

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

INSTITUTE OF SCIENCE, NAGPUR

Infrastructure

Main Building



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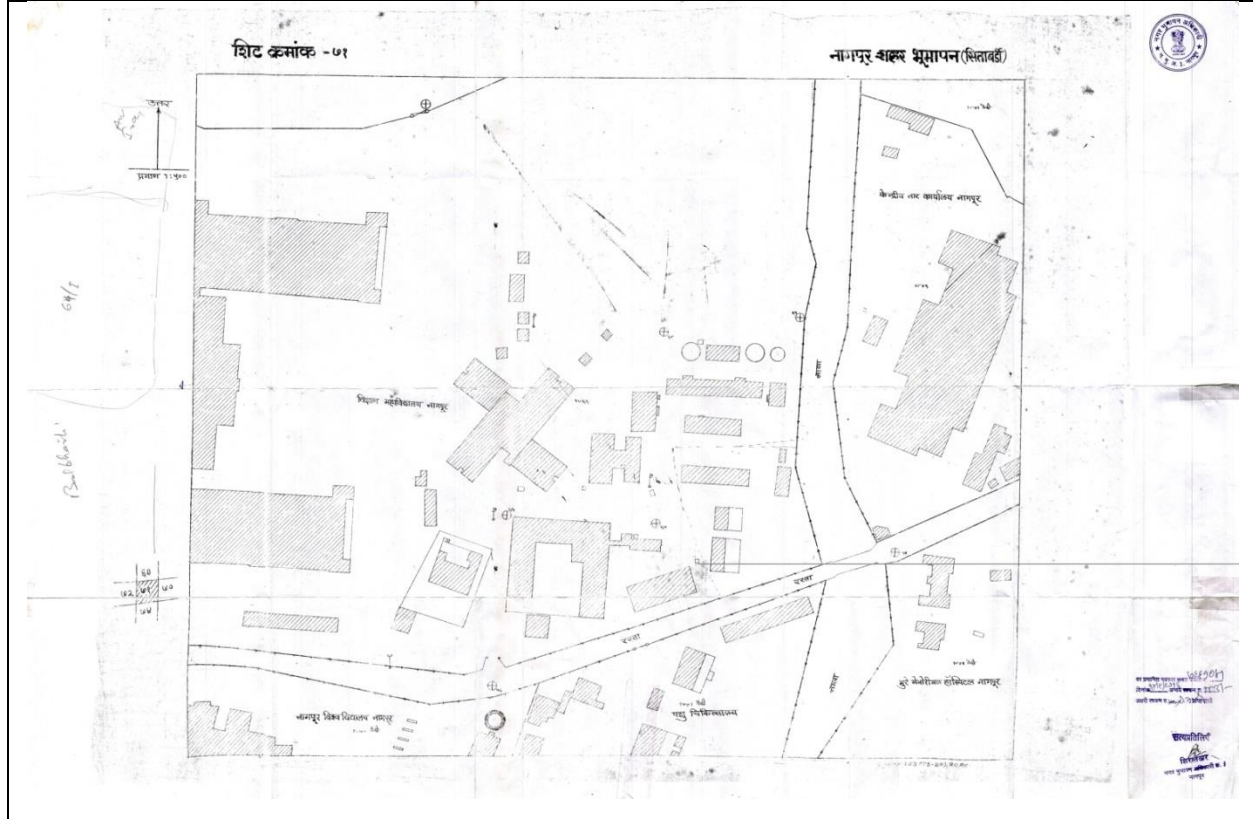
New Library Building



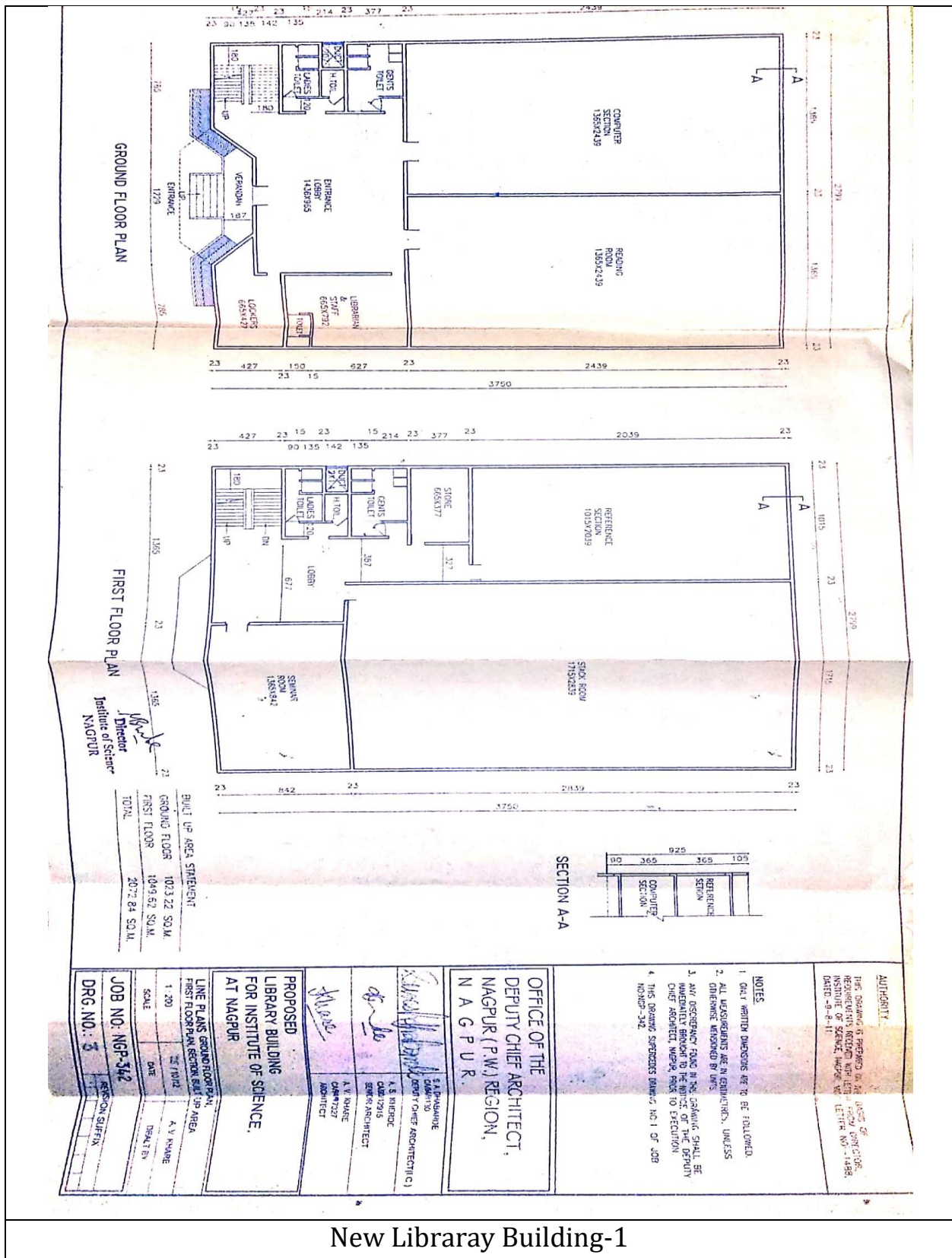
Ground

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Maps Main Campus (Administrative Building & Hostels)

