#### PES Modern College of Arts, Science and Commerce, Ganeshkhind, Pune Department of Microbiology Annual Report 2019-20

The department of Microbiology, believes in establishing a culture of excellence in academics and research. It provides maximum exposure to the students and staff members by means of organizing guest lectures, educational visits, workshops, seminars, symposia, encouraging participation in research projects, science exhibition and competitions for developing the students in every aspect. As a result our alumni are well placed in national and international research institutes, laboratories and industries.

# Skill Based Course/Workshop/Seminar organized:

|  | -   |   | Duration                  |
|--|---|---|---------------------------|
|  |   | Registered participants                                   | and Dates                 |
| Physicochemical and microbial analysis of soil For SY B Sc             | Mr. Mihir Thatte,<br>Ms. Pranita Natesan,<br>Mrs. Sneha Ogale,<br>Dr. Neelima<br>Kulkarni   | 39 (33 – MCASC, GK,<br>6 Other Colleges;<br>2 MCASC-SN, 2 | 18, 19, 20th<br>June 2019 |
| Skill based course on "Quality control in industries and laboratories" | Mr Vishram Vaidya, Mrs. Medha Kulkarni, Mr. Mihir Thatte, Mr. Daspute, Mrs. Sneha Ogale, Dr. Neelima Kulkarni, Mrs. Gauri Bhagat, Dr. Gauri Phadke, |   | 04.07.2019 to 19.07.2019  |

# Skill Based Course/Faculty Development program/Workshop/Seminar attended by staff members:

| Sr. | Title  | Partici | Registered participants              | Duration   |
|-----|--|---------|--------------------------------------|------------|
| 10. | -  | pants   |                                      | and Dates  |
| 1   | Learning management                          | 10      | Mrs. Anupama Sonawane, Dr. Neelima   | 29.06.2019 |
|     | systems training                             |         | Kulkarni, Mr. Prasad Deshmane, Mrs.  |            |
|     | workshop by VinSys IT<br>Services at Amanora |         | Gauri Bhagat, Dr. Manasi Tukdeo, Dr. |            |
|     | Town Centre.                                 |         | Gauri Phadke, Dr. Kirti Dahigaonkar, |            |
|     | zomi comio.                                  |         | Dr. Ashwini Kulkarni, Ms. Yogini     |            |
|     |  |         | Kanade, Mrs. Prajakta Taple.         |            |



| Training Program on " 3 Dr. Manasi Tukdeo, Dr. Gauri Phadke, How to access J-Gate Dr. Kirti Dahigaonkar | 06.07.2019 |
|---|------------|
| DOM TO ACCESS 1-Ctate   D. W. C. D. 1: 1  | 00.07.2019 |
|   |            |
| Basic Science Database"   |            |
| organized by Central library  |            |
| 2 FDD WE  |            |
| Cl.:11?   | •          |
| Di. Gauri i nauke, Di. Killi  | 12 and 13  |
| Dahigaonkar.  4 RBPT workshop 1 Ms Yogini Kanade  | July 2019  |
| Workshop 1 Wis. Togilii Kanade  |            |
| organised by IISER and  |            |
| Madan Mohan Malaviya Institute for faculty  |            |
| Institute for faculty development   |            |
|   |            |
| Manav Human Atlas 1 Dr. Gauri Phadke Project Workshop   | 20-31 May  |
|   | 2019       |
| Wis. Sheha Ogale, Wis. Anupama  | 30.08.2019 |
| Sonawane, Dr. Neelima Kulkarni, Mr.   |            |
| Prasad Deshmane, Mrs. Gauri Bhagat,   |            |
| Dr. Manasi Tukdeo, Mrs. Trupti  |            |
| Kulkarni, Dr. Gauri Phadke, Dr. Kirti<br>Dahigaonkar, Dr. Ashwini Kulkarni,                             |            |
| Ms. Yogini Kanade, Mrs. Prajakta  |            |
| Taple, Ms. Shruti Deshpande.  |            |
| 7 Orientation Program for 13 Mrs. Sneha Ogale, Mrs. Anupama   | 13.09.2019 |
| Staff Sonawane, Dr. Neelima Kulkarni, Mr.   | 13.09.2019 |
| Prasad Deshmane, Mrs. Gauri Bhagat,   |            |
| Dr. Manasi Tukdeo, Mrs. Trupti  |            |
| Kulkarni, Dr. Gauri Phadke, Dr. Kirti   |            |
| Dahigaonkar, Dr. Ashwini Kulkarni,  |            |
| Ms. Yogini Kanade, Mrs. Prajakta  |            |
| Taple, Ms. Shruti Deshpande   |            |
| 8 National Conference on 13 Mrs. Sneha Ogale, Mrs. Anupama  | 26.07.2019 |
| Best Practices in Sonawane, Dr. Neelima Kulkarni, Mr.   | _5.57.2017 |
| Education at PES   Prasad Deshmane, Mrs. Gauri Bhagat.  |            |
| Auditorium Dr. Manasi Tukdeo, Mrs. Trupti   |            |
| Kulkarni, Dr. Gauri Phadke, Dr. Kirti   |            |
| Dahigaonkar, Dr. Ashwini Kulkarni,  |            |
| Ms. Yogini Kanade, Mrs. Prajakta  |            |
| Taple, Ms. Shruti Deshpande.  |            |

