Palus Shikshan Prasarak Mandal's

ARTS, COMMERCE AND SCIENCE COLLEGE PALUS

Dist.: Sangli, Maharashtra, India

Affiliated to Shivaji University Kolhapur

DBT STAR COLLEGE SCHEME

ANNUAL PROGRESS REPORT 2022-2023

DEPARTMENT OF BIOTECHNOLOGY
MINISTRY OF SCIENCE AND TECHNOLOGY
CGO COMPLEX, LODI ROAD
NEW DELHI – 110 003

2022-23

DEPARTMENT OF BIOTECHNOLOGY

PROFORMA FOR SUBMISSION OF ANNUAL PROGRESS REPORT SUPPORTED UNDER STAR COLLEGE SCHEME

1. Name of the College: Arts, Commerce and Science College Palus

2. Name of Coordinator, Designation, Address, Phone No.

Dr. Suresh M. Kumbar
Professor,
Department of Zoology
Arts, Commerce and Science College Palus
Mobile: 9420675426
E-mail: smkumbar@rediffmail.com

3. **Assessment Duration** : 01/04/2022 to 31/03/2023 Duration in Years: One Year

4. Details of Departments Supported:

Sr. No.	Name of Department	Courses (B.Sc./M.Sc./PG Diploma, Certificate etc) offered	Regular Faculty Members	
			Total	
			With Ph.D.	Without Ph.D.
1.	Zoology	B.Sc. M.Sc. Certificate	1. Dr. S. S. Patil 2. Prof. S. M. Kumbar	1. Mr. A. B. Ghadage
2.	Physics	B.Sc. Certificate	1. Dr. S. D. Pawar	1. Mrs. S. S. Patil 2. Mr. M.V. Kamble

5. Number and Date of Advisory committee meeting: 02

Designation	Committee	Name
Chairman	Principal	Dr. R. S. Salunkhe
Adviser, HRD, DBT	DBT Adviser	Dr. Garima Gupta, Sc "F"
	Program Officer	Dr. Abhishek Kumar Mehta Sc "D"
External Experts	Physics	Dr. R. T. Sapkal
	Zoology	Dr. S. R. Yankanchi
Members	Physics Department	Dr. S. D. Pawar (HOD)
		Mrs. S. S. Patil
		Mr. M. V. Kamble
	Zoology Department	Dr. S. S. Patil (HOD)
		Mr. A. B. Ghadage
Coordinator	Member Secretary	Dr. S. M. Kumbar
Joint-Coordinator		Dr. S. S. Lendave
Office Staff	Office Superintendent	Mr. N. K. Shinde
	Accountant	Mr. A. D. Patil

6. Qualitative improvements due to DBT support. Department wise: Zoology

The Star College Scheme of the Department of Biotechnology in New Delhi has significantly enhanced our college departments by enabling the procurement of new equipment and improving infrastructure facilities. This simultaneous improvement has empowered students to handle instruments individually, thereby boosting their confidence levels. The DBT Star College Scheme has facilitated the purchase of books, enriching our departmental library and providing students with easy access to valuable resources. Interdisciplinary events, such as Science Day, National Voter's Day celebrations, and workshops on handling glassware and chemicals in the laboratory, have become possible through this scheme.Thanks to the DBT for funding, undergraduate students have had the opportunity to participate in various events, presenting their research work through oral and poster presentations. This has allowed them to showcase their hidden talents.The Star College Scheme has played a pivotal role in upgrading existing teaching resources, improving hands-on experimental exposure for students, and subsequently enhancing the quality of both learning and teaching. The scheme has also facilitated health awareness, computer literacy, and information technology applications among students on the college campus. Excursions and field visits to various agriculture-related farms and research institutes, supported by the DBT-Star college fund, have enabled deserving students from economically backward sections to attend these trips, gaining academic and industrial exposure. The qualitative improvements resulting from the DBT-Star college fund support include the procurement of new equipment, aiding in the upgrade of teaching resources, and improving the student-instrument ratio for better learning. New experiments have been conducted, and existing ones creatively extended. Multiple units of equipment purchased have empowered students to perform experiments independently and explore beyond the syllabus. Projects undertaken by students provide hands-on training, enhancing the quality of experiential learning. Guest lectures by experts organized for students not only provide expertise in various topics but also add credibility to the curriculum content. Experiential learning through industrial and field visits, supported by financial aid from the DBT, has become a valuable aspect of our educational program.The additional facilities and funds provided through the Star College Scheme, including equipment and consumables, now permit students to explore more challenging projects.

