



Annual Quality Assurance Report (AQAR) of the IQAC

Academic Year
2019-2020

**GOVERNMENT INSTITUTE OF SCIENCE,
NIPAT NIRANJAN NAGAR, CAVES ROAD
AURANGABAD-431 004, MAHARASHTRA**

Part – A

Data of the Institution *(data may be captured from IQA)*

1. Name of the Institution : Institute of Science, Aurangabad
☐ Name of the Head of the institution : Dr. Rajendra A. Satpute
☐ Designation : Director
☐ Does the institution function from own campus : Yes
☐ Phone no./Alternate phone no. : 0240 2400586
☐ Mobile no. : 9404012456
☐ Registered e-mail : director@inosca.org
☐ Alternate e-mail :
☐ Address : Nipatniranjan Nagar, Caves road
☐ City/Town : Aurangabad
☐ State/UT : Maharashtra
☐ Pin Code : 431004
2. Institutional status
☐ Affiliated / Constituent : Affiliated
☐ Type of Institution: Co-education/Men/Women : Co-education
☐ Location: Rural/Semi-urban/Urban : Urban
☐ Financial Status: Grants-in aid/ UGC 2f and 12 (B)/ Self financing (please specify):
Grants-in aid/ UGC 2f and 12 (B)
☐ Name of the Affiliating University : Dr. Babasaheb Ambedkar Marathwada
University, Aurangabad
☐ Name of the IQAC Co-ordinator : Dr. Aniroodha V. Pethkar
☐ Phone no. : 9833494261
Alternate phone no. : -
☐ Mobile : 9833494261
☐ IQAC e-mail address : iqacgis@gmail.com
☐ Alternate Email address : -

3. Website address:

Web-link of the AQAR: (Previous Academic Year):

<http://www.inosca.org/iqac/aqar-2019-20.pdf>

4. Whether Academic Calendar prepared during the year? Yes

Yes/No....., if yes, whether it is uploaded in the Institutional website: Yes

Weblink: <http://www.inosca.org/iqac/academic-calendar-2019-20.pdf>

5. Accreditation Details:

Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1 st	B++	80-85 %	2004	From 16 September 2004, to: 15 September 2009
2 nd	B	2.74	2016	from March 29, 2016 to March 28, 2021

6. Date of Establishment of IQAC: DD/MM/YYYY: 15/01/2005

7. Internal Quality Assurance System

7.1 Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & duration	Number of participants/beneficiaries
Regular meeting of Internal Quality Assurance Cell (IQAC).	06.08.2019, 3pm to 4pm 14.01.2020, 4pm to 5pm	12 10
Encouraging faculty members to participate in Faculty Development Programmes for enhancing the knowledge horizons and career progression.	2019-20	20
Encouraging faculty members to submit proposals for collaborative projects to funding agencies.	2019-20	All faculty members= 22
Seminar and Interactive Session on Toxicology, “Toxicologist- a gatekeeper redefining biomedical research” by Dr. Saurabh Vispute (Senior Scientist at Pfizer, Connecticut, USA), jointly organized by the IQAC and jointly organized by the IQAC and Microcosm- Student Club of Department of Microbiology, Govt. Institute of Science, Aurangabad.	10-12-2019, 2hr	All students and faculty= 218
Department of Microbiology organized visits of the M.Sc. I students to the Central Library (2 Aug. 2019, 17 students), Biophysics	2019-20	21

Department (3 Aug. 2019, 21 students), Geology Department (26 Feb. 2020, 21 students), Botany Department (6 Aug. 2020, 21 students), Atomic Absorption Spectroscopy Laboratory		
Department of Geology organized Pre-Ph.D. course for all Geology Research Students of the affiliating University in the Institute campus.	2019-20	25
Feedback from students, alumni and parents collected, analyzed and recommendations given to respective Departments for improvements. Student Satisfaction Survey carried out in order to measure the satisfaction level of students concerning the teaching-learning process.	2019-20	Feedback= 127 respondents, Student Satisfaction Survey= 80 respondents Alumni= 27 respondents, Parents' feedback= 16 respondents
Academic Administrative Audit (AAA) conducted	26/29-02-2020	All staff= 38, internal audit conducted by one-person committee= 01
Students encouraged to participate in cultural activities, sports and extension activities organized by the NSS unit.	2019-20	All students= 196
Students encouraged to participate in Avishkar-19 research competition, poster competitions, paper presentations and extracurricular activities and take active interest in research.	University Level: 20-01-2020 to 21-01-2020 State Level: 28-01-2020 to 31-01-2020	08 PG students and 05 Research students participated in Avishkar-19 University Level Competition. Amongst them, 06 participants were selected for 2 nd round and 04 participants (2 PG and 2 Research Students) were selected for State level Avishkar at Mumbai University. Students attended 60 conferences, presented papers, participated in quiz and other competitions. 05 research students were awarded Ph.D. degree by the affiliating University and 01 student was selected as research fellow in Agharkar research Institute, Pune.
Mentoring the students of M.Sc. I Microbiology and Biotechnology for submission of research proposals for Summer Research Fellowships 2020 (National Academies of Science)	2019-20	Dr. A. V. Pethkar mentored 06 students, Mr. S. G. Kulkarni mentored 06 students, Mrs. V. N. Wadekar mentored 06 students.

Seminar and Interactive Session on Summer Research Fellowship Program-2020 of the National Science Academies by Mr. Jameel Hassain (M.Sc. II, Microbiology) organized by Microcosm-Student Club of Microbiology under the aegis of the IQAC.	29 th Nov.2019, 5.00- 6.00pm	All students= 196
Faculty members encouraged to focus on student mentoring, establish academic linkages, organize seminars, conferences, etc. and student-centric activities such as excursions, educational visits, placements, guidance for competitive exams, etc.	2019-20	Placements= 10, NET/SET qualified students= 05, students progression for higher education= 01.
Encouraging staff members to submit collaborative research projects to various funding agencies, pursue research work, and publish papers in peer reviewed, refereed and UGC-listed, scopus-indexed and high impact factor journals, develop intellectual property, communicate with the scientific community and organize conferences, guest lectures, seminars, etc.	2019-20	02 faculty members, viz. Dr. A. N. Salve and Dr. A. V. Pethkar submitted proposals for collaborative research projects. 02 faculty members, viz. Mr. S. G. Kulkarni and Mrs. V. N. Wadekar recommended and forwarded the research proposal (under International Collaboration) for Ramlingaswami Re-entry Fellowship 2019-20 of Department of Biotechnology, Government of India. Papers published= 23, Chapters in books= 09 Presentations in conferences= 15, Resource persons= 10.
NSS unit was encouraged to organize unique extension activities for benefit of local residents increase sensitivity of students for the various social problems. Under the “Ek Bharat Shreshtha Bharat” initiative of Govt. of India, documentaries, movies and clips on the living and lifestyles of the people of Orissa State were presented to local residents and NSS volunteers. Cleanliness campaigns, cleaning of dug wells, water conservation activities and tree plantations were carried out in Soneri Mahal area and Institute campus. Orientation lectures on fundamental rights of Indian citizens, responsibilities of the youth,	2019-20	100 students of NSS in addition to other interested students

personality development, modern scientific approach of modern youth, Gandhian thoughts and their relevance to mankind were arranged. Other important activities included- pledge for tobacco free youth, road safety programme, awareness on electoral rights of citizens.		
NSS volunteers were encouraged to participate in State Level Residential Camp- Ek Bharat Shrestha Bharat at Shendurni, Jalgaon and Sakri, Dhule.	24-02-2020 to 01-03-2020	02
A special program was organized for spreading awareness about avoiding the wastage of food. The program was conducted by “Save Food Save Nation”- an NGO from Aurangabad and organized by the NSS unit.	07.09.2019	All students and staff= 235
Department of Botany under the aegis of the alumni awarded Prin. S. P. Nanir Gold Medal to the M.Sc. Part II Department Topper in the subject of Botany.	03.02.2020	01 awardee
Encouraging the Placement cell to organize on-campus and off-campus placement activities, career guidance programmes and guidance for competitive exam preparation. Campus Placement initiatives not possible due to COVID-19.	2019-20	Off- campus placements= 10, Progression to higher education= 01, Qualification of competitive exams= 08
Department of Biotechnology celebrated “Biotechnology Day” on 14 th November, 2019 by organizing Speech Competition for the students under the aegis of the Biotechnology Students’ Council.	14.11.2019	Participant= 08
Department of Biotechnology organized a debate competition on “Whether Life should be made Immortal or Not?” under the aegis of the Biotechnology Students’ Council.	01.10.2019	Participants= 24
Department of Biotechnology organized a Poster Competition on the topic “Immunology” under the aegis of the Biotechnology Students’ Council.	16.10.2019	Participants= 24
MicroCosm-Student Club of the Department of Microbiology organized programme to celebrate 197 th Birth Anniversary of Sir Louis Pasteur by organizing an Intercollegiate Research Paper Presentation Competition.	27.12.2020	Participants= 13

Department of Microbiology organized online National Level Microbiological Contest.	25.01.2020	2227 participants from 104 colleges
Department of Microbiology organized 19 th National Level MicrobioCanvas competition.	25.01.2020	110 participants from 41 Colleges
Department of Microbiology organized 19 th National Level Microbiolympiad Competition with overwhelming success.	15.02.2020	90 participants from 27 colleges
MicroCosm-Student Club of the Department of Microbiology organized programme to celebrate National Science Day with the National theme “Women in Science”.	28.02.2020	Participants= 21
In order to create public awareness about the guidelines on preventing COVID-19 pandemic, students of Botany Department appealed the public using social media Platforms.	12.04.2020	Participants= 38
Students of Microbiology Department spread the awareness for staying safe from COVID-19 by filling out a Google Survey Form and sending the same to friends and acquaintances using social media platforms.	May 2020	Participants= >1000
IQAC took up the initiative to spread awareness on COVID-19 amongst students and general public. An online survey was carried out at two levels- General Level and Advanced Level using social media platforms such as Whatsapp and e-mail. About 1000 participants participated in the survey and certificates with grades were distributed to the participants.	May 2020	General Level= 454 respondents, Advanced Level= 470 respondents.
Faculty members are encouraged to participate in PG/UG syllabus restructuring, revisions as per current trends in respective subjects.	2019-20	10 faculty members are members of BoS in the respective subjects of various Universities and the affiliating University and they actively contribute towards the revision/reframing of syllabi, viz. Mrs. V. N. Wadekar- Ad-hoc BoS in Biophysics, Mr. H. P. Panakkal- Ad-hoc BoS in Biotechnology, Prof. U. K. Patil- member BoS in Microbiology at Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon,

		Dr. A. V. Pethkar- BoS in Microbiology, Dr. Mrs. S. A. Peshwe- BoS in microbiology, Dr. A. G. Jadhav- Ad-hoc BoS in Bioinformatics, Dr. M. A. Sonar- BoS in Geology and member of Academic Body of Gondwana Geological Society, Nagpur, Mr. S. G. Kulkarni- Ad-hoc BoS in Biophysics and member BoS in Biophysics of SRTM University, Nanded, Dr. S. M. Deshpande- member BoE and Member, RRC of affiliating University, Prof. R. A. Satpute is member, BOS at Dr. Homi Jehangir Bhabha University, Mumbai.
Tapping of funds from different funding agencies for development of infrastructure, received funds from DPDC for lab equipment, chemicals/consumables. RUSA committee carried out active persuasion to get RUSA funds.	2019-20	Members of DPDC and RUSA Committee.
Work distribution and planning for preparation and submission of pending AQAR reports. The IQAC took stock of status of the pending AQAR reports and took immediate steps to submit the reports before the due date.	2019-20	Members of IQAC= 13

Note: Some Quality Assurance initiatives of the institution are:

- ☐ Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback from all stakeholders collected, analysed and used for improvements
- ☐ Academic Administrative Audit (AAA) conducted and its follow up action
- ☐ Participation in NIRF
- ☐ ISO Certification
- ☐ NBA etc.
- ☐ Any other Quality Audit

8. Provide the list of funds by Central/ State Government-

Institution/ Department/Faculty	Scheme	Funding agency	Year of award with duration	Amount (Rs.)
Institute of Science, Aurangabad	Total Funds	State Govt.	2019-20, 1 yr.	7,03,14,000
	Salary	State Govt.	2019-20, 1 yr.	6,24,92,000
	Academic facilities	State Govt.	2019-20, 1 yr.	7,52,000
	Physical facilities	State Govt.	2019-20, 1 yr.	-
	Miscellaneous*	State Govt.	2019-20, 1 yr.	70,70,000
Institute of Science, Aurangabad	Earn and Learn	Affiliating Univ.	2019-20, 1 yr.	5,000
	NSS	Affiliating Univ.	2019-20, 1 yr.	44,500

*Includes electricity, telephone, water, contractual services, travel within India, office expenses, land and revenue and taxes, publication fees.

9. Whether composition of IQAC as per latest NAAC guidelines: Yes/No: Yes

*upload latest notification of formation of IQAC

<http://www.inosca.org/iqac/iqac-composition-2016.pdf>

10. No. of IQAC meetings held during the year: 02

The minutes of IQAC meeting and compliance to the decisions have been uploaded on the institutional website- (Please upload, minutes of meetings and action taken report)

Yes

<http://www.inosca.org/iqac/mom-2019-20.pdf>

<https://www.inosca.org/compliance 2019-20.pdf>

11. Whether IQAC received funding from any of the funding agency to support its activities during the year? Yes/No: No

If yes, mention the amount: Year: NA

12. Significant contributions made by IQAC during the current year (maximum five bullets)

- Tapping of funds from different funding agencies for development of infrastructure. Funding was received from DPDC and RUSA through the efforts of special committees constituted for the purpose.
- Mentoring the PG students for submission of research proposal for Summer Research Fellowship 2020 (SRF -220) Under National Academies of Science. Students were guided by faculty members for writing research proposals and resume Mr. Jameel Hussain, a PG

students who completed SRF -219 delivered interactive presentation and guided other students to submit applications fro SRF-2020 through interactive presentation and guided other students to submit applications fro SRF -2020 through initiative of the IQAC and Microcosm – students club of Microbiology

- The faculty members were encouraged to participate in the framing and revision of syllabus as a part of University constituted committees. A total of 10 faculty members actively contribute to syllabus revisions and reframing as members of University constituted committees such as BoS.
- Encouraging faculty members to participate in Faculty Development Programs for enhancing the knowledge horizons and career progression.
- Encouraging staff members to submit collaborative research projects to various funding agencies, pursue research work, and publish papers in peer reviewed, refereed and UGC-listed, scopus-indexed and high impact factor journals, develop intellectual property, communicate with the scientific community and organize conferences, guest lectures, seminars, etc. Faculty members, viz. Dr. A. N. Salve and Dr. A. V. Pethkar submitted proposals for collaborative research projects. Mr. S. G. Kulkarni and Mrs. V. N. Wadekar recommended and forwarded the research proposal (under International Collaboration) for Ramlingaswami Re-entry Fellowship 2019-20 of Department of Biotechnology, Government of India.
- All Departments were advised to submit uniform time-table of lectures considering slot for service course lectures. All departments were also advised to take measures to ensure 100% student attendance for theory and practical sessions.
- Urging faculty members to organize workshops on Preparations for Competitive Examinations and encouraging the Placement cell to organize on-campus and off-campus placement activities and career guidance programmes involving professionals, industry experts and alumni. Ten students got placements and five students qualified National Level competitive examinations. The number of placements is expected to increase after the end of COVID-19 pandemic crisis.
- As an initiative to motivate students and honour them for the performance in final year of PG, the Department of Botany under the aegis of the alumni awarded Prin. S. P. Nanir Gold Medal to the M.Sc. Part II Department Topper in the subject of Botany.
- NSS unit was encouraged to carry out unique activities for developing sensitivity towards the society, environment and the Nation and for upliftment of society.
- In order to acquaint students with latest trends in Life and Health Sciences, a Seminar and Interactive Session on Toxicology, “Toxicologist- a gatekeeper redefining biomedical research” by Dr. Saurabh Vispute (Senior Scientist at Pfizer, Connecticut, USA) was jointly organized by the IQAC and MicroCosm- Students’ Club of Department of Microbiology. Department of Microbiology organized 19th National Level MicrobioCanvas competition, a National Level Microbiolympiad Competition and Innovative Scientific Theme Presentation competitions with overwhelming success. Interactive session on “Personality Development” by Prof. Satish Mokashi, Professor, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, was organized for the benefit of all students.
- Motivating students to take initiatives in organizing science activities through the formation of student clubs in the various departments. Students’ council of Department of Biotechnology celebrated “Biotechnology Day” on 14.11.2019 by organizing Speech

Competition for the students. The members of Students' Council of Biotechnology organized various other activities such as debate competition on 01.10.2019 and poster competition on 16.10.2019. MicroCosm- student club of Microbiology Department organized National Science Day programme (28.02.2020), Intercollegiate Research Paper Presentation Competition to celebrate 197th Birth Anniversary of Sir Louis Pasteur (27.12.2020), online National Level Microbiological Contest (25.01.2020), 19th National Level MicrobioCanvas competition (25.01.2020), and 19th National Level Microbiolympiad Competition with overwhelming success (15.02.2020).

- Motivating students to participate in Avishkar-19 research competition, paper/poster presentation competitions and extracurricular activities. A total of 04 participants (2 PG and 2 Research Students) were selected for State level Avishkar at Mumbai University .
- PG and Research students participated and succeeded in poster and oral presentation competitions. Students delivered presentations in conferences and demonstrated their capacity to present scientific data.
- Department of Microbiology organized visits of the M.Sc. I students to the Central Library and other departments and facilities within the Institute with the aim of providing them additional knowledge about the laboratory facilities and expertise of other departments which will be useful to them for research projects in the final year.
- Faculty members were encouraged to arrange study tours, summer/winter trainings, links with academic institutions, excursions, field visits and industry visits for keeping abreast with recent trends across fields related with the subject and to provide experiential learning to the students.
- Encouraging students to participate in cultural activities and sports organized by the Institute and other institutions. Students actively participated in sports and cultural activities. This resulted in all-round development of the students and physical and mental fitness.
- Feedback from students collected and analysed. Necessary suggestions for improvement in teaching-learning given to respective department HODs. Student Satisfaction Survey and Analysis carried in order to estimate their satisfaction on teaching-learning experience. Feedback collected from alumni and parents in order to suggest improvements to the concerned department.
- NSS unit was encouraged to organize unique extension activities for benefit of local residents, and increase sensitivity of students for the various social problems. Activities included spreading awareness about avoiding the wastage of food (under "Save Food Save Nation"- an NGO from Aurangabad), documentaries, movies and clips on the living and lifestyles of the people of Orissa State under "Ek Bharat Shreshtha Bharat" initiative of Govt. of India, cleanliness campaigns, cleaning of dug wells, water conservation activities and tree plantations in Soneri Mahal area and Institute campus. Orientation lectures on fundamental rights of Indian citizens, responsibilities of the youth, personality development, modern scientific approach of modern youth, Gandhian thoughts and their relevance to mankind were arranged. Other important activities included- pledge for tobacco free youth, road safety programme and awareness on electoral rights of citizens, participation of NSS volunteers in State Level Residential Camps at Shendurni, Jalgaon and Sakri, Dhule under "Ek Bharat Shreshtha Bharat" initiative.
- Initiatives to spread awareness about COVID-19 among students and the general public. IQAC took up the initiative to spread awareness on COVID-19 amongst students and

general public. An online survey was carried out at two levels- General Level and Advanced Level using social media platforms such as Whatsapp and e-mail. About 1000 participants participated in the survey and certificates with grades were distributed to the participants. Department of Microbiology, Department of Biotechnology and Department of Botany also designed on-line and social-media based approaches to spread awareness on COVID-19 and how to remain safe in the pandemic. Students of Botany Department appealed the public using Twitter Platform and Whatsapp.

- Feedback was collected from students, alumni and parents. The feedback was analyzed and recommendations given to respective Departments for improvements.
- Work distribution and planning for preparation and submission of pending AQAR reports. The IQAC took stock of status of the pending AQAR reports and took immediate steps to submit the reports before the due date.

