



## Yearly Status Report - 2017-2018

### Part A

#### Data of the Institution

|   |   |
|---|---|
| Part A  |   |
| <b>Data of the Institution</b>                |   |
| <b>1. Name of the Institution</b>             | P. T. SARVAJANIK COLLEGE OF SCIENCE   |
| Name of the head of the Institution           | DR. PRUTHUL RAMESH DESAI  |
| Designation                                   | Principal   |
| Does the Institution function from own campus | Yes   |
| Phone no/Alternate Phone no.                  | 02612240028   |
| Mobile no.                                    | 9426854713  |
| Registered Email                              | pruthuldesai@gmail.com  |
| Alternate Email                               | principal@ptscience.ac.in   |
| Address                                       | P T Sarvajanic College of Science, M T B College Campus, Jawaharlal Nehru Marg, Athwalines, Surat |
| City/Town                                     | SURAT   |
| State/UT                                      | Gujarat   |
| Pincode                                       | 395001  |

|  |                           |
|--|---------------------------|
| <b>2. Institutional Status</b>         |                           |
| Affiliated / Constituent               | Affiliated                |
| Type of Institution                    | Co-education              |
| Location                               | Urban                     |
| Financial Status                       | state                     |
| Name of the IQAC co-ordinator/Director | DR. ANITA BAHADUR         |
| Phone no/Alternate Phone no.           | 02612240028               |
| Mobile no.                             | 9825454366                |
| Registered Email                       | anita26p@gmail.com        |
| Alternate Email                        | principal@ptscience.ac.in |

|  |   |
|--|---|
| <b>3. Website Address</b>  |   |
| Web-link of the AQAR: (Previous Academic Year)                           | <a href="http://www.ptscience.ac.in/upload/2016-17.pdf">http://www.ptscience.ac.in/upload/2016-17.pdf</a>                                   |
| <b>4. Whether Academic Calendar prepared during the year</b>             | Yes   |
| if yes,whether it is uploaded in the institutional website:<br>Weblink : | <a href="https://www.ptscience.ac.in/upload/term%20schedule_2017-18.pdf">https://www.ptscience.ac.in/upload/term%20schedule_2017-18.pdf</a> |

**5. Accrediation Details**

| Cycle | Grade | CGPA | Year of Accrediation | Validity    |             |
|-------|-------|------|----------------------|-------------|-------------|
|       |       |      |                      | Period From | Period To   |
| 2     | A     | 3.03 | 2015                 | 03-Mar-2015 | 02-Mar-2020 |

|   |             |
|---|-------------|
| <b>6. Date of Establishment of IQAC</b> | 01-Jul-2007 |
|---|-------------|

**7. Internal Quality Assurance System**

| 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 |
| Science Academies'  | 18-Dec-2017     | 27                                    |

|   |                   |     |
|---|-------------------|-----|
| Refresher Course on Statistical Physics by Prof. Deepak Dhar and others   | 13                |     |
| Lecture cum Demonstration of Physics experiments by Prof. H. C. Verma, Retd. Prof. IIT, Kanpur                      | 28-Jan-2018<br>1  | 700 |
| Conceptual Foundations of Quantum Mechanics by Prof. V. N. Potbhare, Retd. Professor, DOP, M. S. University, Baroda | 17-Aug-2018<br>3  | 140 |
| Au-some Cosmic explosion & its implication for 21st century Astronomy by Prof. A. Gopakumar TIFR, Mumbai            | 19-Feb-2018<br>1  | 98  |
| Carrier Counselling by Mr. Ghanshyam Khatri   | 03-Feb-2018<br>1  | 85  |
| Public Awareness Program on Radio Activity by Mr. A. K. Patra Kakrapar Atomic Power Project, Kakrapar, Gujarat      | 18-Sep-2017<br>1  | 153 |
| Topological Phases of matter by Prof. Sudhir Jain BARC, Mumbai  | 01-Sep-2017<br>1  | 257 |
| Carrier Counselling by Mr. Vivek Patel  | 22-Jul-2017<br>1  | 156 |
| Bridge course Chemistry during summer vacation  | 16-Jun-2017<br>7  | 38  |
| Bridge course in Physics during summer vacation   | 12-Jun-2017<br>12 | 25  |
| <a href="#">View File</a>   |                   |     |

**8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.**

| Institution/Department/Faculty | Scheme       | Funding Agency | Year of award with duration | Amount  |
|--------------------------------|--------------|----------------|-----------------------------|---------|
| Institute                      | CPE          | UGC            | 2016<br>1,825               | 2448000 |
| Faculty                        | Travel grant | UGC            | 2017<br>0                   | 70907   |
| <a href="#">View File</a>      |              |                |                             |         |

**9. Whether composition of IQAC as per latest NAAC guidelines:**

Yes

|  |   |
|--|---|
| Upload latest notification of formation of IQAC  | <a href="#">View File</a>   |
| <b>10. Number of IQAC meetings held during the year :</b>  | 2   |
| The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website   | Yes   |
| Upload the minutes of meeting and action taken report  | <a href="#">View File</a>   |
| <b>11. Whether IQAC received funding from any of the funding agency to support its activities during the year?</b>   | No  |
| <b>12. Significant contributions made by IQAC during the current year(maximum five bullets)</b>  |   |
| <p>1. Bridge courses were conducted in Physics and Chemistry during summer vacation</p> <p>2. Special seminars were arranged by the college staff in which the faculty members of the college gave presentations on various topics</p> <p>3. Special seminar slot was added in the time table in which invited talks, informative and motivational talks and screening of science documentaries and science fiction are arranged</p> |   |
| <a href="#">View File</a>  |   |
| <b>13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year</b>   |   |
| Plan of Action   | Achievements/Outcomes   |
| To arrange invited talks of renowned scientists/ professors/research scholars etc.   | <p>Physics Department: Prof. Sudhir Jain from BARC, Mumbai was invited to deliver a talk on "Topological Phases of Matter: Nobel Prize in Physics 2016", We invited Mr. M. V. Parikh and Dr. A. K. Patra from KAPS, Kakrapar to deliver talks on "DAE - Society Benefits" and "Radiation - A Fact of Life", Prof V N Potbhare, Retd Professor, Department of Physics, M S University, Vadodara was invited to for a lecture series on "Conceptual Foundations of Quantum Mechanics" during 17th August to 19th August, 2017, Renowned Prof. H. C. Verma from IIT, Kanpur was invited on 28th January, 2018. He spared the whole day at the college with two sessions. In the morning, he had a presentation on "Science in India". In the afternoon session, there was demonstration of</p> |