Students Minor Research Projects :

Sr.no	Name of the project	Name of the students	Impact	Justification
1.	Preparation of silver Nano particles using Lactuca seriolla leaves	1.Mrs Swati Sahebrao Patil. 1.Pratiksha A. Nikam 2.Avantika A .Kadam 3.Ankita D. Shinde 4.Rohan A.Patil 5.Nikita Dhanaji Raskar	1.Students learn method to synthesize silver nanoparticl es. 2.They can analyse uv visible spectrum	There are different methods for production of silver nanoparticles.Silver nanoparticles have number of extraordinary properties than bulk.Production of silver nanoparticles by chemical method involve use of toxic chemicals.Biosynthesisof nanoparticles is clean nontoxic and eco-friendly method.
2.	Air ion and pollution index variation at semiurban station Palus	2. Dr.S.D.Pawar 1.Nikita B.Vanjeri 2. Priyanka S. Mulik 3. Shivani Chavan 4.Monika Gavali	Awareness about pollution is created	Students measured air ions at semiurban place Palus.Finally Pollution index I the ratio of Positive to negative air ions .From this pollution index even though Palus is semiurban place .pollution index is high .This is harmful to human health
3.	Effect of physicochemic al parameters on the quality of drinking water innearby villages of Palus(Water testing analysis)	3. M. V.Kamble 1.Apurva P.Gaikwad 2.Shivraj Arjun Patil 3.Sakshi R.Patil 4.Snehal Mane 5.Rohan Ravindra Patil	Digestive system and health of people in Burli,Kund al,Amnapur and palus.	It is always necessary to test frequently drinking Water Quality . Water quality can be improved by suggesting appropriate measures, If any adverse component is found in water analysis.

Students Minor Research Projects

Sr. No.	Title of Project	Name of students	Remarks
1.	Estimation of age and longevity of Freshwater fish *Puntius sarana* inhabiting Krishna River	Miss. Mane Gayatri G.	Project work allows individuals to gain a deeper understanding of the topic and develop expertise in that area. It also promotes curiosity and a desire to learn more, leading to continuous personal growth and development.
2.	Diversity of Freshwater fishes of Krishna River	Miss. Salunkhe Rutuja R.	
3.	Identification of Insect Pests in Palus Tehasil, Sangli District	Miss. Deshmukh Anuradha	
4.	Human Genetic Traits	Miss. Lad Rutuja M.	
5.	Diversity of Spider species in Sangli Dist.	Miss. Sutar Amruta R.	
6.	Collection and identification of Caterpillars in Palus Tehsil	Miss. Jadhav Pooja P.	
7.	Collection and identification of Butterfly in Palus Tehsil	Miss. Dhade Poonam A.	

7. Any Novel aspect introduced or planning to introduce during the Scheme duration

Students were encouraged to participate in compulsory career orientation courses, including sericulture, maintenance of electrical equipment and home appliances, yoga and meditation, tally, and maintenance of hardware and software in computers, as well as English speaking courses. This initiative aimed to enhance the students' skill set and prepare them for various career paths.The handling efficiency of instruments was improved, contributing to the development of basic research knowledge and scientific writing skills among students. Additionally, the cultivation of entrepreneurial skills was emphasized, with the expectation that it would positively impact the students' future well-being.The introduction of new experiments and practical activities has allowed students to expand their existing knowledge and engage in hands-on learning experiences.Faculty members also played a crucial role in enhancing the educational environment. They enriched their knowledge through participation in orientation courses, refresher courses, faculty development programs, and various workshops, conferences, and seminars. The DBT Star College supported student initiatives such as paper presentations and poster presentations in conferences and seminars, as well as student exchange programs.To instill a competitive spirit among third-year students, compulsory field visits and study tours were organized. These activities, integral to the study of life sciences, provided students with the opportunity to observe animals in their natural environment, fostering a more interesting and useful experience, particularly for zoology students.

