



Rashtriya Uchchatar Shiksha Abhiyan, Maharashtra

RUSA PROJECT REPORT

PART A						
SCHEME: RUSA 2.0						
NAME OF THE INSTITUTION: Vivekanand college, Kolhapur(Autonomous)						
ADDRESS OF THE INSTITUTION: 2130, E Ward, Tarabai Park, Kolhapur, Maharashtra 416003						
DISTRICT LOCATION: Kolhapur, Maharashtra						
AFFILIATING UNIVERSITY: Shivaji University, Kolhapur						
CURRENT STUDENT STRENGTH: 5168 (UG-4611, PG-511, PG- diploma:46)						
CURRENT FACUTLY STRENGTH (Sanctioned posts and filled posts): Sanctioned posts: 85, filled posts: 55						
NAME OF THE PRINCIPAL: Prof. Dr. R. R. Kumbhar						
MOBILE NUMBER: 9822664082			EMAIL ID:info@vivekanandcollege.org			
NAME OF RUSA COORDINATOR: Dr. C. B. Patil						
MOBILE NUMBER: 9922049750			EMAIL ID: patilcb.ele@gmail.com			
PART B			<i>*(kindly enter Amount - Rs in Lakhs only)</i>			
COMPONENT NUMBER: 9						
COMPONENT NAME: Infrastructure Development Grant						
PROJECT SANCTIONED DATE: 14/02/2019						
PROJECT COMPLETION DATE : 31/03/2022						
GRANTS SANCTIONED (Rs. in lakhs): 200 Lakhs						
TOTAL GRANTS RECEIVED (Rs. in lakhs): 200 Lakhs						
GRANT RECIEVED AMOUNT RS & DATE	1ST INSTALMENT		2ND INSTALMENT		3RD /FINAL INSTALMENT	
	Amount	Date	Amount	Date	Amount	Date
	100 lakhs	14.2.2019	50 lakhs	28.10.2020	50 lakhs	19.7.2019
GRANT UTILISED IN RS. 200 lakhs			BALANCE AMOUNT RS. (IF ANY) : Nil			
% OF GRANTS UTILIZED: 100%						
1. WHETHER ALL THE STOCK BOOK ENTRIES HAVE BEEN MADE WHEREVER NECESSARY? YES/NO YES						



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DETAILS OF EXPENDITURE (Rs in Lakhs)						
A. CONSTRUCTION	TYPE OF INFRASTRUCTURE (Hostel/lab etc.)	SANCTIONED AMOUNT	AMOUNT UTILIZED (in Rs & %)	STATUS OF UTILITY	NO. OF FACILITIES CREATED	LOCATION OF FACILITY
	1. Physics Lab	82.02	88.30 (108 %)	Completed	1. laboratories =3 (size 9 * 12 m=108 m ²), 2. laboratories =1 (size 9 * 9 m=81 m ²) 3. Staff Room =1 (size 3 * 9 m=27 m ²), 4. Wash Rooms= (size 9 * 9 m=81 m ²), 5. Passage= (size 2.75 * 33.75 m=92.81 m ²) 6. Lift Space (size 1.8*1.8= 3.24 m ²)	4 th Floor
TOTAL :		82.02	88.30			
1. Whether the construction is checked as per sanctioned estimate by an independent engineer? YES						
2. Technical Sanctions for civil and electrical work? If Yes, attach copies YES, copy attached						
3. Whether Safety /Structural Audit conducted? If YES/No, If YES, attach copies YES, copy attached						
4. Whether the new construction facility has been registered on Property Card? If YES, attach copy It is in process						
5. Whether the facility is in actual use of its desired purpose? Yes, Practicals of B.Sc. and M.Sc. Program are conducted						
6. All facilities created has RUSA cornerstone/RUSA signboard with RUSA logo? YES/NO YES						
B. RENOVATION/UPGRADATION	TYPE OF INFRASTRUCTURE (Hostel/lab etc)	SANCTIONED AMOUNT	AMOUNT UTILIZED	STATUS	NO. OF FACILITIES	LOCATION OF FACILITY
(Chemistry Lab and Smart Classrooms)	1. Chemistry Lab	72.00	75.20	completed	<ul style="list-style-type: none"> • Practical tables with Storage cabinets • Table top chemical storage cabinets • Reticulated gas piping • Staff cabin with tables & chairs • Students stools in stainless steel 	Room Nos. 5, 6, 9
	2. ICT enabled Classrooms	23.00	22.95	completed	<ul style="list-style-type: none"> • Flooring • Decorative lighting • Audio system • Smart board • Air conditioner • Staff table with chairs • Students desks • Storage cabinet, locker • Armstrong ceil out grid ceiling 	Room Nos. 13 & 19
TOTAL :		94.00	98.12			
1. Whether the construction is checked as per sanctioned estimate by an independent engineer? YES/NO YES						
2. Technical Sanctions for civil and electrical work? YES/NO , If Yes, attach copies YES, copy attached						
3. Whether Stability/Structural Audit for the existing structure conducted before renovation/upgradation? YES/NO, If Yes, attach copies YES, copy attached						
4. Whether the renovation work approved as per local construction norms? YES						
5. Whether the facility is in actual use of its desired purpose? YES						
6. All facilities renovated has RUSA cornerstone/Signboard with RUSA logo? YES/NO YES						