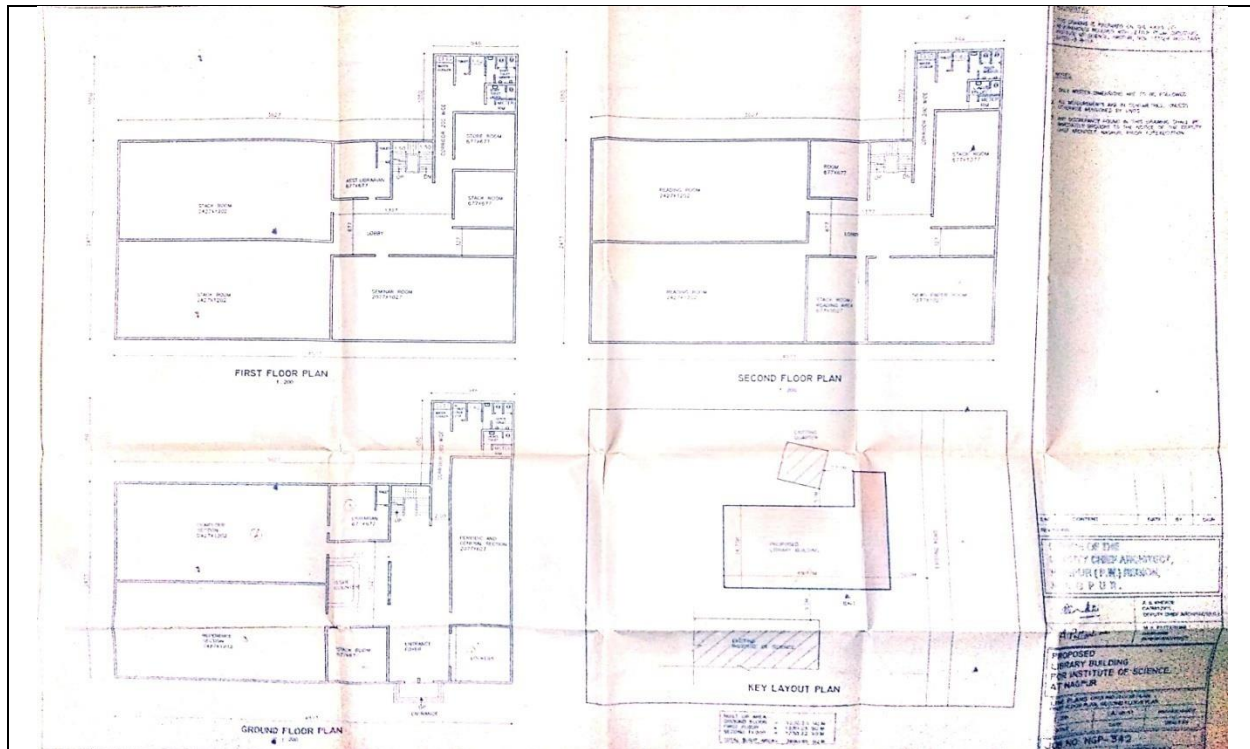


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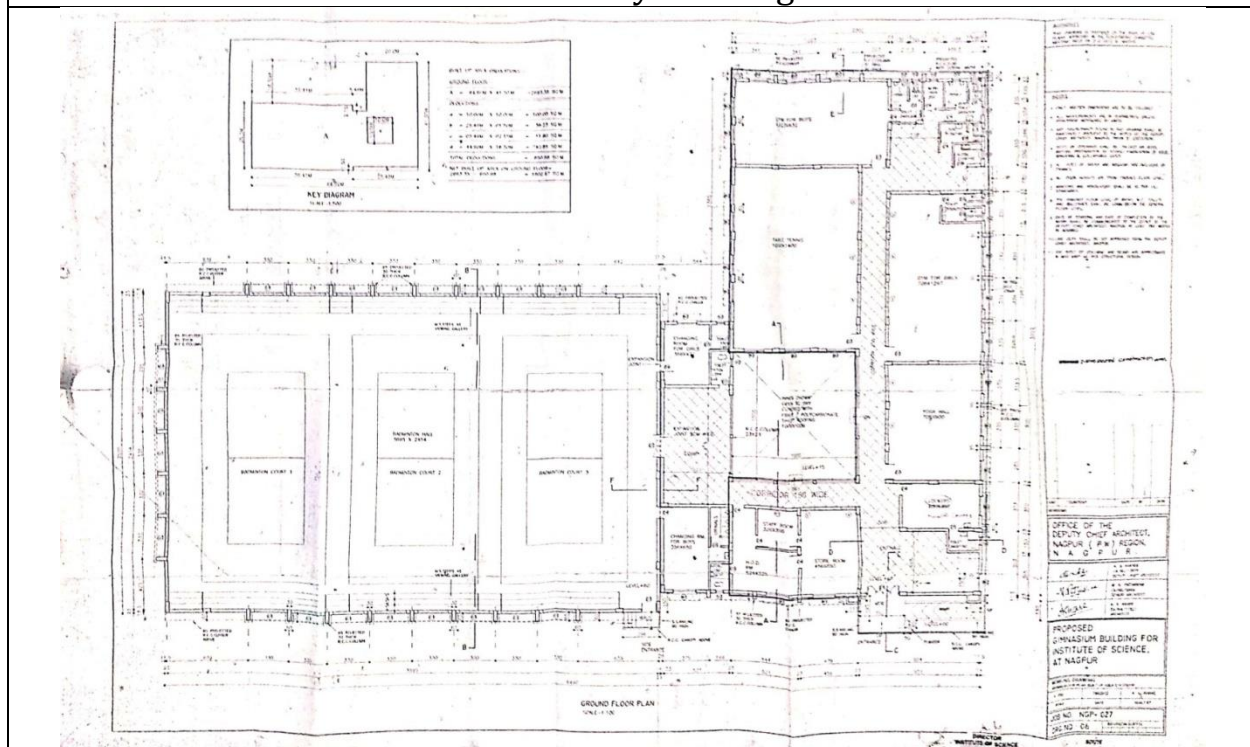


New Libraray Building-1

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New Libraray Building-1



Institute of Science, Nagpur Gymkhan Building

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Class Rooms (No. of class rooms and area covered in sq. Ft.)

SN	Department	Classroom No.	Area in Sq ft	Total Area in Sq ft
1	Physics	63	552	2424
		80A	936	
		80B	936	
2	Chemistry	9 (M.Sc. classroom equipped with LCD Projector)	900	9964
		7A	433	
		15	922	
		16	922	
		21	745	
		26A	4748	
		26B		
		27	611	
		40	320	
		40A	363	
3	Zoology	79	1879	2769
		61 - M.Sc II Classroom	890	
4	Botany	12 - M. Sc II Classroom	922	2578
		M.Sc. I Classroom	922	
		13 Palyno Botany Classroom	734	
5	Statistics	N7- Library & Reading Room	1296	2190
		N7 – M.Sc. I Classroom		
		N6- M.Sc. II Classroom	894	
6	Mathematics	M. Sc II Class Room	358	1624
		46 – M.Sc. I Class Room	1266	
7	Env. Science	N-14 : M.Sc. I Classroom	1823	2722
		M.Sc. II Class Room.	899	
8	Conf. Room	39 IQAC	727	727
9	UG Class rooms	41	1248	7255
		42	2220	
		49	759	
		50	749	
		51	733	
		52	760	
		53	756	

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Laboratories

(No. of labs rooms and area covered in Sq. Ft.)

(List of labs along with equipments to be placed as annexure)

SN	Department	Subject Lab No.	Area in Sq ft	Total Area in Sq ft	List of Equipments
1	Physics	64 Spectro Lab	552	8715	Annexure- 6.1
		65 Research Room	612		
		67 Material Sc	922		
		68 M.Sc. I Lab	1007		
		55 Instrumentation Lab	521		
		58 Computer Room	300		
		B. Sc I Lab	2183		
		B. Sc II & III Lab	2618		
2	Chemistry	Computer Room	377	6854	Annexure-6.2
		Inorganic PG lab	745		
		PG lab	4745		
		PG lab classroom	376		
		Conference Room	611		
3	Zoology	Cell Bio Lab – 1	355	3477	Annexure- 6.3
		Cell Bio Lab – 2	324		
		60 Computer Room	216		
		79 – A M. Sc I Lab	1080		
		66 Fresh Water Zoo. Lab	612		
		MRP Lab	890		
4.	Botany	13_Annex - Palyno classroom	734	4653	Annexure 6.4
		13 - Paleo Lab	1123		
		N-2 - UG Lab	1874		
		5 - seminar hall including Computer room	922		
5	Statistics	N10 class room R Lab	599	1299	Annexure 6.5
		UG lab	700		
6	Computer Science	N-8 & N-9 Computer Lab	1517	1517	Annexure- - 6.6
7	Mathematics	Computer Room	246	246	Annexure- 6.7
8	Electronics	N-11 Electronics lab	898	898	Annexure- 6.8
9	Env. Science	N-12 & N-13 including Computer Room	1823	1823	Annexure- 6.9