|   |  |
|---|--|
|   | experiments indigenously designed by him. Almost 800 students of schools and colleges were benefitted by it,<br>Chemistry Department: Dr. Prem Kaushal, CDFD, Hyderabad delivered a talk on "Nobel Prize in Chemistry in 2017".  |
| To encourage students to participate in national/state level exam/competition/symposia/seminars/workshops/conventions | Mathematics Department: Annual convention of Gujarat Ganit Mandal at Ganpat University, Mahesna, Students participated state level Prof. A. R. Rao Mathematics Competition, Physics Department: Students participated in "National Competition for Essay Writing in Physics", organized by IAPT, Students appeared in a National Level Examination, called NGPE, organized by IAPT, Kanpur, Students participated in CPEX - 2018(State Level Final) organized by RC - 7 (Gujarat) of IAPT held in our college. Our students won first prize in UG level. |
| To take students to educational tours - arranged by individual departments  | Zoology Department: Kosmada (Induced breeding), Sarthana Nature's Park, Wadhvana bird sanctuary (Ta. Dabhoi), Mathematics Department: Annual convention of Gujarat Ganit Mandal held at Ganpat University, Mahesna, Physics Department: Dang district for night sky gazing and Charusat, Changa for a workshop on nano-science and nano-technology, Chemistry Department: Forensic Science Laboratory, Surat and NSS Camp was organized at Kalibel, DANG for one week  |
| It was decided to add a seminar slot in the time table  | Executed   |
| To arrange a series of lectures on "Nobel Prize" in different subjects.   | Arranged lectures on Nobel prize in Chemistry: by Dr. Prem Kaushal, CDFD, Hyderabad, Physics: by Prof. A Gopakumar, TIFR, Mumbai, Medicine/Physiology: Prof. Sheeba Vasu, JNCASR, Bengaluru  |
| <a href="#">View File</a>   |  |

|  |     |
|--|-----|
| <b>14. Whether AQAR was placed before statutory body ?</b> | Yes |
|--|-----|

| Name of Statutory Body | Meeting Date |
|------------------------|--------------|
| LAC                    | 04-Jan-2019  |

|  |    |
|--|----|
| <b>15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?</b> | No |
|--|----|

|  |             |
|--|-------------|
| <b>16. Whether institutional data submitted to AISHE:</b>            | Yes         |
| Year of Submission   | 2018        |
| Date of Submission   | 19-Feb-2018 |
| <b>17. Does the Institution have Management Information System ?</b> | No          |

## 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

Institution has the mechanism for well-planned curriculum delivery and documentation: • As per the present structure of the Veer Narmad South Gujarat University, the curriculum is designed by the committee formed by the Board of Studies of the respective subjects and approved by the Faculty and the Academic Council of the university. • Then the curriculum is forwarded to all the affiliated colleges of the university. • In the beginning of the academic year, all the HODs call upon the meeting of the staff members and discuss the curriculum with them. The papers/topics of the papers are distributed among the staff members as per the specialization and the expertise of the teachers after a fruitful discussion in the meeting. • The teachers conduct the theory classes on the regular basis as per the time table and if required, they engage extra classes also to cover the syllabus. • We have sufficient number of laboratories in the college across the departments. • The students are called for performing experiments in the laboratory during the stipulated time mentioned in the time table. • They are informed to prepare a record book and a graph book to record and maintain their observations. Then they are instructed to prepare journal to record the experiments they have performed and get them signed by the respective teacher. • It is assured that the students perform maximum number of experiments prescribed in the curriculum. • The student's attendance is also recorded, both in the theory classes as well as in the laboratories.

1.1.2 – Certificate/ Diploma Courses introduced during the academic year

| Certificate | Diploma Courses | Dates of Introduction | Duration | Focus on employ ability/entrepreneurship | Skill Development |
|-------------|-----------------|-----------------------|----------|--|-------------------|
| NIL         | NIL             | 12/06/2017            | 0        | NA                                       | NA                |

#### 1.2 – Academic Flexibility

1.2.1 – New programmes/courses introduced during the academic year

| Programme/Course  | Programme Specialization | Dates of Introduction |
|-------------------|--------------------------|-----------------------|
| Nil               | NIL                      | 12/06/2017            |
| No file uploaded. |                          |                       |

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 | Programme Specialization                         | Date of implementation of CBCS/Elective Course System |
|----------------------------------|--|---|
| BSc                              | Physics, Chemistry, Mathematics, Botany, Zoology | 12/06/2017  |

1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

|                    | Certificate | Diploma Course |
|--------------------|-------------|----------------|
| Number of Students | Nil         | Nil            |

### 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 |
|---------------------|----------------------|-----------------------------|
| NIL                 | 12/06/2017           | Nil                         |
| No file uploaded.   |                      |                             |

1.3.2 – Field Projects / Internships under taken during the year

| Project/Programme Title   | Programme Specialization | No. of students enrolled for Field Projects / Internships |
|---------------------------|--------------------------|---|
| MSc                       | Nuclear Physics          | 22  |
| <a href="#">View File</a> |                          |   |

### 1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

|           |     |
|-----------|-----|
| Students  | Yes |
| Teachers  | Yes |
| Employers | Yes |
| Alumni    | Yes |
| Parents   | Yes |

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

|  |
|--|
| Feedback Obtained  |
| Feedback from students is taken during the contact hours in informal way by teachers and principal and their suggestions are incorporated. From Teachers, Employers, Alumni and Parents feedback is taken during the meetings with them. |

## CRITERION II – TEACHING- LEARNING AND EVALUATION

### 2.1 – Student Enrolment and Profile

2.1.1 – Demand Ratio during the year

| Name of the Programme | Programme Specialization | Number of seats available | Number of Application received | Students Enrolled |
|-----------------------|--------------------------|---------------------------|--------------------------------|-------------------|
| BSc                   | BSC                      | 420                       | 448                            | 448               |
| MSc                   | MSC                      | 90                        | 91                             | 91                |
| MPhil                 | MPHIL                    | 11                        | 11                             | 11                |
| PhD or DPhil          | Mathematics, Zoology     | 6                         | Nil                            | 6                 |

[View File](#)

## 2.2 – Catering to Student Diversity

### 2.2.1 – Student - Full time teacher ratio (current year data)

| Year | Number of students enrolled in the institution (UG) | Number of students enrolled in the institution (PG) | Number of fulltime teachers available in the institution teaching only UG courses | Number of fulltime teachers available in the institution teaching only PG courses | Number of teachers teaching both UG and PG courses |
|------|---|---|---|---|--|
| 2017 | 1241  | 173   | 42  | Nil   | 23   |

## 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 |
|----------------------------|---|-----------------------------------|----------------------------------|----------------------------|---------------------------------|
| 29                         | 29  | 27                                | 14                               | Nil                        | Nil                             |

[View File of ICT Tools and resources](#)

[View File of E-resources and techniques used](#)