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C. EQUIPMENTS	TYPE OF EQUIPMENT	SANCTIONED AMOUNT	NO. OF EQUIPMENTS	AMOUNT UTILISED	STATUS (IN USE/ NOT IN USE)	LOCATION OF FACILITY
	Intensity using photo sensor and laser on diffraction pattern of single and double slits apparatus	15.00	01	0.21	IN USE	Physics Dept.
	Thermal Mechanical equivalent of heat by Callender and Barne's constant method apparatus		01	0.10	IN USE	Physics Dept.
	Conductivity by Angstrom's Apparatus		02	0.25	IN USE	Physics Dept.
	Thermal Coefficients of resistance by platinum resistance thermometer		01	0.18	IN USE	Physics Dept.
	Resistance Temperature device (RTD) using null method /off balance bridge		02	0.25	IN USE	Physics Dept.
	Study of Electron spin resonance		01	0.64	IN USE	Physics Dept.
	To study the quantum tunneling effect		01	0.10	IN USE	Physics Dept.
	To determine the Coupling Coefficient of a Piezoelectric crystal,		01	0.43	IN USE	Physics Dept.
	To determine the ionization potential of mercury		01	0.10	IN USE	Physics Dept.
	Frank and Hertz experiment		01	0.72	IN USE	Physics Dept.
	Potentiometer		04	0.33	IN USE	Chemistry
	Colorimeter		01	0.15	IN USE	Chemistry
	Digital Conductometer		12	1.32	IN USE	Chemistry
	Digital orbital shaker		01	0.28	IN USE	Chemistry
	Digital Electronics balance		03	0.89	IN USE	Chemistry
	Educational Microscopes		30	0.94	IN USE	Botany
	Dissecting Microscopes		25	0.24	IN USE	Botany
	Steam sterilizer		01	1.30	IN USE	Biotechnology
	Electronics Balance		01	0.40	IN USE	Microbiology
	Microscope with oil immersion		07	0.56	IN USE	Microbiology
	Gel Electrophoresis unit		01	0.21	IN USE	Microbiology
	Distillation Unit		01	0.14	IN USE	Microbiology
	Electronics Experimental Kits, 3D Printer, Raspberry Pi kits, Arduino UNO boards, Wireless robot kits etc. (Total 72 particulars)		--	3.27	IN USE	Electronics
	Single beam spectrometer		01	1.53	IN USE	Zoology
	Distillation unit		01	0.39	IN USE	Zoology
	Vertex mixer		01	0.09	IN USE	Zoology
	Total:	15.00		15.003		
Books & Journals	Total:	5.00		5.00		
1. All equipment purchased through RUSA is tagged with RUSA logo sticker/label? YES/NO YES						



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D. SOFT COMPONENT	TYPE OF ACTIVITY	SANCTIONED AMOUNT	AMOUNT UTILIZED	STATUS OF UTILITY	OUTCOME ACHIEVED	NO OF STUDENTS BENEFITTED	INTERNATIONAL/ STATE/ COLLEGE LEVEL
1	FDP on Framing & executing Learning Outcomes	6.50	0.38	completed	1. Participants understand the concepts, importance and relevance of Bloom's Taxonomy 2. Participants gets aware about the process of evaluation and paper setting according to Learning Outcomes	61	COLLEGE
2	A National symposium on the role of Mass media in teaching		0.81	completed	1. proved through the discussion of the scholars that Mass Media play an important role in the development of attitudes, values and language skills of an individual	260 delegates and students	NATIONAL
3	FDP on understanding IPR & writing research paper		0.68	completed	1. Participants understand the IP Law and inclined knowledge for writing Research papers	135	
4	FDP on Stress Management for Non-teaching Staff		0.28	completed	1. Participants understand the sources of Stress and get aware about how to handle situation	106	COLLEGE
5	Mask Donation Campaign		0.07	completed	1. created awareness about Corona 2. trained students to make Masks	40	COLLEGE
6	One day FDP workshop on "Use of modern technology in teaching pedagogy"		0.22	completed	1. Participant gets familiar with the use of Smart Boards, which enhance Teaching Learning skills and make the Teaching-Learning process interesting	142	COLLEGE
7	FDP on National Education Policy 2020		0.24	completed	1. understand the nature & contents of NEP-2020 2. Initiated dialogue & thought process amongst faculty regarding their role & responsibilities	833	NATIONAL
8	Transcending the boundaries of Gender		0.31	completed	1. Brainstorming on Gender roles 2. create supportive environment for Gender recognition		COLLEGE
9	FDP on Stress and Anger Management		0.20	completed	1. foster resilience & cope with stressful situations at the workplace 2. Improved emotional intelligence	250	COLLEGE
10	FDP on POs , COs mapping		0.06	completed	1. Participant has understood articulation matrix of CO-PSO-PO and method of calculating level of Attainment	70	COLLEGE
11	Anusandhan ke vividh Aayam		0.21	completed	1. Participant understood gradations/ shades of Research	73	NATIONAL
12	FDP on Basics in Research and Securing IP		0.18	completed	1. Participant became able to identify research problems, acquired skills of writing research papers, aware about patent filing	22	COLLEGE
13	FDP on Radio Transmission Antennas		0.07	completed	1. Participants have got knowledge about Antenna design simulation software -CTS studio suite.	35	STATE
TOTAL :		6.50	3.86				



PART C

F. OVERALL IMPACT OF RUSA

RUSA played a vital role in improvising the quality of teaching-learning processes, capacity building of faculties and infrastructural growth of the College. Two ICT enabled classrooms have been constructed and upgraded by RUSA which are being used for lectures, online meetings, webinars and seminars. The laboratories have been renovated that helps in inculcating research atmosphere among the students. Also various new equipments are procured under this scheme and they are very useful for experimental work and practical explanation. The upgraded research labs (Physics and Chemistry) have contributed to increased research output. New books are purchased under this scheme which is very helpful to faculty and students for new autonomous curriculum. All these things helped us to produce employable and competitive graduates, post-graduates and PhDs.