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Annexure-6.1

Department of Physics
Lab wise list of instruments
RAMAN RESEARCH LAB (Room No. 65)

SN	Name of Instrument	Quantity
1	LASER RAMAN SPECTROMETER WITH COMPUTER AND PRINTER	01
2	UV-VIS SPECTROMETER OCEAN OPTICS	01
3	UV-VISIBLE SPECTROMETER WITH COMPUTER, LAB INDIA	01
4	ULTRASONIC INTERFEROMETER FOR SOLID AND LIQUID M-81	01
5	CONSTANT TEMPERATURE BATH UNIT	01
6	POLARIMETER SODIUM LAMP	01
7	OVEN, LAB HOSP ® DIGITAL	01
8	MICROWAVE BENCH UNIT, N-K ENTERPRISES	01
9	THIN FILM VACUUM EVAPORATION UNIT MANSHA VACUUM EQUIPMENT PVT LTD.	01
10	YAMATO BALANCE	01
11	LCR Q METER	01
12	IC-REGULATED POWER SUPPLY	01
13	DIGITAL PICOMETER, DPM-111	02
14	UNIVERSAL TIME AND FREQUENCY COUNTER, APLAB 1116	01
15	KEITHLEY 6514 SYSTEM ELECTROMETER	01
16	FOUR PROBE SETUP DFP-03	01
17	MAGNETIC STURRER WITH HOTPLATE, MACRO SCIENTIFIC	01
18	SPOT REFLECTING GALVONAMETER COIL RESISTANCE	01
19	K-12 CLASSIC BALANCE	02
20	TRUE RMS AC MILIVOLTMETER	03
21	STABILIZED POWER SUPPLY	01
22	FUNCTION GENERATOR SCIENTIFIC	01
23	PID OVEN 200	01
24	IC REGULATED POWER SUPPLY (LYZER)	06
25	UNIVERSAL IC PROGRAMMER AND TESTER	01
26	UNIPRO 110 U	01
27	HYSTERESIS LOOPTRACER	01
28	HYDROGEN TUBE	03
29	MERCURY LAMP	01
30	ADJUSTABLE MICROMETER	01
31	TIMER CLOCK	01
32	STUDY OF PN JUNCTION	02
33	SOLAR EDUCATIONAL KIT	01
34	MICROSCOPE	01
35	SPECTROMETER	01
36	LCRQ BRIDGE 6018	02

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37	PID CONTROLLED OVEN	01
38	DIGITAL LCR METER 925	01
39	HE-NE LASER	01
40	TESTRONIX 30D POWERSUPPLYU	01
41	AC MILLIVOLTMETER	01
42	TESTRONIX SIGNAL GENERATOR	02
43	LCR BRIDGE	01
44	FRANK HERTZ SETUP	01

Central Instrumentation Facility (Room No. 55)

SN	Name of Instrument	Quantity
1	FLUORESCENCE SPECTROPHOTOMETER F-7000 (HITACHI)	01
2	TUBE FURNACE (HAMCO)	01
3	FTIR-8400S (SHIMADZU)	01
4	DTG-60 SIMULTANEOUS DTA-TG (SHIMADZU)	01
5	QUANTECH FILTER FLUOROMETER (THERMO SCIENTIFIC)	01
6	UV-VISIBLE SPECTROPHOTOMETER	01
7	VACUUM OVEN (BESTO)	01
8	KBR PRESS MODEL M-15 (TECHNOSEARCH INSTRUMENT)	01
9	ANALYTIC BALANCE (CONTECH)	01
10	COMPUTER	06
11	OSCILLOSCOPE I/360	01
12	OPTICAL MICROSCOPE	01
13	PRINTER	05

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MSc-II Sem-III Physics LAB Room No. 63

List of Equipment

SN	Name of Instrument	Quantity
1	DIGITAL XEROX MACHINE	2
2	WEIGHING MACHINES	3
3	DIGITAL OVEN	1
4	FURNACE(HIGH TEMPERATURE)	
5	D.C.POWER SUPPLY	1
6	DIGITAL NANOAMMETER	2
7	HYDRAULIC PRESS	1
8	9302 LCR METER	1
9	DIMMER STAT	1
10	RESISTANCE BOX	1
11	DISTILLATION SETUP	1
12	IC REGULATED POWER SUPPLY 0-16V, 5 AM	1
13	FOUR PROBE SETUP	2
14	D.C.POWER SUPPLY 5 V,1A	1
15	MICRO AMMETER (0-500 MA)	1
16	DC VOLTMETER ANALOG(0-10V)	1
17	MILL AMMETER ANALOG (0-10MA)	1
18	RHEOSTAT 540 Ω , 0.6 A	1
19	PID CONTROL OVEN	1
20	DIGITAL PICO AMMETER	2
21	HIGH VOLTAGE POWER SUPPLY	1
22	COMPUTER	1
23	DIGITAL LCR METER-17	1

MSc-II Atomic and Molecular Physics LAB Room No. 64

List of Equipments

SN	Name of Instrument	Quantity
1	ABBES REFRACTOMETER	1
2	ULTRASONIC INTERFEROMETER	1
3	MAGNETIC STIRRER WITH HOT PLATE	1
4	MALUS LAW SETUP	1
5	HE-NE LASER SOURCE	1
6	LCRQ BRIDGE 6018	1
7	ROTARY VACUUM PUMP	1
8	VACUUM OVEN	1
9	ONE PAN BALANCE	1
10	ADAM HILGER SPECTROGRAPH	1

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11	UV-VIS SPECTROPHOTOMETER (SL 159)	1
12	OPTICAL BENCH	1
13	SPECTROMETER	2
14	HELMHOLTZ COIL UNIT	1
15	POWER SUPPLY 2-12 VOLTS	1
16	COMPARATOR	1
17	MICROWAVE TEST BENCH UNIT	1
18	MAGNETIC FIELD MEASUREMENT APPARATUS MODEL:MEM-01	1
19	GUNN POWER SUPPLY X-110	1+1
20	KLYSTRON POWER SUPPLY MODEL: KP-151	1
21	COMPUTER CPU UNIT	1
22	COMPUTER	1
23	POWER SUPPLY 0-16VOLT, 5AMP DC	1
24	BALLISTIC GALVANOMETER	1+1
25	HIGH VOLTAGE POWER SUPPLY	1
26	UPS MICROTEK	1
27	MERCURY LAMP	1
28	LASER DIODE MODULE	1
29	CORNERS FRINGES	1

Laboratory Room: Materials Science Lab M.Sc. II Room No.: 67

SN	Name of the Instrument	Quantity
1	ESR SPECTROMETER	1
2	POWER SUPPLY FOR ELECTROMAGNET	1
3	CONSTANT CURRENT POWER SUPPLY	1
4	CONSTANT CURRENT POWER SUPPLY	1
5	HIGH VOLTAGE POWER SUPPLY EHT - 11	2
6	HIGH VOLTAGE POWER SUPPLY EHT - 11	1
7	POWER SUPPLY (STABILISED)	1
8	PID CONTROLLED OVEN	1
9	MINI OVENS (WITH DIFFERENT KITS)	3
10	LATTICE DYNAMIC KIT	1
11	ELECTROMAGNETS (DIFFERENT SIZES)	4
12	ELECTROMAGNETS	2
13	ELECTROMAGNETS FOR HALL EFFECT (BIG SIZE)	1
14	ELECTROMAGNETS FOR SUSCEPTIBILITY (BIG SIZE)	1
15	FURNACE (HAND MADE)	2
16	ELECTRIC COMPARATOR FOR LATTICE MEASUREMENTS	1