13. Plan of action chalked out by the IQAC in the beginning of the Academic year towards Quality Enhancement and the outcome achieved by the end of the Academic year

Plan of Action	Achievements/Outcomes
Tapping of funds from different funding agencies for development of infrastructure.	Received funds from DPDC for lab equipment, chemicals/consumables. RUSA committee carried out active persuasion to get RUSA funds. Funding of Rs. 2 crore was sanctioned by RUSA for infrastructure development, laboratory equipment and consumables.
Mentoring the PG students for submission of research proposals for Summer Research Fellowships 2020 (SRF-2020) under National Academies of Science.	06 PG students were mentored for submission of research proposals. Students were guided for preparation of resume, selection of research topics and preparation of research proposals. Letters of recommendation were provided to the organizers of SRF-2020. Mr. Jameel Hussain (PG Student of M.Sc. II, Microbiology) who was selected for SRF-2019 in 2018-19 delivered a seminar and interactive session on Summer Research Fellowship Program-2020 of the National Science Academies by organized by Microcosm- Student Club of Microbiology under the aegis of the IQAC. Although none of the students were selected, they learnt the skills of writing research proposals and preparation of resume.
Encouraging faculty members to participate in the framing and revision of syllabus as a part of various committees in the University.	10 faculty members are members of BoS in the respective subjects of various Universities and the affiliating University and they actively contribute towards the revision/reframing of syllabi, viz. Mrs. V. N. Wadekar- Ad-hoc BoS in Biophysics, Mr. H. P. Panakkal- Ad-hoc BoS in Biotechnology, Prof. U. K. Patil- member BoS

	<p>in Microbiology at Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon, Dr. A. V. Pethkar- BoS in Microbiology, Dr. A. G. Jadhav- Ad-hoc BoS in Bioinformatics, Dr. M. A. Sonar- BoS in Geology and member of Academic Body of Gondwana Geological Society, Nagpur, Mr. S. G. Kulkarni- Ad-hoc BoS in Biophysics and member BoS in Biophysics of SRTM University, Nanded, Dr. S. M. Deshpande- member BoE and Member, RRC of affiliating University.</p>
Encouraging faculty members to participate in Faculty Development Programs for enhancing the knowledge horizons and career progression.	Faculty members participated in 20 training programmes such as Orientation and Refresher courses, as well as Short Term Programmes for updating their own subject knowledge.
Encouraging staff members to submit collaborative research projects to various funding agencies, pursue research work, and publish papers in peer reviewed, refereed and UGC-listed, scopus-indexed and high impact factor journals. Encouraging faculty members to participate in and organize conferences.	<p>The faculty members took active interest in research activities. Faculty members of different departments submitted collaborative research proposals to the funding agencies. Faculty members published papers in peer-reviewed journals and chapters in books, presented their work to a wide scientific community, worked as resource persons and received honours/awards for their academic/research accomplishments.</p> <p>One faculty member, Dr. A. V. Pethkar submitted a patent application with complete specifications to the Indian Patent Office, Mumbai.</p> <p>Mr. S. G. Kulkarni and Mrs. V. N. Wadekar, (Department of Biophysics) recommended and forwarded the research proposal (mutually beneficial) entitled 'Characterization of Induced Mutational Breeding and Protein Oxidation in higher plants' of Dept. alumni Dr Ravidra Kale, Postdoctoral Researcher at Louisiana State University, LA, USA, for Ramlingaswami Re-entry Fellowship 2019-20 of Department of Biotechnology, Government of India under International collaboration.</p> <p>Dr. A. N. Salve (Dept. of Botany) and Dr. A. V. Pethkar (Dept. of Microbiology) submitted collaborative research project to DST under</p>

	<p>Empowerment and Equity Opportunities for Excellence in Science. Dr. A. V. Pethkar (Dept. of Microbiology) and Dr. A. N. Salve (Dept. of Botany) submitted collaborative project to DBT, Govt. of India under the call for R&D Proposals on “Nanotechnology based tools to enhance agricultural productivity”. Dr. A. V. Pethkar submitted to UGC, Govt. of India under Scheme for Trans-disciplinary Research for India’s Developing Economy (STRIDE), Component 2.</p> <p>Mr. I. R. Gupta and Dr. A. K. Gade (Dept. of Biotechnology), submitted a major research project to DBT, Govt. India, New Delhi.</p> <p>Dr. A. V. Pethkar (Dept. of Microbiology) and Dr. A. N. Salve (Dept. of Botany) submitted collaborative project to DBT, Govt. of India under ePromis.</p> <p>Since 2005-06, the Institute received funding for 12 Major Research Projects (Rs. 2,08,88,970/-), 29 Minor Research Projects (Rs. 24,20,000/-) with Total Grant of Rs. 2,33,09,170/-</p> <p>Papers published= 23, Chapters in books= 09 Presentations in conferences= 15, Resource persons= 10, Placements= 10, NET/SET qualified students= 05, students progression for higher education= 01.</p>
To motivate students and honour them for the performance in final year PG examination.	Department of Botany under the aegis of the alumni awarded Prin. S. P. Nanir Gold Medal to the M.Sc. Part II Department Topper in the subject of Botany. The students are inspired to prepare and perform well in the examinations and the award creates a sense of pride for the awardee.
Advising all Departments to submit uniform time-table of lectures considering slot for service course lectures and to take measures to ensure 100% student attendance for theory and practical sessions.	Faculty members followed the academic calendar and the time-table. The student attendance in theory and laboratory sessions was satisfactory.
Urging faculty members to organize workshops on Preparations for Competitive Examinations and encouraging the Placement cell to organize on-campus and off-campus placement activities	Students got the opportunity of participation in programmes aimed at honing their competitive exam skills. A number of programmes were organized to let students know about career

and career guidance programmes.	opportunities and soft skills development. However, due to the COVID-19 pandemic, only few students (10) got placements through the initiatives of the Placement Cell. A total of 5 students qualified in National Level Competitive Exams such as NET/SET/GATE, etc.
Encouraging NSS unit to carry out unique activities for developing sensitivity in the students towards the society, environment and the Nation and for upliftment of society through various awareness programmes.	Students were actively involved in various on-campus and off-campus extension activities, cleanliness campaigns, tree plantation, water conservation, awareness rallies and street-plays, etc. Under the “Ek Bharat Shreshtha Bharat” initiative of Govt. of India, documentaries, movies and clips on the living and lifestyles of the people of Orissa State were presented to local residents and NSS volunteers. Cleanliness campaigns, cleaning of dug wells, water conservation activities and tree plantations were carried out in Soneri Mahal area and Institute campus. Orientation lectures on fundamental rights of Indian citizens, responsibilities of the youth, personality development, modern scientific approach of modern youth, Gandhian thoughts and their relevance to mankind were arranged. Other important activities included- pledge for tobacco free youth, road safety programme and awareness on electoral rights of citizens. Cleanliness campaign- cleaning of the Heritage Dug Well (Baarav) near Soneri Mahal in the affiliating University campus. On-line program on Introduction to the living and lifestyle of the people of Orissa State, cultural and natural heritage of the state and the places to visit in the state. Two NSS volunteers participated in the State Level Residential Camps on “Ek Bharat Shreshtha Bharat” at Shendurni (Dist. Jalgaon) and Sakri (Dist. Dhule). A special program was organized for spreading awareness about avoiding the wastage of food. The program was conducted by “Save Food Save Nation”- an NGO from Aurangabad and organized by the NSS unit.
Motivating students to participate in Avishkar-19 research competition, poster competitions, paper presentations and extracurricular activities.	08 PG students and 05 Research students participated in Avishkar-19 University Level Competition. Amongst them, 06 participants were selected for 2 nd round and 04 participants (2 PG and 2 Research Students) were selected for State level Avishkar at Mumbai University. A number of students presented posters and papers in seminars, conferences and competitions and won prizes. Students participated in quiz competitions and on-line courses during lock-down period announced by

	the government due to COVID-19 pandemic. 21 students participated in conferences and presented posters/oral papers. 24 students actively participated in quiz and other science activities.
Motivation to the student for performance in University Final Year Examinations.	Department of Botany under the aegis of the alumni awarded Prin. S. P. Nanir Gold Medal to the M.Sc. Part II Department Topper in the subject of Botany. The award motivates students to prepare well for the examinations and is a matter of honour and pride for the student receiving the award.
Motivating faculty members to organize lectures of eminent scientists to provide students with a glimpse of current trends in scientific research. Designing and implementation of different activities aimed at improvement of student skill and knowledge through lectures and workshops, invited talks of experts and professionals from industry/academia and implementing good mentoring practices.	<p>Seminar and Interactive Session on Toxicology, "Toxicologist- a gatekeeper redefining biomedical research" by Dr. Saurabh Vispute (Senior Scientist at Pfizer, Connecticut, USA), jointly organized by the IQAC and Microcosm-Student Club of Department of Microbiology, Govt. Institute of Science, Aurangabad.</p> <p>Department of Microbiology organized 19th National Level MicroBioCanvas competition.</p> <p>Department of Microbiology organized a National Level Microbiolympiad Competition with overwhelming success.</p> <p>Interactive session on "Personality Development" by Prof. Satish Mokashi, Professor, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad was organized for the benefit of all students.</p>
Developing academic linkages with other institutions for providing opportunity to the students to undertake summer/winter training programmes, on-field trainings and experiential learning. Arranging and execution of study tour, industry visits, excursions, field visits, etc. for keeping abreast with recent trends across fields related with the subject.	Students of Geology and Microbiology departments received training from experts during summer vacations. Faculty members of all departments organized study tours, excursions, field visits, industry visits, etc. for the students.
Encouraging students to visit different departments and interact with faculty members to get information about other subjects and expertise of other departments. Library Orientation aimed at introducing the rich knowledge resources available in the Central Library.	Department of Microbiology organized visits of the M.Sc. I students to the Central Library (2 Aug. 2019, 17 students), Biophysics Department (3 Aug. 2019, 21 students), Geology Department (26 Feb. 2020, 21 students), Botany Department (6 Aug. 2020, 21 students) and Atomic Absorption Spectroscopy Laboratory. Students got additional knowledge about the laboratory

	facilities and expertise of other departments which will be useful to them for research projects in the final year.
Motivating faculty members to arrange programmes aimed at nurturing and enhancing the scientific communication skills of the students.	National Science Day was celebrated on 28-02-2019 by organizing 2 competitions on Innovative Scientific Theme Presentation- a Poster Competition and a 2-minute Oral Presentation competition. A total of 30 participants enrolled for the competitions. Prizes were awarded for 3 winning entries from each competition and 5 consolation prizes were given to deserving participants in each competition.
Active promotion of student participation in seminars, presentations, extracurricular activities, summer training, national/international symposia, conferences and workshops.	PG and Research students participated and succeeded in poster and oral presentation competitions. Students delivered presentations in conferences.
Building and sustenance of platform for interaction of stakeholders associated with the Institute.	Alumni interacted with students for guidance on preparations for competitive exams and placements.
Feedback from students collected and analysed. Student Satisfaction Survey and Analysis carried in order to estimate their satisfaction on teaching-learning experience. Feedback collected from alumni and parents in order to suggest improvements to the concerned department.	Necessary suggestions for improvement in teaching-learning given to respective department HODs.
Motivating students to take initiatives in organizing science activities through the formation of student clubs in the various departments.	<p>Students' council of Department of Biotechnology celebrated "Biotechnology Day" on 14.11.2019 by organizing Speech Competition Competition for the students. The members of Students' Council organized various other activities such as debate competition on 01.10.2019 and poster competition on 16.10.2019.</p> <p>MicroCosm- student club of Microbiology Department organized National Science Day programme (28.02.2020), Intercollegiate Research Paper Presentation Competition to celebrate 197th Birth Anniversary of Sir Louis Pasteur (27.12.2020), online National Level Microbiological Contest (25.01.2020), 19th National Level MicroBioCanvas competition (25.01.2020), and 19th National Level Microbiolympiad Competition with</p>

	overwhelming success (15.02.2020). In order to create public awareness about the guidelines on preventing COVID-19 pandemic, students' club of Botany Department appealed the public using social media platform and carried out awareness campaign on Guidelines to Fight Corona Virus.
Encouraging students to participate in cultural activities and sports organized by the Institute and other institutions.	Students actively participated in sports and cultural activities. This resulted in all-round development of the students and physical and mental fitness.
Initiatives to spread awareness about COVID-19 among students and the general public.	IQAC took up the initiative to spread awareness on COVID-19 amongst students and general public. An online survey was carried out at two levels- General Level and Advanced Level using social media platforms such as Whatsapp and e-mail. About 1000 participants participated in the survey and certificates with grades were distributed to the participants. Department of Microbiology, Department of Biotechnology and Department of Botany also designed on-line and social-media based approaches to spread awareness on COVID-19 and how to remain safe in the pandemic.
Work distribution and planning for preparation and submission of pending AQAR reports.	IQAC took stock of status of the pending AQAR reports and took immediate steps to submit the reports before the due date.

14. Whether the AQAR was placed before statutory body? Yes /No: Yes

Name of the statutory body: Staff Council

Date of meeting(s): 15-09-2020

15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning?

Yes/No: No

Date: NA

16. Whether institutional data submitted to AISHE: Yes/No: Yes

Year: 2018-19

Date of Submission: 15/01/2019

17. Does the Institution have Management Information System?

Yes/No: Yes

If yes, give a brief description and a list of modules currently operational.
(Maximum 500 words)

The State Govt. and Universities are facing constantly changing problems, diverse managerial styles, and ever present information needs offer a challenging context for developing computer based information systems. To portray the status of higher education in Maharashtra State, Department of Higher and Technical Education, Govt. of Maharashtra has endeavored to collect higher educational statistics through web-based Management Information System. This covers all the Institutions in the State which are pertaining higher education in streams Arts, Science, Commerce, Education, Law and other Non-AICTE Courses. Data is being collected on several parameters (modules) such as teachers, student enrolment, programmes, examination results, education finance, infrastructure etc. This web based MIS uses computer technology to provide information and decision support to Universities and, helping them becomes more effective.

Part – B

CRITERION I- CURRICULAR ASPECTS

1.1 Curriculum Planning and Implementation

1.1.1 Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words.

The institute follows the curriculum designed by affiliating university viz. Dr Babasaheb Ambedkar Marathwada University, Aurangabad. While revision and up-gradation of the syllabi is done at the University level, the college has a mechanism for effective, documented curriculum delivery. At the commencement of each academic year, Director along with the IQAC coordinator and Heads of all the Departments conducts meeting to finalize the Institute Academic Calendar in alignment with that prescribed by the university. Based on this schedule the Heads of the each department conduct academic planning meeting to plan and organize the schedule of lectures and distributes the syllabus among the faculty members of their departments based on their subject expertise and interests. Time table at departmental level for every semester is prepared by the respective Heads of departments in consultation with the departmental faculty members. The faculty members are instructed by the head of departments to complete the syllabus within stipulated time. Teaching plan and the assignments for the semester are prepared by the respective subject in charge before the start of the new semester. Each Faculty in their initial lecture narrates the course objectives and outcomes of their subjects/disciplines in accordance with the university prescribed syllabus. Faculty members maintain attendance records of the students for theory and practical sessions. Faculty members are encouraged to impart the curriculum through innovative teaching methods such as presentations, case studies, group discussions, brainstorming, peer learning, quiz, real world learning, workshops, seminars, industrial visits and educational tours besides the traditional chalk and talk method. To support the needs of changing curriculum and pedagogy, the College infrastructure and facilities are continuously upgraded. We have well-equipped computer laboratories, library and classrooms with projection facilities for both faculty and students. In addition to traditional teaching methods the video lectures related to subjects from SWAYAM, e-PG-Pathshala, NPTEL, Vlabs and other sites are observed to explore thoroughly. Guest lectures are regularly arranged to bridge the gap in the prescribed curriculum. The traditional classroom teaching is supplemented by regular tests, tutorials, group discussions, extensive lab work, projects, seminars and industrial exposure by way of industry visits and summer training. We have a very rich central library with open access system and many departments have their Departmental libraries too for the benefit of the students. Some Journals are subscribed by our institute which help the students to explore dt depth inthe concerned topics. In addition, the institute encourages teachers to participate in Orientation/ Refresher Courses/ Faculty Development Program/Workshops/ Seminars so as to update their knowledge and to improve teaching practices for effective delivery of curriculum. The institute and faculty members adopt numerous policies for bridging the knowledge gap of the enrolled ‘weak’ students to enable them to cope with the programme of their choices as well as promote, reward and facilitate ‘advanced’ learners. This includes mentorship, tutorials, remedial teaching and felicitation. The entire approach is student centric emphasizing upon knowledge & skill enrichment. The subject/topic relevant reference notes, presentations, link addresses of important learning sites, e-books are delivered to the students. Continuous review of the progress of syllabus completion, performance of the students is done in the department level meetings. Student feedback is collected at the end of every semester and analyzed for suggesting improvements in the teaching.

1.1.2 Certificate/Diploma Courses introduced during the Academic Year					
Name of the Certificate Course	Name of the Diploma Course	Date of introduction and duration	Focus on employability/ entrepreneurship	Skill development	
-	-	-	-	-	
1.2 Academic Flexibility					
1.2.1 New programmes/courses introduced during the Academic Year					
Programme with Code		Date of Introduction	Course with Code		Date of Introduction
-		-	-		-
1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated colleges (if applicable) during the Academic Year					
Name of Programmes adopting CBCS	UG	PG	Date of implementation of CBCS/Elective Course System	UG	PG
M.Sc.	-	Biophysics	30.05.2015	-	-
	-	Biotechnology	30.05.2015	-	-
	-	Botany	30.05.2015	-	-
	-	Geology	30.05.2015	-	-
	-	Microbiology	30.05.2015	-	-
Already adopted (mention the year): 2015-16					
1.2.3 Students enrolled in Certificate/Diploma Courses during the year					
		Certificate Courses		Diploma Courses	
No. of students		-		-	
1.3 Curriculum Enrichment					
1.3.1 Value-added courses imparting transferable and life skills offered during the year					
Value added courses		Date of introduction		Number of students enrolled	
Department of Geology organized 1 st Pre-Ph.D. Course in Geology on behalf of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.		18-01-2020 to 31-03-2020		25	
Personality Development (under Service Course)		Semester III		All M.Sc. Part II students of the Institute= 85 (Geology- 18, Microbiology- 21, Botany- 18, Biotechnology- 19, Biophysics- 09)	

1.3.2 Field Projects / Internships under taken during the year	
Project/Programme Title	No. of students enrolled for Field Projects/Internships
Department of Botany: Field explorations were organized as a part of curriculum, students accompanied by the staff visited MahaExpo.	38
Department of Geology: Educational Geological Field study and Mapping Tour around Matanumadh, Dist Bhuj, Gujrat and around Abu-Road, Dist. Sirohi, Zawar mines, Dist. Udaipur, Rajasthan during 18.12.2019 to 02.01.2020, accompanied by Dr. K. M. Wanjarwadkar and Dr. M. A. Sonar.	23
Mr. Akash Karande, Department of Geology: Winter training project on "Usefulness of MT in hydrogeologic studies" at CSIR- National Geophysical Research Institute, Hyderabad, under the guidance of Dr. Prasanta K. Patro (Senior Principal Scientist) during 02.12.2019 to 14.01.2020.	01
Ms. Tanvi Umakant Khandekar, Department of Geology: Training on Geological and Geo-morphological study in and around Narkhed, Nagpur, District Maharashtra at National Environment Engineering Research Institute, Nagpur, Maharashtra during 15.05.2019 to 15.07.2019.	01
Mr. Musaddiq Mohd. Moin Naik, Department of Geology: Training on Pipette Analysis from the core sediments of Gulf of Cambay, under the guidance of Dr. Archana Das, Scientist-B at Institute of Seismological Research, Gandhinagar, (DST) Gujrat, during 25.05.2019 to 15.06.2019.	01
Ms. Priyanka Wankhare, Department of Microbiology: Summer training as Lab. Technician, at Detect Diagnostics Advanced Pathology and Microbiology Lab, Aurangabad during 1.05.2019 to 31.07.2019.	01
Mr. Ajinkya Deshmukh, Department of Botany: Certificate Course in Key Biodiversity Area Identification and Monitoring (Level 5 of NSQF), under Green Skill Development Programme of the Ministry of Environment, Forest and Climate Change, Govt. of India, at Bombay Natural History Society, Nagpur.	01
Mr. Yogesh Chavan, Department of Botany: Certificate Course in Key Biodiversity Area Identification and Monitoring (Level 5 of NSQF), under Green Skill Development Programme of the Ministry of Environment, Forest and Climate Change, Govt. Of India, at Bombay Natural History Society, Nagpur.	01
Miss. Shital Jarare (Research Scholar), Dept. of Botany: CSIR integrated skill initiative training program on Seaweed Cultivation and Processing Technology (SEA-CPT) organized between 18 th to 20 th Dec 2019, at CSMCRI Bhavnagar.	01
Department of Microbiology: Visit to sewage treatment plant, Nakshatrawadi, Paithan road, Aurangabad.	22
Department of Biotechnology: Visit to Ajeet Seeds, Aurangabad on 02.01.2020.	38
Department of Biotechnology: Visit to Paul Hebert DNA Barcoding Lab, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad on 12.02.2020.	20

1.4 Feedback System

1.4.1 Whether structured feedback received from all the stakeholders.

1) Students	2) Teachers	3) Employers	4) Alumni	5) Parents
Yes	No	No	Yes	Yes

1.4.2 How the feedback obtained is being analyzed and utilized for overall development of the institution (maximum 500 words)

The IQAC has developed its own feedback mechanism to evaluate the performance of the faculty as well as physical and academic facilities available in the Institute. A 100 marks questionnaire (Feedback Form) containing ten questions probing the teaching learning process is circulated to the students of each department at the end of academic session (Semester) by online method. The students then fill up the questionnaire that has the following parameters included in the feedback form- Content of teaching, Adequacy of teaching methodology, Responsiveness to students queries, Stimulate interest, Regularity & Punctuality, Adequacy and effectiveness of Teaching Aids used (LCD/OHP/White board), Availability of Faculty after class hours for guidance, Completion of course on time, Availability of reference resources from the faculties.

Feedback form for Alumni also contains ten questions aimed at understanding the overall experience of the students with regard to the teaching learning environment, physical facilities and suggestions for the further improvement.

The level of satisfaction of students about the teaching-learning experience in the Institute is gauged from the Student Satisfaction Survey. Response of students to a set of questions related to teaching-learning is recorded and analyzed.

The feedback obtained from the parents probes the level of satisfaction of the parents in terms of facilities available in the Institute, learning environment, achievements of their ward, confidence level, and behavioral changes in the ward. The feedback also tries to know the willingness of the students and their parent to recommend other candidate to peruse higher education in our Institute.

Link to the feedback forms is provided to the students, alumni and parents. The stakeholders fill up the feedback forms by online method and submit their response to IQAC. The performance statistics of the each faculty members is available through the response in the Google Form. Accordingly, faculty members are encouraged to adopt effective strategies.

