



Mohanlal Sukhadia University

मोहनलाल सुखाड़िया विश्वविद्यालय, उदयपुर, 313001

NAAC-SSR (Assessment Year: 2017-22)

Criterion- 3

Research, Innovations and Extension

Key Indicator 3.1:

Promotion of Research and Facilities

Metric 3.1.1:

Additional Information

Additional Information 3.1.1.

The University has a long-standing tradition of research in key areas of Science and Technology, as well as in Commerce and Management, and in Social Sciences and Humanities. All the departments of constituent colleges have a strong orientation towards research, in addition to education and training. A significant number of students are in fact, research scholars pursuing Ph. D. and other research-based programmes. Research is undertaken with the use of state-of-the-art instruments and up-to-date experimental facilities set up in-house to encourage specific research programmes. As frontrunners of research in the country, the departments in the MLSU update their experimental facilities on a regular basis. The policy of promoting research is framed to meet all the research needs of the University.

Adequate funding is provided by various government and non-government agencies like UGC, DST, DBT, MoES, ICSSR and RUSA so that periodical upgrading of the research facilities can be done without any financial constraints. Enhancement of research facilities is made possible through capital projects, which enable both addition of new facilities, as well as refurbishing or updating existing facilities. The institute also has a code of ethics of research, a strict plagiarism check policy and an Institutional animal ethical committee to ensure that the ethical value of the research is upheld.

The University promotes research by its faculty and its scholars through its Research Advisory Committee (RAC) which was established in 2012 and comprises temporary members who serve the committee for a stipulated period. The RAC ensure the upkeep of all ethical matters relating to research. It screens research proposals for their feasibility, social relevance and applied value. The University also facilitates the participation of its faculty members in seminars, conferences, workshops, etc., at national and international levels. Further, it supports the smooth conduct of departmental seminars and community outreach programmes. The University encourages staff and students to travel to National and international conferences to present their research.





EQUIPMENT AND FACILITIES WITH THE UNIVERSITY FOR RESEARCH ACTIVITIES

S. No.	Item name	Make	Price (Rs. in Lakh)	Application
1	Laminar Air Flow	Yorco	0.70	Used for inoculation of test organisms
2	Autoclave	Yorco	.030	Used for sterilization of media
3	Hot Air Oven	Yorco	0.30	Used for sterilization of glassware
4	Incubator shaker	Dihan Labtech	USD 3200	Used to cultivate microorganisms
5	Nanodrop Spectrophotometer	Nabi	4.30	For DNA quantification purpose
6	Thermocycler (PCR machine)	Banglore Genei	4.00	For DNA amplification purpose
7	Gel Imaging System	Zenith Engineers	6.96	To capture gel/blots photographs
8	Biosafety Cabinet	Rescholar	1.75	To work with animal cells under sterile environment
9	CO2 incubator	Mac	2.31	To incubate animal cells under experimental conditions
10	Laminar air flow	Rescholar	0.56	For working under sterile conditions
11	Autoclave	Yorco	0.28	To sterile the lab equipments and reagents
12	Hot air oven	Yorco	0.26	High temperature sterilization of equipment and materials
13	PCR	Genei	1.99	To synthesize the DNA copies
14	Nanodrop	Nabi	4.35	To measure the concentration of

				solutions
15	Laminar air flow	Rescholar	0.56	For working under sterile conditions
16	Autoclave	Yorco	0.28	To sterile the lab equipments and reagents
17	Hot air oven	Yorco	0.26	High temperature sterilization of equipment and materials
18	PCR	Genei	1.99	To synthesize the DNA copies
19	Nanodrop	Nabi	4.35	To measure the concentration of solutions
20	Deep Freezer	Blustar	0.18	To store heat sensitive solutions and reagents at -20°C
21	BOD Incubator	Yorco	1.01	To undertake incubation of microbial cultures at specific temperature.
22	Laminar air flow	Stericlean	0.69	To handle various microbes and prevent air borne contaminants entering into working area.
23	Spectrophotometer	Elico	0.57	To undertake the bacterial growth studies based on the absorbance of the suspension and also used to measure enzymatic reactions.
24	Autoclave	Alpha	0.37	To undertake sterilization of various media, glass wares etc. at high pressure saturated steam at 121 °C.
25	Hot air oven	Yorco	0.26	To sterilize the