# Syllabus Implementation Workshops attended by Staff Members:

| Sr.<br>no. | Title                  |                            | Organised           | At      | Regis<br>partic | tered<br>cipants |        | Duration and Dates |  |
|------------|------------------------|----------------------------|---------------------|---------|-----------------|------------------|--------|--------------------|--|
| 1          | Syllabus<br>workshop f | Implementation or F Y B Sc | Abasaheb<br>College | Garware | _               | Sneha            | Ogale, | 20.07.2019         |  |



| 1) |   |              |                |             |         | Sonawane, Mr. Prasad  |             |
|----|---|--------------|----------------|-------------|---------|-----------------------|-------------|
|    |   |              |                |             | *       | Deshmane              |             |
|    | 2 | Syllabus     | Implementation | Abeda       | Inamdar | Dr. Neelima Kulkarni, | 26.07.2019- |
|    |   | workshop for | or M Sc I      | Senior Coll | lege    | Mr. Prasad Deshmane,  | 27.07.2019  |
|    |   | _            |                |             |         | Dr. Manasi Tukdeo,    |             |
|    |   |              |                |             |         | Dr. Kirti Dahigaonkar |             |

#### **Educational and Industrial Visits:**

| Sr. | Place of Visit                   | Target              | What seen  | No. of   | Duration   | Accompanying Staff  |
|-----|----------------------------------|---------------------|--|----------|------------|---|
| no. | Y                                | group               |  | students | and Dates  | members   |
| 1   | PMC Sewage<br>Treatment<br>Plant | M Sc II             | Wastewater<br>treatment<br>processes   | 41       | 07.10.2019 | Dr. Gauri Phadke,<br>Dr. Ashwini Kulkarni,<br>Ms. Yogini Kanade                               |
| 2   | NCCS                             | M Sc II             | FACS, Cell<br>Imaging<br>using<br>Confocal<br>microscope                       | 47       | 14.10.2019 | Dr. Gauri Phadke,<br>Dr. Ashwini Kulkarni,<br>Ms. Yogini Kanade                               |
| 3   | NCMR                             | M Sc I              | Next generation sequencing, MALDI- TOF, Anaerobic facility and lyophilizati on | 45       | 02.01.2020 | Dr. Kirti Dahigaonkar,<br>Dr. Ashwini Kulkarni,<br>Ms. Yogini Kanade,<br>Ms. Shruti Deshpande |
| 4   | IISER                            | TYBSc               | Instrumenta<br>tion in<br>biology lab  | 53       | 17.01.2020 | Dr. Neelima Kulkarni,<br>Dr. Manasi Tukdeo,<br>Ms. Shruti Deshpande                           |
| 5   | IISER                            | M Sc II             | Presentation<br>on animal<br>house,<br>analytical<br>instruments<br>lab        | 30       | 31.01.2020 | Dr. Gauri Phadke,<br>Ms. Yogini Kanade,<br>Ms. Shruti Deshpande                               |
| 6   | Empress<br>garden, Pune          | S Y B<br>Sc-<br>EVS | Diversity in higher plants, flowering shrubs                                   |          | 01.02.2020 | Dr. Ashwini Kulkarni,<br>Ms. Roja Pogul,<br>Mrs. Rutuja,<br>Mrs. Snehal Gagare                |
| 7   | Someshwar sugar factory          | S Y B               | Sugar<br>manufacturi<br>ng, power<br>plant,<br>distillery,<br>water            | 136      | 10.02.2020 | Mrs. Gauri Bhagat,<br>Mr. Prasad Deshmane,<br>Dr. Ashwini Kulkarni                            |



|   |                                     |         |   |   | treatment<br>and<br>recycling  |     |            |  |
|---|-------------------------------------|---------|---|---|--|-----|------------|--|
| 8 | Someshwar<br>sugar factory          | F Sc    | Y | В | Sugar<br>manufacturi<br>ng, power<br>plant,<br>distillery,<br>water<br>treatment<br>and<br>recycling | 230 | 11.01.2020 | Mrs.Anupama Sonawane,<br>Dr. Gauri Phadke,<br>Mrs Prajakta Taple     |
| 9 | Warana milk<br>and milk<br>products | T<br>Sc | Y | В | Collection of milk, milk processing, butter and cheese processing and packing                        | 56  | 14.01.2020 | Mrs.Anupama Sonawane,<br>Mrs. Trupti Kulkarni,<br>Mrs Prajakta Taple |