Department of Physics:

- To calculate pollution index at semiurban place Palus.
- To synthesi e nanomaterials and study its applications.
- To study the purity of water.
- To study chemical parameters,physical and biological parameters of drinking water.

8. Lessons learnt/ difficulties faced / suggestions if any, in implementation of the programme and utilization of DBT grant.

We have initiated the implementation of individual or group projects for final-year students in both the Physics and Zoology departments. We consistently encourage students to actively participate and present their research papers in conferences, seminars, symposia, etc., fostering the development of a strong rapport with eminent subject experts in both departments.Furthermore, we actively promote our graduate students to publish their project work data in research papers in renowned journals, thereby contributing to the dissemination of valuable knowledge.To enhance the overall academic environment, we have focused on improving infrastructure facilities in both participatory departments. Additionally, we encourage faculty and students from other departments to optimally utilize the newly purchased equipment and benefit from knowledge support provided.In order to nurture research thirst and enhance learning skills, we utilize ICT tools in both the Physics and Zoology departments. Through these tools, we aim to create a conducive environment for research and continuous learning.As part of the Star College Scheme activity, we are dedicated to popularizing and elevating the image of the college. This involves active participation in the scheme's initiatives to further enhance the overall academic standing.However,

we initially faced challenges in the transaction of DBT amounts through the PFMS system, leading to some delays in the utilization of grants. Despite these challenges, we are committed to overcoming such obstacles and ensuring the effective utilization of the granted funds for the betterment of both departments.

Department of Physics:

Lessons learnt:-The increase in instruments in laboratory students experimental skill is increased .students become aware about research field. Innovative projects must be undertaken.Students participation must be increased .Students should be outreach activities.

Difficulties faced: As grants are not received we are unable to purchase computer and printer.We can not conduct computer practicals.Please allow to purchase two computers and one printer from recurring grant.

9. Key Performance Indicators

Sr. No.	Indicator	Pre-support 2019-20	During/ After Support 2022-23	Remarks
		Department of Zoology		
1.	Number of students admitted	Total = 38 Male = 08 Female = 30 SC ST OBC G SC ST OBC G 1 0 2 5 6 1 2 21	Total = 10 Male = 01 Female = 09 SC ST OBC G SC ST OBC G 0 0 0 1 4 0 1 04	
		Department of Physics		
		Total = 18 Male = 1 Female = 17 SC ST OBC G SC ST OBC G 0 0 0 1 0 1 2 14	Total = 15 Male = 3 Female = 12 SC ST OBC G SC ST OBC G 0 0 0 3 2 0 2 08	
2.	No. of students passing out (%) students Admitted/ passing out (pass %)	Zoology: Batch 2019-2020 100%	Zoology: Batch 2022-2023 100%	
		Physics: Batch 2019-2020 100%	Physics: Batch 2022-2023 84.61%	
3.	Drop-out rates	Zoology: 00	Zoology: 04	
		Physics: 00	Physics: --	
4.	No. of students opting for M.Sc.	Zoology: 03	Zoology: 05	
		Physics: 06	Physics: 05	
5.	Average marks	Zoology: 85%	Zoology: 85%	
		Physics: 80%	Physics: 82.88%	
6.	No. of hands-on-experiments being conducted	Zoology: 1. Measurement of Blood Pressure	Zoology: 1) Microtomy 30/09/2020 Mr. ABG 2) Insect collection &Identification 31/10/2020 Dr. S. M. Kumbar 3) Spectrophotometer 31/03/2021	
		Physics: 02	Physics: Sky observation programme Was conducted	
7.	No. of New Experiments introduced	Zoology: Nil	Zoology: 1) Gel Electrophoresis 2) Separation of Lipids by Thin Layer Chromatography 3) Estimation of BOD 4) Polytene Chromosome	

