AMITY INSTITUTE OF BIOTECHNOLOGY (AIB)							
S.No	**Institute**	**Block Room No**	**Name of Lab**	**Name of Instrument**	**Make/ Model**	**Technical Specifications**	**Image**
GROUND FLOOR							
1	AIB	J-3 G-01	Molecular Biotechnology	Incubator	Thermofisher(Heracell150i)	Disinfection Time:90°C/9 hr. CO2Concentration Range:0 to 20% CO2 Oxygen Control: 1-21% or 5-90% Humidity Delivery integral panless system Relative Humidity:to 95% Temperature Range (Metric):Ambient +3° to 55°C	
2	AIB	J-3 G-01	Molecular Biotechnology	Electroporator (Eporator)	Eppendorf	Power supply:100/240 V ±10%, 50/60 Hz Power consumption:20 W Time constant:5 ms (nominal) Pulse form Decaying exponential wave form with RC time constant of 5ms Pulse voltage:200-2,500 V Charging time: <10 s	
3	AIB	J-3 G-01	Molecular Biotechnology	Centrifuge	Eppendorf (5418 R)	Max. rcf 16,873 x g Max. speed 14,000 rpm Max. rotor capacity 18 x 1.5/2.0 mL No. of rotors 1 Acceleration time to max. speed 11 s Braking time from max. speed 12 s Noise level <55 dB(A) Dimensions in cm (W x D x H) 30 x 46 x 25 Weight without rotor 22 kg Power supply 230 V/50–60 Hz Power requirement max. 320 W Temperature settings 0 to +40°C	
4	AIB	J-3 G-02	Fermentor Lab	Fermentor	Hygene (Lark)	Fermenter vessel: Pyrex glass with 5 to 8 side necks (culture volumes from 35 ml to 6 l) Temperature control:special radiation heat source with gilded reflector 150 W, Regulation:from 5 °C over RT to 70 °C Measurement:from 0 to 99.9 C in 0.1 C steps Precision:0.2 C (0 to 60 °C) Sensor:Pt 100 incorporated in the pH sensor	

5	AIB	J-3 G-02	Fermentor Lab	Sonicator	Sartorius(Labsonic P)	Compact instruments for various applications Control of amplitude and time for reproducible act Automatic control of sonotrode length Working frequency above hearing level PC connection optional	
6	AIB	J-3 G-02	Fermentor Lab	Rotary Flask Shaker	Optics	Operates at 130/180 RPM (as desired) Rotates Specimens in horizontal plane in 3/4" circle. 30x30cm platform can accommodate slides, blood bottles, flasks & beakers by use of spring bottle holder. Constructed of all steel finished with stoved enamel paint. Turned up edges and rubber sheeting on platform to prevent slipping of specimen containers. Platform rigidly supported by steel legs for smooth and silent rotation and heavy load can easily be supported. Shaker mounted on four rubber suction feet to prevent creeping. 1/35 H.P. motor operates on 220/230 volts A.c. only. Supplied with brass ring maker for 12 rings. Without thermometer. Adjustable 0-30 minute timer with arrangement for continuous operation (optional).	
7	AIB	J-3 G-02	Fermentor Lab	Vaccum Rotary Evaporator	IKA(RV-10)	Type of cooling :vertical Cooling surface :1500 cm2 Speed range :5 - 280 rpm Heating temperature range room temp. :- 180 °C Heat output :1300 W Bath volume max. :3 l Vacuum adjustment range" 1050 - 1 mbar	
8	AIB	J-3 G-03	Bio Process Engineering-I	Fermentor	Hygene (Lark)	Fermenter vessel: Pyrex glass with 5 to 8 side necks (culture volumes from 35 ml to 6 l) Temperature control:special radiation heat source with gilded reflector 150 W, Regulation:from 5 °C over RT to 70 °C Measurement:from 0 to 99.9 C in 0.1 C steps Precision:0.2 C (0 to 60 °C) Sensor:Pt 100 incorporated in the pH sensor	

9	AIB	J-3 G-04	Bio Process Engineering-II	Fermentor	Sartorious (B-Lite)	Power supply: – 230 V (± 10%), 50 Hz, max. power consumption 10 A – Potential equalisation International protection rating: IP21 Gases: – Gas supply pressure, 1.5 barg – Dry, oil and dust-free – Hose barb for tubing, external dia. = 6 mm Water: – Water supply pressure, 2–8 barg – Flow rate up to 20 lpm – Temperature min. = 4°C – Discharge pressure-less – Hose barb for tubing, external dia. = 10 mm – Degree of hardness: 12 dH max	
10	AIB	J-3 G-08	Novel Molecular Synthesis	Rotavapor	Buchi(R-210)	Flask size range : 50 - 4000 Ml Controlled temperature range: 20 - 180 °C (water and oil) Temperature deviation :± 2 °C	
11	AIB	J-3 G-10	Plant Tissue Culture Facility	Laminar Air flow		Horizontal Laminar Air Flow Bench	
12	AIB	J-3 G-16	CIF-I	Gel Doc	Syngene BioInc.(IN GENIUS)	Camera InGenius3 Sensor1/3 inch Resolution 3 million pixels Image depth 12/16 bit Greyscales 4,096/65,536 Dynamic range 3.6 - 4.8 Lens Manual zoom 6.5 - 39, F1.4 Maximum viewing area 20 x 20cm	

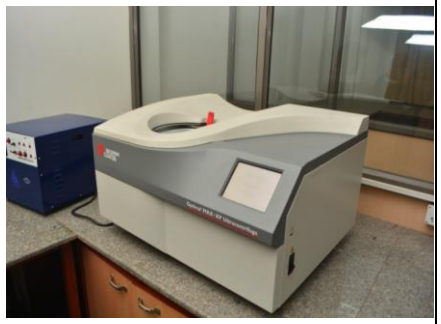
13	AIB	J-3 G-16	CIF-I	Laboratory Centrifuge	SARTORIUS (3K30)	Maximum Speed :100-30000 rpm selectable in steps of 1 rpm. High-speed refrigerated bench top centrifuge for gravitational fields up to more than 60.000 × g. Maintenance-free brushless drive motor. Free programming of all run parameters possible. Automatic rotor identification prevents the rotor from overspeeding. Efficient refrigerating machine for temperatures between –20°C and +40°C, possibility of precooling the rotors during standstill.	
14	AIB	J-3 G-16	CIF-I	Cooling Centrifuge	Remi (C-24BL)	Max. Speed(rpm):20000 Max. RCF'g':37570 Max. Tube Size(ml):100 Max. Capacity(ml): 400 Lowest Temp.°C :-8	
15	AIB	J-3 G-16	CIF-I	UV-Visible Spectrophotometer	Shimadzu (1650PC)	Spectral bandwidth :< 2nm Wavelength range :190 ~ 1100nm Wavelength accuracy :±0.3nm Wavelength repeatability :±0.1nm Photometric system :Double beam optics Photometric range Absorbance : -0.5~ 3.999Abs Transmittance : 0.0 ~ 300% Light source :50w halogen lamp deuterium lamp Built-in light source auto position adjustment Monochromator :Aberration corrected concave blazed holographic grating Detector :Silicone photodiode	
16	AIB	J-3 G-18	Animal Cell Culture Facility	CO2 Air jacketed incubator	Nuaire	Volume: 6.65 ft.³ [188.5 liters] Temperature Range: 5° C above ambient to 55°C Temperature Sensitivity: ±0.125° C Temperature Uniformity: ± 0.3° C @ 37° C Temperature Accuracy: ± 0.1° C CO^2 Range: 0.1 to 20% CO^2 Accuracy: ± 0.1% CO^2 Recovery: Up to 5% ± 0.2% in 4 minutes Temperature Recovery: 0.3° C/min. Temperature Display Resolution: 0.1° C CO^2 Uniformity: ± 0.1% CO^2 Display Resolution: 0.1%	

17	AIB	J-3 G-18	Animal Cell Culture Facility	Inverted Microscope	Motic (AE-31)	Trinocular (80/20) Inverted Microscope, WF10x/22 Eyepieces, Plan Achromat PL4x Plan Achromat Phase 10x and 20x objectives, ELWD condenser, Phase slider, PH1, PH3 and phase centering telescope, plain stage, 6V/30W Quartz illumination	
18	AIB	J-3 G-20	New Drug Discovery & Innovation Lab	Lyophilizer	Labconco (Freezone 2.5)	Collector Temperature: -50°C, -58°F Ice Holding Capacity: 2.5 L Options Included: PTFE-Coated Collector Plug Type: North America, 230 volt Style: Benchtop	
19	AIB	J-3 G-20	New Drug Discovery & Innovation Lab	Rotary Evaporator	Buchi (B-4911/R-210)	Bath Capacity:4L Temperature Range:20°to 100°C Vacuum Controller V-850 for vacuum regulation to a specified setpoint Data transfer via USB interface Timer function for process interruption after a set time Library of 43 predetermined solvents Rotary evaporator with rotation control knob Automatic lift	
20	AIB	J3 GF	Research Lab	Ultra Low Cooling	Sanyo (Ultra Low)	Temperature Range:- –50˚C to –86˚C (1˚C increments) Maximum cooling performance: –86˚C (Ambient temp. 30˚C)	
21	AIB	J3 GF	Research Lab	Centrifuge	Eppendorf (5418R)	Max. rcf:16,873 x g Max. speed:14,000 rpm Max. rotor capacity:18 x 1.5/2.0 mL No. of rotors:1 Acceleration time to max. speed :11 s Braking time from max. speed:12 s Noise level:<55 dB(A) Temperature settings:0 to +40°C	

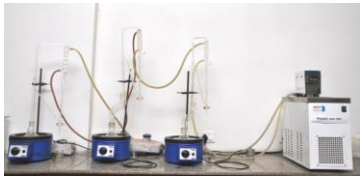
22	AIB	J3 GF	Research Lab	CO2 Incubator	Thermoscientific (Heracell 150i)	Disinfection Time:90°C/9 hr. CO2Concentration Range:0 to 20% CO2 Oxygen Control: 1-21% or 5-90% Humidity Delivery integral panless system Relative Humidity:to 95% Temperature Range (Metric):Ambient +3° to 55°C	
FIRST FLOOR							
23	AIB	J-3 FF-102	Molecular Genetics	Cooling Centrifuge	REMI (R-8C BL)	Max. Speed : 6000-16000 rpm Max. RCF: 5070-16600 'g' Max. Capacity:400-40 ml Digital timer range-0-59Min	
24	AIB	J-3 FF-102	Molecular Genetics	Bench Top Centrifuge	Eltek (Microspin RC 4815 S)	Max. Speed RPM 16000 Max. RCF xg 17600 Max. Tube Size ml 5 Max. Capacity ml 48 Width mm 320 Depth mm 410 Height mm 290 Weight Kg 16.5 Connected Load kVA 0.30	
25	AIB	J-3 FF-102	Molecular Genetics	UV- Visible Spectrophotometer (Bio Spectrophotometer BASIC)	Eppendorf	Optical system: Absorption single-beam photometer with reference beam Light source : Xenon flash lamp Wavelengths: 200 nm - 830 nm, smallest increment: 1 nm Spectral bandwidth: ≤ 4 nm Photometric: 0 to 3 A at 260 nm measuring range: ≤ 0.002 at A = 0; ≤ 0.005 (0.5 %) at A = 1 Random error: ±1% at A = 1 Systematic error: Memory Capacity: >1000 results Light beam height: 8.5 mm Cuvette shaft: 12.5mm x 12.5 mm, not temperature controlled Cuvette shaft: temperature: N/A Receiver: CMOS photodiode array Interface: RS-232 and USB Power consumption: 30 W during operations, 5 W during dimmed display Power supply : 100/240 V, 50/60 Hz Dimensions (W x D x H): 11.6 x 15.7 x 6 in	

26	AIB	J-3 FF-102	Molecular Genetics	Oil Bath Shaker	Laczenie Biosciences	Top Lid: GABLED DOME LID made of Stainless Steel Temperature: Controlled by microprocessor based digital temperature indicator cum controller. Temperature Display: Digital LED with set value (SV) & process value (PV). Shaking Speed: 40 to 140 cycles/min. Shaking Speed: Controlled by speed regulator	
27	AIB	J-3 FF-102	Molecular Genetics	Microspin Centrifuge	Eltek (Microspin TC 4815 D)	Max. Speed : 16000 RPM Max. RCF : 17600xg Max. Tube Size : 5 ml Max. Capacity : 48 ml	
28	AIB	J-3 FF-103	Animal Biotechnology	Microplate Reader	Bio-Rad (iMARK)	Wavelength range : 400–750 nm Photometric range: 0.0–3.5 OD Linearity :≤1.0% from 0.0–2.0 OD; ≤2.0% from 0.0–3.0 OD Accuracy : ≤1.0% or 0.010 from 0.000–3.000 OD at 490 nm Precision :1.0% or 0.005 OD from 0.0–2.0 OD; 1.5% from 2.0–3.0 OD Resolution :0.001 OD Filter wheel capacity : 8 Plate shaking (3 speeds) : Low, mid, high Duration, sec: 0–999 Read time : 6 sec at single wavelength, 10 sec at dual wavelengths Data output :Onboard graphical thermal printer and USB2 interface with PC or Mac data stations Data storage Calender/clock funtions; 64 assay protocols Multilanguage support 4 languages, LCD indication supported; printout report supported	

29	AIB	J-3 FF-104	Plant Biotechnology	Incubator Shaker	NISCO	Temperature Range (℃ / ℉) :Amb.+5 to 80 [Amb.+9 to 176] Motion Type: Orbital or Reciprocating motion (Default : Orbital motion) Speed Range :(RPM) 10 to 300 (Stackable Top :10 to 250) Timer Run time(10sec ~ 999hr 59min 59sec)	
30	AIB	J-3 FF-106	Cell & Molecular Biology	Orbital Shaker Incubator	NISCO	Temperature Range (℃ / ℉) :Amb.+5 to 80 [Amb.+9 to 176] Motion Type: Orbital or Reciprocating motion (Default : Orbital motion) Speed Range :(RPM) 10 to 300 (Stackable Top :10 to 250) Timer Run time(10sec ~ 999hr 59min 59sec)	
31	AIB	J-3 FF-106	Cell & Molecular Biology	Sonicator	Hielsher (UPSOH)	Diameter range :3 to 40mm Sample Volumes : 5 to 4000ml. In flow approx. 10 to 50 liters per hour can be sonicated.	