CRITERION II -TEACHING-LEARNING AND EVALUATION					
2.1 Student Enrolment and Profile					
2.1. 1 Demand Ratio during the year					
Name of the Programme	Number of seats available (M.Sc. I)		Number of applications received (M.Sc. I)	Students admitted (M.Sc I)	Demand Ratio (M.Sc. I)
M.Sc. Biophysics	20		029	20	1.45
M.Sc. Biotechnology	20		148	23	6.43
M.Sc. Botany	20		072	22	3.27
M.Sc. Geology	20		035	23	1.75
M.Sc. Microbiology	20		168	24	7.0
Total	100		452	112	4.52
2.2 Catering to Student Diversity					
2.2.1. Student - Full time teacher ratio (current year data): 9:1					
Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of full time teachers available in the institution teaching only UG courses	Number of full time teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2019-20	NA	180	NA	22	NA
2.3 Teaching - Learning Process					
2.3.1 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)					
Number of teachers on roll	Number of teachers using ICT (LMS, e-Resources)	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
6	Microbiology- ICT enabled lectures (6 teachers), Moodlecloud (2 teachers)	Google classroom, Virtual lab, Moodlecloud Powerpoint presentations,	00	00	PDFs, HTML documents and videos downloaded from the internet.
4	Botany- ICT enabled lectures	Powerpoint presentations,	00	00	PDFs, HTML documents and videos downloaded from the internet.
5	Biotechnology- ICT enabled lectures	Google classroom, Powerpoint presentations,	00	00	PDFs, HTML documents and videos downloaded from the internet.

3	Geology	Powerpoint presentations	00	00	PDFs, HTML documents and videos downloaded from the internet.
2	Biophysics	Powerpoint presentations	00	00	PDFs, HTML documents and videos downloaded from the internet.

2.3.2 Students mentoring system available in the institution Give details. (maximum 500 words)

All departments execute the teaching-learning activity through lectures, tutorials, practical sessions using online and offline resources. Additionally students are given exposure to the recent developments in the respective subjects through organization of guest lectures, field visits, excursions, industry visits, visits to other departments, summer trainings and participation in conferences, workshops, poster/oral presentations.

Microbiology Department: the department has appointed mentors for each class, viz. Dr. Ajay Jadhav and Dr. J. J. Bukhtar for M.Sc. I, respective project/dissertation guides for M.Sc. II and Dr. S. A. Peshwe for Ph.D. students. The mentors/teachers help in solving difficulties of the students. A special session on Literature Searching was arranged for students of M.Sc. I and II in the Central Library of the Institute by Dr. A. V. Pethkar in addition to visiting the other departments of the Institute. Student also work as mentors to deliver short presentations and explain important concept in the class. Students present research papers and faculty members explain the research methodology underlying the paper and solve student queries. Dr. AVP Mentored six students of M.Sc. I Microbiology for submission of research proposals for Summer Research Fellowships 2020 (National Academies of Science) and one student got selected in University of Delhi for summer research fellowship. Mr. Jameel Hassain (M.Sc. II, Microbiology) delivered seminar on Summer Research Fellowship Program-2020 of the National Science Academies by organized by Microcosm- Student Club of Microbiology under the aegis of the IQAC on 29th November, 2019 and mentored fellow students. Dr. AVP mentored PG students for presentation of their research work in State Level Conference. Mentoring by Prof. U. K. Patil, (Head, Department of Microbiology) culminated in students getting opportunity to get training in the renowned Agharkar Research Institute, Pune and an advanced diagnostic/pathology laboratory.

Biophysics Department: Every academic session is suffixed with a Q&A session to resolve difficulties of students. The students are personally attended through Mentor-Mentee academic interactions to resolve problems in study styles, understanding of concepts, rejuvenating reading and writing skills. The necessary basic soft skills, basic background information, career counseling, National fellowship and competitive examination guidance are prominent activities during mentoring process.

Biotechnology: All the faculties are mentoring students in diverse orientation for overall development of the students. The enhancement of basic soft skills, career counseling, international and national fellowships and competitive examination guidance are prominent activities during mentoring process. Students are encouraged to take participation in various event like workshop, conferences, debates etc. Much focus is given on preparation of students for competitive exams and their placements. Some

innovative teaching-learning processes adopted by Mrs. P. M. Sonawane are- (i) Cross over teaching-educational trip, (ii) Learning through flipped classroom- students develop concept from resources provided and deliver to the class, and (iii) Teaching through collaboration- students work together on group assignments.

Botany Department: since most of the students are from rural background, they are counseled, oriented and consistently attended for their academic need. The staff gives an extra time on weekends to weak students for their academic queries, if any. Students are mentored one-to-one for their projects and dissertations. Dr. A. N. Salve mentored 02 research scholars, 07 PG students for presentation of research papers in conferences and 04 students for the Avishkar competition. The efforts resulted in the students receiving several awards for the presentations. Academic linkages of Dr. A. N. Salve proved beneficial to students for getting the opportunity of training in renowned institutions under expert guidance.

Geology Department: two teachers are assigned work as mentors for the students, viz. Dr. M.A. Sonar (Assistant Professor) for the first year and Dr. K.M. Wanjarwadkar (Associate Professor) for the second year. The mentors give personal attention to students, monitor their attendance, encourage them to be attentive and regular in theory classes and practical and also evaluate the students for internal tests. Slow learners are given individual counseling and are motivated to improve their performance. Faculty members encourage students to refer reference books in the Central Library and collect supplementary reading materials from the web for getting in-depth knowledge. The faculty members impart training on applied aspects through on-field mentoring and prepare students for a career as professional geologists. In order to nurture a research environment environment, Dr. K.M. Wanjarwadkar encourages students to participate actively in Avishkar competition, conferences, seminars, workshops, summer/winter trainings, National Science day function, etc. Academic ties with professional and academic institutions have enabled students to visit the organizations for summer trainings. Dr. K.M. Wanjarwadkar motivates students for success in various Geosciences examinations, viz. SET, CSIR-NET, GATE, Geoscientist Examination conducted by UPSC, etc. as wells as for career opportunities. Under his guidance 2 students presented posters at National level and 4 students participated in Avishkar competition.

The students participating in Avishkar-19 research competition were led by the Faculty Coordinator, Dr. A. N. Salve, who guided the team in all aspects of the competition. A total of 08 PG students and 05 Research students participated in Avishkar-19. Faculty members, viz. Dr. A. N. Salve, Dr. A. G. Jadhav, Dr. A. V. Pethkar, Dr. K. M. Wanjarwadkar, Dr. R.P. Bhagat, Shri. S. G. Kulkarni and Mrs. V. N. Wadekar mentored the PG and research students working under their guidance for experimental research and presentation of the work in Avishkar competition.

2.4 Teacher Profile and Quality

2.4.1 Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D.
35	22	13	00	13

2.4.2 Honours and recognitions received by teachers

(received awards, recognition, fellowships at State, National, International level from Government, recognized bodies during the year)

<i>Year of award</i>	<i>Name of full time teachers receiving awards from state level, national level, international level</i>	<i>Designation</i>	<i>Name of the award, fellowship, received from Government or recognized bodies</i>
Since 2016	Shri. S. G. Kulkarni National Level	Associate Professor, Biophysics	Nominated as Member of INSA-IUPAB National Committee (Jan. 2016 to Dec. 2019).
2019	Dr. A. V. Pethkar, International Level	Associate Professor, Microbiology	IASR Excellence Award 2019, 29 July 2019, awarded by International Academy of Science and Research, Kolkata at Govind Bhai Shroff Auditorium, S.B.E.S. College of Science, Aurangabad.
2019	Dr. A. V. Pethkar, International Level	Associate Professor, Microbiology	Invited to work as Session Chairman, Day-3, 10 th International Congress of Environmental Research, 19-21 December, 2019, organized by Journal of Environmental Research and Development, and Adi Shankara Institute of Engineering and Technology, Kalady, Kerala, at Adi Shankara Institute of Engineering and Technology, Kalady, Kerala.
2019	Dr. A. N. Salve National Level	Associate Professor, Botany	Invited to work as Session Chairman, National Conference on Emerging Transdisciplinary Approaches in Biosciences-2019 during 23-24 Dec. 2019 at Deogiri College, Aurangabad. Dr. A. N. Salve, in State Level Conference on “Innovative prospects in basic and applied plant science, on 27th and 28th December 2019 at Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Dist. Pune
2019	Dr. A. N. Salve, State Level Conference	Associate Professor, Botany	Invited to work as Session chairman at the state level conference “Innovative prospects in basic and applied plant science, on 27th and 28th December 2019 at Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Dist. Pune

2.5 Evaluation Process and Reforms

2.5.1 Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year- end examination*	Date of declaration of results of semester-end/ year- end examination
M.Sc. Biophysics	-	Part I, Sem I	Oct./Nov 2019	4 Jan. 2020

		Part II, Sem III		
M.Sc. Biophysics	-	Part I, Sem II Part II, Sem IV	-	-
M.Sc. Biotechnology	-	Part I, Sem I Part II, Sem III	Oct./Nov 2019	12 Jan. 2020
M.Sc. Biotechnology	-	Part I, Sem II Part II, Sem IV	-	-
M.Sc. Botany	-	Part I, Sem I Part II, Sem III	Oct./Nov 2019	12 Jan. 2020
M.Sc. Botany	-	Part I, Sem II Part II, Sem IV	-	-
M.Sc. Geology	-	Part I, Sem I Part II, Sem III	Oct./Nov 2019	19 Dec. 2019
M.Sc. Geology	-	Part I, Sem II Part II, Sem IV	-	-
M.Sc. Microbiology	-	Part I, Sem I Part II, Sem III	Oct./Nov 2019	24 Jan. 2020
M.Sc. Microbiology	-	Part I, Sem II Part II, Sem IV	-	-

*Due to COVID-19 pandemic, Sem II and Sem IV examinations have not been conducted

2.5.2 Reforms initiated on Continuous Internal Evaluation(CIE) system at institutional level (250 words)

Midterm and End term internal examinations are conducted at the Institute level.

Microbiology- Internal Examination by Online mode in addition to conventional offline mode. Use of Google classroom and Whatsapp for assignment completion and submission by students, Moodle cloud enabled continuous evaluation. Weightage is given for attendance in theory & practical, participation and attendance in seminar presentation, internal tests, tutorials, MCQ tests.

Biotechnology- Developed internal assessment system giving weightage to student attendance in theory & practical, participation and attendance in seminar presentation, internal tests, tutorials, MCQ tests.

2.5.3 Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

The academic calendar was prepared as per the University Calendar and all academic, co-curricular and extra-curricular as well as extension activities were conducted by adhering to the academic calendar during the entire academic year.

The internal examination in the form of tests/assignments/tutorials/seminars are conducted as per the academic calendar of the Institute.

However, due to COVID-19 Pandemic situation, it was difficult to follow the calendar from March 2020 during the National Lockdown. Hence for the internal evaluations, home assignments were given to the students and they were encouraged to submit the assignments by electronic and social media such as e-mail and Whatsapp.

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

https://www.inosca.org/program_and_course_outcomes.pdf

2.6.2 Pass percentage of students				
Programme Code	Programme name	Number of students appeared in the final year examination	Number of students passed in final semester/year examination	Pass Percentage
-	M. Sc. Biophysics	Due to the COVID-19 pandemic, the M.Sc. examinations have not been conducted so far. Hence, the information about the results cannot be given.		
-	M. Sc. Biotechnology			
-	M. Sc. Botany			
-	M. Sc. Geology			
-	M. Sc. Microbiology			
2.7 Student Satisfaction Survey				
2.7.1 Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire), results and details be provided as weblink.				
https://www.inosca.org/student-satisfaction-survey-2019-20.pdf				
CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION				
3.1 Resource Mobilization for Research				
3.1.1 Research funds sanctioned and received from various agencies, industry and other organisations				
Nature of the Project	Duration	Name of the funding Agency	Total grant Sanctioned (Rs.)	Amount received during the Academic year (Rs.)
Major projects	3yrs., 24.04.2019 to 24.05.2022	Ministry of Earth Sciences, Gov. of India.	21,98,970.00	8,45,250.00
Minor Projects	-	-	-	-
Interdisciplinary Projects	-	-	-	-
Industry sponsored Projects	-	-	-	-
Projects sponsored by the University/ Col	-	-	-	-
Students Research Projects (other than compulsory by the College)	-	-	-	-
International Projects	-	-	-	-
Any other(Specify)	-	-	-	-
Total	-	-	21,98,970.00	8,45,250.00

3.2 Innovation Ecosystem				
3.2.1 Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year				
Title of Workshop/Seminar		Name of the Dept.	Date(s)	
Seminar and Interactive Session on Toxicology, “Toxicologist- a gatekeeper redefining biomedical research” by Dr. Saurabh Vispute (Senior Scientist at Pfizer, Connecticut, USA), jointly organized by the IQAC and Department of Microbiology, Govt. Institute of Science, Aurangabad.		IQAC and Microbiology Department	10-12-2019	
Opportunities in Proteomics sector by Mr. Amit Fulzele, Posdt Doc Fellow, University of California, USA (online skype webinar)_		Placement Cell and Biotechnology Department	05/09/2019	
Entrepreneurship Development by Dr. Anand Yadav, Director, TechAnand Scientific Pvt.Ltd. Amravati		Placement Cell and Biotechnology Department	22/08/2019	
Interview Skills for Research Lab by Mr. Ashish Bijewar, PhD Scholar, IISC Bangalore		Placement Cell and Biotechnology Department	20/04/2020	
Current Research Trend in Genomics by Mr. Hanuman Kale, PhD CCMB Hyderabad		Placement Cell and Biotechnology Department	20/04/2020	
3.2.2 Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year				
Title of the innovation	Name of the Awardee	Awarding Agency	Date of Award	Category
Teachers				
IASR Excellence Award 2019 at Govind Bhai Shroff Auditorium, S.B.E.S. College of Science, Aurangabad.	Dr. A. V. Pethkar (Associate Professor, Department of Microbiology)	International Academy of Science and Research, Kolkata	29 July 2019,	International level
Participation in Avishkar-19 Competition, “Sunscreen metabolites from cyanobacteria, selected for University Campus Level Avishkar Competition at Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon.	Mr. S. G. Kulkarni (Associate Professor & Head, Department of Biophysics)	Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon.	30.12.2019	University Campus Level Avishkar Competition
Participation in Avishkar-19 Competition, “Sunscreen metabolites from cyanobacteria, selected for District Level Avishkar Competition at Kavayitri Bahinabai Chaudhari North Maharashtra University,	Mr. S. G. Kulkarni (Associate Professor & Head, Department of Biophysics)	Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon.	08.01.2020 to 9.01.2020	District Level Avishkar Competition

Jalgaon.				
Participation in Avishkar-19 Competition, "Sunscreen metabolites from cyanobacteria, Selected for State Level Avishkar at Mumbai University, Mumbai	Mr. S. G. Kulkarni (Associate Professor & Head, Department of Biophysics)	University of Mumbai, Mumbai.	28.01.2020 to 31.01.2020	State Level Avishkar Competition
Appreciation award for successfully guiding research student for State Level Avishkar-19 Competition	Dr. A. N. Salve, (Associate Professor, Botany)	University of Mumbai, Mumbai.	28.01.2020 to 31.01.2020	State Level Avishkar Competition
Students				
Young Scientist Award in National Conference on Emerging Transdisciplinary Approaches in Biosciences-2019 during 23-24 Dec. 2019.	Bagwan Rahim (Research Student), Department of Botany	Deogiri College, Aurangabad	23.12.2019 to 24.12.2019	State Level
2 nd Prize- Best Paper presentation in 2-Days National Conference on Emerging Transdisciplinary Approaches in Biosciences-2019 organized by Deogiri College, Aurangabad	Bagwan Rahim (Research Student), Department of Botany	Deogiri College, Aurangabad	23.12.2019 to 24.12.2019	National Level
Paper Presentation in 2-Days National Conference on Emerging Transdisciplinary Approaches in Biosciences-2019 organized by Dept. of Botany, Deogiri College, Aurangabad.	Mrs. Manisha Chalse	Deogiri College, Aurangabad	23.12.2019 to 24.12.2019	National Level
Paper presentation in International Multidisciplinary Research Conference on Biodiversity, Climate Change, Environment and Life Sciences, organized by SBES College, Aurangabad in association with International Academy of Science and Research (Kolkata) and Confederation of Indian Universities, N. Delhi. At SBES College, Aurangabad.	Ms. Mehavish Fatima (Research Student), Department of Microbiology	International Academy of Science and Research (Kolkata) and Confederation of Indian Universities, N. Delhi.	29.07.2019 to 30.07.19	International Level
Participation in 1-Day International Online Conference on Environment Conservation, organized by	Ms. Mehavish Fatima (Research Student), Department of	Punyashlok Ahilyadevi Holkar Solapur University,	05.06.2020	International Level

Punyashlok Ahilyadevi Holkar Solapur University, Solapur.	Microbiology	Solapur.		
Participation in State Level Online Quiz- 2020 organized by Dept. of Science and IQAC, K. K. Wagh Arts, Commerce, Science and Computer Science College, Nashik.	Ms. Mehavish Fatima (Research Student), Department of Microbiology	K. K. Wagh Arts, Commerce, Science and Computer Science College, Nashik.	May 2020	State Level
Paper Presentation in 2-Days National Conference on Emerging Transdisciplinary Approaches in Biosciences-2019 organized by Dept. of Botany, Deogiri College, Aurangabad.	Mrs. Ashwini Pujari (Research Student), Department of Microbiology	Deogiri College, Aurangabad	23.12.2019 to 24.12.2019	National Level
Participation in NPTEL Online Certification, 8 weeks Course on Plant Cell Bioprocessing, organized by IIT, Madras on Swayam Platform funded by Ministry of HRD, Govt. of India.	Mrs. Ashwini Pujari (Research Student), Department of Microbiology	IIT, Madras	Aug.-Oct. 2019	National Level
Participation in National Webinar on HPTLC- an Indispensable Analytical Research Tool, organized by Dept. of Botany and Research Development Cell, Smt. Chandibai Himathmal Mansukhani College, Ulhasnagar in association with Anchrom Enterprises Pvt. Ltd.	Mrs. Ashwini Pujari (Research Student), Department of Microbiology	Smt. Chandibai Himathmal Mansukhani College, Ulhasnagar	04.06.2020	National Level
Participation in Microbiology Online Quiz- 2020 organized by PG and Research Department of Microbiology, Shanmuga Industries Arts and Science College, Tiruvannamalai.	Ms. Mehavish Fatima (Research Student), Department of Microbiology	Shanmuga Industries Arts and Science College, Tiruvannamalai.	12.06.2020	Local Level
Poster Paper presentation in State level Conference on "Innovative Prospects in Basic and Applied Plant Sciences-IPBAPS-2019 during 27-28 Dec. 2019.	Deshmukh Ajinkya Vijayrao (PG Student), Department of Botany	Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Pune	28.12.2019	State Level

Paper presentation in State level Conference on “Innovative Prospects in Basic and Applied Plant Sciences- IPBAPS-2019 during 27-28 Dec. 2019.	Nakhate Snehal Sunil (PG Student, Department of Botany	Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Pune	28.12.2019	State Level
Paper presentation in State level Conference on “Innovative Prospects in Basic and Applied Plant Sciences- IPBAPS-2019 during 27-28 Dec. 2019.	Mitkari Aarti Chandrashekhar (PG Student), Department of Botany	Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Pune	28.12.2019	State Level
Paper presentation in State level Conference on “Innovative Prospects in Basic and Applied Plant Sciences- IPBAPS-2019 during 27-28 Dec. 2019.	Mr. Vaibhav Kale (PG Student), Department of Botany	Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Pune	28.12.2019	State Level
Paper presentation in State level Conference on “Innovative Prospects in Basic and Applied Plant Sciences- IPBAPS-2019 during 27-28 Dec. 2019.	Mr. Bhanudas Pardeshi (Research Student), Department of Botany	Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Pune	28.12.2019	State Level
Paper presentation in State level Conference on “Innovative Prospects in Basic and Applied Plant Sciences- IPBAPS-2019 during 27-28 Dec. 2019.	Ms. Alka Dhore (PG Student), Department of Botany	Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Pune	28.12.2019	State Level
Paper presentation in State level Conference on “Innovative Prospects in Basic and Applied Plant Sciences- IPBAPS-2019 during 27-28 Dec. 2019.	Ms. Diksha Thakur (PG Student), Department of Botany	Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Pune	28.12.2019	State Level
Paper presentation in State level seminar on Emerging and innovative Trends in Life Sciences.	Rahim Bagwan	Dept. of Botany, Eknath Sitaram Divekar College, Warvand, Tal. Daund, Dist. Pune.	17.02.2020 to 18.02.2020	State Level
Paper presentation in State level seminar on Emerging and innovative Trends in Life Sciences, EITLS-2020, “Removal of methylene blue dye from aqueous solutions using floral biowaste”.	Rakshanda Tukaram Jadhav	Dept. of Botany, Eknath Sitaram Divekar College, Warvand, Tal. Daund, Dist. Pune.	17.02.2020 to 18.02.2020	State Level