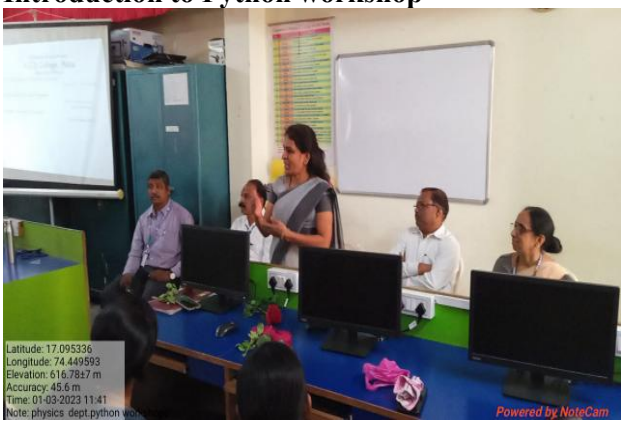
				5) Identification of Arthropods 6) Chick embryo culture	
		Physics	00	23	
8.	Publications (Scopus indexed)/ Patents, if any	Zoology	02	02	
		Physics	00	02	
9.	Training received by faculty	Zoology	02	Refresher course Mr. A. B. Ghadage	
		Physics	03	1) Introduction to python -Mrs. S. S. Patil 2) Refresher course- Dr. S. D. Pawar 3) Refresher course- Dr. S. D. Pawar 4) FDP- Mrs. S. S. Patil 5) Refresher Course -Mrs. S. S. Patil	
10.	Exhibitions/seminars /training courses conducted	Zoology	1) Avishkar Research Project workshop 2) Wall paper presentations 3) Seminar series offline mode	1) Book Exhibition 2) Science Exhibition for English Medium School 3) B.Sc.- III student online seminar 4) Poster Exhibition for B. Sc. Students 5) Poster Presentation Competition 6) Preparation of Honey bee Newton model	
		Physics	01	1.Exhibition organized on science day for High school students 2.Training programme Introduction to Python was conducted for students	
11.	Books/Journals subscribed from grants	Zoology	10	Nil	
		Physics	06	Nil	
12.	Outreach activities (Popular Lectures)	Zoology	1) Intellectual Property Rights 2) Flood relief Activities NDRF Team maintenance 3) COVID -19 Awareness campaign	1) National Voter Day celebration 2) Health checkup camp 3) Tree Plantation 4) Two Days Teacher Training Program on Raman Explorium	
		Physics	00	1.Online quiz was conducted on 28/02/2023. 2.Sky observation programme was conductedwas arranged	
13.	College mentored to apply for DBT Star College grants	Zoology	Self motivation after seeing on DBT website	Balasaheb Desai College Patan	
		Physics	Self motivation after seeing on DBT website	Balasaheb Desai College Patan	
14.	Invited Lectures	Zoology	Mr. Sandip S. Patil, Dept. of Computer Science, ACS College Palus	Prof. Dr. Nitin Kamble, Dept. of Zoology, Shivaji University, Kolhapur	
		Physics	01	Mrs. Sucheta N. Murumkar, Dept. of Physics, Mathubai Garware College, Sangli	