				glass wares and other materials that is used in a laboratory.
26	Deep freezer	Bluestar	0.20	To undertake preservation of milk samples, some diagnostic kits, blood samples, etc. for a long period of time.
27	Water bath	Sonar	0.96	To undertake incubation and staining process of various microbes.
28	-20 Refrigerator	Blue star	0.17	To store the chemicals at low temperature
29	Autoclave	Sun Scientific	0.43	To sterilize the culture media
30	Centrifuge	Remi, R12-C	0.45	For precipitation and making supernatant of active fractions
31	Centrifuge	Remi Max 17300 RPM/27440 RCF without rotor heads and accessories	0.43	For precipitation and making supernatant of active fractions
32	Centrifuge Accessories – Angle Rotor Head and Tubes	-	0.26	Centrifuge Accessories installed in the Centrifuge as replacement of damaged part
33	Centrifuge Accessories – Angle Rotor Head and Tubes	Remi	0.10	Centrifuge Accessories installed in the Centrifuge as replacement of damaged part
34	Centrifuge Accessories – Angle Rotor Head and Tubes	Remi	0.14	Centrifuge Accessories installed in the Centrifuge as

				replacement of damaged part
35	Cryocan	Inox	0.17	Storage of Liquid Niteogen
36	Culture Room Cooling System (AC)	Lloyd	0.28	To maintain the culture room temp. constant at 25-27°C
37	Deep freezer	Carrier	0.20	Currently used to store various chemicals, primers, isolated genomic DNA and RNA, enzymes etc.
38	Digital Conductivity Meter	Sun scientific	0.08	For experimental purpose
39	Digital pH Meter	Sun scientific	0.65	For measuring pH
40	Digital SLR Camera	Canon	0.38	For documentation purpose
41	Digital Ultrasonic Cleaner 4.2 Ltr.	Aximatic	0.30	For experimental purpose
42	Double Distillation Unit	Borosil	0.33	To prepare distilled water
43	Electrophoresis	Genaxy	0.60	To separate the protein molecules from a complex mixture
44	Heating Mantle 3 Ltrs.	JSGW	0.04	For heating solutions etc. under controlled condition
45	Heating Mantle 1 Ltr.	Sun scientific	0.02	For plant extraction
46	Hot Air Oven	Sun scientific	0.26	For drying glassware and plant material
47	Hot Block Digital LED Dry Bath	Abdos	0.33	For heating solutions etc. under controlled condition
48	Laboratory Analytical Balance Digital 220 Gm	Wensar	0.37	For accurate measurement of chemicals, plant material etc.
49	Laptop Printer	HP	0.55	To keep the

				database safe and print the docs and reprints
50	LCD Projector	Epson	0.38	Presentation work
51	Magnetic Stirrer	Uni-tech	0.0 5	To stirring or mixing a solution
52	Magnetic Stirrer -Hot Plate	Remi	0.0 6	To prepare different solutions and to develop nanometals
53	Magnetic Stirrer with Hot Plate	Sun scientific	0.0 3	For plant extraction
54	Micropipette 100-1000 Microlitre	Eppendorf	0. 17-	For experimental work
55	Micropipette	Borosil	0.0 5	For experimental purpose
56	Microwave Oven	Samsung	0.06	To prepare solutions and for media preparation
57	Microwave oven	Samsung	0.06	To prepare culture media
58	Mixer-Grinder	Morphy Richard	0.03	For grinder plant material
59	Refrigerator	Whirlpool	0.21	Keep the reagents and samples safe for longer use
60	Rotary Vaccum Evaporator	Mac	1.50	For evaporation of solvents under high pressure and low temperature, along with high speed rotation.
61	SDS-PAGE Unit	Genaxy	0.40	Currently used in protein profiling of stress in different experiments
62	Software for Spectrophotometer	Systronics	0.12	Documentation of data
63	Soxhlet Extraction Apparatus	Uni-Tech	0.09	To extract the secondary metabolites from plant sample
64	Vacuum Pump With moisture trap and moisture gauge	Revotek 5%	0.13	For plant extraction etc.
65	Vertical Autoclave	Sun scientific	0.41	For sterilization of

