



II विद्याविनयेनशोभते II

**Changu Kana Thakur Arts, Commerce and Science College, New Panvel
(Autonomous)**

Re-Accredited 'A+' Grade by NAAC

'College with Potential for Excellence' Status Awarded by University Grants Commission
'Best College Award' by University of Mumbai

Department of Biotechnology

Research facilities

A) Department Area

Sr. No.	Laboratory / Preparation Room / Faculty Room etc.	Area in Sq. m.
i.	Undergraduate Laboratory	157.70
ii.	Postgraduate Laboratory	78.40
iii.	Plant Tissue Culture Laboratory	10.34
iv.	Animal Tissue Culture Laboratory	12.46
v.	Instrumentation Room	31.35
vi.	Preparation Room-I	10.46
vii.	Preparation Room-II	13.60
viii.	Inoculation Room	08.04
ix.	Faculty Room	19.29
x.	Green House	56.82
Total		398.46

B) Details of Laboratories

1. Undergraduate Laboratory:

- **Area:** 157.70 Sq. m.

- **Information:** Under graduate laboratory is planned for carrying out the practical for F.Y. B.Sc., S.Y. B.Sc., and T.Y. B.Sc. classes. The area of laboratory is 157.70 Sq. m. It is well equipped with all modern facilities.

- **Features:** The undergraduate laboratory is having space for working 48 students at a time. Laboratory is well furnished and equipped with all the instruments required for routine practical and carrying out research projects.

- **Facilities:**
 - 48 pairs of Bunsen burners
 - Fire extinguishers
 - Exhaust Fans
 - Separate racks for keeping bags
 - Book Bank
 - Separate preparation room with storage and washing facility.
 - All required chemicals and solvents.
 - Separate cabinets for storage of glassware's and other accessories.
- Information charts

2. Postgraduate Laboratory

- **Area:** 78.40 sq. m.
- **Information:** Postgraduate laboratory is planned for carrying out the practical for M.Sc. Biotechnology. The area of laboratory is 78.40 Sq. m.
- **Features:** The postgraduate laboratory is having space for working 20 students at a time. Laboratory is well furnished and equipped with all the instruments and accessories required for routine practical.
- **Facilities:**
 - Fire extinguishers
 - Exhaust Fans
 - Separate racks for keeping bags
 - Separate preparation room with storage and washing facility.
 - All required chemicals and solvents.
 - Separate cabinets for storage of glassware's and other accessories.
 - Separate racks for keeping project reports.
 - LCD with Screen
 - Overhead projector
 - Computer
 - Information charts.

3. Plant Tissue Culture Laboratory

- **Area:** 10.34 Sq. m.
- **Information:** Plant tissue culture laboratory is designed to carry out PTC Practical for the learners.
- **Features:** The plant tissue culture laboratory is air conditioned, well furnished and equipped with all the culture facilities.
- **Facilities :**
 - Separate preparation room
 - Separate inoculation room
 - Separate culture room
 - Air conditioners
 - Temperature recorders
 - Culture racks

4. Animal Tissue Culture Laboratory

Area: 12.46Sq. m.

- **Information:** Animal tissue culture laboratory is designed to carry out ATC Practical for the learners.
- **Features:** The animal tissue culture laboratory is air conditioned, well furnished and equipped with all the facilities required for basic animal cell culture and studies.
- **Facilities:**
 - Air conditioners
 - Temperature recorders

5. Instrumentation Room:

- **Photo:**



Instrumentation Room



Instrumentation Room

- **Area:** 31.35 Sq. m.
- **Information:** Instrumentation room is planned to space all the sophisticated instruments.
- **Features:** The Instrumentation room is air conditioned, well furnished, and equipped with all modern instruments.
- **Facilities**
 - Air conditioners
 - Fire extinguishers
 - Exhaust Fans

List of the Instruments available with department

Sr. No.	Title of the Instrument / Equipment	Make	Nos.
1.	Autoclave	Lab India	01
2.	Autoclave	Biotechnics	01
3.	Hot Air Oven	Lab India	01
4.	Hot Air Oven	Metzer	01