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

- The students are mentored by their respective teachers in different departments and any grievances or issues are addressed by the faculty to help the students from time-to-time.
- The teachers carry out counselling in the class also as and when needed.
- Sometimes, individual one-to-one counselling is also done when need arises.

| Number of students enrolled in the institution | Number of fulltime teachers | Mentor : Mentee Ratio |
|--|-----------------------------|-----------------------|
| 1414   | 42                          | 1:34                  |

## 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 |
|-----------------------------|-------------------------|------------------|--|--------------------------|
| 60                          | 29                      | 31               | Nil                                      | 23                       |

### 2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )

| Year of Award     | Name of full time teachers receiving awards from state level, national level, international level | Designation | Name of the award, fellowship, received from Government or recognized bodies |
|-------------------|---|-------------|--|
| 2017              | NIL   | Nil         | NIL  |
| No file uploaded. |   |             |  |

## 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- | Date of declaration of results of semester- |
|----------------|----------------|----------------|---|---|
|----------------|----------------|----------------|---|---|

|                           |            |        |                 |                            |
|---------------------------|------------|--------|-----------------|----------------------------|
|                           |            |        | end examination | end/ year- end examination |
| MSc                       | MScBOT001  | Sem IV | 20/04/2018      | 09/05/2018                 |
| MSc                       | MScPHY001  | Sem IV | 20/04/2018      | 25/05/2018                 |
| MSc                       | MScCHEM001 | Sem IV | 20/04/2018      | 23/05/2018                 |
| BSc                       | BSc001     | Sem VI | 13/04/2018      | 08/05/2018                 |
| <a href="#">View File</a> |            |        |                 |                            |

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

- It is being done as per VNSGU rules and regulations.
- We encourage students to deliver presentation/seminar on the topics of their choice and we consider it as their internal evaluation test.

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

- The college is affiliated to the Veer Narmad South Gujarat University, Surat. The academic calendar is prepared by the University and the college follows the same.
- In the beginning of the academic year, the HoDs convene a meeting with the respective departmental faculty members. The teaching work for the current semester is allocated to the respective teachers.
- The draft plan for the academic year is discussed in the meeting regarding the assignment collection, conduct of internal examinations and their evaluations, practical viva, journal preparation and certification, co-curricular and extra-curricular activities, celebration of National Science Day, invited talks by eminent persons etc. The progress of the matter is monitored by the HoDs time to time and actions are taken accordingly.

### 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.ptscience.ac.in/upload/co-po\\_ptscs.pdf](https://www.ptscience.ac.in/upload/co-po_ptscs.pdf)

#### 2.6.2 – Pass percentage of students

| Programme Code | Programme Name | Programme Specialization   | Number of students appeared in the final year examination | Number of students passed in final year examination | Pass Percentage |
|----------------|----------------|--|---|---|-----------------|
| BSC001         | BSc            | Bachelor of Science (Physics, Chemistry, Mathematics, Botany, Zoology) | 394   | 352   | 89.34           |
| MSC            | MSc            | Master of Science (Physics, Chemistry, Botany)                         | 81  | 70  | 86.42           |

[View File](#)

### 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)

[NIL](#)

### **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 | Amount received during the year |
|----------------------------------|----------|------------------------------------|------------------------|---------------------------------|
| Major Projects                   | 1095     | INDIAN SPACE RESEARCH ORGANISATION | 1853000                | 0                               |
| <u><a href="#">View File</a></u> |          |                                    |                        |                                 |

#### **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       |
|--|------------------------------------|------------|
| Conceptual Foundations of Quantum Mechanics  | Department of Physics              | 17/08/2017 |
| Lecture cum Demonstration of Physics experiments   | Department of Physics              | 28/01/2018 |
| "Is Anyone Out There?" by Dr. Pruthul Desai, Principal   | Department of Physics<br>2/07/2017 | 22/07/2017 |
| Career Counselling   | Department of Physics              | 22/07/2017 |
| Topological Phases of Matter by Prof. Sudhir Jain BARC, Mumbai   | Department of Physics              | 01/09/2017 |
| Public Awareness Program on Radio Activity by Mr. A. K. Patra Kakrapar Atomic Power Project, Kakrapar, Gujarat | Department of Physics              | 18/09/2017 |
| Milestones in The History of Optics by Prof. V. H. Thakkar, Asso. Prof.  | Department of Physics              | 28/09/2017 |
| What First: Theory or Experiment? by Prof. V. H. Thakkar, Asso. Prof.  | Department of Physics              | 31/01/2018 |
| Gravitational Waves: New window on the Universe by Dr. Pruthul Desai, Principal                                | Department of Physics              | 03/02/2018 |
| Carrier Counselling by Mr. Ghanshyam Khatri  | Department of Physics              | 03/02/2018 |
| Au-some Cosmic explosion its implication for 21st century Astronomy by Prof. A. Gopakumar TIFR,                | Department of Physics              | 19/02/2018 |

|  |  |  |
|--|--|--|
| Mumbai                                     |  |  |
| A Public Speaking Contest                  | Sir P. T. Sarvajanik<br>College of Science |  |
| Inter-College Elocution<br>Competition     | Sir P. T. Sarvajanik<br>College of Science |  |
| College Level Essay<br>Writing Competition | Sir P. T. Sarvajanik<br>College of Science |  |
| College Level Elocution<br>Competition     | Sir P. T. Sarvajanik<br>College of Science |  |

### 3.2.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

| Title of the innovation | Name of Awardee | Awarding Agency | Date of award | Category |
|-------------------------|-----------------|-----------------|---------------|----------|
| NIL                     | NIL             | NIL             | 12/06/2017    | NIL      |
| No file uploaded.       |                 |                 |               |          |

### 3.2.3 – No. of Incubation centre created, start-ups incubated on campus during the year

| Incubation Center | Name | Sponsored By | Name of the Start-up | Nature of Start-up | Date of Commencement |
|-------------------|------|--------------|----------------------|--------------------|----------------------|
| NIL               | NIL  | NIL          | NIL                  | NIL                | 12/06/2017           |
| No file uploaded. |      |              |                      |                    |                      |

## 3.3 – Research Publications and Awards

### 3.3.1 – Incentive to the teachers who receive recognition/awards

| State | National | International |
|-------|----------|---------------|
| 0     | 0        | 0             |

### 3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

| Name of the Department | Number of PhD's Awarded |
|------------------------|-------------------------|
| NIL                    | Nil                     |

### 3.3.3 – Research Publications in the Journals notified on UGC website during the year

| Type                      | Department | Number of Publication | Average Impact Factor (if any) |
|---------------------------|------------|-----------------------|--------------------------------|
| National                  | Chemistry  | 1                     | 0.75                           |
| International             | Zoology    | 2                     | 0.0                            |
| National                  | Zoology    | 2                     | 3.66                           |
| <a href="#">View File</a> |            |                       |                                |