				glassware, media etc.
66	Vortex Shaker (Test tube Shaker)	Uni-tech	0.05	For separation of plant extracts
67	Water bath	JSGW	0.11	For heating solutions etc. under controlled conditions
68	Weighing Balance	Sartorius, BT 323-S	0.40	To weigh the various chemicals
69	Weighing Balance	Agilent	0.74	To quantify the samples and salts to make the reagents
70	Weighing Balance	Sartorius	0.74	To determine the weight or mass of chemicals and plant materials
71	White light trans - illuminator	Genei	0.24	To visualize the protein bands
72	BOD Incubator	MAC	2.50	Currently used for culture and growth of algae
73	UV-Vis Spectrophotometer	Elico	5.00	Currently used in various experiments
74	Laminar air flow bench	Resechar Equipment	1.00	Currently used for maintenance as well as establishment of axenic algal cultures
75	Microscope with photographic facility	Olympus	1.00	Currently used to capture images of algae and other microscopic preparations
76	Deep freezer	Sonar	0.50	Currently used to store various chemicals, primers, isolated genomic DNA and RNA, enzymes etc.
77	Autoclave	yorco	0.60	Currently used to sterilize the medium and other

				items, like glassware, steel apparatus etc.
78	Rotary evaporator with vacuum pump	MAC (Marco Scientific)	2.18	Use for extraction
79	Centrifuge	Remi	0.50	Used in separation, isolation of biomolecules
80	Ultra Violet Fluorescence analysis cabinet	MAC	0.50	Used in band visualization electrophoresis
81	Gel doc	Genei	5.00	Used for band visualization in gel
82	Serological Waterbath	MAC	0.50	For estimation of carbohydrate
83	Gel imaging system	Genei	5.00	Used for band visualization in gel
84	SDS casting tray	Genei	1.00	Used for molecular weight of protein identification
85	Colony counter	Yorco	0.10	For counting of bacterial cells in a culture
86	TLC dectecter, loader	Camag, Linomat -5	5.00	For TLC band detection
87	Thermal Cycler (PCR machine)	Eppendroff, 2007	5.00	Currently under use for molecular characterization of algae and plants (DNA barcoding for species identification, genetic diversity)
88	Electrophoresis Unit	Geneitm, 2007	2.00	Currently used to resolved PCR products
89	Gel Documentation System	Syngene, 2007	5.00	Currently used to capture the gel images of resolved PCR products
90	UV-Vis Spectrophotometer	Hitachi, 2010	5.00	Currently used in various experiments

91	Incubator Shaker	New Brunswick Scientific	5.00	Currently used for culture and growth of algae
92	Laminar air flow bench	Yorco	1.00	Currently used for maintenance as well as establishment of axenic algal cultures
93	Microscope with photographic facility	Olympus	1.00	Currently used to capture images of algae and other microscopic preparations
94	Deep freezer	Carrier	0.50	Currently used to store various chemicals, primers, isolated genomic DNA and RNA, enzymes etc.
95	Autoclave	Yorco	0.60	Currently used to sterilize the algal medium and other items, like glassware, steel apparatus etc.
96	Laminar Air Flow Bench	Alpha	0.40	Aseptic transfer
97	Rotary Vacuum evaporator	Sonar	2.50	Vacuum evaporation
98	UV-Vis Spectrophotometer	Elico	2.50	Absorbance measurement
99	Serological Water Bath	Mac	1.00	Incubate samples in water at a constant temperature over a long period of time.
100	Autoclave	Tempo	0.70	Steam sterilization
101	Test tube rotator	Abdos	0.30	Cold extraction
102	Electrophoresis unit	Genexy	0.45	DNA separation
103	BOD Cooling incubator	Remi	1.00	Maintains optimal temperature, humidity and other conditions such as the CO (CO ₂) and

				oxygen content of the atmosphere inside.
104	FT-IR Spectrometer	Bruker	11.00	To Characterize organic and inorganic compounds.
105	Flash Chromatography System	Yamazen	10.00	To get more purification with using minimal space
106	Cyclic Voltammeter	Metrohm	7.00	For electrochemical studies.
107	Rotary Evaporator with Vacuum pump and chiller	Heidolph	6.00	To undertake electrical properties of thin films and devices
108	UV- Visible Spectrophotometer	Shimadzu	4.50	To undertake optical properties of thin film and liquid samples like optical energy band gap, refractive index, extinction coefficient and absorption coefficient etc.
109	Atomic absorption spectrometer (AAS)	Elico	2.00	Use in the analytical chemistry.
110	Muffle Furnace	Sonar	2.00	Annealing of thin film and powder samples in air atmosphere upto 1100°C.
111	Balance (4 digit)	Sartorius	1.00	For weighing of various Chemicals and reagents.
112	Magnetic Stirrer (Total: 5)	IKA	2.50	For stirring of various reactions.
113	Ultra Sonication Bath	Labman	0.30	To undertake cleaning of the substrates for thin films and device

