



SPEEDPOST

**SRI BHARATA PATI MAHAVIDYALAYA, SAMANTIAPALLI,  
GANJAM**

([www.sbp.edu.in](http://www.sbp.edu.in))

(A Non-Govt. Aided College under Department of Higher Education, Odisha)

**Quotation Call Notice**

Ref. No-	Rate quotation for-
Date-	Laboratory chemicals and equipment

To

M/s

Dear Sir,

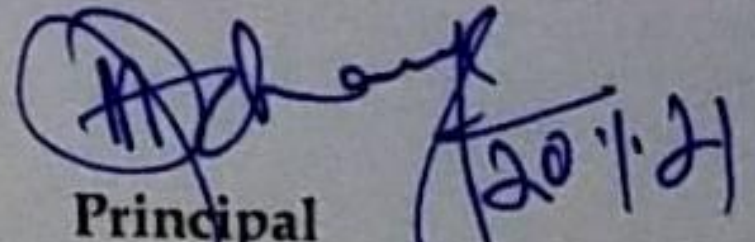
Principal, Sri Bharata Pati Mahavidyalaya, Samatiapalli, Ganjam intends to procure the following Electronics items through Tender/Quotation for improvement of Laboratories with Practical subjects in science and Humanities stream of the College. Wax sealed quotation is invited for Supply of Laboratory chemicals and equipment (Physics, Mathematics, Zoology and Chemistry Department) as specified in the attached list "Annexure-A" as per specification (mentioned at annexure-A) and terms & conditions noted below.

**Terms and Conditions:**

1. The Tender should reach the undersigned in a wax sealed cover by 12/02/2021 (Friday) by the 02:30PM.
2. Quotation is to be submitted by post/Courier only in sealed envelope with superscription "Rate Quotation for supply of Laboratory chemicals and equipment" and addressed to "The Principal, SBP Mahavidyalaya, Samantiapalli, Ganjam, Pin-761004".
3. The Tender will be opened on the same day at 03:30PM.
4. Absence of any bidder or their representative will not bar to open any tender.



5. The Tender received beyond stipulated date and time will not be taken into consideration under any circumstances
6. Indent will place to the successful bidder and materials must be supplied to the undersigned within 7 days' time from the date of receiving the indent.
7. The selection for procurement of equipment's will be based on quality and cost. The decision of the technical committee is final and binding, based on physical verification.
8. Payment will be made only after receiving the clearance report from the concerned departments following successful delivery and demonstration of the Ordered Items.
9. The under signed reserves the right to cancel the tender without showing any cause thereof.
10. The supplier should attach the GSTIN clearance certificate and ID proof with tender.
11. Sole authorized distributor certificate from the manufacturer in Original or Notarized, should be submitted.
12. Chemicals and instruments should preferably belong to the following brands- INSIF, AJANTA EXPORT, UNICON, SQLAB (SPA & LAB), SPANCO (For Physics instruments more preference given to INDOSAW, OMEGA, AELAB).
13. The under signed reserves the right to cancel any item/equipment without showing any cause thereof.
14. The dealer must show the guarantee and warranty card provided by the company and demonstrate before the export committee.
15. Certificate by the Supplier that the Item has not been sold at a price lower than that quoted to PEC during this financial year.
16. Earnest amount of Rs. 17000/- must be submitted in shape of Account payee demand draft in favour of "**Principal, SBP Mahavidyalaya, Samantiapalli, Ganjam**". Tender without EMD will be considered unresponsive and rejected. The firms who are registered with Director General of Supplies and Disposals (DGS & D) or National Small Industries Corporation (NSIC) are exempted from this bid security
17. Performance security of Rs. 17000/- must be submitted in shape of Account payee demand draft in favour of "**Principal, SBP Mahavidyalaya, Samantiapalli, Ganjam**" by the selected bidder, awarded the Contract, in the form of Account payee Demand Draft, which should be valid for a period 60 days beyond the completion of all contractual obligation of the supplier including warranty. Performance security is to be forfeited and credited to the institute in the event of breach of contractual obligation by the supplier, in terms of relevant Contract.

