SELF STUDY REPORT

Submitted to
National Assessment and Accreditation Council
First cycle

August 2015

PSG COLLEGE OF PHARMACY
PEELAMEDU
COIMBATORE - 641004
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<tr>
<td>ADR</td>
<td>Adverse Drug Reaction</td>
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<tr>
<td>AICTE</td>
<td>All India Council for Technical Education</td>
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<td>CBCS</td>
<td>Choice Based Credit System</td>
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<td>CBSE</td>
<td>Central Board of Secondary Education</td>
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<td>CCTV</td>
<td>Closed Circuit Television</td>
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<tr>
<td>CPCSEA</td>
<td>Control and Supervision of Experimental on Animal</td>
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<td>CPE</td>
<td>Continuous Pharmacy Education</td>
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<td>CSIR</td>
<td>Council of Scientific &amp; Industrial Research</td>
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<td>DBT</td>
<td>Department of Biotechnology</td>
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<td>DELNET</td>
<td>Developing Library Network</td>
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<td>DIC</td>
<td>Drug Information Centre</td>
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<td>DME</td>
<td>Directorate of Medical Education</td>
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<tr>
<td>DRDO</td>
<td>Defence Research and Development Organisation</td>
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<td>DSIR</td>
<td>Department of Scientific and Industry Resources</td>
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<tr>
<td>DST</td>
<td>Department of Science &amp; Technology</td>
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<tr>
<td>GC</td>
<td>Governing Council</td>
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<tr>
<td>GLP</td>
<td>Good Laboratory Practice</td>
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<tr>
<td>GPAT</td>
<td>Graduate Pharmacy Aptitude Test</td>
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<td>GRE</td>
<td>Graduate Record Examination</td>
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<td>HR</td>
<td>Human Resource</td>
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<tr>
<td>IAEC</td>
<td>Institutional Animal Ethical Committee</td>
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<td>ICMR</td>
<td>Indian Council of Medical Research</td>
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<td>ICODDD</td>
<td>International Conference on Drug Delivery</td>
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<tr>
<td>IHEC</td>
<td>Institutional Human Ethical Committee</td>
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<tr>
<td>IISI</td>
<td>Innovative Ideas for Scientific Issues</td>
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<tr>
<td>IJPR</td>
<td>International Journal of Pharma Research</td>
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<tr>
<td>IPR</td>
<td>Intellectual Property Rights</td>
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<tr>
<td>IQAC</td>
<td>Internal Quality Assurance Cell</td>
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<tr>
<td>ISO</td>
<td>International Organisation for Standardisation</td>
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<tr>
<td>ISRO</td>
<td>Industrial and Scientific Research Organisation</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>LCD</td>
<td>Liquid Crystal Display</td>
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<tr>
<td>MAD</td>
<td>Music, Arts &amp; Dance</td>
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<tr>
<td>MCI</td>
<td>Medical Council of India</td>
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<td>NABH</td>
<td>National Accreditation Board for Hospitals &amp; Healthcare Providers</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>NABL</td>
<td>National Accreditation Board for Testing and Calibration Laboratories</td>
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<td>NGO</td>
<td>Non Governmental Organisation</td>
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<td>NRI</td>
<td>Non Resident Indian</td>
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<td>NSS</td>
<td>National Service Scheme</td>
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<td>OMR</td>
<td>Optical Mark Recognition</td>
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<td>PCI</td>
<td>Pharmacy Council of India</td>
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<td>PRISAM</td>
<td>Pharmaceutical Research Initiative to Strengthen Academia and Manpower</td>
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<tr>
<td>PSG</td>
<td>Poolaimedu Sama naidu Govindasami naidu</td>
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<td>PSG DIC</td>
<td>PSG Drug Information Centre</td>
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<td>PSG IMSR</td>
<td>PSG Institute of Medical Science &amp; Research</td>
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<td>PSG STEP</td>
<td>PSG Science &amp; Technology Entrepreneurial Park</td>
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<td>PSGCP</td>
<td>PSG College of Pharmacy</td>
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<td>PTA</td>
<td>Parent Teacher Association</td>
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<td>RAC</td>
<td>Research Advisory Committee</td>
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<td>SIDCER</td>
<td>Strategic Initiative for Developing Capacity in Ethical Review</td>
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<td>SIF</td>
<td>Strategic Initiative Forum</td>
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<td>TANIPA</td>
<td>Indian Pharmaceutical Association - Tamilnadu Branch</td>
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<td>TNMGRMU</td>
<td>Tamilnadu Dr. M.G.R. Medical University</td>
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<td>TOEFL</td>
<td>Test of English as Foreign Language</td>
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<td>UGC</td>
<td>University Grants Commission</td>
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<tr>
<td>URC</td>
<td>University Research Council</td>
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<tr>
<td>USP</td>
<td>Unique Selling Point</td>
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Preface
PREFACE

PSG College of Pharmacy (PSGCP), a unit under PSG and Sons’ Charities was established in 2001 and is one more jewel to stud the crown of the PSG group, who are well known for their commitment to high quality education. The college of Pharmacy, which has now completed 14 years of existence and commitment to excellence in Pharmacy Education, is located in the PSG Health Campus at Peelamedu in Coimbatore city. The college is affiliated to The Tamil Nadu Dr. MGR Medical University Chennai and also approved by the AICTE (All India Council for Technical Education) and PCI (Pharmacy Council of India). Since 2005, the college is consistently meeting annual ISO (International Organization for Standardization) Certification Standards. Three major functions of the institution are teaching, research, and practicing aspects of Pharmacy.

Right from its inception in 2001 the college has made impressive strides in many areas. And this spirit of excellent progress has been continued exponentially till date. This is reflected in recent rankings concerning private pharmacy colleges in the nation where PSGCP has stood 7th. Its philosophy is embedded in its commitment to quality as well as its vision and mission statements-

“We at PSG College of Pharmacy endeavor to pursue global standards of excellence in all our endeavors, namely Pharmaceutical Education for all graduates and post-graduates, Research, Consultancy, Continuing Education, Hospital and Clinical Pharmacy and to remain accountable through a process of self-evaluation and continued improvement”

PSGCP offers B. Pharm, M. Pharm (Pharmaceutics, Pharmacology, Pharmacy Practice, & Pharmaceutical Analysis), Pharm D, Pharm D Post-Baccalaureate degrees, and doctoral programs. The curriculum design and academic flexibility depends on our affiliating university and PCI. In spite of the limited autonomy in this regard, we are able to bring changes and have incorporated technical and practical based approaches in the curriculum. The feedback on the curriculum taken from stake holders and students are communicated to the authorities for necessary action. A systematic approach and master planning in regards to the execution of teaching-learning process is the USP of the institute. The students are informed well in advance regarding the academic schedule. The quality of education and student progression is given emphasis. The student diversity and transparency on admission procedure is another salient feature because of which we are able to attract quality students. Faculty members with good qualifications are employed in the institute and their dedication to teaching and training through academic development programs helps them to execute their duties better.

Currently, the institution is working on the following learning outcome measures
- Academic competency to compete at national and international level
- Professional efficiency in the field of pharmacy
- Communication skills
- Pass percentage at the university level
- Academic progression of the students to different career options
- Publication of research papers in peer viewed or indexed journals
- Presentation of research papers at national and international conferences
- Employability

PSGCP emphasizes research activities and faculty members are provided with an environment conducive to do research. A Research Advisory Board and internal Research committee has been constituted in this regard. The institution has mobilized funds over Rs 480 lakhs from various funding agencies to do research in the area of Pharmaceutical sciences. PSGCP is also working on the objectives of interdisciplinary research and for collaborations at National and International levels. The college has good infrastructure with state of the art teaching facilities for students. The College has well equipped laboratories catering to the various disciplines in pharmacy. Latest books and journals are also being regularly purchased to bring our library up to date with the latest developments in the field of pharmacy. The college has also a well developed website: www.psgpharma.ac.in, which serves as its portal to the globe. Additional work is being done currently to update the website and make it more visitor and student friendly. In 2004, the PSGCP library became a member of DELNET (Developing Library Network) in order to access the latest developments and information in the field of pharmacy. Because of DELNET, staff and students alike have been able to do quality research and project work in pharmacy. Moreover, this has also helped to considerably improve the academic standards at PSGCP. In 2006, PSGCP was certified by the Department of Scientific and Industry Resources (DSIR) as having ISRO (Industrial and Scientific Research Organization) status. Research at PSGCP concentrates on drug development, drug targeting, and herbal drug research. The practicing aspects of pharmacy have been emphasized by the institute through the support of our health professionals in the hospitals. Their presence gave a perceptible difference in the quality of patient care. PSGCP contributes to the society through various outreach programs. Further PSG and Sons’ Charities are known for their corporate social responsibilities.

We have strong belief that education alone will not make the individual and that the additional values inculcated in them through organizations skills, responsibilities, Indian culture, moral, and professional ethics are equally important. The above aspects are strongly emphasized along with curriculum to our students through mentorship and student council activity. All our initiatives in the colleges are focused on objectives mentioned in our quality policy. The governance of the
college is well executed on a day to day basis. The governing council of the institute gives adequate emphasis on policy decisions. The Principal of the institution is given full autonomy on the academic activities.

On the ecological front, we are part of a green campus. One of our innovation and best practice introduced from the academic year 2014 regarding man power training is a unique endeavor. It has been named as PRISAM (Pharmaceutical Research Initiative to Strengthen Academia and Manpower) and through this initiative our students are given an industrial oriented approach in the curriculum.

In 2001, PSGCP started with the objective to achieve excellence in Pharmacy Education. To the best of our knowledge, the application questionnaires in the different criteria have been fulfilled because of the initiatives taken by the institute. This could only be possible because of the teamwork within the institution and the constant external support by our management since inception. And it is because of these factors, PSGCP has been able to progress rapidly in a relatively short span of time. The institution is marching with the future aim to produce more entrepreneurs, responsible citizens, establishment of unique facilities to do pharmaceutical research, advanced study centers, and effective pharmaceutical care for the needy. With these future goals, we at PSGCP strive to give our best to the society.

Join hands for better future

Jai Hind

**Dr. M. Ramanathan**
Principal
PSG College of Pharmacy
Coimbatore
EXECUTIVE SUMMARY
The SWOC Analysis of the College
EXECUTIVE SUMMARY

PSG College of Pharmacy (PSGCP) was established in 2001 and right from its inception, the institution has always emphasized quality. The college runs B. Pharm, M. Pharm, Pharm D, and PhD programs. It has faculty strength of 37 and has around 500 students. The programs run by the institution are affiliated to The Tamil Nadu Dr MGR Medical University (TNMGRMU), Pharmacy Council of India (PCI), and All India Council of Technical Education (AICTE), New Delhi. The institution is also Industrial Scientific Research Organization (DSIR) and ISO certified. PSGCP strives to pursue global standards of excellence in all its endeavors, namely Pharmacy Education for all graduates and post-graduates, Research, Consultancy, Continuing Education, Hospital Pharmacy and Community Pharmacy and to remain accountable through a process of self-evaluation and continued improvement. PSGCP has a clear cut Vision, Mission, and Quality statements and care is taken that the day to day operations of the institution always confirm with this statements. The college is now ranked 7th among all private pharmacy colleges nationally and 12th overall.

PSG & Sons’ Charities:

PSG & Sons’ Charities is an educational Trust formed in 1926 and has more than 88 years of legacy in quality education. The Trust has many quality institutions under its umbrella covering a broad range from Schools to Medical, Paramedical, Arts & Science, and Engineering colleges. The current Managing Trustee is Shri L. Gopalakrishnan. The main motive of the Trust is Quality Education to all.

CRITERIA I
CURRICULAR ASPECTS

The syllabus for B. Pharm and M. Pharm is determined by the University of Affiliation, TNMGRMU. The Pharm D syllabus is determined by PCI. Since, the University of Affiliation and the PCI determines our syllabus, we have limited flexibility regarding the curriculum.

Unique Features:

- The institution has specific objectives and goals towards the effective delivery of curriculum.
- Training of students towards developing professional skills, meeting community needs, and development of academic competencies.
- Educating students on morals and ethics and helping them to become good and productive citizens.
- Integrated learning process.
• Policy to attract national and international students of all sections.
• The flexibility of curriculum is achieved with hands on training in the field of Hospital & Clinical Pharmacy, Industrial exposure and training, Personality and Soft Skills development programs, and Social Outreach programs.
• Introduction of two new M Pharm streams: Pharmacy Practice and Pharmaceutical Analysis.
• Value adding module courses in Drug Design, Regulatory Affairs/Quality Assurance have been initiated.
• Regular invited lectures by stalwarts from the Pharmaceutical Industry to interact with faculty and students and update them with the latest developments in the field.
• Structured feedback system is available concerning the curriculum. Feedback obtained from Staff and students is communicated to the University of Affiliation as well as to the PCI.

Strengths:

✓ Industrial training programs
✓ Practical oriented teaching of the curriculum
✓ Interaction and updating of knowledge through eminent personalities.
✓ Teaching of ethics and morals, outreach programs
✓ Personality development.

Challenges:

➢ Limited autonomy regarding syllabus.
➢ Enrichment of curriculum to the latest Know How.
➢ Obtaining feedback regarding curriculum from external stakeholders.

CRITERIA II

TEACHING, LEARNING, AND EVALUATION

Student Enrolment & Quality

• Transparency in admissions and student quality as per the guidelines established by Directorate of Medical Education, Government of TN, and the TN Private Professional Colleges Association for Health Sciences. Criteria for admissions take into consideration both Government and Management quota for UG and PG.
• Admissions for the integrated program through management on merit basis.
• Candidates from weaker sections (SCST/OBC, disabled people, economically backward, women) of the society given fair representation.
• Maintenance of a fair gender ratio.
• Identification of slow and advanced learners and tailoring the academic needs accordingly.
• Orientation programs for the new comers.
• Execution of teaching learning process through a well defined Academic Calendar.
• A Master Course plan, approved by the Principal and provided by staff to the students at the start of every academic year.
• Hands on training for Pharm D students regarding Clinical & Hospital Pharmacy at the PSG IMSR Hospital.
• Invitation of experts and eminent personalities to deliver lectures and workshops to augment the teaching environment.
• Adequate facilities for effective teaching through virtual labs, e-learning, and open educational resources.
• Innovative teaching processes in the field of Pharmaceutical Chemistry, Pharmaceutics, Pharmacognosy, Pharmacology, and Pharmacy Practice.
• Functioning of Sir CV Raman Science Club for instilling a scientific temper in students and nurturing their creativity.
• A functioning Drugs and Poison centre.
• A two week Industrial Training Program for fourth and Industrial Visit for second year B. Pharm students.

Teacher Quality
• Well qualified and diversified staff members having international experience.
• Appointment of faculty to initiate new programs.
• Policies and facilities available for staff for knowledge and skills updating.
• Five Emeritus and four Adjunct faculties.
• 10 awards received in total by the faculty in recognition of excellence in academics at the State, National, and International level in the past 4 years.
• Around 50% of faculty underwent induction, reorientation, and refresher courses to update their knowledge and effective teaching.

Evaluation
• Annual pattern examinations conducted by TNMGRMU.
• Formative and summative assessments done at the institutional level.
• Transparency in the evaluation process.
• Structured question patterns, key to the questions/question banks are available.
Teaching and learning outcomes measured by direct and indirect tools.
- Direct assessment by assignment writing, class tests, surprise tests, open book tests, and through power point presentations.
- Indirect assessment through pass percentage calculations.
- Redressal and grievances committee for evaluation related issues available.
- Learning outcome is measured through academic competency, professional efficiency, communicative skills, academic progression, pass percentage at university level, research paper publication, and employability.
- Well defined graduate attributes have been identified.

Strengths:
- Transparency in admissions
- Diversified students community
- Well defined plans to execute academic activities
- Practical oriented teaching
- Academic freedom for staff
- Highly qualified faculty, 13 faculty members with PhDs.
- Encouragement of faculty to attend conferences and workshops
- Structured evaluation pattern with formative and summative assessment
- Clearly stated learning outcome measures

Challenges:
- Motivating all sectors of students and staff equally for learning outcomes.

CRITERIA III
RESEARCH, CONSULTANCY, AND EXTENSION

Research and Consultancy
- Proactive on research front.
- Constitution of Research Advisory Board with academic and industrial experts as advisory members for determining the research direction for students and staff.
- Institutional Research Committee to monitor UG research activities and coordinate industrial training.
- PG and doctoral research activities monitored by the respective departments.
- Institution Industry Interaction Cell to consult eminent scientists from the Industry for research ideas.
- Constitution of PRISAM (Pharmaceutical Research Initiative for Scientific and Manpower) to help students to develop industrial focus.
Four completed research projects and 6 ongoing projects for a total funding of Rs 480 lakhs received from bodies like DST, DBT, ICMR, AICTE, & TNPSWT.

Institution has 2 patents to its credit.

Two unique labs in Bioinformatics/Molecular Pharmacology and Drug Design/Therapeutic Drug Monitoring.

One hundred and five research publications contributed by staff and students in reputed journals.

Nineteen awards won by staff and students on the research and academic fronts.

Approximately Rs 1.5 lakhs worth of academic consultancy projects have been done every year.