Certain Faculty development programs (Seminars, Conferences–National/International) and social activities are executed under this scheme for capacity building of faculty. Skills and domain knowledge is enhanced. It helped the faculty members to develop research culture. Also the Research work and research quality is increased. Around 12 research papers have been published in UGC CARE, Scopus and Web of Science in 2020-21 and 15 research papers in 2021-22. Some Faculty development programs have helped the teachers in improving language communication skills and their technical knowledge regarding E-content development for online classroom teaching with smart board. The faculty development programs on Intellectual Property Right initiated the faculty to apply for patents. 03 faculties from department of Computer science Dr. R. Y. Patil, Dr. Vishal Waghmare and Dr. I. K. Mujawar have received the Australian Govt. Patent (October, 2022) and one faculty from department of Botany, Ms. Priya Patil received German Patent in September 2023.

G. THREE OUTCOMES OF RUSA PROJECT WHICH HAS BENEFITTED COLLEGE AND STUDENTS

1. Improvement in the quality of teaching-learning because of smart classrooms, ICT enabled classrooms, purchase of advanced equipments, renovation in Labs, purchasing of Books
2. Increased capacity of infrastructure to run more courses
3. Capacity building(skill and domain knowledge) of faculty: enhanced Research work and research quality

H. SUCCESS STORY WITH RESPECT TO RUSA, IF ANY

With the funding provided by RUSA, Vivekanand College, Kolhapur organized two national seminars/conferences on various aspects of Intellectual Property Rights. IQAC and RDPC of our college organized an FDP entitled “National Seminar on Basics in Research and Securing IP” on 1st March, 2021 which was sponsored by RUSA. Scientists like Mr. Udaysinh Ghatage having 36 national and 2 international patents on his account were invited to discuss the vision and process of Patenting. Inspired by this Seminar three of our Computer Science dept. faculty worked on an innovative idea on the same thought line. Dr. I. K. Mujawar, Dr.



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Vishal Waghmare and Dr. Rajashree Patil were rewarded with an Australian Government Patent on 27th Oct. 2021 for their research in 'use of ICT in the treatment of Cardio diseases'. This success story in turn inspired one more faculty from Botany Dept. named Miss. Priya Patil who received German Patent for her research in Botany in Sept. 2022.

SEAL AND SIGNATURE OF PRINCIPAL/ REGISTRAR, UNIVERSITY



A. Construction

Floor view of Physics Department



A. Construction

Department: Physics

Passage= (size 2.75 x 33.75 m=92.81 m²)