				development.
114	DELL Server PowerEDGE R730	DELL	2.58	Analytics, Data Processing , SNA
115	DELL Server PowerEDGET630	DELL	3.77	Big Data and Machine Learning
116	Dissolution rate test Apparatus		1.31	Dissolution study of novel drug formulation
117	HPLC	Younglin	15.92	Qualitative method development for identification of drug molecule.
118	UV/Vis. Spectrophotometer	Shimadzu	3.53	Method development & Identification of drug concentration wrt reference drug
119	Rotavapor Assembly	Indigenous	1.00	Solvent evaporation under reduced pressure
120	Referegartor centrifuge	Thermo Fisher	3.25	For centrifugation purpose
121	Deep freezer	Blue Star	--	Storage of heat labile chemical samples
122	UV Cabinet	JSGW	0.10	Visualization of TLC
123	Melting Point Apparatus	JSGW	0.04	For determination of M.P. of chemicals
124	Hot Plate Magnetic Stirrer	Borosil	0.47	For synthesis and mixing of chemicals
125	Autoclave	Indigenous	0.38	For microbiology work
126	Aseptic Cabinet	Yorco	0.66	For microbiology work.
127	pH Meter	Eutech	0.05	To check pH of solution.
128	Tablet Punch Machine		0.18	To form tablets.
129	Top loading Balance	Shimadzu	0.35	Weighing purpose of chemicals.
130	Brookfield Viscometer	Khera	1.82	Viscosity measurement of fluids.

131	Digital Conductivity Meter	Yorco	0.43	Measurement of conductivity of sol ⁿ .
132	Tablet Disintegration Test Apparatus	Indegenous	0.10	Measurement of formulation disintegration property.
133	Top Pan Balance	Keroy	0.13	Weighing of chemicals
134	HPGe detectors	CANBERRA, USA make (4 sets)	60.00	Detection devices and electronics to analyze the Compton scattered data
135	NIM-BIN power supplies			
136	High voltage power supply devices			
137	Spectroscopy amplifiers			
138	Analog-to-digital converters			
139	MCA Card (Accuspec) with Pentium Machine			
140	Desktop computers, UPS, Printer, etc.	Indigenous		To perform computational work
141	γ -ray calibration sources	BRIT, Mumbai		To calibrate the MCA of spectrometer
142	20 Ci Cs-137 Compton spectrometer (γ -ray source procured from BARC)	Locally fabricated using steel, lead, and other shielding/collimating materials	1.47	To measure Compton profiles of materials
143	100 mCi Am-241 Compton spectrometer (γ -ray source procured from M/s Chemotrade, GMBH, Germany)	Locally fabricated using steel, brass, lead, and other shielding/collimating materials	0.83	To measure Compton profiles of materials
144	Theoretical computational codes: CRYSTAL09, WIEN2k, SPR-KKR		1.50	Computation of electronic structure and optical and magnetic properties of variety of materials
145	Liquid Nitrogen Plant		18.95	To make Liquid Nitrogen

146	Arc melting Furnace	Centorr, USA	7.29	To prepare the alloys
147	X-Ray Powder Diffractometer	Rigaku (Japan)	88.28	For determination of crystal structure and crystallite size
148	High energy mixer mill	SPEX 8000M, USA	7.00	For obtaining nanosized particles through mechanical milling or mixing
149	Vibrating Sample Magnetometer (VSM)	Lakeshore 7300, USA	90.00	For DC magnetization measurements
150	Mössbauer Spectrometer	Wissel, Germany	12.92	To obtain Mössbauer spectra for Fe containing/dopable materials to determine Hyperfine fields
151	Table top model basic AFM	Nanosurf, Switzerland	15.19	For surface visualization of thin films
152	Lenovo think center		0.68	Computational work
153	High Temperature Furnace	Nasker	4.75	Sample preparation
154	SPM:AFM	NT-MDT	35.00	Surface and morphological studies
155	ac-Susceptometer	Cryo-Bind	35.00	Magnetic susceptibility measurements
156	Digital balance	Citizen	0.75	Weighing
157	Source meter	Agilent	3.40	To undertake electrical properties of thin films and devices
158	Vacuum Coating Unit	Hind High Vacuum	10.50	To undertake coating of different layers to solar cells, Vacuum sealing of ampoules, annealing of thin film samples under vacuum and