## Guest lectures organized:

| Sr.<br>no. | Resou        | rce Perso | n      | Topic                          |                            | No.<br>students<br>benefitted | Target<br>Audience | Dates      |
|------------|--------------|-----------|--------|--------------------------------|----------------------------|-------------------------------|--------------------|------------|
| 1          | Mr.<br>Venky | Rohit     | Joshi, | Chicken fibroblast and applica | embryo<br>culture<br>tions | 47                            | M Sc II            | 18.09.2019 |
| 2          | Mr. G        | aurav Goo | lse    | Fire safety                    | 47                         | M Sc II                       | 04.01.2020         |            |

# Student participation in Guest lectures organized outside college:

| Sr.<br>no. | Resource       | Person | Topic             |         | No.<br>students<br>benefitted | of | Target<br>Audience | Dates      |
|------------|----------------|--------|-------------------|---------|-------------------------------|----|--------------------|------------|
| 1          | Dr.            | Yogesh | Making            | health  | 23                            |    | M Sc I             | 24.08.2019 |
|            | Shouche, NCCS. | NCMR-  | and Weal microbes | th from |                               |    |                    |            |

#### Guest lectures attended:

| Sr. | Resource Person      | Organized By | Topic            | Dates          |
|-----|----------------------|--------------|------------------|----------------|
| 1   | Ramnadi              | Kirloskar    | Ramnadi Restorat | ion 09.09.2019 |
|     | Restoration Mission, | Vasundhara   | Mission          |                |



|   | Kirloskar           |               |                         |            |
|---|---------------------|---------------|-------------------------|------------|
|   | Vasundhara          |               |                         |            |
|   | Members             |               |                         |            |
| 2 | Annular Solar       | Department o  | f Annular Solar eclipse | 17.12.2019 |
|   | eclipse by Mr.      | Physics       |                         |            |
|   | Mayuresh Prabhune   |               |                         |            |
|   | of Khagol Vishwa    |               | *                       |            |
| 3 | Mr. Sunil Limaye,   | Kirloskar     | Human and Wildlife      | 06.01.2020 |
|   | Dr. Ajay Deshmukh,  | Vasundhara    | Conflict : Concerns     |            |
|   | Dr. Sadanand Raut,  | Foundation,   | and resolution          |            |
|   | Mr. Subhash Badve,  | Biospheres an | 1                       |            |
|   | Mr. Anirudh Chaoji, | Department c  | f                       |            |
|   | Dr. Sachin Punekar  | Botany        |                         |            |
| 4 |                     | Department o  | f Career Opportunities  | 07.01.2020 |
|   |                     | Chemistry     | Abroad focused on       |            |
|   |                     |               | Scholarships for        |            |
|   |                     |               | Higher Education.       |            |

# DBT Sponsored Science Fair 30.08.2019

| Sr.<br>No. | Models by students | Projects by students | Total number of student participants |
|------------|--------------------|----------------------|--------------------------------------|
| 1          | 12                 | 11                   | 71                                   |

#### Staff achievements:

#### 1. Mrs. Sneha Ogale

Oral Presentation in International level Workshop on 'Open Education Design' at Slovenia on 04.07.2019.

2. **Posters** presented at **State level Seminar** on "Trends in life sciences 2020" on 31<sup>st</sup> January 2020 at Annasaheb Magar Mahavidyalay.