Paper presentation in State level seminar on Emerging and innovative Trends in Life Sciences, EITLS-2020, "Removal of methylene blue dye from aqueous solutions using floral biowaste".	Mayuri Santosh Sarda	Dept. of Botany, Eknath Sitaram Divekar College, Warvand, Tal. Daund, Dist. Pune.	17.02.2020 to 18.02.2020	State Level
2 nd Prize (Agriculture Technology), University Level Avishkar-19 Competition at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, selected for State Level Avishkar.	Mr. Rahim Bagwan (Research Student), Department of Botany	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.	20.01.2020 to 21.01.2020	University Level
Participation in online Conference on Environmental Conservation.	Ms. Mehavish Fatima (Research Student), Department of Microbiology	School of Earth Sciences, Punyashlok Ahilyadevi Holkar Solapur University, Solapur.	05.06.2020	Univeristy Level
Participation in State Level Online Microbiology Quiz 2020.	Ms. Mehavish Fatima (Research Student), Department of Microbiology	K. K. Wagh Arts, Commerce, Science and Computer Science College, Nashik.	May 2020	State Level
Participation in Avishkar-19 State Level Competition at Mumbai University, Mumbai.	Mr. Rahim Bagwan (Research Student), Department of Botany	University of Mumbai, Mumbai.	28.01.2020 to 31.01.2020	State Level
1 st Prize in Avishkar-19 Competition, University Level Avishkar-19 Competition at Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.	Mr. Shekh Samir (PG Student), Department of Botany	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.	20.01.2020 to 21.01.2020	University Level
Participation in Avishkar-18 Competition, State Level Avishkar Competition at Mumbai University, Mumbai.	Mr. Shekh Samir (PG Student), Department of Botany	University of Mumbai, Mumbai.	28.01.2020 to 31.01.2020	State Level
Participation in Avishkar-19 Competition	Mrs. Ashwini Pujari (Research Student), Department of Microbiology	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	20.01.2020 to 21.01.2020	University Level

Participation in Avishkar-19 Competition	Smt. Manisha Chalse (Research Student), Department of Microbiology	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	20.01.2020 to 21.01.2020	University Level
Participation in Avishkar-19 Competition	Ms. Mehavish Fatima (Research Student), Department of Microbiology	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	20.01.2020 to 21.01.2020	University Level
Participation in Avishkar-18 Competition	Ms. Rakshanda Jadhav (PG Student), Department of Microbiology	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	20.01.2020 to 21.01.2020	University Level
Participation in Avishkar-18 Competition	Ms. Mayuri Sarda (PG Student), Department of Microbiology	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	20.01.2020 to 21.01.2020	University Level
Participation in Avishkar-18 Competition	Ms. Neha Ramteke (PG Student), Department of Biophysics	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	20.01.2020 to 21.01.2020	University Level
Participation in Avishkar-18 Competition	Ms. Preksha Marlecha (PG Student), Department of Biotechnology	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	20.01.2020 to 21.01.2020	University Level
Participation in Avishkar-18 Competition	Mr. Shaikh Sarvar (PG Student), Department of Biophysics	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	20.01.2020 to 21.01.2020	University Level
Participation in Avishkar-18 Competition	Mr. Tushar Shirsat (PG Student), Department of Biophysics	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	20.01.2020 to 21.01.2020	University Level
Participation in Avishkar-18 Competition	Mr. Ajinkya Deshmukh (PG Student), Department of Botany	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	20.01.2020 to 21.01.2020	University Level

Participation in Avishkar-18 Competition	Mr. Shubham Gavali (PG Student), Department of Botany	Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	20.01.2020 to 21.01.2020	University Level
1 st Prize in Intercollegiate Science Quiz Competition	Ms. Preksha Marlecha (PG Student), Department of Biotechnology	BP Arts, SMA Science and KKC Commerce College, Chalisgaon	30.01.2020	State Level
1 st Prize in Intercollegiate Science Quiz Competition	Mr. Sagar Biradar (PG Student), Department of Biotechnology	BP Arts, SMA Science and KKC Commerce College, Chalisgaon	30.01.2020	State Level
1 st Prize in Intercollegiate Science Quiz Competition	Mr. Nilesh Mapari (PG Student), Department of Biotechnology	BP Arts, SMA Science and KKC Commerce College, Chalisgaon	30.01.2020	State Level
Participation in Intercollegiate Science Quiz Competition	Sayyed Ajmatali (PG Student), Department of Botany	BP Arts, SMA Science and KKC Commerce College, Chalisgaon	30.01.2020	State Level
Participation in Intercollegiate Science Quiz Competition	Jagruti Sharma (PG Student), Department of Botany	BP Arts, SMA Science and KKC Commerce College, Chalisgaon	30.01.2020	State Level
Participation in State Level Poster, Model & Idea Presentation Competition- SRUJAN 2020.	Shaikh Sarwar (PG Student), Department of Biophysics.	MGM University, Institute of Biosciences and Technology, Aurangabad.	01.02.2020	State Level
Course on Coronavirus Disease 2019	Nikita Shinde (PG Student), Department of Microbiology.	AACC Learning Lab for Laboratory Medicine on NEJM Knowledge+, Harvard Medical School	23.03.2020	International Level
Course on Coronavirus Disease 2019	Shrutika Wagh (PG Student), Department of Microbiology.	AACC Learning Lab for Laboratory Medicine on NEJM Knowledge+, Harvard Medical School	23.03.2020	International Level

Participation in Online Quiz on Dairy Science and Microbiology	Nikita Shinde (PG Student), Department of Microbiology.	Dept. of Dairy Science and Microbiology, Sanjeevanee Mahavidyalaya, Charoli, Dist. Latur.	05-2020	Local Level
Participation in Online Quiz on Dairy Science and Microbiology	Priyanka Wankhare (PG Student), Department of Microbiology.	Dept. of Dairy Science and Microbiology, Sanjeevanee Mahavidyalaya, Charoli, Dist. Latur.	05-2020	Local Level
Participation in Online Quiz on Introduction to Bioinformatics	Priyanka Wankhare (PG Student), Department of Microbiology.	Dept. of Biotechnology and Bioinformatics, Deogiri College, Aurangabad.	19.05.2020	Local Level
Participation in 3-days National Workshop on Career Opportunities and Personality Development for the Students of Life Sciences.	Priyanka Wankhare (PG Student), Department of Microbiology.	Dharampeth M. P. Deo Memorial Science College, Nagpur.	25.05.2020 to 27.05.2020	National Level
Participation in National Webinar on Recent Trends in Life Science Research.	Priyanka Wankhare (PG Student), Department of Microbiology.	Dept. of Microbiology and Biotechnology in association with IQAC, R. C. Patel Arts, Commerce and Science College, Shirpur.	28.05.2020 to 31.05.2020	National Level
Participation in National Webinar on Recent Trends in Life Science Research.	Shrutika Wagh (PG Student), Department of Microbiology.	Dept. of Microbiology and Biotechnology in association with IQAC, R. C. Patel Arts, Commerce and Science College, Shirpur.	28.05.2020 to 31.05.2020	National Level
Participation in 12-week Course on Genetic Engineering: Theory and Application.	Shruti Lavekar (PG Student), Department of Microbiology.	NPTTEL Online Certification on Swayam Platform, organized by IIT-Guwahati, funded by Ministry of HRD, Gov. of India.	July 2019 to Oct 2019	National Level

Participation in National Webinar on Vaccine Development and Scale Up.	Shrutika Wagh (PG Student), Department of Microbiology.	Organized by Mayur Ushir	06.06.2020	National Level
Participation in Online Quiz on Role of NSS in prevention of COVID-19.	Supriya Mathwale (PG Student), Department of Microbiology.	Organized by NSS, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.	05.03.2020	University Level
Participation in National Level Online Quiz “A Quarantine Quiz for Scientific Thinkers”.	Supriya Mathwale (PG Student), Department of Microbiology.	Organized by Department of Microbiology, Smt. Chandibai Himathmal Mansukhani College, Ulhasnagar, Mumbai.	05.06.2020	National Level
Participation in Certification Exam, “The Fundamentals of Digital Marketing”.	Supriya Mathwale (PG Student), Department of Microbiology.	Organized by Google Digital Garage, IAB, Europe and The Open University.	05.06.2020	
Participation in National Webinar on Recent Trends in Life Science Research.	Supriya Mathwale (PG Student), Department of Microbiology.	Organized by Department of Microbiology and Biotechnology and IQAC, RC Patel Arts, Commerce and Science College, Shirpur.	28.05.2020 to 31.05.2020	National Level
Participation in Online Quiz on Dairy Science and Microbiology	Supriya Mathwale (PG Student), Department of Microbiology.	Dept. of Dairy Science and Microbiology, Sanjeevanee Mahavidyalaya, Charoli, Dist. Latur.	05-2020	Local Level
COVID Awareness Programme	Supriya Mathwale (PG Student), Department of Microbiology.	Organized by NSS and Shiv Sahayata Disaster Management Center, Shivaji University, Kolhapur.	29.04.2020	University Level

Participation in International Conference on Recent Advances in Sciences, ICRAS-19.	Supriya Mathwale (PG Student), Department of Microbiology.	Organized by Shri Kumasswami Mahavidyalaya, Ausa, Dist. Latur.	02.12.2019	International Level
Participation in Dr. Dixit Diet's 3D Walkathon, Walk for Obesity and Diabete Free World.	Supriya Mathwale (PG Student), Department of Microbiology.	Organized by Dr. Dixit Diet.	15.09.2019	Local Level
3.2.3 No. of Incubation centre created, start-ups incubated on campus during the year				
Incubation Centre	Nature		Sponsored by	
Nil	Nil		None	
Name of the Start-up	Nature of Start-up		Date of commencement	
Nil	Nil		Nil	
3.3 Research Publications and Awards				
3.3.1 Incentive to the teachers who receive recognition/awards				
State	National		International	
Nil	Nil		Nil	
3.3.2 Ph. Ds awarded during the year (<i>applicable for PG College, Research Center</i>)				
Name of the Department		No. of Ph. Ds Awarded		
Microbiology: 3 students under the guidance of Dr. S. G. Gupta 2 students under the guidance of Dr. S. M. Dharmadhikari		05		
Total		05		
3.3.3 Research Publications in the Journals notified on UGC website during the year				
Department	Name of Faculty member	No. of Publication		Average Impact Factor, if any
International				
Microbiology	Dr. A. G. Jadhav	Aniketa R. Patel, Narendra U. Mokashe, Diptaraj S. Chaudhari, Ajaykumar G. Jadhav, Ulhas K. Patil, Production optimisation and characterisation of extracellular protease secreted by newly isolated <i>Bacillus subtilis</i> AU-2 strain obtained from <i>Tribolium castaneum</i> gut; Biocatalysis and Agricultural Biotechnology (Elsevier) 19 (2019) 1011-22		1.02
	Dr. A. G. Jadhav	Patil, M., Jadhav, A., & Patil, U., Functional characterization and in vitro screening of <i>Fructobacillus fructosus</i> MCC 3996 isolated from <i>Buteamonosperma</i> flower for probiotic potential, Letters in Applied Microbiology 70 (4), 331-339		1.890

	Prof. U. K. Patil	Chaudhari, D. S., Dhotre, D. P., Agarwal, D. M., Gaike, A. H., Bhalerao, D., Jadhav, P., Mongad, D., Lubree, H., Sinkar, V. P., Patil, U. K., Salvi, S., Bavdekar, A., Juvekar, S. K., & Shouche, Y. S. (2020). Gut, oral and skin microbiome of Indian patrilineal families reveal perceptible association with age. <i>Scientific Reports</i> , 10(1), 1–13. https://doi.org/10.1038/s41598-020-62195-5	4.01
	Prof. U. K. Patil	Chaudhari, D., Dhotre, D., Agarwal, D., Gondhali, A., Nagarkar, A., Lad, V., Patil, Ulhas , Juvekar, S., Sinkar, V., & Shouche, Y. (2019). Understanding the association between the human gut, oral and skin microbiome and the Ayurvedic concept of prakriti. <i>Journal of Biosciences</i> , 44(5), 112. https://doi.org/10.1007/s12038-019-9939-6	1.83
	Prof. U. K. Patil	Patil, M., Jadhav, A., & Patil, U. (2020). Functional characterization and in vitro screening of <i>Fructobacillus fructosus</i> MCC 3996 isolated from <i>Buteamonosperma</i> flower for probiotic potential. <i>Letters in Applied Microbiology</i> , 70(4), 331–339. https://doi.org/10.1111/lam.13280	1.890
	Prof. U. K. Patil	Aniketa R. Patel, Narendra U. Mokashe, Diptaraj S. Chaudhari, Ajaykumar G. Jadhav, Ulhas K. Patil (2019) Production optimisation and characterisation of extracellular protease secreted by newly isolated <i>Bacillus subtilis</i> AU-2 strain obtained from <i>Triboliumcastaneum</i> gut; <i>Biocatalysis and Agricultural Biotechnology</i> ; 19, 101122	1.02
	Dr. Mrs. S. A. Peshwe	Kalpana Kulkarni and Swati Peshwe, Computational analysis of <i>Magnaporthe</i> gene sequences for prediction of pathogenicity related genes, <i>Research Journal of Agricultural Sciences</i> 11(2): 497-498(April 2020), ISSN: 2249-4538.UGC approved.	COSMOS impact factor: 4.633 NAAS rating 4.54
	Dr. Mrs. S. A. Peshwe	Kalpana Kulkarni and Swati Peshwe, PCR detection of seed borne blast fungus <i>Magnaporthe oryzae</i> from Paddy seeds, <i>Research Journal of Agricultural Sciences</i> 11(2): 430-433. March 2020), ISSN:2249-4538.UGC approved.	COSMOS impact factor: 4.633 NAAS rating 4.54
	Dr. Mrs. S. A. Peshwe	Kalpana Kulkarni and Swati Peshwe, Demonstration of pathogenicity in three different <i>Magnaporthe oryzae</i> isolates, <i>International journal of Agriculture and Food Sciences</i> (2020), 2(1);29-32, ISSN 2664-844X. UGC approved.	RJIF 5.22
	Dr. Mrs. S. A. Peshwe	Chaudhari S.P and S.A. Peshwe, Bioprospecting actinomycetes for production of thermotolerant Phytasse, <i>International journal of scientific technology and research</i> (2020),9(2):713-717. ISSN 2277-8616.UGC approved.	00

	Dr. A. V. Pethkar	Abhay N. Salve, Swaranjali K. Gadhe, Manoj T. Patil and Aniroodha V. Pethkar, Studies on antimicrobial activities of selected algae from Maharashtra, Indian Hydrobiology, 18(1 & 2): 19-30, 2019, ISSN 0971-6548, UGC-CARE list A.	00
Biotechnol.	Sonawane P.M, Gupta S.G	Sonawane P.M, Gupta S.G, Quantification of toxic and precious metal content of scrap mobile PCB by FE SEM/EDAX and Inductively Coupled Plasma-Optical Emission Spectroscopy method, Applied Ecology and environmental Sciences, Vol. 8, No. 2, 55-63, March, 2020.	2-GJIF
	Sonawane P.M, Gupta S.G	Sonawane P.M, Gupta S.G, An Insight into E-waste, exploring its toxicity and preciousness, Think India, Vol. 22, Special Issue31, 314-328, December, 2019.	5.9 (SJIF)
	Indarchand R. Gupta	Rai, M., Ingle, A.P., Gupta, I., Pandit, R., Paralikar, P., Gade, A., Chaud, M.V., dos Santos, C.A. (2019) Smart nanopackaging for the enhancement of food shelf life, Environmental Chemistry Letters, 17(1):277-290.	Impact Factor: 3.125 Total Citations: 15
	Indarchand R. Gupta	Rai, M., Grupenmacher, A., Ingle, A.P., Paralikar, P., Gupta, I., Alves, M. (2019) Evolving nanotechnological trends in the management of mycotic keratitis, IET Nanobiotechnology, 13(5):464-470.	Impact Factor: 1.925
	Dr. R. P. Bhagat	More N.V, Bhagat,R.P, Genetic Diversity in Parental Lines of Hybrid Rice (<i>Oryza sativa</i> L.) by using SSR Markers, J. Biol. Chem. Research. Vol. 36, No. 1: 147-155, 2019, ISSN 2319-3077 (Online/Electronic)	Journal Impact Factor: 4.275
Geology	Prof. S. M. Deshpande	G.D. Gaikwad, S.M. Deshpande, K. R. Aher, V. R. Dasarwar, Hydrogeochemical Investigation and Qualitative Assessment in Jogeshwari Industrial area of Aurangabad, Maharashtra, India, Bulletin of Pure and Applied Sciences (Geology), 2019, 38F (2), 89-103, ISSN 0970-4639	5.195
	Prof. S. M. Deshpande	S.M. Deshpande, R.K.Aher, Suitability of Groundwater Quality for Drinking and Irrigation Purposes In the Dheku River Basin, Maharashtra, Bulletin of Pure and Applied Sciences (Geology), 2019, 38F (1), 104-113, ISSN 0970-4639.	5.195

	Dr. K. M. Wanjarwadkar	Tarun Koley, Swetlina Parhi, Anju C.S. and K.M. Wanjarwadkar, Planktonic foraminifera from the Neogene volcanoclastic sediments of South Andaman Island: Implications on stratigraphy, Journal of Geological Society of India. Vol.94, pp.69-77, July 2019.	0.994
	Dr. M. A. Sonar	M.A. Sonar, Tribhuvan P.R. and Golekar R.B., Bryozoan Fauna from the Burdigalian of Quilon Beds of Padappakara, Kerala, India, Journal of Geological of India, Vol.93, pp.--, May 2019, ISSN: 0552-9360	0.994
	Dr. A. N. Salve	Abhay N. Salve, Swaranjali K. Gadhe, Manoj T. Patil and Aniroodha V. Pethkar, Studies on antimicrobial activities of selected algae from Maharashtra, Indian Hydrobiology, 18(1 & 2): 19-30, 2019. ISSN 0971-6548, UGC-CARE list A.	00
	Dr. A. N. Salve	Abhay N. Salve, Growth studies of Synechocystis under different physical and chemical parameters, <i>Think India Journal</i> (Dec. 2019), 22(31), 723-728. ISSN: 0971-1260	5.9 (SJIF)
	Dr. A. S. Vinchurkar	Pravin Dhepe and Aruna Vinchurkar, Assessment of pulmonary function test in athletic and non athletic individuals, Indian Journal of Applied Research, August 2019, 9(8), 21-22, ISSN No. 2249 - 555X.	00

3.3.4 Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department and Faculty member	No. of publication
Biotechnology- Dr. Indarchand Gupta	<p>Bhagat, R., Panakkal, H., Gupta, I., Ingle, A.P. (2020) Recent advances in the production of biodiesel using lignocellulosic biomass. <i>In Lignocellulosic Biorefining Technologies</i>, Eds. Avinash P. Ingle, Anuj Kumar Chandel, Silvio Silvério da Silva, John Wiley & Sons Ltd : pp 69-85.</p> <p>Ingle, A.P., Shende, S., Gupta, I., Rai, M. (2020) Recent trends in the development of nano-bioactive compounds and delivery systems. <i>In Biotechnological Production of Bioactive Compounds</i>, Eds. Madan L. Verma and Anuj K. Chandel, Elsevier: pp 409-431.</p> <p>Ingle, A.P., Gupta, I., Jogee, P., Rai, M. (2020) Role of nanotechnology in the detection of mycotoxins: a smart approach. <i>In Nanomycotoxicology: Treating Mycotoxins in the Nano Way</i>, Eds. Mahendra Rai and Kamel A. Abd-Elsalam, Academic Press, pp 11-33.</p> <p>Rai, M., Gupta, I., Ingle, A.P., Biswas, J.K., Sinitsyna, O.V. (2019) Nanomaterials: What are they, Why they cause ecotoxicity, and how</p>

	<p>this can be dealt with? <i>In Nanomaterials: Ecotoxicity, Safety, and Public Perception</i>, Eds. Mahendra Rai and Jayant Kumar Biswas, Springer, pp 3-18.</p> <p>Ingle, A.P., Ingle, P., Gupta, I., Rai, M. (2019) Socioeconomic impacts of biofuel production from lignocellulosic biomass. <i>In Sustainable Bioenergy: Advances and Impact</i>, Eds. Mahendra Rai and Avinash Ingle, Elsevier: 347-366.</p>
Dr. R. P. Bhagat	Recent Advances in the Production of Biodiesel Using Lignocellulosic Biomass, In: <i>Lignocellulosic Biorefining Technologies</i> , (First Edition), Avinash P. Ingle, Anuj Kumar Chandel, and Silvio Silv�rio da Silva (eds.), 2020, John Wiley & Sons Ltd.
Mr. H.P.Panakkal	Recent Advances in the Production of Biodiesel Using Lignocellulosic Biomass, In: <i>Lignocellulosic Biorefining Technologies</i> , (First Edition), Avinash P. Ingle, Anuj Kumar Chandel, and Silvio Silv�rio da Silva (eds.), 2020, John Wiley & Sons Ltd.
Dr. M. S. Patil	Patil M. S. (2019,), Distillery spent wash decolorization by using Biopolymer synthesized by indigenously isolated <i>Pseudomonas</i> species, 65 th Annual Convention of DSTA.
Dr. M. S. Patil	M. S. Patil, Hundiware J.C., Patil A.V. (2020) Bioremediation: A Potential Tool for Minimizing Industrial, Agricultural and Environmental Pollution, In; "New Vistas in Microbial Sciences (Volume - 1)". Integrated Publications- New Delhi.