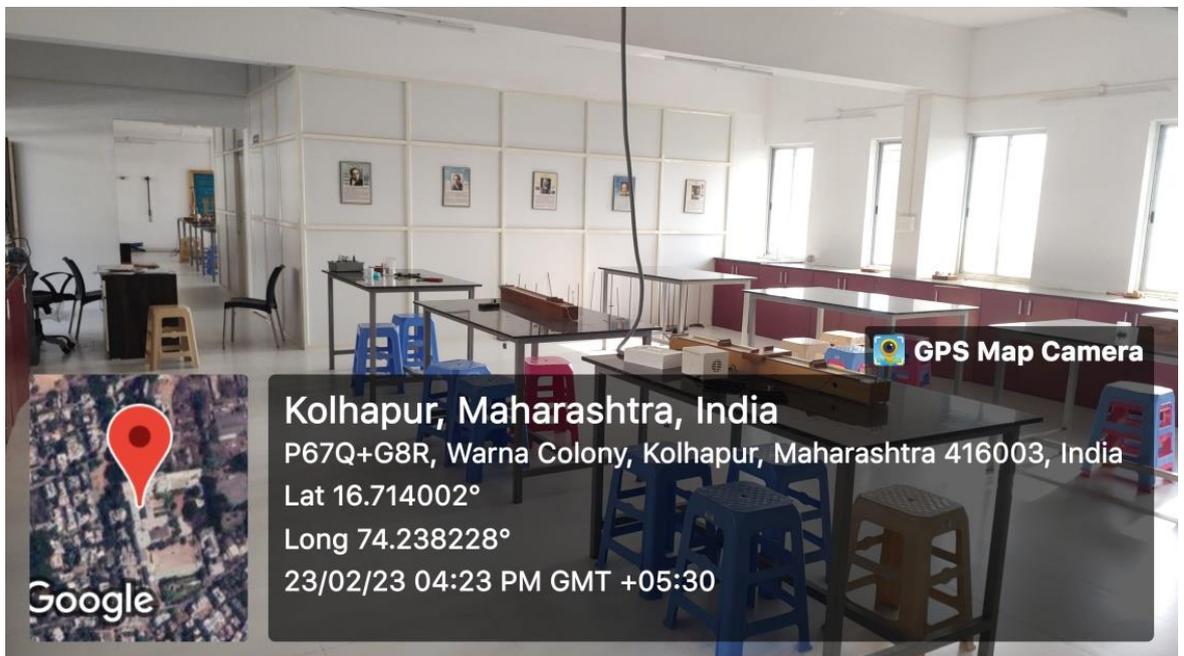
A. Construction

Department: Physics

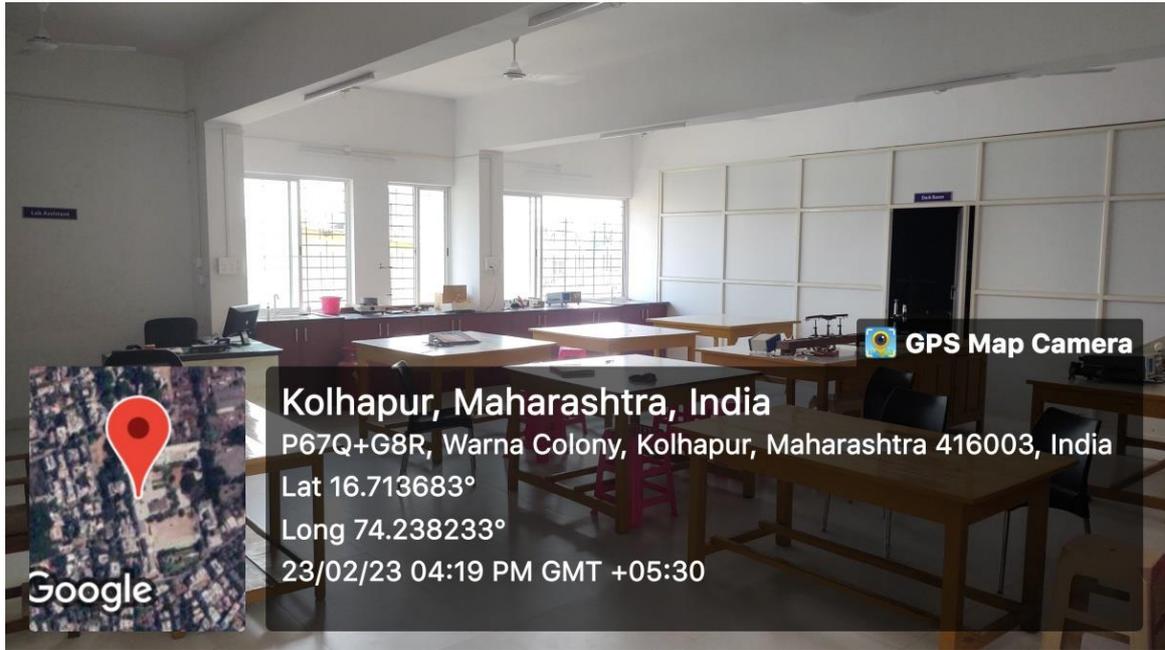
UG Lab-I



A. Construction: Physics Department
Construction: Lab-I (size 9m x 12 m=108 m²)



A. Construction: Physics Department
Construction: Lab-II (size 9m x 12 m=108 m²)



A. Construction: Physics Department
Construction: Lab-III (size 9m x 12 m=108 m2)



A. Construction: Physics Department
Construction: Staff Room =1 (size 3m x 9 m=27 m2)



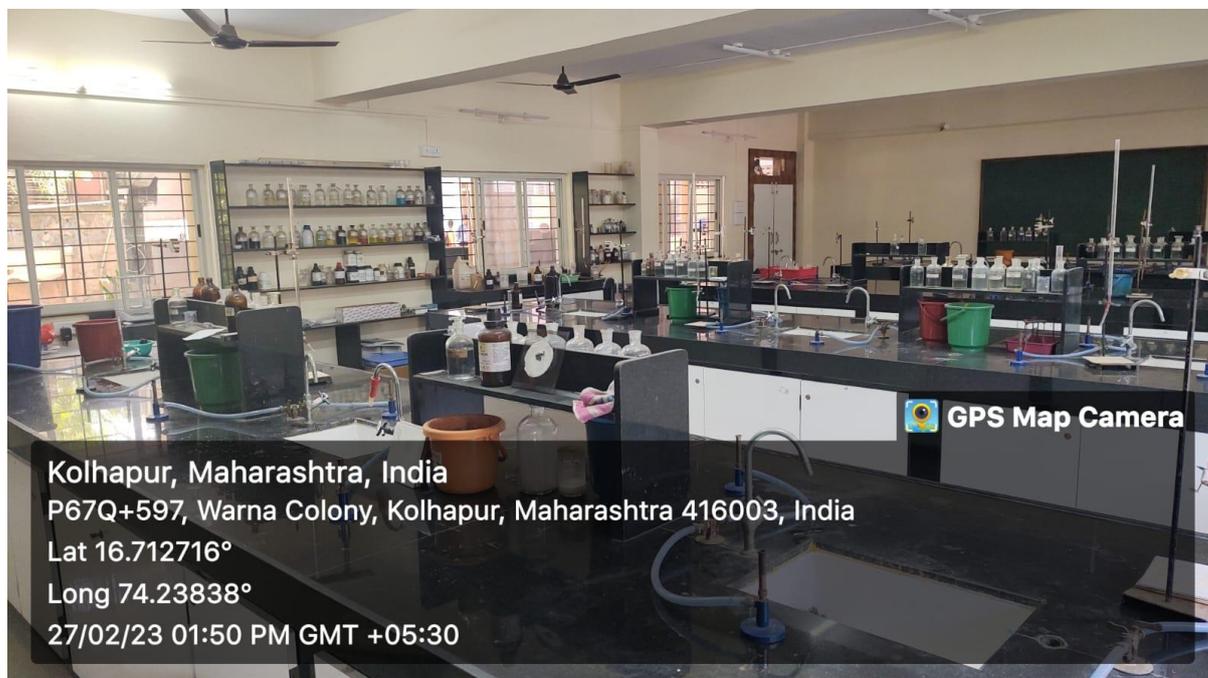
B. Renovation of Chemistry Laboratory:
Renovation of Lab (9): Lab entrance and Staff room



