: Variable, CMRR:Better than 80dB, EEG Simulator output: Stanadrd EEG signal output with Alpha, Beta, Delta, and Theta wave generator,Test points: 12 nos., Dimensions(mm): W 326×D 252× H 52, Power supply: 110V-260V AC, 50/60 Hz	1			
5	Phono Cardiograph System (Trainer Kit)	Sensor : Stethoscope with microphone, Frequency response:20Hz-90Hz, CMRR:≥80dB,PC Interface: USB,Test points: 7 nos., Dimensions(mm): W 326×D 252× H 52, Power supply: 110V-260V AC, 50/60 Hz	1			

2. Medical Laboratory Technology, SME,Gandhinagr						
Sl.No	Item	Specification	Number Required	Rate	Total Amount	Actual Amount including GST
1	Colorimeter	ELICO Micro controller based Photometer Model CL 63 with 8 filters and 10 ELICO Micro controller based Photometer Model CL 63 Nos Glass Test Tubes, Peak Wavelength : 450, 470, 510, 520, 540, 570, 600 & 670 nm. Photometric : Range : ± 1.99 Abs, Repeatability : ± 0.01 Abs, Stability : ± 0.01 Abs/hr. after warm up, Readability : %T- 1, Abs-0.01. Light Source : Long Life Solid State Light Source. Detector : Silicon Photo Diode. Data Presentation : Readout 4 digit 7 segment LED of 12.7mm height. Sample Holder : Accommodate φ 12.4 mm ± 0.1 mm Test tube, Power Requirement : 90-260 V AC, 50-60 Hz, 1φ, 6 VA Max. Physical Dimensions : Size (WxDxH) in mm : 150 x 155 x 80, Weight (in kg) : Approx. 1. Accessories Supplied : With Instrument Matched Test Tubes	1			
2	Water Bath	ROTEK Serological Water Bath- Thermostat Model RSW-01, Double Walled ROTEK Serological Water Bath-Thermostat Model RSW-01, construction outer body made of M.S sheet, powder coated. Inner body made of 304 quality S.S sheet. Glass wool insulation, fitted with 30°C to 110°C Imported	1			

		Thermostat. Flat Lid, Suitable to work on 220VAC supply. Bath size : LxWxH : 25x17.5x15cm, Capacity : 7L, Watts : 750				
3	Centrifuge	ROTEK Multipurpose Laboratory Centrifuge Model M8A with speed regulator, with Angel Rotor head AH-2, 12x15ml	1			
4	Electronic Balance	SCALETEC Analytical Balance Model SAB 224CL INCAL, Capacity : 220g, SCALETEC Analytical Balance Model SAB 224CL INCAL, Readability : 0.1mg, Pan Size : Ø 90mm, Calibration : Internal, Display : LCD-BL	1			

3. Bachelor of Physiotherapy, SME, Angamaly

Sl.No	Item	Specification	Number Required	Rate	Total Amount	Total amount including GST
1	IFT	Physiomodalities, 4P vector sweep, rectangular wave, intensity 99MA, feel 4KHZ, dimension-12x12x5	1			
2	TENS	Automode digital tens machine, Physiogears, item dimension-24x24x31 cm, frequency-2hz-10hz-50hz-100hz, Intensity- 0-100mhz	1			

4. Department of Medical Laboratory Technology , SME, Manimalakunn

Sl.No	NAME OF ITEM	SPECIFICATION	QTY	Rate	Total amount	Total amount including GST
1	Dissecting Microscope	Portable with 10x objective	7			
2	Testtube Rack	Higher Temperature Resistant anti acid and Alkali	30			

5. Medical Laboratory Technology, Puthuppally

S.N	ITEM	BRAND	QTY	RATE	NET AMT	Total amount including GST
1	Autoclave - Vertical - Digital Maximum Pressure : 15 psi Pressure Indicator : Bourdon tube pressure gauge Controller : Digital temperature indicator cum timer with audio alarm (For Digital Models Only) Valves : Safety Valve, Steam Release Valve Drain : Drain tap provided at the bottom Lid lifting : Foot lifting mechanism Inner chamber : SS 304, 1.6 mm Outer Chamber : SS 304, 1.2 mm Gasket : Silicone Gasket Basket : Perforated Stainless Steel Supply : 220-230 volts AC .350 x 550, 52 LTRS,	BESTON	1			
2	Lovibond Comparator discs pH (Phenol Red) ,Max Range 6.5 - 8.4 value		1			
3	All metal rugged Stand with individual Coarse & Fine Focus drive with focus stop, Maintenance Free ECO LED illumination including Battery backup with regulating intensity control for 220V/50Hz, movable Achromatic Condenser 0.90 NA with aperture iris diaphragm, 115 X 125 mm double plate Mechanical Stage with coaxial XY Drive knobs, Quadruple revolving nosepiece, Achromatic objectives 4x, 10x, 40x (spring), 100x (spring, Oil imm.), 360° rotatable 45° inclined Monocular head with Widefield Eyepiece 10x/18 lockable, dust cover complete set	MAGNUS	5			
4	Magnus Trinocular Microscope with Long life LED light source		1			