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17	THERMAL CONDUCTIVITY KIT	1
18	HYSTERESIS LOOP TRACER WITH ASSEMBLY	2
19	HYSTERESIS TRACER WITH ASSEMBLY HLT-III	1
20	FUNCTION PULSE GENERATOR	1
21	THERMOLUMINESCENCE TEMP. METER (TL-02)	1
22	UNIT TL-02B BOX UNIT	1
23	NANOMETER (DIGITAL) (DNM – 121)	1
24	NANOMETER (DIGITAL) (DNM – 121)	1
25	PICOAMMETER (DIGITAL) (DPM 111)	1
26	LOW CURRENT SOURCE (LCS 02) + OVEN	1
27	LCR SERIES RESONANCE CIRCUIT KIT	1
28	LCR METER (DIGITAL)	1
29	LCR METER (CADD0 9302)	1
30	TEMPERATURE RECORDER	1
31	ASSEMBLY FOR BH CURVE	1
32	IONIZATION POTENTIAL FOR GASES KIT (MODEL 372)	1
33	DIGITAL PANEL METER	6
34	DIGITAL OHM METER (MACRO SCIENTIFIC - MAC)	1
35	MULTIMETER (DIGITAL)(SMALL)	3
36	MULTIMETER (DIGITAL) (BIG) (BROKEN)	2
37	MULTIMETER (PHILIPS ANALOG)(PH 2421 A)	1
38	DIMMERSTAT	6
39	VOLTMETER + MILLIVOLTMETER	3
40	AMMETER + MILLIAMMETER	8
41	MILLIAMMETER	2
42	AMMETER (AC)	4
43	VOLTMETER (ALSO BANDWIDTH MEASUREMENT) OLD	1
44	MONOPAN BALANCE	2
45	MONOPAN BALANCE (DIGITAL)	1
46	HALL PROBE SET UP	2
47	WEIGHT BOX	3
48	LEES DISC APPARATUS	1
49	IONISED WATER UNIT	1
50	ELECTRIC OVEN	1
51	TRANSFORMER	3

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52	DIGITAL GAUSSIMETER (DGM 102)	2
53	DIGITAL GAUSSIMETER (DGM 102)	1
54	DIGITAL GAUSSIMETER (DGM 102)	2
55	HALL EFFECT SET UP (ONE BROKEN)	2
56	DMR PROBE	1
57	DMR PROBE	1
58	OSCILLOSCOPE POS20A 15MHZ	1
59	OSCILLOSCOPE 505 D + VOS4PC 5 MHZ	2
60	POTENTIOMETER (PORTABLE)	1
61	TRAVELLING MICROSCOPE	1
62	RADIATION COUNTING SYSTEM RES 4027	1
63	G.M. COUNTER TUBE (SMALL SIZE) 5 CM	1
64	THERMO-COUPLE MU 1 (IN METER)	1
65	PYROMETER (BROKEN)	1
66	TRANSFORMER/POWER SUPPLY/ REGULATOR	1
67	MAGNETO-RESISTANCE SET UP	1

MSc-I Laboratory

Room No. 68

SN	Instrument	Quantity
1	APLAB DSO	1
2	CRO METRO Q 0516B	3
3	HYSTERESIS LOOP TRACER	1
4	MULTIFUNCTIONAL OSCILLATOR	1
5	SPECTROSCOPY INSTRUMENTS PARTS	1
6	HELMHOLTZ COIL	1
7	IC REGULATED POWER SUPPLY	1
8	MAGNETO-RESISTANCE SETUP	1
9	MINI CONTROL OVEN	2
10	OSCILLATOR	3
11	AUDIO SIGNAL GENERATOR	1
12	TRAVELLING MICROSCOPE	2
13	CRYSTAL STRUCTURE MODEL	11
14	ELECTRON SPIN RESONANCE SPECTROMETER	1
15	FERROMAGNETIC SAMPLE COIL	1
16	RF OSCILLATOR	1
17	VOLTAGE REGULATOR	4
18	PLANKS CONSTANT SETUP	1

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19	AMMETER	7
20	ANALOG MULTIMETER	11
21	OIL DROP SET UP	1
22	MICHELSON INTERFEROMETER SETUP	1
23	TRANSFORMER	5
24	GALVANOMETER	2
25	SOLENOID	2
26	POLIZER ANALYSER ASSEMBLY	1
27	LENS WITH HOLDER	2
28	ELECTRO-MAGNETIC POWER SUPPLY	1
29	LIGHT SOURCE ASSEMBLY	1
30	DIGITAL GAUSSMETER	1
31	FOUR PROBE SETUP	3
32	BH CURVE APPARATUS	1
33	PID CONTROL OVEN	1
34	AUDIO OSCILLATOR	1
35	HE-NE LASER	1
36	DIGITAL MULTI METER	2
37	POLARIZER	1
38	INVERTER	1

MSc-I Electronics Lab

SN	Instrument	Quantity
1	FUNCTION GENERATOR	2
2	VTVM	1
3	CRO	7
4	IC-RPS	4
5	VOLTMETER DC	2
6	RESISTANCE BOX	6
7	MICRO AMMETER	2
8	VARIAC	3
9	RHEOSTAT	12
10	BREAD BOARD	8
11	DIGITAL MULTIMETER	6
12	GALVANOMETER	1
13	DIGITAL TRAINER KIT	1

M.Sc. Room No. 58: Computer Lab

SN	Instrument	Quantity
1	ACER VERITON COMPUTERS	11
2	HCL KEYBOARD, CPU, MONITOR, CPU	1 each

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3	HCL HOMECLINIC WHITE COMPUTER	1
4	HP ELITE 7100 COMPUTER	
5	PRINTER TVS MSP 245	1

Room No. 57

SN	Name of Instrument	Quantity
1	CRO-30 M DUELTRACE, CADD0 803	2
2	HCL MONITOR	3
3	HCL	1
4	DIGITAL NANOMETER	1
5	ELECTROMETER EM 1000	1
6	VOLTAGE STABILIZER	1
7	HEAT CAPACITY KIT	1
8	ULTRASONIC INTERFEROMETER	1
9	ULTRASONIC ATTENUATION	1
10	ULTRASONIC TIME INTER-VOLTAMETER	1
11	CONDENSER TYPE-428	2
12	CONDENSER TYPE-121	1
13	HP PRINTER AND XEROX	1
14	SCANNER (SCAN JET) HP 2300C	1
15	INVERTER	1
16	INVERTER	1

List of Instruments in B.Sc.-I Lab

SN	Instrument	Quantity
1	MULTI-METER	6
2	MILI VOLTMETER	5
3	BATTERY ELIMINATOR	2
4	AMMETER	4
5	VOLTMETER	11
6	MICRO AMMETER	7
7	TRAVELLING MICROSCOPE	8
8	DIMMER STAT	2
9	TELESCOPE	1
10	BREADBOARD	2
11	TRANSFORMER	4
12	STOP WATCH	9
13	RHEOSTAT	5
14	MAGNETIC NEEDLE	9
15	GALVANOMETER	3
16	THERMOMETER	12
17	MILLIMETRE	8

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18	VARIAC	1
19	RESISTANCE BOX	7
20	MAGNETIC FIELD MEASUREMENT APPARATUS	1
21	ELECTRIC KITTLE	1
22	INDUCTION STOVE	1
23	FLYWHEEL	1
24	MAXWELL NEEDLE	2
25	TENSIONAL PENDULUM	4
26	STATIC METHOD ROD	2
27	VERNIER CALLIPER	22
28	SCREW GAUGE	17
29	IC REGULATED POWER SUPPLY	2
30	CANTILEVER	2
31	THIN METAL PLATE	2
32	WOODEN SCALE	2
33	YOUNG'S MODULUS APPARATUS	2
34	DIELECTRIC CONSTANT KIT	1
35	SIGNAL GENERATOR	1
36	LCR IMPEDANCE APPARATUS	1
37	TUNNING FORK	12
38	COPPER TRAVELLING MICROSCOPE	1
39	KATER'S PENDULUM	2
40	BAR PENDULUM	2

List of Instruments in B.Sc.-II and III Lab.