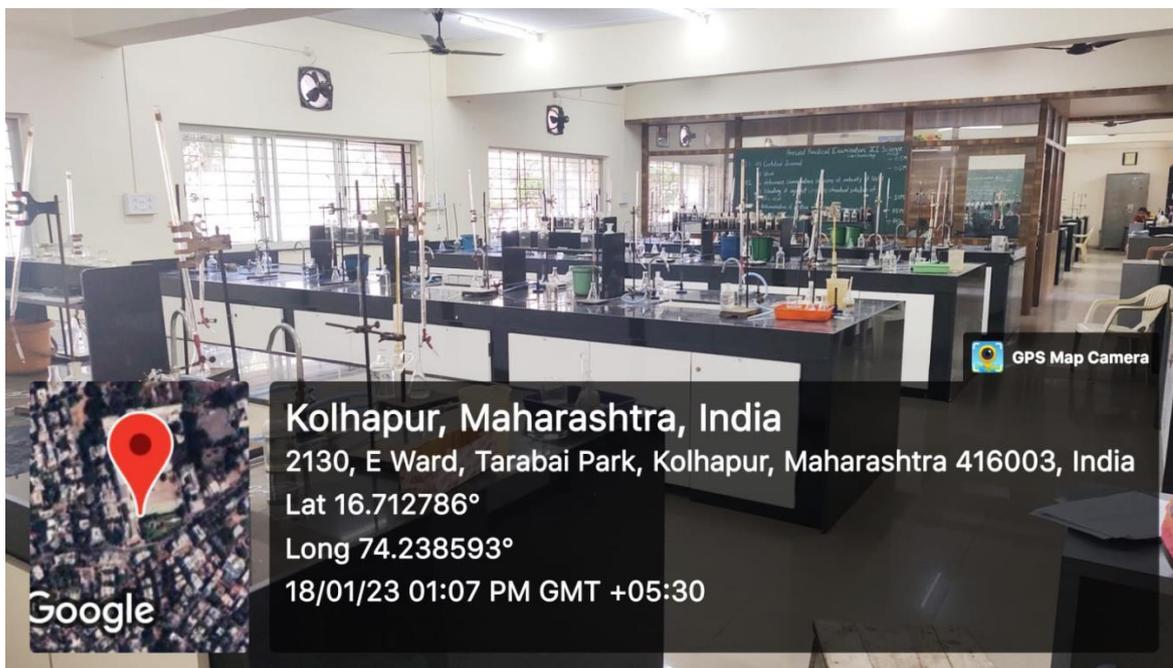
B. Renovation of Chemistry Laboratory:
Renovation of Lab (9): Practical tables with storage cabinets, chemical storage cabinets, Green board, Flooring, Armstrong ceil out grid ceiling, Decorative lighting and Aluminium ventilator etc.