6. Department of Pharmaceutical Sciences, Cheruvandoor

Sl.No	Item	Specification	Number Required	Rate	Total Amount	Actual Amount
1	Smile drive digital microscope	with USB connection to PC. Built in micro SD card slot (8GB)	1			
2	Hot air Oven	Digital temperature controlled BSCO stainless steel MS powder coated 3 side insulation (75mm)	1			
3	Incubator	Bacteriological incubator. Stainless steel 14*14*14	1			
4	Compound microscope	Olympus or Dollar brand. eye piece-10x objective 10x 45x 100x iris diaphragm abbe condenser mirrors	6			
5	Digital Thermometer	Rod type, Graduations 1Degree, measuring range up to 150 degree, l 300 mm	10			
6	Autoclave	Vertical Type, Fully Automatic, Double walled, radial locking, Stainless Steel, Chamber volume, 10-15 lit, 2 kW, with warranty	1			
7	Self illuminated compound microscope	Labomed, eye piece-10x ,objectives-10x 45x 100x, light source -halogen lamp	6			
8	Compound microscope	preferred brand-Micron. eye piece 5x 10x objective 10x 45x	5			

9	Microwave synthesizer - TOP-300MS Power less than 900 w Capacity 30 ltr Frequency -2450 MHz	(1)Catalyst systems Sandiego,CA,PH-858-630-0493 (2)Toplab Distributers Siences world Sevapuram.coimbatore, Tamilnadu Ph-994246772 E-mail scienceworldcbe@gamil.com Pvt Ltd (3)RAGA TECH raj@ragatechindia.com Ph-9011096601	1			
10	Interactive flat panel (smart Board) resolution-3180 X2160; Size 86 inch; LAG less than 15 milli seconds OPS plus android; Power consumption 500 W	(1)Golive technologies Ph-9311715414; Softlogic, (2)View sonic Technologies Inda ,Delhi service.in@viewsonic.com	1			
11	Sherrington's recording drum (Digital Kymograph)	Type of product: Microprocessor controlled Digital Kymograp Display:* LCD display Digital speed selection 0.12-2.5 mm pe sec (8 speed variations) Mode: Auto CRC and normal mo Model no:SRD 01 Drum dimension- Height :150 mm Diameter : 150 mm Height of the rod:375mm Digital timer and time multipler with audio an dvisual alrm Very hieght adjustment of drum Warranty : 1 year	10.00			
12	Remi Doctor Centrifuge, R-303,	Type of product: laboratory centrifuge Rotor Capacity: 8x15 ml Number of Tubes:8 Phase: Single Warranty:12 Months against any manufacturing defects Rotor Capacity: 8x15 ml Voltage: 220-240 V. Frequency: 50 HzHead Type: Angle Rotor Head Maximum RCF: 1450 g Maximum speed (RPM) :3500 Weight: 6kg Dimesnion (mm): 210*210*250	1.00			
13	Rotor Remi RQT- 127 A/D Digital - Homogenizer	Type of product : Digital-Homogenizer Stirring Capacity (L): Upto 100mL Motor:AC/DC 1/8 HP Impeller: Sterling Shaft Dia*Length(mm) : 8 *276 Teflon pestle Motor: AC/DC 1/8 HP Min speed :300 Max. Speed: 8000 Model no: RQT-127 A/D	1.00			
14	Royal scientific Water Bath Rectangular Type of product : Water Bath Rectangular Single Walled Cap.15 Ltr plate.	Type of product : Water Bath Rectangular Single Walled Cap.15 Ltr Temperature: Up to 99.8C Material: Stainless Steel Features: Thermostatic type Stainless Steel top plate Dimensions: 355 *2405 *100 mm Model No: RSW 113	1			
15	Student Organ Bath 3/4 Ltr SE-303	Type of product: Bath thermostatic Sub stype: Student organ bath Capacity: 3/4 L Material: Stainless steel Dimension:8 *4 *5 inch Model no: SE-303	10.00			
16	College model uv transilluminator	Type of product: UV transilluminator Dimension: 25 *13cm Basic system with satebeam filter,High range,360nm Four *8W UV lamps Cool day light byLED Air cooling fan,Orange UV blocking feild	1.00			
17	Euthanasia chamber with air accessories like cylinder and rezulator	Type of product: Euthanasia chamber Material: Complete Acrylic plastic cage Flow rate: Airtight at flow rate 5.30L/min for 3 minute at pressure not more than 0.6 bar Chamber volume (L): 16.78 L Chamber volume (cu.cm & cu.inch): 1024 cu.inch 16780.3 2 cu.cm Dimesnion: 16 *8 *8 (40.64x20.32x20.32) Includes the container, lid, Inlet nozzle with stopcock,Outlet nozzle with adequate silicone tubing of 7mm ID & 11mm OD and locking clamp	1.00			
18	Lever for Pharmacology simple lever (Stainless steel or aluminum with celluloid writing tip)		2.00			
19	Starling heart lever (steel)		2.00			
20	Brodies universal lever (Steel)		2.00			
21	Gimbal lever (Steel)		2.00			
22	Video tracking software -Ethovision XT	EthoVision XT works with a large range of cameras, including analog, USB, and GigE. You can track one or more animals from multiple camera inputs simultaneously.	1			

