

CENTRAL RESEARCH FACILITIES
BISHOP CHULAPARAMBIL MEMORIAL COLLEGE, KOTTAYAM
2025-2026

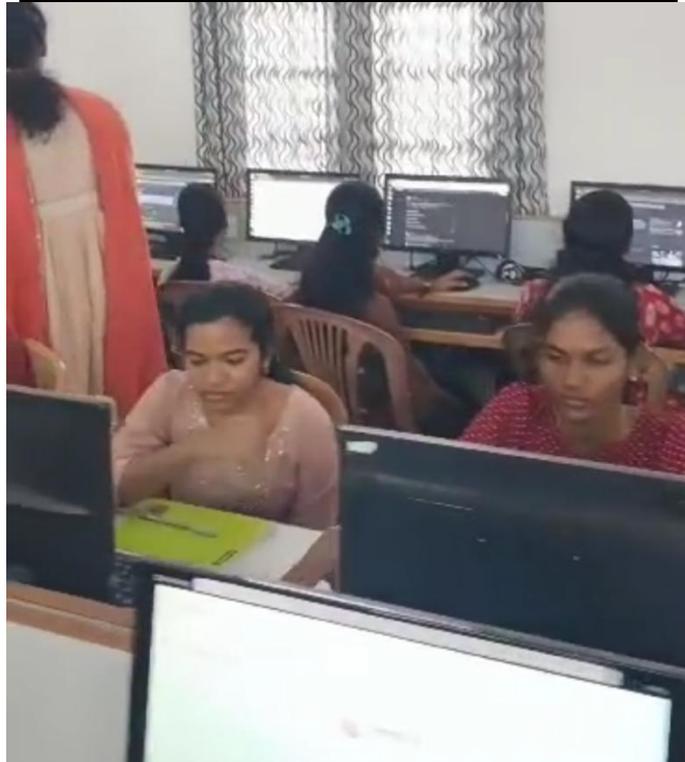
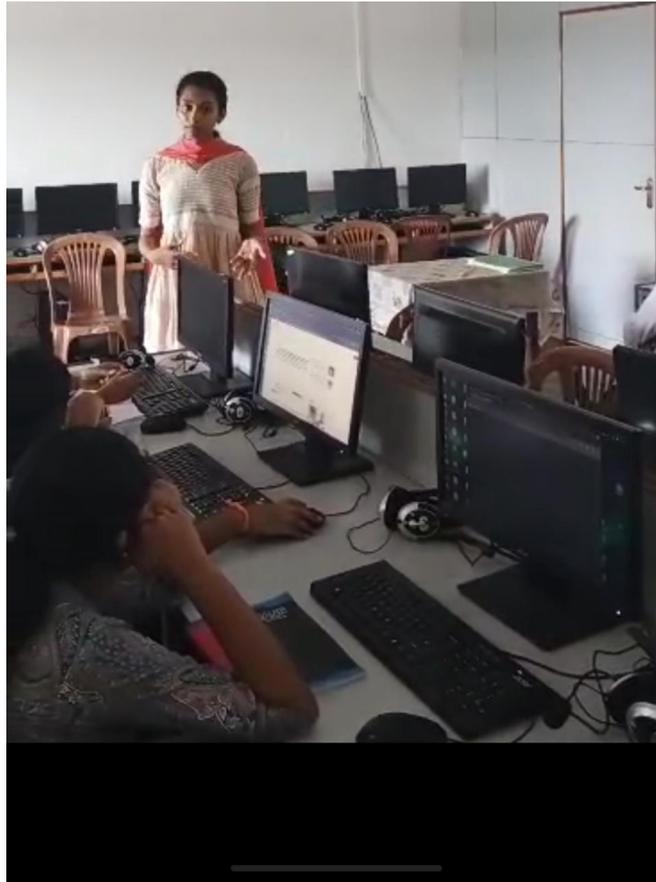
BCM College is committed to fostering a strong research culture by providing adequate infrastructure and central research facilities that support innovative, interdisciplinary, and quality research activities. The institution ensures that faculty members, research scholars, and students have access to essential physical and digital resources required for conducting meaningful academic and scientific investigations. The college has established a range of central facilities that enable researchers to carry out experiments, data analysis, literature review, and scholarly communication efficiently. These facilities are designed to promote collaborative research across departments and to enhance the overall research output of the institution.