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

| Department                | Number of Publication |
|---------------------------|-----------------------|
| Mathematics               | 2                     |
| Physics                   | 2                     |
| <a href="#">View File</a> |                       |

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

| Title of the | Name of | Title of journal | Year of | Citation Index | Institutional | Number of |
|--------------|---------|------------------|---------|----------------|---------------|-----------|
|--------------|---------|------------------|---------|----------------|---------------|-----------|

| Paper  | Author                        |  | publication |    | affiliation as mentioned in the publication | citations excluding self citation |
|--|-------------------------------|--|-------------|----|---|-----------------------------------|
| Monoazo styryl Quinazolinone Reactive dyes: Their synthesis, application and DFT calculation   | Dr. Bhavesh M. Patel          | Proceedings of the national academy of science, India, Section A | 2017        | 0  | Sir P T Sarvajani College of Science, Surat | 1                                 |
| Glucose triggered enhanced solubilization, release and cytotoxicity of poorly water soluble anti cancer drug from T 1307 micelles              | P. Patiddar and Anita Bahadur | Journal of biotechnology   | 2017        | 14 | Sir P T Sarvajani College of Science, Surat | 7                                 |
| Systematic characterization of pluronic micelles and their application for solubilisation and in vitro release of hydrophobic anticancer drugs | Anita Bahadur                 | Journal of Molecular liquids                                     | 2017        | 39 | Sir P T Sarvajani College of Science, Surat | 35                                |
| Comparison of total protein content in the muscles of Catla catla on exposure  | Ankita Patel Anita Bahadur    | Res Rev: A Journal of life science                               | 2017        | 0  | Sir P T Sarvajani College of Science, Surat | Nil                               |

|  |                                |                                       |      |   |   |      |
|--|--------------------------------|---------------------------------------|------|---|---|------|
| to Ag and ZnO nano particles and their metal ions  |                                |                                       |      |   |   |      |
| Variation in activity of lipase immobilized on Chitosan and alginate nano particles by changing concentration of the preparatory agents. | Heena Devnani<br>Anita Bahadur | Res Rev:<br>A Journal of life science | 2017 | 0 | Sir P T Sarvajani<br>College of Science,<br>Surat | Nill |
| <a href="#">View File</a>  |                                |                                       |      |   |   |      |

### 3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

| Title of the Paper | Name of Author | Title of journal | Year of publication | h-index | Number of citations excluding self citation | Institutional affiliation as mentioned in the publication |
|--------------------|----------------|------------------|---------------------|---------|---|---|
| NIL                | NIL            | NIL              | Nill                | Nill    | Nill  | 0   |
| No file uploaded.  |                |                  |                     |         |   |   |

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

| Number of Faculty           | International | National | State | Local |
|-----------------------------|---------------|----------|-------|-------|
| Attended/Seminars/Workshops | Nill          | 4        | 18    | 3     |
| Presented papers            | Nill          | 2        | Nill  | Nill  |
| <a href="#">View File</a>   |               |          |       |       |

## 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 participated in such activities | Number of students participated in such activities |
|--|--|--|--|
| Meeting of our college campus ambassadors with deputy collector at Jilla Seva Sadan. | Collector Office,<br>Surat                   | 3  | 2  |
| Participation in   | NSS unit                                     | 3  | 7  |

|  |  |   |     |
|--|--|---|-----|
| organizing Thalesemia Test for sem-1 students                              |  |   |     |
| Orientation Programme for new volunteers from F Y B Sc NSS Day celebration | NSS unit   | 3 | 119 |
| Programme Sankalpe Sidhdhi' at Gandhi Smruti Bhavan                        | NSS unit   | 3 | 261 |
| Flag hosting and Swachhata Abhiyan   | NSS unit   | 3 | 15  |
| YOGA- MEDITATION Programme   | NSS unit SIR P. T. SARVAJANIK COLLEGE OF SCIENCE Lakulish Yog University                           | 3 | 18  |
| WORLD PREVENTIVE HEALTH CARE DAY   | NSS unit   | 3 | 191 |
| BREAST FEEDING WEEK celebration  | NSS unit SIR P. T. SARVAJANIK COLLEGE OF SCIENCE Sheth P.T.Mahila College of Arts and Home Science | 3 | 174 |
| Participated in FEMICON conference at V.N.S.G.U.,                          | Damini Organisation  | 3 | 9   |
| TREE PLANTATION in Botanical Garden  | NSS unit   | 3 | 115 |
| <a href="#">View File</a>  |  |   |     |

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 | Number of students Benefited |
|----------------------|-------------------|-----------------|------------------------------|
| NIL                  | NIL               | NIL             | Nil                          |
| No file uploaded.    |                   |                 |                              |

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 participated in such activities | Number of students participated in such activities |
|--------------------|--|---------------------------------|--|--|
| NSS                | Sir P T Sarvajanic College of Science, Surat | Lecture on "Urban Horticulture" | 3  | 155  |
| NSS                | Sir P T Sarvajanic                           | Yoga-Meditation                 | 3  | 56   |

|                           |  |  |     |     |
|---------------------------|--|--|-----|-----|
|                           | College of Science, Surat                    |  |     |     |
| NSS                       | Sir P T Sarvajanik College of Science, Surat | "No Tobacco" campaign                      | 3   | 119 |
| NSS                       | Sir P T Sarvajanik College of Science, Surat | Swachhata abhiyaan                         | 3   | 67  |
| NSS                       | Sir P T Sarvajanik College of Science, Surat | World PHD gratitude ceremony               | Nil | 5   |
| NSS                       | Sir P T Sarvajanik College of Science, Surat | Swachha Surat abhiyaan.                    | 3   | 180 |
| NSS                       | Sir P T Sarvajanik College of Science, Surat | Thalassemia camp                           | 3   | 22  |
| NSS                       | Sir P T Sarvajanik College of Science, Surat | NSS camp (07 days)                         | 3   | 40  |
| NSS                       | Sir P T Sarvajanik College of Science, Surat | Femicon conference for girls               | 2   | 11  |
| NSS                       | Sir P T Sarvajanik College of Science, Surat | Breast feeding awareness program for girls | 2   | 255 |
| <a href="#">View File</a> |  |  |     |     |

### 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 |
|--------------------|-------------|-----------------------------|----------|
| NIL                | NIL         | NIL                         | 0        |
| No file uploaded.  |             |                             |          |