23	Water tanks -Zebra fish	Tanks used to hold Zebrafish are usually made of polycarbonate, high-quality glass or acrylic material	2			
24	Sim Pharm-Virtual Clinical Pharmacology simulation tool	SimPHARM utilizes a dynamic Case Based Learning (CBL) model	1			
25	EEG for rodents -2 channel system	two channel transmitter RL11 M2-F20EEF (technical specifications: 3.9 g, 1.9 cc, input voltage range ± 1.25 mV, channel bandwidth (B) 1-50 Hz, nominal sampling rate (f) 250 Hz (f = 5B), temperature operating range 34.0 to 41.0°C, warranted battery life 1.5 month, on-off mechanism magnetically actuated	1			
26	Stereotaxic instrument for rodents	The dual-lead screws ensure stable, accurate and smooth manipulation. It includes a 100 micron 3-axis, a left-hand manipulator arm, a rat adaptor, a pair of traditional (18°) ear bars, and a standard probe holder. And other subassemblies are available such as dual arm, mouse adaptor, 60° ear bars, etc.	1			
27	Chemical FUME HOOD	Velocity control of approximately 80-100 feet per minute, semi close ventilated exposures, Outer construction of thick PCRC, pre coated corrosion resistant GI sheet, Inner construction of high grade SS-304, sliding sash made out of special grade shatter proof glass duly framed in wooden/aluminum frame with sliding motion and counter weight balanced mechanism, Illumination level of approx. 800 lux on the work table, heavy duty exhaust system, comprising of dynamically balanced centrifugal impeller with high speed motor, suitable FRP ducting of required dimension as per the individual requirements, Low noise level, Energy efficient, Eco friendly.	1			
28	Specific gravity bottle	25 ml borosilicateglass	20			
29	Stalagmometer	straight borosilicate glass	20			
30	Ostwald viscometer	borosilicate glass	3			
31	Pipette pump	25 ml	5			
32	Electronic weighing balance	min 0.01 max 300g	2			
33	Schrodinger Mastero suite		1			
34	Ostwald viscometer	borosilicate glass	7			
35	TABLE TOP BALANCE	ACCURACY MINIMUM WEIGHABLE QYT 0.001G,Max 10.0.G	2			
36	DIGITAL CALORIMETER	SCANNING BETWEEN 400 TO 800 nm,Absorbivity reading 4 digit values,Filter type	1			