Well-equipped laboratories across various departments provide opportunities for experimental learning and research-based activities. These laboratories are equipped with modern instruments and equipment necessary for practical training, product development, and scientific investigations. The institution also maintains computer laboratories with high-speed internet connectivity, enabling researchers to perform statistical analysis, data processing, and online research activities. These facilities support the use of research software, digital tools, and online platforms essential for contemporary research work.

The central library of the college serves as an important knowledge resource centre for researchers. It houses a rich collection of textbooks, reference books, national and international journals, research reports, dissertations, and periodicals across diverse academic disciplines. In addition to print resources, the library provides access to a wide range of e-resources, including online journals, academic databases, and digital repositories that support advanced literature search and scholarly research. To encourage academic interaction and dissemination of research findings, the institution provides well-equipped seminar halls and conference facilities. These venues are used for organizing seminars, workshops, conferences, research methodology training programmes, and academic discussions that promote knowledge exchange among scholars and experts.

Through these facilities, BCM College creates a supportive research environment that encourages innovation, interdisciplinary collaboration, and the development of new knowledge. The central research facilities play a crucial role in enhancing the quality of research activities and contribute significantly to the academic advancement of the institution as well as to societal development.







Library Automation Using Integrated Library Management System (ILMS)

The Library of Bishop Chulaparambil Memorial (BCM) College is fully automated using the Integrated Library Management System (ILMS) with the open-source software KOHA. The automation facilitates efficient management of library resources and provides a user-friendly interface for accessing academic materials. The system supports cataloguing, circulation, acquisition, serial control, and online public access to library resources, thereby enhancing the overall library services for students, faculty, and researchers.

Details of ILMS

Particulars	Details
Name of ILMS Software	KOHA (Open Source)
Nature of Automation	Fully Automated
Version	15.11.06.000
Year of Automation	2012
Library Link	127.0.1.1:8080
KOHA Link	172.16.16.29:8080
OPAC Link	172.16.16.29

Library Resources

Resource Type	Quantity
Print Books	50,034
E-Books	3 Crores +
Journals / Periodicals	92
Newspapers	6
E-Journals	3,828

The library also subscribes to **N-LIST**, providing access to a large number of e-books and e-journals for academic and research purposes.

Library Infrastructure and ICT Facilities

To ensure effective implementation of ILMS and provide a supportive learning environment, the library has adopted several modern facilities:

- Web OPAC (Online Public Access Catalogue) access is provided to users within the campus.
- Search options are available based on author, title, subject, and accession number, and users can make online reservations.
- Two exclusive systems are available for catalogue search.
- 23 computer systems are provided for internet browsing and accessing e-resources.
- Gate entry is managed through a barcode scanning system.
- Library access is enabled through college ID cards for staff and students.
- Books are issued and returned using a barcode reader system.
- Periodic orientation programmes are conducted to familiarize staff and students with the ILMS and library services.

Institution frequently updates its IT facilities including Wi-Fi

Bishop Chulaparambil Memorial College updates IT facilities regularly to mould students well-versed in a techno-imperative society. The major upgradations during the assessment period include:

Computing Systems are augmented to **193** in 2021 from 93 of 2014

Student - Computer Ratio was brought to **9:1** from 24:1 of 2014

Internet facility is made available in the library with new **23** systems

The computer centre is expanded with 86 Computers

Details of Equipment And Lab Facilities

The college provides well-equipped laboratory facilities to support practical learning, research activities, and skill development across various science disciplines. The laboratories are furnished with a wide range of modern instruments and essential equipment that enable students and researchers to conduct experiments, scientific analysis, and advanced research work effectively. Major facilities include spectrophotometers, centrifuges, microscopes, incubators, electrophoresis units, analytical balances, pH meters, ovens, autoclaves, and other specialized instruments required for chemistry, physics, botany, zoology, and interdisciplinary laboratory work. In addition, the institution maintains adequate computational support and specialized equipment for biotechnology and experimental studies. These facilities help in strengthening hands-on training, enhancing experimental competence, and supporting both undergraduate and postgraduate research activities while ensuring a conducive environment for scientific inquiry and innovation.

Details of Equipment in Science Laboratories			
Sl.No.	Equipment	Brand	Number
1	Electronic Balance	SARTORIUS	3
2	Electronic Balance	SCHIMADZU	1
3	Laboratory Oven	LABLINE 2015	1
4	Laboratory Oven	NSW	1
5	Digital pH Meter	LT-10, LABTRONICS, 015	2
6	BOD Incubator	REMI, BOD-65, 2012, 2015	1
7	UV-Visible Spectrophotometer	SCHIMADZU, UV-2600	1
8	Distillation Unit	BOROSIL, BAPS, 2015	1
9	Centrifuging Machine	REMI, C-24BL, 2012	3
10	Spin coater	NAVSON TECHNOLOGIES	1
11	Microwave oven	MORPHY RICHARDS	1
12	Sonicator	LABWAN	1

13	Water bath	KEMI, KCSBT 2, 2015	1
14	Incubator	KEMI, K75-SFP, 2011	1
15	Magnetic stirrer	KEMI	4
16	Magnetic stirrer	REMI	1
17	Polarimeter	ADVANCE	1
18	Potentiometer	EQUIPTRONICS	2
19	Conductometer	EQUIPTRONICS	2
20	Melting Point Apparatus	JSGW	6
21	Nephelo Turbidity meter	SYSTRONICS	1
22	Heating mantle	RAGHA LAB SYSTEMS	3
23	Dissection microscope	OLYMPUS	40
24	Fluorescent microscope (Instrumentation room)	LEICA	1
25	Compound microscope (Binocular)	LABOMED	1
26	Compound microscope(Inclined)	LEITZWETZLER-GERMAN	11
27	Compound microscope(Straight)	OLYMPUS	40
28	Table top centrifuge	REMI	1
29	Ultra cooling centrifuge	REMI-C-24BL	1
30	Hot air oven (Small)	KEMI	1
31	Laminar air flow chamber	KEMI	1
32	Electronic weighing balance	PRRESTIGE	1
33	pH meter	SYSTRONICS	2
34	Hemocytometer	NEUBAEUR	2
35	Water bath	KEMI	1
36	Cyclomixer	REMI-CM101	1
37	Autoclave	SUBHASH	1
38	Electric heater	JOHNSON	1
39	Colorimeter	BEACON	1
40	Refrigerator	WHIRLPOOL	1
41	Computer	Lenovo	2
42	Cooker 20 L	HAWKINS	1
43	AF generator	SCIENTIFIC TECH	9
44	Battery eliminator 12V	Prominent Technologies	10
45	Battery eliminator 12V (Green Big)	Prominent Technologies	3
46	Dimmerstat	SCIENTIFIC TECH	6
47	Dual Power supply	Teklab Instruments	5