				different environments upto 250°C. Coating of metal contacts to almost all type of solar cells like perovskite, organic, dye sensitized, CdTe, CIGS etc.
159	UV- Vis. spectrophotometer	Shimadzu	4.50	To undertake optical properties of thin film and liquid samples like optical energy band gap, refractive index, extinction coefficient and absorption coefficient etc.
160	Spin Coating System	Apex	1.00	Coating of different transport layers to solar cells through solution process spin coating route under different environments.
161	Muffle Furnace	Sonar	0.30	Annealing of thin film and powder samples in air atmosphere upto 1100°C.
162	Ultra Sonication Bath	Labman	0.30	To undertake cleaning of the substrates for thin films and device development.
163	Hydrothermal Autoclave	Techinstro	0.20	To synthesize metal organic frameworks (MOFs) for storage devices and solar cell devices.
164	Magnetic Stirrer	Labman	0.20	To prepare

				different samples and to develop Quantum Dots for solar cell devices
165	Photocatalytic Reactor	Equipline Technology	2.64 (order placed)	Use for the degradation of contaminants in aqueous solution
166	Centrifuge Machine	Remi	0.96 (order placed)	Use for separation of the photocatalyst present in contaminant aqueous solution
167	Stereo Microscope with Integral digital camera	Leica	6.51	To Understand the external Morphology of various insects
168	UV Visible Spectrophotometer	Coleparmer, USA	3.02	For Quantitative measurements of molucules
169	Gradient PCR	Bio-Red USA	4.82	To amplify DNA molecules
170	HPLC System	Thermo, USA	9.98	To isolate and identify molecules
171	DSLR Camera	Nikon Coolpix P900	0.35	Animal photographic documentation
172	Global Positioning System (GPS)	Etrex	0.25	Mapping of animal distribution
173	Binoculars	Diamondback	0.45	To take behavioural observation and animal identification in field
174	Clinometer	--	0.10	Height measurement
175	Video recorder	Panasonic	0.35	Behavior recording
176	High Speed research centrifuge	Eltek	0.99	Plant Analysis
177	Muffle furnace	Khera	0.35	Plant & Metal Analysis
178	Hot air oven	Khera	0.33	Air, water and soil

				analysis
179	High volume Air sampler	envirotech	0.32	Air sampling
180	Uv-Vis Spectrophotometer	Eleco	1.17	Air, water, plant and soil analysis
181	COD digester	Khera	0.61	Water and soil analysis
182	Digital Electronic balance	Sartorius	0.75	All analysis
183	Liquid nitrogen container	Inox	0.38	Water and soil analysis
184	Magnetic stirrer with hot plate	Remi	0.10	All analysis
185	GPS	Garmin	0.22	Field survey
186	Growth Chamber	Yorco	1.70	Plant analysis
187	Cryostat	Yorco	1.60	Zoological analysis
188	Electrophoresis		0.58	DNA, RNA, Protein analysis
189	BOD incubator	Yorco	0.58	Water analysis
190	Laminar flow bench	Yorco	0.55	Microbial analysis
191	Respiratory dust System PM-205	envirotech	1.09	Air sampling
192	Flamephoto meter	Eleco	0.43	Metal analysis
193	Auto clave	Yorco	0.23	
194	Microtome	Yorco	0.24	Zoological analysis
195	ENVI Image Processing Software	ENVI	4.78	The software is used in digital image processing for various geoscientific research purposes
196	Advance Student Ore Microscope Model RXLr-4POL (20Nos)	Radical	14.39	The microscope is used in teaching of ore petrographic studies
197	Polarizing Research Microscope Model RXLr-4POL	Radical	3.00	The microscope is used in teaching and research of ore petrographic