32	AIB	J-3 FF-111	AIOA Lab	Walk in Chamber	Bluestar	CoolBot window air conditioner Easily installed, cost effective Low power consumption Environment friendly i.e. low carbon emission Reliable, energy-efficient refrigeration units Timer-based electrically operated ventilation systems and exhaust fans High CFM evaporators to ensure uniform airflow inside the chamber Gas-emission systems for flexible, large-scale ripening processes Ethylene generators for sequential ripening solutions Humidifiers to maintain high humidity throughout the ripening cycle CO2 and ethylene analysers to monitor carbon dioxide levels* **Typical conditions for ripening banana** Fruit temperature :14 to 180c Relative humidity: 90-95% Ethylene concentration: 100-150 ppm Duration of exposure to ethylene: 24-48 hrs Carbon dioxide: <1% **Typical conditions for ripening Mango** Fruit temperature :20 to 220c Relative humidity: 90-95% Ethylene concentration: 100-150 ppm Duration of exposure to ethylene: 12-24 hrs Carbon dioxide: <1%	
33	AIB	J-3 FF-115	CIF-II	Ultracentrifuge	Beckman Coulter(Optima MAX-XP)	Set Speed:Actual rotor speed ± 50 rpm of set speed Set Temperature:0°C to 40°C in 1° increments Speed Range:5,000 to 150,000 rpm Temperature Control:± 2°C of set temperature User-Settable Programs: All user programs have up to 5 steps each Ambient Temperature Range: 15 to 35°C ambient Clearances Required:7.6 cm (3.0 in) both sides and rear Time -- Actual Display: Indicates run time remaining Vacuum: Moisture-purging vacuum system User-Defined Programs: RPM or RCF user selectable Display:Full-color LCD touch screen Approximate Acceleration Time: 10 acceleration profiles Approximate Deceleration Time: 11 deceleration profiles Electrical Requirements:220/240 V, 50 Hz; 120 V, 50/60 Hz; 100 V, 50/60 Hz g Force:1,019,000 x g (with MLA-130 rotor) Maximum Heat Dissipation into Room under Steady-State Conditions: 0.7 kW (2,400 BTU/hr) Refrigeration System:Solid state, thermoelectric temperature control system with forced air, no coolant, no CFCs/ODCs	

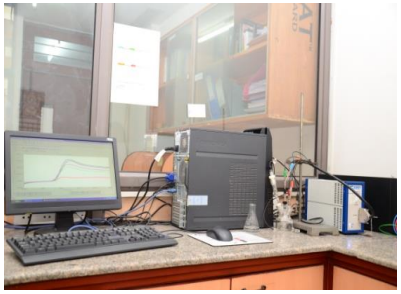
34	AIB	J-3 FF-115	CIF-II	UV-Visible Spectrophotometer	Shimadzu(1650PC)	Spectral bandwidth :< 2nm Wavelength range :190 ~ 1100nm Wavelength accuracy :±0.3nm Wavelength repeatability :±0.1nm Photometric system :Double beam optics Photometric range Absorbance : -0.5~ 3.999Abs Transmittance : 0.0 ~ 300% Light source :50w halogen lamp deuterium lamp Built-in light source auto position adjustment Monochromator :Aberration corrected concave blazed holographic grating Detector :Silicone photodiode	
35	AIB	J-3 FF-115	CIF-II	PCR Workstation	Eppendorf(MX-1289-02)	Dimension : 40cm(L)x50cm(W)x60cm(H) (MX 1289-01) Dimension : 60cm(L) x 60cm(W) x 70cm(H) (MX 1289-02) UV Source : 2x15 watts / 2 x 8 watts UV tube White Light : 3 x 8 watts / 2 x 8 watts fluorescent lamp Source	
36	AIB	J-3 FF-115	CIF-II	Thermal Cycler	Bio-Rad(MJ-MINI)	Compact thermal cycler, includes adjustable heated lid, holds 48 x 0.2 ml tubes, 12 x 0.5 ml tubes, or a 48-well microplate	
37	AIB	J-3 FF-120	Microbiology Lab - III	Bio Safety Cabinet(Class-2)	Relible(RIC-33G)	Bio Safety Cabinet frame of ply-board covered with sunmica from outside. Work bench top of stainless steel. Side and front door of work bench covered with acrylic. Motor & blower assembly to provide sufficient air pressure	

38	AIB	J-3 FF-121	Pest Control Lab	Gas Chromatograph	Varian(430-GC)	Operating temperatures: 10°Cto 35°C. Operating humidity(relative):5% to 95%. Column Oven Dimensions: 23cm(w)x11cm(d)x28cm(h). Temperature range:ambient -55°C to 450°C Temperature program ramps/holds:7/8. Maximum temperature ramp rate: 100 °C /min for all voltages. Cool down rate: 450 °C to 50 °C in 5.2 minutes. Temperature set-point resolution: 1 °C. Injector :1177 Split/Splitless injector (S/SL).	
39	AIB	J-3 FF-121	Pest Control Lab	Centrifuge	Remi(C-24BL)	Max. Speed(rpm):20000 Max. RCF'g':37570 Max. Tube Size(ml):100 Max. Capacity(ml): 400 Lowest Temp.°C :-8	
SECOND FLOOR							
40	AIB	J-3 SF-210	Plant Secondary Metabolite Technology Lab	Freezing Circulator (Cooling/Heating)	Genaxy Scientific(IC 201J)	Clevenger apparatus with circulator. Collection of essential oil. To provide constant temperature at regular time	
41	AIB	J-3 SF-210	Plant Secondary Metabolite Technology Lab	PCR with E Gel imager(Gel Doc System)	Life Technologies	Dimensions (W x D x H):Hood (20.3 x 28.4 x 36.5 cm) Base :(21.4 x 30.4 x 11.9 cm) Viewing dimensions (W x D):12 x 15 cm Excitation light source :UV light–312 nm Blue light–470 nm Power:110 or 220 VAC; 50–60 Hz Camera Type:CMOS Gradation:16-bit (65,536 gray levels) Resolution:1280 (H) x 1024 (V); 1.3 megapixels Dynamic range:3.8 orders of magnitude Exposure time:0.124 sec to 1 min Optics: Super bright lens F/1.4 fixed lens Optional: 16 mm Field of view:11 x 14 cm for 16 mm lens Emission filter:Orange filter (ethidium bromide and SYBR® Safe DNA Gel Stain) Green filter (Fluorescein, SYBR® Gold, SYBR® Green) Red filter (Qdot® 625) Software:Image capture GelCapture™ Acquisition Software 1D image analysis:GelQuant™ Express Analysis Software	

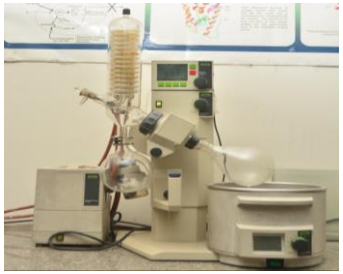
42	AIB	J-3 SF-210	Plant Secondary Metabolite Technology Lab	Chest Freezer (-20° C)	Blue Star	Temperature Range: -20°C ~ +8°C No. of Lid: 01	
43	AIB	J-3 SF-211	Molecular & Cellular Lab	Fluroscence Microscope	Olumpus (BX-43)	Optical system: UIS2 optical system Focus:Coaxial coarse and fine focus with stage up and down mechanism Focus stroke 25 mm Coarse stroke 15 mm/rotation Fine stroke 100 µm/rotation Illuminator:Built-in Koehler illumination for transmitted light Revolving nosepiece:Interchangeable reversed quintuple/sextuple/septuple nosepiece Observation tube:Widefield tilting, telescopic and lifting binocular, inclined -3°-27° Condenser:Swing out achromatic condenser (N.A. 0.9), for 1.25x–100x (swing-out: 1.25x–4x) Fluorescence illuminator:Manual reflected fluorescence, 8-position mirror turret unit, encoded with tool-free exchange of filter cubes Motorized reflected fluorescence, 8-position mirror turret unit, encoded with tool-free exchange of filter cubes Fluorescence light source: 100 W Hg apo lamp housing and transformer	
44	AIB	J-3 SF-211	Molecular & Cellular Lab	DNA Thermal Cycler	Applied Biosystem (2720 Thermal Cycler)	Personal-sized 96-well thermal cycler Ideal for both basic PCR and cycle-sequencing applications using 0.2 mL reaction tubes or 96-well reaction plates.	
45	AIB	J-3 SF-211	Molecular & Cellular Lab	Deep Freezer(-80 C)	Skadi Green Line(R404)	Capacity:484 l Sample througput holes 3 built-in access ports are standard (18 mm inner diam.) multi-position key switch: on, off and set; Bright, easy to read, digital display; Readout option in 1 and 0.1 ºC increments; Adjustable temperature set point; Clean filter alarm; door alarm (also for CO2 backup System); remote alarm (NO/NC/COM); RS232 / RS485 port (free software to download); Service friendly plug & play detachable cable housing;	

46	AIB	J-3 SF-211	Molecular & Cellular Lab	Electrophoretic Unit	GeNei	Electrophoresis System Connecting Cord : red and black (1 each).No. of Platinum electrodes : red and black (1 each).Lid : 1 No.	
47	AIB	J-3 SF-211	Molecular & Cellular Lab	Refrigerated Bath Circulators	Lab Companion (Model RW-0525G)	The Lab Companion Refrigerated Bath Circulators model RW-0525G has a capacity of 4L-6L and has a temperature range of Amb +5°C - 40°C with an accuracy of +/- 5°C at -10°C and uniformity +/- 0.1°C at -10°C. Its dimensions 302 x 438 x 690 mm externally and requires a power source of 230VAC 50/60Hz 6.7A or 120VAC 60Hz 12.6A.	
48	AIB	J-3 SF-211	Molecular & Cellular Lab	Refrigerator	Celfrost	Celfrost freezer Temperature Range: -24°C ~ +8°C	
49	AIB	J-3 SF-211	Molecular & Cellular Lab	Hybridization Oven Shaker		Rotisserie/rocker speed: 4-20rpm Temperature range:Amb. +5°-80°C Temperature control: Microprocessor	

50	AIB	J-3 SF-211	Molecular & Cellular Lab	Orbital Shaking Incubator	Remi	Chamber Volume (Litres):180 Max shaking Capacity:9 litres Platform Size: 18" x 20" External Dimensions W x D x H (cm): 70 x 78 x 125 Temperature:5ºC to 60º C (±0.5ºC) Range (Accuracy):VS-02 Supply: 220-240 Votts 50 Hz Single Phase	
51	AIB	J-3 SF-211	Molecular & Cellular Lab	Deep Freezer(-60° C)	Celfrost	Temperature Range: -60°C No. of Lid: 01	
52	AIB	J-3 SF-214	Structural Biology Lab	UV Visible Spectrophotometer with Thermal Melting Programmer (UV-1800)	Shimadzu	Buffer : 100mM Sodium Phosphate, 1M NaCl, 0.5mM EDTA, pH7.0 Wavelength : 260nm, 320nm Temperature Range : 0 to 95°C Ramp Rate : 1°C/min Sampling Interbal : 0.5°C Waiting Time : 30sec Post-Process Annealing : (95°C, 2min)	
53	AIB	J-3 SF-214	Structural Biology Lab	Chest Freezer (-20° C)	Blue Star	Temperature Range: --20° C No. of Lid: 01	

54	AIB	J-3 SF-216	Nanotechnology & Bio Informatics Lab	Water bath Incubator Shaker	Micro Scientific works (MAC)	Heating Load2.5 KW (2.0 KW + 0.5 KW) Temperature RangeAmb. +5°C to 100°C ControllerMicroprocessor based PID Digital Temperature Indicator-cum-Controller Microprocessor based Digital Temperature Indicator-cum-Controller with Automatic Digital Minute Timer Display:Digital LED with set value (SV) & process value (PV) Temperature Accuracy: ±5°CTemperature SensorRTD: (Pt-100) Shaking Speed: 40 to 180 cycles/min	
55	AIB	J-3 SF-218	Bio mimetic Research Lab	Electrochemical Analyser	Gamry(Ref 600-ZRA)	Current ranges -11 (600 milliamps to 60 picoamps) Compliance voltage :± 22 volts. On-board electronics for electrochemical impedance spectroscopy measurements Frequency range : 1 MHz down to 10 microHz. Min Voltage Resolution 1 µV Min Current Resolution 20 aA Max Applied Potential ±11 V Rise Time <250 ns Noise and Ripple <10 µV rms Noise and Ripple (typical) <2 µV rms Min Time Base 3.333 µs Max Time Base 715 s Min Potential Step 12.5 µV Analog/Digital Converter 16 bit	
56	AIB	J-3 SF-218	Bio mimetic Research Lab	Melting Point Appratus	Veego	With Silicon Oil Bath, for determination of Melting Points, Melting Range, Boiling Points. Supplied with std.accessories. Heating rate is precisely controlled by Microprocessor Circuit. Printer socket is provided.	