48	IC trainer kit	SCIENTIFIC TECH	4
49	LCR meter	SCIENTIFIC TECH	1
50	CRO	Prominent Technologies	3
51	Spectrometer for grating expt	SCIENTIFIC TECH	4
52	Muffle Furnace	KEMI	1
53	DC Voltage source	SCIENTIFIC SE	13
54	Magnetic Stirrer	TARSONS	2
55	Ic Tester	SCIENTIFIC TECH	1
56	UV spectrophotometer	Schimidzu	1
57	Multimeter	Metravi	3
58	Binocular Microscope Magnus MLXB LED Plus	Crescent Lab Equipments	1
59	Monocular Microscope Magnus HB	Crescent Lab Equipments	18
60	Digital Sartorius Analytical Balance BSA 2245-CW	Hall Mark Mechatronics	1
61	Horizontal Electrophoresis Biotech 03 – 02	Universal Agencies	1
62	Power Pack for electrophoresis biotech 10-03 analytical Power Pack 300	Universal Agencies	1
63	Digital pH meter Eutech ECPHTUTOR – I	Bio Tech	
64	Hot plate rectangular Kemi 30 X 45 with Energy Regulator	Bio Tech	1
65	UV transilluminator biotech 09 - 03	Bio Tech	1
66	Haemocytometer ROHEM counting chamber with RBC and WBC pipette	Bio Tech	10
67	Laminar air flow cabinet Kemi 3 X 2 horizontal K L	Bio Tech	1
68	Plankton Counting Chamber Sedwich Rafter (Biocraft)	Bio Tech	5
69	Slide Warming Table ROTEK RSWT -01- TopSS	Bio Tech	1

70	Waterbath KEMI cylindrical KCWBT -2 with thermostat	Bio Tech	1
71	Double Distillation Unit (1.5 litre) Borosil 3362 All glass	Bio Tech	1
72	Power Pack for Distillation Unit (DAPS)	Bio Tech	1
73	Micropipette (0.2-2 ml) adjustable Thermo Fisher 4642010	Scientific Enterprises	1
74	Micropipette (2-20 ml) adjustable Thermo Fisher 4642050	Scientific Enterprises	1
75	Micropipette (10-100 ml) adjustable Thermo Fisher 4642070	Scientific Enterprises	1
76	Micropipette (100-1000 ml) adjustable Thermo Fisher 4642090	Scientific Enterprises	1
77	Cyclomixer (Vortex mixer) Remi CMI 01 Plus	Scientific Enterprises	1
78	Multiparameter portable Meter Eutech ECPCDWP65044K	Scientific Enterprises	1
79	Microscope Compound	ERNST LEITZ GMBH WETZLAR Germany	16
80	Microscope Compound	BECK KASSEL C.B.S Germany	11
81	Senior Dissecting microscope	Weswox optik	30
82	Haemocytometer	Rohem India	25
83	Haemoglobinometer	Superior marienfied	10
84	Digital pH Meter	Systronics	1
85	Digital Colorimeter	Beacon	1
86	Plankton Counting Chamber	Reliance Plast	10
87	Electronic Balance (CTG602)	CWS Series infra digital balance	1
88	Camera Lucida	Geniune Dollar	4
89	Senior Laboratory Microscope	Weswox optik	2
90	Hot Air Oven	Jempo	1
91	Autoclave	Yorco sales Pvt	1
92	Spygmomanometer	Ushima Deluxe	1
93	Stethoscope	Novasonic	1

94	Centrifuge	KEMI	1
95	Monocular Microscope with LED illumination	Labomed	1
96	Electrophoretic Apparatus (Vertical)	Biotech	1
97	Colorimeter	Beacon	1
98	Refrigerator 253 L	Samsung	1
99	Stage Micrometer	Erma Tokyo	18
100	Ocular Micrometer	Erma Tokyo	24
101	Camera and macrolens	Nikon	1
102	Incubator	Remi	2
103	Stitching Machine	USHA+C238:C25C238:C250	16
104	Stitching Machine	Merrit	8
105	Stitching Machine	Singer	1
106	Stitching Machine	Ortem	1
107	Microscope	Micro India MI3RP	1
108	Microscope	Linker HL-4	2
109	Microscope with LED illumination	Labomed	1
110	Centrifuge	Remi	1
111	Refrigerator	LG	1
112	Refrigerator	Whirlpool	1
113	Gas Stove	Sheel Flame	8
114	Gas Stove	Butterfly	3
115	Mixer Grinder	Prestige	1