Extension activities

- Very active on the social front by its active contributions to social welfare through voluntary agencies like NSS, Red Ribbon Club, and other corporate social responsibilities.
- Regular NSS voluntary activities in adopted villages.
- Constitution of Valar karangal (helping hands) by the students to contribute their services to old age homes and orphanages.
- MOU with Indian Pharmaceutical Association Community Division to bring awareness among the community pharmacists on effective use and storage of medicines.
- Regular auditing of prescription pattern, drug interaction, and intervention in the surrounding community.
- Promoting safe use of medications in rural health centers by Pharm D students.
- Regular conduction of Patient counseling and Medical camps, Drug information initiatives, contribution of funds for national disasters, conducting awareness programs on chronic and communicable diseases and rallies on others issues like public smoking and HIV awareness.
- An established Blood Donor Club.
- Promoting ecological awareness in the community.

Collaborations

- Institution has collaboration with central research labs, industries, other institutions and universities. National collaboration with Annamalai University, Chidambaram, Manipal College of Pharmaceutical Sciences, Manipal, Central Laboratories IASST Guwahati, Rajiv Gandhi Centre for Biotechnology, Trivandrum. Dr Ambedkar centre for Biomedical Research,
Delhi University, and Indian Forest Genetics and Tree Breeding Institute, Coimbatore.

- International collaboration MOU signed with University of Toledo, Ohio, USA.
- Industry level collaboration with AVN Madurai, Sami Labs Bangalore, and Stempeutics Pvt Ltd, Bangalore.

**Strengths**

- Research Advisory Board, PRISAM, and Institution Industry Interaction cell.
- High success in securing of Grants from the government funding agencies.
- Good and consistent social outreach activities and programs.
- Good collaboration at national, international, and industrial levels.

**Challenges**

- Attracting all staff to actively participate in research.
- Securing of sufficient funds to do quality research.

**CRITERIA IV**

**INFRASTRUCTURE AND LEARNING RESOURCES**

**Physical structure**

- Strictly follows AICTE, PCI, and TNMGRMU guidelines pertaining to infrastructure.
- Total of 11 classrooms and 20 labs for effective deliverance of curriculum.
- Each PG department is well equipped with LCD, library, internet facilities, and two research labs with state of the art equipment.
- *In-silico* simulation lab for pharmacological investigations and study.
- State of the art equipment for conducting research in nanotechnology.
- Dedicated machine room for conduct of practical experiments and demonstration of various pharmaceutical processes.
- Regular maintenance of lab equipment by the Biomedical Engineering Department and also monitored by the maintenance committee.
- Regular monitoring and augmentation of infrastructure.
- A separate medicinal plant garden cultivated with various medicinally active plants.
- Institution is attached to a NABH accredited 1000 bedded teaching hospital.
Library

- 6000 sq ft area, stocked with books and journals offering the latest knowledge and developments in the field of Pharmaceutical Sciences.
- Has 8000 plus books, 625 e-journals, 1025 e-books, and 66 trending journals.
- Full-fledged Digital Library services available with 24 hr internet access.
- Students have access to various open source information portals.

IT

- A separate IT Department in the campus for the purposes of intra-campus internet services as well as hardware and software maintenance.
- Usage of latest techniques in teaching and learning process
- Sufficient computers with internet facilities is available
- Availability of Wi-Fi connection in the institute.

Strengths

✓ Adequate infrastructure facilities.
✓ Regular maintenance services available.
✓ In-silico simulation lab.
✓ Nanotechnology and molecular lab.
✓ Excellent library facilities.
✓ Good internet connectivity.

Challenges:

➢ Meeting spiraling maintenance costs.
➢ Full utilization of library facilities.
➢ Setting up of smart classes.

CRITERIA V

STUDENT SUPPORT AND PROGRESSION

- Student welfare is a high priority area for the institution.
- An established Student Council for student welfare.
- Heavy emphasis placed on extracurricular activities like sports, cultural and musics.
- Life schooling in also inculcated for personal development.
- Various students clubs are formed to cater to their various needs: MAD (Music and Dance) club, Tamil Mandram (Chemozhi Peravai), Sports Club, and Nature Club.
• Mentorship program to address individual student needs.
• Mandatory yearly meeting of parents with mentor.
• Separate anti-ragging committee functioning to protect the new students.
• Redressal and grievances committee for student problems.
• Disciplinary committee to address student disciplinary issues.
• Enhancement of student communication skills by Personality Development program

**Strengths**

✓ Student council.
✓ Various club activities.
✓ Anti-ragging, redressal, and disciplinary committees.
✓ Personality development programs

**Challenges**

➢ Overcoming the language barrier of those students from rural areas who have done their studies in the State vernacular medium.
➢ Consistent motivation of slow learners.

**CRITERIA VI**

**GOVERNANCE LEADERSHIP & MANAGEMENT**

• Quality objective of the institution is finely tuned with its Vision & Mission statements.
• Established Governing Council to formulate future policies in academics and research.
• Emphasis on e-governance.
• Established organizational structure.
• Decentralization of governance.
• Well established interactive meetings with parents and industrial stakeholders.
• Grooming leadships at various levels.
• Effective monitoring of plans and policies.

**Faculty empowerment:**

• Clear recruitment and promotional policies of its employees.
• Performance based appraisal reports collected and monitored by the department of Human Resource.
• Emphasis on faculty welfare through Provident Fund, Gratuity, Medical Insurance, and concession on hospital charges and staff and their families by the parent Trust.
• Concise financial management done by the Trust.
• Maintenance of a corpus fund.
• Periodic academic audits of all departments by annual ISO inspection.
• Regular review and audit of teaching-learning process.

Strengths:
✓ Robust organization structure and an established Governing Council.
✓ Faculty empowerment programs and plans.
✓ Effective budgeting and financial management.
✓ Addressing the faculty needs through welfare schemes

Challenges:
➤ Motivating and inculcating leadership in junior staff.

CRITERIA VII
INNOVATIONS & BEST PRACTICES

Green Campus
• Certified Green Campus.
• Emphasis on energy conservation and water saving.
• Emphasis on solar power.
• Steps taken towards carbon neutrality.
• Bio-hazardous and e-waste management.
• Effluent treatment and recycling plant.
• Usage of environmentally friendly materials on campus
• All indents made online.
• Usage of cotton mops and water soluble paints for the floors and the walls.
• Established eco-club for students to foster environmental consciousness.

Strengths:
✓ Emphasis on energy conservation and water saving.
✓ Ban on plastic bags and cups inside the campus.
✓ 100% recycling of water.
✓ Emphasis on natural lighting on campus.
Challenges:

- Motivating green campus awareness universally across the campus.
- Reducing paper waste

Current Best Practices at PSGCP:

- Periodic assessment in academics and evaluation of governance
- Conduct of orientation program to the beginners, industrial outlook program for 2nd year and industrial training program for final B Pharm students. Hospital pharmacy and dispensing program through model pharmacy for both B Pharm and Pharm D students. Development of soft and interview skills among the students through personality development programs.
- Benchmarking various external institutions through vision 2025 program to observe their best practices.
- The overwhelmingly positive feedback from the students and alumni as a measure of our success.
- Integrated and interdisciplinary approach in research and innovations.
- Interaction of students with industrial experts every month to focus and understand key areas. Regular interaction visits by stalwarts and other experts from the Pharma industry to motivate the student and help to decide their path of career.

Challenges:

- Scheduling visits of industrial experts without affecting regular academic plans.
- Fine tuning required in feedback and evaluation.
PROFILE

Profile of the College
SECTION B: PREPARATION OF SELF-STUDY REPORT

1. Profile of the Affiliated / Constituent College
1. Name and Address of the College:

<table>
<thead>
<tr>
<th>Name:</th>
<th>PSG College of Pharmacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address:</td>
<td>Avinashi Road, Peelamedu, Coimbatore</td>
</tr>
<tr>
<td>City:</td>
<td>Pin: 641004 State: Tamil Nadu</td>
</tr>
<tr>
<td>Website:</td>
<td><a href="http://www.psgpharma.ac.in">www.psgpharma.ac.in</a></td>
</tr>
</tbody>
</table>

2. For Communication:

<table>
<thead>
<tr>
<th>Designation</th>
<th>Name</th>
<th>Telephone with STD code</th>
<th>Mobile</th>
<th>Fax</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>Dr. M. Ramanathan</td>
<td>O: 0422 4345840 R: 422 2570170</td>
<td>8870009199</td>
<td>0422 2594400</td>
<td><a href="mailto:ramanathanm@psgpharma.ac.in">ramanathanm@psgpharma.ac.in</a></td>
</tr>
<tr>
<td>Vice Principal</td>
<td>Dr. V. Sankar</td>
<td>O: 0422 4345841</td>
<td>9842290701</td>
<td>0422 2594400</td>
<td><a href="mailto:sankarv@psgpharma.ac.in">sankarv@psgpharma.ac.in</a></td>
</tr>
<tr>
<td>Steering Committee Co-ordinator</td>
<td>Mrs. G. Syamala</td>
<td>O: 0422 4345841</td>
<td>9976084164</td>
<td>0422 2594400</td>
<td><a href="mailto:syamalag@psgpharma.ac.in">syamalag@psgpharma.ac.in</a></td>
</tr>
</tbody>
</table>

3. Status of the Institution: **Affiliated College**

4. Type of Institution
   a. By Gender
      i. For Men
      ii. For women
      iii. **Co-education √**
   b. By Shift
      i. **Regular √**
      ii. Day
      iii. Evening

5. It is a recognized minority institution?
   Yes
   No √

If yes specify the minority status (Religious/linguistic/ any other) and provide documentary evidence.
6. Sources of funding: Government
   Grant-in-aid
   Self-financing   √
   Any other

7. a. Date of establishment of the college: **15/06/2001**
   b. University to which the college is affiliated /or which governs the college
   (If it is a constituent college)
   **The Tamil Nadu Dr. M. G.R. Medical University, Chennai – 32**
   c. Details of UGC recognition:

<table>
<thead>
<tr>
<th>Under Section</th>
<th>Date, Month &amp; Year (dd-mm-yyyy)</th>
<th>Remarks (If any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>i. 2 (f)</td>
<td>NA</td>
<td>--</td>
</tr>
<tr>
<td>ii. 12 (B)</td>
<td>NA</td>
<td>--</td>
</tr>
</tbody>
</table>

   (Enclose the Certificate of recognition u/s 2(f) and 12(B) of the UGC Act)

d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

<table>
<thead>
<tr>
<th>Under Section/ Clause</th>
<th>Recognition/Approval details Institution/Department Programme</th>
<th>Day, Month and Year (dd-mm-yyyy)</th>
<th>Validity</th>
<th>Remarks</th>
<th>Course approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCI 12 C section</td>
<td>Ref.No.32-240/2002-PCI-7017-18</td>
<td>27.05.2003</td>
<td>Till date</td>
<td>B Pharm</td>
<td>Pharm D</td>
</tr>
<tr>
<td>AICTE</td>
<td>F.No.732-52006/NDEGP/ET/99</td>
<td>11-08-1999</td>
<td>Till date</td>
<td>B Pharm</td>
<td>M Pharm</td>
</tr>
<tr>
<td>University</td>
<td>Ref.No. 36848/Affln.I(3)/98</td>
<td>15-06-2001</td>
<td>Till date</td>
<td>B Pharm</td>
<td>M Pharm Pharm D</td>
</tr>
</tbody>
</table>

   (Enclose the recognition/approval letter) Latest Approval letter enclosed.

8. Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

   [ ] Yes   √ [ ] No

   If yes, has the College applied for availing the autonomous status?

   [ ] Yes   [ ] No
9. Is the college recognized
   a. by UGC as a College with Potential for Excellence (CPE)?
      [ ] Yes  [ ] No
      If yes, date of recognition: ………………….. (dd/mm/yyyy)
   b. for its performance by any other governmental agency?
      [ ] Yes  [ ] No
      If yes, Name of the agency DSIR and Date of recognition: 28/04/2006

10. Location of the campus and area in sq.mts:
    | Location * | Urban |
    |------------|-------|
    | Campus area in sq. mts. | 1,26,517 |
    | Built up area in sq. mts. | 14,625 |
    (* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

   Auditorium/seminar complex with infrastructural facilities  - Available
   • Sports facilities
     Play ground - Available
     Swimming pool - No
     Gymnasium – Available
   • Hostel
     o Boys hostel
       ▪ Number of hostels  - 1
       ▪ Number of inmates - 60 (30 rooms)
       ▪ Facilities (mention available facilities) – Reading room, Indoor play room, Laundry, TV Hall
     o Girls hostel
       ▪ Number of hostels  - 1
       ▪ Number of inmates - 85 (22 rooms)
       ▪ Facilities (mention available facilities) - Reading room, sick room, Laundry, TV Hall
     o Working women’s hostel - 1
       ▪ Number of inmates - 120
       ▪ Facilities (mention available facilities) 60 rooms
• Residential facilities for teaching and non-teaching staff (give numbers available — cadre wise) – Yes, Staff quarters available for teaching staff
• Cafeteria — 450 sq mts
• Health Centre – Institution attached with hospital
• First aid, Inpatient, Outpatient, Emergency care facility, Ambulance……….. Health centre staff –
  o Qualified doctors Full time 250 Part-time --
  o Qualified Nurse Full time 650 Part-time --
• Facilities like banking, post office, book shops – Banking and book shops available
• Transport facilities to cater to the needs of students and staff – Yes
• Animal house - Yes
• Biological waste disposal - Available as per municipal corporation norms
• Generator or other facility for management/regulation of electricity and voltage – UPS facility available for the entire institution.
• Solid waste management facility – Available as per municipal corporation norms
• Waste water management – Reverse osmosis plant available
• Water harvesting – Rain water harvesting pits available

12. Details of programmes offered by the college (Give data for current academic year)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Programme Level</th>
<th>Name of the Programme/Course</th>
<th>Duration</th>
<th>Entry Qualification</th>
<th>Medium of instruction</th>
<th>Sanctioned/approved Student strength</th>
<th>No. of students admitted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Under-Graduate</td>
<td>B Pharm</td>
<td>4</td>
<td>+2/ D Pharm</td>
<td>English</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>2.</td>
<td>Post-Graduate</td>
<td>M Pharm</td>
<td>2</td>
<td>B Pharm</td>
<td>English</td>
<td>72</td>
<td>33</td>
</tr>
<tr>
<td>3.</td>
<td>Integrated Programme PG</td>
<td>Pharm D</td>
<td>6</td>
<td>+2/ D Pharm</td>
<td>English</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pharm D (PB)</td>
<td>3</td>
<td>B Pharm</td>
<td>English</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>Ph.D.</td>
<td>Ph D</td>
<td>Minimum 3 or 4 yrs</td>
<td>M Pharm</td>
<td>English</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>M.Phil.</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Ph.D</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Certificate courses

7. UG Diploma

8. PG Diploma

9. Any Other (specify and provide details)

13. Does the college offer self-financed Programmes?

[ ] Yes [ ] No

If yes, how many? - Four (B Pharm, M Pharm, Pharm D, Ph.D)

14. New programmes introduced in the college during the last five years if any?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>√</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

<table>
<thead>
<tr>
<th>Faculty</th>
<th>Departments eg. Physics, Botany, History</th>
<th>UG</th>
<th>PG</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commerce</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Any Other Pharmacy</td>
<td>Pharmaceutics</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Pharmacy Practice</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Pharmacology</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Pharmaceutical Analysis</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Pharmaceutical Chemistry</td>
<td>√</td>
<td>-</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>Pharmacognosy</td>
<td>√</td>
<td>-</td>
<td>√</td>
</tr>
</tbody>
</table>
16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, M.Com…)
   a. Annual system 3
   b. Semester system
   c. Trimester system

17. Number of Programmes with
   a. Choice Based Credit System Nil
   b. Inter/Multidisciplinary Approach Nil
   c. Any other (specify and provide details) Nil

18. Does the college offer UG and/or PG programmes in Teacher Education?
   [ ] Yes   [ ] No
   If yes,
   a. Year of Introduction of the programme(s)……… (dd/mm/yyyy)
      and number of batches that completed the programme
   b. NCTE recognition details (if applicable)
      Notification No.: ........................................
      Date: ........................................ (dd/mm/yyyy)
      Validity:.................................
   c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately?
      [ ] Yes   [ ] No

19. Does the college offer UG or PG programme in Physical Education?
   [ ] Yes   [ ] No
   If yes,
   a. Year of Introduction of the programme(s)……… (dd/mm/yyyy)
      and number of batches that completed the programme
   b. NCTE recognition details (if applicable)
      Notification No.: ........................................ Date:
      ........................................ (dd/mm/yyyy)
      Validity:.................................
   c. Is the institution opting for assessment and accreditation of Physical Education Programme separately?
      [ ] Yes   [ ] No
20. Number of teaching and non-teaching positions in the Institution

<table>
<thead>
<tr>
<th>Positions</th>
<th>Teaching faculty</th>
<th>Non-teaching Staff</th>
<th>Technical staff</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Professor</td>
<td>Associate Professor</td>
<td>Assistant Professor</td>
</tr>
<tr>
<td>Sanctioned by the UGC / University / State Government</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yet to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sanctioned by the Management/society or other authorized bodies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yet to</td>
<td>6   3</td>
<td>6   4</td>
<td>11  6</td>
</tr>
</tbody>
</table>

*M-Male *F-Female

21. Qualifications of the teaching staff:

<table>
<thead>
<tr>
<th>Highest qualification</th>
<th>Professor</th>
<th>Associate Professor</th>
<th>Assistant Professor</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Permanent teachers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D.Sc./D.Litt.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ph.D.</td>
<td>6</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>M.Phil.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PG</td>
<td>4</td>
<td>3</td>
<td>9</td>
<td>6</td>
</tr>
</tbody>
</table>

Temporary teachers

<table>
<thead>
<tr>
<th>Ph.D.</th>
<th>M.Phil.</th>
<th>PG</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Part-time teachers

<table>
<thead>
<tr>
<th>Ph.D.</th>
<th>M.Phil.</th>
<th>PG</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

22. Number of Visiting Faculty /Guest Faculty engaged with the College.

-3
23. Furnish the number of the students admitted to the college during the last four academic years.