Proofs to be provided duly attested by Principal and Coordinator

S. No. 6. Number of Hands on Experiments being conducted

Sr. No.	Experiments	Date	Resource Person	No. of Beneficiary
1.	Introduction to Python	Three days 1/3/23 to3/3/23	Mrs. Sucheta N. Murumkar, Dept. of Physics, Mathubai Garware College, Sangli	30 students and 5 faculties
2.	Microtomy Technique	09/02/2023	Mr. A. B. Ghadage, Department of Zoology, ACS College Palus	11 students
3.	Identification of ABO blood group system	01/032023	Dr. Ashutosh Patil, Rural Hospital, Palus	105 students
4.	Preparation of Research Project Models	16/10/2022	Dr. S. M. Kumbar Dr. U. P. Patil Dr. S. S. Lendave Mr. V. S. Jadhav	30 students

Introduction to Python workshop



Hands on Trainning

Blood Group Checking

Workshop on Avishkar Poster Preperation

Ashishkar Competition

S. No. 7. Number of new experiments introduced

Sr. No.	New Experiments	Class	No. of Beneficiary
1.	Isolation of DNA	B.Sc. II and III	90 students
2.	Preparation of Polytene Chromosome	B. Sc. I	90 students
3.	Thin layer Paper Chromotography	B. Sc. III	11 students
4.	Separation of Lipids by Thin Layer Chromatography	B. Sc. II & III	90 students
5.	Identification of ABO Blood group system	B. Sc. II & III	90 students
6.	Chick Embryo Culture	B. Sc. II	70 students
7.	Human Karyotype	B. Sc. I	70 students
8.	Micro-technique	B. Sc. III	11 students

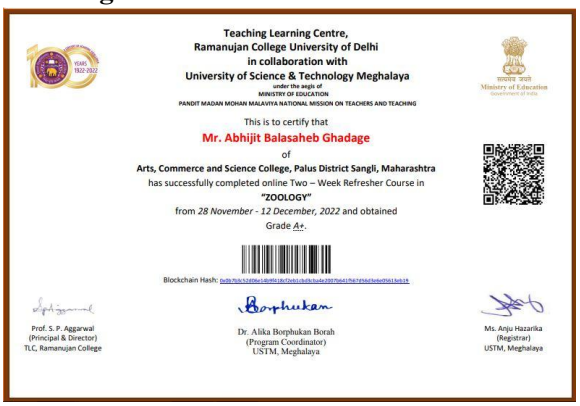
S. No. 8. Publications (Scopus indexed) / patents, if any

Sr.No.	Authors, Title, Journal, year of publications
1.	Angha V. Bhoi-Kamble and Suresh M. Kumbar title 'A study on Ichthyofaunal Diversity of Yerla River, Northern Western Ghat, Maharashtra, India. *Rec. Zool. Surv. India.* 123(1s)/01-15, 2023 (pp 597-613)
2.	S. S. Patil. To study antibacterial activity for synthesized silver nanoparticles by using fresh *Allium sativum* leaves. IJAR. 2022. 9(1): 2348-2349.
3.	Patil, G. and S. D. Pawar. Air ion concentrations and pollution index for irrigated and Non-irrigated vegetation areas at rural station Khatav (16.570N, 74.31.0E). January, 2023.
4.	Bansode, S. B. and Kumbar, S. M. 2023. Record of bone growth marks in phalanges of Indian lesser bandicoot rat Bandicota bengalensis inhabiting Southern India' Acta Zoologica Bulgarica.
5.	Kumbar, S. M. 2022. Age and Longevity of Indian Garden Lizard, *Calotes versicolor* by Skeletochronology. Shivaji University Kolhapur Journal of Science and Technology. 2022: 1: 22-28.

S. No. 9. Training received by faculty

Sr. No.	Training Programme	Date	Faculty	Remarks
1.	UGC National Workshop on NEP 2020	17/02/2022 Goa University	Dr. S. M. Kumbar	Updating in subject knowledge
2.	Refresher Course	Zoology 28/11/2022 to 12/12/2022 Ramanujan College New Delhi, HRDC, PMMMNMTT, Ministry of Education,	Mr. A. B. Ghadage	
3.	FDP course	25/6/2022 to 01/07/2022 Ramanujan College New Delhi, HRDC, PMMMNMTT, Ministry of Education,	Dr. S. D. Pawar	
4.	Refresher course	31/10/2022 to 14/11/2022 Ramanujan College New Delhi, HRDC, PMMMNMTT, Ministry of Education,	Dr. S. D. Pawar	
5.	FDP course	VMV Commerce and JMT Arts and JJP Science College, Vardhamannagar, Nagpur	Mrs. S. S. Patil	
6.	'Electron Microscopy: A marvel in the study of cells and its organelles'	Kristu Jayanti College, Bengaluru. 23/11/2022	Dr. S. M. Kumbar	