3.3.5 Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or Pub Med/ Indian Citation Index

Title of the paper	Name of the author	Title of the journal	Year of publication	h5-index	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citations
Comparative study of growth and sporulation of <i>Magnaporthe oryzae</i> using different media formulations	Kalpana Kulkarni and Swati Peshwe	Int. J. of Scientific & technology Research,	Nov. 2019	00	00	Government Institute of Science, Aurangabad	00
Aquifer Characteristic in hard Rock Terrain of GP-8 Watershed, Aurangabad District, Maharashtra Using Vertical Electrical Sounding Method,	M.A. Sonar, Tribhuvan P.R. and M.A.Malik ,	Journal of Geosciences Research	July 2019	00	00	Government Institute of Science, Aurangabad	00

Understanding the association between the human gut, oral and skin microbiome and the Ayurvedic concept of prakriti.	Chaudhari, D., Dhotre, D., Agarwal, D., Gondhali, A., Nagarkar, A., Lad, V., Patil, Ulhas, Juvekar, S., Sinkar, V., & Shouche, Y.	<i>Journal of Biosciences</i>	Sept. 2019	23	03	Government Institute of Science, Aurangabad	00
An Insight into E-waste, exploring its toxicity and preciousness,	P M Sonawane, S G Gupta	Think India,	2019	00	00	Government Institute of Science, Aurangabad	00
Evolving nanotechnological trends in the management of mycotic keratitis	Rai, M., Grupenmacher, A., Ingle, A.P., Paralikar, P., Gupta, I., Alves, M	IET Nanobiotechnology	July 2019	23	00	Government Institute of Science, Aurangabad	00
Genetic Diversity in Parental Lines of Hybrid Rice (<i>Oryza sativa</i> L.) by using SSR Markers,	R P Bhagat	J. Biol. Chem. Research.	2019	00	00	Government Institute of Science, Aurangabad	00
Planktonic foraminifera from the Neogene volcaniclastic sediments of South Andaman Island: Implication on stratigraphy,	Tarun Koley, Svetlina Parhi, Anju C.S. and K.M. Wanjarwad kr	Journal of Geological Society of India, 94 , pages 69–77(2019)	July 2019	18	00	Government Institute of Science, Aurangabad	00
Gut, oral and skin microbiome of Indian patrilineal families reveal perceptible association with age.,	Chaudhari, D. S., Dhotre, D. P., Agarwal, D. M., Gaike, A. H., Bhalerao, D., Jadhav, P., Mongad, D., Lubree,	Scientific Reports	Ma. 2020	178	02	Government Institute of Science, Aurangabad	00

	H., Sinkar, V. P., Patil, U. K., Salvi, S., Bavdekar, A., Juvekar, S. K., & Shouche, Y. S.						
Functional characterization and in vitro screening of <i>Fructobacillus fructosus</i> MCC 3996 isolated from <i>Buteamonosperma</i> flower for probiotic potential.	Patil, M., Jadhav, A., & Patil, U.	<i>Letters in Applied Microbiology</i> ,	Jan. 2020	29	00	Government Institute of Science, Aurangabad	00
Computational analysis of <i>Magnaporthe</i> gene sequences for prediction of pathogenicity related genes	Kalpna Kulkarni and Swati Peshwe	Research Journal of Agricultural Sciences, 11(2): 497-498	April 2020	09	00	Government Institute of Science, Aurangabad	00
PCR detection of seed borne blast fungus <i>Magnaportheoryzae</i> from Paddy seeds	Kalpna Kulkarni and Swati Peshwe,	Research Journal of Agricultural Sciences, 11 (2), 430-433	2020	09	00	Government Institute of Science, Aurangabad	00
Bioprospecting actinomycetes for production of thermotolerant Phytasse,	Chaudhari S.P and S.A. Peshwe	International journal of scientific technology and research 9 (02).	February 2020	00	00	Government Institute of Science, Aurangabad	00

Detailed Quantification of toxic and precious metal content of scrap mobile PCB by FE SEM/EDAX and Inductively Coupled Plasma-Optical Emission Spectroscopy method.	P M Sonawane, S G Gupta	Applied Ecology and environmental Sciences, 8 (2), 55-63. DOI: 10.12691/aees-8-2-3	April 2020	00	00	Government Institute of Science, Aurangabad	00
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3.3.6 h-index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the paper	Name of the author	Title of the journal	Year of publication	h-index	Number of citations excluding self citations	Institutional affiliation as mentioned in the publication
See above	See above	See above	See above	See above	See above	See above

3.3.7 Faculty participation in Seminars/Conferences and Symposia during the year :

No. of Faculty	International level	National level	State level	Local level
Attended Seminars/ Workshops	Mr. H. P. Panakkal, One day International Webinar on Biologicals in Agriculture: Scope and Limitations, organized by Badrinarayan Barwale Mahavidyalaya, Jalna on 17.01.2020.			Mrs. P. M. Sonawane, Scientific Writing and Presentation, 6 th May 2020, organized by Dept of Microbiology, Kankavli College, at Kankavli College, Kankavli.
Presented papers	Dr. A. G. Jadhav, Decolorization of The Textile Dye Blue Herd by Bacterial Isolates from Industrial Contaminated Soil, 60 th Annual Conference of Association of Microbiologists of India (AMI 2019) and International Symposium on Microbial technologies in Sustainable Development of energy environment , agriculture and Health, organized by	Dr. I. R. Gupta, National 'Young Scientist Conference' held at Biswa Bangla Convention Centre, Kolkata, organized by India International Science Festival (IISF), India, during November 5-7, 2019.	Dr. A. V. Pethkar, Rakshanda Tukaram Jadhav, Mayuri Santosh Sarda, Abhay N. Salve, and Aniroodha V. Pethkar, Removal of methylene blue dye from aqueous solutions using floral biowaste State Level Seminar on Emerging and Innovative Trends in Life Sciences- ETTLS-2020 held on 17 & 18	

	Central University of Haryana, Mahendragarh (15 -18 November 2019) organized by Central University of Haryana, Mahendragarh, during November 15-18, 2019.		Jan. 2020.	
	Dr. R. P. Bhagat, Purification and Characterization of Inulinase enzyme from bacterial isolates obtained from rhizosphere of Garlic and Onion Plants, <i>Young Scientist conference 2019 India International Science festival organized by Ministry of Science and technology, Ministry of Earth Science, Ministry of Health and Family Welfare, Govt. of India held at Kolkata, 5-8 Nov 2019.</i>	Mrs. P. M. Sonawane, An Insight into E-waste, exploring its toxicity and preciousness, National Conference on Emerging Trans-Disciplinary Approaches in Bio-Sciences-2019, 23 rd to 24 th December 2019, organized by Department of Botany, Deogiri College, Aurangabad at Deogiri College, Aurangabad		
	Prof. U. K. Patil, “ <i>Bacillus amyloliquefaciens</i> as potential biocontrol against <i>C. torulosis</i> causing leaf spot disease” in 60 th Annual Conference of Association of Microbiologists of India (AMI 2019) and International Symposium on Microbial technologies in Sustainable Development of energy environment , agriculture and Health, organized by Central University of Haryana Mahendragarh (15 -18	Dr. R. P. Bhagat, Screening of Industrially important Bacterial Inulinases by using Natural Resources, National Conference on New Dimensions of Chemistry and Chemistry education (NCCT 2019), SGB Amravati University Amravati		

	November 2019).			
	Dr. Mrs. S. A. Peshwe, (2017), Bioprospecting agroresidues and microorganisms for production of thermotolerant phytase, Recent trends in science and technology sustainable development through scientific approach, organized by Shri Shivaji Science college Amravati's Science college Congress Nagar, Nagpur at Nagpur.	Mr. S. G. Kulkarni, Microalgal response to gamma radiation and heavy metals, in National Conference ETDAB during 23-24 De. 2019.		
	Dr. Mrs. S. A. Peshwe, (2019), Optimization of media components for production of phytase by <i>Aspergillus</i> sp. Fsp-4 using statistical experimental approach, Empowering society with Microbial Technology, organized by T.C. College, Baramati at Baramati.	Mrs. P. M. Sonawane, Emerging Trans-Disciplinary Approaches in Biosciences, 23.12.2019 to 24.12.2019.		
	Dr. M. A. Sonar, "Some more neocheilostomine bryozoans from the Miocene sequences of Kachchh, Gujarat, India. 6 th Annual International Conference on Recent Perspectives on Climate change and sustainable Development. Suresh Gyan Vihar University, Jaipur. Nov. 8-10, 2019			

	Dr. K. M. Wanjarwadkar, 12 th International Symposium on Fossil Algae, on Sept. 17-18, 2019.			
	Dr. A. V. Pethkar and Mehvish F, Enzyme-laden Biowaste of an Industrial Microorganism for the synthesis of gold nanoparticles and biochemical method for the synthesis of silver nanoparticles, International Multidisciplinary Research Conference on Biodiversity, Climate Change and Life Sciences, IMRCBCCLS-2019, 29-30 July 2019, organized by S.B.E.S. College of Science, Aurangabad in association with International Academy of Science and Research, Kolkata and Confederation of Indian Universities, N. Delhi at S.B.E.S. College of Science, Aurangabad (MS).			
	Dr. A. V. Pethkar, Phytotherapeutic agents to control multidrug resistant Gram positive pathogenic bacteria, 10 th International Congress of Environmental Research, 19-21			

	December, 2019, organized by Journal of Environmental Research and Development, and Adi Shankara Institute of Engineering and Technology, Kalady, Kerala, at Adi Shankara Institute of Engineering and Technology, Kalady, Kerala.			
Resource Persons	Dr. A. V. Pethkar, Planery Lecture, July 29, 2019, Biointerface in the synthesis and applications of nanoparticles, International Multidisciplinary Research Conference on Biodiversity, Climate Change and Life Sciences, IMRCBCCLS-2019, 29-30 July 2019, organized by S.B.E.S. College of Science, Aurangabad in association with International Academy of Science and Research, Kolkata and Confederation of Indian Universities, N. Delhi at Govind Bhai Shroff Auditorium, S.B.E.S. College of Science, Aurangabad (MS).	Dr. A. N. Salve, Algal Diversity and its Bioprospecting, Refresher Course in Basic Science 23.09.2019 organized by Dr. Babasaheb Ambedkar Marathwada University, Aurangabad	Dr. A. N. Salve, in State Level Conference on “Innovative prospects in basic and applied plant science, on 27th and 28th December 2019 at Hutatma Rajguru Mahavidyalaya, Rajgurunagar, Dist. Pune.	Dr. K. M. Wanjarwadkar, <i>Fieldwork– Observations and Noting</i> , 1 st Pre-Ph.D. Course work in Geology- Govt. Institute of Science, Aurangabad on 20.01.2020
	Dr. A. V. Pethkar, Invited Speaker, Going green- microbial intervention in the synthesis of stable	Dr. Mrs. S. A. Peshwe, Transplantation Immunology, Refresher		Dr. M. A. Sonar, ‘ <i>How to avoid Plagiarism in Research Publications</i> ’, 1 st Pre-Ph.D. Course

	metal nanoparticles, 10 th International Congress of Environmental Research, 19-21 December, 2019, organized by Journal of Environmental Research and Development, and Adi Shankara Institute of Engineering and Technology, Kalady, Kerala, at Adi Shankara Institute of Engineering and Technology, Kalady, Kerala.	Course, 23-09-2019, organized by Dr. BAMU UGC-HRD Centre, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.		work in Geology- Govt. Institute of Science, Aurangabad, 19.01.2020.
		Dr. A. V. Pethkar, AFM, Nano-techniques and opportunities in Life Sciences, National Level Conference on Analytical Techniques and Opportunities in Life Sciences, 1-2 February 2020, organized by Gokhale Education Society's HPT Arts and RYK Science College, Nashik.		Dr. A. V. Pethkar, Research Methodology, 20 January 2020, Scientific writing and ethics in reserach, in the 1st Pre-Ph.D. Course Work in Geology, organized by Department of Geology, Govct. Institute of Science, Aurangabad, under the aegis of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad during 18th Jan. 2020 to 15th March 2020.
				Dr. Mrs. J. J. Bhuktar, Shivachhatrapati College Aurangabad. 21 Sep. 2019.

3.4 Extension Activities			
3.4.1 Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year			
Title of the Activities	Organising unit/ agency/ collaborating agency	Number of teachers coordinated such activities	Number of students participated in such activities
Cleanliness campaign- cleaning of the Heritage Dug Well (Baarav) near Soneri Mahal in the affiliating University campus.	NSS unit in collaboration with the NSS Department of affiliating University	01	50
On-line program on Indroduction to the living and lifestyle of the people of Orissa State, cultural and natural heritage of the state and the places to visit in the state.	NSS unit under “Ek Bharat Shreshtha Bharat” initiative of the Government of India, in collaboration with NSS Department of the affiliating University.	01	50
Participation of NSS volunteer Mr. Navnath Vilas Honmane in State Level Residential Camp- Ek Bharat Shrestha Bharat at Shendurni, Jalgaon and Sakri, Dhule. Two NSS volunteers participated in the residential camps.	NSS unit in association with A. R. B. Garud Arts, Commerce and Science College, Shendurni, Tal. Jamner, Dist Jalgaon.	01	01
Participation of NSS volunteer Mr. Pravin Prakash Sonune in State Level Residential Camp- Ek Bharat Shrestha Bharat at Shendurni, Jalgaon and Sakri, Dhule. Two NSS volunteers participated in the residential camps.	NSS unit in association with Kavayitri Nahinabai Chaudhari Northe Maharashtra University, Jalgaon and V. V. Mandal Sitaram Govind patil Arts, Science and Commerce College, Sakri, Dist. Dhule at Shri Kshetra Nagai-Kokle, Tal. Sakri.	01	01
Digging out the canal to remove hinderances to the flow of water into the catchment site (lake) in the	NSS unit in collaboration with NSS Department of the affiliating University.	01	50

University campus			
Lecture on “Fundamental Rights of the people under the Indian Constitution” by Shri. Rahul Gawde, Asst. Prof., Govt. Institute of Forensic Science, Aurangabad.	NSS unit in collaboration with Govt. Institute of Forensic Science, Aurangabad.	02	50
Lecture on “Law and Justice- Current social scenario and the youth responsibility” by Shri. Rahul Bharti, Asst. Prof., Govt. Institute of Forensic Science, Aurangabad.	NSS unit in collaboration with Govt. Institute of Forensic Science, Aurangabad.	01	50
Interactive session on “Personality Development” by Prof. Satish Mokashi, Professor, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.	NSS unit	01	50
Lecture on “A Modern Scientific View on Social Structure in India”, by Dr. S. G. Narwade, Assistant Prof., Govt. Institute of Forensic Science, Aurangabad	NSS unit in collaboration with Govt. Institute of Forensic Science, Aurangabad.	01	50
Biodiversity Field Study and interactive session on “Algae and their nutritive potential” by Dr. A. N. Salve, Associate Professor, Institute of Science, Aurangabad	NSS unit	01	50
Lecture on “Gandhian Thoughts” by Dr. Arun Wahul, Vivekanand College, Aurangabad.	NSS unit in collaboration with NSS Department of the affiliating University.	01	50
Program on Awareness to Avoid Wastage of Food.	NSS unit in collaboration with “Save Food Save Nation”, an NGO from Aurangabad.	01	All Staff and Students= 235
Awareness campaigns on prevention of spread of COVID-19.	IQAC, Department of Botany, Department of Biotechnology, Department	04	>2000

	of Microbiology.			
3.4.2 Awards and recognition received for extension activities from Government and other recognized bodies during the year				
Name of the Activity	Award/recognition	Awarding bodies	No. of Students benefited	
-	-	-	-	
3.4.3 Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year				
Name of the scheme	Organising unit/ agency/ collaborating agency	Name of the activity	Number of teachers coordinated such activities	Number of students participated in such activities
Ek Bharat Shreshtha Bharat initiative of the Government of India	NSS Department of the affiliating University.	On-line program on Indroduction to the living and lifestyle of the people of Orissa State, cultural and natural heritage of the state and the places to visit in the state.	01	50
Program on Awareness to Avoid Wastage of Food	NSS unit in collaboration with “Save Food Save Nation”, an NGO from Aurangabad.	Interactive talk by Mr. Kulkarni	01	All Staff and Students= 235
Participation of NSS volunteer Mr. Navnath Vilas Honmane in State Level Residential Camp- Ek Bharat Shrestha Bharat at Shendurni, Jalgaon and Sakri, Dhule.	NSS unit in association with A. R. B. Garud Arts, Commerce and Science College, Shendurni, Tal. Jamner, Dist Jalgaon.	State Level Residential Camp- Ek Bharat Shrestha Bharat	01	01
Participation of NSS volunteer Mr. Pravin Prakash Sonune in State Level Residential Camp- Ek Bharat Shrestha Bharat at Shendurni, Jalgaon and Sakri, Dhule.	NSS unit in association with Kavayitri Nahinabai Chaudhari North MaharashtraUniversity, Jalgaon and V. V. Mandal Sitaram Govind patil Arts, Science and Commerce College, Sakri, Dist. Dhule at Shri Kshetra Nagai-Kokle, Tal.	State Level Residential Camp- Ek Bharat Shrestha Bharat	01	01

	Sakri.			
3.5 Collaborations				
3.5.1 Number of Collaborative activities for research, faculty exchange, student exchange during the year				
Nature of Activity	Participant	Source of financial support	Duration	
Research	Prof. U. K. Patil and Dr. Yogesh Shouche, National Centre for Microbial Resource (NCMR) (National facility funded by the Department of Biotechnology), NCCS, Pune	Nil	Throughout the year	
3.5.2 Linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the year				
Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration (From-To)	Participant
Research collaboration	Sharing of nanoparticle characterization facility	Linkage with Dr. A. K. Gade & Prof. M. K. Rai, Department of Biotechnology, SGB Amravati University, Amravati.	2012 till date	Mr. I. R. Gupta
Research consultancy	Gamma irradiation of seed samples	Ahmednagar College, Ahmednagar.	02.07.2019	Mr. S. G. Kulkarni
Research consultancy	Gamma irradiation of samples	Maulana Azad College, Aurangabad.	15.07.2019	Mr. S. G. Kulkarni
Research consultancy	Mutation breeding of sunflower	Department of Botany, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.	19.12.2019	Dr. A. N. Salve
Academic	Work as Session Chairman in National Conference on Emerging Transdisciplinary Approaches in Bioscience.	Deogiri College, Aurangabad.	23.12.2019 to 24.12.2019	Dr. A. N. Salve
Research consultancy	Induction of mutation in <i>Vigna radiata</i>	New Arts, Commerce and Science College, Ahmednagar	12.06.2019	Mr. S. G. Kulkarni
Research consultancy	Gamma irradiation of seed samples	New Arts, Commerce and Science College,	29.07.2019	Mr. S. G. Kulkarni

		Ahmednagar		
Research	M.Sc. students' research project and own research work.	Department of Biotechnology SGB Amravati University Amravati	2019-20	Dr. R. P. Bhagat
Research	Academic interactions	COCSIT College, Latur	2019-20	Dr. R. P. Bhagat
Research	M.Sc. students' research project and own research work.	Beej Sheetal Ltd. Jalna	2019-20	Dr. R. P. Bhagat
Research	M.Sc. students' research project and own research work.	Paul Haberd DNA Barcoding center Dr. BAMU University Aurangabad.	2019-20	Dr. R. P. Bhagat
Research	Experimental work	NCCS, Pune.	Since 2015	Prof. U. K. Patil
Research	Experimental work	Dr. Yogesh Shouche, National Centre for Microbial Resource (NCMR) (National facility funded by the Department of Biotechnology), NCCS, Pune.	Since 2015	Prof. U. K. Patil
Training in Diagnostics to Ms. Priyanka Wankhare (PG Student), Department of Microbiology.	Summer training/ Laboratory Technician	Dr. Santosh Tathe (MD, Microbiology), Detect Diagnostics Advanced Pathology and Microbiology Lab, Aurangabad.	01.05.2019 to 31.07.2019	Prof. U. K. Patil
Training to Ms. Shruti Lavekar (PG Student), Dept. of Microbiology.	Summer Course on Natural Product Chemistry: Synthesis, Isolation and Application.	MACS-Agharkar Research Institute, Pune.	27.05.2019 to 31.05.2019	Prof. U. K. Patil
Training to Mr. Ajinkya Deshmukh (PG Student), Dept. of Botany.	Training in Key Biodiversity...in Association with BNHS, funded by MoEFCC.	Nagpur.	2019-20	Dr. A. N. Salve
Training to Mr. Yogesh Chavan (PG Student), Dept. of Botany.	Training in Key Biodiversity...in Association with BNHS, funded by MoEFCC.	Nagpur.	2019-20	Dr. A. N. Salve

Training to Miss. Shital Jarare (PG Student), Dept. of Botany.	Training in Seaweed Cultivation and Processing Technology (SEA-CPT) under CSIR integrated skill initiative training program.	CSMCRI, Bhavnagar	18.12.2019 to 20.12.2019	Dr. A. N. Salve
Training to Ms. Tanvi Umakant Khandekar in “Geological and Geo-morphological study in and around Narkhed, Nagpur, District Maharashtra”.	Summer Training	National Environment Engineering Research Institute, Nagpur, Maharashtra	15.05.2019-15.07.2019	Dr. K. M. Wanjarwadkar
Training to Mr. Musaddiq Mohd. Moin Naik on “Pipette Analysis from the core sediments of Gulf of Cambay”.	Summer Training	Institute of Seismological Research, Gandhinagar, (DST) Gujarat	25.05.2019-15.06.2019	Dr. K. M. Wanjarwadkar
Winter training to Mr. Akash Karande on “Usefulness of MT in hydrogeologic studies”.	Winter Training	CSIR- National Geophysical Research Institute, Hyderabad.	02.12.2019 to 14.01.2020	Dr. K. M. Wanjarwadkar
Examination	Examiner for M.Sc. Biotechnology	Institute of Biosciences and Technology, Aurangabad.	23.11.2019	Dr. Mrs. M. S. Patil
Examination	Examiner for B.Sc. Forensic Science	Govt. Institute of Forensic Science, Aurangabad.	03.10.2019	Dr. R. P. Bhagat
Examination	Examiner for M.Sc. Biotechnology	Deogiri College, Aurangabad.	20.11.2019 to 21.11.2019	Mrs. P. M. Sonawane
3.5.3 MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year				
Organisation	Date of MoU signed	Purpose and Activities	Number of students/ teachers participated under MoUs	
Nil	Nil	Nil	Nil	

CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES		
4.1 Physical Facilities		
4.1.1 Budget allocation, excluding salary for infrastructure augmentation during the year		
Budget allocated for infrastructure Augmentation (Rs.)	Budget utilized for infrastructure development (Rs.)	
2,87,000.00	2,87,000.00	
4.1.2 Details of augmentation in infrastructure facilities during the year		
Facilities	Existing	Newly added
Campus area	25 acre (12,852 sq. m.)	Nil
Central Library	01	Nil
Class rooms	10	Nil
PG Laboratories	10	Nil
Research Laboratories	05	Nil
Special Instrument Laboratories	05	Nil
Seminar Halls	03 (Geology, Biotechnology and Biophysics)	Nil
Classrooms with LCD facilities	08 (Botany 2, Geology1, Biotechnology2, Microbiology2 & Biophysics1)	Nil
Classrooms with Wi-Fi/ LAN	02 (Biotech)	Nil
Seminar halls with ICT facilities	03	Nil
Video Centre	00	Nil
Playground	01	Nil
Auditorium	01	Nil
Health Center	01	Nil
No. of important equipments purchased (\geq 1-0 lakh) during the current year.	17	4
Value of the equipment purchased during the year (Rs.)	58,45,372	8,02,440
Others	Nil	Nil

4.2 Library as a Learning Resource									
4.2.1 Library is automated {Integrated Library Management System -ILMS}									
Name of the ILMS software	Nature of automation (fully or partially)		Version		Year of automation				
SOUL	Partially		2.0		2012				
4.2.2 Library Services:									
	Existing		Newly added		Total				
	No.	Value	No.	Value	No.	Value			
Text Books	2616	1875634.00	72	29225	2688	1904859.00			
Reference Books	7342	2579249.00	84	86343	7426	2665592.00			
e-Books	-	-	84086437	-	840864437	-			
Journals	25	148703.00	14	-	14	-			
e-Journals	-	-	-	-	-	-			
Digital Database	-	-	-	-	-	-			
CD & Video	85	-	17	-	102	-			
Library automation	-	-	-	-	-	-			
Weeding (Hard & Soft)	-	-	-	-	-	-			
Others (specify)	-	-	-	-	-	-			
4.3 IT Infrastructure									
4.3.1 Technology Upgradation (overall)									
	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Available band width (MGBPS)	Others
Existing	86	-	72	19	-	08	48	10 MBPS	11
Added	-	-	-	-	-	-	-	-	-
Total	86	-	72	19	-	08	48	10 MBPS	11
4.3.2 Bandwidth available of internet connection in the Institution									
NMEICT 10 MBPS									
4.3.3 Facility for e-content									
Name of the e-content development facility				Provide the link of the videos and media centre and recording facility					
Nil				Nil					
4.3.4 E-content developed by teachers such as: e-PG-Pathshala, CEC (under e-PG-Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc									
Name of the teacher		Name of the module		Platform on which module is developed		Date of launching e - content			
Nil		Nil		Nil		Nil			

4.4 Maintenance of Campus Infrastructure			
4.4.1 Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year			
Assigned budget on academic facilities (Rs.)	Expenditure incurred on maintenance of academic facilities (Rs.)	Assigned budget on physical facilities (Rs.)	Expenditure incurred on maintenance of physical facilities (Rs.)
4,65,000	4,65,000	1589000	1589000
Total	4,65,000	1589000	1589000
4.4.2 Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (<i>maximum 500 words</i>) (information to be available in institutional Website, provide link)			
http://www.inosca.org/iqac/procedures-policies-2019-20.pdf			
CRITERION V - STUDENT SUPPORT AND PROGRESSION			
5.1 Student Support			
5.1.1 Scholarships and Financial Support			
	Name /Title of the scheme	Number of students	Amount in Rupees
Financial support from institution	Nil	00	00
	Freeship (SC)	03	3480.00
	Freeship (VJNT)	18	38,715.00
	Freeship (OBC)	32	2,14,380.00
Financial support from other sources			
a) National	GOI- SC	18	2,59,534.00
	GOI- PMS- ST	03	3,447.00
	GOI- PMS- OBC	34	107,528.00
b) International	Nil	00	00
Total		108	6,27,084.00
5.1.2 Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counseling and Mentoring etc.,			
Name of the capability enhancement scheme		Date of implementation	Agencies involved
Entrepreneurship Development		22/08/2019	Dr. Anand Yadav, Director, TechAnand Scientific Pvt.Ltd. Amravati
Interview Skills for Research Lab		20/04/2020	Mr. Ashish Bijewar, PhD

			Scholar, IISC Bangalore
Lecture on “Fundamental Rights of the people under the Indian Constitution” by Shri. Rahul Gawde, Asst. Prof., Govt. Institute of Forensic Science, Aurangabad.	14/02/2020	50	NSS unit in collaboration with Govt. Institute of Forensic Science, Aurangabad.
Lecture on “Gandhian Thoughts” by Dr. Arun Wahul, Vivekanand College, Aurangabad.	19/02/2020	50	NSS unit in collaboration with NSS Department of the affiliating University.
Lecture on “A Modern Scientific View on Social Structure in India”, by Dr. S. G. Narwade, Assistant Prof., Govt. Institute of Forensic Science, Aurangabad	17/02/2020	50	NSS unit in collaboration with Govt. Institute of Forensic Science, Aurangabad.
Interactive session on “Personality Development” by Prof. Satish Mokashi, Professor, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.	16/02/2020	50	NSS unit in collaboration with NSS Department of the affiliating University.
Lecture on “Law and Justice- Current social scenario and the youth responsibility” by Shri. Rahul Bharti, Asst. Prof., Govt. Institute of Forensic Science, Aurangabad.	15/02/2020	50	NSS unit in collaboration with Govt. Institute of Forensic Science, Aurangabad.
Lecture on “Nutritive value of edible algae” by Dr. A. N. Salve	18/02/2020	50	NSS unit in collaboration with Govt. Institute of Forensic Science, Aurangabad.
Lecture on “Water conservation practices and thei importance” by Dr. K. M. Wanjarwadkar	19/02/2020	50	NSS unit in collaboration with Govt. Institute of Forensic Science, Aurangabad.
Yoga Interactive Demonstration and Lecture by Yoga Trainers, Ku. Rucha Jadhav and Ku. Jyoti Waghmare for mental and physical stability and prober body posture.	21/06/2020	100	NSS unit in collaboration with Govt. Institute of Forensic Science, Aurangabad.
Pre-Ph.D. Course in Geology	18.01.2020 to 15.03.2020	25	Department of Geology, Govt. Institute of Science, Aurangabad.

5.1.3 Students benefited by guidance for competitive examinations and career counseling offered by the institution during the year					
Year	Name of the scheme	Number of benefited students by Guidance for Competitive examination	Number of benefited students by Career Counselling activities	Number of students who have passed in the competitive exam	Number of students placed
2019	Seminar on “Opportunities in Pharmaceutical Industries for Life Science Students” by Mr. Mr. Maitreya Mudkavi, Shodh AdvanTech LLP , Aurangabad	-	All students of the Biotechnology, Biophysics, Botany and Microbiology Departments.	-	3
2019	Seminar on “Opportunities in Pharma Sector for life Science Students” by Mr. Rushikesh Deshpande, Asst. Manager, Eurolife Healthcare, Aurangabad	-	All students of the Biotechnology, Biophysics, Botany and Microbiology Departments.	-	3
2019	Seminar on “Entrepreneurship Development” by Dr. Anand Yadav, Director, Tech Anand Scientific Pvt.Ltd. Amravati	-	Students of Biotechnology Department.	-	3
2020	Seminar on “Interview Skills for Research Lab ” by Mr. Ashish Bijewar, PhD Scholar, IISC Bangalore	-	Students of Biotechnology Department.	-	3
2020	Seminar on “Current Research Trend in Genomics”, by Mr. Hanuman Kale, PhD CCMB Hyderabad	-	Students of Biotechnology Department.	-	-

5.1.4 Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year		
Total grievances received	No. of grievances redressed	Average number of days for grievance redressal
Nil	Nil	-

5.2 Student Progression

5.2.1 Details of campus placement during the year

On campus			Off Campus		
Name of Organizations Visited	Number of Students Participated	Number of Students Placed	Name of Organizations Visited	Number of Students Participated	Number of Students Placed
02	03	00	05	17	10

5.2.2 Student progression to higher education in percentage during the year					
Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of Programme admitted to
2019-20, December 30, 2019	Ms. Snehal S. Kulkarni	M.Sc. Microbiology	Department of Microbiology	MACS-Agharkar Research Institute, Pune.	Junior Research Fellow' under the DBT Sponsored Project (SP-300), "Production, nano-delivery and validation of viral vaccine against nodavirus of fish."
5.2.3Students qualifying in state/ national/ international level examinations during the year (eg: NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)					
Items		No. of Students selected/ qualifying		Registration number/roll number for the exam	
DBT-JRF of Biotech Consortium India Ltd. N. Delhi		Ms. Snehal Kulkarni		Award letter no. DBT/JRF/BET-19/1/2019/AL/62 dated 04.07.2019	
NET (CSIR)-LS Jun 2019		Mr. Bhaurao Chausaste		00	
SET- Jun 2019		Ms. Priyanka Giri		759920	
GATE-Mar 2020		Mr. Deepak More		XL20S32030269	
		Mr. Swadhyay Phatangare		XL20S32029394	
Civil Services		Nil		00	
State Government Services		Nil		00	
Any Other		Nil		00	
5.2.4 Sports and cultural activities / competitions organized at the institution level during the year					
Activity			Level	Participants	
Annual Sports			Institute Level	192	
Annual Gathering Cultural Events			Institute Level	100	
Department of Biotechnology celebrated “Biotechnology Day” on 14 th November, 2019 by organizing Speech Competition and Essay Competition for the students.			Institute Level	10	
Department of Biotechnology organized Speech Competition on Biotechnology Day under the aegis of the Biotechnology Students’ Council on 14.11.2019.			Institute Level	08	
Department of Biotechnology organized a debate competition on “Whether Life should be made Immortal or Not?” under the aegis of the Biotechnology Students’ Council on 01.10.2019.			Institute Level	24	
Department of Biotechnology organized a Poster Competition on the topic “Immunology” under the aegis of the Biotechnology Students’ Council on 16.10.2019.			Institute Level	24	

MicroCosm-Student Club of the Department of Microbiology celebrated 197 th Birth Anniversary of Sir Louis Pasteur on 27.12.2020 by organizing an Intercollegiate Research Paper Presentation Competition.	Intercollegiate Level	01
Department of Microbiology organized online National Level Microbiological Contest on 25.01.2020.	National Level	2227 students from 104 colleges
Department of Microbiology organized 19 th National Level MicrobioCanvas competition on 25.01.2020.	National Level	110 students from 41 Colleges
Department of Microbiology organized 19 th National Level Microbiolympiad Competition on 14.02.2020 with overwhelming success.	National Level	90 students 27 Colleges
MicroCosm-Student Club of the Department of Microbiology organized programme to celebrate National Science Day with the National theme “Women in Science” on 28.02.2020.	Institute Level	21

5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/ medal	National/ International	Sports	Cultural	Student ID number	Name of the student
21-12-2019	Participation	State Level	-	Bapusaheb Kaldate State Level College Elocution Competition, organized by Bapu-Sudha Kaldate Pratishthan, Aurangabad.	-	Mr. Ajinkya Vijayrao Deshmukh
21-12-2019	Participation	State Level	-	Bapusaheb Kaldate State Level College Elocution Competition, organized by Bapu-Sudha Kaldate Pratishthan, Aurangabad.	-	Ms. Jagruti Pandurang Sharma
28-09-2019	Debate Toppers	Local Level	-	Debate Competition organized by Divya Marathi newspaper	-	Ms. Sharma Jagruti Pandurang, Ms. Nishan Padole, Ms. Shruti Mahajan

28-09-2019	Debate Toppers	Local Level	-	Debate Competition organized by Divya Marathi newspaper	MBL19-20/2013	Ms. Rutuja Patil
28-09-2019	Participation	Local Level	-	Debate Competition organized by Divya Marathi newspaper		Ms. Diksha Kharat, Ms. Bhagyashree Wavre, Mr. Vishal Bhavar, Mr. Yogesh Thorat, Ms., Mr. Riyaz Shaikh, Mr., Mr. Sagar Birasdar, Ms. Alka Dhore, Mr. Sandeep Zavak, Ms. Bharati Khandare, Mr. Yashodhan Patil, Ms. Sampada Nagpure, Mr. Muntajim Khan, Mr. Aakash Karande, Mr. Ms. Diksha Thakur, Mr. Ajinkya Deshmukh.
28-09-2019	Participation	Local Level	-	Debate Competition organized by Divya Marathi newspaper	MBL19-20/1014	Mr. Dnyaneshwar Adhude
28-09-2019	Participation	Local Level	-	Debate Competition organized by Divya Marathi newspaper	MBL19-20/2015	Ms. Vaidehi Pisu
28-09-2019	Participation	Local Level	-	Debate Competition organized by Divya Marathi newspaper	MBL19-20/2004	Mr. Anand Indore
14-04-2020	Consolation Prize	National Level	-	National Open Essay Competition organized by Takshashila Pratishthan, Ma. Shri. Datta Bhau Ghuge Mitra Mandal, Beed	MBL19-20/1008	Ms. Nikita Shinde

<p>5.3.2 Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)</p>
<p>Members of the Student Council are elected through Institute Level Elections as per directives given by the affiliating University. In the current year, there were no directives issued by the University to conduct the elections. Hence, the Student Council was not constituted.</p>
<p>5.3 Alumni Engagement</p>
<p>5.3.1 Whether the institution has registered Alumni Association? Yes/No, if yes give details (maximum 500 words):</p>
<p>The institute has alumni association named as “ALUMNI OF INSTITUTE OF SCIENCE” It is registered under मुंबई सार्वजनिक विश्वस्तव्यवस्था अधिनियम १९५० (सन १९५० चा मुंबई अधिनियम, २९) with Deputy Charity Commissioner, Aurangabad. The registration number is F11 217 (A). This association has drafted memorandum and rules & regulations adopted unanimously at a special general meeting in Institute’s conference hall. The registered office of association will be situated at Government Institute of Science, Aurangabad. The executive body of association consists of 11 members including Director of the Institute is Ex-officio Chairman and other members include Vice-chairman, Secretary, Joint Secretary, Treasurer and 6 Executive Members. The members of this association are Ex-students of this institute only. The association is formed with following broad aims.</p> <ul style="list-style-type: none"> • To inculcate research consciousness and professional exposure among existing students through Lectures and demonstrations by alumni working in various fields • To foster collaboration with industries, research institutions via alumni mediation for arranging internship, study visits, short term trainings, undertaking summer projects, campus interviews, interaction meets, group discussion etc. • To undertake and strengthen the research projects of mutual benefits with various industries and research organizations utilizing sophisticated instrumentation and expertise on both the sides and simultaneously involving existing students in these projects mentoring and exposing them in multidisciplinary aspects. • To encourage and undertake socio-educational activities like exhibition, science at doorsteps seminars, workshops, conferences which are consequent upon our interdisciplinary approach. • To felicitate the bright students contributing innovations in different fields. • To help financially hard-pressed students • To perform all other acts as may be incidental or conducive to the attainment of any one or all of the abovementioned objectives. <p>The membership drive and appeal for alumni contribution are being executed presently.</p> <p>The “ALUMNI OF INSTITUTE OF SCIENCE” in conjunction with Government Institute of Science, Aurangabad has undertaken student centric activities for their overall development under “STEP-IN” (STudents EmPowerment INitiative), an initiative venture to establish Industry-Institute Advisory Forum and implement action programmes for Human Resource Development in respective fields. Our vision statement of STEP-IN is, “<i>to be most admired Industry-Institute advisory forum engaging youngsters in education and equip tomorrow’s workforce with relevant skills by linking with industry requirements</i>” to march towards mission as follows -</p> <p><i>“We will inculcate employability/entrepreneur skills in the students by high quality academic experience, developing performance competencies through hands on training in modular employable skills and helping them to meet job-fit skill requirement of the industry”</i></p>

<p style="text-align: center;">Strategy for execution of activities under STEP-IN</p> <ul style="list-style-type: none"> ➤ Establish strong between Industry and Institute co-ordination ➤ Develop and Translate Campus to Corporate curricula ➤ Undertake skill development initiatives by blending modular employable skill programs <p>Several lecture series, interaction meetings and campus interviews were organized under this banner.</p>
5.3.2 No. of registered enrolled Alumni: Nil
5.3.3 Alumni contribution during the year (in Rupees) : Nil
<p>5.3.4 Meetings/activities organized by Alumni Association :</p> <ul style="list-style-type: none"> • Each Department has a database of alumni and organizes meetings with the alumni. • A unique activity is initiated as Alumni lecture series (GISA initiated alumni lecture series) wherein alumni of the institute who have made marks in various walks of life are invited to deliver lectures and have a dialogue with the students about the contribution of the Institute in building their career. This helps to motivate the students. • The Alumni are invited to share their expertise and deliver some lectures from academic curriculum. • Alumni support to the Institution and each individual department include announcements and communications about new openings and opportunities available at different institution and industries they are attached with, thus acting as a bridge for ensuring the placement of fresh postgraduates. • Alumni support Training and Placement Cell in organizing campus interviews, recruitment and offering summer training etc. • Biotechnology department has initiated the activity named ‘Walk The Talk’, where alumni members deliver lectures and shares their expertise and experience with the students.
CRITERION VI –GOVERNANCE, LEADERSHIP AND MANAGEMENT
6.1 Institutional Vision and Leadership
6.1.1 Mention two practices of decentralization and participative management during the last year (maximum 500 words)
<p>The Principal delegates the powers to the Heads of Departments to impart the curriculum and syllabi. In turn the Heads of various departments allocate the responsibilities and work amongst their departmental colleagues. College has installed and empowered IQAC for achieving excellence in the institutional processes. The office administration is geared through Registrar to help general administration ranging from admission, scholarships, purchases, estate management, infrastructure maintenance etc. Various committees are formed for organizing co-curricular, extracurricular and sports activities. Opinions and suggestions that are expressed in meetings are given due consideration and promptly acted upon by the Director and other faculty. The Director encourages and supports the participation of students and teachers in seminars, conferences, workshops, Ph.D & M.Phil. programmes, Refresher Course and Orientation programmes, publication of research papers, publication of books and many such steps to ensure creation and enrichment of knowledge. The Local Governing Body Meetings, staff meetings, directives issued by the government, visit of the government authorities, activities of the student forum for co-curricular and extracurricular activities are all purposeful in fine tuning with the institutional processes and activities to ensure compliance with our national policies of Higher Education and also the vision, mission and goals of our institution.</p>
<p>6.1.2 Does the institution have a Management Information System (MIS)?</p> <p>Yes/No/Partial: Yes</p>

6.2 Strategy Development and Deployment
6.2.1 Quality improvement strategies adopted by the institution for each of the following (within 100 words each):
<p><input type="checkbox"/> Curriculum Development:</p> <p>The institute implements the curriculum provided by our affiliating University. Teachers are deputed to participate in orientation courses, refresher courses, seminars, conferences, workshops, symposia etc., to enable them to keep themselves abreast with latest developments in the respective fields of their specializations. Curriculum designing and restructuring of courses is the prerogative of the affiliating University. However, the faculties of our College make significant contributions in the curriculum design and development. They act as BOS members and attend workshops on designing of syllabi.</p>
<p><input type="checkbox"/> Teaching and Learning:</p> <p>Systematic academic planning, use of the modern teaching-learning aids and extensive ICT adoption are incorporated for effective delivery of the curriculum. Remedial mentoring for slow learners and special tasks for advanced learners are encouraged. IQAC has made the teaching and learning process student centric and transformed the student community into lifelong learners by way of adopting the mechanisms: teaching with case studies, focus on teaching with digital aids, learning with guided assignments, seminars, student seminars and to make teaching more interesting and activity based, teachers are encouraged to organize study tours, field visits and industrial visits.</p>
<p><input type="checkbox"/> Examination and Evaluation:</p> <p>Institute follows examination and evaluation reforms mandated by the affiliating University. Institute appoints a faculty member as the In-charge of the Exam. Committee to conduct institute level centralized internal examinations. The campus is equipped with CCTV to ensure transparency. The Committee conducts mid-term and End-term internal examinations each semester by adhering to the academic calendar. Teachers set question papers and hand over to the committee to ensure transparency. The internal test marks and test papers are shown to students and elaborately discussed in order to suggest refinements for further improvements.</p>
<p><input type="checkbox"/> Research and Development:</p> <p>Research culture is nurtured in the institute. The Institute encourages faculty members to pursue PhD, submit proposals for Minor and Major Research projects to get financial assistance sanctioned publish papers in UGC listed journals, present their research findings among peers through conferences, symposia, and seminars. The institute extends consultancy services to professional and industrial organizations in the field of expertise. Free unlimited internet access for both staff and students is available. Students are also encouraged to involve in research activities and participate in conferences, seminars and research competitions such as AVISHKAR, Poster competitions and oral presentation. Guest lectures on research methodology, orientation are given to students and are encouraged to participate actively.</p>
<p><input type="checkbox"/> Library, ICT and Physical Infrastructure / Instrumentation:</p> <p>The institute has central Library housed in an independent building with two floors having spacious reading hall, separate halls for books and periodicals. The library has a collection of over 7000 text books, over 2000 reference books and back volumes of highly acclaimed journals such as Science, Nature, Scientific American, Journal of Bacteriology, Journal of Biological chemistry, Various Annual Reviews etc. The library provides access to e-books and e-journals through Digital consortium.</p> <p>The Institution is located in serene picturesque and a pollution free campus in an environment conducive to learning. The institute has installed CCTV as safety and discipline measure in the campus, installation of water purifiers for providing pure and clean drinking water, well equipped auditorium, free Internet access in the departments to students and teachers. The institute strives to procure funds for development of new infrastructure and renovation of existing infrastructure from various funding agencies such as RUSA, DPDC</p>