| Sr. No. | Title of poster                       | Corresponding       | Participating      |
|---------|---------------------------------------|---------------------|--------------------|
|         |                                       | author              | students           |
| 1       | Bioelectricity production from        | Dr. Kirti           | 1.Bhagyashree      |
|         | various wastes (First Prize)          | Dahigaonkar         | Nipunage,          |
|         |                                       |                     | 2.Poonam Sukhdeve, |
|         |                                       |                     | 3.Nikita Bankar    |
| 2       | Effect of altered solar radiations on | Dr Kirti            | 4.Prajakta         |
|         | microbes during annular solar         | Dahigaonkar,        | Kshirsagar,        |
|         | eclipse Dec 2019 (Third Prize)        | Dr Ashwini Kulkarni | 5.Rucha Joshi,     |
|         |                                       |                     | 6.Stutee Panse,    |



| 3 | Science behind Indian Traditional    | Dr Kirti            | 7.Anagha Tulse,     |
|---|--------------------------------------|---------------------|---------------------|
|   | Knowledge                            | Dahigaonkar,        | 8. Vikrant Jadhav   |
|   |                                      | Dr Ashwini Kulkarni |                     |
| 4 | Development and application of       | Dr Kirti            | 9.Aishwarya Kore,   |
|   | bacterial consortium for solid waste | Dahigaonkar,        | 10.Pragati Pawar,   |
|   | management                           | Dr Ashwini          | 11.Aditi Malekar,   |
|   |                                      | Kulkarni.           | 12.Supriya Bhalchim |
| 5 | Mutations caused by UV radiations    | Mrs. Gauri Bhagat   | Gaurav Rai          |

3. **Posters** presented at **State level conference** on "Current Status of River water in Pune with reference to Pollution management and restoration" on 3<sup>rd</sup> and 4<sup>th</sup> February 2020 at H V Desai College.

| Sr. No. | Title of poster                   | Corresponding        | Participating      |
|---------|-----------------------------------|----------------------|--------------------|
|         |                                   | author               | students           |
| 1       | Culturable bacterial diversity of | Dr Kirti Dahigaonkar | 1. Ganesh          |
|         | Ramnadi water and study of        |                      | Aware              |
|         | mutualism with native plants      |                      | 2. Rutuja          |
|         |                                   |                      | Paigude,           |
|         |                                   | 7                    | 3. Shreya Kulkarni |
| 2.      | Antimicrobial resistance studies  | Dr Ashwini Kulkarni  | Samir Shinde       |
|         | of Ram river in Pune City         |                      |                    |

4. **Poster** presented at **National conference** on "Phage: a boon in disguise" on 17<sup>th</sup> and 18<sup>th</sup> January 2020 at Abeda Inamdar Senior College.

| Sr. No. | Title of poster                  | Corresponding       | Participating   |
|---------|----------------------------------|---------------------|-----------------|
|         |                                  | author              | students        |
| 1       | Screening and optimization of    | Dr Neelima Kulkarni | Mayuri Patil    |
|         | bioemulsifier production by      |                     | Shweta Waghole, |
|         | Streptomyces spps. (First prize) |                     | Sayali Patil    |

5. Posters presented at International conference on "Biotechnology: Perspectives and Challenges" on 14<sup>th</sup> and 15<sup>th</sup> January 2020 at Modern College, Ganeshkhind, Pune 16

| Sr. No. | Title of poster   | Corresponding author | Participating students               |
|---------|---|----------------------|--------------------------------------|
| 1       | Isolation of pigment producing bacteria and characterization of the pigments produced |                      | Sawani Karandikar<br>Vaishnavi Taple |



| 2. | Biodegradation of plastic  | Mrs Anupama<br>Sonawane  | Shraddha Rana                                   |
|----|--|--------------------------|---|
| 3. | Screening and Optimization of Bioemulsifier production by <i>Streptomyces</i> sp. B3 (2) | Contract states to       | Mayuri Patil<br>Shweta Waghole,<br>Sayali Patil |
| 4. | Screening of chitinolytic bacteria to explore their potential in fungal biocontrol       | Mrs Gauri Bhagat         | Ms. Priyanka Parate                             |
| 5. | Plant growth promoting activity of keratin degrading Bacillus cereus (Consolation Prize) | Dr, Manasi Tukdeo        | Prasad Memane                                   |
| 6. | Microbial diversity of Ramnadi   | Dr. Kirti<br>Dahigaonkar | Ganesh Aware                                    |
| 7. | Isolation and characterization of pigment producing fungi                                | Dr. Ashwini<br>Kulkarni  | Titiksha Chavan<br>Saurabh Devkate              |