### B. Pharm

<table>
<thead>
<tr>
<th>Categories</th>
<th>Year 1 2014</th>
<th>Year 2 2013</th>
<th>Year 3 2012</th>
<th>Year 4 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male Female</td>
<td>Male Female</td>
<td>Male Female</td>
<td>Male Female</td>
</tr>
<tr>
<td>SC</td>
<td>2 4</td>
<td>1 3</td>
<td>3 4</td>
<td>4 0</td>
</tr>
<tr>
<td>ST</td>
<td>1 0</td>
<td>0 0</td>
<td>0 0</td>
<td>0 1</td>
</tr>
<tr>
<td>OBC</td>
<td>23 24</td>
<td>25 27</td>
<td>19 22</td>
<td>30 13</td>
</tr>
<tr>
<td>General</td>
<td>0 4</td>
<td>2 2</td>
<td>5 7</td>
<td>6 4</td>
</tr>
<tr>
<td>Others</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
<td>0 0</td>
</tr>
<tr>
<td>Total</td>
<td>26 32</td>
<td>28 32</td>
<td>27 33</td>
<td>40 18</td>
</tr>
</tbody>
</table>

### Pharm. D & PB

<table>
<thead>
<tr>
<th>Categories</th>
<th>Year 1 2014</th>
<th>Year 2 2013</th>
<th>Year 3 2012</th>
<th>Year 4 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male Female</td>
<td>Male Female</td>
<td>Male Female</td>
<td>Male Female</td>
</tr>
<tr>
<td>SC</td>
<td>2 -</td>
<td>1 -</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>ST</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>OBC</td>
<td>6 8</td>
<td>3 19</td>
<td>3 5</td>
<td>4 8</td>
</tr>
<tr>
<td>General</td>
<td>2 16</td>
<td>4 9</td>
<td>10 20</td>
<td>6 17</td>
</tr>
<tr>
<td>Others</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>Total</td>
<td>10 24</td>
<td>8 28</td>
<td>13 25</td>
<td>10 25</td>
</tr>
</tbody>
</table>

### M. Pharm

<table>
<thead>
<tr>
<th>Categories</th>
<th>Year 1 2014</th>
<th>Year 2 2013</th>
<th>Year 3 2012</th>
<th>Year 4 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male Female</td>
<td>Male Female</td>
<td>Male Female</td>
<td>Male Female</td>
</tr>
<tr>
<td>SC</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>ST</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>OBC</td>
<td>5 10</td>
<td>10 5</td>
<td>8 1</td>
<td>5 1</td>
</tr>
<tr>
<td>General</td>
<td>7 8</td>
<td>9 5</td>
<td>7 13</td>
<td>8 4</td>
</tr>
<tr>
<td>Others</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
<td>- -</td>
</tr>
<tr>
<td>Total</td>
<td>12 18</td>
<td>19 10</td>
<td>15 14</td>
<td>13 7</td>
</tr>
</tbody>
</table>
24. Details on students enrollment in college during the current academic year:

<table>
<thead>
<tr>
<th>Type of students</th>
<th>UG</th>
<th>PG</th>
<th>M. Phil.</th>
<th>Ph.D.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students from the same state where the college is located</td>
<td>56</td>
<td>12</td>
<td>-</td>
<td>1</td>
<td>69</td>
</tr>
<tr>
<td>Students from other states of India</td>
<td>2</td>
<td>14</td>
<td>-</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>NRI students</td>
<td>0</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>0</td>
</tr>
<tr>
<td>Foreign students</td>
<td>0</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>58</td>
<td>30</td>
<td>-</td>
<td>2</td>
<td>90</td>
</tr>
</tbody>
</table>

25. Dropout rate in UG and PG (average of the last two batches)
   UG – Nil   PG – Nil

26. Unit Cost of Education
   \( Unit\ cost = \frac{total\ annual\ recurring\ expenditure\ (actual)}{total\ number\ of\ students\ enrolled} \)
   (a) including the salary component \( Rs. 89,000 \)
   (b) excluding the salary component \( Rs. 31,680 \)

27. Does the college offer any program/s in distance education mode DEP)?
   
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Yes]</td>
<td>![No]</td>
</tr>
</tbody>
</table>

   If yes,
   a) is it a registered centre for offering distance education programmes of another University
   
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Yes]</td>
<td>![No]</td>
</tr>
</tbody>
</table>

   b) Name of the University which has granted such registration.
   
   c) Number of programmes offered
   
   d) Programmes carry the recognition of the Distance Education Council.
   
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Yes]</td>
<td>![No]</td>
</tr>
</tbody>
</table>

28. Provide Teacher-student ratio for each of the programme/course offered
   B Pharm – 1 : 11
   M Pharm – 1 : 6
   Pharm D – 1 : 10
   Pharm D (PB) – 1 : 6
29. Is the college applying for Accreditation:
   Cycle 1 [✓]  Cycle 2  Cycle 3  Cycle 4  
   Re-Assessment:  
   *(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re-accreditation)*

30. Date of accreditation* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)
   Cycle 1: (dd/mm/yyyy) Accreditation Outcome/Result
   Cycle 2: (dd/mm/yyyy) Accreditation Outcome/Result
   Cycle 3: (dd/mm/yyyy) Accreditation Outcome/Result
   *Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.

31. Number of working days during the last academic year.
   270

32. Number of teaching days during the last academic year
   *(Teaching days means days on which lectures were engaged excluding the examination days)*
   180

33. Date of establishment of Internal Quality Assurance Cell (IQAC)
   IQAC -18/11/2014

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC. – Not Applicable
   AQAR (i) .................... (dd/mm/yyyy)
   AQAR (ii) .................... (dd/mm/yyyy)
   AQAR (iii) .................... (dd/mm/yyyy)
   AQAR (iv) .................... (dd/mm/yyyy)

35. Any other relevant data (not covered above) the college would like to include.
   (Do not include explanatory/descriptive information)

1. It is an ISO 9001:2008 certified institution
2. Receives fund from DST, DBT, ICMR, CSIR, UGC, AICTE, DRDO, Tamil Nadu State Council for Science & Technology, Tamil Nadu Dr. M.G.R. Medical University for research projects, seminars, conferences & workshops
Criterion I
Curricular Aspects
<table>
<thead>
<tr>
<th>Key aspects</th>
<th>Process/Approach</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Curriculum design and development</td>
<td>• Limited flexibility regarding curriculum.</td>
<td>• Regulations as per the affiliation University maintained</td>
</tr>
<tr>
<td>1.1 Curricular planning and Implementation</td>
<td>• Participation by staff in University level board meetings.</td>
<td>• Syllabus upgrading to latest knowhow.</td>
</tr>
<tr>
<td>1.2 Academic flexibility</td>
<td>• Setting up specific goals and objectives.</td>
<td>• Improved academic performance.</td>
</tr>
<tr>
<td></td>
<td>• Integrated learning process.</td>
<td>• Hands on practical experience</td>
</tr>
<tr>
<td></td>
<td>• Industrial/clinical exposure</td>
<td></td>
</tr>
<tr>
<td>1.3 Curriculum enrichment</td>
<td>• Personality and soft skills development programs</td>
<td>• Improved confidence and involvement by students in general.</td>
</tr>
<tr>
<td></td>
<td>• Social outreach programs</td>
<td></td>
</tr>
<tr>
<td>1.4 Feedback system</td>
<td>• Structured feedback system regarding curriculum</td>
<td>• Feedback communicated to the Affiliated University and PCI.</td>
</tr>
<tr>
<td></td>
<td>• Wherever possible taking feedback from Alumni, Stakeholders</td>
<td></td>
</tr>
</tbody>
</table>
1.1 Curriculum Planning, Design and Development

The Pharmacy curriculum, designed and developed by The Tamil Nadu Dr. M.G.R. Medical University (TNMGRMU), Chennai is adapted by PSGCP as it is an affiliated college.

1.1.1 Does the institution have clearly stated goals and objectives for its educational program?

Yes. The institution has clearly stated goals and objectives and they are reflected in its vision and mission statements and quality policy.

Mission

“To establish a Center of Excellence in Pharma Education & Research”

Quality Policy

“We at PSG College of Pharmacy endeavor to pursue global standards of excellence in all our endeavors, namely Pharma Education for all graduates and post-graduates, Research, Consultancy, Continuing Education, Hospital Pharmacy and Clinical Pharmacy and to remain accountable through a process of self-evaluation and continued improvement.”

1.1.2 How are the institutional goals and objectives reflected in the academic programs of the institution?

- Achieving quality and excellence in Pharmacy education
- Transparency in evaluation process
- Pharmaceutical research
- Exposure and training of students to industrial need
- Active participation in Pharmaceutical care and supportive to health professionals
- Entrepreneurship and organizational skill developments

The above said goals are been achieved and reflected in the institutional activity in its curriculum, different training programs given to the students during their study period, exposure of research in final year of the program through project work. Other than the regular curricular activities defined by the affiliating University special emphasize has been given to the students in the form of stage presentation and soft skill development program.
1.1.3 Does the institution follow a systematic process in the design, development and revision of the curriculum? If yes, give details of the process (need assessment, feedback, etc.).

PSG College of Pharmacy (PSGCP) has a very limited role in curriculum designing and revision. The affiliating University, TNMGRMU, is responsible for curriculum design at both UG and PG levels. Pharm D curriculum is strictly followed as per the PCI norms.

1.1.4 How does the curriculum design and development meet the following requirements?

- **Community needs** - In the Pharm D and B Pharm courses, separate subjects dealing with community needs are taught to the students. Similarly in 5th and 6th Pharm D, students are exposed to community as part of their curriculum activity.
- **Professional skills and competencies** - An industrial visit in second year B Pharm and industrial/hospital training in final year B Pharm enhances the professional skills. In Pharm D program students are given Clinical Pharmacy exposure in the hospitals to improve their professional skills during 4th, 5th and 6th year.
- **Research in thrust / emerging areas** - The curriculum is designed in such a way that all the students will be doing dissertation work (Final year B Pharm project, 5th Pharm D Hospital oriented project, and Final Year M Pharm research work). The projects are evaluated by the examiners. The Research Committee of the college monitors the research activities and ensures that the research has been conducted in the emerging areas.
- **Innovation** - An element of innovations is found in the assignments given to the students to submit mini-projects in innovative areas.
- **Employability** - As compact professional courses both B Pharm and Pharm D produce employable candidates

1.1.5 To what extent does the institution use the guidelines of the regulatory bodies for developing and/or restructuring the curricula? Has the institution been instrumental in leading any curricular reform which has created a national impact?

Our institution is not an autonomous institution; it is affiliated to TNMGRMU. However, the institution strictly adheres to regulatory guidelines of the AICTE, PCI and TNMGRMU with respect to running of Pharmacy program in the college. The regulatory guideline of PCI is followed for Pharm D program. The institution follows the curriculum prescribed by University and PCI, hence we are not able to create any curricular reforms of national impact. However within
University at state level we contribute modifications and development in curriculum through Board of Studies in Pharmacy.

1.1.6 Does the institution interact with industry, research bodies and the civil society in the curriculum revision process? If so, how has the institution benefitted through interactions with the stakeholders?
Yes. An Industry Institution Interaction Cell has been formed with the aim of forming an effective platform to incorporate latest developments in the pharmaceutical industry as well as pharmaceutical research into the curriculum. As part of this program eminent personality from the pharmaceutical industry are periodically invited to interact with our students. We have also formed Research Advisory Board to encourage research activities within the institution. The function of the board is to provide advice as well as review grant applications submitted by faculty to organizations like DBT, DST, AICTE, and ICMR and fine tune these applications to improve their chances for success.
Direct change in the curriculum could not bring in however our students benefited by understanding and bringing awareness on industrial requirement and additional inputs required for their career development.

1.1.7 How are the global trends in health science education reflected in the curriculum?
The curriculum is revised every 5 years by the affiliated University and the respective councils. They take into consideration the inputs regarding the latest global trends in Pharmacy Education.

1.1.8 Give details of how the institution facilitates the introduction of new programs of studies in its affiliated colleges.
PSGCP is itself an affiliated institution and does not have any affiliated institutions under its jurisdiction.

1.1.9 Does the institution provide additional skill-oriented programs relevant to regional needs?
None

1.1.10 Explain the initiatives of the institution in the following areas:

- **Behavioral and Social Science**- Pharmacy curriculum does not have a subject on behavioral and social sciences. However students are emphasized on this through orientation, moral classes and during NSS activities.
- **Medical Ethics / Bio Ethics / Nursing Ethics**- Workshops are conducted by the PSG Medical College in this regard. Faculty will attend the workshop.
- **Practice Management towards curriculum and/or services**- Pharm D students take part in community and hospital pharmacy services. A separate schedule has been put and faculty members are appointed to monitor.

- **Orientation to research**- Students are encouraged to take part in research projects and seminars. The research committee of PSGCP reviews this on a periodic basis and gives constant encouragement to the students to participate in various conferences and present their work.

- **Rehabilitation**- Available. Students require such facilities are taken care.

- **Ancient scriptural practices**- Not under the purview

- **Health Economics**- Pharmaco-economics subject in Pharm D and Pharmacy Practice subject in B Pharm and M Pharm (Pharmacy Practice) give exposure to our students in this regard.

- **Medico legal issues**- N/A

- **Enhancement of quality of services and consumer satisfaction**- Students have been repeatedly trained in communication skills with emphasis on quality-oriented services to attain consumer (patient) satisfaction.

1.1.11 How does the institution ensure that evidence-based medicine and clinical practice guidelines are adopted to guide patient care wherever possible?

We have adapted Evidence-based Medicine in teaching regarding drug usage for the clinical pharmacist in the hospital. They follow the guidelines prescribed by the American Hospital Pharmacists Association.

1.1.12 What are the newly introduced value-added programs and how are they related to the internship programs?

NA

1.1.13 How does the institution contribute to the development of integrated learning methods and Integrated Health Care Management?

- **Vertical and horizontal integration of subjects taught**- In the initial years, they study the basic subjects related to Pharmacy and Drug Development. In the later part of their curriculum, they apply the basic sciences and study the subjects like Medicinal Chemistry, Pharmacology, and Formulations.

- **Integration of subjects taught with their clinical application**- The Clinical Pharmacist will apply their basic knowledge in Pharmacotherapeutics, which is an integrated subject of Physiology, Pathology, Pharmacology, Therapeutics, and Toxicology. In the curriculum, the students will collect the medical records of the patients to understand the clinical application of the subject.
• Integration of different systems of health care (Ayurveda, Yoga, Unani, Homeopathy, etc.) in the teaching hospital
NA

1.1.14 How is the compatibility of programs with goals and objectives achieved with particular reference to priority of interface between Public Health, Medical Practice, and Medical Education?
The curriculum goals and objectives are related to public health; the Clinical Pharmacist will enlighten the community on drug usage, utilization and storage, adverse drug reaction, and safe use of medications through counseling at bedside and in outpatient pharmacy.

1.2 Academic Flexibility

1.2.1 Furnish the inventory for the following:
• Programs offered at campus- B Pharm, M Pharm, Pharm D, & PhD
• Overseas programs offered at campus- Nil
• Programs available for colleges/students to choose from- B Pharm, B Pharm (lateral entry after Diploma), M Pharm (Pharmaceutics, Pharmacology, Pharmaceutical Analysis, and Pharmacy Practice), Pharm D and Pharm D (Post Baccalaureate), Research leading to PhD in different speciality in Pharmacy.

1.2.2 Give details on the following provisions with reference to academic flexibility
As an affiliated College, the PSGCP is bound to work under the academic rules set by the parent University. At the same time additional inputs are given to the students by way of introduction of
- English class in first year B Pharm,
- Intensive training in hospital for Pharm D students,
- Introduction of practical training in Pharmaceutical Technology in second B Pharm,
- Communication and Soft Skills program in Fourth B Pharm, and
- 2 to 4 weeks Industrial training for Fourth B Pharm
• Core options- Pharmaceutical Sciences
• Elective options- Nil
• Bridge course- Nil
• Enrichment courses- As mentioned above
• Credit accumulation and transfer facility- Nil
• Courses offered in modular form- Nil
- Lateral and vertical mobility within and across programs, courses and disciplines and between higher education institutions- Nil
- Twinning programs- Nil
- Dual degree programs- Nil

1.2.3 Does the institution have an explicit policy and strategy for attracting students from
Other states- Yes
Socially and financially backward sections- Yes
International students- Yes

<table>
<thead>
<tr>
<th></th>
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<tbody>
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<td>M Pharm</td>
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<tr>
<td>Pharm D</td>
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<tr>
<td>Other State</td>
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<td>21</td>
<td>10</td>
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<tr>
<td>Socially and financially backward sections</td>
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<td>12</td>
<td>41</td>
</tr>
<tr>
<td>Internationals</td>
<td>-</td>
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</table>

1.2.4 Does the institution offer self-financing programs? If yes, list them and indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programs?
All the programs are self-financed.
Admissions: Based on merit through TN Government and Private Professional Colleges Association of TN. The interested candidate can apply directly to the Government or to the Consortium for admission.
Fee structure: The fee collected for different programs is as per the guidelines given by the TN Government for private colleges.
Teacher Qualification: Teachers are appointed based on the qualification criteria given by PCI, AICTE, and University.

Salary: Faculty are given basic salary as per the AICTE norms.

