

Govt. Revati Raman Mishra P.G. College, Surajpur, Dist- Surajpur (C.G.)

(Items to be purchased from RUSA fund)

1. LAB INSTRUMENT

S. No.	Instruments	Company Name	Quantity	Specification
Department of Chemistry				
1	Ultraviolet Inspection Cabinet	Mac (Macro Scientific works Pvt.ltd)	3	Supplied with 3 tubes to work on 230 volts A.C only with Day Light, Short Wave (254 mm) & Long Wave (365 mm) light source; with enclosed viewing space; Control switches mounted on top of the unit; Dimension: 20*12*15 inches
	TDS meter portable	modernScientific instrumentsco.	2	Pocket size
2	Magnetic Stirrer with hot plate	Mac (Macro Scientific works Pvt.ltd)	5	Max. stirring quantity: 2 Ltr; Stirring Paddle (ceramic coated); Power : 500 watt; Temperature and stirring control
3	Fridge - 20 ⁰ C	LG	3	Dimensions: 170H x 70D x 60W cm Frost-free double-door; 375 litre
4	Melting Point Apparatus	Mac (Macro Scientific works Pvt.ltd)	4	Temperature Range : 0-300° C Digital temp , indicator cum controller

5	Microcentrifuge 6000 rps	Thermo FISHER SCIENTIFIC	1	Max. Speed (RPM) :: 6000 rpm
6	Micropipette 200 µL	MEDICAL EXPO	2	Standard size; Variable volume pippet; Range 20-200 µL
7	Micropipette 1 mL	MEDICAL EXPO	2	Standard size; Variable volume pippet; Range 200 µL-1mL
8	POLARIMETER	Standard suppliers	1	3 DIGIT led display
9	Heating Mantle 1 L	modernScientifi c instrumentsco	3	Capacity: 1000ml ; Accuracy: ±1°C; Max temperature: 380°C; Voltage 220 V Power: 530W; Insulating layer; Temperature regulation with auto-cut
10	pH meter	Mac (Macro Scientific works Pvt.ltd)	3	Dual display alphanumeric led and led 4 digit display Range for pH 0-14 with buffer solution; Digital output; Relative Acc.: 0.01 pH, mV: 0.001mV, Temp. Compensation: 0 to 1000 C; Power Requirement 230 V AC/, 50Hz; pH combined Glass electrode, Electrode stand, buffer (7 & 4),
11	Weighing balance in 4 digits	modernScientifi c instrumentsco.	1	Standard size with four digit accuracy, least count 0.0001g Glass casing around, water drop indicator for labeling, digital display of weight in multiple units, Power: 100-240 V AC Dimen: 275*188*300 mm Working temperature 5-40 degree; Maximum capacity 30 gm
12	Vacuum Oven with vacuum pump	modernScientifi c instrumentsco.	1	Micro processor controlled Double walled, withstanding vacuum of 760 mm Hg, Temperature Range 50°C to 150°C, Height 300 mm, Diameter 300 mm, Load 2 KW, Voltage 220/230 V, AC 50 Hz, Stainless Steel, Timer Facility, No. of Shelves 1.0
13	Vacuum Pump with oil	Mac (Macro Scientific works Pvt.ltd)	1	Air Displacement - 25 Ltrs/minute (single stage); Low vacuum cum Low Pressure Double Stage pump to create vacuum through a TEFLON diaphragm; Workable on Single Phase 220 / 230 volts A.C. supply.
14	Ice Flake Maker	LG	1	Stainless steel body and rigid plastic cabinets. Ice shape should be steady. User-friendly electronic controls. Energy and water efficient Low noise. High efficiency CFC free