57	AIB	J-3 SF-218	Bio mimetic Research Lab	UV-Visible Spectrophotometer	Thermoscientific(Aquamate 8000)	Wavelength Range: 190 to 1,100nm Wavelength Accuracy: ±1.0nm Accuracy (Photometric) ±0.005A at 1.0A; <0.00025 at 0.0A Lamp :Xenon flash lamp Min. Data Interval:0.2; 0.5; 1.0; 2.0; 3.0; 5.0nm Noise :<0.00050 at 1.0 A; <0.00080 at 2.0 A RMS at 260nm Optical Design Dual beam—internal reference detector Photometric Linearity Up to 3.5A at 260nm Range (Photometric) -0.5 to 5.0 A ; -1.5 to 125 %T; ±9999 C Spectral Bandwidth: 1.8nm	
58	AIB	J-3 SF-218	Bio mimetic Research Lab	Rotary Evaporator	Buchi(B-4911/R- 210)	Bath Capacity:4L Temperature Range:20°to 100°C Vacuum Controller V-850 for vacuum regulation to a specified setpoint Data transfer via USB interface Timer function for process interruption after a set time Library of 43 predetermined solvents Rotary evaporator with rotation control knob Automatic lift	
59	AIB	J-3 SF-218	Bio mimetic Research Lab	Ultra Sonicator (Ultrasonic Cleaner)	Telesonic Ultrasonics	• Ultrasonic and heat insulation • Sloped floor for complete emptying • Edged work area prevents liquid from dropping down • Beveled cover guides water condensation back to the tank • Protection against dry running for ultrasound and heating • Ultrasonic generator is integrated • Temperature regulation • Timer for ultrasonic activity • Working frequencies 25, 40 kHz	

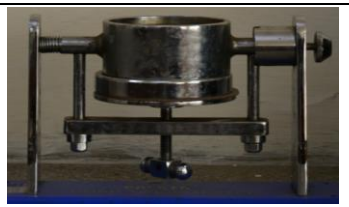
THIRD FLOOR							
60	AIB	J-3 TF-301	Algal Biotechnology	Rotary Evaporator	Buchi(B-4911/R-210)	Bath Capacity:4L Temperature Range:20°to 100°C Vacuum Controller V-850 for vacuum regulation to a specified setpoint Data transfer via USB interface Timer function for process interruption after a set time Library of 43 predetermined solvents Rotary evaporator with rotation control knob Automatic lift	
61	AIB	J-3 TF-320	Chemical Biology	HPLC	UFLC Shimadzu(LCLC-6AD)	Pump:Binary isocratic pump, Injector: Injector with a 20 µL fixed loop and a SPD-20A Prominence UV- visible diode Detector: UV-Visible detector system Large Scale Preparative System (Automated Scale-up SystemTrap) Wide Range of Use from Analysis to Large-Scale Fractionation	
62	AIB	J-3 TF-320	Chemical Biology	Rotary Evaporator	Buchi(B-4911/R-210)	Bath Capacity:4L Temperature Range:20°to 100°C Vacuum Controller V-850 for vacuum regulation to a specified setpoint Data transfer via USB interface Timer function for process interruption after a set time Library of 43 predetermined solvents Rotary evaporator with rotation control knob Automatic lift	

Amity Institute of Food Technology (AIFT)							
S.No	**Institute**	**Block Room No**	**Name of Lab**	**Name of Instrument**	**Make/ Model**	**Technical Specifications**	**Image**
1	AIFT	I-1/FF-404	MICROBIOLOGY AND BIOTECHNOLOGY LAB	BOD Incubator	NISCO	Utilized to prepare Biochemical Oxygen Demand determinations and for preservation of chemicals, vaccines, and many more. Double walled with the inner chamber made of stainless steel and the outer made of mild steel which is duly powder coated. Temperature range:- 5oC to 50oC with accuracy ± 1oC. Size:10 Cubic Feet Shelves Adjustable 3 / 4 shelves The unit is fitted with a digital temperature controller and an air circulating blower to keep the temperature uniform inside the chamber.	
2	AIFT	I-1/FF-404	MICROBIOLOGY AND BIOTECHNOLOGY LAB	Forced Convection Oven	Lab Companion/OF-12G	Min Temperature 30 °C / 86 °F Max Temperature 250 °C / 482 °F Volume 3.6 cu. ft. / 102 L RS-232 interface Microprocess PID control / Auto-tuning / Calibration Digital timer: 1 min to 99 hr 59 min, delayed ON / OFF Over-temperature limiter / Door opening alarm 3 different temperature values memorable without auto-tuning	
3	AIFT	I-1/FF-404	MICROBIOLOGY AND BIOTECHNOLOGY LAB	Motic Digital Research Microscope (Image Analyzer)	Motic/BA-310	Includes color corrected infinity optical system. Objective Lenses: Inward facing quintuple objective turret revolving nosepiece holds Color Corrected Infinity System (CCIS) EF-N Plan Achromat objectives, CCIS Plan Achromat objectives or CCIS Plan Phase objectives. Eyepieces: Siedentopf high eyepoint widefield 10x eyepieces, 20mm FOV. Accepts 25mm diameter reticle. 30° inclined binocular tubes with interpupillary distance adjustments from 55 mm to 75 mm. Independent diopter adjustments are on each eyepiece, rather than on the eyepiece tube. Trinocular version (see below) has a port that features a professional light distribution slider of 100% binocular or 100% photo tube, making it ideal for photo microscopy.. Total Magnification: CCIS EF-N Plan Achromat objectives - 40x, 100, 400xr, 1000xr oil immersion. CCIS Plan Achromat objectives - 40x, 100x, 200x, 400xr, 1000xr oil immersion. CCIS Plan Phase objectives - 100x, 200x, 400xr, 1000xr oil immersion. Specimen Stage: Rectangular mechanical stage, 175mm x 140mm with a travel range of 76mm x 50mm	

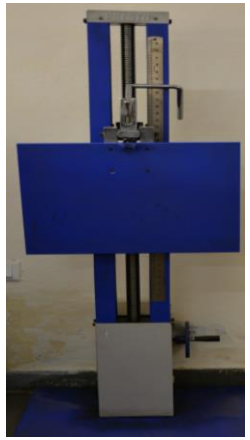
4	AIFT	I-1/FF-404	MICROBIOLOGY AND BIOTECHNOLOGY LAB	Orbital Shaking Incubator	NISCO	Temperature Range (℃ / ℉) :Amb.+5 to 80 [Amb.+9 to 176] Motion Type: Orbital or Reciprocating motion (Default : Orbital motion) Speed Range :(RPM) 10 to 300 (Stackable Top :10 to 250) Timer Run time(10sec ~ 999hr 59min 59sec)	
5	AIFT	I-1/FF-404	MICROBIOLOGY AND BIOTECHNOLOGY LAB	Water Bath	Lab Companion/BW-05G	Volume 4L ~ 6L Range Amb. +5°C ~ 100C Temperature Accuracy ±0.1°C at 50°C Temperature Uniformity +/- 0.02C at 50C Heat up time 50°C Within 40 min Controller PID Controllled microprocessor touch pad, Digital Display Permissible environment condition Temperature : 5°C to 40°C,Relative humidity: 50% ~80%,Altitude : Up to 2,000m Internal Stainless steel, 1.0t, Cubic Type External Steel, 1.2t, Double painted and baked Heater (60Hz/50Hz) 700W/230V,700W/120V	
6	AIFT	I-1/FF-404	MICROBIOLOGY AND BIOTECHNOLOGY LAB	Water Bath	Lab Companion/BW-B(Analog model)	Range:- 7°C above room temperature to 100°C Uniformity ±0.3°C at 50°C (based on various conditions) PID temperature control Over-temperature limiter, alarm indication Analog dialed indication with fine adjustment	
7	AIFT	I-1/FF-404	MICROBIOLOGY AND BIOTECHNOLOGY LAB	UV-Visible Spectrophotometer	Systronic/2202	Optics: Double Beam Optics Wavelength Range:200 - 1100 nm (190-1000nm in 2201) Spectral Bandwidth:2 nm (0.5 to 6.0nm variable in 2201) Display:PC Monitor Operating Mode:Single Multi-Wavelength, Scan & Time Scan Measuring Modes:%T, ABS, Concentration & K Factor ABS Range:+ 2.5 Abs Detector:Dual Si-Photo diode (Phtomultiplier in 2201) Filter / Dark Settng:Automatc, through Software	

8	AIFT	I-1/FF-409	FOOD CHEMISTRY LAB	Automatic Fat Extraction Assembly(Biosox)	Techno Reach/BS-04	Microprocessor based Automatic Solvent/Fat Extraction System Used for rapid, economic and safe estimation of soluble material in samples like food, feed, soil, polymers, textiles, paper, pulp, aromatic and medicinal plants, flower essence, etc . User friendly with safety features, risk free with spark proof heaters, low solvent usage, high solvent recovery, less power consumption, re-usable thimbles, six times faster than traditional method.	
9	AIFT	I-1/FF-409	FOOD CHEMISTRY LAB	Crude Fibre Estimation Assembly(Biofib)	Techno Reach/BF-04	Automatic fibre estimation system Used for the determination of crude fibre, ndf, adf, adl, cellulose, hemicelluloses, lignin & related parameters in plant materials compound feed, food etc. Fibre determination in accordance with weende, van soest and other recognized methods. BIO FIB four place automatic solvent extraction system	
10	AIFT	I-1/FF-409	FOOD CHEMISTRY LAB	Infrared Moisture Analyzer	Sartorius /MA-35	Maximum weighing capacity of 35 g with 1-mg resolution Temperature range from 40 - 160°C Heating of a sample by two powerful metal tubular-shaped heating elements (also called dark radiators) Uniform distribution of the heat rays using an integrated reflector Choice of two modes for end-point determination of a measurement: fully automatic and timer modes Special version for compliance with FDA/HACCP regulations (no glass components)	

11	AIFT	I-1/FF-409	FOOD CHEMISTRY LAB	Nitrogen Estimation System (Biokjel)	Techno Reach/Biodist-F/BK12	BIOKJEL Automatic Block Digestors enable rapid digestion of samples within 45 minutes to 1 hour. The unique PID micro-controller enables precise control of temperature with Digital Display. Efficient Casted Aluminium with Alloy Combination enable uniform transfer of heat. BIOKJEL incorporates feather touch membrane keys with built-in safety features. Equipped with Automatic Micro Twelve Sample System,Acid Neutralizer Scrubber ,Refrigerated water cooling system	
12	AIFT	I-1/FF-409	FOOD CHEMISTRY LAB	Oil Bath	NISCO	Double wall construction. Temperature range 50oC to 250oC + 2oC is controlled by a thermostat.	
13	AIFT	I-1/FF-410	FOODS & NUTRITION LAB	Bomb Calorimeter	NISCO	Used for a full range of solid and liquid samples. The instrument is Simple to operate, can be set up in a short time period. Type: Isothermal Tests Per Hour: 2 0.3% Precision Class Static Jacket Calorimeter Operator time Per Test: 25 Min Temperature Resolution: 0.01 °C	
14	AIFT	I-1/FF-410	FOODS & NUTRITION LAB	Centrifuge	Remi/R-24	Used for determination of moisture equivalent of soil. It is also suitable for determination of settlement of paints, pastes, cosmetics and food products. Stepless speed regulator with zero start interlock Digital speed indicator Dynamic brake 0-99 minutes digital count down timer Imbalance detector with cutoff Safety lid interlock to prevent cover opening during centrifugation Max Speed rpm:- 17300 Max. RCF 'g':-27440 Max. Tube size ml :-100 Max. Capacity ml:- 400	

15	AIFT	I-1/FF-411	PACKAGING & SENSORY EVALUATION LAB	Ubique Burst Strength Tester	Ubique/ BST-AUTO	Used to determine strength and performance of materials like paper, paperboards, corrugated boards and boxes, solid fibreboards, filter cloth, industrial fabrics, leather, rexine, etc. to determine their quality, strength and performance. Two-in-One Paper & Board Tester: Fitted with Thin as well as Moulded Rubber Diaphragms for testing materials with lower as well as higher burst values accurately Range: 0 to 7/10 & 35/70 kg/cm2	
16	AIFT	I-1/FF-411	PACKAGING & SENSORY EVALUATION LAB	MAP Unit	Dansensor/Checkmate 3	Fast, flexible and accurate headspace gas analyser for quality control of Modified Atmosphere Packages (MAP) Large easy to read 5" colour display with touch function Available for either headspace oxygen analysis (O2) or combined headspace oxygen/carbon dioxide (O2/CO2) measurement Very small headspace analysis sample volume requirement (from 3 ml) Data transfer via Ethernet, USB and RS232 Measuring Range: 0-100%	
17	AIFT	I-1/FF-411	PACKAGING & SENSORY EVALUATION LAB	Cobb Sizing Tester	Presto/PCS-23	Cobb sizing tester is used for fast determination of the quantity of water absorbed by a paper or board in a given time. The Water absorptiveness (Cobb value) of a substance is defined as the mass of water absorbed in a specific time by a 1 sq. meter sample of paper, board or corrugated board, under standardized conditions.	
18	AIFT	I-1/FF-411	PACKAGING & SENSORY EVALUATION LAB	Texture Profile Analyzer	Stable Micro Systems/TA HD Plus	Used to perform tests in both tension and compression for cycling, flexure, constant strain and stress relaxation on such products as food, pharmaceuticals, cosmetics, packaging, leather, and adhesives. There are many built in test procedures to meet most product testing requirements and materials testing standards. Speed Range:-0.01 - 20mm/sec up to 250Kg 0.01 - 13mm/sec from 250 to 750Kg Speed Accuracy :-Better than 0.1% Range Resolution:-0.001 mm Displays:-Simultaneous Speed, Distance and Force Operating Modes:-Four channels of RS485 using an industry standard MODBUS protocol. Operating Modes:-Measurement of force and distance in tension or compression.	