1.2.5 Has the institution adopted the Choice Based Credit System (CBCS) / credit based system? If yes, for how many programs? What efforts have been made by the institution to encourage the introduction of CBCS in its affiliated colleges?
No

1.2.6 What percentage of programs offered by the institution follow:
All the programs offered by the institution follow Annual system

1.2.7 How does the institution promote multi/inter-disciplinary programs?
Name a few programs and comment on their outcome.
None

1.2.8 What programs are offered for practicing health professionals for skills training and career advancement?
NA

1.3 Curriculum Enrichment

1.3.1 How often is the curriculum of the institution reviewed and upgraded for making it socially relevant and/or skill oriented / knowledge intensive and meeting the emerging needs of students and other stakeholders?
The Board of Studies for Pharmacy at TNMGRMU meets twice in a year to review the syllabus as per the changing requirements and induce a change in the syllabus once in five years. The last change for B Pharm and M Pharm occurred in 2010, and for Pharm D course, it will be reviewed by the Pharmacy Council of India.

1.3.2 During the last four years, how many new programs were introduced at the UG and PG levels? Give details.
Multi/inter-disciplinary- Two new courses M Pharm in Pharmacy Practice and M Pharm in Pharmaceutical Analysis were introduced by the institution in 2011. The rationale behind the introduction for M Pharm (Pharmacy Practice) was the fact that PSGCP is associated with teaching hospital within our campus and also there is a good demand for Pharmacy Practice post graduates in the hospitals today. M Pharm in Pharmaceutical Analysis is also a well sought discipline by the Pharmaceutical industry and consequently many B Pharm graduates want to pursue this course.
Programs in emerging areas- Module courses in Drug Design and Regulatory Affairs will be shortly provided.

1.3.3 What are the strategies adopted for the revision of the existing programs? What percentage of courses underwent a syllabus revision?
There has been a minor change in the Pharmacognosy syllabus for B Pharm as of the 47th Standing Academic Board meeting held in June 2014 of the TNMGRMU.

1.3.4 What are the value-added courses offered by the institution and how does the institution ensure that all students have access to them?
Module courses in Drug Design and Regulatory Affairs will be shortly provided.

1.3.5 Has the institution introduced skills development programs in consonance with the national health programs?
We have regular seminars conducted by eminent personalities from the pharmaceutical industries as part of our Industry Institute Interaction cell. Here students get a good idea regarding the skills to be developed for being employed by the Pharmaceutical industry. Our soft skills training program for our students gives them the necessary life skills.

1.3.6 How does the institution incorporate the aspects of overall personality development addressing physical, mental, emotional and spiritual well being of the student?
The institution strongly believes that interpersonal skills and relationships are very important for the students to become a responsible citizen of the country. The training given for the students during their stay at PSGCP will enable them to leave the campus with confidence and face the challenges and obstacles in their career. The various programs and events which are given to the students are:
- Mentorship
- NSS program
- Communication and Soft Skill development program
- Moral classes
- Organization of various programs through student council
- Outreach programs for Pharm D and B Pharm students

1.3.7 Does the curriculum provide for adequate emphasis on patient safety, confidentiality, rights and education?
Yes. Our Pharm D students see the clinical records as a teaching material. But before they utilize these facilities, the students have to take ethical clearance from
the Institutional Human Ethical Committee, where they will be enlightened on the confidentiality and privacy of the patient records.

**1.3.8 Does the curriculum cover additional value systems?**
Yes, Special emphasis is given to students regarding their social responsibilities towards society as well as the country.

**1.4 Feedback System**

**1.4.1 Does the institution have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?**
There is a formal mechanism to obtain feedback from students, staff, and stakeholders regarding the curriculum. This feedback is filed at the office and whenever any faculty attends the University syllabus revision meetings he/she communicates the same to the university.

**1.4.2 Does the institution elicit feedback on the curriculum from national and international faculty? If yes, specify a few methods such as conducting webinars, workshops, online discussions, etc. and their impact.**
The Institute regularly collects feedback on the curriculum from the teachers. Currently, we do not have any feedback collection from the international faculty. However, during the visit of some international faculty in the past and also during the RAC meeting, discussions related to the curriculum were made.

**1.4.3 Specify the mechanism through which affiliated institutions give feedback on curriculum and the extent to which it is made use of.**
PSGCP does not have any affiliating institute under it.

**1.4.4 Based on feedback, what are the quality sustenance and quality enhancement measures undertaken by the institution in ensuring the effective development of the curricula?**
PSG group of institutions are known for their quality. Feedback is regularly received on the curriculum for quality teaching. PSGCP is not an Autonomous institution, hence the feedback received by the institution with respect to quality assurance are implemented then and there. The quality sustenance and enhancement measures are monitored by the performance of our students in various competitive exams and placements. Despite the limitations in curriculum design, adequate measures have been taken to provide quality education.
1.4.5 What mechanisms are adopted by the management of the institution to obtain adequate information and feedback from faculty, students, patients, parents, industry, hospitals, general public, employers, alumni and interns, etc. and review the activities of the institution?

The HR department of PSG Health institutions effectively collects feedback from the faculty, students, patients, and parents. This feedback (oral as well as written) helps us to improve the infrastructure, approach to learning and evaluation process, and curriculum development. The feedbacks of our alumnae as well as that of their employers are maintained by the college.

*Any other information regarding Curricular Aspects which the institution would like to include.*
Criterion II
Teaching Learning and Evaluation
## Criteria II - Teaching learning and evaluation

<table>
<thead>
<tr>
<th>Key aspects</th>
<th>Process/Approach</th>
<th>Outcome</th>
</tr>
</thead>
</table>
| 2.1 Student enrolment and profile | • Transparency in admissions.  
• Merit based system                                                             | • Fair process of student selection and enrolment from wide strata of society.  
• Increasing cutoff marks in entry level                                        |
| 2.2 Catering to student diversity | • Admissions conducted as per established official guidelines.  
• Equal opportunity for all sectors                                              | • Candidates from all sections of the society given a fair representation  
• Increased in number of first graduates in a family and minorities.             |
| 2.3 Teaching – Learning process   | • Tailoring academic needs as per student requirements.  
• Orientation programs for new comers.  
• Well defined Academic Calendar.  
• Master course plan.  
• Hands on practical training in industrial, clinical, and hospital pharmacy.  
• Model Pharmacy setup.                                                          | • Better quality in student output and performance in exams.  
• Good awareness about the course and the institutions by fresher.  
• Smooth execution of academic year.  
• Better knowledge about industrial equipment and student involvement in community pharmacy. |
| 2.4 Teacher quality               | • Well qualified and diversified staff members having international experience.  
• Induction, re-orientation, and refresher courses undergone by staff periodically.  
• Clear policies                                                                  | • Awards received by faculty at various state, national, and international levels.  
• Quality education for students  
• Stakeholder satisfaction  
• Conformed campus placements  
• Increased demand of students admission |

<table>
<thead>
<tr>
<th>2.5 Evaluation process and reforms.</th>
<th>2.6 Student performance and learning outcomes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Quality based promotion</td>
<td>- Measured through academic competency, professional efficiency, communication skills.</td>
</tr>
<tr>
<td>- Stringent selection criteria</td>
<td></td>
</tr>
<tr>
<td>- Formative and summative assessments.</td>
<td>- Well defined graduate attributes.</td>
</tr>
<tr>
<td>- Structured question patterns.</td>
<td>- Improvement of confidence levels</td>
</tr>
<tr>
<td>- Rederessal and grievances for evaluation related issues.</td>
<td>- Better student progression</td>
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</tbody>
</table>
2.1 Teaching learning evaluation

2.1.1 How does the institution ensure publicity and transparency in the admission process?

- Admission Process for B Pharm and M Pharm will be announced by the Directorate of Medical Education (DME) Government of Tamil Nadu and Tamil Nadu Private Professional Colleges Association- Health Sciences every year in the month of June/July. Interested candidates can apply for single window counseling. Based on the merit, the candidates are called for B Pharm admissions. Transparency of the admissions has been maintained through publication of merit list in the respective web pages (www.tnhealth.org and www.tnppcahs.org) and dailies.
- Similarly, for admissions to M Pharm a separate entrance examination is conducted by the DME and Tamil Nadu Private Professional Colleges Association - Health Sciences for admission through government and management quota respectively. Based on scorings merit list is prepared and published in the web page for admissions.
- The Pharm D admission process is notified through the college website www.psgpharma.ac.in, the interested candidates can apply for admissions on merit basis and the candidates are called for admissions.
- By this way publicity and transparency have been maintained in the admission process.

2.1.2 Explain in detail the process of admission put in place by the institution. List the criteria for admission: (e.g.: (i) merit, (ii) merit with entrance test, (iii) merit, entrance test, aptitude and interview, (iv) common entrance test conducted by state agencies and national agencies (v) any other criteria (specify).

- The admission criteria for B Pharm, M Pharm, and Pharm D are based on merit. In B Pharm 65% is filled by Government quota and the remaining 35% by Management quota. Government quota is filled by the Director of Medical Education, TN Government through single window counseling according to the merit of the candidate. Similarly, Management quota is filled by the Association of Private Professional Colleges of TN. Based on the received applications, the merit list is prepared and admissions are given.
- M. Pharm admissions are made by conducting common entrance test. The test will be conducted by either the TN State Government (DME) or through the TN Private Professional Colleges Association- Health Sciences, Chennai. GPAT qualified students are also admitted to the M. Pharm, provided they qualified either of the above exams.
Pharm D admissions: The applications for Pharm D and Pharm D (PB) program are received by the admission section in the administrative office. Based on the merit list the students are given admission.

2.1.3 Provide details of admission process in the affiliated colleges and the university's role in monitoring the same.
Not Applicable

2.1.4 Does the institution have a mechanism to review its admission process and student profile annually? If yes, what is the outcome of such an analysis and how has it contributed to the improvement of the process?
- The admission Committee reviews the admission process and the findings are presented by the Head of the institution at the Strategic Initiative Forum of PSG group of institutions. The review includes the minimum and maximum marks of the admitted students, their diversity, gender ratio and any shortcomings. After discussions the issues are addressed in the next round of admissions. The reason for taking admissions at PSG are collected from the students and parents and taken into account in the review process.

2.1.5 What are the strategies adopted to increase / improve access for students belonging to the following categories:
- SC/ST/OBC
  Special English classes are conducted for SC/ST/OBC students and Government awards them various scholarships and special training and coaching is given to improve their performance.
- Women
  Healthy gender ratio with regard to students is maintained. Utmost care has been taken to grant and secure a safe environment for the girl students. A mentorship program is also being run for the girl students to address various issues pertaining to females. There are separate hostels for girls with female faculty as warden.
- Persons with varied disabilities
  Currently at PSGCP, there are no students with varied disabilities. However, special railings and sloped platforms are provided for wheelchair movement. Designated parking area for the disabled has been provided.
- Economically weaker sections
  Economically weaker students can avail themselves of various scholarships awarded by the TN Government.
- Outstanding achievers in sports and other extracurricular activities
  Outstanding achievers in sports and extracurricular students are provided with state-of-the-art sports facilities for developing their talents.
2.1.6  Number of students admitted in the institution in the last four academic years:

Students Admitted in UG Course (B Pharm)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total No of Students</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>58</td>
<td>40</td>
<td>18</td>
</tr>
<tr>
<td>2012</td>
<td>60</td>
<td>27</td>
<td>33</td>
</tr>
<tr>
<td>2013</td>
<td>60</td>
<td>27</td>
<td>33</td>
</tr>
<tr>
<td>2014</td>
<td>58</td>
<td>26</td>
<td>32</td>
</tr>
</tbody>
</table>

No. of students: 2.2:1, 0.81:1, 0.81:1, 0.81:1

Students Admitted in Integrated PG Course (Pharm D)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total No of Students</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>30</td>
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<td>2012</td>
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<td>6</td>
<td>24</td>
</tr>
<tr>
<td>2014</td>
<td>30</td>
<td>8</td>
<td>22</td>
</tr>
</tbody>
</table>

No. of students: 0.43:1, 0.36:1, 0.25:1, 0.36:1
Students Admitted in PG Course (M Pharm & Pharm D Post Baccalaureate)

Mark criteria for UG (B Pharm) admission
Mark criteria for Integrated PG (Pharm D) admission

Mark criteria for PG (M Pharm) admission
2.1.7 Has the university conducted any analysis of demand ratio for the various programs of the university departments and affiliated colleges? If so, highlight the significant trends explaining the reasons for increase / decrease.

Our institution is affiliated to TNMGRMU, Chennai. Hence no analytical data on the demand ratio for the courses offered are available. However the demand for UG Program has been found to be high and for PG programs it is moderate due to the increase in the number of seats for M Pharm by the AICTE. There is a steady increase in the demand for Pharm D program. This demand is due to clinical orientation, integrated PG program and also having good employment opportunities across the globe.

2.1.8 Were any programs discontinued/staggered by the institution in the last four years? If yes, specify the reasons.

No

2.2 Catering to Student Diversity

2.2.1 Does the institution organize orientation / induction program for fresher? If yes, give details such as the duration, issues covered, experts involved and mechanism for using the feedback in subsequent years.

Yes - The institution conducts orientation-cum-induction program for the freshers so as

- To induct the newly admitted students into the Pharma field
- To brief the students about their course curriculum, role of various committees and other development programs that are going to be held during the current academic session.
- To make the students aware of various infrastructure locations facilities available in the institute for effective utilization.
- To make the students understand the ubiquitous role of communication skills so that they will get ample opportunities to use these skills.

The orientation program for the academic year 2013-14 was conducted as per the following schedule. It consisted of -

- Introduction about the PSG Institution and affiliating / approval bodies of B Pharm and Pharm D courses
- Role of various institutional committees related to academics including examination.
- Introduction about Pharmaceutical Industry, Hospital Pharmacy & Clinical Pharmacy
- Introduction about various Departments of PSGCP and achievements.
- Extracurricular activities.
• A session for language assessment to weigh the students so that measures can be taken to improve their language skills.
• Introduction about communication skills and learning skills – Preparation of class notes, Observation techniques in theory and practical classes.

I Year B. Pharm and Pharm D Orientation Program
Academic Year 2014 – 2015
Venue – Seminar Room, PSG College of Pharmacy

MORNING

<table>
<thead>
<tr>
<th>DATE</th>
<th>DAY</th>
<th>PROGRAMME 9:00 – 10:00 AM</th>
<th>PROGRAMME 10:15 – 11:30 AM</th>
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<tbody>
<tr>
<td>06/10/14</td>
<td>Monday</td>
<td>Induction Program</td>
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</tr>
<tr>
<td>07/10/14</td>
<td>Tuesday</td>
<td>Introduction - about PSG Group of Institutions, PSGCP, AICTE &amp; PCI, Dr. M. Ramanathan, Principal</td>
<td>Lecture about Academic details – Mr. B Samuel/ Mrs. Prudence</td>
</tr>
<tr>
<td>08/10/14</td>
<td>Wednesday</td>
<td>Introduction of Department of Pharmaceutics – Dr. C. Vijayaraghavan</td>
<td>Communication skills – Mr. S. Karthikeyan, Department of Pharmaceutics</td>
</tr>
<tr>
<td>09/10/14</td>
<td>Thursday</td>
<td>Introduction to Pharmaceutical Industry, Placements/ Job Dr. V. Sankar, Dr. S. Subramanian and Mr. M. Sivaselvakumar</td>
<td>Introduction of Dept of Pharmacognosy &amp; ISO – Mrs. G. Syamala / ISO Members</td>
</tr>
<tr>
<td>10/10/14</td>
<td>Friday</td>
<td>Motivational Talk – Dr. Khadar Bhatcha</td>
<td>Biodata of B Pharm students (31 - 60)</td>
</tr>
<tr>
<td>11/10/14</td>
<td>Saturday</td>
<td>Introduction to Department of Pharmacy Practice / Employment opportunities – Dr. V. Sankar</td>
<td>Feedback by students</td>
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<tr>
<td>EVENING</td>
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<tr>
<td>PROGRAMME</td>
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<tr>
<td>2:00 – 3:00 PM</td>
<td>3:15 – 4:30 PM</td>
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<tr>
<td>Hostel settlement / Completion of admission procedure</td>
<td>Language assessment – Dr. Sivaram Hariharan</td>
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<tr>
<td>Student introduction (as per the given questionnaire)</td>
<td>Communication skills – HR Dept PSG institutions</td>
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</tr>
<tr>
<td>Introduction of Dept of Pharmaceutical Chemistry – Dr. K. Umaa  Dept of Pharmacology – Dr. K.G.Prasanth</td>
<td>Biodata of B Pharm students (1-30)</td>
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<tr>
<td>Language assessment – Dr. Sivaram Hariharan</td>
<td>Students council &amp; Students council (Science club activities)</td>
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<tr>
<td>Introduction to learning skills – preparation of class notes, observation techniques in theory and practical class – Dr. K.G. Prasanth, Mrs. S.E. Maida Engels, Dr. Sivaram Hariharan</td>
<td>Student Council (NSS, MAD club)</td>
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</tbody>
</table>

After witnessing the success of the orientation program, it was once again conducted for the fresher of the academic year 2014-15. Based on the feedback from the previous year students, the contents were enriched and the length of the program has been reduced from eleven days to six days.

2.2.2 Does the institution have a mechanism through which the “differential requirements of the student population” are analyzed after admission and before the commencement of classes? If so, how are the key issues identified and addressed?