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 | Duration To | Participant |
|-------------------|----------------------|---|---------------|-------------|-------------|
|                   |                      |   |               |             |             |

|  |                 |                    |            |            |  |
|--|-----------------|--------------------|------------|------------|--|
| Academia-<br>Research lab<br>collaboratio<br>n | Project<br>work | KAPS,<br>Kakarapar | 08/09/2017 | 08/09/2017 | M Sc<br>(Nuclear<br>Physics)<br>students |
| Academia-<br>Research lab<br>collaboratio<br>n | Project<br>work | KAPS,<br>Kakarapar | 28/09/2017 | 28/09/2017 | M Sc<br>(Nuclear<br>Physics)<br>students |
| Academia-<br>Research lab<br>collaboratio<br>n | Project<br>work | KAPS,<br>Kakarapar | 29/09/2017 | 29/09/2017 | M Sc<br>(Nuclear<br>Physics)<br>students |
| <a href="#">View File</a>                      |                 |                    |            |            |  |

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/Activities | Number of students/teachers participated under MoUs |
|-------------------|--------------------|--------------------|---|
| NIL               | 12/06/2017         | NIL                | Nil   |
| No file uploaded. |                    |                    |   |

## 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 | Budget utilized for infrastructure development |
|--|--|
| 11.5   | 39.29  |

4.1.2 – Details of augmentation in infrastructure facilities during the year

| Facilities  | Existing or Newly Added |
|---|-------------------------|
| Classrooms with Wi-Fi OR LAN                                    | Newly Added             |
| Seminar Halls   | Existing                |
| Laboratories  | Existing                |
| Class rooms   | Existing                |
| Campus Area   | Existing                |
| Value of the equipment purchased during the year (rs. in lakhs) | Newly Added             |
| <a href="#">View File</a>                                       |                         |

### 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 patially) | Version | Year of automation |
|---------------------------|--|---------|--------------------|
| SOUL                      | Partially                                | 2.0     | 2006               |

4.2.2 – Library Services

| Library Service Type | Existing | Newly Added | Total |
|----------------------|----------|-------------|-------|
|                      |          |             |       |

|                       |       |         |      |       |       |         |
|-----------------------|-------|---------|------|-------|-------|---------|
| Weeding (hard & soft) | Nill  | Nill    | Nill | Nill  | Nill  | Nill    |
| Others(s pecify)      | 126   | Nill    | Nill | Nill  | 126   | Nill    |
| Text Books            | 2003  | 209838  | 150  | 17440 | 2153  | 227278  |
| Reference Books       | 10190 | 2718251 | 143  | 66300 | 10333 | 2784551 |
| e-Books               | 1002  | Nill    | Nill | Nill  | 1002  | Nill    |
| Journals              | 242   | 411043  | 23   | 55505 | 265   | 466548  |
| e-Journals            | Nill  | Nill    | Nill | Nill  | Nill  | Nill    |
| Digital Database      | Nill  | Nill    | Nill | Nill  | Nill  | Nill    |
| CD & Video            | 11    | 60      | Nill | Nill  | 11    | 60      |

[View File](#)

4.2.3 – 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                                   | 12/06/2017                  |
| No file uploaded.   |                    |                                       |                             |

#### 4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

| Type     | Total Computers | Computer Lab | Internet | Browsing centers | Computer Centers | Office | Departments | Available Bandwidth (MBPS/ GBPS) | Others |
|----------|-----------------|--------------|----------|------------------|------------------|--------|-------------|----------------------------------|--------|
| Existing | 40              | 1            | 8        | 7                | 0                | 1      | 7           | 50                               | 0      |
| Added    | 21              | 0            | 1        | 0                | 0                | 0      | 0           | 0                                | 0      |
| Total    | 61              | 1            | 9        | 7                | 0                | 1      | 7           | 50                               | 0      |

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

50 MBPS/ GBPS

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  | Nill   |

#### 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 | Expenditure incurred on maintenance of academic facilities | Assigned budget on physical facilities | Expenditure incurred on maintenance of physical facilities |
|--|--|--|--|
| 0.52                                   | 5.66   | 8.91                                   | 22.35  |

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

• The college is very conscious as far as the maintenance of the infrastructure and updating the other facilities are concerned. • The maintenance of infrastructure involves repair work of college building, plumbing work, electrical work, furniture repairs etc. The Sarvajanic Education Society (SES) has a well-established Estate department which takes care of all maintenance work. • Routine cleaning of the laboratory, library, sports complex, classrooms etc. is done by the departmental peons of the college. • As for the cleaning of campus and campus facilities, an AMC has been given to a professional housekeeping agency and cleaning is done by the trained staff of the agency on day-to-day basis. • AMCs are in place with different professional agencies for the maintenance of on-campus computers, laptops, printers, projectors, air-conditioners, CCTV camera system, drinking water utility system and other such electronic devices appliances. This ensures that the computers and other essential utilities have a minimum downtime. • The support facilities like replenishing of consumables like laser printer toners, photocopying machine toners, laboratory chemicals, stationary items etc. are also made available through pre- authorised vendors. • The college boasts of a vast green cover of trees and lawns. This also means that the areas under green cover will have a lot of leaves and twigs falling from trees and shrubs. The housekeeping agency maintains the campus clean. • The college has outsourced the maintenance of the garden and green cover elements to a horticulture agency. They regularly water, trim and maintain the gardens, potted plants, trees etc. • The library has an OPAC software, and is RFID enabled. As far as the laboratories are concerned, the laboratory assistants and the laboratory in-charge are responsible for the upkeep of the equipment. The stock register of equipment of different laboratories is maintained. Our college has large playground and a pavilion for outdoor and indoor sports activities respectively. Maintenance of all sports facilities is looked after by the Assistant Professor in Physical Education and a peon dedicated to this task. • The college has an on-campus health centre which is looked after by a full-time doctor and a compounder.

<https://www.ptscience.ac.in/upload/aqar/procedure%20%26%20policies.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   | Scholarship from Management/ Alumini | 67                 | 184491           |
| Financial Support from Other Sources |                                      |                    |                  |
| a) National                          | Financial support from government    | 462                | 0                |
| b) International                     | NIL                                  | Nil                | 0                |

[View File](#)

5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

| Name of the capability enhancement scheme                   | Date of implementation | Number of students enrolled | Agencies involved                            |
|---|------------------------|-----------------------------|--|
| Bridge course Chemistry                                     | 16/06/2017             | 38                          | Sir P T Sarvajanik College of Science, Surat |
| Course on Conceptual Foundations in Physics (Bridge Course) | 12/06/2017             | 25                          | Sir P T Sarvajanik College of Science, Surat |

[View File](#)

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

| Year | Name of the scheme | Number of benefited students for competitive examination | Number of benefited students by career counseling activities | Number of students who have passed in the comp. exam | Number of students placed |
|------|--------------------|--|--|--|---------------------------|
| 2017 | JAM EXAM           | 42   | 200  | 13   | Nil                       |

[View File](#)

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 | Number of grievances redressed | Avg. number of days for grievance redressal |
|---------------------------|--------------------------------|---|
| Nil                       | 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 |
| Envision Scientific Pvt. Ltd. | 16                              | 9                         | NIL                           | Nil                             | Nil                       |