  
Principal  
Sri Bharat Pati Mahavidyalaya  
Samantiapalli, Ganjam  
Sri Bharatpati Mahavidyalaya  
SAMANTIAPALLI (Gm.)



Annexure-A  
DETAIL SPECIFICATION OF EXPERIMENTS

1. PHYSICS EQUIPMENTS:

SL NO	DETAIL SPECIFICATION OF EXPERIMENT (MAKE-INDOSAW, OMEGA, AELAB, SPANCO)	QUANTITY
	<b>MECHANICS LAB</b>	
1	<p><u>To determine the Modulus of Rigidity of a Wire by Maxwell's needle.</u></p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ Hollow cylindrical brass tube of length 40cm</li> <li>◆ Maxwell's needle, Wall Bracket, Wire</li> </ul> <p><u>Optional essential accessories</u></p> <ul style="list-style-type: none"> <li>◆ Screw gauge: Range:0-25 mm, Finish: Metallic</li> <li>◆ Meter scale-1meter</li> </ul> <p>Optional-Telescope with stand</p>	01
	<b>ELECTRICITY, MAGNETISM &amp; EMT</b>	
1	<p><u>To use a Multimeter for measuring (a) Resistances, (b) AC and DC Voltages, (c) DC Current, and (d) checking electrical fuses.</u></p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ Display :3 3/4 Big LCD Display</li> <li>◆ DCV: 6V to 600V, ACV: 600mV to 600V</li> <li>◆ Resistance: 400 Ω to 40MΩ, Capacitance: 50nF to 100μF</li> <li>◆ Frequency: 50 Hz to 100Khz</li> <li>◆ Temperature: 0°C to 400 °C</li> <li>◆ Continuity Test, Auto Power Off</li> </ul>	01
2	<p><u>To compare capacitances using De'Sauty's bridge.</u></p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ On Board Decade Resistance: Range :10 ,100 &amp; 1KΩ.-2nos</li> <li>◆ Standard Capacitors: 0.1 μf &amp; 0.2 μf</li> <li>◆ Unknown Capacitors :4nos</li> <li>◆ A.C supply of frequency: 10 KHz</li> <li>◆ Null Detector: Digital</li> <li>◆ Interconnection: 4mm banana patch cord</li> </ul>	01
3	<p><u>To Study the Characteristics of a Series RC Circuit.</u></p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ Built in DC Regulated Power Supply :0-12V (Variable)</li> <li>◆ Voltmeter: 0-12V (Moving Coil)</li> <li>◆ Galvanometer: 1-0-1 (Moving Coil)</li> <li>◆ Resistances :10KΩ,15KΩ &amp; 18KΩ</li> <li>◆ Capacitors: 1000 μf,2200 μf &amp; 4700 μf</li> <li>◆ Toggle Switch: 2way, Dump Switch: 1no</li> </ul>	01
4	<p><u>To Determine a Low Resistance by Carey Foster's Bridge</u></p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ DC Supply: 1.5V/250 mA (Switch Controlled)</li> <li>◆ Decade Resistance Box: 0.1Ω to 10 Ω-2nos (Fractional)</li> <li>◆ Galvanometer: 30-0-30 μA (Moving Coil)</li> <li>◆ DC Regulated Fixed Power Supply: 1.5V/250 mA</li> <li>◆ Fixed Resistors :10 Ω ±1% -2nos&amp;Carey Foster Bridge with jockey</li> </ul>	01
5	<p><u>To Verify the Thevenin and Norton Theorems</u></p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ DC Supply:12V/150mA (Variable)</li> <li>◆ Resistor: 500Ω/1W (Variable)</li> <li>◆ Resistor: 500Ω,200Ω &amp; 1KΩ (Fixed)</li> <li>◆ DC Voltmeter :0-12V (Moving Coil)</li> <li>◆ DC Ammeter: 0-20mA (Moving Coil)</li> </ul>	01