- Yes, the student diversity, basic education schooling pattern (state board, CBSE and international schoolings) are analyzed. As our admissions are through the government the differential requirements of the student populations are met. In the management quota the diversity of the student population is maintained by taking students from other states and NRI which was reflected in the student diversity profile.
- Further, entry level assessment/ English proficiency/ rural student’s betterment programs/ Orientation program help to assess the student’s any special talents.
2.2.3 How does the institution identify and respond to the learning needs of advanced and slow learners?

- The identification of the advanced and slow learners is done by the subject handler.
- Advanced learners: we encourage them to actively participate in the Science Club activities, elocution competition, quiz competition, debates, and scientific presentations at conferences and seminars. The interested students are also actively involved in the research work in the field of their interest. Special coaching classes for higher education have also been given to them.
- Slow learners: Special classes for slow learners, mentorship program for guidance have been organized. To improve their understanding on the subject and to have better result outcome the slow learners will learn under a student team leader. The team leader will guide and help them and the entire process will be monitored by the concerned faculty.

2.2.4 Does the institution offer bridge / remedial / add-on courses? If yes, how are they structured into the time table? Give details of the courses offered department-wise/faculty-wise?

No, other than affiliated courses the institution is not offering any course.

2.2.5 Has the institution conducted any study on the academic growth of students from disadvantaged sections of society, economically disadvantaged, differently-able, etc.? If yes, what are the main findings?

No

2.2.6 Is there a provision to teach the local language to students from other states/countries?

No, interested students can learn the language in the Tamil Department at PSG College of Arts and Science, Coimbatore a sister institution of PSGCP.

2.2.7 What are the institution's efforts to teach the students moral and ethical values and their citizenship roles?

To inculcate the moral values, ethical principles and national values all the first year students have a moral class for 1hr/week.

2.2.8 Describe details of orientation/ foundation courses which sensitize students to national integration, Constitution of India, art and culture, empathy, women's empowerment, etc.

PSGCP is not running any orientation or foundation courses.
2.2.9 Has the institution incorporated the principles of Life Style Modifications for students based on Eastern approaches in their day to day activities?  
The institution follows dress code and the students will come to the class in uniform. The Indian culture and its significance are emphasized to the students through student council.

2.2.10 Has Yoga/Meditation/any other such techniques been practiced by students regularly as self-discipline?  
A separate Yoga centre is available in the hospital to which the students are exposed and encouraged by staff to maintain physical fitness and self-discipline through the mentorship program.

2.2.11 How does the institution attend to the diverse health issues (physical and mental) of students and staff?  
A resident psychologist is available for counseling students. Physical fitness and physical wellbeing are maintained by involving students in sports activities.

2.2.12 Does the institution cater to the needs of groups / individuals requiring special attention by conducting group classes / special individual trainings / focused group discussion / additional training measures etc.?  
Yes, PSGCP have addressed the needs whenever the requirement has arisen. Stipulated tutorial hours have been allotted for this. Workshops at PG level are organized to improve their skills.

Group class, identification of weak students, special training before and during examination is given to improve their learning process and subject interest. The groups are been conducted with team leaders and monitored by respective subject in charge.

2.3 Teaching-Learning Process

2.3.1 How does the institution plan and organize the teaching-learning and evaluation schedules such as
  
  - Academic calendar

    Academic Plan: An exclusive Academic Committee for B Pharm, M Pharm and Pharm D course has been constituted in this regard to monitor the smooth function of the academic time table and the running of all classes and labs as per schedule. The academic schedule for every calendar year is prepared and disseminated to staff and students well in advance. The academic calendar gives the details about the various committees and the modalities to report their redressal and grievance.
• Master plan
The conduct of sports, cultural, all the club activities, and other major activities like Graduation day, college day, internal examinations are incorporated in the master plan. The master plan also show the vacation period, number of working days, university examination and rules and regulations of the institute as well as affiliating university and council.

• Teaching, course, and unit plan
Teaching, course, and unit plan are the responsibility of each subject handler. They make a detailed teaching plan for the academic year covering all the topics including unit-wise plan. The same has to be approved by the Principal and subsequently it is audited by the Academic Committee.

• Rotation plan
Clinical rotation for Pharm D students of the 4th, and 6th years are scheduled by the Department of Pharmacy Practice on a monthly basis, which will be approved by the Principal and passed on to the perusal of the Medical Director for implementation. Preceptors are appointed to supervise the effective implementation of rotation plan.

• Evaluation blue print
The pattern of internal and continuous assessment has been given in advance to the students. The detail of the internal assessment and marks distribution is provided in the academic calendar. Similarly the continuous assessment detail has been informed to the students by examination section and announcement through notice board. The evaluation blue print for each subject is available in the respective departments. The key answers to the question are given.

• Outpatient and in-patient teaching
Pharm D students will take part in the ward rounds along with the assigned preceptors to study the drug interaction, pharmacovigilance, dosage compliance, and patient care. During the ward rounds the respective physicians of the departments will also contribute towards the bedside teaching. Outpatient teaching will be carried out at the patient counseling center where the students are taught on dispensing, patient counseling, and information on drug usage.

• Clinical teaching in other sites
Clinical teaching for Pharm D students are given at rural centers of PSG located at Karadivaavi and Vedapatti.

• Teaching in the community
As part of the curriculum, Pharm D and B Pharm students have been posted in PSG hospital/ community pharmacy to gain valuable experience as well as to inculcate knowledge to the general public. They are involved in educating the public on storage, usage and side effects on drug usage.
2.3.2 Does the institution provide course objectives, outlines and schedules at the commencement of the academic session? If yes, how is the effectiveness of the process ensured?
Yes. Each theory and practical (components) have objectives and schedules which are made clear to the faculty handling as well as to the students. The process of transaction is monitored by the Head of the Institution and the evaluation is done by the academic committee. The same is discussed in the faculty meetings.

2.3.3 Does the institution face any challenges in completing the curriculum within the stipulated time frame and calendar? If yes, elaborate on the challenges encountered and the institutional measures to overcome these.
No.

2.3.4 How is the learning made student-centric? Give a list of participatory learning activities adopted by the faculty that contributes to holistic development and improved student learning, besides facilitating life-long learning and knowledge management.

- Interactive learning: one to one interaction with teacher in the practical hours followed by assessment of the knowledge.
- Participatory learning: It has been mandatory for all the students to make a presentation on a scientific topic of their interest related to the syllabus.
- Group learning: Weak students having difficulty in learning and not able to perform well in the examination are formed into groups of four students each. In each group one student leader, preferably a bright student has been appointed. Under the supervision of the group leader and subject-in-charge the students are given coaching.
- Apart from regular academic activities, students are also exposed to other fields of science. Emphasis is also given to life skills and values.

2.3.5 What is the institution's policy on inviting experts / people of eminence to augment teaching-learning activities?
The institute invites experts from the academia as well as industry to interact with the students. An Industry Institution Interactive Cell is functioning in the college and conducts interactive sessions once in a month. Apart from these it has been made a policy to conduct two seminars and workshops every year on current topics. During this period eminent people from industry and academia both at national and international are called to present their findings.
In Pharm D and practicing pharmacy curriculum the students have been encouraged to make case presentation during the practical hours. Further, the institute also conducts continuous Pharmacy Education program fortnightly. The topic for the presentation is approved by the affiliating university TNMGRMU.

2.3.6 Does the institution formally encourage learning by using e-learning resources?
Yes, the institution encourages learning through e-learning resources. A state-of-the-art digital library is available and students can access the facility up to 10 pm every day. A designated area in the library with 44 computers is available for e-learning. The students have access to e-books, CD and net facilities in this center.

2.3.7 What are the technologies and facilities such as virtual laboratories, e-learning and open educational resources used by the faculty for effective teaching?
- The institute has a well equipped simulation lab at the hospital to teach physiological and pharmacological aspects of diseases.
- In the Department of Pharmacology computer aided pharmacological screening lab is available for the faculty to teach on drug effects.
- The faculty use video recorded teaching downloaded from web.
- Full access to SCIENCE DIRECT, DRUGDEX, MICROMEDEX, MD CONSULTANT.
- CD/DVDs, (numbers required)
- Database
- E-books, journals

2.3.8 Is there any designated group among the faculty to monitor the trends and issues regarding developments in Open Source Community and integrate its benefits in the institution’s educational processes?
The college permits the faculty to use information available in the open source community. The main sources of information used are Wikipedia, Pub Med, Google Scholars, Pub Chem Protein Data Bank etc., for education and research purpose. There is no separate committee has been appointed for this. However the institution will adapt to the new era of education and information resources.

2.3.9 What steps have the institution taken to transition from traditional classrooms into an e-learning environment?
Along with the traditional classroom setup it has been proposed to take steps for transition into an e-classroom. Steps initiated include uploading the power point presentations and e-learning resources on to the college web site.
2.3.10 Is there any provision for the services of counselors / mentors/ advisors for each class or group of students for academic, personal and psycho-social guidance? If yes, give details of the process and the number of students who have benefitted.

Yes. A mentor system is in place. Mentorship is available to students at 1:11 ratio at B Pharm level and 1:13 ratio at Pharm D level. The process has been initiated in the year 2005. After a 3 year break in between it has been re-initiated in 2014. The major responsibility of the mentor is to provide moral support, understanding the weaknesses and strengths of the students so as to help them to choose their career. By motivation and guidance the mentors drive them properly.

2.3.11 Were any innovative teaching approaches/methods/practices adopted and implemented by the faculty during the last four years? If yes, did they improve learning? What were the methods used to evaluate the impact of such practices? What are the efforts made by the institution in giving the faculty due recognition for innovation in teaching?

- Usage of ball in stick models in Organic Chemistry.
- Industrial oriented teaching at the second year B Pharm level; for Pharmaceutical technology students have scored high marks and pass percentage have improved in this subject.
- Assignments and presentation of the topic selected in an interactive session. Case studies, project work, practical field work for Pharm D. This activity helps the students to gain confidence in podium presentation and remove their inhibition and improve the language skills.
- Conduction of science quiz every year.

2.3.12 How does the institution create a culture of instilling and nurturing creativity and scientific temper among the learners?

Sir Raman’s Science club

Sir Raman’s Science club was initiated by the institution with the motto of “Knowledge for all”. This club is a platform for the exposure of pharmacy students to bring out their innovative ideas in science and to increase the creativity and scientific temper. This forum serves as a great opportunity for learners to explore ideas they’re passionate about, learn about science and develop key skills.
<table>
<thead>
<tr>
<th>S. No.</th>
<th>Year</th>
<th>Science Club activities</th>
</tr>
</thead>
</table>
| 1.    | 2014 | • A preliminary quiz contest about Scientists was held on April, 2014 in which 31 teams participated. The top 6 teams were selected for the Final Round of the Science Quiz contest which was held in the month of May, 2014. The Quiz contest consisted of about 6 rounds covering the fields of science, technology, inventions and current affairs. Winners and Runners-up of the quiz contest were awarded certificates and gifts.  
• Students were updated about the research breakthroughs by scientific talks by experts from different disciplines.  
• Current scientific discoveries/facts were regularly updated in the student notice board. |
| 2.    | 2013 | • Intercollegiate quiz contest between PSG institutions was conducted on March, 2013. Four entries were allowed to participate from each institution. Students from Engineering, Nursing, Physiotherapy and from Arts & Science had participated.  
• Students were updated about the research breakthroughs through scientific talks by experts from different disciplines.  
• The current scientific discoveries/facts were regularly updated in the student notice board. |
| 3.    | 2011 | • Intra college level quiz contest was conducted in which B. Pharm, Pharm D and M. Pharm students had participated.  
• The current scientific discoveries/facts were put up in the student notice board. |
| 4.    | 2010 | • National Level Quiz – Pharma Quest was conducted in three phases based on the theme Knowledge Treasure Hunt. |

**Research Advisory Committee**
Research Advisory Committee has been constituted with external member academia from other universities and researchers from industries. Their inputs are inculcated among the students and faculty to encourage their scientific temper.

**Innovative Ideas for Scientific Issues (IISI)**
The Innovative Ideas for Scientific Issues (IISI), is a science competition, aimed to stimulate innovative R&D projects that address a specific market need or challenge/commercial potential/benefit to the public. This activity provides a forum for all B Pharm, Pharm D, M Pharm, Ph. D students and faculty to showcase their independent research talent by giving ideas/hypothesis/research works for scientific problems.
Activities (2013-14)

- Twenty four research ideas were turned in and the best three participants were awarded certificates and prizes.
- The Best three projects were:

<table>
<thead>
<tr>
<th>Prize</th>
<th>Title of the Idea/Project</th>
<th>Presented to</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>A novel method for improving quality of water</td>
<td>Ms. Thangam G III B. Pharm</td>
</tr>
<tr>
<td>II</td>
<td>Protective effect of <em>Pterocarpus marsupium</em> marketed capsules against acetic acid induced ulcerative colitis in rats</td>
<td>Ms. Merin Maria Mathew IV B. Pharm</td>
</tr>
<tr>
<td>III</td>
<td>Formulation of Furosemide SLNs for bioavailability enhancement and sustained release</td>
<td>Mr. Ram Pravin Kumar II B. Pharm</td>
</tr>
</tbody>
</table>

2.3.13. Does the institution consider student projects mandatory in the learning program? If yes, for how many programs have they been (percentage of total) made mandatory?

Yes, student project is mandatory for learning program as per council and university norms. The UG and Pharm D program have dissertation work. In this, groups of students work on a scientific problem under the supervision of a teacher. In the university examination, the project is graded on UG project for Pharm D project it is evaluated and marks are allotted by the examiners. M. Pharm project is done for one year and at the end of the year it is evaluated and marks are awarded.

- Number of projects executed within the institution

<table>
<thead>
<tr>
<th>B Pharm</th>
<th>All the projects</th>
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</thead>
<tbody>
<tr>
<td>M Pharm- Pharmaceutics</td>
<td>50 – 75 percent</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>100%</td>
</tr>
<tr>
<td>Pharmacy Practice</td>
<td>100%</td>
</tr>
<tr>
<td>Pharm D</td>
<td>All the projects</td>
</tr>
</tbody>
</table>

- Names of external institutions for student project work

For industrial training and project, the names of interested students are collected. Based on that list, Pharmaceutical Companies are contacted with a request letter for in-plant training as per the rules and regulation of the company. On approval the students are sent for the training and project work. The companies which allowed the students for project work are:

List of companies
- Role of faculty in facilitating such projects
The faculty is given a free hand to act on this within the rules framed by the University. The teacher will identify the interest and competency of the student before assignment of the project. He will initiate the entire process of training and project work.

2.3.14 Does the institution have a well qualified pool of human resource to meet the requirements of the curriculum? If there is a shortfall, how is it supplemented?

The institution has well qualified and competent teachers in all the departments to impart knowledge to the students. The appointment of faculty in various departments is based on the Pharmacy Council of India regulations. There is no shortfall in the human resources of the institution to meet the requirements of the curriculum.

2.3.15 How are the faculty enabled to prepare computer-aided teaching/learning materials? What are the facilities available in the institution for such efforts?

Teachers have been given a free hand to develop computer-aided teaching materials with accessories like power point projectors, laptops, and so on. An IT department is present in the campus to cater to the IT requirements of the college.

2.3.16 Does the institution have a mechanism for the evaluation of teachers by the students / alumni? If yes, how is the evaluation feedback used to improve the quality of the teaching-learning process?

Yes, the students’ feedback on teachers is taken twice a year. The feedback helps the faculty to improve his/her teaching process. The feedback system helped the institution teaching and learning process. There is no formal feedback system mechanism to evaluate the teachers by the alumni.

2.3.17 Does the institution use telemedicine facilities for teaching-learning processes? If yes, cite a few instances.

No, the conventional method for dispensing has been employed in the pharmacy. Fully computerized dispensing system in the hospital is available. B. Pharm and Pharm D students have the opportunity to learn using this technology.

2.3.18 Does the institution utilize any of the following innovations in its teaching learning processes?

- ICT enabled flexible teaching system.
- ICT (Information based Communication Technology)
- Reflective learning.
- Simulations- state-of-the-art simulation lab is available in the medical college. It is a common facility all the faculty is permitted to use and train the students.
- Evidence based medicine - NA
- Emphasis on development of required skills, adequate knowledge and appropriate attitude to practice medicine - NA
- Problem based learning (PBL).
  During the practical hours and ward rounds, students are exposed to pharmacotherapeutic problems by physician, clinical pharmacist and other health care professionals. Students are trained to manage the problems in clinical settings.
- Student assisted teaching (SAT).
  Pharm. D students have the ward rounds with Post Graduate Medical students; they teach them about current medical problems and management strategies.
- Self directed learning and skills development (SDL).
  Other than the ward rounds with physicians, students attend pre- and post-ward rounds to assess and learn the pharmacotherapy problems. They provide the patient counseling to improve medication adherence and better management of current medical condition.
- Narrative based medicine - NA
- Medical humanities - Workshops have been conducted in this regard by our Medical College.
- Drug and poison information assistance centre
  Yes, we have a Drug and poison information centre. The Department of Pharmacy practice has a drug and poison information center to provide the updated information related to queries asked by physicians, medical and paramedical students, other health care professionals and public.
- Ayurveda practices - NA
- Yoga practices - A Yoga centre at the PSG Hospital caters to the needs of interested students.
- Yoga therapy techniques - NA
- Naturopathy and its practices - NA
- Any other - NIL

2.3.19 Does the institution have an Electronic Medical Records facility, staffed by trained and qualified personnel? Is it used for teaching-learning process?
Yes the institution is attached with a medical college hospital and an exclusive electronic medical record facility is available. One of the strengths of PSGCP is its association with PSG Institute of Medical sciences and Research, an MCI approved medical college hospitals. It is used by Pharm D students for case study.
2.3.20 Does the institution have well documented procedures for case sheet writing, obtaining informed consent and the discharge process of the patients? Yes, the institution is associated with the medical college hospital. The student doing clinical research is exposed to this facility. The students maintain the records on informed consent.