SN	Instrument Name	Quantity
1	POLAROID	2 Set
2	POLARIZER	2 SET
3	STABILIZED POWER SUPPLY	01
4	MICROPROCESSOR POWER SUPPLY	01
5	MULTI METER	05
6	MICRO AMMETER	05
7	VERNIER CALIPER	03
8	SCREW GAUGE	01
9	VOLTMETER	10
10	GALVANOMETER	02
11	RESISTANCE BOX	05
12	A.C. VOLTMETER (5V)	02
13	RHEOSTAT	17
14	TRANSFORMER	02
15	POWER SUPPLY	07
16	MAGNETO RESISTANCE SET UP	01
17	PHOTODIODE CHARACTERISTICS	01

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19	MILLI AMMETER	15
20	SPHEROMETER	04
21	DEMONSTRATOR	03
22	MAGNETIC STIRRER	01
23	COOKING BURNER	01
24	MILKEN OIL DROP	02
25	DIGITAL MICROVOLTMETER	02
26	HIGH VOLTAGE POWER SUPPLY	01
27	STUDY OF DIELECTRIC CONSTANT	01
28	TUNING FORK SET	03
29	ZENER DIODE CHARACTERISTICS	02
30	HELMHOLTZ	01
31	VOLUME RESONATOR	02
32	ANALOG MULTIMETER	02
33	FUNCTION GENERATOR	03
34	ELECTRONIC TRAINER BOARD	02
35	AMPLITUDE MODULATION AND DEMODULATION	01
36	FREQUENCY MODULATION DEMODULATION	01
37	DIGITAL PENAL METER	01
38	TELESCOPES	02
39	SPECTROMETER	05
40	FILTER CHARACTERISTICS KIT	01
41	HARTLEY AND COLPITTS OSCILLATOR KIT	01
42	TRANSISTOR CHARACTERISTICS KIT	01
43	RESONANCE RLC CIRCUIT	01
44	SOLAR CELL CHARACTERISTICS	05
45	PN-JUNCTION DIODE CHARACTERISTICS KIT	01
46	LED CHARACTERISTICS KIT	01
47	ENERGY BAND GAP KIT	02
48	FET CHARACTERISTICS KIT	02
49	THERMISTOR CHARACTERISTICS	05
50	DIGITAL STORAGE OSCILLOSCOPE	01
51	TUNED DIODE CHARACTERISTICS	02
52	CRO	04
53	HALF WAVE FULL WAVE KIT	01
54	E/M BY THOMSON METHOD SET	03
55	MODULATION DEMODULATION	01
56	IC REGULATOR POWER SUPPLY	07
57	STEP DOWN TRANSFORMER	02
58	FREQUENCY MODULATION KIT	01
59	CLIPPER CLAMPER KIT	01
60	ANALOG COUNTER SYSTEM	03
61	MULTIMETER ANALOG	02
62	FIXED REGULATED POWER SUPPLY	02
63	OPERATION ON PHASE LOCK LOOP	01

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64	AM/FM SIGNAL GENERATOR	03
65	FUNCTION GENERATOR	03
66	AMMETER 1 AMP	02
67	MILLI VOLTMETER 100 MV	01
68	SODIUM LAMP 35 W	04
69	DIGITAL VOLTMETER	01
70	FUNCTION GENERATOR	01
71	OSCILLATOR FOR BRIDGE 1 KHZ	01
72	VOLTMETER 3V	01
73	FIBER OPTIC TRAINER KIT	01
74	CRO	03
75	AC MILLIVOLTMETER	01
76	POWER SUPPLY	01
77	HALL EFFECT SETUP	01
78	CONSTANT CURRENT SUPPLY	01
79	FUNCTION GENERATOR	02
80	CRO	01
81	IC REGULATED POWER SUPPLY	01
82	PLANK CONSTANT APPARATUS	01
83	FOUR PROBES SET UP	01
84	DIELECTRIC CONSTANT APPARATUS	01
85	PORTABLE WHEATSTONE BRIDGE	01

List of Instruments with Geo- tagged Photographs



1 Thin Film Vacuum Evaporation Unit

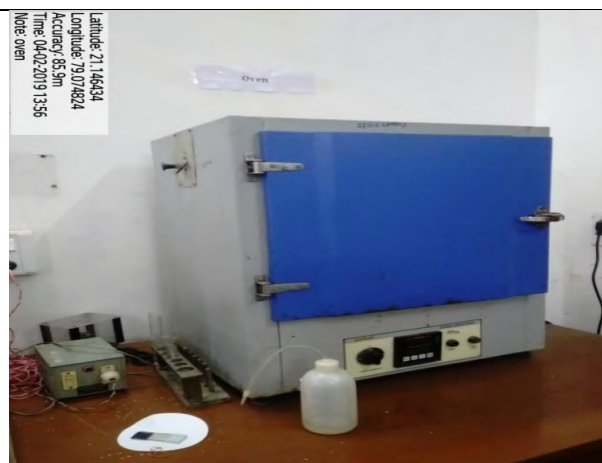


2 Constant Temperature Bath Unit

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3 Polarimeter



4 Oven



5 Laser Raman Spectrophotometer



6 UV- VIS Spectrophotometer



7 Hydraulic press



8 Four probe Setup

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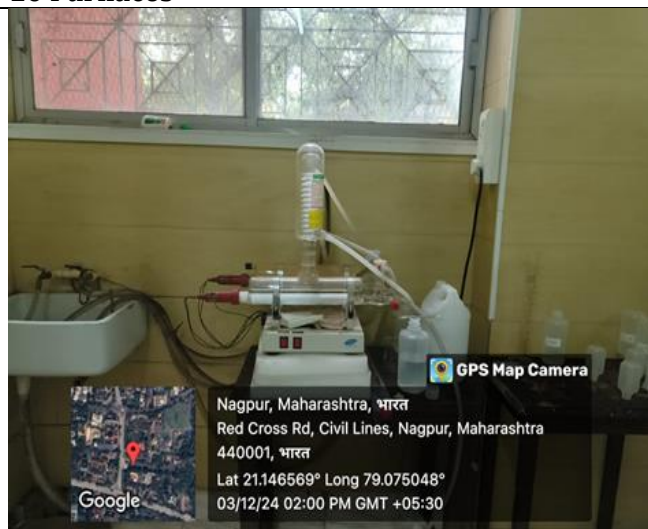
9 Furnace



10 Furnaces



11 Water Distillation Plant



12. Double distillation assembly



13. Centrifuse Machine



14. Atomic Absorption Spectrophotometer

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Annexure 6.2

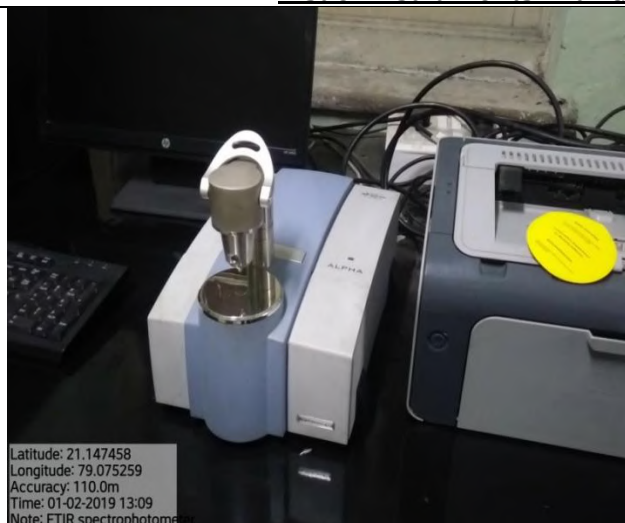
**Department of Chemistry
List of Equipments**