WAVE & OPTICS		
1	<p>To determine the Frequency of an Electrically Maintained Tuning Fork by Melde's. Experiment and to verify <math>\lambda^2 \propto T</math> Law.</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ Heavy steel fork, Heavy cast iron base, Electromagnet</li> <li>◆ Weight box 1, Voltage source 1.5V - 12V / 3A/2A,</li> <li>◆ Pulley with clamp</li> <li>◆ Reel of thread, Scale pan</li> </ul>	01
2	<p>To determine the Refractive Index of a Prism</p> <p>To determine refractive index of the Material of a prism using sodium source</p> <p>Dispersive power and Cauchy constants of the material of a prism using</p> <p><u>Technical Specification</u></p> <p>Spectrometer</p> <ul style="list-style-type: none"> <li>◆ Scale: Brass, Dia :6/7, L.C :30/20 Second</li> <li>◆ Objective: Achromatic lens, f : 178mm</li> <li>◆ Aperture :32mm, Slit: Brass with micrometre</li> <li>◆ Reticule: 90 crosses etched on glass</li> <li>◆ Eyepiece: 10X, Gauss eyepiece, in-built magnifier</li> <li>◆ Base: 190mm Triangular, Cast Iron Prism</li> <li>◆ Size: 38x38x38mm, Height: 38mm, Material : EDF</li> </ul> <p>Optional Essential Accessories</p> <ul style="list-style-type: none"> <li>◆ Sodium Vapour Lamp 35W, Transformer with Metal Box</li> <li>◆ Mercury Vapour lamp: 80/125W Transformer with metal Box</li> </ul> <p>Lamp House : 300x85mm(LxΦ), Aperture dia :25mm</p>	01
3	<p>To determine wavelength of sodium light using Newton's Rings</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ Microscope: Magnification -30X</li> <li>◆ Eyepiece: Ramsden 10x, Objective: 3x</li> <li>◆ Scale length: 110 mm,</li> <li>◆ Least count: 0.01 mm</li> <li>◆ Rotatable Cross line</li> </ul> <p>Optional Essential Accessories</p> <ul style="list-style-type: none"> <li>◆ Sodium Vapour Lamp 35W,</li> <li>◆ Sodium Lamp Transformer</li> </ul> <p>Sodium Lamp Housing with Metal Box</p>	01
THERMAL PHYSICS & STATISTICAL MECHANICS LAB		
1	<p>To determine the coefficient of thermal conductivity of a bad conductor by Lee and Charlton's disc method</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ Hollow metal box</li> <li>◆ MS chrome plated rod, Thread reel, MS painted base</li> <li>◆ Chrome plated brass disc,</li> <li>◆ Disc made of ebonite and glass</li> <li>◆ Steam generator,</li> <li>◆ Steam Chamber,</li> <li>◆ Glass beaker 250ml</li> <li>◆ Lee disc stand with base plate</li> <li>◆ Two thermometers: 10 to 100°C ,Rubber tube</li> </ul>	01
2	<p>To study the variation of thermo emf across two junctions of a thermocouple with temperature.</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ Copper-Iron Thermocouple &amp; Potentiometer: 10 wire</li> <li>◆ Water containing Beaker: 250ml 2Nos</li> <li>◆ Heating Arrangement</li> <li>◆ DC Voltage: 2V &amp; 4V/100mA</li> <li>◆ DC Voltmeter: 20V &amp; 200mV (Switch Select)</li> <li>◆ Ammeter: 0-200mA</li> <li>◆ Resistance: 1Ω-10000Ω &amp; 1KΩ -10KΩ</li> <li>◆ Thermometer :10-100°C -2nos</li> <li>◆ Sensitive Galvanometer 30-0-30,</li> </ul>	01