## **Students Achievements:**

| Sr. | Name of the student | Class   | Details of achievements                                    |
|-----|---------------------|---------|--|
| 1   | Aditi Malekar       | M sc. I | Research paper published in international journal of       |
|     |                     |         | pharmacy and biological sciences. Conference Organised by  |
|     |                     |         | tc college Baramati.Topic – invitro evaluation of          |
|     |                     |         | antibacterial potential of coccinia grandis against human  |
|     |                     |         | pathogens  |
|     |                     |         | Work done at Dayanad college, Solapur                      |
|     |                     |         | Publication in june 2019                                   |
|     |                     |         | INTERNATIONAL LEVEL ROTARY ART OLYMPIAD                    |
|     |                     |         | won first prize in college group in a competition having   |
|     |                     |         | 30000 paintings submitted through out the india.           |
|     |                     |         | Artwork was selected for arts exchange prog and painting   |
|     |                     |         | was exhibited at usa England, argentina, hungery,          |
|     |                     |         | Australia and india. Organised by ROTARY ART, pune         |
|     |                     |         | Dayanand shree puraskar 2019.                              |
|     |                     |         | Achievement for all rounder best student of college.       |
|     |                     |         | ( received in feb 2019)                                    |
|     |                     |         | Selected as best content by readers choice and awarded as  |
|     |                     |         | author of the week by story mirror, international platform |
|     |                     |         | for writers  |
| 34  |                     |         | Also selected as literacy captain(editor) in the army of   |
|     |                     |         | literacy warrior at story mirror.                          |
|     |                     |         | story mirror is international platform for writers         |



| 2       | Vinay Naik    | M Sc. I | Guinness world record longest single line bicycle parade,   |  |  |
|---------|---------------|---------|---|--|--|
|         |               |         | by Hubbali bicycle club Karnataka                           |  |  |
|         |               |         | Solo bicycle expedition of 39 days Kanyakumari to leh-      |  |  |
|         |               |         | Ladakh khardong-La-top (world's highest motor able road     |  |  |
|         |               |         | ) 4800km Applied for India book of record.(2017)            |  |  |
| 3       | Sawani        | M Sc.   | First prize in Dbt ppt presentation competition . topic –   |  |  |
|         | karandikar    | II      | applications of mathematics Iin biology 28th dec 2019.      |  |  |
| " , - , | And Rutuja    |         | Organised by Mathematics department .PES Modern             |  |  |
|         | Sawairam      |         | college Ganeshkhind .                                       |  |  |
| 5       | Ameya jagtap  | SYBSc   | Bronze medal in Poster competition botanica. Organised by   |  |  |
|         | Shreya        |         | Wadia college, pune   |  |  |
|         | sontakke      |         |   |  |  |
| 6       | Shreya        | SYBSc   | Painting competition in botanica                            |  |  |
|         | sontakke      |         | Organised by Wadia college, pune                            |  |  |
| 7       | Rigzin norboo | FYBSc   | Attended republic day camp -2019                            |  |  |
|         |               |         | Prime minister rally 27th jan. 2019(cariappa parade ground) |  |  |
| Ď.      |               |         | B certificate in NCC( Bravo Grading )                       |  |  |
|         |               |         |   |  |  |

# Participation in College level Science Exhibition 'Anubhuti':

| Sr. | Type    | Title                      | Names of Students | Class    | Name of Guide         |
|-----|---------|----------------------------|-------------------|----------|-----------------------|
| No. |         |                            |                   |          | 1                     |
|     | Project | Isolation of <i>E-coli</i> | 1.Gaurav Rai      | S.Y.B.Sc | Mrs.Gauri Bhagat.     |
|     |         | mutants induced by         | 2.Sachin Bomen    |          |                       |
|     |         | U.V light                  | 3.Mithil Bochgire |          | *                     |
|     |         |                            | 4.Mayuri Pawar    |          |                       |
|     | Project | Food Spoilage Fungi        | 1.Saloni Divekar  | S.Y.B.Sc | Mrs.Anupama           |
|     |         |                            | 2.Diksha Nalage   | all 1    | Sonawane              |
|     |         |                            | 3.Shreya Nair     |          |                       |
| 4.  | Project | Skin Microflora            | 1.Atharva         | S.Y.B.Sc |                       |
|     |         |                            | Wakharkar         |          |                       |
|     |         |                            | 2.Medhansh Kotian |          |                       |
| 5   | Project | "Grain - Gain"             | 1.Ashwin          | S.Y.B.Sc | Mrs.Gauri Bhagat      |
|     |         |                            | Deekonda          |          |                       |
|     |         |                            | 2.Neha Mahadik    |          |                       |
|     |         |                            | 3.Akanksha        |          | ,                     |
|     |         |                            | Dhende            |          |                       |
|     |         |                            |                   |          |                       |
| 6   | Project | Immediate effect of        | 1.Stutee Panse,   | M.Sc. I  | Dr.Kirti Dahigaonkar, |
|     | Ĭ       | solar radiations on        | 2.Prajakta        |          | Dr.Ashwini Kulkarni   |
|     |         | microbes during            | Kshirsagar        |          |                       |
|     |         |                            | 3.Rucha Joshi     |          |                       |