[View File](#)

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 |
|------|--|--------------------------|---------------------------|-----------------------------------|-------------------------------|
| 2018 | 1  | BSc                      | BOTANY                    | Dept. of Bioscience, VNSGU, Surat | B. Ed.                        |
| 2018 | 4  | BSc                      | CHEMISTRY                 | B.M.College                       | B. Ed.                        |

|      |    |     |             |   |        |
|------|----|-----|-------------|---|--------|
|      |    |     |             | of Science & Tech,<br>Bharthana,<br>Surat, Shree<br>Sarvodaya<br>Shikshan<br>Mandalk B.<br>Ed. College,<br>Surat, Shri.<br>S. R. Patel<br>B. Ed.<br>College,<br>Anita, Kim,<br>Swaminarayan<br>B. Ed.<br>College,<br>Ankleshwar |        |
| 2018 | 13 | BSc | MATHEMATICS | Bhagwan<br>Mahaveer<br>College of<br>Edu., Surat,<br>Registrar,<br>VNSGU,<br>Surat, Shree<br>Sarvodaya<br>Shikshan<br>Mandal B.<br>Ed. College,<br>Surat, Swami<br>narayan, B.<br>Ed. College,<br>Ankleshwar                    | B. Ed. |
| 2018 | 11 | BSc | PHYSICS     | Dept. of<br>Physics,<br>VNSGU, Surat  | B. Ed. |
| 2018 | 2  | BSc | ZOOLOGY     | Bhagwan<br>Mahaveer<br>College of<br>Edu. Surat ,<br>Vivekanand<br>Colloeege for<br>B. Ed. Surat  | B. Ed. |
| 2018 | 1  | BSc | MATHEMATICS | V. T.<br>Choksi<br>Sarvajanik<br>Law College,<br>Surat  | Law    |
| 2018 | 54 | BSc | CHEMISTRY   | B.M.College<br>of Science &<br>Tech,<br>Bharthana,<br>Surat,<br>Department<br>of<br>Chemistry,  | M. Sc. |

|                           |    |     |             |  |        |
|---------------------------|----|-----|-------------|--|--------|
|                           |    |     |             | VNSGU,<br>Surat,<br>Registrar,<br>VNSGU,<br>Surat, Jay<br>Jalaaram<br>Talimi<br>Saatak Mahav<br>idhtyalaya,<br>Thava, Di-<br>Bharuch,<br>Navyug<br>Science<br>College,<br>Surat, Shree<br>Narmada<br>College of<br>Mangrol,<br>Surat |        |
| 2018                      | 60 | BSc | MATHEMATICS | Department<br>of<br>Mathematics,<br>VNSGU,<br>Surat, Jilla<br>shikshan and<br>Talim<br>Bhavan,<br>Navsari,<br>Registrar,<br>VNSGU, Surat   | M. Sc. |
| 2018                      | 38 | BSc | PHYSICS     | Department<br>of Physics,<br>VNSGU,<br>Surat,<br>Registrar,<br>VNSGU, Surat  | M. Sc. |
| 2018                      | 11 | BSc | ZOOLOGY     | Dept. of<br>Bio-science<br>VNSGU,<br>Surat,<br>Registrar,<br>VNSGU, Surat  | M. Sc. |
| <a href="#">View File</a> |    |     |             |  |        |

5.2.3 – Students 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                     | Number of students selected/ qualifying |
|---------------------------|---|
| NET                       | 3                                       |
| SLET                      | 7                                       |
| Any Other                 | 1                                       |
| Any Other                 | 2                                       |
| <a href="#">View File</a> |   |

5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

| Activity                  | Level   | Number of Participants |
|---------------------------|---|------------------------|
| Volleyball (Women)        | West Zone Inter University                      | 2                      |
| Volleyball (Women)        | VNSGU, Surat Inter College                      | 12                     |
| Taekwondo (Women)         | Canada Open Taekwondo Championship 2017-18      | 1                      |
| Taekwondo (Women)         | Commonwealth Taekwondo Association Championship | 1                      |
| Taekwondo (Women)         | Senior State Taekwondo Championship             | 1                      |
| Taekwondo (Women)         | All India Inter University                      | 1                      |
| Taekwondo (Women)         | VNSGU, Surat Inter College                      | 1                      |
| Cross Country (Men)       | VNSGU, Surat Inter College                      | 9                      |
| Chess (Women)             | West Zone Inter University                      | 1                      |
| Chess (Women)             | VNSGU, Surat Inter College                      | 6                      |
| <a href="#">View File</a> |   |                        |

### 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/ Internaional | Number of awards for Sports | Number of awards for Cultural | Student ID number | Name of the student         |
|---------------------------|-------------------------|------------------------|-----------------------------|-------------------------------|-------------------|-----------------------------|
| 2018                      | Bronze Medal (Trio)     | National               | 1                           | Nil                           | PM51              | Kosambia Meet<br>Pareshbhai |
| <a href="#">View File</a> |                         |                        |                             |                               |                   |                             |

5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

• A student's council is a platform for the students to experience and practice healthy democratic policies. The college believes in and encourages the active participation of students in various academic curricular, extracurricular and other day to day activities. The students are thus groomed for leadership qualities, team work, event organizing skills and facing unforeseen challenges and overcoming them. • The University has set some norms for the formation of the student's council and requires that the council be headed by the Principal of the college. The various committees are chaired by a senior faculty member and comprises of faculty members too. • The General Secretary and the other elected student members are part of these committees. The students other than elected students are also co-opted as team members. This is usually done in cases of sports and cultural activity like cases. This ensures that students who excel in such activities are able to give their valuable inputs and aid in smooth planning and execution of events. Such diversified student's union creates an atmosphere of harmony, vitality and synchronization in the routine

management of the college. • The fund for the students' union comes from the semester fees collected by the Institute. • The members of student's council actively take the leadership in organizing various events like Elocution competition, youth festival, sports events, blood donation camp, tree plantation, community services, college's annual day, quiz competition and many more activities. • Various days like environment day, blood donation day, food nutrition day, no vehicle day etc. are celebrated under the aegis of student's council. • As a part of NSS and NCC activities students visit the nearby villages, are doing various activities to solve their problems, arrange programs on traffic rules awareness etc. In flood-like situation, students take initiative to help affected people by collecting food, clothes etc. from nearby localities and providing it to the affected people. • The various departments too have subject related clubs such as Mathematics Club, Physics Club, Chemistry Club, Eco Club etc. Some students who are found to have the leadership potential are given the responsibility of organising and conducting activities throughout the year. Thus, the students not only actively get an opportunity for active participation in the academic activities through the clubs but simultaneously they are able to develop leadership qualities in them.