3	<p>Stand for Thermocouple with base plate</p> <p>To determine the coefficient of thermal conductivity of Cu by Searle's Apparatus.</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>▶ Searle's Thermal Conductivity Apparatus</li> <li>▶ Thermometers (1/10°C) - 4nos</li> <li>▶ Constant Level Tank</li> <li>▶ Steam Boiler with Heating Arrangement</li> <li>▶ Rubber Tubing, Measuring Flask</li> </ul>	01
4	<p>Measurement of Planck's constant using (blackbody) radiation and Photo detector.</p> <p><u>Technical Specification</u></p> <p>SELECTOR SWITCH AT V-I POSITION</p> <ul style="list-style-type: none"> <li>◆ Voltmeter &amp; current Display: 3½ digit, 7segment,</li> <li>◆ Voltage Range: 0.000-2.000V, Current Range: 0-2000mA</li> </ul> <p>SELECTOR SWITCH AT T-I POSITION</p> <ul style="list-style-type: none"> <li>◆ Current Display: 3½ digit, 7segment LED</li> <li>◆ Current Range: 0-20mA</li> <li>◆ Temperature Display : 3½ digit, 7segment LED</li> <li>◆ Temperature Range : Room temperature to 60.0°C</li> <li>◆ Oven , Oven Connector : 5 Pin, DIN type</li> <li>◆ LED Connector : 3 Pin, DIN type</li> </ul> <p>OVEN WITH TEMPERATURE SENSOR</p> <ul style="list-style-type: none"> <li>◆ Heating Element : 20 ohm, Oven Connector : 5 Pin, DIN</li> <li>◆ Ambient Temp. : 60° C, Temp. Sensor : Pt100</li> </ul> <p>Output Pin : Heater pin 4 &amp; 5., Temperature pin 1 &amp; 2</p>	01
<b>ANALOG SYSTEM &amp; APPLICATIONS</b>		
1	<p>To study the V-I characteristics of a Zener diode and its use as voltage regulator.</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ Variable DC supply:0-15V</li> <li>◆ Voltmeter Range:0-15V</li> <li>◆ Ammeter Range:0-15mA</li> <li>◆ Ammeter Display : 3 ½ Digit LCD</li> <li>◆ Voltmeter Display : 3 ½ Digit LCD</li> <li>◆ Variable pot :500K -1no</li> <li>◆ Interconnection :4mm patch cord</li> <li>◆ Resistance:1kΩ-3nos</li> </ul> <p>Zener Diode : 6V,9V&amp;12V, Mains Power :230V/50Hz</p>	01
2	<p>Study of V-I &amp; power curves of solar cells, and find maximum power point &amp; efficiency.</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ DC Ammeter Range : 0- 20mA</li> <li>◆ DC Voltmeter Range : 0-500mV</li> <li>◆ Ammeter Display : Analog Moving Coil</li> <li>◆ Voltmeter Display : Analog Moving Coil</li> <li>◆ Solar Cell ,</li> <li>◆ Light Source : 100W with intensity control</li> <li>◆ Range Selector Restive Load : 10Ω,22Ω,47Ω,56Ω,68Ω, 82Ω,100Ω,150Ω,180Ω &amp; 1KΩ</li> </ul>	01
3	<p>To study the characteristics of a Bipolar Junction Transistor in CE configuration</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ DC Supply :0-1V/100mA (Variable) &amp; 0-10V/100mA (Variable)</li> <li>◆ DC Voltmeter Range :0-1V &amp; 0-10V</li> <li>◆ DC Ammeter Range :0-250μA &amp; 0-50mA</li> <li>◆ Ammeter Display : Analog Moving Coil</li> <li>◆ Voltmeter Display : Analog Moving Coil</li> <li>◆ Transistor : NPN &amp; PNP</li> <li>◆ Interconnection :4mm patch cord, Mains Power :230V/50Hz</li> </ul>	01
4	<p>To design an inverting amplifier using Op-amp (741,351) for dc voltage of given gain.</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ DC Supply :+12V &amp; -12V Fixed</li> <li>◆ DC Supply : 0-5V Variable</li> </ul>	01