2.3.21 Does the institution produce videos of clinical cases and use them for teaching learning processes? No

2.3.22 Does the institution perform medico legal/post-mortem procedures with a view to train the undergraduate and post-graduate students in medico legal procedures? Not Applicable

2.3.23 Does the institution have drug and poison information and poison detection centers? How are these used to train the students? Yes, The Department of Pharmacy Practice has poison information center in the hospital. The poison cases admitted in the hospital are reviewed by the Pharm D and Pharmacy practice students. The students are taught on the symptoms and progression of the poison effects in the biological system followed by therapeutic interventions.

2.3.24 Does the institution have a Pharmacovigilance/Toxicologycentre/clinical pharmacy facility/drug information centre/Centre for disease surveillance and control/ Prevention through Yoga/Promotion of positive health/Well-equipped Psychology Laboratory/ Naturopathic diagnostic centre, etc.? 
- The Pharmacy College is situated in the same campus as the MCI approved medical college, namely PSG Institute of Medical sciences and Research. The pharmacy faculty members are actively involved in the pharmaceutical care. The health campus has Pharmacovigilance Center. It is one of the approved centers by Government of India to record ADR and report. Two faculty members from the Pharmacy College are the members of the Pharmacovigilance Committee.
- Clinical pharmacy faculty members are appointed in the hospital. They actively participate in the pharmaceutical care.
- Drug information centre- an exclusive drug information center is available in the hospital which is controlled by the Pharmacy Practice department. The center provides the information on drug usage and new drug interactions to the physicians on request. Further this facility is also used by clinical
pharmacists for understanding the drug utility and also about new drugs marketed.

- Other than the above mentioned facilities the hospital also has a Centre for disease surveillance and control, a well-equipped Psychology Laboratory, Naturopathic and Yoga centre.

2.3.25 Laboratories / Diagnostics
- **How is the student’s learning process in the laboratories/ diagnostics monitored?** Provide the laboratory time table (for the different courses). All the students will be supervised by the faculty and assessed by them at the end of the lab hours. For the lab timetable, see annexure.
- **Student staff ratio in the laboratories / diagnostics.** Student staff ratio in labs is 20:1.

2.3.26 How many procedures / clinical cases / surgeries are observed, assisted, performed with assistance and carried out independently by students in order to fulfill learning objectives?
Pharmacy students assist the physicians on drug information, drug interaction, and counsel the patients on drug usage to fulfill the learning objectives. The clinical observations made by the students per year are 20 different cases.

2.3.27 Does the institution provide patients with information on complementary and alternative systems of Medicine?
No

2.3.28 What are the methods used to promote teaching-learning process in the clinical setting?
The clinical pharmacist learning is mainly depend on the hospital settings, hence all the students are encouraged to actively participate in the Ward rounds, Drug information, Physician interaction, patient counseling, preceptor evaluation, and group interaction among the students and teachers.

2.3.29 Do students maintain log books of their teaching-learning activities?
Yes, the log books are maintained for 5th and 6th year Pharm D students on their hospital activity including ward rounds, hospital pharmacy, patient counseling and drug information. B Pharm students maintain log book in third year when they visit hospital pharmacy as part of their curriculum activity. Other than these, students maintain their observation and record note book for the practical subjects. The record note book is evaluated at the end of the year.
2.3.30 Is there a structured mechanism for post graduate teaching-learning process? 
Yes

2.3.31 Provide the following details about each of the teaching programs:

- **Number of didactic lectures**: One per week for undergraduate students. During the lecture the morality is discussed. For Pharm D students the instruction lecture is organized once in a month.

- **Number of students in each batch**
  - 60 students (B Pharm)
  - 8-10 (Pharm D)
  - 100 students (CPE program)

- **Number of rotations**
  Rotations for Pharm D students are assigned based on the guidelines suggested by the Pharmacy Council of India. The fifth year Pharm D students are posted in wards based on their projects. The students are available in the ward between 8 and 12 noon and have a minimum of three rotations in their fifth year.
  Similarly the sixth year Pharm D students (Pharm D interns) are posted for six months in general medicine and remaining six months in any of the following three specialties - general surgery, pediatrics, orthopedics, dermatology, and gynecology.

- **Details of student case study / drug study**
  Interns and fifth year Pharm D students will present their case study reports once in a week (Tuesday) before the preceptors and in presence of other Pharm D students.

- **Nursing Care Conference (NCC)** – Not Applicable

- **Number of medical / dental procedures that the students get to see** – Not Applicable

- **Mannequins / Simulation / skills laboratory for student teaching** – Not Applicable

- **Number of students inside the operation rooms at a given time** – Not Applicable

- **Average number of procedures in the ORs per week, month and year** – Not Applicable

- **Autopsy / Post-mortem facility** – Not Applicable
2.4 Teacher Quality

2.4.1 How does the institution plan and facilitate its faculty to meet the changing requirements of the curriculum?
For upgrading their knowledge the faculties are encouraged to attend training programs, workshops, national and international seminars, exposure and interaction with other nationally and internationally reputed institutions. Foreign Academia is invited to interact with the students and faculty. AICTE and DST sponsored seminars and programs centered on specific topics of interest are conducted. The recent topics to be included in the curriculum are also discussed with the experts in the panel of the Research Advisory Committee.

2.4.2 Does the institution encourage diversity in its faculty recruitment? Provide the following details (department / school-wise).
Diversity in the staff is essential to have a mixture of knowledge about people rather than having in bred faculty. The institution has the policy of appointing alumni as faculty after they have served for three years outside. Similarly the institution also encourages appointing faculty from other states, who have studied in other universities. The details of the faculty on diversity is given below

<table>
<thead>
<tr>
<th>Department</th>
<th>Ph. Ceutics</th>
<th>Ph. Cology</th>
<th>Ph. Analysis</th>
<th>Ph. Practice</th>
<th>Ph. Chemistry</th>
<th>Ph. Cognosy</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>BC</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>4</td>
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<tr>
<td>MBC</td>
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<td>1</td>
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<tr>
<td>SC/ST</td>
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<td>1</td>
</tr>
</tbody>
</table>

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Faculty Profile (Diversity of Faculty)

- Male, 23
- Female, 13

Social Status

- OC, 9
- BC, 25
- MBC, 1
- SC/ST, 1
Nativity of the Faculty

- Faculty from Coimbatore: 25
- Faculty from Tamilnadu: 6
- Other State: 5

Diversity in Faculty recruitment

- From TN Dr. MGR Medical University: 13
- Other University: 32
- International exposure: 5
2.4.3 How does the institution ensure that qualified faculty are appointed for new programs / emerging areas of study? How many faculty members were appointed to teach new programs during the last four years?

To be alive with the changing trend in the pharmaceutical education introduction of new programs in the field of drug discovery, drug development, bioinformatics, regulatory and clinical research has been concentrated. To teach these programs four faculty in the area of Chemistry research (Dr. A Nagarajan), GLP, Drug Testing, and Regulatory (Mrs. R Nithya and Mr. Siva Selva Kumar), bioinformatics and drug discovery (Dr. B. Balaji) are appointed in different departments of the institute.

2.4.4 How many Emeritus / Adjunct Faculty / Visiting Professors are on the rolls of the institution?

Emeritus: Prof., A.K. Chandrasekhar, Dr. Natarajan, Dr. Jayaraman, Dr. M. Jagadeesan, Mrs. Priya Iyer
Adjunct: Mr. Navaneetha Krishnan, Ms. Mary Sasikala Rani, Dr. Anil. C Mathew, Mrs. Anushya

2.4.5 What policies/systems are in place to academically recharge and rejuvenate teachers? (e.g. providing research grants, study leave, nomination to national/international conferences/seminars, in-service training, organizing national/international conferences etc.)

Financial assistance is provided to the faculty for travel to attend the seminars and for presenting their research findings (oral and posters) to overseas (USA, Germany, Malaysia, Europe) and within India for enrichment and exchange.

2.4.6 How many faculty received awards / recognitions for excellence in teaching at the state, national and international level during the last four years?

2011

Dr. M. Ramanathan, Principal, PSG College of Pharmacy received “Professional Excellence Award”. The award has been constituted by TNMGMU to appreciate the service rendered in the field of Pharmacy and the award had been conferred at National Pharmacy week celebrations at The TNMGRMU, Chennai on 25th November 2011.

Dr. V. Sankar, Professor & Head of Department of Pharmacy Practice received “Best Teacher Award” during National Pharmacy week celebrations at The TNMGRMU, Chennai on 25th November 2011.

Mrs. G. Syamala, Assistant Professor secured 2nd prize in oral presentation for her research paper titled “High performance thin layer chromatographic quantification
of Rectin in the root of *Aegle marmelos*” in “Pharmacon III” held at Nehru College of Pharmacy, Pampady, Kerala on the 14th & 15th October 2011.

2012  
**Dr. M. Ramanathan** has been invited as editorial member of the journal *Ancient Science of Life*. Publishes AVP research foundation. A quarterly multi disciplinary scientific research journal min Ayurveda.

**Dr. C. Vijaya Raghavan**, Vice Principal, PSG College of Pharmacy has been selected as an Advisory Board Member for the “*Saudi Pharmaceutical Journal*” which is an international Elsevier publication.

**Dr. C. Vijaya Raghavan**- Research paper entitled “Formulation, optimization of PLGA zidovudine Nanoparticles and in vitro evaluation to study the effectiveness in crossing blood brain barrier” received Best Paper award in National symposium on Mathematical Modeling in Drug Development and Drug Delivery (MMDD-2012) organized by Ultra College of Pharmacy, Madurai, during 29th March 2012.

**Dr. G. Geetha**, Head, Department of Pharmaceutical Analysis, PSGCP received the Best Teacher Award from the Honorable Health Minister of Tamil Nadu Dr. VS Vijay at the National Pharmacy Week celebrations organized by The TNMGRMU, Chennai 25th November 2012.

2013  
**Mr. K. Balakumar**, Assistant Professor, Department of Pharmaceutics and **Mr. N. Tamil Selvan**, Research Scholar, Department of Pharmaceutics, received an International travel grant (Rs. 83,631 each) from the Department of Biotechnology (DBT) to present a research paper at the 3rd International conference and Exhibition on Pharmaceutics and Novel Drug Delivery System 2013, on 8-10 April, 2013 to be held at Chicago, USA.

**Dr. K.Y Kavitha**- research paper titled “Development and Validation of RP-UPLC Analytical Method for Simultaneous Estimation of Emtricitabine, Rilpivirine, Tenofovir disoproxil fumarate in bulk and Its Pharmaceutical Dosage Forms” was adjudged as the best paper at the national seminar on Advanced chromatographic techniques on 1 & 2nd February 2013 at JSS College of Pharmacy Mysore.

2014  
**Dr. B Balaji and Dr. M Ramanathan**- research paper titled "QSAR prediction of 17β-hydroxy steroid dehydrogenase 2 inhibitors using support vector machine" at
the 2nd Annual International Conference - Drug Discovery India 2014, held at Mumbai on 11-12 September 2014, bagged the Best Poster award.

2.4.7 How many faculty underwent professional development programs during the last four years?

**Induction programs**


Three newly joined faculty (2014-15) have attended the Orientation program at PSG Institution in Feb 2015.

**Re-orientation programs**

Mrs. P Rama, Assistant Professor, attended the workshop on Good Clinical practices guidelines for research” conducted at PSG IMSR on 18th May 2013.

Dr. V. Sankar, Professor attended Bioethics in Research conducted at PSG IMSR in 2014.

Mr. S. M. Habibur Rahman, Associate Professor attended 7th PAGIN workshop conducted at PSG IMSR on 29th -31st, January 2015.

**Refresher courses**

Dr. B. Balaji, Assistant Professor, visited Molecular Biotechnology and Bioinformatics Lab of International Institute of Information Technology, Pune from 1st June to 30th June 2011. During his stay for one month in Pune he learned molecular techniques related to PCR and transfection.

Dr. S. Subramanian, Associate Professor, participated in one day national workshop on “Nano Drug delivery techniques organized by PSG College of Pharmacy on 27th April 2012.

Mr. D. Sivakumar, Assistant Professor attended National workshop on ‘Insilico Drug Discovery & Lead Optimization” conducted at PSG College of Pharmacy on May 24th - 26th, 2012.

Mrs. Prudence A Rodrigues, attended IACP, Pharmacy Practice module Advanced learning series – 3 organised by SRIPMS, College of Pharmacy on 11th to 13th December 2012.

Mrs. P. Rama, Assistant Professor, attended IACP, Pharmacy Practice module Advanced learning series – 3 organised by SRIPMS, College of Pharmacy on 11th to 13th December 2012.

Mrs. S. E. Maida Engels, Assistant Professor, participated workshop on Molecular Modeling and Drug discovery conducted on 10th - 12th July 2013 at PSG College of Pharmacy.
Mrs. Prudence A Rodrigues attended “Training in learning management system using MOODLE” organized by PSG Institute of Management from 10th – 11th June 2013.

Mrs. S. E. Maida Engels, Assistant Professor, participated in Workshop on Research methodology conducted at Department of Epidemiology, The Tamilnadu Dr. M.G.R Medical University, Chennai from 28th April – 2nd May 2014.

Dr. A. Nagarajan, Professor attended oneday International symposium on “Grant writing and research reporting in biological & medical sciences” conducted at PSG IMSR on 13th November 2014.

Dr. G. Geetha, Professor attended a one day International symposium on “Grant writing and research reporting in biological & medical sciences” conducted at PSG IMSR on 13th November 2014.

Mrs. P. Rama, Assistant Professor attended workshop on ‘Research Methodology’ organized by The Tamilnadu Dr. M.G.R. Medical University, Chennai on 17th – 20th November 2014.

Capacity building programs

Mr. S. M. Habibur Rahman, Associate Professor attended 6th PAGIN workshop conducted at PSG IMSR on 1st – 3rd August 2013.

Mr. M. Siva Selva Kumar, Associate Professor attended 6th PAGIN workshop conducted at PSG IMSR on 1st – 3rd August 2013.

Mr. S. Karthikeyan, Assistant Professor attended National workshop on “Techniques in Animal cell culture and Invitro toxicology” at Bharathidasan University, Trichy from 1st – 10th April 2014.

2.4.8 How often does the institution organize academic development programs (e.g.: curriculum development, teaching-learning methods, examination reforms, content / knowledge management, etc.) for its faculty aimed at enriching the teaching-learning process?

As a part of the developmental program a team of faculty visited different institutions of high calibre in different streams as benchmark exercise. The institutes visited for Benchmark exercise include IIT, Chennai, BITS Pilani, Bharathiya Vidyapeeth University, Pune, TVS School, Madurai.

Once a year, workshops and conferences are organized by the departments.

This activity helps PSGCP to analyse and improve its teaching-learning process.
2.4.9 Does the institution have a mechanism to retain faculty? What is the annual attrition rate among the faculty?
The attrition rate in the institution is less, annually 3% attrition (Faculty resigned/Faculty enrolled) was observed. The institution has various welfare schemes for faculty retention. The details of the welfare schemes provided by the institute are given elaborately in the section 6.3.4. The institute has full academic freedom to carry out research and for effective implementation of academic activities. Other steps taken to retain the faculty includes, annual appraisal, encouragement to attend conferences, free research activities and quality oriented program of the PSG and Sons’ Charities.

2.4.10 Does the institution have a mechanism to encourage

- **Mobility of faculty between institutions/universities for teaching/research?**
  Yes. The institution deputed Dr. V. Sankar, Professor of Pharmacy Practice for learning of practicing aspects of Pharmacy at Children’s’ Hospital of Eastern Ontario, Canada for a month period.

- **Faculty exchange programs with national and international bodies?**

If yes, how have these schemes helped in enriching the quality of the faculty?
The faculty visited other universities and research centers at national and international levels are given below which helped to upgrade the knowledge and understanding of academic learning and teaching process. Based on the observations steps are taken to improve the quality and standard.
Dr. M. Ramanathan, Principal, in the month of October 2013 visited the following institutions in USA

- University of Toledo, Toledo,
  - Department of Medicinal chemistry
  - Drug development center
  - Department of Pharmacy practice
  - Department of Pharmacology

- Wayne State University, Detroit
  - Medicinal Chemistry lab
  - Drug Development lab

- Baeumont hospital, Royal Oak
  - Neuro-Urology lab
  - Bio-Bank system

- University of Illinois, Urbana Champaign
  - Medicinal Chemistry

- University of Maryland, Baltimore
  - School of Pharmacy and Biochemistry
  - Department of Pharmacy Practice
Dr. C. Vijayaraghavan chaired a scientific session of Pharmaceutics in 2nd World conference on Magic Bullets, Nurnberg, Germany, 2008.

Dr. V. Sankar, Professor & Head, Department of Pharmacy Practice, attended the FAPA conference conducted at Malaysia. He visited Taylors University and International Medical University, Kulalampur, Malaysia.

2.4.11 Does the institution have well defined career advancement policy for Health Science professionals? If yes, outline the policy.
Yes the institution has well defined promotional guidelines based on council norms (PCI and AICTE). The eligible candidates can apply for their promotion through the department with request. The application will be reviewed by the promotion committee for the merit. Based on the availability of vacancy the promotion order will be issued.