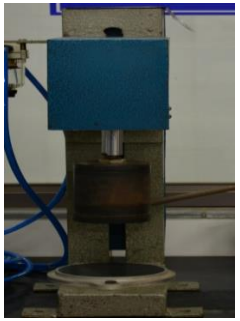
19	AIFT	I-1/FF-411	PACKAGING & SENSORY EVALUATION LAB	Scuff resistance tester	Presto	The rub test equipment can be used in Paper & Packaging industries to evaluate color transfer from printed or coated surfaces during rubbing. Specimen Size: 2 inch and 4.5 inches Diameter. Weight on Sample: 1psi + 1psi separate weights provided Controls : Digital Preset Cycle counter. No. of Cycles: 0 - 9999, 9999. Paint : Powder coated & Chromate finished Input Power : 230 Volts, 50/60Hz, single phase supply.	
20	AIFT	I-1/FF-411	PACKAGING & SENSORY EVALUATION LAB	Pin Hole Tester	Test Techno Consultants	An apparatus to help identify the pinholes present in Aluminum Foils, Metalized Films, Opaque Laminates, Table Top model. Consist of a Self-Illuminated Chamber with Glass Top, Hood and Digital Counter. The Digital Event Counter has an LCD Display with an inbuilt battery. The expected life span of the battery is almost 7-8 years.	
21	AIFT	I-1/FF-411	PACKAGING & SENSORY EVALUATION LAB	Vaccum Oven	Pooja Scientific	These are double walled units with outer made of M.S. sheet duly powder painted and inner made of heavy gauge S. Sheet. Temperature range from ambient to 150oC is controlled by Digital Temperature Controller with an accuracy of ± I°C. It is capable of with standing a high vacuum. Provided with vacuum gauge, see through transparent window of toughened glass and one shelf.	
22	AIFT	I-1/FF-411	PACKAGING & SENSORY EVALUATION LAB	Dart Impact Tester	Presto	Used for evaluating the impact resistance and impact failure load of polyethylene films under specified conditions. Inside diameter of clamp: 127mm Specimen size : strips of 240 mm width Release Mechanism : Electro Magnetic. Diameter of dart head : 38mm Weights : Ranging from 5gms to 500gms supplied. Height of fall : 220,660,and 1524 mm Counter : Digital.	

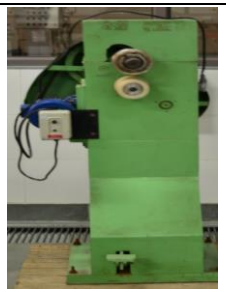
23	AIFT	I-1/FF-411	PACKAGING & SENSORY EVALUATION LAB	Drop Tester	Presto	Drop tester is widely used in various industries to check and validate the strength of plastic bottles. Moreover, these testers are used to drop plastic materials from a certain height to ascertain the strength of the plastic material. Height: 1 meter (Adjustable) Load: Upto 50Kg.	
24	AIFT	I-1/FF-411	PACKAGING & SENSORY EVALUATION LAB	Poroscope	Fischer	Low-energy, and therefore safe, high voltage. High voltage generation in the test head. Two test head versions with test voltage ranges: 0.3 to 3 kV and 2.5 to 25 kV can be connected. Continuously adjustable test voltage. Display of the test voltage that is present directly at the electrode. Electronic test voltage monitoring. Optical indication at the test head and the test instrument when a pore is detected. Additionally, an acoustic signal will sound at the test head. The pore detection sensitivity is adjustable. Depending on the setting, pores are indicated at short 20 to 50% voltage drops.	
25	AIFT	I-1/FF-411	PACKAGING & SENSORY EVALUATION LAB	Tensile Testing Machine	Presto/ Jupiter Series(Digital),ATTM -250	Digital is used to determine testing tensile strength & elongation of various products of Paper & Packaging. Load capacity: 250 kg. (Or Custom Specified Spec). No. of load cell : 1. Speed: Varies 100 mm/minute to 300 mm/minute. Paint: Powder coated. Power Consumption : 1K Motor: ¼ HP Single Phase 220 / 110 V AC Supply. Elongation/Deformation : 0.1 mm	

26	AIFT	I-2/LG	Process Hall - Cereals, Pulses and Oilseeds Processing Unit	Baking oven	Continental Equipment Private Limited	Ideal for entire range of baked dishes,continental food and even pizzas. Fully safe with automatic flame sensing microprocessor controller. Even heating in a linear turbulent manner ensuring no uncooked portions remain.	
27	AIFT	I-2/LG	Process Hall - Cereals, Pulses and Oilseeds Processing Unit	Mini Dal Mill	National Scientific Instruments Co.	Mini Dal Mill is a semi automatic composite unit consisting of a Dehusking machine, an aspirator assembly and a reciprocating sieve arrangement. Entire system operates by 3 HP electronic motor. Capacity of Dal processor machine about 125kg of pulses per hour provided with automatic arrangement of collecting husk, desusked and split pulses. Retains proteins and Natural shine. Automatic arrangement of collecting the following in separate outlet: (a) Dehusked (b) Split Pulses (c) Brokens (d) Husk Pollution free	
28	AIFT	I-2/LG	Process Hall - Cereals, Pulses and Oilseeds Processing Unit	Corn Mill	National Scientific Instruments Co.	Corn Grinding Mills, Maize Mills offers high speed and continuous grinding. These mills are easy to install, easy to operate, highly efficient and durable. SPEED RPM:-600 B.H.P:-4-6	
29	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Planetary Mixer	Continental Equipment Private Limited	Dimensions 655 x 568 x 1156 Power (KW/HP) 1.25 HP	

30	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Proofing cabinet	Continental Equipment Private Limited	Recessed control panel with adjustable dial thermostat Drip trough and removable condensation pan on bottom of cabinet Heavy-duty 20 gauge polished stainless steel cabinet 5" casters; two swivel with brakes and two rigid Includes 10 pairs of tray slides	 
31	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Blanching Equipment	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	It is pre-processing production line of vegetables on the material pre-cooking, blanching, sterilization of the major equipment. All parts are adopted stainless steel. Matching supply with automatic hoister, water cooling trough, the machine is automatically in materials ingress and egress, pre-cooking time of PC variable speed controller regulates motor speed to achieve constant torque stepless speed regulation. Pre-cooking temperature is double insurance by the number of significant temperature regulator and thermometer direct. Scope of application:suit to process peduncle vegetables, cabbage, carrots,graden bean, garlic sprouts, taro seeds, etc; the normal pre-cooking time :1-10 minutes; day capacity 1-5 tons of dry goods;	
32	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Canning Retort	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	The canning retort utilizes steam based process for complete sterilization of cans and bottles after sealing. It is easy to operates and provides complete manual control over the process. Cans/batch capacities.: 425	
33	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Colloidal Mill	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	Suitable for exhausting air from filled cans before seaming. Suitable for dehydration of fruits & vegetable to homogenizing of liquids or pastes and for many other purposes.	

34	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Crown Corking Machine	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	Suitable for sealing bottles / bottle capping with Crown Corks. Hand Operated. Capacity: 8-10 Bottles/min.	
35	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Double Seamer	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	The double seamer is suitable for high speed hermetic seaming of OTS cans still type seaming ensures best seaming results / high productivity. Fabricated from heavy gauge steel, the double provides easy operation and long service life. This heavy duty double seamer is suitable for continuous and high speed seaming of can	
36	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Fruit/ Vegetable Crusher(Fruit Mill)	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	These fruit juice machines and extractor suitable for crushing hard seedless fruits before pulping or juice extraction. Available in following models:	
37	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	GC-BL Filler	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	This machine is suitable for fillling thick viscous liquids like jams/curry/paste/chocolate/sauce/mayonnaise etc is different types of containers.Semi Automatic Filling machine, GMP Standard. Model:- GC-BL-500 Filling range (ml):- 100-500 Capacity (fills/m) :-12-18 Air usage (Ft3/min):- 5.7	

38	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Hand Flanger	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	Ideally suitable for all sizes of welded cans. In a single stroke the flanged ends come out giving perfect shape to the can. Speed: 10 to 15 cans/min	
39	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Helicoidal Juice Extractor	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	Suitable for extraction of juices from fruits like pineapple, orange, apple, ginger, awla etc. Unique spiral design of the machine ensures high yield juice recovery without making it bitter. Continuous feeding/extraction of product ensures minimal labour.	
40	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Lug Cap Sealers	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	Suitable for bottle capping with lug caps. Pneumatically opreated and more efficient as well as faster. LCS - 12 (Semi-automatic Pedestal model) 20-25 bottles/min	

41	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Pulper	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	Fruit and Vegetable Pulper is suitable for extraction of pulp from vegetables and fruits like mango, litchi, guava, pear, tomato, passion fruit, grape etc. Capacity:- 80 Kg/Hr	
42	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Rotary Flat Can Body Reformer	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	This machine is used for reforming flattened cans into round shape. The machine is firmly bolted into the ground and can be arranged for the motor drive. Speed: 10 to 15 cans/min.	
43	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Round Can Body Beader	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	Suitable for beading of cans. The ensures avoidance of paneling / damage to the can body after sterlisation Transportation.	
44	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Screw type Juice Extractor	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	Suitable for extraction of Juice from citrus fruits like orange and gooseberry (awla). Capacity :- 1 motor	

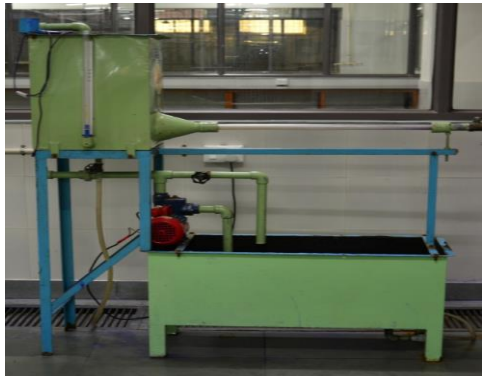
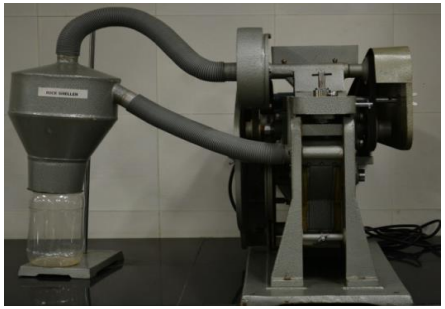
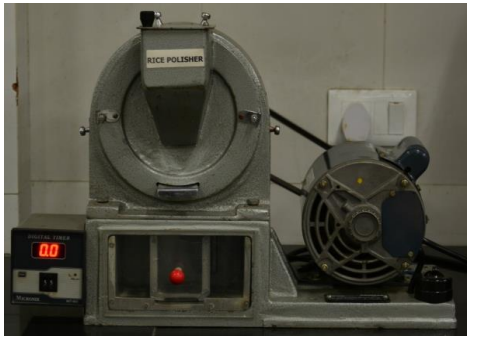
45	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Steam jacketed kettle	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	It is suitable for cooking pulp or juices used in the food processing and packaging industry. The kettle is 2/3rd jacketed Capacity :-10gallon [45 litres]	
46	AIFT	I-2/LG	Process Hall - Fruits & Vegetables Processing Unit	Straight Line Exhaust Box	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	The exhaust box are used for exhausting air from filled cans before seaming. These boxes are available in different lengths as per the specifications of clients. Suitable to exhaust entrapped air in product/cans before final Seaming Uses Steam to heat up the product ensure exhausting it entrapped air. Length:- 18 feet	
47	AIFT	I-2/LG	PROCESS HALL - Milk Processing Unit	Treadle Lid Embossing Machine	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	used for embossing batch number, manufacture date, etc on the lid before seaming. It uses an inexpensive marking method because it doesn't require inks, hazardous waste disposal or skilled technicians to operate.	
48	AIFT	I-2/LG	PROCESS HALL - Milk Processing Unit	Vacuum Filler	BAJAJ PROCESS PACK MACHINEN PRIVATE LIMITED	Suitable for filling viscous liquids like juice, ketchup and syrup in glass bottles with narrow necks. VF 27 6 Head 35-40 bottles/min	

49	AIFT	I-2/LG	PROCESS HALL - Milk Processing Unit	Ageing Vat	Goma Engg	Made of stainless steel and various other metal alloys to make them more durable. Find application in several dairy and other related industries. Appropriate for making ice-cream and other similar items. Easy to operate	
50	AIFT	I-2/LG	PROCESS HALL - Milk Processing Unit	Steam Boiler	Shubham Engineers	Rated Steam Output(F & A 100 deg C) (Kg/Hr) : 50 Steam Pressure Kg/sq.cm : 10 Efficiency : 88 +- 1 Fuel Consumption Kg/Hr : 3 Connected Electrical Load (H.P): 1	
51	AIFT	I-2/LG	PROCESS HALL - Milk Processing Unit	Gerber Centrifuge	Ample	Commonly used in small dairies to milk collection centres, to check fat content in milk and milk products. Designed to achieve absolute balance and correct alignment, these are equipped with completely separable top cover, which makes these easy to operate. The specifications of these centrifuge machines are: * Hand Operated Centrifuge * Capacity 8 / 12 / 24 Butyrometers * Acid Proof Clamps & Sockets *	

52	AIFT	I-2/LG	PROCESS HALL - Milk Processing Unit	Ice cream freezer	Goma Engineering Private Limited	Continuous Ice Cream Freezer at (-) 50C. Of Ice Cream suitable for 100% overrun with mix inlet at (+) 40C. Utilities required Cooling Tower Water @ 300C.and 3 Phase power connection It will be complete with :- Frame and covering panel in SS 304 High conductivity metal hard chrome plated cylinder Hollow two piece construction dasher Hardness Controller with digital ammeter Hour meter, speed variable device for mix pump with indicator, hour meter, SS Diaphragm sanitary design pressure gauge Suction and Discharge pressure gauge for refrigeration kit Hot gas supply for freezing cylinder Interlock and safeties for single phase, overload, low/high refrigerant pressure etc. FRESCOLD / Reputed make refrigeration compressor with water cooled condenser of 404 A. Pump Drive arrangement – A. C Drive	
53	AIFT	I-2/LG	PROCESS HALL - Milk Processing Unit	Milk processing equipment	Goma Engineering Private Limited	**Homogenisers:-** Capacity : 20 - 30,000 LPH • Pressure : Upto 1000 bar • All contact parts in SS - 304 / SS - 316 • Stellite / Tungsten Carbide Valve & Valve Seat • Two stage Homogenising head • Particle size less than 1 micron • CE Marked • SS-316 Diaphragm Pressure Gauge **Pasteuriser / PHE:**Capacity : 20 - 20,000 LPH • Imported SS 316 Plate • Glue - less & Clip-On type gaskets • Regeneration efficiency upto 93% • Application - Milk, Cream, icecream Fruit Juice, Beverages etc	
54	AIFT	I-2/LG	PROCESS HALL - Milk Processing Unit	Spray Dryer	S. M. Scientech	Spray Drying is still the most economical method of evaporation to reduce a liquid feed to solid powder particles.	