	<ul style="list-style-type: none"> <li>◆ Resistor : 1K<math>\Omega</math>-2nos,10K<math>\Omega</math></li> <li>◆ OpAmp-IC741</li> <li>◆ DC Voltmeter : 0-5V-2nos</li> <li>◆ Display : 3 ½ Digit</li> <li>◆ Interconnection:2mm patch cord</li> </ul>	
5	<p>To investigate the use of an op-amp as an Integrator &amp; Differentiator,</p> <p><u>Technical Specification</u></p> <p>DC Supply: +12V &amp; -12V Fixed  AC Signal:10KHz, AC Voltage:1V  OPAMP-IC741  Resistor : 1K<math>\Omega</math>,10K<math>\Omega</math>-2nos,100K<math>\Omega</math>-2nos,1M<math>\Omega</math>,10M<math>\Omega</math></p>	01
<b>ELEMENTS OF MODERN PHYSICS</b>		
1	<p>To show the tunneling effect in tunnel diode using I-V characteristics</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ Inbuilt Fixed DC regulated power supply</li> <li>◆ DC Voltmeter: 0-600mV</li> <li>◆ DC Ammeter: 0-50mA</li> <li>◆ Tunnel Diode: IN 3717</li> </ul>	01
2	<p>To determine the wavelength of laser source using diffraction of single slit &amp; double slits</p> <p><u>Technical Specification</u></p> <p>OPTICAL BENCH -Black Colour Alloy Iodinated, Precision scaling of LC 1mm</p> <ul style="list-style-type: none"> <li>◆ DIODE LASER- Peak wave length: 635nm Operating voltage: 5V DC,</li> <li>◆ Operating current: 250mA, Optical power: 0.4-0.8mW,</li> <li>◆ Laser product: Class II, Operating temp. : 0 - 40°C,</li> <li>◆ Storage temp.: -10 to 50°C</li> </ul> <p>PIN HOLE PHOTO DETECTOR</p> <ul style="list-style-type: none"> <li>◆ Detector : Silicon photocell,</li> <li>◆ Terminals : 4mm safety socket,</li> </ul> <p>Aperture : 1 mm, Rod : 10 mm diameter</p>	01
3	<p>To determine the Planck's constant using LEDs of at least 4 different colours,</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ DC Supply :0-5V/150mA</li> <li>◆ DC Voltmeter : 0-5V</li> <li>◆ DC Ammeter: 0-2000<math>\mu</math>A</li> <li>◆ LED : RED-630nm,</li> <li>◆ YELLOW-578nm,BLUE-436nm, GREEN-546nm</li> </ul>	01
<b>DIGITAL SYSTEMS AND APPLICATIONS</b>		
1	<p>To measure (a) Voltage, and (b) Frequency of a periodic waveform using a CRO</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ 30MHz Dual Trace Dual Channel 1mv Sensitivity</li> <li>◆ CRT Type: 6-inch rectangular with internal graticule 8x10div (1div=1cm).</li> <li>◆ Bandwidth :X1 - DC (AC 10Hz) ~20MHz (-3dB)</li> <li>Mode:Ch1,Ch2,Dual(Alt/Chop)Add,Ch2 INV</li> </ul>	01
2	<p>To design an astable &amp; monostable multivibrator of given specifications using 555 Timer</p> <p><u>Technical Specification</u></p> <ul style="list-style-type: none"> <li>◆ DC Supply : 5V,</li> <li>◆ IC : NE555,</li> <li>◆ Led Indicator : 2nos</li> <li>◆ Resistor : 100K<math>\Omega</math>-2nos,10K<math>\Omega</math>-2nos,1K<math>\Omega</math></li> <li>◆ Capacitor :1<math>\mu</math>F,0.1<math>\mu</math>F-2nos,0.01<math>\mu</math>F-2nos,10<math>\mu</math>F</li> <li>◆ Variable Resistor : 5K<math>\Omega</math></li> <li>◆ 20MHz Dual Channel Analog Oscilloscope</li> </ul>	01
<b>SOLID STATE PHYSICS</b>		
1	<p>To Measure the Dielectric Constant of a Dielectric Materials with frequency</p> <p><u>Technical Specification</u></p> <p>Actual capacitor :18pf,13pf,10pf,8pf  Test capacitor without dielectric : 80pf,88pf,91pf,94pf  Test capacitor with dielectric :25pf,46pf,60pf,70pf  High Frequency Oscillator :100KHz</p>	01