				compressor. Ice and water level indicator. Fully automatic control. Overload protection. Power Consumption 420 W, Temperature 20°C
15	Muffle furnace with microprocessor	Mac (Macro Scientific works Pvt.ltd)	1	Temp. range upto 900°C
16	uv-vis spectrophotometer with computer	Agilent Cary 60 uv-vis	1	comprises a double beam, Czerny-Turner monochromator, 190–1100 nm wavelength range, 1.5 nm fixed spectral bandwidth, full spectrum Xenon pulse lamp single source with exceptionally long life, dual silicon diode detectors, quartz overcoated optics, scan rates up to 24,000 nm/min, 80 data points/sec maximum measurement rate, nonmeasurement phase stepping wavelength drive, room light immunity, central control by PC with Microsoft® Windows® operating system. Supported by GLP software, optional 21 CFR Part 11 capable software, and dedicated instrument validation software which includes pharmacopeia test suites.
17	Rotary vacuum evaporator with vacuum pump oil free	Buchi	1	Hand Lift 1 Heating Bath B-301 / B-305 1 Glass assembly 1 Vapor duct (with Combi-Clip) 1 Vacuum seal (WD26) 1 Evaporating flask (1 liter) 1 Receiving flask (1 liter) 1 Flyer “List of solvents” 1 Set of required cooling and vacuum tubings 1 Set of required power cables 1 Interface I-300 / I-300 Pro 1 VacuBox 1 Communications cable. BUCHI COM 6 p Vacuum Pump V-300 1 Recirculating Chiller F-305 / F-308 Communication cables are included
18	Digital flame photometer	Mac (Macro Scientific works Pvt.ltd)	2	Supplied with two filters (Na and K) , 2 ½ Digit LED Display, Oil Free Air compressor, Air Filter with Pressure Regulator & Gauge, Atomizer Tube, Gas Lighter, Sample Beaker (05 Nos), LPG Tube, Air line PU Tube
19	Digital conductivity meter microprocessor based	Mac (Macro Scientific works Pvt.ltd)	4	Dual display alphanumeric lcd and led 4 digit display Range 0 to 20, 200 µS* 0 to 2, 20 & 200 mS* Readability 0.05 % of Range Accuracy ± 1% of Range Repeatability ± 1% of Range .Readout 3½ digit 7 segment LED of . 12.7mm height. TEMP. COMPENSATION 0 to 50°C Manual TEMP. CO-EFFICIENT 2% CELL CONSTANT 0.1, 0.5 or 1.0 (Selectable) OUTPUT 20 mV Full Scale into 10 kΩ Resistive Impedance.
20	Digital conductivity tds meter	Mac (Macro Scientific works Pvt.ltd)	1	Microcontroller Based Dual display alphanumeric lcd and led 4 digit display Measures Conductivity and TDS Auto Ranging Facility

				Auto Cell Constant Measurement 3½ Digit Display
21	Digital nephlo/turb. Meter	Mac (Macro Scientific works Pvt.ltd)	2	<p>led 4 digit display . Detector Photocell Photodiode. Range 0-20 AND 0-200 NTU. Resolution 0.01 NTU. Accuracy ±2% FS ± 1digit. Sample Systems 30 mm Clear Glass Test. Light Source 6V Tungsten Lamp. Power 230V±10%, 50Hz AC. Display 3½ Digital LED. Detector Photocell Photodiode. Range 0-20 AND 0-200 NTU. Resolution 0.01 NTU. Accuracy ±2% FS ± 1digit.</p>
22	Digital potentiometer	Mac (Macro Scientific works Pvt.ltd)	4	<p>3 ½ Digit LED Display Single touch self calibration Simple Master Reset</p>
23	Digital photo colorimeter	Mac (Macro Scientific works Pvt.ltd)	2	Micro processor with lcd display 230V AC MSW -559
24	Mini rotary flask shaker	Mac (Macro Scientific works Pvt.ltd)	2	<p>Complete body mounted on heavy mild steel angle iron frame. Top platform made up of Mild Steel painted with rubber disc or Stainless Steel clamps . Speed Range from 80 to180 rpm (approx).</p>
25	TLC kit	Mac (Macro Scientific works Pvt.ltd)	1	<p>a) Spreader (Applicator) made of electroplated brass. b) Perspex base size 114 x 23 cm. to support 5 glass plates of size 20 x 20 or 10 of 20 x 10 cm. and two plates of 20 x 5 cm.</p>