B. Renovation of Chemistry Laboratory:
Renovation of Lab (5)(6): Lab entrance and Staff room

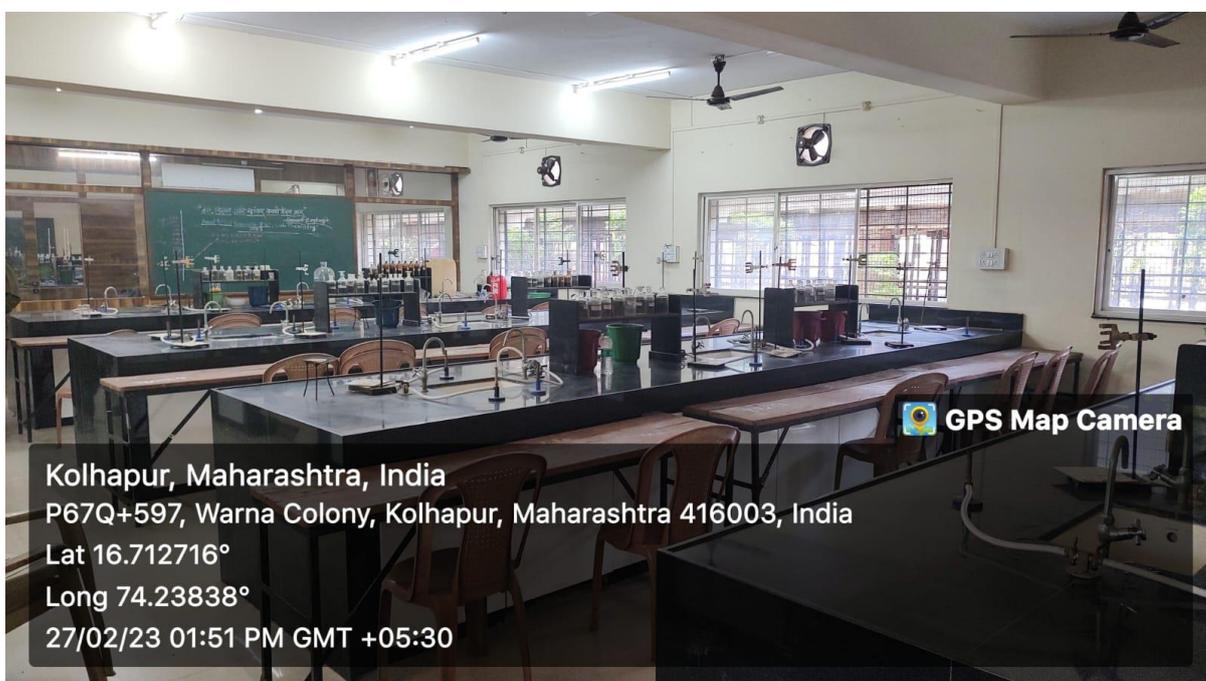


B. Renovation of Chemistry Laboratory:
Renovation of Lab (5): Practical tables with storage cabinets, chemical storage cabinets, Green board, Flooring, Armstrong ceil out grid ceiling, etc.



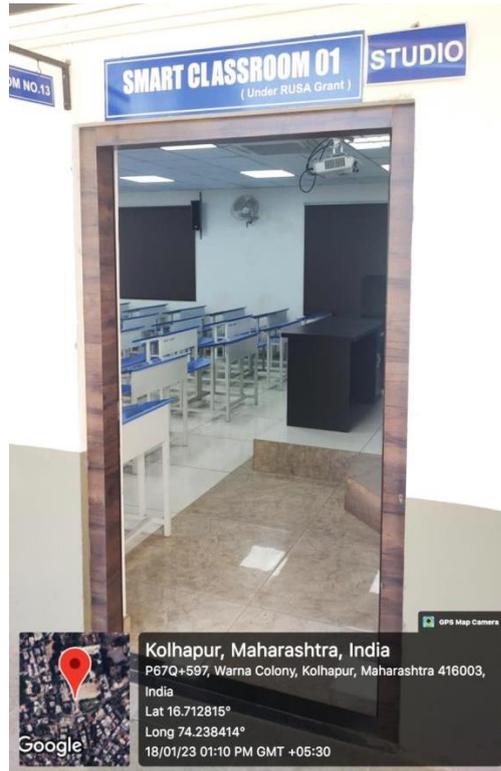
B. Renovation of Chemistry Laboratory:

Renovation of Lab (5): Practical tables with storage cabinets, chemical storage cabinets, Green board, Flooring, Armstrong ceil out grid ceiling, etc