	<p>Gang Condenser :0 to180°  The unit is compiled on a Hylem Board, Inter Connection :4mm</p>	01
	<p>To determine the Hall coefficient of a semiconductor sample.  <u>Technical Specifications</u>  ELECTROMAGNET - Made of soft iron, specially design for Hall Effect experiments, mounted on a wooden base for stable performance, Pole pieces :- 50mm dia. tapered type  Field :- 7.5kg at 10mm. air gap, Energizing Coils :- Two coils  DIGITAL POWER SUPPLY FOR ELECTROMAGNET - 0 - 6Amp, 60V digital display, It is a constant current power supply, with long time operation and continuously variable current.  DIGITAL GAUSS METER: Range: 0-2 K Gauss &amp; 0-20 K Gauss, Resolution: 1Gauss at 0-2 K Gauss Range, CONSTANT CURRENT POWER SUPPLY:  (i) Digital Mill voltmeter Range: 0-200mV/2000mV (100μV minimum) Accuracy : ±0.1% of reading ±1 digit  (ii) Digital Mill Ammeter Range : 0-10mA/20mA Accuracy : ±0.1% of reading ±1 digit  (iii) Constant Current Power Supply Current : 0-20mA Resolution : 10μA Accuracy : ±0.2% of the reading ±1 digit  Load regulation : 0.03% for 0 to full load  Line regulation : 0.05% for 10% variation</p>	01
3	<p>To measure the resistivity of a semiconductor (Ge) crystal with temperature by four-probe method  <u>Technical Specification</u>  FOUR PROBE ARRANGEMENT  Oven (up to 200°C)  Thermocouple Sensor (With Probe)  Sample : Ge Crystal mounted  Thermometer (0-200°C)  Four Probe Setup  Output Brought Out Through 4mm Banana Plugs. Constant Current Power Supply 20mA</p>	01
	<b>ELECTROMAGNETIC THEORY</b>	
1	<p>To verify the Stefan's law of radiation and to determine Stefan's constant.  <u>Technical Specification</u>  DC Power Supply : 12V/250mA  DC Voltmeter : 0-12V  DC Ammeter :0-250mA, DC Bulb :12V  Interconnection : 4mm banana patch cord  Mains Power :230V/50Hz</p>	01
2	<p>To determine the specific rotation of sugar solution using Polarimeter.  <u>Technical Specification</u>  POLARIMETER TUBE  Length :200mm with central bulb, metallic cap &amp;cover glasses packed in a velvet case  LAURENT'S HALF SHADE  Circular scale :0°-360°, Least count :1°  Vernier Reading :6 min, Dimensions :Dia 12mm, length 200mm  ESSENTIAL ACCESSORIES  Sodium light source, Transformer &amp; Metal Housing</p>	01
3	<p>To determine value of Boltzmann constant using V-I characteristic of PN diode.  <u>Technical Specification</u>  Digital DC Voltmeter to measure the voltage across the diode.  Highly stabilized variable D.C. power supply ( 0 - 2Volts).  Digital Milliammeter to measure forward bias current in diode.  Silicon Diode mounted inside the cabinet.  Temperature controlled oven 70°C to heat the diode for different set of readings.  Digital temperature indicator to measure temperature directly</p>	01



**Other Essential Accessories (Physics):**

1. Bread Board-10 Pcs.
2. Transistor (BC547)- 100 Pcs.
3. Diode- 100 pcs.
4. Resistor- 100 pcs.
5. Diffraction Grating (15000 lines/inch) - 2 Pcs.
6. DCC Wire- 1/2 KG
7. Prism (38\*38)- 2 Pcs.
8. Prism (50\*50)- 2 Pcs