#### 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

No

5.4.2 – No. of enrolled Alumni:

793

5.4.3 – Alumni contribution during the year (in Rupees) :

128790

5.4.4 – Meetings/activities organized by Alumni Association :

4 Meetings were conducted.

### 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)

In order to manage and ensure the smooth functioning of its constituent institutes, the SES has formed a unique two-tier system. The first tier is at the level of the overall administration of the college. The LAC - Local Administrative Committee, as it is named, looks after various affairs of the institute for which that committee has been framed. The LAC is headed by a chairman appointed by the SES. The Principal of the college is the ex-officio member of the committee. The other members of the committee, nominated by the SES include - a few ex-principals of the college, a representative from the alumni, some members from the industry, a representative each from teaching faculty and non-teaching faculty of the college. The LAC meets at least once in a term (twice a year) to discuss and finalize various affairs of the college for the academic year. It includes the financial matters, such as purchase of the books, equipment and instruments, giving AMCs for various purposes, appointing the required ad hoc staff - both teaching and non-teaching etc. Many institutes, in the country, suffer due to financial bottlenecking and lack of financial freedom. But in our case, we are fortunate that the LAC aids in the smooth fund flow and glitch free availability of funds as and when necessary. The LAC is a bridge between the SES and the college. It also acts as a buffer

and is often looked upon as an intermediary to resolve any issues faced by the staff members. Another tier of decentralization is at the departmental level. This is a case of operational autonomy via a shared collective responsibility. In the beginning of the term, the HODs are informed to prepare a list of the requirements for their respective departments that includes books, equipment, instruments, ad hoc staff in both teaching and non-teaching fields and any other infrastructural/academic facility to be augmented in the department. The HODs consult the teaching and the non-teaching staff members of the department whence, after deliberation, on receiving feedback from them finalizes the proposal which can be put forward in the LAC. This financial decentralization by way of participative management is indeed one of the outstanding features of our college and a classic example of healthy management and institute relationship.

6.1.2 – Does the institution have a Management Information System (MIS)?

No

### 6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

| Strategy Type  | Details  |
|--|--|
| Admission of Students                                      | Admissions are conducted as per the university norms and government orders., Strict transparency and admission rules are adhered to by the college.                  |
| Human Resource Management                                  | Teachers are given additional charges for various extra-curricular and co-curricular activities such as NSS - Dr J M Patel and Dr Hetal Gajjar NCC- Dr Dhiraj B Shah |
| Library, ICT and Physical Infrastructure / Instrumentation | New course based books purchased in good numbers   |
| Research and Development                                   | Teachers are encouraged to pursue research and attend conferences  |
| Examination and Evaluation                                 | Regular tests and internal examinations (both theory and practical) are conducted as per the instruction of the university   |
| Teaching and Learning                                      | ICT enabled teaching   |
| Curriculum Development                                     | Curriculum is prepared by the university in a meeting with board   |

6.2.2 – Implementation of e-governance in areas of operations:

| E-governace area | Details |
|------------------|---------|
| Nill             | NIL     |

### 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 |
|------|-----------------|--|--|-------------------|
|------|-----------------|--|--|-------------------|

|                   |     |     |     |     |
|-------------------|-----|-----|-----|-----|
| 2017              | NIL | NIL | NIL | Nil |
| No file uploaded. |     |     |     |     |

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 | From date | To Date | Number of participants (Teaching staff) | Number of participants (non-teaching staff) |
|-------------------|--|---|-----------|---------|---|---|
| 2017              | NIL  | NIL   | Nil       | Nil     | Nil                                     | Nil   |
| No file uploaded. |  |   |           |         |   |   |

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 | From Date  | To date    | Duration |
|---|---------------------------------|------------|------------|----------|
| Refresher Course                                | 2                               | 18/12/2017 | 29/12/2017 | 13       |
| Teachers Training Program                       | 1                               | 30/08/2017 | 31/08/2017 | 2        |
| Teachers Training Program                       | 1                               | 01/05/2017 | 06/05/2017 | 6        |
| Refresher Course                                | 1                               | 29/05/2017 | 18/06/2017 | 21       |
| Orientation                                     | 1                               | 23/10/2017 | 19/11/2017 | 28       |
| Teachers Training Program                       | 2                               | 18/08/2017 | 24/08/2017 | 7        |
| Teachers Training Program                       | 1                               | 27/11/2017 | 24/02/2018 | 90       |
| <a href="#">View File</a>                       |                                 |            |            |          |

6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

| Teaching  |           | Non-teaching |           |
|-----------|-----------|--------------|-----------|
| Permanent | Full Time | Permanent    | Full Time |
| Nil       | Nil       | Nil          | Nil       |

6.3.5 – Welfare schemes for

| Teaching                                    | Non-teaching                                | Students               |
|---|---|------------------------|
| Cooperative society, Health Centre, Canteen | Cooperative society, Health Centre, Canteen | Health Centre, Canteen |

**6.4 – Financial Management and Resource Mobilization**

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

• One of the main pillars of sustaining an institution is finance. The inflow and outflow of finance and its proper management is crucial to the smooth running of the institution's steam engine. • The college has computerised its financial accounting and uses Tally software for the management of financial resources. The SES also carries out financial audit regularly and external audits are also done. • The annual Government audit is also carried out.

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/ Grnats received in Rs. | Purpose          |
|--|-------------------------------|------------------|
| Indian Academies of Sciences                             | 615000                        | Refresher Course |
| <a href="#">View File</a>                                |                               |                  |

6.4.3 – Total corpus fund generated

|   |
|---|
| 0 |
|---|

## 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      | GoG    | No       | NIL       |
| Administrative | Yes      | GOG    | Yes      | CA        |

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

|     |
|-----|
| NIL |
|-----|

6.5.3 – Development programmes for support staff (at least three)

|     |
|-----|
| NIL |
|-----|

6.5.4 – Post Accreditation initiative(s) (mention at least three)

1. M. Sc. course in Physics was started with specialization in Nuclear Physics in the year 2016. 2. The efforts to digitize the records of the office and to computerize its routine functioning were initiated. 3. Online fee collection was started for the students. 4. It was resolved to put forward the proposal to the UGC seeking Autonomous status for the college. 5. Establishment of bicycle club.