Training Certificates of Faculties


Teaching Learning Centre,
Ramanujan College University of Delhi
in collaboration with
University of Science & Technology Meghalaya
under the aegis of
MINISTRY OF EDUCATION
PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

This is to certify that
Mr. Abhijit Balasaheb Ghadage
of
Arts, Commerce and Science College, Palus District Sangli, Maharashtra
has successfully completed online Two – Week Refresher Course in
"ZOOLOGY"
from 28 November - 12 December, 2022 and obtained
Grade A+.

Blockchain Hash:

Prof. S. P. Aggarwal (Principal & Director) TLC, Ramanujan College
Dr. Alika Borphukan Borah (Program Coordinator) USTM, Meghalaya
Ms. Anju Hazarika (Registrar) USTM, Meghalaya

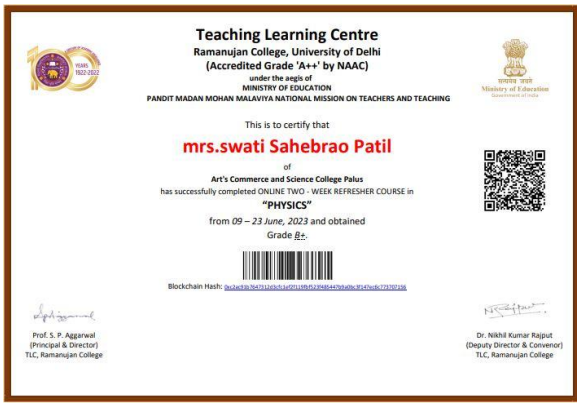

UNIVERSITY GRANTS COMMISSION
HUMAN RESOURCE DEVELOPMENT CENTRE
GOA UNIVERSITY

UGC – SPONSORED WORKSHOP ON NEP 2020
(ONLINE)

This is to certify that Dr. Suresh M. Kumbar, Professor from Arts, Commerce and Science College, Palus, Maharashtra participated in the Workshop on NEP 2020: Promotion of Indian Knowledge Systems (Online) held on 17.02.2023.

Course Coordinator
Director
Human Resource Development Centre

Ref. No.: GU/HRDC/WKSP/NEP2020/262/2022-23/420/38
Date: 28.02.2023


Teaching Learning Centre
Ramanujan College, University of Delhi
(Accredited Grade 'A++' by NAAC)
under the aegis of
MINISTRY OF EDUCATION
PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING

This is to certify that
mrs.swati Sahebrao Patil
of
Art's Commerce and Science College Palus
has successfully completed ONLINE TWO - WEEK REFRESHER COURSE in
"PHYSICS"
from 09 – 23 June, 2023 and obtained
Grade B+.

Blockchain Hash:

Prof. S. P. Aggarwal (Principal & Director) TLC, Ramanujan College
Dr. Nikhil Kumar Rajput (Deputy Director & Convenor) TLC, Ramanujan College


Shri Nagpur Gujarati Mandal's
V.M.V COMMERCE, J.M.T ARTS AND J.J.P SCIENCE COLLEGE,
WARDHAMAN NAGAR, NAGPUR.
PLACE OF HIGHER LEARNING & RESEARCH
ORGANIZED
TEN DAY NATIONAL LEVEL ONLINE WORKSHOP ON RESEARCH METHODOLOGY

CERTIFICATE

This is to certify that Mrs.Swati Sahebrao Patil Of A.C.S.College Palus has attended the TEN DAY NATIONAL LEVEL ONLINE WORKSHOP ON "RESEARCH METHODOLOGY" during 09/01/2023 to 18/01/2023 organized by Place of Higher Learning & Research. His / her participation is highly appreciated.