<p>and state government. The institute has developed analytical instrumentation facility with funding from central government DST-FIST scheme. In addition the institute gets funding for purchase of instruments and accessories. The institute offers Gamma Irradiation, Ground Water survey, Forensic investigation services to academicians, industrial professionals and farmers. The institute houses museum and herbariums in departments of Geology and Botany respectively.</p>
<p><input type="checkbox"/> Human Resource Management:</p> <p>The faculty members are appointed by the government through MPSC. In order to cater to additional workload every year the qualified candidates are entrusted with teaching activity on Clock hour basis by following UGC and state government norms. Expert Professionals are invited to deliver guest lectures to keep students updated with latest developments. Faculty members are encouraged to take part in FDPs, STPs, orientation and refresher courses to widen their knowledge horizons. The institute regularly encourages faculty members for timely submission of proposals for CAS placements and promotions. The teaching and nonteaching staff of institute is entitled to avail annual increments, leaves and other permissible benefits.</p>
<p><input type="checkbox"/> Industry Interaction / Collaboration:</p> <p>The institute offers Gamma Irradiation, Ground Water survey, Forensic investigation services to academicians, industrial professionals and farmers. Experts from industries deliver guest lectures and interact with students on various aspects. Industries and other professional organizations visit institute for campus interview and placements. Industries also employ students of the institutes based on recommendations of faculty whenever there are vacancies. Surrounding industries always extend their helping hand to organize field and industrial visits. Our College has established MoUs, collaborations and linkages with Biotech and pharma industries, agro-based research labs. Teachers visit industries and other professional organizations along with their students for carrying their research and gain practical knowledge about the working of such units.</p>
<p><input type="checkbox"/> Admission of Students:</p> <p>As per the instructions from affiliating university the institute conducted PGCET examination for admission of students in the institute. The central admission committee monitored and Department Admission committees execute the admission process as per regulations of the State Government and affiliating university to ensure transparency in admission process.</p>
<p>6.2.2 : Implementation of e-governance in areas of operations:</p>
<p><input type="checkbox"/> Planning and Development</p> <p>The institute maintains the website www.inosca.org. The Vision and Mission Statement, e-prospectus, eligibility criteria for admissions, academic and physical infrastructure facilities available for the students, syllabi, academic calendar, admission procedure, are displayed on the institutional website. Most of the communication related with planning and development are executed through e-mail.</p>
<p><input type="checkbox"/> Administration</p> <p>The Administration of the Institute functions with E-governance system at Government and institute level. The institute is connected through high-speed internet of bandwidth 10 MBPS. The institute implements online MIS in order to provide vital institute statistics to the State Government. The Institute participated in online AISHE system to update the Central Government regarding institute's current academic information. Every year the institute participates in online affiliation process of the affiliating university and ensures the adherence to the prescribed guidelines. The Institute has Biometric attendance for teaching and non-teaching staff. The Institute campus is equipped with CCTV Cameras at Strategic places to maintain discipline and ensure safety of students, staff and campus on the whole.</p>
<p>• Finance and Accounts</p> <p>The college uses the Sevarth system for preparation and disbursement of salary bills. The purchases are done</p>

through Gem portal or e-tendering as per government procedure. Online tenders, tender publication, opening and purchase order issue is through online Maha-Tender system. The payments of salaries to staff and payments above Rs 100/ to suppliers and vendors are done through Central Master Pay System (CMP) which involves electronic transfer of money via Bank account.

☐ **Student Admission and Support**

Institute processes admission through departmental admission committees. The students are provided with computational facilities for Scholarship Form filling. The affiliating university conducted PG CET exam for admission of students to various affiliated colleges. The procedure for application and processing of the applications was done online. The admission committee of the institute acted as liaison in this online admission process. The seats for students were allotted based on merit in PG CET.

☐ **Examination**

The College has the separate Examination committee for conducting mid-term and End-term internal examination. The institute participates in online pre and post examination processes of university exam such as exam form filling and submission, hall ticket generation and printing, internal marks uploading, practical marks uploading etc.

6.3 Faculty Empowerment Strategies

6.3.1 Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
-	Nil	Nil	Nil	Nil

6.3.2 Number of professional development / administrative training programmes organized by the College for teaching and non-teaching staff during the year

Year	Title of the professional Development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	Dates (from-to)	No. of participants (Teaching staff)	No. of participants (Nonteaching staff)
	Nil	Nil	Nil	Nil	

6.3.3 No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	Date and Duration (from – to)
“46 th Orientation Programme” held at HRDC, S. G. B. Amravati University, Amravati.	Dr. I. R. Gupta	10.09.2019 to 01.10.2019
Managing Online Class and Co-creating MOOCs	Dr. I. R. Gupta	20/04/2020 to 06/05/2020
SWAYAM ARPIT ONLINE COURSE CERTIFICATION-Skills For New Educational Architecture	Dr. I. R. Gupta	01/09/2019 to 15/01/2020
SWAYAM ARPIT ONLINE	Dr. R. P. Bhagat	01/09/2019 to 15/01/2020

COURSE CERTIFICATION-Skills For New Educational Architecture		
Managing Online Class and Co-creating MOOCs	Dr. R. P. Bhagat	20/04/2020 to 06/05/2020
One Week Online Faculty Development Programme on Moodle : Learning Management System	Dr. R. P. Bhagat	07/05/2020 To 12/05/2020
SWAYAM ARPIT ONLINE COURSE CERTIFICATION-Skills For New Educational Architecture	Mr. H.P.Panakkal	01/09/2019 to 15/01/2020
Managing Online Class and Co-creating MOOCs	Mr. H.P.Panakkal	20/04/2020 to 06/05/2020
One Week Online Faculty Development Programme on Moodle : Learning Management System	Mr. H.P.Panakkal	07/05/2020 To 12/05/2020
Refresher course in Life Sciences held at HRDC Sant Gadge Baba Amravati University Amravati.	Dr. R. P. Bhagat	07.01.2020 to 20.01.2020
STTP Course on “History of life and Mass Extinction Events GIAN, HRDC, Govt. of India, Academic staff college, Sant Gadge Baba University, Amravati.	Dr. M. A. Sonar	14/10/2019 to 18/10/2019
STTP on” New Dimensions in Research Breaking: New Grounds”, HRDC, Dr. H.S. Gaur University, Sagar, M.P.	Dr. M. A. Sonar	10/02/2020 to 15/02/20
Online (MOOC, (ARPIT)) inter-disciplinary ‘Refresher Course on Teacher and Teaching in Higher Education’	Dr. M. S. Patil	01.09.2019 to 31.12.2019
Online (MOOC, NPTEL) FDP on ‘Biochemistry’, coordinated by IIT, Kharagapur	Dr. M. S. Patil	27 January to 27 April 2020
Swayam Online ARPIT Course, 'Refresher Course on Teacher and Teaching in Higher Education'.	Shri. V. W. Patil	Certification date: 16-02-2020
MOOC Course on Swayam, 'Academic Writing'.	Shri. V. W. Patil	July-October 2019 Certification date: 9-11-2019

Short-term course on “History of Life and Mass Extinction Events”, organized by Sant Gadge Baba Amravati University, Amravati.	Dr. M.A. Sonar	14.10.2019 to 18.10.2019		
STC in Yoga and Wellness organized by UGC, under HRDC, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.	Dr. S. P. Bidarkar	08.07.2019 to 13.07.2019		
Short Term Course on MOOC, UGC-HRDC, Dr. Babasaheb AMbedkar Marathwada University, Aurangabad.	Dr. A. G. Jadhav	19.01.2020 to 27.01.2020		
Refresher Course, UGC	Dr. J. J. Bhuktar	30.01.2020		
6.3.4 Faculty and Staff recruitment (no. for permanent/fulltime recruitment):				
Teaching		Non-teaching		
Permanent	Fulltime	Permanent	Fulltime/temporary	
22	22	17	17 FT	
6.3.5 Welfare schemes for				
Teaching	Co-operative society, housing loans, vehicle loans, computer loans, medical reimbursement facility			
Non-teaching	Co-operative society, residential quarters, medical reimbursement facility.			
Students	Scholarships, Book Bank facility			
6.4 Financial Management and Resource Mobilization				
6.4.1 Institution conducts internal and external financial audits regularly (within 100 words each)				
This Institute is run by Department of Higher and Technical Education, Govt. of Maharashtra. Therefore, internal financial audit provision is not permissible. However, regular or periodical audit and office inspection is done by competent authorities.				
6.4.2 Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)				
Name of the non-government funding agencies/ individuals	Funds/ Grants received in Rs.		Purpose	
Nil	Nil		Nil	
6.4.3 Total corpus fund generated- Nil				
6.5 Internal Quality Assurance System				
6.5.1 Whether Academic and Administrative Audit (AAA) has been done?				
Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	University Affiliation	Yes	Audit Committee
Administrative	No	-	Yes	Audit Committee

6.5.2 Activities and support from the Parent – Teacher Association (at least three)			
<ul style="list-style-type: none"> Parent-teacher association is not established in the Institute. However, parents are invited for feedback on the curriculum. Parents and teachers meet regularly and parents are kept apprised of the Departmental and Institutional activities. Each year parents' meet is held in all the Departments. During the meetings, the students, their parents, Director of the Institute, Heads of the Departments and faculty members have a healthy interaction cum discussion on different issues concerning overall improvement and sustenance of quality in the education being imparted through the different courses in the Institute. Teachers give regular feedback to parents regarding the progress of students. 			
6.5.3 Development programmes for support staff (at least three)			
<ul style="list-style-type: none"> The non-teaching staff members are motivated to use computers for the maintenance of the records, admission process and other departmental work. The non-teaching staff members are encouraged to participate in training programs. 			
6.5.4 Post Accreditation initiative(s) (mention at least three)			
Section	Item	Initiatives undertaken	Year
2.1	Curricular Aspects		
2.1.2	Academic flexibility	CBCS has been introduced in the Institute since 2015-16. Students have the choice of selecting one service course out of those offered by the affiliating University.	
2.1.4	Feedback system	Feedback is collected, analyzed and recommendations are given to respective departments for implementation and improvements in teaching-learning. Feedback is collected by designated personnel from another department in order to maintain transparency. In order to gauge the satisfaction level of students regarding the teaching-learning experience in the Institute, Student Satisfaction Survey is conducted for students graduating out from the institute.	
2.2.2	Catering to student diversity	Freshers are offered induction program in the form of Departmental counseling by HODs and faculty. In addition, Library orientation is schedules at the start of the new academic year in order to allow them to get acquainted with huge reading resources and facilities available in the Central Library. Visit of the students to the other Departments is arranged in order to introduce the students to the laboratory facilities and expertise available in the other departments and provide opportunity to the students to interact with faculty members of the departments. The students derived advantage from this activity for the purpose of their PG research projects.	
2.2.6	Student performance and learning outcomes	Necessary initiatives for Academic and administrative audit has commenced. The internal audit has been carried out by designated faculty from the Institute. The necessary information for external audit has been submitted to the affiliating University.	
2.3.2	Research mobilization	Faculty members are encouraged to apply for research funding, emphasizing more on submission of inter-department collaborative research proposals. Faculty members have submitted collaborative proposals to government funding agencies. Students are mentored to submit applications for Summer Research Programmes under the Indian Academies of Science.	

2.3.3	Research facilities	Up gradation of research facilities is being continued. Laboratory utilities and equipment have been procured through DPDC funding. Sophisticated instrumentation as a central facility is being maintained in allied departments owing to paucity of trained staff for maintenance. The Institute received funding from RUSA for infrastructure, laboratory equipment, consumables and chemicals.
2.3.4	Research publications and awards	Faculty members are encouraged to publish papers in UGC listed journals. Students participated and presented research work in conferences and competitions. One Indian patent is granted to a faculty member. Another patent application with complete specifications is filed by the faculty member in the Indian Patent Office, Mumbai and necessary action is being taken as per communication from the IPO, Mumbai with regard to the application. Faculty members and students received awards and honours for innovations.
2.3.5	Consultancy	Necessary steps are being taken for exploring various avenues for consultancy by utilizing the potential and expertise of the faculty members. At present, faculty members provide consultancy in ground water exploration, water analysis, forensic investigations, gamma irradiation, mutagenesis experiments and studies on nanomaterials.
2.3.7	Collaboration	Steps are undertaken to explore possibility of developing new linkages for research activities and training of students. The Institute has initiated preliminary discussions with renowned institution, viz. TIFR, Mumbai. Students get the opportunity to work with experts and get field-experience/training under summer/winter training programmes.
2.4	Infrastructure and Learning resources	
2.4.1	Physical facilities for learning	Proposal for canteen facility is submitted to concerned government agency, viz. (PWD). However, due to paucity of funds, the facility could not be established. Fresh proposal for canteen facility submitted to RUSA has been approved. The facility will be established soon.
2.4.3	IT infrastructure	Wi-Fi facility is augmented in order to provide better internet connectivity to staff and students. The proposal for 5 smart classrooms establishment has been routed to RUSA.
2.5.2	Student progression	Students are provided guidance on career opportunities and competitive exams preparation. Placement initiatives are undertaken by the Placement Cell for on-campus and off-campus recruitment. A total of 08 students qualified National level competitive exams. Due to the COVID-19 pandemic, few (03) students got placements through the Placement Cell. As the situation improves, more placements are expected to take place. 01 student proceeded for higher education in a renowned National Institute after completion of PG.
2.5.3	Student participation and activities	Students encouraged to participate in co-curricular and extra-curricular activities. Students actively participate in annual cultural programme and sports organized by the Institute and other institutions. Students are encouraged to participate in co-curricular, extra-curricular activities and Avishkar competition.

2.7.1	Environment consciousness	Students carry out biodiversity analysis in the institute campus. The green coverage of the institute is enhanced through the activities of NSS unit.		
2.2.4	Vacant teaching posts	Three vacant posts of Assistant Professor in the Botany Department are filled up.		
2.5.1	Coaching for competitive exams	One-day free seminar on preparation for competitive exams was conducted. Faculty members regularly guide students for competitive examination preparations.		
6.5.5 a. Submission of Data for AISHE portal : (Yes /No)- Yes b. Participation in NIRF : (Yes /No)- No c. ISO Certification : (Yes /No)- No d. NBA or any other quality audit : (Yes /No)- No				
6.5.6 Number of Quality Initiatives undertaken during the year				
Year	Name of quality initiative by IQAC	Date of conducting activity	Duration (from-----to-----)	Number of participants
2019-20	Regular meeting of Internal Quality Assurance Cell (IQAC),	06.08.2019, 3pm to 4pm 14.01.2020, 4pm to 5pm	06.08.2019, 3pm to 4pm 14.01.2020, 4pm to 5pm	12 10
2019-20	Collection of feedback from students, alumni and parents; analyses of the feedback and suggestions to respective departments for improvement in teaching-learning. Student Satisfaction Survey and Analysis to estimate their satistisfaction on teaching-learning experience.	Each Semester of the academic year 2019-20.	NA	Feedback= 127 respondents, Student Satisfaction Survey= 80 respondents Alumni= 27 respondents, Parents’ feedback= 30 respondents
2019-20	Tapping of funds from funding agencies viz. DPDC and RUSA for development of infrastructure and laboratory through concerted efforts of respective committees.	NA	NA	Members of DPDC and RUSA Committees
2019-20	Seminar and Interactive Session on “Toxicologist- a gatekeeper redefining biomedical research” by Dr. Saurabh Vispute (Senior Scientist at Pfizer, Connecticut, USA), jointly organized by IQAC and Microcosm- Student Club of Mirobiology.	10-12-2019, 2hr	2pm to 3pm	All students and faculty= 218
2019-20	Mentoring the PG students for	NA	NA	Faculty members

	submission of research proposals for Summer Research Fellowships 2020 (SRF-2020)- preparation of resume, selection of research topic and preparation of research proposals.			Dr. A.V.Pethkar, Mr. S. G. Kulkarni and Mrs. V. N. Wadekar mentored 18 students.
2019-20	Interactive session by Mr. Jameel Hussain (SRF-2019 awardee) on Summer Research Fellowship Program-2020 organized by IQAC and Microcosm- Student Club of Microbiology.	29th November 2019,	5.00-6.00pm	All students= 218
2019-20	Encouraging faculty members to participate in the framing and revision of syllabus as a part of various committees in the University.	As per the University Schedule	As per the University Schedule	10 faculty members are members of BoS in the respective subjects of various Universities and the affiliating University and they actively contribute towards the revision/reframing of syllabi, viz. Mrs. V. N. Wadekar- Ad-hoc BoS in Biophysics, Mr. H. P. Panakkal- Ad-hoc BoS in Biotechnology, Prof. U. K. Patil- member BoS in Microbiology at Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon, Dr. A. V. Pethkar- BoS in Microbiology, Dr. Mrs. S. A. Peshwe- BoS in microbiology, Dr. A. G. Jadhav- Ad-hoc BoS in

				Bioinformatics, Dr. M. A. Sonar- BoS in Geology and member of Academic Body of Gondwana Geological Society, Nagpur, Mr. S. G. Kulkarni- Ad-hoc BoS in Biophysics and member BoS in Biophysics of SRTM University, Nanded, Dr. S. M. Deshpande- member BoE and Member, RRC of affiliating University, Prof. R. A. Satpute is member, BOS at Dr. Homi Jehangir Bhabha University, Mumbai.
2019-20	Encouraging faculty members to participate in Faculty Development Programs for enhancing the knowledge horizons and career progression.	As per Schedule of respective programmes	As per Schedule of respective programmes	13
2019-20	Encouraging staff members to submit collaborative research projects to various funding agencies, pursue research work, and publish papers in peer reviewed, refereed and UGC-listed, scopus-indexed and high impact factor journals and file patents. Encouraging faculty members to participate in and organize conferences.	Throughout the year	NA	All faculty members= 22
2019-20	To motivate students and honour them for the performance in final year PG examination (Botany) by awarding Prin. S. P. Nanir Gold Medal under the aegis of	03.02.2020	1 Day	01 Awardee

	Alumni of Dept. of Botany.			
2019-20	Advising all Departments to submit uniform time-table of lectures considering slot for service course lectures and to take measures to ensure 100% student attendance for theory and practical sessions.	NA	NA	All faculty members= 22
2019-20	Encouraging the Placement cell to organize on-campus and off-campus placement activities, career guidance programmes and guidance for competitive exam preparation. Campus Placement initiatives not possible due to COVID-19.	Throughout the year	NA	Off- campus placements= 10, Progression to higher education= 01, Qualification of competitive exams= 05
2019-20	Encouraging NSS unit to carry out unique activities for developing sensitivity in the students towards the society, environment and the Nation and for upliftment of society through various awareness programmes.	Throughout the year	As per schedule	100
2019-20	Motivating students to participate in Avishkar-19 research competition.	Throughout the year	NA	13
2019-20	Motivating students to participate in conferences, seminars, poster, oral and quiz competitions, online courses, etc..	Throughout the year	NA	10
2019-20	Encouraging faculty members to organize lectures of eminent scientists and experts from industry/academia to provide students with a glimpse of current trends in science and implement good mentoring practices.	Throughout the year	NA	All faculty members= 22
2019-20	Encouraging students to visit different departments and interact with faculty members	As per schedule	NA	Microbiology students= 21

	to get information about other subjects and expertise of other departments. Library Orientation, student visits of other departments of the Institute.			
2019-20	Enhancing the scientific communication skills of the students through activities of the students' clubs.	Throughout the year	NA	Participants= 90
2019-20	Students encouraged to participate in cultural activities and sports	As per schedule	NA	All students= 218
2019-20	Academic Administrative Audit (AAA) conducted	26.02.2020 to 29.02.2020	NA	All staff= 21, conducted by one-person committee.
2019-20	Building and sustenance of platform for interaction of stakeholders/alumni associated with the Institute.	As per schedule	NA	All students= 218
2019-20	Motivating students to take initiatives in organizing science activities through the formation of student clubs in the various departments.	Biotechnology Day (Speech competition)- 14.11.2019,	11am-2pm	08 participants
		Debate Competition- 01.10.2019,	3pm-5pm	24 participants
		Poster competition on Immunology- 16.10.2019,		
		197 th Birth Anniversary of Sir Louis Pasteur (Intercollegiate Research Paper Presentation)- 27.12.2020,	1 Day	300 participants
		Microbiological contest- 25.01.2020,	1 Day	13 participants
		19 th National Level MicrobioCanvas competition- 31.01.2020,	1 Day	2227 participants from 104 colleges
		National Level Microbiolympiad	1 Day	110 participants from 41 Colleges

		Competition- 14.02.2020 National Science Day Celebration- “Know Our Instruments”	1 Day	90 participants from 27 colleges 21 participants
2019-20	Initiatives to spread awareness about COVID-19 among students and the general public.	March-May 2020	NA	All students= 218
2019-20	Work distribution and planning for preparation and submission of pending AQAR reports.	NA	NA	All faculty= 22
2019-20	Supporting the affiliating University in academic activities- organization of Pre- Ph.D. course for Geology Research Students of the affiliating University.	Jan Feb 2020	10.30 am- 5.30pm	Participants= 25
2019-20	Faculty members encouraged to focus on student mentoring, devote to research activities, competitions, establish academic linkages, organize seminars, conferences, etc. and student-centric activities such as excursions, educational visits, placements, etc.	Throughout the year	NA	Papers published= 23, Chapters in books= 09, Presentations in conferences= 15, Resource persons= 10, Placements= 10, NET/SET qualified students= 05, students progression for higher education= 01.
2019-20	Encouraging NSS unit to organize innovative extension programmes for the benefit of the society.	Throughout the year	NA	100
2019-20	Awareness on preventing wastage of food.	07.09.2019	3pm to 4pm	All students and staff= 235