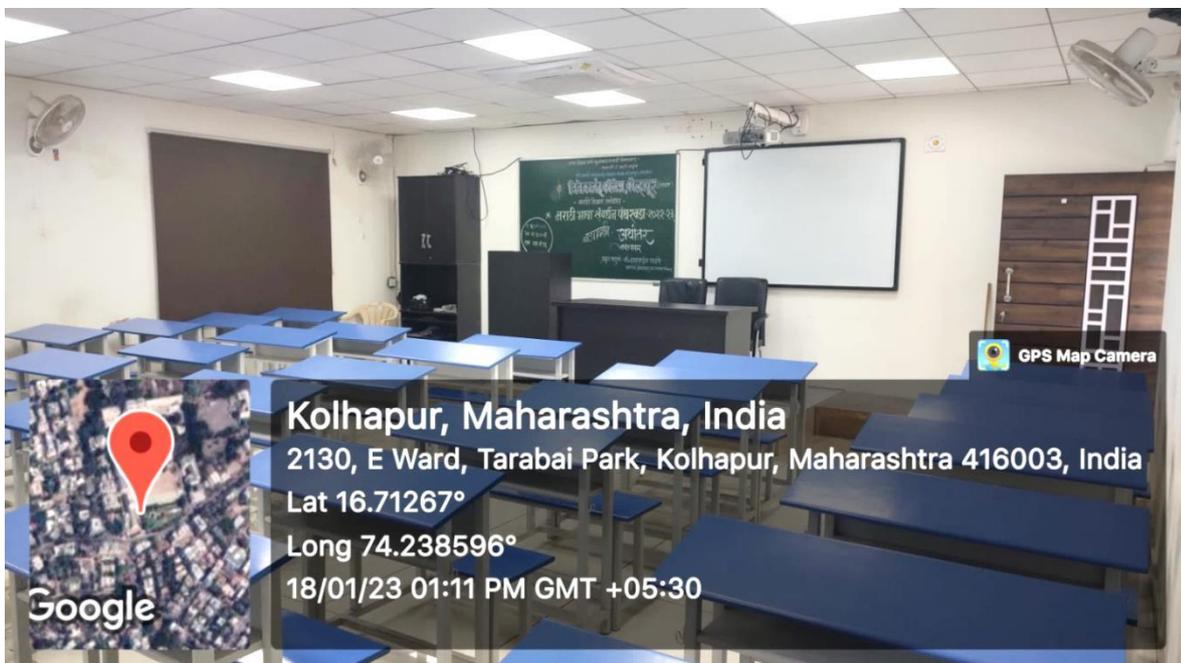


B. Renovation of Chemistry Department:

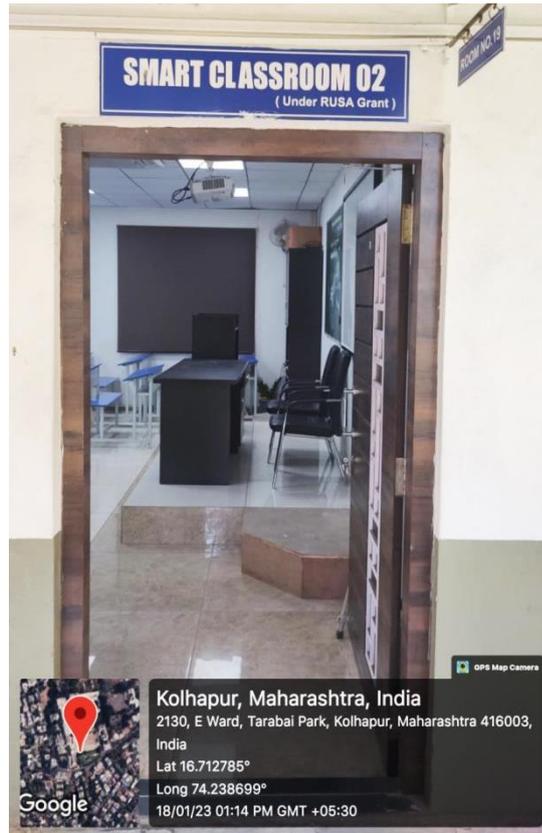
Renovation of Lab (6): Practical tables with storage cabinets, chemical storage cabinets, Green board, Flooring, Armstrong ceil out grid ceiling, etc.



B. Renovation of class rooms
Renovation of class room-1(13): Smart class room-1



B. Renovation of class rooms: Class room-1 (13): Smart class room-1
Smart board, AC, Audio system with mic., Flooring, Decorative lights, Windows with roller type curtains, Staff table with chairs, Students desk, Storage cabinet, locker, Armstrong ceil out grid ceiling, Console table T. W. Panelled doors etc.



B. Renovation of class rooms

Renovation of class room-2(19): Smart class room-2



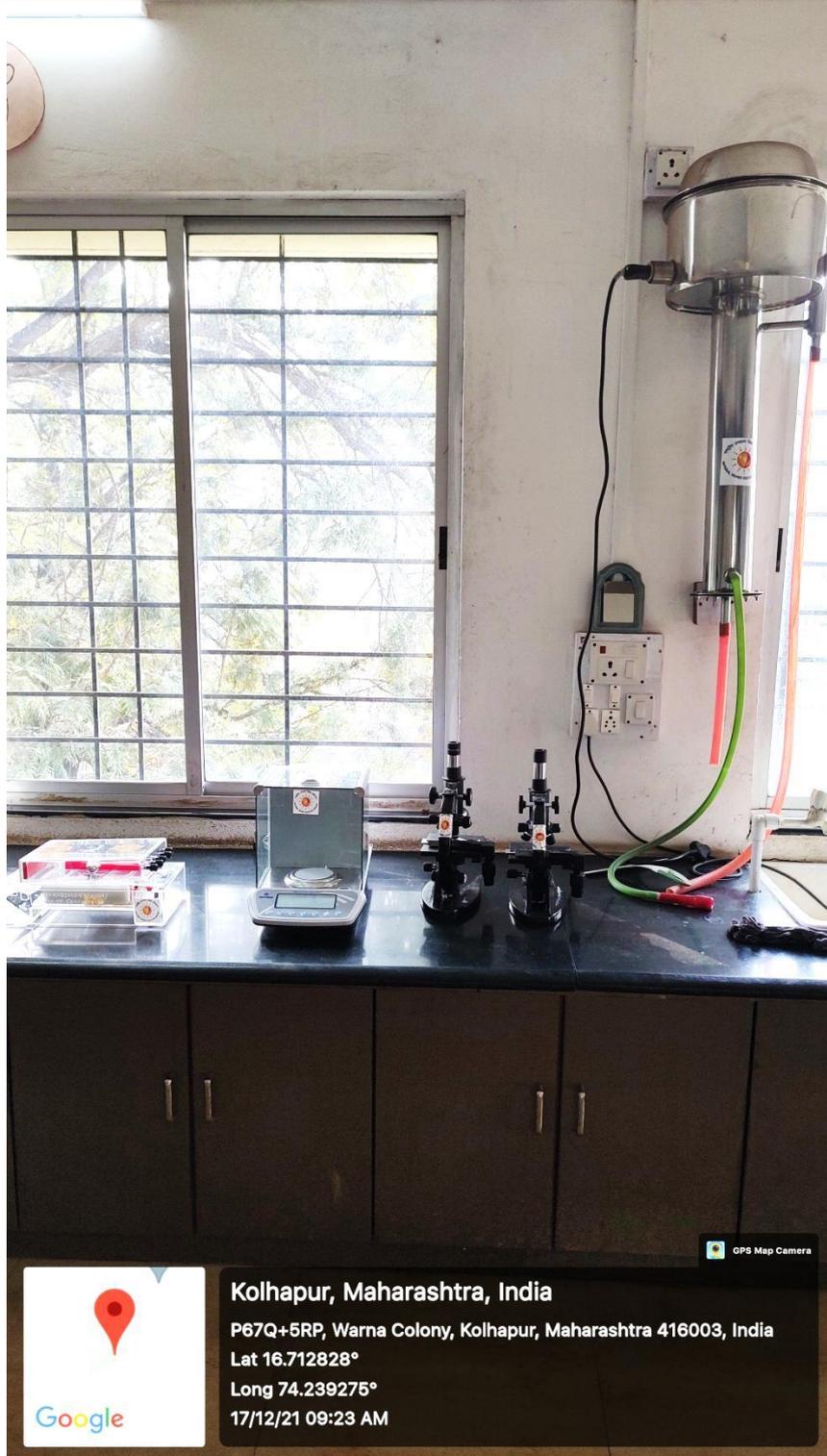
B. Renovation of class rooms: Class room-2(19): Smart class room-2

Smart board, AC, Audio system with mic., Flooring, Decorative lights, Windows with roller type curtains, Staff table with chairs, Students desk, Storage cabinet, locker, Armstrong ceil out grid ceiling, Console table T. W. Panelled doors etc.