55	AIFT	I-2/LG	PROCESS HALL - Milk Processing Unit	Vacuum evaporator	S. M. Scientech	Vacuum Evaporators are used to remove water prior to drying, reduce the volume of product and prolong the storage life.	
56	AIFT	I-2/LG	Process Hall- Food Engineering I Unit	Fermentor(in-situ sterlizable)	Scigenics	Automatic in-place sterilization of the vessel, process piping & filters. Automated CIP Automatic pressure control Provision for Independent sterilization of inlet & exhaust filter Rupture disk Caster wheels to convert the system as mobile fermenter for convenience in cleaning & maintenance. Additional ports for convenient access & effective cleaning of the vessel internals are provided for 500 litres and above.	
57	AIFT	I-2/LG	Process Hall- Food Engineering I Unit	Forced Convection Heat Transfer Appratus	J. P. TECHNO INSTRUMENTS	consists of mainly a centrifugal blower, electrically heated test sec tion, control valve to regulate the air flow and an orificemeter and U-tube water manom eter for flow measurement. Thermocouples are used to measure the pipe wall tempera ture and also the air temperature at inlet and exit. The apparatus mainly designed to find out the value of heat transfer coefficient under the air different conditions.	
58	AIFT	I-2/LG	Process Hall- Food Engineering II Unit	Free(Natural)Convection Heat Transfer Appratus	J. P. TECHNO INSTRUMENTS	Consists of vertical cylinder fitted in a large enclose, with top and bottom open to ensure undisturbed natural convection apparatus. Perspex sheet provided at the front side of enclosure for visual display. H eating element provided inside the cylinder to heat it uniformly and the heat is dissipated from other surface by natural convection to ambient air. Thermocouples cylinder surface and one more thermo couple records the ambient temperature in the duct. The heater input can be varied with the help of a dimmerstat and measured by voltmeter and an ammeter.	

59	AIFT	I-2/LG	Process Hall- Food Engineering II Unit	Thermal Conduction Appratus	J. P. TECHNO INSTRUMENTS	Consists of a guarded hot plate assembly formed by a central heater and sandwitched between the lower and upper plates and rings. Two identical specimen of the material to be tested are clamped between the two cooling plates and the heater plate assembly. Heater input to central heater measured by voltmeter and ammeter giving the heat flow rate across the specimen. Thermocouple are placed in heater and cooling plated to measure the temperature difference across the specimen.	
60	AIFT	I-2/LG	Process Hall- Food Engineering II Unit	Parallel Flow / Counter Flow Heat Exchanger	J. P. TECHNO INSTRUMENTS	Geyser Capacity :3 KW Heat Exchanger Outer Pipe Insulated By Asbestos Rope a. Diameter:25mm b. Material:G.I 03. Heat Exchanger Inner Pipe a. Length:1000mm b. Diameter:12.5 mm OD c. Material:Copper 04. Digital Temperature Indicator With Selector Switch a. Range:Ambient to 199.9 Deg. c 05. Thermocouples a. Type :Cr. AI	
61	AIFT	I-2/LG	Process Hall- Food Engineering II Unit	Recirculatory Tray Drier	S. M. Scientech	Design capacity - 100 kg per batch. Air blowers – 2 nos. Arrangement for recirculation of discharge air at an adjustable degree of recirculation. Control heater - 1 No. (4.5 kW; with thermostat) Booster Heater - 2 Nos. (4.5 kW each) Tray size – 80 x 60 cm No. of trays - 12 (two stacks containing 6 trays each) A two-panel glass door of 60 cm width Air velocity control Indicating type digital temperature controller (0‑100oC) All interior parts made of SS‑304 5 cm thick insulation on all sides of the dryer. A vent on the top centre to insert a sensing probe	

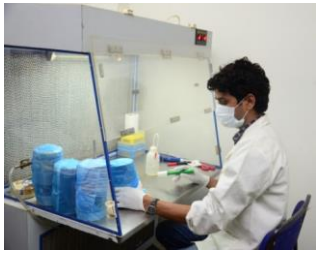
62	AIFT	I-2/LG	Process Hall- Food Engineering II Unit	Reynold's Appratus	J. P. TECHNO INSTRUMENTS	Steady flow arrangement Very clear flow visualization Fine control of die thread. Accurate flow measurement & control. Acrylic tube (transparent) 25 mm OD of suitable length. Sump tank of 400 X 400 X 700 mm. Supply tank of 300 x 300 mm size & die tank with die needle. Flow control valve. Measuring Flask & stop watch for flow measurement. .	
63	AIFT	I-2/LG	Process Hall- Food Engineering II Unit	Rice Sheller	Indo Osaw Industrial Products Private Limited	Capacity : 40-50kg/hr Shelling Mechanism : It comprises of two rubber rollers. Husk Collector : It is used to save husk from each sample for further analysis. Safety Features : Safety features prevent damage by small rocks or metal objects, which accidentally enter the hopper. Operating Voltage : 220V, 50Hz, AC. Motor : 0.25HP Visibility : De-husking operation is visible through transparent window.	
64		I-2/LG	Process Hall- Food Engineering II Unit	Rice Polisher	Indo Osaw Industrial Products Private Limited	Hopper Capacity : 100g/batch. Input : Brown rice. Output : Polished rice. Polishing Capacity : 6kg/h. Sieve : Grinding wheel is surrounded by an oblong 1mm sieve for removal of bran. Bran Collector : It is used to save bran from each sample for further use. Operating Voltage : 220V, 50Hz AC. Motor Power : 1/2HP. Mesh size of abrasion roller : 36 No. Roll speed : 650-1750 RPM.	

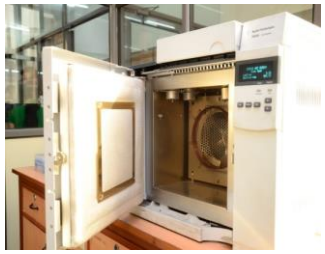
65		I-2/LG	Process Hall- Food Engineering II Unit	Seed Grader Paddy Cleaner / Grader	Indo Osaw Industrial Products Private Limited	Machine operates on the principle of gravity with scalping and grading process. Feed hopper : Designed for many crop seeds, with adjustable feeding control. Screens : Set of 10 sieve sizes. Constructed of perforated metal sheet with round/oblong openings. Fan : Blowing air speed is regulated through a control value. Handle : For manual operation of the machine. Collection trays : One for under size, one for over size & one for graded/clean seeds. No. of working screen : Two. Motor : ½ HP Single Phase. Operation : Manually/Electrically. Set of 10 Sieves Sizes (mm) Simple wood made 3.5 OH, 2.75 OH, 2.0 OH, 1.85 OH, 1.75 OH, 1.5 OH,7.0 RH, 5.0 RH, 1.6 RH, 1.2 RH (OH - Oblong Hole & RH-Round Hole).	
66		I-2/LG	Process Hall- Food Engineering II Unit	Shelf Freeze Drier	Lyodel / DELVAC Pumps	Specially designed for flexible and reproducible production cycles. Used for precise control of freezing, primary drying and a secondary drying. The unit is provided with a microprocessor based programmable temperature controller with 2 relay outputs for shelf heating and cooling purposes. Easy to use separate stainless steel chamber/condenser Hermetic type refrigerating compressor DD8, double stage oil sealed rotary pump Digital vacuum and temperature indicators Wide range of accessories that include also microprocessor for automatic control system Compact size, supplied with trolley Using Lyodel-Shelf, material can be processed in a wide range of product containers with provision for sealing under vacuum or inert gas	
67		I-2/LG	Process Hall- Food Engineering II Unit	Sieves Shaker	Kwality Traders	Gyratory Type Sieve shaker Driven by a 0.25 H.P motor, 220 volts AC through a reduction gear and is suitable to carry upto6 sieves of 8” dia. .In addition to the gyratory motion of the shaker there is an upward and downward movement at a frequency of around 270 R.P.M approx.	

Amity International Centre for Post Harvest Technology & Cold Chain Management (AICPHTCCM)

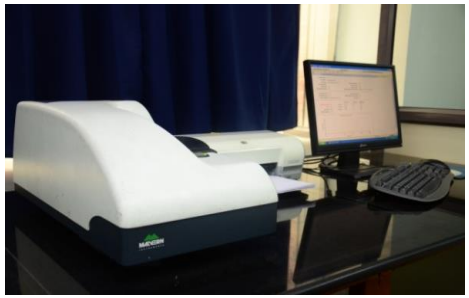
S.No	Institute	Block Room No	Name of Lab	Name of Instrument	Make/ Model	Technical Specifications	Image
1	AICPHTCCM	J-1 /LG-05	Low Temperature Storage Room/Ripening Lab	CoolBot Cool Room	Bluestar	Temperature Range :- Upto 4 degree C CoolBot window air conditioner Easily installed, cost effective Low power consumption Environment friendly i.e. low carbon emission Reliable, energy-efficient refrigeration units Timer-based electrically operated ventilation systems and exhaust fans High CFM evaporators to ensure uniform airflow inside the chamber Gas-emission systems for flexible, large-scale ripening processes Ethylene generators for sequential ripening solutions Humidifiers to maintain high humidity throughout the ripening cycle CO2 and ethylene analysers to monitor carbon dioxide levels* **Typical conditions for ripening banana** Fruit temperature :14 to 180c Relative humidity: 90-95% Ethylene concentration: 100-150 ppm Duration of exposure to ethylene: 24-48 hrs Carbon dioxide: <1% **Typical conditions for ripening Mango** Fruit temperature :20 to 220c Relative humidity: 90-95% Ethylene concentration: 100-150 ppm Duration of exposure to ethylene: 12-24 hrs Carbon dioxide: <1%	 
2	AICPHTCCM	J-1 /LG-04	Processing Lab	UV Visible Spectrophotometer	Systronics (119)	High Performance Stabel Beam Optics, 1200 lines/mm Grating, Czerny Turner mount monochromator. Wavelength: Range: 200-1000nm Resolution: 0.1 nm Accuracy: ± 1nm Repeatability: 0.5 nm Bandwidth: 2nm	

3	AICPHTCCM	J-1 /LG-03	PHT Lab/ Instrumentation Lab	Micro Centrifuges	REMI (RM - 12CDX)	Max. Speed rpm 16000 Max. RCF 'g' 16600 Max. Capacity ml 40 W x D x H mm 280 x 350 x 290	
4	AICPHTCCM	J-1 /LG-03	PHT Lab/ Instrumentation Lab	Microscope Primo Star	ZEISS	Primo Star is your digital classroom microscope - designed with long-term use and extreme durability in mind. With Primo Star and the integrated HD streaming camera in conjunction with the iPad App Labscope from ZEISS, you can connect several microscopes in your classroom to a network. Doing so makes teaching easy and will help your students learn quickly and effortlessly	
5	AICPHTCCM	J-1 /LG-03	Research Lab	Atomic Absorption Spectrophotometer	NOV AA 350	novAA® 350 represents a fully automated flame system with double beam mode and automatic 8-lamp turret. The novAA® 350 is designed to meet the challenges of the most routine analysis and demanding applications. At a glance: Robust design for handling complex matrices and resists difficult lab environment High degree of automation through intelligent auto optimization routines and accessories Fully automated 8 lamp turret for highest sample throughput Single beam and double beam optics Very strong background correction with Deuterium lamp Intuitive user guidance Hydride technique The combination of the hydride technique with the novAA® 350 enables the analysis of hydride forming elements, such as As, Se, Sb, Te, Bi and Sn: Combination of Continuous Flow and Batch mode for hydride technique Integrated amalgamation unit (gold-platinum-net) for best detection limits of mercury Integrated electro thermal heating	

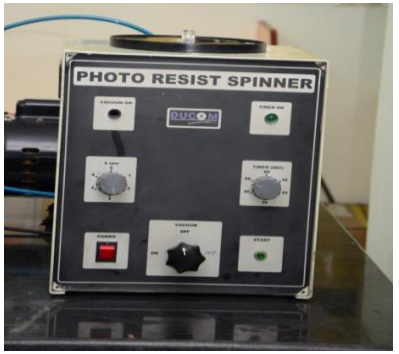
Amity Institute of Environmental Toxicology Safety & Management (AIETSM)							
S.No	**Institute**	**Block Room No**	**Name of Lab**	**Name of Instrument**	**Make/ Model**	**Technical Specifications**	**Image**
1	AIETSM	J-1/GF- 20	Microbial Lab	Autoclave verticle (500x300)	khera	Double walled, complete with ON/OFF switch, water level, Radial locking device, Pedal lifting Device, pressure auage, steam release valve and indicator to show the working of mains control sstem, Electrically operated on 220V AC with S.S Basket working pressure 5-20 Ib per sq. inch. with Automatic pressure switch. Ht x Dia :550 x 350mm Rating: 3.0 KW	
2	AIETSM	J-1/GF- 21	Microbial Lab	Laminar flow bench	khera	Horizontal Laminar Air Flow Bench	
3	AIETSM	J-1/GF- 20	Wet and Instruments Lab	BOD Incubator	khera	Low Temp Incubator fitted with CFC free Refrigeration system. Temp.Range:5 to 50°C Temp. controlled with Digital Temp. Controller Double Walled, outer chamber of M.S. duly enamel painted, inner chamber of S.S. Fitted with glass window or glass door. Chamber Size :(H x W x D) : 950 x 650 x 550 mm 12 c ft.	