Dr. M. G. Chandekar
Principal
Dr. M. J. Kolhatkar
Coordinator
Place of Higher Learning & Research

S. No. 10. Exhibitions/ seminars/training courses conducted

Sr. No.	Activities	Department	Date	Beneficiary
1.	Wall paper Exhibition	Zoology	19/10/2022	50 students
2.	Wall Paper Exhibition	Physics	Birth anniversary of Late Dr.APJ Abdul Kalam 15/10/2023	35 Students
3.	Library visit of Students of	B. Sc.III Zoology & Physics	10/2/2023	32 Students
4.	Poster presentation competition	Physics	17/01/2023	15 Students
5.	Wild Life Week Celebration	Zoology	08/10/2022	35 Students
6.	Student seminar	Zoology	25/11/2022	11 Students
7.	Exhibition organized on science day for High school students	Physics	28/02/2022	45 Students
8.	Goat Farm Visit	Zoology	25/03/2022	11 Students

Wild Life Week Celebration

Wallpaper Exhibition

Poster Presentation

Student seminars

Goat farm visit

Library Visit

S. No. 11. Books/Journals subscribed from grants

Sr. No.	Name of book	Name of author	publication
1.	Callister's Material Science and Engineering (second edition)	Wllium D.Callister David G.Retheisch	Wiley India private limited
2.	Radiation Detection and measurement	Glenn F.Knoll	Wiley India private limited
3.	A text book of practical Physics	Indu Prakash Ram Krishna A.K.Jha	Kitab mahal,22,Alahabad
4.	Thermal Physics Kinetic theory, thermodynamic and statistical mechanics	S.C. Gerg, R.M.Bansal C.K.Ghosh	Mc Graw Hills
5.	The Physics of waves and oscillations	N.K.Bajaj	Mc Graw Hill
6.	Heat and Thermodynamics	Mark W.Zeemansky Richard h.Dittman	Mc Graw Hill
7.	Concept of Modern Physics	Arthur Beiser Shibhit Mahajan	Mc Graw Hill
8.	Modern Physics	S.L.Kankani Shubhra Kankani	Viva Books New Delhi
9.	Physics for Degree students	C.L.Arora Dr.P.S.Hemane	S.Chand New Delhi

S. No. 12. Outreach activities (Popular Lectures)

Sr. No.	Resource Person	Topic	Date	Beneficiary
1.	Mrs. S. S. Patil	Online quiz was conducted	28/02/2022	
2.	Dr.Aviraj Jatratkar	Sky observation program	26/11/2022	100
3.	Dr. Hemant Lagvankar, Science Communicator and educational Consultant	Two Days Teacher Training Program on Raman Explorium	11-12/01/2023	45
4.	Mr Sangram Kulkarni, Regional Head of FM radio ,West Maharashtra	Carrier opportunities in FM radio.	24/11/2022	

Dr. Hemant Lagvankar, SCEC

Mr. Sangram Kulkarni, RH, FM radio

Cancer Awareness Lecture

Sky Observation

S. No. 13. Colleges mentored to apply for DBT Star College Grants

Balasaheb Desai College Patan, Dist. Satara, Maharashtra

S. No. 14. Invited Lectures

Sr. No.	Resource Person	Topic	Beneficiary
1.	Prof. Dr. Nitin B. Kamble Dept. of Zoology, Shivaji University, Kolhapur	In vitro Fertilization (IVF) Technique 08/12/2022	20 students and 3 faculties
	Mr. Aakash Salunkhe, Commercial Manager of Asian Paints, Alumni	Opportunities in Physics on 21st February 2023	20 students and 3 faculties
2.	Mr. Sandip S. Patil, Dept. of Computer Science, ACS College Palus	Computer Literacy	11 students and 3 faculties
3.	Mrs. Sucheta N. Murumkar, Dept. of Physics, Mathubai Garware College, Sangli	Introduction to Python	30 students and 5 faculties
4.	Dr. S. S. Patil, dept. of Zoology, ACS College Palus	New Education Policy 2020 on 17/11/2022	35 students and 7 faculties