				<p>c) Drying plate rack anodized aluminum for ten 20 x 20cm. plates.</p> <p>d) Spotting Template Perspex.</p> <p>e) Developing tank with lid.</p> <p>f) Five Glass plates 20 x 20cm. and two end plates 20 x 5 cm. or Ten 20 x 10 cm. and two 20 x 5 cm. plates.</p> <p>g) Micro pipette corning glass.</p> <p>h) Scriber.</p> <p>i) Glass Sprayer with rubber bellow.</p> <p>j) Instruction Manual</p>
26	Water bath rectangular	Mac (Macro Scientific works Pvt.ltd)	2	TEMPERATURE Range Ambient +2°C to 100°C, Accuracy±0.1°C, Uniformity ±0.1°C, Setting, Membrane keypad, Control Microprocessor Display Digital to 0.1°C, Speed (slightly lower at 50 Hz) 20 to 400 rpm, DIMENSIONS Overall, W x D x H(26 x 23 x 21) in (66 x 58 x 53) cm bath (21 x 15 x 7.5) in(53 x 38 x 19) cm
27	Split ac	LG	3	2 TON
Department of Zoology				
28	Compound Microscope monocular	modernScientific instrument sco.	10	Model HSA olympus
	Large rotator microtome (open type)	modernScientific instrument sco.	1	Mic-72
	Dissecting microscope	modernScientific instrument sco.	5	entomological
29	Compound	modernScientific	1	magnus ms-til with light system olympus

	Microscope bionocular	instrument sco.		
Department of Botany				
30	Trinocular research microscope with 35 mm SLR camera	modernScientific instrument sco.	1	Mic-9
31	Complete Electrophoresis Unit	modernScientific instrument sco.	1	Corrosion resistant gold plated lid terminals with retractable connectors compatible with most major power supplies. Application Includes a 15 x 7 cm, 15 x 10 cm, and 15 x 15 cm UV Trays, 2 x 20 sample combs, loading guides and dams.
32	Phase contrast dark field bionocular microscope	modernScientific instrument sco.	1	MIC-7
33	AUTO CLAVE VERTICAL	modernScientific instrument sco.	1	22 Lit., msw-101 (hp)
	Plant growth chamber	modernScientific instrument sco.	1	MIC239, 147 lit.
	Horizontal laminar flow cabinet stainless steel	modernScientific instrument sco.	1	Model – LH42 4feet x2 feet x2 feet
	Hot air oven 95 lit	modernSci	2	Digital controlled

		entific instrument sco.		
	Incubator 45 lit. digitally controlled	modernScientific instrument sco.	1	MIC-121
	Compound Microscope with oil immersion lens	modernScientific instrument sco.	1	olympus
	Chromatography cabinet research grade	modernScientific instrument sco.	2	MICC-2 24INCH x12 INCH x24 INCH
	Zoom stereoscopic binocular microscope	modernScientific instrument sco	1	MIC-19
	BOD incubator	modernScientific instrument sco	1	MIC-237, 65 lit.
	Counting chamber	modernScientific instrument sco	2	MICH-8 with bright line
	Ocular micrometer	modernScientific instrument	2	1Cm-100div.

		sco		
	Stage micrometer	modernScientific instrument sco	2	1Cm-100div.
Department of Physics				
34	Zeeman Apparatus (Complete Set)	Standard suppliers	1	Constant deviation spectrograph Calibration range: 4000 Å – 7000 Å, ± 10 Å; Constant deviation spectrograph prism ($\mu= 1.71$); Fabry-Perot Etalon. Glass plates size: 32mm; Clear aperture: 25 mm R/T= 80/20 + 5%; Micrometer eyepiece. Range: 25 mm (Least Count: 0.01mm) Eyepiece Magnification: 10x; Electromagnet 10 kilo Gauss at 10 mm gap between its poles; Digital Constant Current Power supply (30V;10Amp); Neon discharge tubes (2 Nos.); Wooden stand with clamp for holding discharge tube; High voltage transformer to run the above discharge tubes (Voltage Range: 1KV – 4.5KV); Digital Gauss meter with probe 0-20 KG
35	Thomson Apparatus (Complete Set)	Standard suppliers	1	Should be designed to Measure CATHODE RAY TUBE CHARACTERISTICS "e/m" by Bar Magnet Method. simple 01 Cathode : Unipotential oxide apparatus to measure the value of e/m experimentally. 02 Heater Voltage : 6.3 Volts AC or DC; 03 Heater Current : 0.15 ± 0.015 Amp.
36	Calorimeter	Local	2	Vessel Volume Range 50 mL, 100 mL; Jacketed Vessel Shapes-Torispherical, Conical, Temperature Range -90°C to 250°C (with seal kit)
37	Table (Honeycomb hole)	Local	1	Rigid supporting stand with leveling mechanism. Mild Steel Stand; Top plate of 6mm thick Stainless steel sheet.; Bottom plate 3mm thick made of Aluminium holes with 25mm center distance. 4 Ft * 3 Ft
38	Mercury Lamp	Standard suppliers	2	175 W