7. Institute of Nursing Education, Gandhinagar

Sl.No	Item	Specification	Number Required	Rate	Total Amount	Total amount including GST
1	Community bag	Rexin bag	25			
2	Spirit lamp	steel with lid	25			
3	Test tube cleaning brush	Material metal	15			
4	Testtube stand	For large & extralarge testubes	30			
5	Testtube holder		20			
6	Artery forceps	Straight & curved	10			
7	Dissecting forceps		10			
8	B.P apparatus	electroning	1			
9	B.P apparatus	Aneroid	2			
10	Pulse oximeteor	Electronic	1			
11	Doppler fetal monitor	Electronics	1			
12	ICV Hosptial bed	5 function with remote Elictronic adjustable bed	1			
13	I/V stand	steel	3			
14	Stretcher	steel collapsible stand	1			
15	Sphygmomanometer	Adult	2			
16	Macintosh	Rubber (Medium)	10			
17	Bandages	Crepe 60cmx4mts	1			
18	Hot water bag	Rubber	2			
19	Tuning fork	steel	10			
20	Sterilizer	Electric stamless steel	2			
21	Ice cap	Rubber	2			
22	Abdominal Binder	cloth with elastic	1			
23	Urinometer	glass	2			
24	Oxygen cylinder	Matel	1			
25	Oxgen flow meter	Plastic	1			
26	Suction apparatus	Glass	1			
27	Nebulizer	Plastic	2			
28	Stem Inhaler	Plastic	2			
29	Laminated Charts of Various topics on Nutrition	5 sets	5			
30	Laminated Charts of Various topics on OBG	5 Sets	5			
31	Mile Stones of Infant		1 set			
32	Anatomical Models - Heart		1			
33	Brain	polyvinyl . - cross section	1			
34	Liver		1			
35	Kidney		1			
36	Lungs		1			
37	Play materials	for 1 to 5 year	12			
38	Trays -Medium with lid	Steel (4) and Plastic(4)	8			
39	Injection tray with lid	Steel	10			
40	Small Kidney tays	Steel	4			
41	Bowls	Steel -Medium(10) and small(10)	20			
42	B.P Apparatus with paediatric cuff		1			
43	Restaints	Jacket abdominal	3			

8. Institute of Nursing Education, Pala

Sl.No	Item	Specification	Number Required	Rate	Total Amount	Total amount including GST
1	Large Steel Tray	490x325x19 mm	10			
2	Cheatele forceps jar	50.8 mmx177.8 mm	1			
3	Small Bowl	Material: Stainless Steel Size: 5 Inch 5.5 Inch 6 Inch 6.5 Inch	10			
4	Stadiometer	Height Measuring Scale, floor model without weighing scale Measuring range : 20 - 210cm with 1mm Graduation. Measuring in inches and centimeters	1			
5	CVP Manometer	Manometer tube with graduation from -4 cm to +34 cm and attached to three-way tap 120 cm. Molded clamps with elastic strings are provided for easy fixation on the I.V. stand	2			
6	COT	Semi Fowler Bed with Mattress and Side Rails (Manual) Material - Iron, Foam, Polyester Elevation Adjustments Available - BACK REST Width - 50 cm Height - 100 cm	1			
7	Finger Pulse Oxymeter	Measures pulse rate, oxygen saturation levels and perfusion index with accuracy of 70-100%. Battery operated, portable. Low battery indication and auto shut-off.	1			
8	Test tube Holder	Material - Iron Maximum Opening - 20 to 25 mm Length - 200 mm	10			
9	Test tube brush	Sleek design Flexible grip	10			
10	Dropper	Material - GLASS WITH RUBBER	10			
11	Nursing Mannequin	DT/T333 Advanced Multi - Fuctional Three year- Old Child Nursing Manikin	1			
12	Skinfold thickness measuring callipers	Skin fold Callipers: (Fat Callipers) Aluminum casting body with very accurate specially calibrated dial gauge. Least count better than 0.1 m.m. Maximum opening 50 mm.	1			
13	Digital Electronic Thermometer	Item Dimensions LxWxH 15 x 5 x 5 Centimeters	2			

9. Institute of Nursing Education, Manimalakunn

Sl.No	Item	Specification	Number Required	Rate	Total Amount	Total amount including GST
1	Simulator -Advanced abdominal palpation and delivery mechanism integrated simulator-		1			
2	Community Health Bag		20			
3	BP Apparatus	Electronic	2			
4	BP Apparatus	Manual	6			
5	Bed Sheet	Single cot Blue color	20			

10. Institute of Nursing Education, Pathanamthitta

Sl No.	Item	Specification	Number	Rate incl GST	Total Amount	Total amount including GST
1	Labour Examination table	Steel , [72x36x32],U hape cut with extra wide top & lithotomy rods	1			
2	Multiple option hospital bed	2.1x0.9x0.6meters	1			
3	Maternity examination simulator	Palpation, embryo heart sound auscultation, pelvic measurement and mammary nursing training. Inflating uterus through ball to make model to be lifelike. Adjustable heart sound speed, volume. Heart sound can be heard.	1			
4	Advance Suture Pad	Advanced suture training suture pad with wounds	1			

11. Department of Physiology,SME,Gandhinagar

Sl.No	Item	Specification	Number Required	Rate	Total Amount	Total amount including GST
1	Sphygmomanometer	Aneroid type	5			
2	Spirometer	New 3 ball type	2			
3	Sphygmomanometer	Digital type	5			

12.College of Teacher Education, Thottakad

Sl.No	Item	Specification	Number required	Rate	Total Amount	Total amount including GST
1	Stop Watch		4			
2	Weighing machine		1			