5.	Laboratory Incubator	Lab India	01
6.	Laboratory Incubator	Metzer	01
7.	Centrifuge with Angular Head Rotor, Model , R-8C	Remi Motors Ltd.	01
8.	Centrifuge with Swing Out Rotor, ,Model , R-8C	Remi Motors Ltd.	01
9.	Microfuge ,Model , RM-12C	Remi Motors Ltd.	01
10.	Cooling Centrifuge, Model , R-24C	Remi Motors Ltd.	01
11.	BOD Incubator	Lab India	01
12.	Laminar Air Flow Horizontal Model	Dyanamicro	01
13.	Laminar Air Flow Horizontal Model	Dyanamicro	01
14.	Refrigerator	LG	01
15.	Refrigerator	Whirlpool	01
16.	Refrigerator	Hitachi	01
17.	Magnetic Stirrer with Hot Plate	Remi equipments Pvt. limited	01
18.	Magnetic Stirrer with Hot Plate	Remiequipments Pvt. limited	01
19.	Magnetic Stirrer without Hot Plate	Remiequipments Pvt. limited	01
20.	Visible Spectrophotometer	Systronics	01
21.	Nephelometer	Elico	01
22.	Single Pan Balance	Tapsons	01
23.	Heating Mantle	Remiequipments Pvt. limited	01
24.	Serological Water Bath	Biotechnics	01
25.	Digital Colorimeter	Systronics	01

26.	Digital Colorimeter	Equiptronics	02
27.	Digital Colorimeter	Elico	01
28.	Digital Colorimeter	ERMA	03
29.	Digital pH Meter	Elico	01
30.	Digital pH Meter	Equiptronics	01
31.	Variable Micropipette	Biosystem	04
32.	Variable Micropipette	Eppendorf AG	02
33.	Variable Micropipette	Tarsons	06
34.	Electronic Balance 0.1 Sensitivity	Contech	01
35.	Electronic Balance 0.01 Sensitivity	Contech	01
36.	Paper Electrophoresis	Bangalore Genei	01
37.	Pressure Cooker	Promise	01
38.	Pressure Cooker	Hawkins	01
39.	Glass Double Distillation Unit	J-Sil	01
40.	Glass single Distillation Unit	J-Sil	01
41.	Cyclomixer	Remi equipments Pvt. limited	01
42.	Digital Lux-meter	China Make	01
43.	Medical Microscope, model KG-5	Micron Optics	35
44.	Rough Balance	Bharat	01
45.	Soxhlet Apparatus	J-Sil	01
46.	Digital Conductivity Meter	Equip-tronics	01

47.	Vertical Gel Electrophoresis System	Techno-Source	04
48.	Horizontal Gel Electrophoresis System	Techno-Source	02
49.	Power Supply for Electrophoresis system	Techno-Source	02
50.	Vertical Gel Electrophoresis System	Bangalore Genie	01
51.	Horizontal Gel Electrophoresis	Bangalore Genie	01
52.	Power Supply for Electrophoresis system	Bangalore Genie	01
53.	Electronic Orbital Laboratory Shaker	Scigenics Biotech Pvt. Ltd.	01
54.	Deepfreeze -20°C	Skylab	01
55.	PCR, Mini Spin	Eppendorf AG	01
56.	Trans-illuminator	Bangalore Genei	01
57.	UV-VIS Spectrophotometer	Jasco	01
58.	Colony Counter, Lapiz	Medica Inst.	01
59.	Microwave	LG	01
60.	CO ₂ Incubator	New Brunswick	01
61.	Semi dry blotter	Bangalore Genei	01
62.	Weighing balance	Shimadzu	01
63.	Inverted microscope with digital camera attachment	Olympus (India) Pvt. Ltd.	01
64.	Muffle furnace	Parathasaradhi Enterprises	01
66.	Binocular Microscope (Olympus)	(Olympus) India	01
67.	Pen pH Meter	HANNA Instruments	01

68.	Saybolt Viscometer	Indian Make	01
69.	Mutiparameter photometer	HANNA Instruments	01
70.	Incubator Shaker	Orbitek	01
71.	Lab Microscopes (Illumination facility)	(Olympus) India	10
72.	Camera for Microscope		01

C) Other

No. of Computers	03
No. of Printers	02
No. of LCD	01
No of OHP	01

Departmental Library:

No of books in Departmental Library	183
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