Sr. No	Instrument Description	Quantity
1	ABBE'S REFRACTOMETER	7
2	BIOTECHNIQUE OIL BATH	1
3	COMPACT LAB CENTRIFUGE WITH SPEED REGULATOR DIGITAL TIMER	4
4	DIGITAL BALANCE	19
5	DIGITAL COLORIMETER	11
6	DIGITAL CONDUCTIVITY METER	24
7	DIGITAL FLAME PHOTOMETER	2
8	DIGITAL MELTING POINT APPARATUS	8
9	DIGITAL NEPHLO TURBIDOMETER	5
10	DIGITAL PH METER	14
11	DIGITAL POLARIMETER	2
12	DIGITAL POTENTIOMETER	18
13	DIGITAL TABLE ELECTRONIC BALANCE	8
14	DIGITAL VISIBLE SPECTROPHOTOMETER	8
15	ELECTROPHORESIS APPARATUS	2
16	ELECTROCHEMICAL WORK STATION	1
17	FLASK SHAKER	1
18	FTIR	1
19	HAIR DRYER	3
20	HEATING MANTLE COIL	6
21	HOT AIR OVEN	6
22	MAGNETIC STIRRER	27
23	MELTING POINT APPARATUS	1
24	MUFFLE FURNACE	6
25	MUFFLE TYPE SOXHLET APPARATUS	2
26	PHOTO ELECTRIC COLORIMETER	13
27	REFRIGERATOR DOUBLE DOOR	9
28	SINGLE PAN BALANCE	15
29	TEFLON LINED SS-316 HIGH PRESSURE VESSEL AUTOCLAVE	1
30	UV-VISIBLE SPECTROPHOTOMETER	5
31	DOUBLE BEAM UV-VISIBLE SPECTROPHOTOMETER	1
32	VACUUM OVEN	1
33	VACUUM PUMP	12

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

34	WATER DISTILLATION UNIT (AUTOMATIC-ELECTRICITY)	4
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List of Instruments with Geo- tagged Photographs



1 FT-IR Spectrophotometer



2 Hydraulic Press



3 Flame Photometer



4 Electroanalytical Work Station

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

 <p>Uv-Vis Spectrophotometer</p> <p>Latitude: 21.147483 Longitude: 79.075343 Elevation: 317.78m Accuracy: 15.2m Time: 01-02-2019 13:17 Note: UV VIS spectrophotometer</p>	 <p>Uv-Vis Spectrophotometer</p> <p>Latitude: 21.147485 Longitude: 79.075331 Elevation: 318.78m Accuracy: 21.2m Time: 01-02-2019 13:26 Note: UV VIS Spectrophotometer</p>
<p>5 UV-VIS Spectrophotometer</p>	<p>6 UV-VIS Spectrophotometer</p>
 <p>Latitude: 21.14748 Longitude: 79.075334 Elevation: 318.78m Accuracy: 27.3m Time: 01-02-2019 13:25 Note: UV VIS spectrophotometer</p>	 <p>Latitude: 21.147477 Longitude: 79.075339 Elevation: 317.78m Accuracy: 15.2m Time: 01-02-2019 13:20 Note: Visible spectrophotometer</p>
<p>7 UV-VIS Spectrophotometer(Computer Based)</p>	<p>8 VIS Spectrophotometer</p>
 <p>Deep Freezer (limit -40°C)</p> <p>Latitude: 21.147514 Longitude: 79.074776 Accuracy: 138.3m Time: 01-02-2019 13:04 Note: Deep freezer</p>	 <p>Latitude: 21.147094 Longitude: 79.075306 Accuracy: 79.3m Time: 01-02-2019 13:12 Note: Distillation plant</p>
<p>9 Deep Freezer</p>	<p>10 Distillation Assembly</p>

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

 <p>Latitude: 21.14724 Longitude: 79.075161 Accuracy: 79.5m Time: 01-02-2019 13:06 Note: Hot air oven</p>	 <p>Latitude: 21.147486 Longitude: 79.075332 Elevation: 318.78m Accuracy: 85.9m Time: 01-02-2019 13:27 Note: Autoclave</p>
<p>11 Hot Air Oven</p>  <p>Latitude: 21.147244 Longitude: 79.075017 Accuracy: 85.9m Time: 01-02-2019 13:11 Note: Sonicator</p>	<p>12 Autoclave</p>  <p>Latitude: 21.147244 Longitude: 79.075017 Accuracy: 85.9m Time: 01-02-2019 13:06 Note: Centrifuge</p>
<p>13 Sonicator</p>  <p>Latitude: 21.147478 Longitude: 79.07534 Elevation: 318.78m Accuracy: 19.7m Time: 01-02-2019 13:19 Note: Muffle furnace</p>	<p>14 Laboratory Centrifuge</p>  <p>Latitude: 21.147478 Longitude: 79.075334 Elevation: 318.78m Accuracy: 16.7m Time: 01-02-2019 13:24 Note: Muffle furnace</p>
<p>15 Muffle Furnace</p>	<p>16 Muffle Furnace</p>

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

 <p>Latitude: 21.147478 Longitude: 79.075335 Elevation: 318.78m Accuracy: 18.2m Time: 01-02-2019 13:22 Note: melting point apparatus</p>	
<p>17 Digital Melting Point Apparatus</p>  <p>नागपुर, महाराष्ट्र, भारत 43xg+38g, सिविल लाईंस, नागपुर, महाराष्ट्र 440001 Lat 21.147402° Long 79.075329° 03/12/24 03:31 PM GMT +05:30</p>	<p>18 Centrifuge</p>  <p>नागपुर, महाराष्ट्र, भारत 43xg+38g, सिविल लाईंस, नागपुर, महाराष्ट्र 440001, भारत Lat 21.147356° Long 79.075369° 03/12/24 03:30 PM GMT +05:30</p>
<p>19. Double distillation assembly</p>	<p>20. Microwave</p>

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

Annexure - 6.3

**Department of Zoology
List of Equipments**

S.No.	Name of equipment	Utility
1	ROTARY MICROTOME	U.G , P.G and Research
2	HOT AIR OVEN	U.G , P.G and Research
3	CENTRIFUGE	U.G , P.G and Research
4	DIGITAL PH METER	U.G , P.G and Research
5	ELECTRONIC BALANCE	U.G , P.G and Research
6	DIGITAL PHOTO COLORIMETER	U.G , P.G and Research
7	PEN PH METER	U.G , P.G and Research
8	WATER BATH	U.G , P.G and Research
9	COMPOUND MICROSCOPES	U.G , P.G and Research
10	DOUBLE DISTILLATION APPARATUS	U.G , P.G and Research
11	TRIPLE DISTILLATION APPARATUS	U.G , P.G and Research
12	INCUBATOR	U.G , P.G and Research
13	DISSECTING MICROSCOPE	U.G , P.G
14	HEAMOMETERS	U.G and P.G
15	HEAMOCYTOMETERS	U.G and P.G
16	UV SPECTROPHOTOMETER	P.G and Research
17	MICROPIPETTS	P. G and Research
18	UV TRANSILLUMINATOR	P. G and Research
19	ELECTROPHORESIS APPARATUS	P.G and Research
20	BOD INCUBATOR	P.G and Research
21	FLAME PHOTOMETER	P.G and Research
22	COOLING CENTRIFUGE	P.G and Research
23	PROJECTING MICROSCOPE	P.G
24	LCD PROJECTOR	P.G
25	COMPUTERS	P.G
26	PRINTERS	P.G
27	DEEP FREEZE	Research
28	SHAKER	Research
29	VORTEX MIXER	Research
30	THERMOCYCLER	Research
31	GEL DOCUMENTATION UNIT	Research
32	MICRO-CENTRIFUGE	Research
33	LAMINAR AIR FLOW	Research
34	LEICA MICROTOME	Research
35	CRYOSTAT	Research