|    |         | annular solar eclipse Dec 2019   |   |          |  |
|----|---------|--|---|----------|--|
| 7  | Project | Bacterial pigments   | <ol> <li>Sawani</li> <li>Karandikar</li> <li>Sana Maniyar</li> <li>Vaishnavi Taple</li> </ol> | M.Sc II  | Mrs. Sneha Ogale                       |
| 8  | Project | Bioelectricity production from various wastes.   | 1.Bhagyashree Nipunage 2.Nikita Bankar 3.Poonam Sukhdeve                                      | M.Sc II  | Dr.Kirti Dahigaonkar                   |
| 9  | Project | Culturable microbial diversity of Ramnadi water with special reference to plant microbe interactions.                | 1.Ganesh Aware<br>2.Rutuja Paigude<br>3.Shreya Kulkarni                                       | M.Sc II  | Dr.Kirti Dahigaonkar                   |
| 10 | Project | Study of antibacterial activity of jamun leaf extract and its applications.  | 1.Snehalata Devkar<br>2. Surabhi Garje  | M.Sc. II | Dr. Gauri Phadke                       |
| 11 | Project | Isolation of hydrocarbon degrading microorganisms and their application in bioremediation                            | 1.Omkar Khedekar<br>2.Anil Bansode  | M.Sc. II | Dr. Gauri Phadke                       |
| 12 | Project | Plant growth promoting activity of keratin degrading Bacillus cereus   | 1.Prasad Memane   | M.Sc. II | Dr. Manasi Tukdeo                      |
| 13 | Project | Production, characteriz ation and biotechnological application of exopolysaccharide produced by halophillic bacteria | 1.Pranali Meher<br>2.Gauri Tungikar   | M.Sc.II  | Mrs. Sneha Ogale<br>Dr.Snehal Kulkarni |

Total No. of Participants: 13 (UG 5 + PG 8)



#### A. Poster Competition

| Sr. | Type   | Title                   | Names of          | Class    | Name of       |
|-----|--------|-------------------------|-------------------|----------|---------------|
| No. |        |                         | Students          |          | Guide         |
| 1   | Poster | Microorganisms in space | 1.Gloriya Rocha   | F.Y.B.Sc | Dr. Manasi    |
|     |        |                         | 2.Bhagyashree     |          | Tukdeo        |
|     |        |                         | Honwad            |          |               |
| 2   | Poster | Corona Virus            | 1.Shruti Raut     | F.Y.B.Sc |               |
|     | a      |                         | 2.Nikita Gaikwad  |          |               |
|     |        | ,                       | 3.Shrutika Nevase |          |               |
| 3   | Poster | A MicroBeeal aspect     | 1.Dhaval Shejwal  | S.Y.B.Sc | Mrs. Prajakta |
|     |        |                         | 2.Jwalanthi       |          | Taple         |
|     |        |                         | Sundaram          |          |               |
|     |        |                         | 3.Shruti Ghaisas  |          |               |
|     |        |                         | 4.Sujala Kulkarni |          |               |
| 4   | Poster | World of Microbes       | 1.Samrudhi More   | TYBSc    | Mrs. Gauri    |
|     |        |                         | 2.Tanvi Bahirat   |          | Bhagat        |
| 5   | Poster | Brain Gate              | 1.Rutuja          | M.Sc II  | Dr. Manasi    |
|     |        |                         | Savairam          |          | Tukdeo        |
|     |        |                         | 2.Sumit Mandle    |          |               |
|     |        |                         | 3.Bhavna Rathor   |          |               |

#### **Total No. of Participants: 5 (UG 4 + PG 1)**

#### **Model Competition**

| Sr. | Type  | Title        | Names of Students | Class   | Name of    |
|-----|-------|--------------|-------------------|---------|------------|
| No. |       |              |                   |         | Guide      |
| 1   | Model | Motility     | 1.Rutuja Savairam | M.Sc II | Dr. Manasi |
|     |       |              | 2.Gauri Tungikar  |         | Tukdeo     |
| 2   | Model | Corona Virus | 1.Rutuja Savairam | M.Sc II | Dr. Manasi |
|     |       |              | 2.Gauri Tungikar  |         | Tukdeo     |