3. Laboratory Equipments:

Name of Equipment: Steam sterilizer (Department: Biotechnology)



3. Laboratory Equipments:

Name of Equipment: Electronics Balance, Microscope with oil immersion, Gel Electrophoresis unit and Distillation Unit (Department: Microbiology)



3. Laboratory Equipments:

Name of Equipment: Study of Electron spin resonance- determine magnetic field as a function of the resonance frequency and N.M.R without C.R.O
(Department: Physics)



3. Laboratory Equipments:

Name of Equipment: Thermal Mechanical equivalent of heat by Callender and Barne's constant method apparatus (Department: Physics)



3. Laboratory Equipments:

Name of Equipment: 3D-Printer (Department: Electronics)

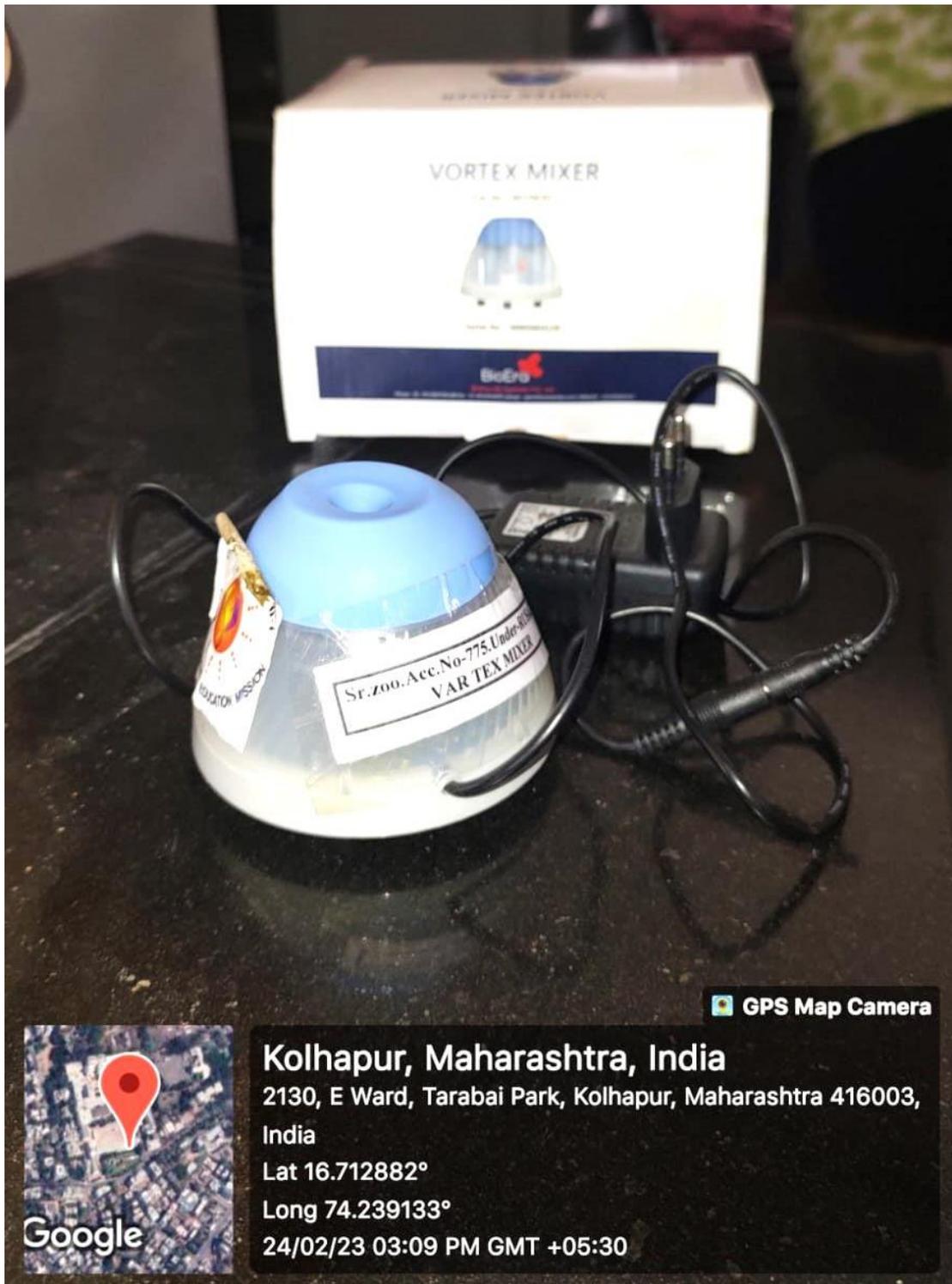


3. Laboratory Equipments:

Name of Equipment: Distillation unit (Department: Zoology)



3. Laboratory Equipments:
Name of Equipment: Single beam spectrometer (Department: Zoology)



3. Laboratory Equipments:

Name of Equipment: Vertex Mixer (Department: Zoology)