				studies
198	Rockwork 17 Advanced Classroom (10 User) Surfer Single Academic GrapherSigle Academic Igpert Window Sigle	Rockware DATACODE Esri	2.47	The softwares is used for interpretation of geological data for teaching and research
199	HP Desktop Core i5 computer ,Printer MFM Laptop-Notebook-HP 250 G7 i5, Desktop Computer i3,	HP LUMINOUS ACER	18.53	The computers is used in setting up of remote sensing lab with application of teaching and research
200	Multimedia Projector with wireless connectivity Brand-Globus Model No-ultra w-40u with wireless dongle	Globus	1.26	The projector is used for developing digital classroom
201	Digital Podium Brand Globus Model No-gel-19p	Globus	1.88	The podium is used for developing digital classroom
202	Polarising Microscope	POL-MN-0Cx1	1.96	The microscope is used in teaching of petrographic studies
203	Multifunctional Office Machine Brand Kyocera Model-TASKalfa 35lli	Kyocera Model-TASKalfa 35lli	1.54	The device is used for reprographic facilities for office work
204	Camera 3 MP CMOS with Accessories- Brightness Adjustable	Lawrence	0.97	The camera is used for taking field photographs during field studies for teaching and research purposes
205	Resistivity Meter	Anvic System	2.79	The instrument is used in teaching and research of geological exploration studies
206	Scanning Electon Microscope (1997)	SEM	36.00	The instrument is used in teaching and research of

				various geological studies for imaging purposes
207	Leica Research Steriozoom Microscope Model M-125 with Leica Digital camera with software	Leica	11.00	The instrument is used in teaching and research of micro paleontological studies
208	Stereozoom Microscope	Biocraft	1.68	The instrument is used in teaching of micro paleontological studies
209	Binocular ore Microscope	Laboscope	4.87	The microscope is used in teaching of ore petrographic studies
210	Plane Table Sets (9)	600*750*15 mm	0.49	Surveying & Levelling
211	Auto Level (1)	Model - 40A	0.18	Surveying & Levelling
212	Prismatic Compass (5)	Brass Body	0.08	Surveying & Levelling
213	Brunton Compass (1)	Brass Body	0.02	Surveying & Levelling
214	Digital Infrared Thermometer (2)	--	0.04	Field data collection
215	Software (10 Licenses)	IBM SPSS version 25.0	2.12	Statistical analysis
216	Software (20 Licenses)	Arc GIS version 10.3	DoIT, Govt. of Raj.	Geospatial analysis
217	GPS (03)	Garmin MAP783	0.22	GIS Lab
218	AIR	2017	0.30	AIR Legal Software

List of equipment's purchased under RUSA

S. No.	Items name	Qty.	Gross Amount with tax
1	Western Blot Transfer Assm.	1	89964
2	Biosafety Cabinet	1	187110
3	Fluorescence (FL8500)& UV-Vis-NTR Spectrophotometer(Lambda 1050+)\$60810	2	4439130
4	Vertical Gel Electrophoresis	1	19580
5	C-digi Blot Scanner licor, LAPTOP	1	409500
6	Weighing balance, Bomb calorimeter (span automation)	2	325500
7	Micro balance	1	413700
9	Colorimeter NCM-510, Turbidity meter-NTM 900	2	13235
10	pH meter, conductivity mtr, TDS mtr. (ERMA)	6	25830
11	Analytical Balance	1	76650
12	NMR Spectrometer (400 MHz, model JNM-ECA400S/L1)(LC account)	1	20162772
13	PH/EC/DO Multi parameter	1	97124
14	Solar Simulator with access. Make:Sciencetech Model:scisun300	1	2308363
15	Gel Documentation system	1	596400
16	Autoclave	1	92400
17	Station reader, antenna, kiosk, m.ware:make Rapid radio	5	1917649
18	Ultrasonicator	1	393252
19	Petrological microscope with camera	1	299250
20	Sewing mach(16), Fusing Mach.(1), Steem Iron(4), Spray gun(2)	26	522650
21	Automatic digital Polarimeter-ADP 90	1	367742
22	IR Spectrophotometer-Nicolet Sunamit	1	1484000
23	Digital s22 Ultra turrax dispenser	1	199500
24	Deep Freezer-20 C Coslab	1	127050
25	Deep Freezer vertical -20c	1	127050
26	Dule chanel flash chromat. System-Biatge-Selekt	1	1779750
27	Spectrophotometer (UV-VIS DB)	1	537652
28	Flame Photometer	1	99708
29	Digital Water Quality Field kit	1	46305
30	Analitical Balance(Weighing Machine)	1	89250