Invited Lectures Zoology

New Education Policy 2020

Opportunities in Physics

Vachan Prerna Din

10) Self evaluation: Department of Zoology

Dept.	*Objective (as stated in proposal)	Achieved (%)	Reasons for underachievement / If achieved, state in quantitative metrics
	Our mission is to deliver high-quality education to students in rural areas and those from economically backward classes, focusing on various aspects of life sciences. We aim to cater to diverse interests and career aspirations, equipping students with scientific, intellectual, technical, and transferable skills. Our goal is to foster self-directed and lifelong learning, enabling students to become well-rounded individuals capable of adapting to various challenges in their future endeavors.	70	1.4
	Field visits and study tours play a crucial role in the learning process, providing students with firsthand exposure to the natural sciences. By visiting locations such as a goat farm and seashore, students gain a better understanding of the subject by directly observing and interacting with the natural environment. These experiences are integral to the study of life sciences, particularly for zoology students, as they offer both interesting and practical insights that enhance their overall educational experience.	60	1.2
	Encouraging research activities involves instilling a research-oriented mindset among both faculty and students. This initiative focuses on fostering the design and execution of innovative ideas at both undergraduate (UG) and postgraduate (PG) levels. The goal is to cultivate innovative thinking within the realm of	70	1.4

	biological sciences, thereby contributing to the advancement of knowledge in this field.		1.6
	Mandatory research projects for students are designed to instill research attributes, fostering the development and execution of innovative ideas at both the undergraduate and postgraduate levels. This approach aims to cultivate innovative thinking within the field of biological sciences, providing students with valuable hands-on experience in research and contributing to their overall academic and professional growth.	80	
	The Computer Literacy Programme aims to deliver high-quality education in bioinformatics and computer sciences, catering to diverse interests and career aspirations. The goal is to equip students with intellectual, scientific, technical, and transferable skills, fostering self-directed and lifelong learning. This initiative strives to provide comprehensive education in the intersection of biological sciences and computer technology, empowering students to pursue a wide range of opportunities and contribute effectively to their chosen fields.	70	1.4

Self evaluation: Department of Physics

Department	Objectives	Achieved (%)	Reasons for under achievement/If achieved state the qualitative metrics
Physics	1.To enhance the interest of students in basic sciences	100	Students strength is increased from 10 to 15
	2.To develop experimental skills in rural college students	80	Students did project all practical's
	3.To make students aware of recent trends in science and technology and Physics	100	All students participated in Introduction to Python programme. Students participated in Institute visit and Sky observation programme.
	4.To increase the ability of students to relate practical and theoretical and applied knowledge	100	Students completed about 3 projects .Publish research papers, Some are in progress.
	5.To make students capable of need of society through education and practical knowledge	100	Students are doing project related to water purity in nearby villages and pollution index.

11) ZBSA Status: (Mark Check Box):

Not opened		**Under Process**		**Open but not mapped on PFMS**		**Account is Functional**	√

Remarks if, any: Second instalment amount received on 13 / 09 / 2023

12) Sanctioned Budget details:

Head	Total Released Budget from DBT	Total Expenditure	Balance as on 31.12.2023	Remarks if any
Grants for creation of capital assets (Non- recurring)	1831.00	1831.00	00.00	1831.00 Refunded
Grants-in-aid General (Recurring)	1,00,689.00	1,00,689.00	00.00	Utilized
Interest Generated	78,354.00	78,354.00	0.00	78,354.00 Refunded
Total	**1,80,874.00**	**1,80,874.00**	**00.00**	

Course Coordinator **Head of the Institution**