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

List of Instruments with Geo- tagged Photographs



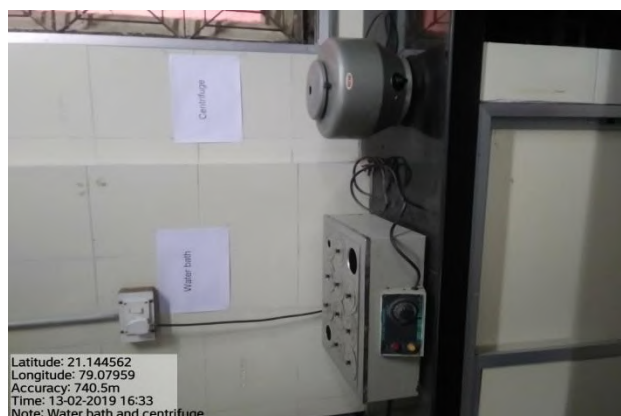
1 Ovens



2 Cryostat Microtome



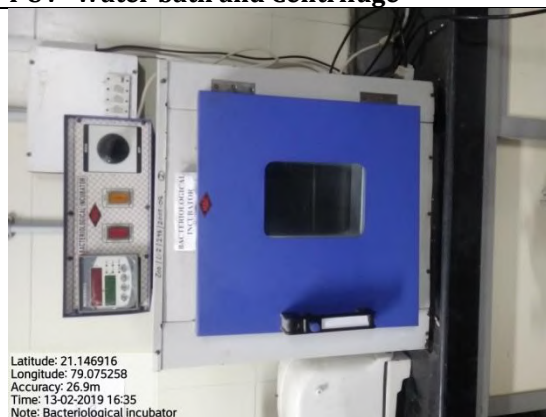
3 Leica rotary Microtome



4 UV- Water bath and Centrifuge



5. Projection Microscope



6 Bacteriological Incubator

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

List of Instruments with Geo- tagged Photographs



7 BOD Incubator



8 Triple Distillation Unit



9 UV Transilluminator



10 PC based thermocycler and Gel Doc



11 Centrifuge



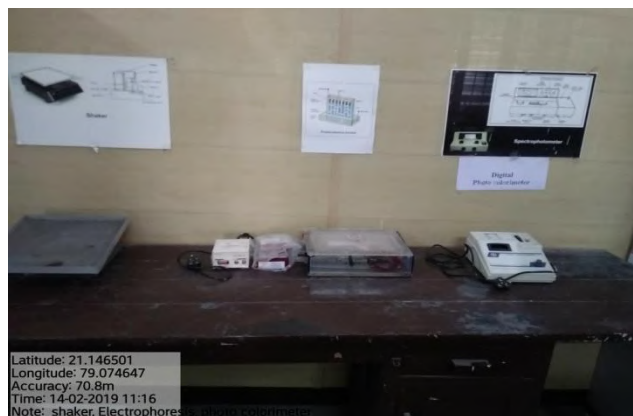
12 Cooling Centrifuge

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

List of Instruments with Geo- tagged Photographs



13 Laminar air flow chamber



14 Shaker Electrophoresis Photo Colorimeter

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

Annexure - 6.4

**Department of Botany
List of Instruments**

SN	Name of the Instrument	Quantity
1	AUTOCLAVE (VERTICAL)	1
2	DIGITAL SPECTROPHOTOMETER	1
3	VACUUM OVEN	1
4	VACUUM PUMP	1
5	DIGITAL PH METER	1
6	POCKET PH METER	1
7	STEREO ZOOM BINOCULAR MICROSCOPE	4
10	MONOCULAR RESEARCH MICROSCOPE	3
11	ULTRA PURE WATER (R. O.)	1
12	BURKARD'S AIR SAMPLER	1
13	BI-STEREOSCOPIC ZOOM MICROSCOPE	1
14	SIEVE BRASS (150 MESH)	2
15	SIEVE BRASS (500 MESH)	2
16	COMPOUND MICROSCOPE (L.S.)	11
17	PRECISION DIGITAL BALANCE	1
18	DIGITAL SPECTROPHOTOMETER SYSTRONICS	1
19	ADVANCED STUDENT MICROSCOPE WESWOX	7
20	BALANCE COMPACT SCALE	2
21	BINOCULAR RESEARCH MICROSCOPE	2
22	LAB OVEN (BIOTECHNIC)	1
23	AIR CONDITIONER	2
24	DESKTOP COMPUTER	4
25	OCULAR MICROMETER DISC	6
26	STAGE MICROMETER	2
27	CUVETTES (GLASS)	2
28	CUVETTES (QUARTZ)	2
29	HEATING MANTLE	1
30	GEOSYNC ROCK CUTTING MACHINE	1
31	HAEMOCYTOMETER	4
32	DIGITAL PHOTOCOLORIMETER	3
33	SOXHLET APPARATUS	6

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

34	STUDENT MICROSCOPE	40
35	ELECTRONIC BALANCE TOP PAN	2
36	HPLC UNIT (CENTRAL PURCHASE)	1
37	DISSECTING MICROSCOPE	40
38	SCANNER	1
39	HP PRINTER MFP1136	1

List of Instruments with Geo- tagged Photographs



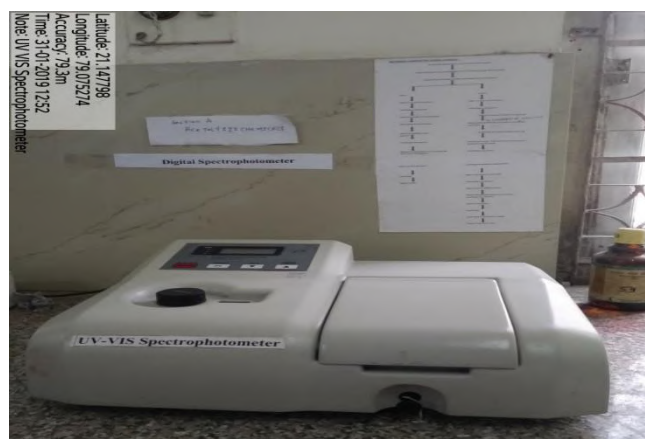
1 HPLC Unit(High- Performance liquid chromatography)



2 Cooling Centrifuge Unit



3 Bacteriological Incubator



4 UV- Visible Spectrophotometer

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.



5 HiEco Airflow



6 Laminar Air Flow Chamber



7 Deep Freezer



8 Plant Tissue Culture Laboratory



9 Rock Cutting Machine



10 Rock grinding Machine

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.



11 Burkard Air Sampler



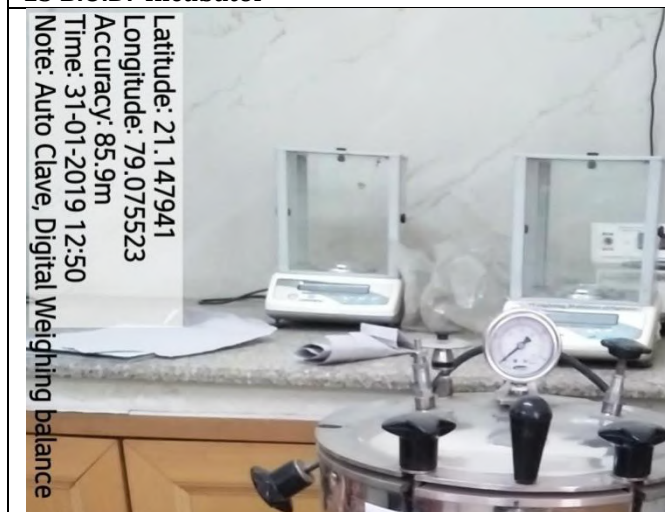
12 Glassware Dryer



13 B.O.D. Incubator



14 Orbital Shaking Incubator



15 Digital Weighing Balance



16 Carl Zeiss Photography Microscope

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.



17 Automatic Autoclave



18 Microwave Oven



19 Microprocessor based Centrifuge



20 Hot Air Oven



21 Vacuum Oven



22 laminar air Flow Chamber

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

Annexure- 6.5

Department of Statistics List of Equipments

Sr. No.	Lab No.	Name of Instrument	Quantity
1	N10- R Lab	COMPUTERS	22
		LASER PRINTER	01
2	UG Lab	PROJECTOR	01
3	PG Lab	PROJECTORS	02
		COMPUTERS	55
		SMART CLASS ROOM EQUIPMENT	01
		LASER PRINTER	02

Computer Labs with Geo- tagged Photographs



Statistics, Computer Room I



Statistics, Computer Room II

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

Annexure- 6.6

Department of Computer Science
List of Equipments

Sr. No.	LAB NO.	NAME OF INSTRUMENT	QUANTITY
1	N8 AND N9 – UG LAB	COMPUTERS	25
		LASER PRINTERS	05
		PROJECTORS	02
		SMART CLASS ROOM EQUIPMENT	01