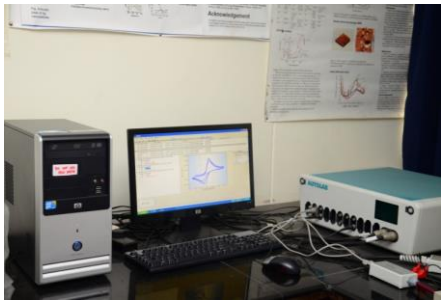
4	AIETSM	J-1/GF- 20	Wet and Instruments Lab	Digital Turbidity meter	khera	DIGITAL TYPE Range 0-1000 JTU, Resolution 1 JTU, Accuracy + 2%, 3.5 digits operate on mains.	
5	AIETSM	J-1/GF- 20	Wet and Instruments Lab	Gas Chromatography	Agilent/GC7820A	Ambient operating temperature 15 to 30 °C Ambient operating humidity 30 to 70% Storage extremes –40 to 70 °C **Column Oven** Dimensions 28.0 × 30.5 × 16.5 cm Operating temperature :8 °C above ambient to 425 °C Temperature setpoint resolution :1 °C Maximum temperature ramp rate :75 °C/min Maximum run time :999.99 min Temperature programming ramps: 5 Ambient rejection :< 0.01 °C per 1 °C Oven temperature ramp :~ 2% Programming temperature repeatability :~ 1% Detector(s):FID, TCD, ECD, NPD Injection Portsup to 2 inlets	
6	AIETSM	J-1/GF- 20	Wet and Instruments Lab	Laboratory centrifuge machine	Khera/kiI199 (d)	With stepless speed control, pilot indicator lamp.0-99 minutes digital Preset timer & Digital speed meter Capacity: 200 ml, Max Speed: 5000 RPM, Max. RCF 3650xg Rotor Heads: 8 x 15 ml Swing out rotor Head, metal carrier, glass tubes & Rubber cushions	

7	AIETSM	J-1/GF- 20	Wet and Instruments Lab	Hot Air Oven	Khera/KI181 ©	Digital Type,Double walled, outer body made of MS, inner made of SS and is provided with ribs for adjusting trays at any height. Three side heating with beaded elements made of high quality Nickle/chrome plated nichrome wire, Temp. Range 50 to 250°C +/- 1 °C with air circulation Fan. controlled with capillary type Thermostat. Provided with digital thermometer and air ventilators on the both sides. No. of Trays: 2 Chamber Size: 455 x 605 x 455 mm	
8	AIETSM	J-1/GF- 21	Wet and Instruments Lab	Sieve Shaker	Khera/ki127	Sieve Shaker for 30 cm Dia Sieves Hand operated	
9	AIETSM	J-1/GF- 21	Wet and Instruments Lab	Soxhlet extraction Unit	RI 155	No of test : 6	

Amity Institute of Nanotechnology (AINT)							
S.No	**Institute**	**Block Room No**	**Name of Lab**	**Name of Instrument**	**Make/ Model**	**Technical Specifications**	**Image**
1	AINT	J-2 303	Instrumentation and Measurement lab	Atomic Force Microscope	Solver(Pro)	A powerful tool for investigation of nano materials shape and size. Sample Size - 100X20mm Scanners – 50X50X1.0µm 100X100X10µm Vibration isolation – Yes Optical Viewing- Resolution - 3µm Magnification – 48X to 578X	
2	AINT	J-2 303	Instrumentation and Measurement lab	Dynamic Light Scattering	Malvern(Nano S 90)	A perfect system for measuring molecular size using Dynamic Light Scattering Measurement Range – 0.3 mm- 0.5 micron (diameter) Minimum Sample volume - 20µL Light Source – He-Ne Laser 633 nm Accuracy - +/-2% Temperature – 10°C – 35°C	

3	AINT	J-2 304	Instrumentation and Measurement lab	X Ray Diffractometer	Bruker(D 2 Phaser)	A novel desktop X-ray diffraction tool with work flow software Diffraction .Suite Geometry- θ/θ and θ/2θ X-ray wavelengths – Cu Kα X-ray generation – 30 KV/10mA Power Supply – 90-250V	
4	AINT	J-2 305	Instrumentation and Measurement lab	ELECTRO METER	KEITHLEY(6516)	<1fA noise >200TΩ input impedance Charge measurements from 10fC to 20μC High speed -- up to 1200 readings/second Interfaces readily with computers, switches Cancels voltage and current offsets easily	

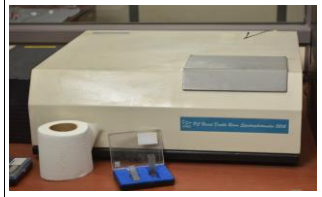
5	AINT	J-2 305	Instrumentation Lab	THERMAL EVAPORATION UNIT	VECCO	Suitable for thin film deposition with 18X24" Pyrex bell jar, Varian Cryo pump, 2KVA filament transformer, 10^{-5} Torr Vacuum, control and top switch, manual valves, and Pirani gauge	
6	AINT	J-2 306	Instrumentation Lab	Photo Resist Spinner	DUCOM	Excellent way to coat thin, uniform layer of materials. Speed range- 1000-6000rpm Timer – 10 - 60 Sec. Substrate size – 75mm (Max) Vacuum suction – Yes	

7	AINT	J-2 307	Instrumentation Lab	UV-VIS Spectrophotometer	Shimadzu(UV-1800)	Wavelength range – 190-1100nm Wavelength display- 0.1nm increments Photometric range – Absorbance – 4 to 4 Abs. Transmittance 0% to 400%	
8	AINT	J-2 308	Instrumentation Lab	Electrochemical Analyser	Autolab(AUT83945)	Excellent tool for measurement of electro chemical cells: Cyclic voltametry, impedance spectroscopy. Current range- 10mA – 10mA Accuracy - ± 0.2% Electrode connections- 2, 3, or 4	

9	AINT	J-2 309	Instrumentation Lab	LCR Hi Tester	HIOKI (3532-50)	High speed measurement of 5ms High precision measurement of ±0.08% basic accuracy Interactive touch panel operation Zoom feature for easy viewing Print measurement values and comparator results	
10	AINT	J-2/408	Nanobiotechnology	Cooling Centrifuge	Remi(C-24)	Max. Speed(rpm):20000 Max. RCF'g':37570 Max. Tube Size(ml):100 Max. Capacity(ml): 400 Lowest Temp.°C :-8	

11	AINT	J-2/408	Nanobiotechnology	Rotamantle	Remi/ 1RML	Stirring Capacity:- 1 Healing Capacity:-300	

AMITY CENTRE FOR RADIATION BIOLOGY (ACRB)

S.No	Institute	Block Room No	Name of Lab	Name of Instrument	Make/ Model	Technical Specifications	Image
1	ACRB	J-3 LG-08	Radiation Biology Laboratory	CO 2 Incubator	New Brunswick(Galaxy170S)	Volume: 170L Shelves :4 Shelves Range: 4°C above Ambient to 50°C Uniformity :+/- 0.2°C	
2	ACRB	J-3 LG-08	Radiation Biology Laboratory	Microplate Absorbance Reader	Biorad(Imark)	Wavelength range :400–750 nm Photometric range :0.0–3.5 OD Linearity : ≤1.0% from 0.0–2.0 OD; ≤2.0% from 0.0–3.0 OD Accuracy : ≤1.0% or 0.010 from 0.000–3.000 OD at 490 nm Precision :1.0% or 0.005 OD from 0.0–2.0 OD; 1.5% from 2.0–3.0 OD Resolution : 0.001 OD Filter wheel capacity : 8 Plate shaking (3 speeds) :Low, mid, high Duration, sec :0–999 Read time : 6 sec at single wavelength, 10 sec at dual wavelengths Data output :Onboard graphical thermal printer and USB2 interface with PC or Mac data stations Data storage :Calender/clock funtions; 64 assay protocols, Multilanguage support 4 languages, LCD indication supported; printout report supported	
3	ACRB	J-3 LG-08	Radiation Biology Laboratory	UV- Visible spectrophotometer	Systronics(2202)	Optics:Double Beam Optics Wavelength Range:200 - 1100 nm Spectral Bandwidth:2 nm Display:PC Monitor 2202 Operating Mode:Single Multi-Wavelength, Scan & Time Scan Measuring Modes:%T, ABS, Concentration & K Factor ABS Range: + 2.5 Abs	
4	ACRB	J-3 LG-08	Radiation Biology Laboratory	Flourescence Microscope	Olumpus(BX 41TF)	Optical system UIS (Universal Infinity System) optical system Built-in transmitted Koehler illumination Illumination :6V 30W halogen bulb Focusing Stage height movement by roller guide (rack & pinion) Stroke per rotation: 0.1 mm (fine), 17.8 mm (coarse) Full stroke range: 25 mm Revolving nosepiece:Universal 6 position revolving	

Amity Institute of Anthropology (AIA)

S.No	Institute	Block Room No	Name of Lab	Name of Instrument	Make/ Model	Technical Specifications	Image
1	Amity Institute of Anthropology	J3 SF-219	Research Lab	Microspin Centrifuge	Eltek (Microspin TC 4815 D)	Max. Speed : 16000 RPM Max. RCF : 17600xg Max. Tube Size : 5 ml Max. Capacity : 48 ml	
2	Amity Institute of Anthropology	J3 SF-219	Research Lab	Centrifuge	HITACHI (CT 15 RE)	Maximum Speed 15000 rpm Height 250 mm CT15RE: 300mm Length 320 mm CT15RE: 520mm Weight 17 kg CT15RE: 40kg Width 240 mm CT15RE: 290mm	
3	Amity Institute of Anthropology	J3 SF-219	Research Lab	Cooling Centrifuge	REMI(R-8C)	Max. Speed : 6000-16000 rpm Max. RCF: 5070-16600 'g' Max. Capacity:400-40 ml Digital timer range-0-59Min	
4	Amity Institute of Anthropology	J3 SF-219	Research Lab	Water Bath Incubator Shaker		Top Lid: GABLED DOME LID made of Stainless Steel Temperature: Controlled by microprocessor based digital temperature indicator cum controller. Temperature Display: Digital LED with set value (SV) & process value (PV). Shaking Speed: 40 to 140 cycles/min. Shaking Speed: Controlled by speed regulator	

AMITY INSTITUTE OF CLICK CHEMISTRY & RESEARCH STUDIES (AICCRS)							
S.No	**Institute**	**Block Room No**	**Name of Lab**	**Name of Instrument**	**Make/ Model**	**Technical Specifications**	**Image**
1	AICCRS	J3- 103 First Floor	Molecular Science & Engineering lab	Rotary Evaporator	ADITYA Scientific (RE 2)	Description Specifications Main Machine - Manual Lift [RE-2] Motorized lift [RE-2A] (0-155mm) Rotating Speed -20-320 rpm motor power: 60w Heating Bath - 1.3Kw SS 316 Temperature Range - Digital control Max: 210° C Total Power - 1.360 KW Voltage : ~220V50Hz Condenser - Vertical Charging Pipe -The Valve Charging pipe connects with PTFE pipe Sealing Ring - PTFE Sealing Ring.	
2	AICCRS	J3- 103 First Floor	Molecular Science & Engineering lab	HPLC	Agilent Technologies (1220 Infinity LC)	Detector UV/VIS Maximum Pressure 8700 psi Additional Specifications Agilent 1220 Infinity LC System - Performance Specifications Safety features: Extensive diagnostics, error detection and display, leak detection, safe leak handling, leak output signal for shutdown of pumping system. Low voltages in major maintenance areas. Control and data evaluation: Agilent EZChrom Compact, Agilent Lab Advisor, Agilent ChemStation, Agilent EZChrom Elite Communications: Controller-area network (CAN), RS-232C, APG Remote: ready, start, stop and shut-down signals, LAN GLP features: Early maintenance feedback (EMF), electronic records of maintenance and errors Agilent 1220 Infinity LC System – Performance Specifications Pumps (isocratic and gradient) Hydraulic system: Dual plunger in series pump with proprietary servo-controlled variable stroke drive, floating plungers and passive inlet valve Settable flow range: 0.001 – 10 mL/min, in 0.001 mL/ min increments Flow range: 0.2 – 10.0 mL/min Flow precision: 1 MPa (10 bar) Compressibility compensation: User-selectable, based on mobile phase compressibility Recommended pH range: 1.0 – 12.5, solvents with pH 2 AU (5%) upper limit Wavelength accuracy: ± 1 nm; Self-calibration with deuterium lines, verification with holmium oxide filter Band width: 6.5 nm typical Flow cells: Standard: 14- ML volume, 10-mm cell path length and 40 bar (588 psi) pressure maximum High pressure: 14- ML volume, 10-mm cell path length and 400 bar (5880 psi) pressure maximum Semi-micro: 5- ML volume, 6-mm cell path length and 40 bar (588 psi)	

3	AICCRS	J3- 103 First Floor	Molecular Science & Engineering lab	Ultra Violet Fluresence Analysis Cabinet		UV viewing darkroom Lightweight, portable viewing darkroom is easily transported Felt curtain provides easy access to cabinet interior Large, UV viewing darkroom for use with larger samples Felt curtain provides easy access to cabinet interior while blocking out external light	
4	AICCRS	J3- 103 First Floor	Molecular Science & Engineering lab	Immersion Cooler	Julabo (FT-902)	Model series FT Series Category Immersion Coolers Working temperature range (°C) -90 ... +30 Temperature stability (°C) ±1 Temperature Display LED Cooling capacity (Medium Ethanol) °C 20 10 -20 -40 -80 kW 0.3 0.27 0.24 0.2 0.07 Refrigerant R23, R404A Ambient temperature 5...35 °C Dimensions W x L x H (cm) 38 x 55 x 60 Weight (kg) 50 Cooling of compressor Air Immersion probe flex. Wellenschlauch, 65 x 1.5 (L x Ø) cm Connection tube (L) cm 160	
5	AICCRS	J3- 103 First Floor	Molecular Science & Engineering lab	Hot Air Oven		The standard double wall fabricated, inner chamber made of anodized aluminum or highly polished stainless steel sheet. uniform heating range 50 to 250 C controlled by capillary type thermostat. L- Shaped thermometer is built in type. Control panel provided with selector switches for high or low rating of power thermostat control knob and indicators for main & thermostat and supplied with cord and plug. The equipment is suitable to operate 220V Ac 50Hz single phase.	