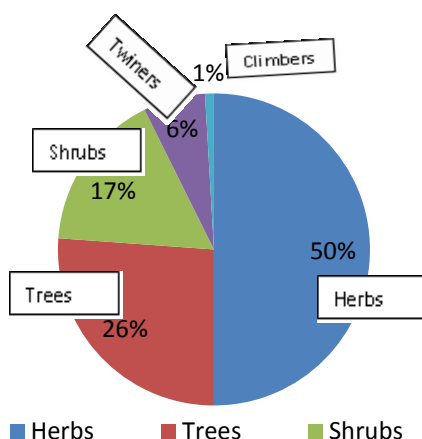
CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES			
7.1 - Institutional Values and Social Responsibilities			
7.1.1 Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)			
Title of the programme	Period (from-to)	Participants	
		Female	Male
Nil	Nil	-	-
7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives such as: Percentage of power requirement of the College met by the renewable energy sources			
<ul style="list-style-type: none"> The sensitivity of students towards the environment and society was enhanced through the efforts of the Institution using various platforms. NSS unit was encouraged to organize unique extension activities for benefit of local residents. The practice of tree plantation was continued in order to enhance the Green-coverage of the Institute campus. NSS volunteers and the Department of Botany planted trees in the campus. Department of Botany handed over tree saplings to the students for plantation in their own residential areas and other suitable places. Cleaning of dug wells in Soneri Mahal area (a heritage site in University campus) was carried out with the aim of removing pollutants from wells and to increase the water level. Non-biodegradable pollutants and recalcitrant material, including plastic waste, polymers, silt, sludge, etc. was removed from the wells by NSS volunteers. In order to collect and conserve water, water canals in the University campus were cleaned to remove the hindrances to the water flow into the catchment site (lake). The work resulted in beautification of the campus, removal of pollutants from the environment and water conservation. Dr. K. M. Wanjarwadkar (Associate Professor, Department of Geology, Govt. Institute of Science, Aurangabad) delivered an informative talk on Water Conservation Practices emphasizing the simple and low-cost methods for local needs. Considering the availability of local resources such as environment, land, water, manpower and raw material, the possibility of self-employment and income generation from environment-friendly activities such as growth of algae for food, feed and medicinal value was presented by Dr. A. N. Salve (Associate Professor, Department of Botany, Govt. Institute of Science, Aurangabad) in an interactive session with NSS volunteers- “Algae and their nutritive potential”. A special program was organized for spreading awareness about avoiding the wastage of food. The program was conducted by “Save Food Save Nation”- an NGO from Aurangabad and organized by the NSS unit. All the students and staff of the Institute participated in the programme and pledged to prevent wastage of food. The practice of chewing tobacco and spitting in the open not only leads to health problems for those who consume tobacco, but also leads to pollution of the air, soil and surfaces. It also leads to spread of infectious diseases. A pledge for tobacco free youth was taken by students and staff under the NSS regular programme. A glimpse of the environment of Orissa State, the livelihood and lifestyle of people living in Orissa, the cultural and natural heritage of Orissa was provided to local residents and NSS volunteers under the “Ek Bharat Shreshtha Bharat” initiative of Govt. of India by way of presenting documentaries, movies and clips. NSS volunteers also participated in State Level residential camps at Dhule and Jalgaon under Ek Bharat Shreshtha Bharat Abhiyan. In view of the COVID-19 pandemic and health environment, IQAC took up the initiative to spread 			

awareness on COVID-19 amongst students and general public. An online survey was carried out at two levels- General Level and Advanced Level using social media platforms such as Whatsapp and e-mail. About 1000 participants participated in the survey and certificates with grades were distributed to the participants. The Departments of Microbiology, Biotechnology and Botany created public awareness about preventing spread of COVID-19.

- Fluorescent tube lights are being replaced by LED lights in laboratory buildings.
- Solar power is used in Hostels for water heating and in Biophysics Department for water distillation.
- Each department ensures proper disposal of potentially hazardous material/waste generated in the laboratories.
- Electronic instruments and computers are used with great care in order to prevent break down of the instruments. This minimizes the generation of e-waste. Instruments beyond repairs are being processed for write-off procedures as per the Government norms.
- The faculty members of Botany Department assign the task of numbering the tree to the students as a part of practical/project work. The department has planted a number of rare and endangered medicinal plants in the Botanical Garden and in the campus. The study conducted revealed that the Institute is rich in floristic diversity representing a total of 55 families of angiosperms. A total of 218 species were recorded from the Institute campus. Grasses and shrubs are seasonal but the trees and climbers are perennial and contribute to the greenery of the campus. In the vicinity of the campus, is the Aurangabad Caves plateau which is densely covered in the rainy season with the ephemerals and some of the rare plants, viz. *Ceropegia bulbosa* Roxb. *Chlorophytum tuberosum* (Roxb.) Baker, *Plumbago zeylanica* L. *Scilla indica* Roxb. *Utricularia* spp., *Woodfordia fruticosa* (L.) Kurz.. The growth of these vegetation indicates that environment is free from pollution.
- *Dalbergia sissoo* plants are naturally growing in the Institute campus, and they were conserved by regular trimming, pruning and watering practices. In all 270 plants were conserved along with the *Azadirachta*, *Ficus bengalensis*, *Ficus religiosa*, *Pongamia pinnata* and *Ziziphus*. The plants have grown in 6 quadrants that were constructed for landscape purpose.

	Dicotyledons			Monocotyledons	Totals
	Ploypetalae	Gamopetalae	Monochlamydeae		
Families	17	29	4	5	55
Genera	78	70	14	12	174
Species	83	104	12	19	218

Number of species occurring in the Institute Campus



7.1.3 Differently abled (Divyangjan) friendliness

Items /Facilities	Yes/No	No. of Beneficiaries
Provision for lift	No	None
Ramp/ Rails	Yes	None
Braille Software/facilities	No	None
Rest Rooms	No	None
Scribes for examination	No, will be made available as per need	None
Special skill development for differently abled students	No	None
Any other similar facility	No	None

7.1.4 Inclusion and Situatedness

Enlist most important initiatives taken to address locational advantages and disadvantages during the year

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students and staff
2019-20	Due to close proximity to the affiliating university and Recognized Center for PG and Research, the	NA	Jan Feb 2020	Pre-Ph.D. Course	Department of Geology organized Pre-Ph.D. course for all Geology Research Students of the	25

	Institute organized Pre-Ph.D. course in Geology for all students registered for Ph.D. (Geology) of the affiliating University.				affiliating University in the Institute campus.	
All years	Due to close proximity to the affiliating university the students and staff of the institute could attend Ph.D. vivo voce examination	NA	As per University Schedule	Attendance at Ph D. vivo voce	Giving exposure to PG and research students from institute to academic deliberations of Ph.D. vivo voce	Students of concerned subject
All years	Due to close proximity to the affiliating university, the PG students can opt for various subjects of their own interest under the mandatory Service Course available within the University Campus.	01 subject- all students of the Institute opted for Personality development course.	Semester III each year	Selection of the Service Course of choice, availability of experts in the field for mentoring	Availability of subject of choice and the necessary expert faculty to teach the subject.	Students of M.Sc. Part II
All years	Institute being situated in the zone inhabited by lower, lower-middle and middle class community, the rallies organized created social awareness amongst them	Institute being situated in the zone inhabited by lower, lower-middle and middle class community, the rallies organized created social awareness amongst them	Throughout the year	Social Awareness Rallies	Lack of awareness about cleanliness, hygiene and environment.	100

All years	Institute being State Government organization could establish the Unique Gamma Irradiation facility outside BARC in the renowned Biophysics department	Academic researchers and professionals from industries	Since July 1985	Establishment of Gamma Irradiation Facility	Research in Radiation Sciences	PG and Research students from and outside the institute and industry professionals
All years	Institute campus spreading about 27 acres situated relatively isolated from the city, the unique facility of Gamma Irradiation could be installed and operated keeping in view the safety of general public.		Since July 1985	Establishment of Gamma Irradiation Facility	Radiation Safety	NA
All years	Since Institute is situated very close to the historical Aurangabad Caves, it gives an opportunity to study the interior part of caves, as they are carved in different types of basaltic rock.	NA	Since July 2013	Experiential Learning-study of rocks and tunnels	Understanding the nature of the tunnels carved out for comparison with modern-day tunnels dug out for roadways, railways and water transport. Due to proximity, students can visit the site frequently and study them at their own pace.	Students of concerned subject (Geology)
All years	Since the Institute is situated very close to Hanuman tekdi, Amodi Hills and Gogababa tekdi, it gives an opportunity to	NA	Since July 2013	Experiential Learning-study of rocks and tunnels	Understanding the various features and flows of basaltic rocks such as ropy lava, vesicular	Students of concerned subject (Geology)

	study the various features and flows of Basaltic rocks.				structures, amygdules, pipe structure, spheroidal structures, etc. Due to proximity, students can visit the site frequently and study them at their own pace.	
All years	Since Institute is situated behind the Dr. Babasaheb Ambedkar Marathwada University, this also helped us to visit often the different dugwells present in campus of university to learn the subsurface geology and compare it with the dugwells present in campus of Institute.	NA	Since July 2013	Experiential Learning-study of subsurface geology	Learning the subsurface geology and comparing it with the dugwells present in campus of Institute in order to predict possibility of water bearing horizon, The knowledge prepares students to take up professional career as Hydrogeologist/ Geologist.	Students of concerned subject (Geology)
All years	Since the Institute is situated very close hilly terian, it gives an opportunity to study the various joint patterns and their effects on groundwater and hydrogeology.	NA	Since July 2013	Experiential Learning-study of subsurface geology	Joint patterns in the hilly region allow students to learn structures responsible for waterfalls present in this area and springs which come from different basaltic lava flow contacts.	Students of concerned subject (Geology)

2019-20	Due to close proximity to the affiliating university the Faculty member from university could visit the institute for engaging classes	NA	August 2019 to October 2019	Service Course in Personal Development	Problem of all students of the institute to attend classes of service in another institution	100
2019-20	Institute being situated in the zone inhabited by large population of common people	To cultivate awareness of Traffic Safety and discipline amongst the masses	17 th Jan 2020	Social Rally for Traffic safety	Traffic Safety and Discipline	100

7.1.5 Human Values and Professional Ethics

Code of conduct (handbooks) for various stakeholders

Title	Date of Publication	Follow up (maximum 100 words each)
Institute Website	First Published in September 2006, updated periodically	Institution Website displays the Code of Conduct for students, Code of Ethics for faculty members and non teaching staff and the prospectus also includes the core values to be achieved Weblink: www.inosca.org

7.1.6 Activities conducted for promotion of universal Values and Ethics

S. No.	Activity	Duration (from-to-)	Number of participants
01	Maharana Pratap Jayanti	16-06-2018	All students and staff
02	Rajarshi Shahu Maharaj Jayanti	26-06-2018	All students and staff
03	Vasantao Naik Jayanti	01-07-2018	All students and staff
04	Lokmanya Balgangadhar Tilak Jayanti	23-07-2018	All students and staff
05	Sahityaratna Annabhau Sathe Jayanti	01-08-2018	All students and staff
06	Krantisinha Nana Patil Jayanti	03-08-2018	All students and staff
07	Sadbhavana Diwas	20-08-2018	All students and staff
08	Raje Umaji Naik Jayanti	07-09-2018	All students and staff
09	Pandit Dindayal Upadhaya Jayanti	25-09-2018	All students and staff
10	Mahatma Gandhi & Lal Bahadur Shastri Jayanti	02-10-2018	All students and staff
11	Dr. A.P.J. Abdul Kalam Jayanti	15-10-2018	All students and staff
12	Maharshi Valmiki Jayanti	24-10-2018	All students and staff
13	Indira Gandhi Punyatithi & Rashtriya Sankalp Diwas	31-10-2018	All students and staff
14	Vallabhbhai Patel Jayanti & Rashtriya Ekta Diwas	31-10-2018	All students and staff
15	Pandit Nehru Jayanti	14-11-2018	All students and staff

16	Birsa Munda Jayanti	15-11-2018	All students and staff
17	Indira Gandhi Jayanti & Rashtriya Ekatmata Din	19-11-2018	All students and staff
18	Sanvidhan Diwas	26-11-2018	All students and staff
19	Dr. Babasaheb Ambedkar Mahaparinirwan Din	06-12-2019	All students and staff
20	Sant Jagnade Maharaj Jayanti	08-12-2019	All students and staff
21	Savitribai Phule Jayanti	03-01-2019	All students and staff
22	Jijau Maasaheb & Swami Vivekanand Jayanti	12-01-2019	All students and staff
23	Netaji Subhashchandra Bose Jayanti	23-01-2019	All students and staff
24	Sant Sewalal Maharaj Jayanti	15-02-2019	All students and staff
25	Chhatrapati Shivaji Maharaj Jayanti	19-02-2019	All students and staff
26	Sant Gadgebaba Maharaj Jayanti	23-02-2019	All students and staff
27	Yashwantrao Chavan Jayanti	12-03-2019	All students and staff
28	Shahid Din	23-03-2019	All students and staff

7.1.7 Initiatives taken by the institution to make the campus eco-friendly (at least five)

- Cleanliness campaign:** The NSS volunteers carry out campus cleaning and parthenium grass removal activities throughout the year. The volunteers participate in rallies aimed at spreading the awareness amongst general public regarding clean, green and safe environmental and the need to conserve biodiversity, energy and the environment. Cleaning of dug wells in Soneri Mahal area (a heritage site in University campus) was aimed at removing pollutants from the wells and to conserve more water. Non-biodegradable pollutants and recalcitrants such as plastic waste, polymers, silt, sludge, etc. was removed from the wells by NSS volunteers. Water canals in the University campus were cleaned to remove the hindrances to the water flow into the catchment site (lake). This resulted in beautification of the campus, removal of pollutants and water conservation. Dr. K. M. Wanjarwadkar (Associate Professor, Department of Geology, Govt. Institute of Science, Aurangabad) delivered an informative talk on Water Conservation Practices emphasizing the simple and low-cost methods for local needs. A special program was organized for spreading awareness about avoiding the wastage of food under the aegis of “Save Food Save Nation”- an NGO from Aurangabad. A pledge for tobacco free youth was taken by students and staff under the NSS regular programme.
- Awareness campaigns:** Rallies are conducted in order to spread messages on social awareness including health, environment, prevention of female foeticide, prevention of drug abuse, electoral rights of people, etc. A glimpse of the environment of Orissa State, the livelihood and lifestyle of people living in Orissa, the cultural and natural heritage of Orissa was provided to the NSS volunteers under the “Ek Bharat Shreshtha Bharat” initiative of Govt. of India by way of presenting documentaries, movies and clips.
- Energy conservation:** The Institute has adopted several practices for energy conservation, viz. minimizing use of energy intensive devices, use of power saving devices, solar equipment and pooling work elements that are energy intensive. The Institute makes use of power saving CFL bulbs for illumination purposes, LED computer monitors and energy saving air conditioners/refrigerators, etc. The fans and lights are put on only when required. In Dept. of Microbiology, autoclaves, ovens, hot plates, etc. are put on by authorized personnel or students only after all material is pooled and repetitious use of instruments is avoided.
- Use of renewable energy:** The Department of Biophysics uses solar power operated water distillation

unit to save energy. Solar water heater is installed in the Boys Hostel to provide hot water to the students.

- **Water Conservation Activities:** Cleaning of dug wells in Soneri Mahal area (a heritage site in University campus) was carried out with the aim of removing pollutants from the wells and to increase the water level. Non-biodegradable pollutants and recalcitrant material, including plastic waste, polymers, silt, sludge, etc. was removed from the wells by NSS volunteers. In order to collect and conserve water, water canals in the University campus were cleaned to remove the hindrances to the water flow into the catchment site (lake). The work resulted in beautification of the campus, removal of pollutants from the environment and water conservation. Dr. K. M. Wanjarwadkar (Associate Professor, Department of Geology, Govt. Institute of Science, Aurangabad) delivered an informative talk on Water Conservation Practices emphasizing the simple and low-cost methods for local needs.
- **Efforts for Carbon neutrality:** The Institute staff makes minimal use of paper and green-house gas emitting devices. The Institute is about to install e-governance system in order to have paperless office. Minimization of paper is an attempt to reduce the cutting down of trees for paper manufacturing. The Institute encourages new tree plantation within the campus and also in the surrounding areas.
- **Tree Plantation:** The practice of tree plantation was continued in order to enhance the Green-coverage of the Institute campus. NSS volunteers and the Department of Botany planted trees in the campus. Department of Botany handed over tree saplings to the students for plantation in their own residential areas and other suitable places. The faculty members of Botany Department assign the task of numbering the tree to the students as a part of practical/project work. The department has planted a number of rare and endangered medicinal plants in the Botanical Garden and in the campus. The department distributes plantlets to the students for plantation in their residential areas or in the Institute campus.
- **Hazardous waste management:** Each department of the Institute ensures proper disposal of the potentially hazardous material/waste generated in the laboratories. The Microbiology, Biotechnology, Biophysics and Botany Departments sterilize all waste microbial cultures by autoclaving prior to disposal. Chemicals such as polyacrylamide and other hazardous chemicals are disposed using proper care.
- **E-waste management:** Electronic instruments and computers are used with great care in order to prevent break down of the instruments. This minimizes the generation of e-waste. Instruments beyond repairs are being processed for write-off procedures as per the Government norms.
- **Biowaste management:** In order to reduce the biological waste generation, books are gifted to guests and awarded to staff/students instead of flowers and bouquets.
- **Eco-friendly approaches for income generation and health:** the possibility of self-employment and income generation from environment-friendly activities such as growth of algae for food, feed and medicinal value was presented by Dr. A. N. Salve (Associate Professor, Department of Botany, Govt. Institute of Science, Aurangabad) in an interactive session with NSS volunteers- “Algae and their nutritive potential”.

7.2 Best Practices

Describe at least two institutional best practices. Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

<http://www.inosca.org/iqac/best-practices-2019-20.pdf>

7.3 Institutional Distinctiveness

Provide the details of performance of the institution in one area distinctive to its vision, priority and thrust
Provide the weblink of the institution in not more than 500 words

<http://www.inosca.org/iqac/institutional-distinctiveness.pdf>

8. Future Plans of action for next academic year (500 words)

- Submission of pending AQARs before the due date announced by NAAC, Bangalore.
- Motivating the faculty members for preparation of on-line, video lectures on MOOC, LMS and other platforms in view of new trends in Higher Education
- Motivating the faculty members to attend online workshops, webinars and conferences for getting updated knowledge of concerned subjects and changing trends in education against the COVID-19 background/situation.
- Encouraging faculty members to organize webinars on current topics in respective fields of science during the National lockdown period.
- Preparation of one full-fledged virtual/smart classroom in each department.
- Organizing webinar/workshop on Intellectual Property Rights and Patenting.
- Organizing programmes on Gender Equity.
- Mentoring the PG students for submission of research proposals for Summer Research Fellowships 2021 (SRF-2021) under National Academies of Science.
- Encouraging faculty members to participate in the framing and revision of syllabus as a part of various committees in the University.
- Encouraging the faculty members to participate in Faculty Development Programmes for enhancing the knowledge horizons and career progression.
- Encouraging staff members to submit collaborative research projects to various funding agencies, pursue research work, and publish papers in peer reviewed, refereed and UGC-listed, scopus-indexed and high impact factor journals. Encouraging faculty members to participate in and organize conferences.
- Advising all Departments to submit uniform time-table of lectures considering slot for service course lectures and to take measures to ensure 100% student attendance for theory and practical sessions.
- Urging faculty members to organize workshops on Preparation for Competitive Exams and encouraging the Placement cell to organize on-campus and off-campus placement activities and career guidance programmes.
- Encouraging NSS unit to carry out unique activities for developing sensitivity in the students towards the society, environment and the Nation and for upliftment of society through various awareness programmes.
- Motivating the students to participate in Avishkar-2020 Research Competition, poster competitions, oral presentations, and other co- and extra-curricular activities.
- Encouraging the faculty members to organize lectures of eminent scientists to provide students with a glimpse of current trends in scientific research. Designing and implementation of different activities aimed at improvement of student skill and knowledge through workshops, lecture series, invited talks of professionals/experts from industry and academia and to implement good mentoring practices.
- Developing academic linkages with other institutions for providing opportunity to the students to undertake summer/winter training programmes, on-field trainings and experiential learning.
- Encouraging students to visit different departments and interact with faculty members to get information about other subjects and expertise of other departments. Library Orientation aimed at

introducing the rich knowledge resources available in the Central Library.

- Motivating faculty members to arrange programmes aimed at nurturing and enhancing the scientific communication skills of the students.
- Arranging and execution of study tour for keeping abreast with recent trends across fields related to subject.
- Active promotion of student participation in seminars, presentations, extracurricular activities, summer training, national/international symposia, conferences and workshops.
- Building and sustenance of platform for interaction of stakeholders associated with the Institute.
- Collection of feedback from stake holders for improving the teaching-learning process.
- Mobilizing students' initiatives to organize science activities through student clubs in the various departments.
- Encouraging student participate in cultural activities and sports organized by the Institute and other institutes.

Name- Dr. Aniroodha V. Pethkar

Name- Prof. Rajendra A. Satpute



Signature of the Coordinator, IQAC

Signature of the Chairperson, IQAC