## Total No. of Participants: 2 (UG 0 + PG 2)

## **Regional Competition**

#### **Project Competition**

| Sr. | Туре    | Title                      | Names of Students | Class    | Name of Guide     |
|-----|---------|----------------------------|-------------------|----------|-------------------|
| No. |         |                            |                   |          |                   |
| 1   | Project | Isolation of <i>E-coli</i> | 1.Gaurav Rai      | S.Y.B.Sc | Mrs.Gauri Bhagat. |
|     |         | mutants induced by         | 2.Sachin Bomen    |          | 1                 |
|     |         | U.V light                  | 3.Mithil Bochgire |          |                   |
|     |         |                            | 4.Mayuri Pawar    |          |                   |



| 2             | Project   | Food Spoilage Fungi  | 1.Saloni Divekar<br>2.Diksha Nalage<br>3.Shreya Nair  | S.Y.B.Sc | Mrs.Anupama<br>Sonawane                      |
|---------------|---|--|---|----------|--|
| 3.            | Project   | Skin Microflora  | 1.Atharva Wakharkar 2.Medhansh Kotian   | S.Y.B.Sc |  |
| 4. Project "C |   | "Grain - Gain"   | 1.Ashwin Deekonda 2.Neha Mahadik 3.Akanksha Dhende  | S.Y.B.Sc | Mrs.Gauri Bhagat                             |
| 5.            | Project   | Immediate effect of solar radiations on microbes during annular solar eclipse Dec 2019                               | 1.Stutee Panse,<br>2.Prajakta<br>Kshirsagar<br>3.Rucha Joshi                                  | M.Sc. I  | Dr.Kirti Dahigaonkar,<br>Dr.Ashwini Kulkarni |
| 6.            | Project   | Bacterial pigments   | <ol> <li>Sawani</li> <li>Karandikar</li> <li>Sana Maniyar</li> <li>Vaishnavi Taple</li> </ol> | M.Sc II  | Mrs. Sneha Ogale                             |
| 7.            | Project   | Bioelectricity production from various wastes.   | 1.Bhagyashree Nipunage 2.Nikita Bankar 3.Poonam Sukhdeve                                      | M.Sc II  | Dr.Kirti Dahigaonkar                         |
| 8.            | 8. Project Plant growth promoting activity of keratin degrading Bacillus cereus |  | 1.Prasad Memane   | M.Sc. II | Dr. Manasi Tukdeo                            |
| 9.            | Project   | Production, characteriz ation and biotechnological application of exopolysaccharide produced by halophillic bacteria | 1.Pranali Meher<br>2.Gauri Tungikar   | M.Sc.II  | Mrs. Sneha Ogale<br>Dr.Snehal Kulkarni       |

Total No. of Participants: 9 (UG 4 + PG 5)



#### **Poster Competition**

| Sr. | Type   | Title                   | Names of          | Class    | Name of       |
|-----|--------|-------------------------|-------------------|----------|---------------|
| No. |        |                         | Students          |          | Guide         |
| 1   | Poster | Microorganisms in space | 1.Gloriya Rocha   | F.Y.B.Sc | Dr. Manasi    |
|     |        |                         | 2.Bhagyashree     |          | Tukdeo        |
|     |        |                         | Honwad            |          |               |
| 2   | Poster | Corona Virus            | 1.Shruti Raut     | F.Y.B.Sc | Mr. Prasad    |
|     |        |                         | 2.Nikita Gaikwad  |          | Deshmane      |
|     |        |                         | 3.Shrutika Nevase |          |               |
| 3   | Poster | A MicroBeeal aspect     | 1.Dhaval Shejwal  | S.Y.B.Sc | Mrs. Prajakta |
|     |        |                         | 2.Jwalanthi       |          | Taple         |
|     |        |                         | Sundaram          |          |               |
|     |        |                         | 3.Shruti Ghaisas  |          |               |
|     |        |                         | 4.Sujala Kulkarni |          |               |
| 4   | Poster | World of Microbes       | 1.Samrudhi More   | TYBSc    | Mrs. Gauri    |
|     |        |                         | 2.Tanvi Bahirat   |          | Bhagat        |
| 5   | Poster | Brain Gate              | 1.Rutuja          | M.Sc II  | Dr. Manasi    |
|     |        |                         | Savairam          |          | Tukdeo        |
|     |        |                         | 2.Sumit Mandle    |          |               |
|     |        |                         | 3.Bhavna Rathor   |          |               |

#### Total No. of Participants: 5 (UG 4 + PG 1)

#### **Model Competition**

| Sr.<br>No. | Type  | Title        | Names of Students                     | Class   | Name of<br>Guide     |
|------------|-------|--------------|---------------------------------------|---------|----------------------|
| 1.         | Model | Corona Virus | 1.Rutuja Savairam<br>2.Gauri Tungikar | M.Sc II | Dr. Manasi<br>Tukdeo |

Total No. of Participants: 1 (UG 0 + PG 1)