AMITY INSTITUTE OF MICROBIAL BIOTECHNOLOGY (AIMB)

S.No	Institute	Block Room No	Name of Lab	Name of Instrument	Make/ Model	Technical Specifications	Image
1	AIMB	J-3 TF-314	Amity Institute of Microbial Biotechnology Lab	PCR	Eppendorf(Master cycler pro)	Temperature control range :4-99°C Temperature control mode Fast, Standard Safe; all in gradient mode Heating technology of the block: Peltier Elements, Triple Circuit Technology Gradient range :1-20°C Gradient temperature range: 30-99°C Block homogeneity: 20-72°C < ±0.3°C, 90°C < ±0.4°C Control accuracy : ±0.2°C Heating rate : 4°C/s	
2	AIMB	J-3 TF-314	Amity Institute of Microbial Biotechnology Lab	Ultra Low temperature Freezer	New Brunswick(U410 PREMIUM)	Capacity: 410 L, up to 240 boxes or 24,000 samples Temperature Range -10°C to -45°C, Programmable in 1°C Increments, at Ambient Temperature Up to 32°C Compartments & Shelving 5 Compartments with 4 Adjustable-Height Shelves	
3	AIMB	J-3 TF-314	Amity Institute of Microbial Biotechnology Lab	Lyophilizer	Scanvan(Coolsafe 55-4)	Bench top 4 lt capacity Temperature options include :- -55, -95, -100 and -110°C Built in drain and vacuum calve Digital display of temperature	

4	AIMB	J-3 TF-314	Amity Institute of Microbial Biotechnology Lab	Centrifuge	Sartorius(3K30)	Maximum Speed :100-30000 rpm selectable in steps of 1 rpm. High-speed refrigerated bench top centrifuge for gravitational fields up to more than 60.000 × g. Maintenance-free brushless drive motor. Free programming of all run parameters possible. Automatic rotor identification prevents the rotor from overspeeding. Efficient refrigerating machine for temperatures between –20°C and +40°C, possibility of precooling the rotors during standstill.	
5	AIMB	J-3 TF-314	Amity Institute of Microbial Biotechnology Lab	Micropulser Electroporator	BioRad	Outputs Waveform: decaying or truncated decaying exponential-decay with resistor capacitor time constant Voltage and current: 3,000 V peak into >600 W load; limited at 100 A peak maximum Output voltage and pulse duration adjustment :Voltage adjustable in 200–3,000 V range with 10 V precision; 5 ms default or 1–4 ms with 0.1 ms precision. Input voltage : 100–120 V or 220–240 V Preset protocols :5 bacterial, 5 fungal Operating environment : 3.5–35°C	

AMITY INSTITUTE OF MOLECULAR MEDICINE AND STEM CELL RESEARCH (AIMMSCR)

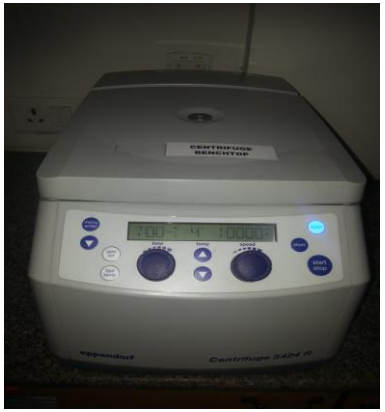
S.No	Institute	Block Room No	Name of Lab	Name of Instrument	Make/ Model	Technical Specifications	Image
1	AIMMSCR	J3- 115 First Floor	Central Instrumentations Facility-II	Real Time PCR System	Applied Biosystems (Step One Plus)	Format: 96-well plate, 0.1 ml tubes, 8-tube strips Optics: 4 emission filters, Photodiode, Blue LED excitation source Weight: 24 kg (53 lbs.) Capacity: 96 x 0.1 ml tubes, 1 x 96-well plate, 12 x 8-tube strips Run Time: <40 min⁄run (Fast Mode), <2 hrs⁄run (Standard Mode) Dimensions: 24.6 cm/9.7 in.(W) x 42.7 cm/16.8 in.(D) x 51.2 cm/20.2 in.(H) Sensitivity: 1 copy Product Size: 1 instrument Dynamic Range: Linear Dynamic Range greater than 9 log units (detection) Calibrated Dye: VIC®, SYBR® Green I, TAMRA™, JOE™, FAM™, NED, ROX™ Green Features: Energy efficient, Fewer resources used Reaction Speed: Standard, Fast Detection Method: Primer-Probe Detection, SYBR Sample Ramp Rate: Standard mode: ± 1.6°C⁄sec, Fast mode: ± 2.2°C⁄sec Peak Block Ramp Rate: 4.6°C⁄sec Temperature Accuracy: 0.25°C (35 to 95°C) of display temperature Passive Reference Dye: ROX (Separate Tube), ROX (Pre-mixed), No ROX Reaction Volume Range: 10-30 µl (Standard curve experiments: 40 µl in standard mode is validated) Temperature Uniformity: 0.25°C (35 to 95°C) of setpoint/display temperature Thermal Cycling System: Peltier-Based System For Use With (Equipment): StepOnePlus™ Temperature Range (Metric): 4-100°C High Throughput Compatibility: Multiplexing	
2	AIMMSCR	J3- 115 First Floor	Central Instrumentations Facility-II	Spectrophotometer	Thermo Scientific (Multiskan GO)	Freely selectable wavelengths from 200 to 1000nm for the demands of various assays Both microplate and cuvette reading for any throughput requirements Fast plate measurements and a full sample spectrum in less than 10 seconds High quality data guaranteed by extensive self diagnostics Unique power save function for reduced energy consumption Visual internal software on a large color screen for quick measurements Easy and logical assay setup for demanding assays A selection of multiple operation languages Compatible with: The Multiskan GO is compatible with the Thermo Scientific™ µDrop plate. Recommended for: DNA and RNA quantitation and purity; Protein assays; Enzyme assays; Kinetic assays; Immunoassays; Cell proliferation and cytotoxicity - See more at: http://www.thermoscientific.com/content/tfs/en/product/multiskan-go-microplate-spectrophotometer.html#sthash.z08YKRVE.dpuf	

AMITY INSTITUTE OF MOLECULAR MEDICINE AND STEM CELL RESEARCH (AIMMSCR)

S.No	Institute	Block Room No	Name of Lab	Name of Instrument	Make/ Model	Technical Specifications	Image
3	AIMMSCR	J3- 109 First Floor	Stem Cell & Cancer Research Lab	Shaker Incubator	New Brunswick (Innova 42)	External depth (with lid/door open) 131 cm (51.6 in) Timer 0.01 – 99.59 h Power supply 230 V, 50 Hz Temperature range Ambient +5 °C to 80 °C Audible and visual alarms Temperature uniformity ±0.25 °C at 37 degree Celsius Available program modes › Constant speed and temperature › Programmable multi-steps › RS-232 communication port › Constant speed and temperature Gassing manifold Humidity monitor In chamber power receptacle Memory Non volatile with automatic power failure restart Motor type Solid state, DC brushless motor Solid state, Orbit 1.9 cm (3/4 in) Photosynthetic lighting Platform size 46 × 46 cm (18 × 18 in) Refrigerated Speed range1 25 – 400 rpm Multi-step programming Steps per program 15 Stored programs 4	
4	AIMMSCR	J3- 109 First Floor	Stem Cell & Cancer Research Lab	Gel Doc with Chemiluminesence	Protien Simple (FluorChem E)	FluorChem systems give you start to finish solutions for Western blot analysis Resolution 8.3 MP Dynamic range 65,536 grayscale Detector –25 °C cooled CCD Standard optics 50 mm f/1.4 motorized lens, 50 mm 365/302 nm UV Epi & Trans White Filter positions 6 – motorized Emission wavelengths- 590 nm Storage 320 GB	
5	AIMMSCR	J3- 109 First Floor	Stem Cell & Cancer Research Lab	Deep Freezer -20° C	Celfrost	Upright Solid Door Freezer Upright right freezers tropicalised for Indian ambient conditions Energy efficient PUF insulation ensures long holding time Temperature range : -17 to -24 degree C	

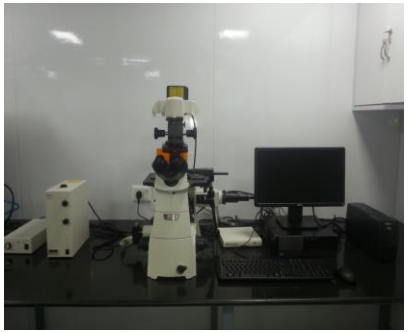
AMITY INSTITUTE OF MOLECULAR MEDICINE AND STEM CELL RESEARCH (AIMMSCR)

S.No	Institute	Block Room No	Name of Lab	Name of Instrument	Make/ Model	Technical Specifications	Image
6	AIMMSCR	J3- 109 First Floor	Stem Cell & Cancer Research Lab	Refrigerator 4° C	Celfrost	Flexible panel sizes ensuring efficient space utilization up to the last 6 inches of space Optimal temperature management, with a choice of low-energy consuming, unitary or remote refrigeration system Refrigerator (+1 / +4°C) and Freezer (-18 / -25°C) Panel joints sealed with PVC gaskets, making routine cleaning easy and eliminating moisture penetration	
7	AIMMSCR	J3- 109 First Floor	Stem Cell & Cancer Research Lab	Speed VAC	Centrifuge eppendrof (Concerntrator plus)	The Concentrator plus with its new design was designed with the customer in mind to deliver an ergonomic, intuitive and durable solution that fits comfortably right on the lab bench. An advanced heating technology provides best treatment for your sample which assures quick, efficient and gentle vacuum concentration of DNA/RNA, nucleotides, proteins and other liquid or wet samples. Our new coated lid provides superior chemical resistance against aggressive acids and organic solvents (e.g. TFA, DMSO). Vacuum 20 hPa (20 mbar) Fixed speed 1,400 revolutions per minute Tube volume0.2–50 millilitre Sample capacity Max. 144 vessels/2 microplates Power supply 230 V, 50 – 60 Hz Max. power consumption350 watt	
8	AIMMSCR	J3- 109 First Floor	Stem Cell & Cancer Research Lab	PCR (Pro Flex PCR System)	applied Biosystems	Format: 0.2 ml tubes, 12-strip wells Weight: 18.75 kg (41 lb) Capacity: 3 x 32-well x 0.2 ml tubes Dimensions: 33 cm (13 in) (W) x 27 cm (11 in) (H) x 57 cm (22 in) (D) Block Format: Interchangeable Product Size: 1 instrument Reaction Speed: Standard, Fast Program Features: Program overwrite protection, Auto re-start (after power outages) Sample Ramp Rate: ± 4.4 °C/sec Display Interface: Touchscreen (8.4 in. TFT LCD) Instrument Memory: USB and On-board Power Requirements: 100-240V, 50-60 Hz Max: 950 VA Peak Block Ramp Rate: 6.0°C/sec Temperature Accuracy: ±0.25°C (35°C to 99.9°C) Reaction Volume Range: 10-80 µl Temperature Uniformity: <0.5 °C (20 sec after reaching 95 °C) For Use With (Equipment): ProFlex™ PCR System Temperature Range (Metric): 0 to 100.0 °C High Throughput Compatibility: High Throughput-Compatible	

AMITY INSTITUTE OF MOLECULAR MEDICINE AND STEM CELL RESEARCH (AIMMSCR)							
S.No	**Institute**	**Block Room No**	**Name of Lab**	**Name of Instrument**	**Make/ Model**	**Technical Specifications**	**Image**
9	AIMMSCR	J3- 109 First Floor	Stem Cell & Cancer Research Lab	Centrifuge	eppendrof (5424 R)	Refrigerated microcentrifuge with rotary knob includes an aerosol-tight 24 x 1.5/2mL rotor and lid; electrical requirements: 120V/60Hz Keypad control panel provides quick parameter changes; high centrifugation speed of up to 21130 x g (15000rpm) FastTemp program cools down to 4°C in only 8 minutes and maintains constant 4°C at maximum speed Compressor control minimizes vibration and improves temperature accuracy; ECO shut-off function extend compressor life and reduce energy consumption	
10	AIMMSCR	J3- 109 First Floor	Stem Cell & Cancer Research Lab	Water Bath	Julabo (SW 23)	MICROPROCESSOR technology with PID temperature control Bright MULTI-DISPLAY (LED) Seamless, splash-proof keypad Splash-proof mains switch Electronic timer for setting the running time (0:01 to 9:59 h:min) On-line communication via built-in RS232 interface Early warning system with high and low temperature limits Drain screw for conveniently emptying the bath Dry-running protection / safety temperature fixed at 130 °C Wide range of accessories including lift-up Makrolon bath cover available EasyTemp control software is available free of charge Removable shaking carriage Shaking frequency adjustable from 20 to 200 rpm Shaking frequency indicated on MULTI-DISPLAY (LED) Shaking stroke 15 mm With integrated circulation pump	
11	AIMMSCR	J3- 109 First Floor	Stem Cell & Cancer Research Lab	Icematic	Castel MAC spA, Italia	Iceflakes (Experimental use)	

AMITY INSTITUTE OF MOLECULAR MEDICINE AND STEM CELL RESEARCH (AIMMSCR)							
S.No	**Institute**	**Block Room No**	**Name of Lab**	**Name of Instrument**	**Make/ Model**	**Technical Specifications**	**Image**
12	AIMMSCR	J3- 109 First Floor	Stem Cell & Cancer Research Lab	Deep Freezer -80° C	Thermo Fisher Scientific (FORMA 88000 Series)	-80°C Upright Ultra-Low Temperature Freezers, designed for daily sample protection and dependability.	
13	AIMMSCR	J3- 109 First Floor	Stem Cell & Cancer Research Lab	Gel Dryer (Digital)	GeNei	Use for gel electrophoresis	
14	AIMMSCR	J3- 105 First Floor	Stem Cell & Tissue Culture Facility	Fume Hood	Airstream (ESCO Class II BSC)	The Esco Airstream® Class II Biological Safety Cabinet is an effective solution in providing operator, product and environmental protection within laboratories and industrial facilities. With the presence of its DC ECM blower, this is the most energy-efficient Class II Biosafety Cabinet in the world with 70% energy savings compared to AC motor. It also features stable and self-compensating airflow, despite building voltage fluctuations & filter loading. Its large performance envelope is an open declaration of possible safe operating airflow values. Certified to EN 12469, Esco Airstream® Class II Biological Safety Cabinet also has antimicrobial coating on all its external and internal painted surfaces for improved safety.	