6.5.5 – Internal Quality Assurance System Details

|  |     |
|--|-----|
| a) Submission of Data for AISHE portal | Yes |
| b)Participation in NIRF                | No  |
| c)ISO certification                    | No  |
| d)NBA or any other quality audit       | No  |

6.5.6 – Number of Quality Initiatives undertaken during the year

| Year | Name of quality initiative by IQAC | Date of conducting IQAC | Duration From | Duration To | Number of participants |
|------|------------------------------------|-------------------------|---------------|-------------|------------------------|
| 2017 | • Bridge course in                 | 12/06/2017              | 12/06/2017    | 24/06/2017  | 25                     |

|      |   |            |            |            |     |
|------|---|------------|------------|------------|-----|
|      | Physics during summer vacation  |            |            |            |     |
| 2017 | Conceptual Foundations of Quantum Mechanics by Prof. V. N. Potbhare, Retd. Professor, DOP, M. S. University, Baroda | 17/08/2017 | 17/08/2017 | 19/08/2017 | 140 |

[View File](#)

## 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 | Period To | Number of Participants |      |
|------------------------|-------------|-----------|------------------------|------|
|                        |             |           | Female                 | Male |
| NIL                    | Nil         | Nil       | Nil                    | Nil  |

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

|   |
|---|
| Percentage of power requirement of the University met by the renewable energy sources |
| Solar streetlights have been installed in the campus.                                 |

7.1.3 – Differently abled (Divyangjan) friendliness

| Item facilities     | Yes/No | Number of beneficiaries |
|---------------------|--------|-------------------------|
| Physical facilities | Yes    | 2                       |
| Ramp/Rails          | Yes    | 2                       |

7.1.4 – Inclusion and Situatedness

| Year | Number of initiatives to address locational advantages and disadvantages | Number of initiatives taken to engage with and contribute to local community | Date       | Duration | Name of initiative  | Issues addressed   | Number of participating students and staff |
|------|--|--|------------|----------|---|--------------------|--|
| 2017 | 1  | 1  | 19/11/2017 | 1        | Conducting exam for bailiff candidates by the High Court of Gujarat | Exam was conducted | 320  |

|      |   |   |            |   |                                |                    |     |
|------|---|---|------------|---|--------------------------------|--------------------|-----|
| 2017 | 1 | 1 | 21/05/2018 | 1 | Conducting JEE (Advanced) 2017 | Exam was conducted | 285 |
|------|---|---|------------|---|--------------------------------|--------------------|-----|

[View File](#)

#### 7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

| Title | Date of publication | Follow up(max 100 words)   |
|-------|---------------------|--|
| Nil   | 12/06/2017          | All the teachers and the non-teaching of the college are governed by the service conditions laid down by the affiliating University. |

#### 7.1.6 – Activities conducted for promotion of universal Values and Ethics

| Activity                              | Duration From | Duration To | Number of participants |
|---------------------------------------|---------------|-------------|------------------------|
| Swachhta Pakhvada                     | 01/12/2017    | 15/12/2017  | 86                     |
| Tree plantation in botanical garden   | 06/07/2017    | 06/07/2017  | 115                    |
| Flag hoisting and swachchhata abhiyan | 15/08/2017    | 15/08/2017  | 18                     |

[View File](#)

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

1. Bicycle club has been established in the college. Some donors, our alumni and well-wishers have donated bicycles to the college. These bicycles are issued to the students at a nominal rate with the condition that they would come to the college on the bicycle every day and use them on a regular basis. The Principal and some staff members of the college too commute at times on a bicycle. This small gesture by the college helps prevent consuming fossil fuels generating carbon waste. It's a small contribution by the college towards eco-friendliness and reducing our carbon footprint. 2. The college has implemented Rain Water Harvesting System. The rain water falling on the rooftop of the college building is channeled to an underground storage facility. The water stored during the rainy season is used by the Chemistry laboratory throughout the year as a source of distilled water for preparing various chemical solutions. 3. The rain water falling on open areas is often wasted. The college has implemented ground water recharging facility by diverting the running off water to an earmarked area. Here the runoff water is percolated into the ground for recharging the borewell. 4. The students are motivated to avoid using plastics in the campus. In order to do so, "plastic-free campus drive" was called upon by the volunteers of NSS and NCC. 5. An Eco club is established in the college. The students participate in the activities of the club and are made aware of environment, global warming and spread consciousness to take care of our environment. This inculcates a sense of responsibility and sensitivity towards the ecology and environment amongst them. Shri Pareshbhai Randeria, Deputy Garden Superintendent, Surat Municipal Corporation, was invited to deliver a talk on "Urban Horticulture" on 8th July, 2017 under the banner of the club. 6. Tree plantation drive was undertaken under NSS and the volunteers planted 50 trees in the botanical garden space in the college campus. The participating students were explained on how to care and look after the saplings on a regular basis.

#### 7.2 – Best Practices

### 7.2.1 – Describe at least two institutional best practices

1. Bridge courses are conducted during summer vacation in various subjects.
2. Nobel Lecture series is conducted and invited talks are arranged.

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

<https://www.ptscience.ac.in/upload/ptscs%20best%20practices%202017-2018.pdf>

### 7.3 – Institutional Distinctiveness

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

Our vision statement reads: To promote experimental scientific pursuit and to provide conducive environment to students, to develop aptitude and to sharpen skills of students to meet the challenges of rapidly changing world and to instil a spirit of camaraderie amongst students and sensitize them regarding their role and duty towards nation building. With huge impressive infrastructure, well-equipped laboratories, lush green campus and conducive environment we strive hard to mould our students to achieve academic excellence and be role models for the society. During the last two decades, the world has changed like never before, thanks to the technological advancements, computer technology, artificial intelligence and what not. In this ever changing scenario, we strive hard to bridge the gap between what is taught and the progress of science is widening day-by-day. We have introduced some novel concepts in this regard in our academic calendar. It includes providing platforms to the students to interact with the best brains of our nation by having Nobel Lecture Series and invited tlaks, tours to the places of academic and industrial interest, organizing different competitions for the students, motivating them to actively involve themselves in the NCC, NSS and PT activities. The outcome of all this is that the students become quite competent when they are ready to enter real world of challenges. The regular activities of NCC, NSS and PT under the guidance of program officers and teachers inculcate in them the sense of responsibilities towards the community, society and the Nation.

Provide the weblink of the institution

<https://www.ptscience.ac.in/upload/the%20performance%20of%20the%20institution%20in%20one%20area%20distinctive%20to%20its%20vision%2C%20priority%20and%20thrust.pdf>

### 8.Future Plans of Actions for Next Academic Year

1. To arrange seminar/workshop by students on different themes: It is resolved to continue to invite eminent persons from the premier institutes of our country to deliver talks or give seminars across the topics of science. 2. To arrange a series of lectures on "Nobel Prize" in different subjects: A unique feature of our college to arrange a lecture series on "Nobel Prize" every year should be continued. 3. To take students to educational tours: The departments should continue to arrange educational tours for the students. 4. To encourage students to participate in national/state level exam/competition/symposia/seminars/workshops/conventions: Various exams and competitions are held at National/State/Local level and we motivate our students to participate in them. They not only participate in such exams and competitions, but some of them get rank certificates and prizes also. The students are also motivated to actively engage themselves in symposia/seminars/workshops/conventions etc. at various levels.