**2. BOTANY EQUIPMENTS:**

SL NO	NAME OF EQUIPMENT (WITH SPECIFICATION)	QUANTITY
1	UV-Vis Single Beam Spectrophotometer 190 - 1000 nm with Spectral Bandwidth - 1nm, with scanning Software (IMPORTED OPTICS)	01
2	Refrigerated Micro Centrifuge Machine 16000 RPM	01
3	Binocular Microscope	01
4	Gel Electrophoresis Apparatus (with Power Supply for Gel Electrophoresis App.)	01

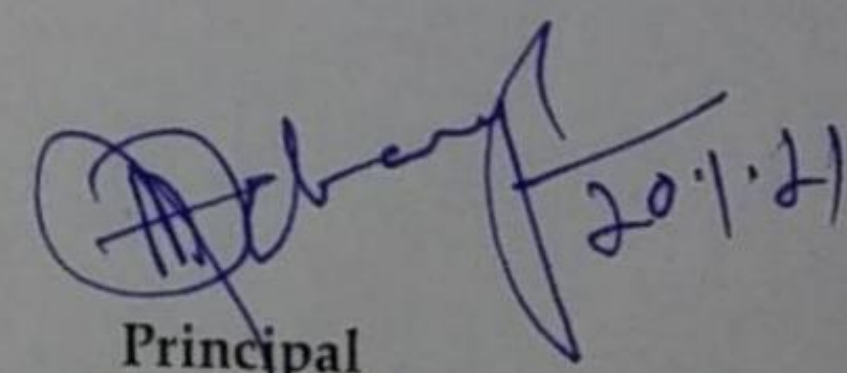
**3. ZOOLOGY EQUIPMENTS:**

SL NO	NAME OF EQUIPMENT (WITH SPECIFICATION)	QUANTITY
1	pH Meter microprocessor Based with Auto Temp. (Technical Specification: A research grade instrument with 16 x 2 alpha numeric Large LCD display, Auto temperature compensation, and auto buffer recognition along with accessories.)	01
2	Centrifuge Bench Top (Lab Type)	01
3	Paper Chromatography Unit	01
4	Digital Weighing Balance - (500 gm .01 gm)	01
5	Laminar Air Flow Inner Working Area 2 x 2 x 2 M.S	01
6	BOD Incubator (Technical Specification: 4 cu. Ft. (455x410x610) Inner SS Outer MS Powder Coated Temp. Range 5 to 50 C with 1 c accuracy. With Digital Temp Indicator cum Controller.)	01
7	Hot Air Oven (Technical Specification: 14 x 14 Inner SS outer MS powder Coated)	01
8	Microtome	01
9	Ice Cooled Chamber (Refrigerator) (Single door, Capacity-180 litres., Four Star, Brand- LG/ Whirlpool)	01



4. CHEMISTRY EQUIPMENTS:

SL. NO	NAME OF EQUIPMENT & CHEMICALS	QUANTITY
1	Calorimeter Copper 3" x 2"	10 Pcs.
2	Tripod Stand 6" x 4"	50 Pcs.
3	Wire Gauge	50 Pcs.
4	Pipette 10 ml	20 Pcs.
5	Titration Stand	50 Pcs.
6	Beaker 250 ml	20 Pcs.
7	Burette 50 ml	20 Pcs.
8	Clay Pipe Triangular	20 Pcs.
9	Filter Stand	10 Pcs.
10	Dropper	10 Pcs.
11	Conical Flask 250 ml	20 Pcs.
12	Ethyl Alcohol	1000ml
13	Conc. HCL-500ml	1000ml
14	Conc.HNO <sub>3</sub> -500ml	1000ml
15	KOH (solid)-500gm	1KG
16	Bunsen Burner	20 Pcs.
17	Water Bath 6 Hole (good Quality)	01 Pcs.
18	Ice Cooled Chamber (Refrigerator) (Single door, Capacity-180 litres., Four Star, Brand- LG/ Whirlpool)	01
19	Demonstration Table	01

 20.1.21

Principal  
Sri Bharat Patil Mahavidyalaya  
Samantipalli, Ganjam  
Sri Bharat Patil Mahavidyalaya  
SAMANTIAPALLI (Gm.)