31	TANCO Laminar flow clean bench	1	160650
32	Petrological microscope with camera	1	900000
33	Rotary Shaker 24x24	1	61819
34	Fluorescent microscope cerizeiss- cariosgr	1	1275000
35	Velocity 18R pro ver ref. centrifuge	1	495000
36	Normal Centrifuge, Refrigerated Cent.	1	384207
37	waighing Balance	1	98624
38	Gel Imaging System	1	555450
39	-25 deep freeze, Ice flake machine	1	396119
40	Trinocular microscope with Laptop	1	347550
41	Hot air Oven	1	25000
42	Compressor-Tecumsseh	1	6650
43	SPAD Meter	1	435750
44	Chassis for mobile Bus	1	2147513
45	CFX96 Touch Real-Time PCR Dete. Sys.	1	1422750
46	Tempstar Orbital Shaking Incubator	1	97650
47	High Perform. Liquid Chrom. (HPLC)	1	3000000
48	Refrigerated Centrifuge-1, Laminar Air Flow-1, Weighing Balance-1	3	403888
49	Tempstar BOD Incubator	1	142800
50	Gel Documentation system-1, RTPCR-1	1	1092000
51	RT-PCR	1	1200000
52	Srreonmicroscope trinocular microscope with HD camera	1	288750
53	Lyophilizer 3 Ltr 1190-SFD-008	1	532875
54	Carl Zeiss Kyowa-Getner stereo micro1	1	292950
55	Hot air Oven-1, Digital bath sonicator-1	1	50925
56	Rotary Vacume Evaporator 1 ltr. MAC	1	426300
57	MasterCycler*50,silver block,eppend	1	499800
58	BOD Incubator	1	115920
59	UV vis spectrophotometer	2	623700
60	Flurometer	2	334950
61	B.O.D. Incubator	1	104895
62	Incubator Shaker- Tempstar	1	154886
63	Double distillation unit- Tempstar	1	227651
64	HPLC prod	1	125162
65	HPLC with accessories	1	1954838
66	Electrophoresis Unit, make-Biorad	2	178500
67	Rotary Comptessor - 2 ton	1	9600
68	Mastercycler @x50s, silverblok, 96-well eppendorf	1	499800
69	Digital multimeter	1	1450
70	Hot Air oven: dry oven 50ltr RT+ REMI	1	49497
71	shredder : make Walf Garten	1	44840
72	Air Monitor (Air qlty. mtr): lutron	1	87851
73	Lab. Water filtration assembly	1	36580

74	Water purification system: Milli	1	338660
75	LX multi-mode microplate reader- synergy make SLXFA with acc.	1	1598900
76	Vacuum Annealing System	1	312228
77	SF Sonik JT100L, shaurya1500	4	28400
78	PEET grady	1	496650
79	Blood Feeding membrane, dawn & dusk simulator	2	191085
80	Elisa Reader with washer	1	543212
81	digital Ph meter	2	9800
82	Digital temprature control unit	1	9925
83	Temprature control unit/sensor	1	9925
84	Digital thermo hydrometer	4	8920
85	Deep freeze -25 degree,elanpro	1	75600
86	Autoclave	5	274313
87	Weighing balance-Wensar-model: mab220T	1	50520
88	Real Time PCT-make:Biorad +ups	1	1422750
89	Electrophoresis Unit , make: Biorad	1	383250
90	Fluorescence Microscope -Leica DM-2000 incl. Computer	1	1375500
91	Kay pee udyog Oven	6	164657
92	Kay pee udyog Lyophilizer	1	509355
93	Tempstar -water bath	1	49376
94	Laby Normal centrifuge:partial payment	1	50520
95	Medimeas freezing microtome	1	295218
96	Nenodrop One Spectrometer: make :-Thermo	1	955500
97	Veriti96w Thermal Cycler 0.2 ml sr.	1	280665
98	platform weighing balance 120kg.	1	9676
99	GEL Imaging system Model : Ebox, Make:Eppendorf with UV/WL conversion screen , UV pad edge, Power card	1	550200
100	Dissecting Microscope	1	8968
101	BOD incubator Alpha make-1 & Laminar Air Flow Alpha make-1	2	231809
102	Two dimensional Gel Electrohoresis	1	1350000
103	Gas Chromatography with standard accesso- BOM-TSQ-MTNOVPI	1	6350000
104	Laby Normal contrifuge: SP-24BL partial payment	1	46154
105	Harmonium 9 scale (3), Std. Harmonium (4), Yamha PSR-E463 (6), Radel Elect Table (4), Ragini Elec. Tanpura (4), Yamha f-280 Gitar (4), Dholak (2), Tabli with dagga (8), Clapbox (3), Nagada Jodi (1)	39	603200