2. Smart Classroom

S. No.	ITEMS	Company	Quantity	Specification
1	Projector	Epson/Sony	2	Dimension: 31.5 x 23 x 7.5 cm; Aspect Ratio 4:3; Digital Zoom 1.35 X; Horizontal Resolution 1024 Pix; Max Vertical Resolution 768 Pix; Noise Level 37 dB; Wattage 220 Watts; USB Ports 1; Remote
2	Projector Screen and tripod stand	Local	2	Size: - 8 Ft. x 6 Ft.; Compatible with all Projectors; With UHD, 3D and 4K; Spring Action Mechanism; Material Imported Super High Gain Matt White Black Coated Fabric
3	Molecular models	Authentic suppliers	4	Plastic Generic Molecular Model Set With Box Organic And Inorganic Chemistry; Material Type(s) Plastic; Multi Color
4	Computer tables	CSIDC	2	Dimen(cm): 750W * 400D * 750H Rigid Steel frame with fixed table top, with slideable keyboard tray, CPU and UPS panel and foot rest
5	Podium	Standard suppliers	2	Fabricated from Steel Sheets, MDF Boards & Laminated Wood, In Dimensions: Height 107.95 cm; Floor Area: 50.80cm x 40.64cm, In-built Tube Light in the Wooden Top to Increase Readability in Dim Lighting Conditions.
6	Mike	Standard Electronic supplier	2	Fixed-Frequency Design; Dual set up, Wireless Receiver; two sets of VH200 Handheld Q6 Transmitters; 1/4" Outputs; 200' Operating Range (Line-of-Sight), with AC adapter
7	Sound system	Standard Electronic supplier	4	high output of up to 15 W, with deep bass, in-built battery of 1800 mA with playback time of approx 12-18 hours in microphone mode.
8	Laser pointer	Standard Electronic supplier	2	Laser Pointer 2.4G RF Remote Control Pen, Power Supply: 200mAh,3.7V (lithium battery), Wireless Distance: about 50m, Size: 13.4cm * 1.8cm * 1cm

9	UPS	Intex/ luminous/ apc	2	Weight 4.7 Kg; Dimens. 23.7 x 10.7 x 21.8 cm; Batteries: 1 Lithium Polymer batteries included; Wattage: 360 Watts; Battery Standby Life 20 Minutes; Battery Life (in hours) 3 Years; Lithium battery Voltage 230 Volts
10	Extension Boards	Havells/ Orient/ Philips	4	Surge capacity: 6500; LxWxH: 8.7x4.5x38.5 cm; Power: 2400 watts, Voltage: 240 volts, Freq: 50 hertz; Heavy duty 3 Core x 0.75 Sq. mm power cable of 2 meters length; Equipped with 4 universal sockets with shutters for safety
11	Desktop Computer	Hp/Dell	2	8th Gen, Intel Core i5, 8 GB DDR4 RAM, 1TB hard drive, 15.6-inch Full HD, Keypads and mouse
12	Airconditioner	Gem	2	2 ton
Total				

4. COMPUTER

S. No	Description	Proposed Quantity	Specification
1	Computers With UPS	10	8th Gen, Intel Core i5, 8 GB DDR4 RAM, 1TB hard drive, 15.6-inch Full HD, Keypads and mouse with UPS & AC 110-260 V/50/60 Hz, laser printer, black and white, 2-inch LCD display and copy, scan and print options. hi-speed USB connectivity.

2	Printer	10	EPSON (3 in 1 print ,copy, scan)
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3. CLASSROOM FURNITURE

S. No.	ITEMS	Quantity	Specification	Remark
1	Student Dual Desk	160	3 seater	

5. OFFICE FURNITURE

S. No.	ITEMS	Company	Quantity	Specification
1	Almirah	Gem	20	godrej
2	Computer table	Gem	10	godrej
3	Computer Chair	Gem	10	godrej
4	Faculty Chairs	Gem	10	godrej

5	Conference chair	Gem	20	godrej
6	Office table	Gem	5	godrej