2.4.12 How does the institution create synergies with other PG institutes for generating required number of specialists and super specialists?
PSG and Sons’ Charities have multiple institutions covering Arts and Sciences, Engineering, Medical and Allied Health Sciences. Pharmaceutical science is a diversified filed it involves sciences from different field. The subspecialties given emphasize to improve it includes Nanotechnology, proteomics, nutritional & micro nutritional importance and drug development. The synergism created between PSGCP and other PG institutes through research collaborations, faculty visits and sharing of expertise.

2.4.13 Does the institution conduct capacity building programs/ courses in subspecialties for its faculty?
No courses or programs have been conducted by the institute, however through workshops and training programs the institute concentrates on capacity building. In the Department of Pharmaceutics the faculty is trained personnel in novel drug delivery system. Similarly in Department of Pharmacology, Bioinformatics personnel trained our faculty and research scholars in molecular modeling programs like Schrodinger.

2.5 Evaluation Process and Reforms

2.5.1 How does the institution ensure that all the stakeholders are aware of the evaluation processes that are in place?
The TNMGRMU organizes the examinations for the students twice a year. The examinations details are available in the webpage of the University. On announcement the details are downloaded from the web page and displayed in the notice board. The changes brought in by the examining authority in examination are
notified to the students then and there and also through the Examination Committee of the college.
The continuous and periodic internal assessments of the students are done by the institution. An exclusive Examination Committee functions for the smooth conduct of the examinations. Examination details are also printed in the academic calendar which is distributed to the students. Any changes in the exam patterns are informed through circulars. The parents are also informed about the examination process during the induction program.

2.5.2 What are the important examination reforms implemented by the institution? Cite a few examples which have positively impacted the examination system.
PSGCP is not an autonomous institution and it is affiliated to TNMGRMU, hence all the reforms adapted in the university have been followed by the institutions.

2.5.3 What is the average time taken by the University for Declaration of examination? In case of delay, what measures have been taken to address them? Indicate the mode adopted by the institution for the publication of examination results (e.g. website, SMS, email, etc.).
The University declares the results within 30 to 45 days from the conclusion of the external final exams. The results are then published on the university webpage.

2.5.4 How does the institution ensure transparency in the evaluation process?
The examination is conducted by the university. To ensure transparency the student can apply to the university by paying prescribed fee to see his/her answer paper. The discrepancies observed in the paper can be communicated with justification to the university authorities for clarification. The decision of the University authorities on this is final.
The internal examinations evaluations are done blindly with only mention of student roll numbers in the answer paper. The corrected answer sheets are given to the students for their verification. There is an Appellate Committee to handle student grievances in regard to the evaluation process.

2.5.5 What are the rigorous features introduced by the university to ensure confidentiality in the conduct of the examinations?
Students are admitted to the examination hall 15 minutes prior to the start of the exam at which time the question paper is released online in the Principal’s room. Answer sheets are pre-numbered and supplied to the institution directly from the University so that students cannot substitute the sheets with their own copied sheets during exams. CCTV camera and metal detectors are kept in the examination hall. The students are not permitted to take electronic devices inside the examination hall.
2.5.6 Does the institution have an integrated examination platform for the following processes?

- Pre-examination processes – Time table generation, hall ticket, OMR, student list generation, invigilators, squads, university observers, attendance sheet, online payment gateway, online transmission of questions and marks, etc.

Forty five days before the commencement of the university examination the authorities will display the time table and the same is displayed in students’ notice board. Hall ticket, student list generation and online payment gateway are also intimated to the college by the university. The invigilators for the conduct of examination are made by the institution as per the guidelines of the university. University appoints squads to check the conduct of examination. The squads visit the institute during examination and send their report. The attendance sheet and online transmission of questions papers are done on the day of examination. A separate team of faculty downloads the questions with confidentiality 15 minutes prior to the exam in the Principal’s room. The internal assessment and practical marks are entered directly in the university web page and verified at two levels to avoid mistakes and malpractice.

- Examination process – Examination material management, logistics, etc.

The required logistics to conduct the examination are provided by the institute. The answer sheet for the students are received from the university. To avoid malpractice and bring in transparency the answer sheets are printed with the student registration number and the subject of the examination.

- Post-examination process – Attendance capture, OMR-based exam result, auto processing, result processing, certification, etc.

The attendance of the student is communicated to the University and all other process is under the control of the University. The internal examination results are announced within two weeks after the examination and are intimated to the parents by post.

2.5.7 Has the university / institution introduced any reforms in its evaluation process?

- At the institutional level- the institution gives internal assessment marks for the students. For practical subjects it is approximately 16% and for non-practical subjects it is 33%. To avoid bias and favoring the students in providing IA marks the institution has brought in blind screening of the answer scripts. The students are also evaluated through continuous assessment through seminars and communication skills.

- University reforms: Online mark entry, Online Question paper, Online results.
2.5.8 What is the mechanism for redressal of grievances with reference to examinations? Give details.
At university level, there is a provision of getting the photo copy of the answer sheet and re-totaling within 15 days of publication of examination results by the University. Along with the prescribed fee the application has to be processed through the Principal. For internal assessments, students having grievances can complain to the Examination Committee.

2.5.9 Does the institution have a Manual for Examinations and if yes, does it specifically take cognizance of examination malpractices by students, faculty and non-teaching staff?
Yes, the institution has examination manual describing the procedure in the conduct of examination. The examination protocols are determined by The Tamilnadu Dr. MGR Medical University and all its regulations regarding malpractices by student, staff, and non-teaching staff are strictly adhered to.

2.5.10 What efforts have been made by the university to streamline the operations at the Office of the Controller of Examinations? Mention any significant efforts which have improved the process and functioning of the examination division/section.
Not applicable

2.5.11 What are the efforts of the institution in the assessment of educational outcomes of its students? Give examples against the practices indicated below:
- Compatibility of education objectives and learning methods with assessment principles, methods and practices.
The objective is overall development of the students; hence an effort is made on the part of the institution to make the educational outcome more student-friendly and student-oriented.
The Institution has made very systematic efforts for the assessment of educational outcomes of its students some of the examples are as follows:
- Various assessment tools and processes are used to judge the attainment of programme outcomes.

Direct assessment tools:-
- Assignment writing – topics from the subjects taught during the assessment period are given.
- Class tests
- Surprise tests
- Open book test and a small out-of-syllabus work
- Presentation – power point presentation on the topics related to curriculum
Three Sessional Exams and a model exam

**Indirect assessment tools:**
- Annual report- Pass percentage calculation
- Periodical assessment by exam committee
- Exam committee audit after every sessional exam
- Student feed back

- **Balance between formative and summative assessments:**
  Regular assignment writing and continuous evaluation process have been adopted for the students. The continuous assessment and summative assessment (IA) are given equal weightage.

- **Increasing objectivity in formative assessments:**
  Formative assessments help students identify their strengths and weaknesses and target areas that need to be worked on; faculty recognize where students are struggling and address problems immediately.

- **Formative (theory / orals / clinical / practical) internal assessment; choice based credit system; grading / marking:**
  Assessment of the various internal tests (class test, open book test, surprise test, out of syllabus test, assignment writing and presentation) are regularly conducted for carrying out continuous evaluation and the weaker points of the candidate are addressed then and there.

- **Summative (theory / orals / clinical / practical):**
  Regular sessional theory exam/remedial exam/model exam and practical exams are conducted. Three internal assessment and one yearly assessment exam were conducted for the students to assess learning. The yearly assessment exam is conducted by TNMGRMU.

- **Theory examination: structure and setting of question papers for sessional exam -**

  **Sessional Question Pattern for B.Pharm :**
  - Essay - 1 question for 20 marks,
  - Short notes - 4 questions, 5 marks each,
  - Short Answers - 5 questions, 2 marks each.

  **Sessional Question Pattern for Pharm D :**
  - Essay - 2 questions, 10 marks each,
  - Short notes - 3 questions, 5 marks each

  **Sessional Question Pattern for M.Pharm :**
  - Essay - 1 question for 20 marks,
  - Short notes - 5 questions, 6 marks each

- **Essays, long answers, short answers and MCQs etc. Questions bank and Key answers:**
  Question paper in prescribed format is set by respective faculty and submitted to the Exam section. Question bank is provided in the department.
2.5.12 Describe the methods of prevention of malpractice, and mention the number of cases reported and how are they dealt with?

In order to prevent malpractice in examination at internal and external level, the following preventive measures are taken:

- One invigilator appointed for every 20 students
- Technicians and attenders are utilized for supporting activities
- CCTV, Camera, Jammer and Metal detector for continuous surveillance
- Cell phones, calculators, electronic devices are strictly prohibited.
- Proposed punishment rules for Unfair means are been displayed on the door of examination hall of the Institution.
- Students are also made aware of the same before commencement of exam.

In general the adherence and the compliance are very strict by the institution and so far no malpractices have been reported in the 14 years of the college.

2.6 Student Performance and Learning outcomes.

2.6.1 Has the institution articulated its Graduate Attributes? If so, how does it facilitate and monitor its implementation and outcome?

The development of student attributes is constantly monitored and followed in PSGCP. The attributes refer to learning, teaching and or research and morality. These attributes measure to shape our graduates with relation to education. The outcome measures of all these attributes mainly to focus on employability. The attributes are:

- Academia reflecting knowledge and research
- Society and community reflecting social responsibility and citizenship
- Work and career reflecting on employability

The implementation and monitoring of the all these graduates attributes are through academic and student welfare committee and in strategic initiative forum. The forum comprises of the faculty and students; the vice principal of the institute is the convener of the committee.

The outcome measure of the graduate attributes are measured by

- Personnel intellectual autonomy
- Personnel effectiveness
- Communication
- Research enquiry
- Understanding the subjects and acquiring skillful practices
- Able to convert the practices into job functioning
- Cognitive ability and application of learned knowledge
2.6.2 Does the institution have clearly stated learning outcomes for its academic programs/departments? If yes, give details on how the students and staff are made aware of these?
Yes. The staff and students are made aware of these by circulars, mentor program, student council meetings, representative meetings, and general body meeting of all students where Principal will address all the above issues.

2.6.3 How are the institution's teaching-learning and assessment strategies structured to facilitate the achievement of the intended learning outcomes?

The teaching learning outcome assessment is done at the end of every internal assessment examination completion. At the end of the academic year the final outcome of the teaching and learning process is evaluated through analyzing the university results. The students who are not able to learn or follow the subjects have been monitored with special care to improve their performance.

PG & UG Program
The students are assessed on learning outcomes based on continuous assessment. The major indicator of teaching learning outcome is university results. The
achievement of individual subject teaching and learning outcome is measured through the conduction of the class test / surprise tests.

2.6.4 How does the institution ensure that the stated learning outcomes have been achieved?
The stated learning outcome for each academic year has been ensured by analyzing the following parameters. The additional input required for the parameters has been discussed for improvement
- Academic competency
- Professional efficiency
- Communication skills
- Pass percentage at university level
- Academic progression
- Publication of research papers
- Presentation of papers at the conference
- Projects received and completed by the students (PG program only)
- Employability

Any other information regarding Teaching-Learning and Evaluation.
Criterion III
Research, Consultancy and Extension
## Criteria III – Research, consultancy and Extension

<table>
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<tr>
<th>Key aspects</th>
<th>Process/Approach</th>
<th>Outcome</th>
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<tr>
<td>3.1 Promotion of research</td>
<td>• Proactive research&lt;br&gt;• Research Advisory Board formation.&lt;br&gt;• Institutional Research Review Committee to promote research.&lt;br&gt;• Industry Institution Interaction cell.&lt;br&gt;• Pharmaceutical Research Initiative to strengthen Academia and Manpower (PRISAM) forum to inculcate research among young faculty.</td>
<td>• Good quality publications in reputed journals.&lt;br&gt;• Greater awareness of current industrial developments.&lt;br&gt;• Enhancing skills of graduates for bettering employability prospects.</td>
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<td>3.2 Resource mobilization for research</td>
<td>• Human resource training to perform research&lt;br&gt;• Allocation of budget to departments.&lt;br&gt;• Research project submission to funding agencies</td>
<td>• Better research equipment and infrastructure for the institution.&lt;br&gt;• Added reputation for the institution.&lt;br&gt;• Completed and ongoing research projects of more than Rs 480 Lakhs.&lt;br&gt;• Funding secured from various agencies like DST, DBT, ICMR, AICTE, UGC etc</td>
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<td>3.3 Research facilities</td>
<td>• Development of new facilities&lt;br&gt;• Faculty to identify research areas&lt;br&gt;• Establishment of Research activities</td>
<td>• High quality research.&lt;br&gt;• State of the art labs in all Pharmacy fields.&lt;br&gt;• Bioinformatics/ Molecular Pharmacology and Drug Design Labs.</td>
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3.4 Research publications and awards
- Encourage paper submission
- Scientific writing training
- Linking Promotion with/and awarding credit points for publication
- Recognition of achievements
- Better faculty profile.
- 105 publications in reputed journals by staff and students.
- Two patents.

3.5 Consultancy
- Identification of faculty having expertise
- Guiding faculty to have consultancy
- Incentives for doing consultancy
- More utilization of research instruments and generating funds for their maintenance.
- Approximately Rs 1.5L of academic consultancy every year.

3.6 Extension activities and Institutional social responsibility
- Very active on social front.
- Through NSS, Red Ribbon club activities, Blood donation drive.
- MOU with IPA community division for promoting awareness regarding Community Pharmacy.
- Creating a brand image of the college in the community.
- Well rounded graduates.

3.7 Collaborations
- Free hand given to faculty to select collaborator with respect to their field of specialty
- International and National level scientist visits to promote collaboration
- Encouragement of MoU signing
- Expansion of research in all disciplines so that faculty will have collaborators
- Industrial link
- More exposure to various disciplines and state of the art research by faculty and students.
3.1 Promotion of research
PSG College of Pharmacy emphasizes on quality research and innovation in the field of Pharmaceutical Sciences. The research activities in the college have been recognized by The Department of Sciences and Technology and the college has received Industrial Scientific Research Organization status. The College has a state-of-the-Art facility to perform research and consultancy. The institution encourages its faculty and students to participate in various conferences, workshops, laboratory visits, and industrial exposure. To promote research the institution has constituted Institutional Research Committee and Research Advisory Board with external members. The students are also encouraged to do research and publish their findings. One of the objectives of the college is promotion of research.

3.1.1 Is there an Institutional Research and Development Committee which monitors and addresses issues related to research? If yes, what is its composition? Mention a few recommendations which have been implemented and their impact.
Yes, the Institution has a Research Committee mainly to monitor the research activities at UG level. PG and PhD research activities are monitored by the Institutional Research Committee where all the Professors are made as members. The research activities are monitored in the department by continuous evaluation seminars and Journal Club activities.
The research committee allots the UG students for research and monitors their progress through three evaluation seminars.
Arrangement of industrial or hospital training is made for the final year UG students during summer holidays.
The committee is responsible for organizing invited talks by the expert in their respective fields.
The impact of the committee is better research outcome; our students have won prizes at the conferences. It also promotes research initiative among the students.
Half of our students have taken up higher studies after their UG.

Vision
- To Develop the Institute as a Centre for Excellence in Pharmaceutical Research and Drug Development

Mission
- Upgradation and modernisation of Laboratory and infrastructure to suit the present need
- Branching out to Basic and Applied Sciences to tap the potential for collaboration
- Establishing Industry-Institute cell
- Enhance foreign exposure and tapping of funds for research
- Motivating young talented minds in research
- Inculcating research culture among students
Objectives
To invoke a dynamic research program and to promote active participation of all faculty in research
To initiate research in thrust areas, to help improve healthcare through advancing the knowledge and skills of Pharmacists and other Health Care Professionals
To introduce best practices and networking with experts in other Institutions and Industry to foster collaborative research

Structure
The committee shall be appointed by the Principal, PSG College of Pharmacy and will have five senior faculty members from the College and six external members from Academia and Industry.
The term of appointment of members shall be three years from the date of appointment as Committee member in PSGCP-RAC.

Responsibilities
Encourage, promote and coordinate research in areas of healthcare
Identify thrust areas of research, through interaction with experts, participation in scientific forum and other technical events
Develop a comprehensive list of potential funding agencies and the requirements for submission
Manage faculty-wise research projects and keep updates for submission to the management and other statutory bodies
Encourage all faculty members to submit at least one proposal in a year for funding
Coordinate and help publish research
Coordinate research activities and enhance Industry-Institution collaborative research for further promoting Industry link and help improve student placement
Upgradation of laboratory facilities
Tracking college research activities
Conducting workshop related to Scientific writing and communication skills for young faculty
Maintenance of records related to research activities including papers published and presentations in conferences

Constitution of Research Advisory Committee
Chairman:
Dr. M.Ramanathan, Principal cum Head, Department of Pharmacology, PSG College of Pharmacy

Members:
1. Dr. C. Vijayaraghavan, Vice-Principal cum Head, Department of Pharmaceutics, PSG College of Pharmacy
2. Dr. G. Geetha, Professor and Head, Department of Pharmaceutical Analysis, PSG College of Pharmacy
3. Dr. V. Shankar, Professor and Head, Department of Pharmacy Practice, PSG College of Pharmacy
4. Dr. A. Nagarajan, Professor, Department of Pharmaceutical Chemistry, PSG College of Pharmacy
5. Dr. Ramesh Varier, Director-AryaVaidhyaNilayam, Madurai
6. Dr. Sridhar Narayanan, Vice President and Head, Infection Science, Astrazeneca India, Bangalore
7. Dr. N. Jayabalan, Professor and Coordinator-UGC-SAP Programme, School of Life Sciences, Bharathidasan University, Trichy
8. Dr. R. Natarajan, Research Head, VKA Polymers Pvt. Ltd., Karur
9. Dr. D. Mangalaraj, Professor and Head, Department of Nanoscience and Technology, Bharathiar University, Coimbatore
10. Dr. S.D. Rajendran, Director, Pharmacovigilance, Medical Affairs, Sristek Consultancy Pvt. Ltd, Hyderabad – 500 019.
11. Mr. Muthulingam, General manager, Aurobindo Pharma, Hyderabad

**Frequency of meeting**
Twice in a year
An Internal Research Review committee has been constituted. It is a five-member committee. The function of this committee is to identify and inform the faculty on call for proposals. To evaluate and assess the research projects, to motivate the young students on research and conduction of research methodology workshop.