13. COLLEGE OF TEACHER EDUCATION VAIKOM

Sl.No	Item	Specification	Number Required	Rate	Total Amount	Total amount including GST
1	Multi meter Digital		1Nos			
2	Rheostat 34ohms		1NO			
3	Human skelton		1Nos			
4	Model of human teeth		1Nos			

14. UNIVERSITY COLLEGE OF ENGINEERING , THODUPUZZHA

Sl.No	Item	Specification	Number Required	Rate	Total Amount	Actual amount including GST
1	DIODE	1N4007	25			
2	Breadboard	830 point	10			
3	Transistor	BC107	20			
4	Thyristor	TYN612	20			
5	Zener Diode	5v6	10			
6	JFET	BFW10	5			
7	Wire Wound Resistor	100Ω, 5W	5			
8	Variable Pot	1K, 5 K, 10K, 47K	5			
9	Comparator	LM311	5			
10	Wire stripper		2			
11	Transformer	12-0-12 V	5			
12	Inductor	10 mH	3			
13	DSO probe	Attenuation type (1x10)	4			
14	CRO probe	Ordinary type	20			
15	Resistor 1/4 w	100 ohm	100			
16	Resistor 1/4 w	150 ohm	100			
17	Resistor 1/4 w	560ohm	20			
18	Resistor 1/4 w	1k	20			
19	Resistor 1/4 w	2k2	20			
20	Resistor 1/4 w	2k7	20			
21	Resistor 1/4 w	4k7	120			
22	Resistor 1/4 w	10k	120			
23	Resistor 1/4 w	12k	120			
24	Resistor 1/4 w	47k	100			
25	Resistor 1/4 w	1M	100			
26	Capacitor(PPC)	0.1 uf/100v	50			
27	Capacitor(PPC)	0.01 uf/100v	50			
28	Capacitor(PPC)	0.22 uf/100v	50			
29	Capacitor(PPC)	0.003uf /100v	20			
30	Electrolytic capacitor	1 uf/25v	70			
31	Electrolytic capacitor	2.2 uf/25v	70			
32	Electrolytic capacitor	3.3 uf/25v	50			
33	Electrolytic capacitor	10 uf/25v	70			
34	Electrolytic capacitor	22 uf/25v	70			
35	IC	uA741	60			
36	IC	NE555	60			
37	IC	CD4016	20			
38	IC	NE565	30			
39	IC	7400	20			
40	IC	7402	20			
41	IC	7420	30			
42	IC	7410	30			
43	IC	7473	10			
44	IC	7474	10			
45	IC	7476	35			
46	IC	7490	10			
47	IC	7495	10			
48	hook up wire	Single Strand 1/22	7			
49	Over Current Relay	Electromechanical Earth Fault /Over Current Relay Trainer Kit	1			
50	Over Voltage Relay	Electromechanical Earth Fault /Over Voltage Relay Trainer Kit	1			
51	Isolators for machines lab	2 POLE	8			
52	Isolators for machines lab	4 POLE	5			
53	Function Generator(ordinary)	2MHz,2chanal	6			
54	Precision signal/function generator	100 MHz 2Chanal	2			
55	power board	power bread board .5v,0 to +12v,0 to -12v	5			
56	Electronic balance	Min-2g, Max-1kg	1			
57	Stainless steel Hot water bath	30*25*10cm	1			
58	Wheel valve	1/2"	3			
59	Vaccum pressure metre	Pressure gauge 0-30 inch Hg-0-100psi, 63 mm diameter	1			
60	Metal jack plane	450mm	10			
61	Hand saw	Stainless steel	10			
62	Wood Chisel	1.5"	15			
63	Sledge Hammer	500gms	4			
64	Round Tongs	16"	10			
65	Measuring tape	30 meter	4			
66	Screw gauge	0-25mm stainless steel	2			
67	Vernier calipers	L C .1mm	2			
68	Ranging rod	MS pipe 25 mm dia & 2 m length	10			
69	Dumpy level	3 mtr	1			
70	levelling staff	aluminium 4mm	1			

15.DEPARTMENT OF MICROBIOLOGY, SME,GANDHINAGAR

Sl.No	Item	Specification	Number Required	Rate	Total Amount	Actual amount including GST
1	Incubator	Chamber Size (600x600x600 mm) Litres - 225	1			

2	Centrifuge	Maximum Speed (rpm) - 5250 Maximum RCF (g) - 300 Maximum Capacity (ml) - 300 Digital Speed Indicator Stepless speed regulator 0-99 minutes digital countdown timer Imbalance detector with cut off Safety Lid interlock to prevent cover opening during centrifugation	1			
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