Computer Science Laboratory

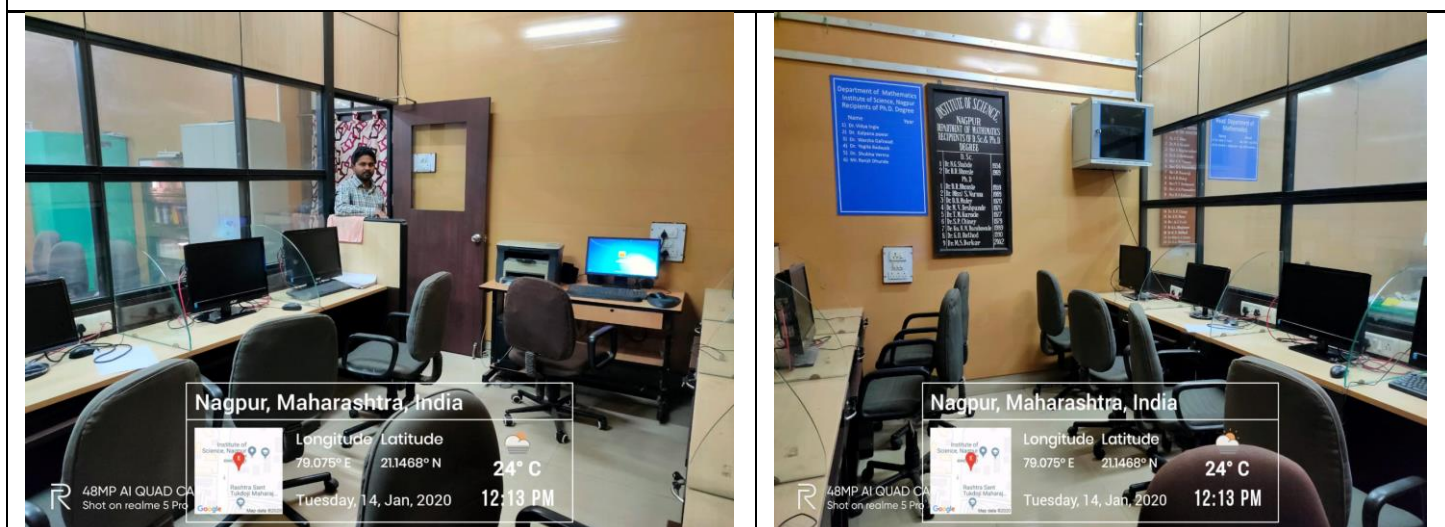
4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

Annexure - 6.7

Department of Mathematics List of Equipments

Sr. No.	Lab No.	Name of Instrument	Quantity
1	Room No 46 and PG lab	COMPUTERS	08
		LASER PRINTER	02
		PROJECTOR	02
		SMART CLASS ROOM EQUIPMENT	01

Mathematics with Geo- tagged Photographs



Mathematics Department, Computer Centre

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

Annexure - 6.8

**Department of Electronics
List of Equipments**

Sr. No.	Lab No.	Name of Instrument	Quantity
1	Room No N11	COMPUTERS	05
		LASER PRINTERS	02
		PROJECTOR	01
		DIGITAL STORAGE OSCILLOSCOPE	01
		INTERACTIVE BOARD	01

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

Annexure - 6.9

Department of Environmental Science

Environmental Science Department

Sr. No.	List of Instruments	Quantity
1	DIGIT LCD DISPLAY DIGITAL DISSOLVED OXYGEN METER PORTABLE, FOR INDUSTRIAL, 250GM	1
2	LABART NPK, PH, EC, TEMPERATURE, HUMIDITY (MULTI PARAMETER) SOIL SENSOR, 0-100%, MODEL NAME/NUMBER: LNPK-102	2
3	50-250 DEGREE CELSIUS STAINLESS STEEL HOT AIR OVEN, FOR LABORATORY, SMALL SIZE	2
4	22 X 20X 22 MM MILD STEEL AIR SAMPLER, 20KG, MODEL NAME/NUMBER: AURA INSTRUMENTS AND SERVICES	1
5	SOUND LEVEL METER	1
6	DIGITAL THERMOMETER	2
7	TRINOCULAR MICROSCOPE WITH LCD MONITOR	1
8	HANDY AIR SAMPLER HAS 2	1
9	SSU 63.5 X 58.42 X 63.5 CM BACTERIOLOGICAL INCUBATOR	1
10	OHAUS PEN PH METER	1
11	HTLP DIGITAL PH METER HTLP-081	1
12	DIGIT LCD DISPLAY DIGITAL DISSOLVED OXYGEN METER PORTABLE, FOR INDUSTRIAL, 250GM	1
13	COD ANALYZER WITH LCD DISPLAY	1
14	WATER AND SOIL ANALYSIS KIT, FOR LABORATORY USE	2
15	LABART NPK, PH, EC, TEMPERATURE, HUMIDITY (MULTI PARAMETER) SOIL SENSOR, 0-100%, MODEL NAME/NUMBER: LNPK-102	1
16	TPY-6A /6PC/ 7PC SOIL NUTRIENT ANALYZER	1
17	SOIL PH & MOISTURE TESTER	10
18	50-250 DEGREE CELSIUS STAINLESS STEEL HOT AIR OVEN, FOR LABORATORY, SMALL SIZE	2
19	22 X 20X 22 MM MILD STEEL AIR SAMPLER, 20KG, MODEL NAME/NUMBER: AURA INSTRUMENTS AND SERVICES	2
20	FIXED DIGITAL STANDARD COLORIMETER	10
21	SEMI AUTOMATIC BOROSILICATE GLASS KJELDAHL DISTILLATION ASSEMBLY, FOR CHEMICAL LABORATORY	1
22	DIGITAL TURBIDITY METER	4
23	DIGITAL PH METER TABLE	6
24	SYSTONIC PLASTIC LABORATORY TURBIDITY METER	4
25	MILD STEEL RECTANGULAR ROTARY FLASK SHAKER	4
26	DOUBLE DISTILLATION ASSEMBLY	2

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.

27	METHANE GAS ANALYZER-3 GAS	1
28	SOIL SEIVE	1
29	LUXMETER	1
30	SOUND LEVEL METER	1
31	DIGITAL HAND HELD ANEMOMETER	1
32	MAGNETIC NEEDLE	1
33	DIGITAL THERMOMETER	10
34	FLAME PHOTOMETER	2
35	TRINOCULAR MICROSCOPE WITH LCD MONITOR	2
36	SMALL BOD INCUBATOR	1
37	HOT PLATE MAGNETIC STIRRER	4
38	REFRACTOMETER	4
39	SOUND LEVEL METER	1
40	BOD ANALYZER	1
41	DOUBLE DISTILLATION ASSEMBLY	1
42	DIGIT LCD DISPLAY DIGITAL DISSOLVED OXYGEN METER PORTABLE, FOR INDUSTRIAL, 250GM	1
43	HTLP DIGITAL PH METER HTLP- 081	1
44	50-250 DEGREE CELSIUS STAINLESS STEEL HOT AIR OVEN, FOR LABORATORY, SMALL SIZE	2
45	LABART NPK, PH, EC, TEMPERATURE, HUMIDITY (MULTI PARAMETER) SOIL SENSOR, 0-100%, MODEL NAME/NUMBER: LNPk-102	2
46	TRINOCULAR MICROSCOPE WITH LCD MONITOR	2
47	DIGITAL THERMOMETER	2
48	HANDY AIR SAMPLER HAS 2	1
49	OHAUS PEN PH METER	1
50	SSU 63.5 X 58.42 X 63.5 CM BACTERIOLOGICAL INCUBATOR	1

List of Instruments with Geo- tagged Photographs

4.1



1 Double Distillation Assembly

uctu
orie



2 Bacteriological Incubator



3 Muffle Furnace



4 Hot Air Oven



5 Extraction Unit



6 Respirable Dust sampler

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.



7 B.O.D. Incubator



8 Visible Spectrophotometer



9 Double Beam Spectrophotometer



10 Hot Air Oven



11 C.O.D. Digester



12 Flocculator

4.1.1 - The Institution has adequate infrastructure and physical facilities for teaching-learning. viz., classrooms, laboratories, computing equipment etc.



13 Air Sampler Portable



14 Flame Photometer



15 Ultra Pure Water plant



16 UV- VIS Spectrophotometer