#### **Alumni Achievements:**

| Sr. | Student Name             | Year o  | of | Achievement  |
|-----|--------------------------|---------|----|--|
| no. |                          | passing |    |  |
| 1   | Ms. Rashmi Chotaliya     | 2011-12 |    | Qualified CSIR- NET and SET  |
| 2   | Tanay Bhagwat            | 2016-17 |    | Joined Northeastern University   |
| 3   | Sanchita<br>Gramopaddhye | 2017-18 |    | CSIR UGC NET JRF JUNE 2019 all india rank<br>29, Qualified SET conducted June 2019, Gate<br>2019 life sciences all india rank 1651 |
| 4   | Asmita Bambole           | 2017-18 |    | Qualified GATE 2019,<br>Qualified CSIR UGC NET JRF JUNE 2019   |



- 1) Students participated in 19<sup>th</sup> State Level MicroBioOlympiad on 25<sup>th</sup> January 2020 conducted by Department of Microbiology and Biotechnology, R. C. Patel Arts, Commerce and Science College, Shirpur.
- 2) Students participated in 19<sup>th</sup> State Level MicroBioCanvas conducted by Department of Microbiology and Biotechnology, R. C. Patel Arts, Commerce and Science College, Shirpur.

| No | Class    | Appeared | Qualified                    |
|----|----------|----------|------------------------------|
| 2  | S Y B Sc | 1        | 9 th rank in the competition |
| 3  | T Y B Sc | 2        |                              |

#### Financial Aid:

| Sr<br>No. | Name of Beneficiary             | Amount | Purpose                  |
|-----------|---------------------------------|--------|--------------------------|
| 1         | Science Club, Ladakh            | 3600/- | Two microscopes          |
| 2         | Mr. Piyush Warankar             | 1300/- | Monthly charges for Mess |
| 3         | Kolhapur – Sangli Flood Victims | 1300/- | Medicines                |

## Extra Curricular activities: Staff participation

| Sr No | Activity                    | Venue       | Staff members  | Date       |
|-------|-----------------------------|-------------|--|------------|
| 1.    | Sending Rakhis to souldiers | MCASC, GK   | Mrs. Sneha Ogale, Mrs. Anupama Sonawane, Dr. Neelima Kulkarni, Mr. Prasad Deshmane, Mrs. Gauri Bhagat, Dr. Manasi Tukdeo, Mrs. Trupti Kulkarni, Dr. Gauri Phadke, Dr. Kirti Dahigaonkar, Dr. Ashwini Kulkarni, Ms. Yogini Kanade, Mrs. Prajakta Taple, Ms. Shruti Deshpande. | 10.08.2019 |
| 2.    | Tree Plantation             | Dakhne Kule | Mrs. Sneha Ogale, Ms. Shruti<br>Deshpande  | 23.08.2019 |



| t. | 3. | Talk on Work   | Psychology  | Mrs. Sneha Ogale, Mrs. Gauri   | 14.09.2019 |
|----|----|----------------|-------------|--------------------------------|------------|
|    |    | life Balance   | Department, | Bhagat, Dr. Manasi Tukdeo,     |            |
|    |    | and Parenting  | MCASC, GK   | Mrs. Trupti Kulkarni, Dr.      |            |
|    |    | by Dr. Sadhana |             | Gauri Phadke, Dr. Kirti        |            |
|    |    | Natu           |             | Dahigaonkar, Dr. Ashwini       | *          |
|    |    |                |             | Kulkarni, Ms. Yogini Kanade,   |            |
|    |    |                |             | Mrs. Prajakta Taple.           |            |
|    | 4. | Swachhata      | MCASC GK    | Mrs. Sneha Ogale, Mrs.         | 02.10.2019 |
|    | 1. | Diwas          | Werlse dit  | Anupama Sonawane, Dr.          | 02.10.2019 |
|    |    | Diwas          |             | Neelima Kulkarni, Mr. Prasad   |            |
|    |    |                |             | Deshmane, Mrs. Gauri Bhagat,   |            |
|    |    |                |             | Dr. Manasi Tukdeo, Mrs.        |            |
|    |    |                |             | Trupti Kulkarni, Dr. Gauri     |            |
|    |    |                |             | Phadke, Dr. Kirti Dahigaonkar, | *          |
|    |    |                |             | Dr. Ashwini Kulkarni, Ms.      |            |
| z. |    |                |             | Yogini Kanade, Mrs. Prajakta   |            |
|    |    |                |             | Taple, Ms. Shruti Deshpande.   |            |
|    |    |                |             |                                |            |



Encha Ogale

HEAD

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