AMITY INSTITUTE OF MOLECULAR MEDICINE AND STEM CELL RESEARCH (AIMMSCR)

S.No	Institute	Block Room No	Name of Lab	Name of Instrument	Make/ Model	Technical Specifications	Image
15	AIMMSCR	J3- 105 First Floor	Stem Cell & Cancer Research Lab	CO_2 Incubator	New Brunswick (Glaxy 170 S)	Full sized 170 Liter (6.0 ft3) provides high capacity incubation within a minimal footprint Temperature range from 4°C above ambient to 50°C Sealed, inner glass door allows observation of samples without disturbing cultures. Six-sided direct heating system provides a uniform incubated environment to gently bathes cells Fanless design achieved with advanced heating system eliminates a classic, and often repeated source of contamination Deep-drawn, stainless steel chamber eliminates seams or welds, removing potential sources of contamination	
16	AIMMSCR	J3- 105 First Floor	Stem Cell & Cancer Research Lab	Inverted Microscope	Nikon (Eclipse Ti-U Inverted Microscope)	**Main body Port - Ti-U: 3 ports** Eyepiece 100%, left 100%, right 100%, AUX**, Ti-U/B: 4 ports Eyepiece 100%, left 100%, right 100%**, bottom 100%, Manual optical path switching Two ports (tube base unit with side port, back port) can be added optionally Focusing, Via nosepiece up/down movement, Stroke (manual): up 8mm, down 3mm, Coarse stroke: 5.0mm/rotation, Fine stroke: 0.1mm/rotation, Minimum fine reading: 1µm, Coarse refocusing mechanism, Intermediate magnification 1.5x **Other —** Eyepiece tube Eyepiece tube body TI-TD Binocular Tube D, TI-TS Binocular Tube S, TI-TERG Ergonomic Tube Eyepiece tube base TI-T-B Eyepiece Tube Base Unit, TI-T-BPH Eyepiece Tube Base Unit for PH, TI-T-BS Eyepiece Tube Base Unit with Side Port, Eyepiece lens CFI 10x, 12.5x, 15x, Illumination pillar TI-DS Diascopic Illumination Pillar 30W, TI-DH Diascopic Illumination Pillar 100W, Condenser ELWD condenser, LWD condenser, NAMC condenser, ELWD-S condenser, High NA condenser, Darkfield condenser, CLWD condenser, Nosepiece —TI-ND6-E Motorized Sextuple DIC Nosepiece, TI-N6 Sextuple Nosepiece, TI-ND6 Sextuple DIC Nosepiece, Objectives CFI60 objectives **Stage** TI-S-ER Motorized Stage with Encoders, TI-S-E Motorized Stage—Cross travel: X110 × Y75 mm, Size: W400 × D300 mm (except extrusions), TI-SR Rectangular Mechanical Stage, TI-SR/F Rectangular Stage with front positioned knob, TI-SSR Short-handle Rectangular Stage-Cross travel: X70 x Y50mm, Size: W310 x D300mm, TI-SP Plain Stage—Size: W260 x D300 mm, TI-SAM Attachable Mechanical Stage—Cross travel: X126 × Y84 mm when used with TI-SP Plain Stage, Motorized functions —Epi-fluorescence attachment, Sextuple fluorescence filter cube rotating turret, Filter cubes with noise terminator mechanism, Field diaphragm centerable, 33mm ND4/ND8 filters, 25mm heat absorbing filter Option: Motorized sextuple fluorescence filter cube rotating turret, Motorized excitation filter wheel, Motorized barrier filter wheel, Nomarski DIC system, Contrast control: Senarmont method (by rotating polarizer) Objective side prism: for individual objectives (installed in nosepiece) Condenser side prism: LWD N1/N2/NR (Dry), HNA N2/NR (Dry/Oil) types **Weight (approx.)** - Phase contrast set: 38.5kg **Epi-fl set**: 42.3kg **Power consumption** (max.) Full set (with HUB-A-U and peripherals): approx. 40W	

AMITY INSTITUTE OF MOLECULAR MEDICINE AND STEM CELL RESEARCH (AIMMSCR)

S.No	Institute	Block Room No	Name of Lab	Name of Instrument	Make/ Model	Technical Specifications	Image
19	AIB	J3- 104 First Floor	Medical Biology Lab	Flow Cytometer	BD accuri C6	**Optics** Laser Excitation 488 nm, 640 nm Laser Profile 10 x 75 µm Light Scatter Detection - Forward (0°, ±13°) Side (90°, ±13°) Emission Detection - 4 colors, user-changeable optical filters Standard set installed: • FL1 533/30 nm (eg, FITC/GFP) • FL2 585/40 nm (eg, PE/PI) • FL3 >670 nm (eg, PerCP, PerCP-Cy5.5, PE-Cy™7) • FL4 675/25 nm (eg, APC) Optical Alignment Fixed alignment **Fluidics** Flow Cell - 200-µm ID quartz capillary Minimum Detectable Particle Size - 0.5 µm, Minimum Sample Volume - 50 µL Pre-Set Flow Rates and Core Sizes - Slow: 14 µL/min, 10-µm core, Medium: 35 µL/min, 16-µm core, Fast: 66 µL/min, 22-µm core Custom Sample Flow Rates - 10–100 µL/min Custom Core Diameter - 5–40 µm Recommended Sheath Fluid - 0.2-µm filtered DI water with BD™ Sheath Additive Maximum Events Per Sample - 1 million events Fluid Bottle Capacity - 2-L sheath fluid, 2-L waste, 250-mL cleaner, 250-mL decontamination fluid **Performance** Fluorescence Sensitivity, MESF* - FITC <75; PE <50 Scatter Resolution - Resolves human peripheral blood lymphocytes, monocytes, and granulocytes Fluorescence Linearity - 2 ±0.05% for chicken erythrocyte nuclei (CEN) Fluorescence Precision - <3% CV for CEN Data Acquisition Rate - Up to 10,000 events/second Signal Processing - 24-bit data path	

AMITY INSTITUTE OF NUCLEAR SCIENCE & TECHNOLOGY (AINST)							
S.No	**Institute**	**Block Room No**	**Name of Lab**	**Name of Instrument**	**Make/ Model**	**Technical Specifications**	**Image**
1	AINST	J-3 LG-06	M.Tech Lab	Gamma Ray Spectrometer	Nucloenix (GR 612)	Used for analysis of Gamma Radiations Identification of unknown isotopes and their relative adundance ,Measures the strength of Radioactivity of sample Useful in radiotracer techniques ,Can be used for protein bound iodine studies in medicine using well type scintillation detector etc. Swipe sample counting in Health Physics Labs.LOW VOLTAGE SUPPLY: +15V, -15V, +24V & 5V are generated in LV PCB, to powerup all the circuits. HIGH VOLTAGE SUPPLY:(0 to 1500V) @ 1mA HV is adjustable by a ten turn the helipot & dial. LINEAR AMPLIFIER PCB a.Input Polarity : Positive or Negative b.Total Gain (Typical) : 600 (Approx.) c.Ouput (Bipolar) : 0V to 8V (usable recom mended Linear range) d. Max.Output : 12V (Saturation Level) e. Shaping : 1µsec SINGLE CHANNEL ANALYSER PCB : a.Input :Unipolar or Bipolar with a +ve leading edge 0 to 10V b.Output Pulse Polarity:Positive Pulse Amplitude :+5V Pulse Width : 0.5 micro sec COUNTER TIMER PCB: a.Display:20x2 LCD Dotmatrix display has been provided to indicate data counts	
2	AINST	J-3 LG-06	M.Tech Lab	Radiation Counting System	Nucloenix (RC605A)	P.M. Input (From alpha, beta, gamma scintillation detector probe) : (a) Polarity : Negative (b) Amplitude : -100 mV (min) G.M. Input (From G.M.Counter) : (a) Polarity : Negative (b) Amplitude : -500 mV (min) (c) Built-in load resistor : 4.7 or 3.3M Ohms HV Output : HV (0-1500V) @1mA continuously variable through front panel keypad in steps of 1 volt, ripple less than 20mV, line & load regulation better than 0.05%. HV indication :On LCD dotmatrix provided. Display : 20 x 2 LCD dotmatrix display has been provided to indicate data counts, Elapsed Time and HV. Counts Capacity : 999999 counts Preset time : 1min to 24 hrs (HH : MM) format Preset cycles / Iterations : 1 to 10 Paralysis Time : A choice of three paralysis times 250, 350 and 550 micro sec plus OFF position selected through PROG key.	

3	AINST	J-3 LG-06	M.Tech Lab	GM Counting system	Nucloenix (GC602A)	G.M. Input (From G.M.Counter) (a) Polarity : Negative (b) Amplitude : 250 mV (min) Resolving Time:-6 micro sec (approx) EHT Output:-Variable EHT using tenturn pot upto a maximum of 1500 volts at 1 mA. Line and load regulation better than 0.05%. Ripple less than 20mV. Display:-20 x 2 LCD dotmatrix display has been provided to indicate data counts, Elapsed Time and EHT. Modes of operation:-Preset count & preset time modes. Counts Capacity:-999999 counts Preset time:-(0-9999) sec. Data Storage:-Upto 1000 readings	
4	AINST	J-3 LG-05	Modern Physics Laboratory	e/m set up	SES Instruments(EMX-01)	Helmholtz coils of radii 14 cm Number of turns 160 on each coil Accelerating Voltage 0 – 250V Deflection plates voltage 50V – 250V Operating Voltage 220V AC/ 50Hz	

5	AINST	J-3 LG-05	Modern Physics Laboratory	Plank's constant measuring Instrument	SES Instruments(PC-101)	Photo Sensitive Device : Vacuum photo tube. Light source : Halogen tungsten lamp 12V/35W. Colour Filters : 635nm, 570nm, 540nm, 500nm & 460nm. Accelerating Voltage : Regulated Voltage Power Supply Output : ± 15 V continuously variable through multi-turn pot Display : 3 ½ digit 7-segment LED Accuracy : ±0.2% Current Detecting Unit : Digital Nanoammeter Power Requirement : 220V ± 10%, 50Hz. Optical Bench : The light source can be moved along it to adjust the distance between light source and phototube. Scale length is 400 mm. A drawtube is provided to install colour filters, a focus lense is fixed in the back end.	

AMITY INSTITUTE OF ORGANIC AGRICULTURE (AIOA)

S.No	Institute	Block Room No	Name of Lab	Name of Instrument	Make/ Model	Technical Specifications	Image
1	AIOA	J-3 FF-111	AIOA	Seed Germinator	Remi	Temperature range 10°C to 60°C, Humidity range 40% to 95% Rh Precise monitoring of temperature and humidity conditions Powerful fan motor for forced air circulation to maintain uniform conditions inside chamber Heating by long life SS tubular heaters Validation protocol with IQ, OQ, DQ Documentation as per ICH guidelines	
2	AIOA	J-3 FF-111	AIOA	Cooling Centrifuge	Remi(C-24BL)	Max. Speed(rpm):20000 Max. RCF'g':37570 Max. Tube Size(ml):100 Max. Capacity(ml): 400 Lowest Temp.°C :-8	

AMITY INSTITUTE OF VIROLOGY & IMMUNOLOGY (AIVI)

S.No	Institute	Block Room No	Name of Lab	Name of Instrument	Make/Model	Technical Specifications	Image
1	AIVI	J-3 LG-01	Molecular Virology/Clinical Virology & Immunology	Phase Contrast/ Dark Field/ Bright Field Microscope	Nikon (Eclipse 3200)	Optical System :- CFI60 Infinity Optical System, Parfocal distance: 60 mm Illumination :- High luminescent white LED illuminator (Eco-illumination) 6V20W/6V30W halogen lamp, Compliant multi-voltage (100 V-240 V) Eyepieces (F.O.V.):-CFI E 10x (20 mm) , CFI E 15x (12 mm) Focusing:- Coaxial coarse/fine focusing Coarse motion torque adjustable, Refocusing function Eyepiece Tube:-E2-TB Binocular Tube E2-TF Trinocular Tube, Eyepiece/Port: 100/0, 0/100, 360º rotatable C-TE2 Ergonomic Binocular Tube, Inclination: 10–30 degrees, Extension: up to 40 mm Nosepiece :-Quadruple nosepiece (within main body) Objectives (NA / W.D., mm):-CFI E Plan Achromat 4X (0.10 / 30) CFI E Plan Achromat 10X (0.25 / 0.7) CFI E Plan Achromat 40X (0.65 / 0.65) CFI E Plan Achromat 100X Oil (1.25 / 0.23) CFI Achromat DL and other higher-grade CFI60 objectives can be used. Condensers:-E2 Abbe Condensen N.A. 1.25, E2 Phase Condenser N.A. 1.25 Observation Methods Brightfield, Epi-fluorescence, Darkfield, Phase contrast, Simple polarizing	
2	AIVI	J-3 LG-01	Molecular Virology/Clinical Virology & Immunology	Gel Doc System	Bio Rad (GelDocTM XR+)	Applications:-Fluorescence,Colorimetry/densitometry,Gel documentation Maximum sample size:-28 x 36 cm Maximum image area:-19.4 x 26 cm Excitation source:-Epi-white light and trans-UV (302 nm) are standard (optional 365 nm lamp available); optional trans-white conversion screen and XcitaBlue™ UV/blue conversion screen available Illumination control:-3 modes (trans-UV, trans white, epi-white) Detector:-CCD Image resolution:-4 megapixels Filter holder:-3 positions (2 for filters, 1 without filter) Dynamic range:- >3.0 orders of magnitude	

3	AIVI	J-3 LG-01	Molecular Virology/Clinical Virology & Immunology	Gradient PCR machine	BioRad(T100 TMThermal Cycler)	Sample capacity: 96 wells x 0.2 ml Lid type: Fixed Reaction volumes: 1-100 µl Display: 5.7” color VGA touch-screen Gradient: Yes Memory: Unlimited with USB download to external source