**3.1.2. Dose the institution have an Institutional Ethics Committee to monitor matters related to the ethics of inclusion of human and animal in research**
Yes, the Institution has an Ethics Committee to monitor research on experimental animals and humans. The IAEC is formed as per the CPCSEA norms. Human Ethical Committee (IHEC) has got international accreditation (SIDCER) in 2012.

**3.1.3. What is the policy of the university to promote research in its affiliated/constituent colleges?**
To encourage research activities, TNMGRMU has proposed to enhance financial assistance to the students and faculty of the affiliated institutions in the form of research grants.
The University has instituted a committee named, The Medical University Research Council, which shall review the applications received. The council, chaired by the Vice Chancellor, consists of a core committee, supported by external and internal reviewers. Through the University Research Council (URC), the varsity aims to fund researches in the field of Allied health sciences (Rupees 50, 000 x 5 projects).
3.1.4. What are the proactive mechanisms adopted by the institution to facilitate the smooth implementation of research schemes /projects?

a. Externally funded projects (both government and private agencies)
   Yes, the institution has government research funds from DST, DBT, AICTE and ICMR

   • Advancing funds for sanctioned projects- Yes, provide to the recommended projects
   • Providing seed money -Yes, directly money has not been given to the faculty. However, on individual request chemicals and animals are provided to do research. Similarly they have been permitted to use the equipment for research without any restriction.
   • Simplification of procedure related to sanctions / purchases to be made by the investigators- Yes, the PI can select the make and specification of the equipment of his choice. Additional funds, if required, is provided by the PSG and Sons’ Charities for the purchase of equipments
   • Autonomy to the Principal Investigator/ coordinator for utilizing overhead charges- Yes
   • Timely release grants- Yes
   • Timely auditing – Yes
   • Submission of utilization certificate to the funding authorities – Yes
   • Writing proposals for funding – Faculty are encouraged to write proposal for funding bodies. They have been given all facilities to write and submit the proposal.
   • Any training given for writing proposals -Yes , the Institution organizes workshops for promoting and training faculty members to write applications to secure national and international funding for research

b. Institution sponsored projects:

   • Proportion of funds dedicated for research in the annual budget
     In annual budget adequate fund for research activity has been allocated. The budget allotted for research, PG and other labs from the institution is given below
     
     | Financial year | Budget allocated for research |
     |----------------|-------------------------------|
     | 2010-11        | 6529618                      |
     | 2011-12        | 7502855                      |
     | 2012-13        | 8720851                      |
     | 2013-14        | 9251000                      |
• **Availability of funding for research/training /resources.**
  The Institution provides adequate fund for the UG and PG students to purchase chemicals and animals

• **Availability of access to online data bases –**
  The Central library is has adequate computers with internet facility with online access to journals to do research. Each department has sufficient computers with internet facility.

3.1.5. How is multidisciplinary / interdisciplinary / transdisciplinary research promoted within the institution?

• **Between/among different departments / and**
  In the present scenario integrated research has wider acceptance hence multidisciplinary approach is acceptable. On this line the Institution encourages the faculty to do research between the departments of the college. In pharmaceutical sciences specialties like pharmacology and pharmaceutical analysis are servicing departments. The main research initiatives generally initiated from department of pharmaceutics, pharmacognosy, pharmaceutical chemistry departments. Hence, within our institute invariably interdisciplinary research is very much in progress.

• **Collaboration with national/international institutes/ industries**
  Similarly PSGCP is also collaborating for its research activity both at national and international level. The PSGCP have completed a few industrial projects also and currently the products are in the market. The evidence of the collaborative research, multi-disciplinary approach is clearly reflected in our research publications.
At National-
- Department of Biotechnology, PSG College of Technology, Coimbatore
- Department of Chemistry, Annamalai University, Chidambaran
- Biological & Chemical Sciences, Division of Life Sciences, Institute of Advanced Studies in Science and Technology, Assam
- Department of Microbiology, PSG Institute of Medical Sciences and Research, Coimbatore
- Department of Dermatology, PSG IMS & R
- Department of Nutrition, PSG College of Arts & Science, Coimbatore
- Department of Nutrition, Avinashilingam University, Coimbatore
- International –
  - Department of Medicinal Chemistry, University of Toledo, Ohio, USA
  - Dr. Aboudoulatif DIALLO from Togo visited under this fellowship for 4 months from August 15th – December 15th 2013
  - Mr. Damien Shatshibey Tshibangu from Democratic Republic of the Congo under Visiting fellowship category from 1st September 2014 to 30th November 2014 for a period of three months.
  - Dr. Laurent KOUAKOU, Plant Physiologist, Sustainable Management of Natural resources, University of Nangui Abrogoua, Cote d’Ivoire, postdoctoral fellow worked in our lab under the fellowship starting from 1st October 2014 to 31st December 2014 for a period of three months.

Industry-
- Arya Vaidya Nilayam, Madurai

3.1.6. Give details of work shop/ training programs / sensitization programs conducted by the institution to promote a research culture in the institution
PSGCP promotes research culture and sensitizes the students and faculty in research activities by conducting workshops, national and international conferences, inviting resources persons to have plenary lectures and conduction of research meet. It is also been practiced that every year two conferences and two workshops will be organized on rotation focusing on the recent topics. The workshops, conferences conducted by PSGCP for past four years are given below

2011
1. International Conference on Drug Delivery (ICODD-2011) under the theme of “Challenges and Novel Strategies in Drug Delivery” was organized by Department of Pharmaceutics, PSG College of Pharmacy, Coimbatore on 21st & 22nd, January 2011.
2. National level symposium on “Emerging opportunities and challenges for Clinical Pharmacist” held on 8th & 9th July 2011.
3. Dr. Cynthia R Gross PhD., Dean, College of Pharmacy & Nursing, University of Minnesota, Minneapolis, USA given a talk on opportunities for Pharmacy Higher education in USA in June 2011.
4. Mrs. Suchitra K Ella, Joint Managing Director, Bharat Biotech Ltd., Hyderabad visited on 10\textsuperscript{th} Sep 2011. She delivered a talk on entrepreneurship and inviting young minds to join hands in the development of Biotechnological derived products.

2012
1. A National workshop on Nano Drug Delivery Technique was organized by the Department of Pharmaceutics on the 27\textsuperscript{th} April-2012.
2. A three days national workshop on \textit{In-silico} Drug Delivery and Lead Optimization was conducted by the Department of Pharmacology, from 24\textsuperscript{th}-26\textsuperscript{th} May 2012.
3. The Pharmacology Department hosted two days National Conference on Experimental Pharmacology & Drug Evaluation from 7\textsuperscript{th} to 8\textsuperscript{th} June 2012. Dr. P Ram Manohar, Research Director, Arya Vaidhya Pharmacy, Coimbatore delivered key note address.
4. The Department of Pharmacy Practice conducted a workshop on Good Dispensing Practice on 12\textsuperscript{th} June 2012 at PSG hospital seminar hall.
5. Dr. John Early, Dean, School of Pharmacy, University of Toledo, USA, addressed the Pharm-D and Postgraduate students regarding career and higher studies opportunities in the USA on 13\textsuperscript{th} April 2012.
6. Dr. Odeku, Dept of Pharmaceutics & Industrial Pharmacy, University of Ibadan, Nigeria gave a guest lecture on the topic “Natural polymer for controlled and targeted drug delivery” on 20\textsuperscript{th} April 2012.
7. Dr. Sophie Foley & Iain McIntosh from Napier University, Scotland visited on 27\textsuperscript{th} June 2012 regarding higher studies at Scotland.
8. The PSG College of Pharmacy organized a National level Conference on Bioanalytical Techniques from the 30\textsuperscript{th} November to 1\textsuperscript{st} December 2012.

2013
1. The Indian Pharmaceutical Association Tamil Nadu branch (TANIPA), in conjunction with PSG College of Pharmacy (PSGCP) conducted a one day workshop on Industry-Student Interaction held at PSGCP on the 2\textsuperscript{nd} of March 2013.
2. A National level seminar on Widening the Horizons for Practicing Pharmacists in Industries and Hospitals organized by the Department of Pharmacy Practice, co-sponsored by the Department of Science and Technology, New Delhi and TNMGRMU, Chennai, was conducted on 5-6 July 2013.
3. The Department of Pharmacology organized a workshop entitled "Molecular Modeling and Drug Discovery - Workshop II" on 10th-12th July, 2013.
4. The inaugural meeting of annual Research Advisory Committee (RAC) was held at the college on 14 December 2013 under the guidance of Principal Dr M Ramanathan. This was held with the aim of establishing strong industrial interactions with the college and also to take their valuable suggestions regarding research as well as curriculum.

2014
1. The International Conference on Drug Delivery (ICODD-2014) was organized by Department of Pharmaceutics on 28th and 1st March 2014.
2. The Department of Pharmacy Practice organized Pharmacist awareness program in association with Indian Pharmaceutical Association – Community Pharmacy Division on 30th August 2014.

3.1.7. How does the institution facilitate researchers of eminence to visit the campus? What is impact of such efforts on the research activities of the institution?
The RAC of the institution advises on this, the following researchers of eminence visited PSGCP in recent years
1. Prof. VR Muthukaruppan
   Director-Research, Aravind Medical Research Foundation, Madurai
2. Dr. Shridhar Narayanan
   Vice President and Head, Infection Science, AstraZeneca, Bangalore
3. Dr. B Gopalan
   Chief Scientific Officer, Orchid Chemicals and Pharmaceuticals, Drug Discovery Research, Chennai
4. Dr. KK Balasubramanian
   Executive Director, R & D, Shasun Chemical Ltd., Chennai
5. Dr. Ramanathan Natarajan - Research Head, VKA Polymers, Karur
The visit of the eminent researchers always helped the faculty to understand the recent advancement in the field of pharmaceutical research, possibilities for newer collaborations, work and research efficiency, planning for the future research developments. Their interaction during the visit also helped the researcher to understand their weakness and area to be concentrated in research. Publication protocols, methods of research grant writing also improved through their assessment.

3.1.8. What percentage of the total budget is ear marked for research? Give details of heads of expenditure, financial allocation and actual utilization.
25 percentage of the total budget is ear marked for research and laboratory expenses.
<table>
<thead>
<tr>
<th>S.No</th>
<th>Project Title</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(2010- Jan 2011)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Standardization, validation and development of herbal formulation for the treatment of neuropathic pain – DST (2008 - 2011)</td>
<td>746788.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Development of Glycogen Synthase Kinase-3β inhibitors for neurogenesis in neurodegenerative disorders – DBT (2011-2014)</td>
<td>316799.00</td>
<td>836281.00</td>
<td>54778.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Androgen receptor mediated drug development for prostate cancer – DBT (2012-2015)</td>
<td>235467.00</td>
<td>363322.00</td>
<td>695002.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Preclinical evaluation of modified estrogen receptor beta agonists for prostate cancer treatment – DST (2012-2015)</td>
<td>781180.00</td>
<td>326351.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chemicals and special chemicals to refer question 3.1.4

3.1.9. In its budget, does the university earmark funds for promoting research in its affiliated colleges if
No, the Institution has been affiliated with TNMGRMU. The University does not provide funds for research activity.

3.1.10. Does the institution encourage research by awarding post doctoral fellowships/ Research associate ship? If yes, provide the details like number of students registered, funding by the institution and other sources
No. The Institution promotes research by awarding doctoral fellowship only. Currently three students availed this fellowship and they are doing research leading to PhD under TNMGRMU. Their names are
   1. Mr. Sriram Karthik - Department of Pharmaceutics
   2. Mr. Darshit Kumar Shah - Department of Pharmacology
   3. Ms. Lavanya - Department of Pharmacy Practice.

3.1.11. What percentage of faculty has utilized facilities like sabbatical leave for pursuit of higher research in premier institutions within the country and abroad? How does the institution monitor the out of these scholars?
The Institution has got provision for sabbatical leave in pursuit of higher education and research but so far no faculty has utilized this facility.
3.1.12. Provide the details of national and international conferences organized by the institution highlighting the names of eminent scientist/scholars who participated in these events.

2011

1. International Conference on Drug Delivery (ICODD-2011) under the theme of “Challenges and Novel Strategies in Drug Delivery” was organized by Department of Pharmaceutics, PSG College of Pharmacy, Coimbatore on 21st & 22nd January 2011. The conference is co-sponsored by Council of Scientific and Industrial Research. Over 350 delegates have registered for the conference. After evaluation by scientific committee 180 papers were accepted for poster presentation and 22 papers were accepted for oral presentation.

Scientists who visited the conference

Dr. R. N. Saha, Deputy Director, Research & Educational, BITS, Pilani delivered a lecture on “Advancement in Ocular Drug Delivery Systems and Opportunities Further”

Mr. Selvakumar, Manager, Shasun Pharmaceuticals Limited, Formulation Division, Puducherry spoke about “An Overview of Super Generics vs Generics”

Dr. N. Nagaraju, Professor, Department of Pharmaceutics, Sri Padmavati Mahila Visva Vidyalaya, Tirupathi delivered a talk on “Core in cup technology for controlled release on highly water soluble drugs”

Dr. HENG Wan Sia Paul, Associate Professor, GEA-NUS Pharm, Processing research lab, Department of Pharmacy, National University of Singapore, Singapore delivered a talk on “Continuous manufacturing- new paradigm in pharmaceutical manufacturing”

Dr. Peh Kok Khiang, Professor, Department of Pharmaceutics, University Sanis Malaysia, spoke about “Self-microemulsifying drug delivery systems to enhance oral bioavailability of poorly soluble drugs”

Dr. D. Prabakaran, Principal Scientist- CR, Lupin Ltd., Pune had a discussion with students on “Bioequivalence- recent trends in generic development”

Dr. G. Subramanian, Senior Scientist, Drug Metabolism and Pharmacokinetics, Novartis, Hyderabad, spoke on “Development of orally administered modified release formulations: importance of gastrointestinal specific absorption studies”

2. National level symposium on “Emerging opportunities and challenges for Clinical Pharmacist” held on 8th & 9th July 2011.

Dr. Prasana C Ganapathy, Deputy manager, Clinge International Ltd, Bangalore delivered a talk on ‘Perspectives in pharmacovigilance’.
Dr. Senthil kumar, Clinical QA, Lotus lab (P) Ltd, Bangalore gave a talk on ‘Regulatory requirement for clinical research’

Dr. Yasmin Shenoy, Director, Regulatory affairs, Sanofi-Avantis, Mumbai, delivered a talk on the topic ‘Pharmacist role and Responsibilities in Regulatory affairs’

Dr. V. Sankar, Professor & Head, Department of Pharmacy Practice, PSG College of Pharmacy, Coimbatore delivered a talk on topic ‘Emerging Opportunities for Clinical Pharmacist’

Dr. Anil C Mathew, Professor, Dept. of Community medicine, PSGIMS&R, Coimbatore delivered a talk on topic ‘Data Collection and management System in Clinical research’

Dr. Anna Durai, Hospital Pharmacist, CMC, Vellore delivered a talk on the topic ‘Medication errors: Impact and Prevention’

Dr. L. Panayappan, Director, Pasumai Pharmacy, Coimbatore delivered a talk on the topic ‘Challenges for community pharmacist in Public Health’

Mr. Raj Vaidya, Community pharmacist, Hindu Pharmacy, Goa delivered a talk on the topic ‘Role of Community Pharmacist in patient Care’

2012

1. The Pharmacology Department hosted two days National Conference on Experimental Pharmacology & Drug Evaluation from the 7th – 8th of June 2012.

Dr. J. Joshua Allan gave a talk on the theme Ethno pharmacology.

Dr. Ram Manohar gave a talk on the topic A narrative review of pre-clinical research on Ayurveda.

Dr. Giridharan Periyasamy gave a talk on the topic Novel CDK-4 inhibitor sensitizes Pancreatic Cancer cells to Gemcitabine induced Apoptosis

Dr. B. Balaji gave a talk on the topic Development of estrogen receptor beta selective ligands for prostate cancer

Mr. Habeeb Ibrahim Gave a talk on the topic The Future Researcher

Dr. S. Senthil Kumari gave a talk on the topic Clinical Pharmacokinetics of the Eye - a study with topical formulation of newer anti-fungal Agents for fungal Keratitis

Dr. Sridhar Palaniyappan gave a talk on Drug discovery and Development of an NCE.
Dr. Prakash Babu delivered a talk on the topic Role of non-steroidal anti-inflammatory drugs (NSAID), in the therapeutics of Glioma: A new avenue for the cancer therapeutics

2. The PSG College of Pharmacy organized a National level Conference on Bioanalytical Techniques from the 30th November to 1st December 2012. The conference was sponsored by DRDO, New Delhi & organized by Department of Pharmaceutical Analysis and Pharmaceutical Chemistry, PSG College of Pharmacy. About 50 delegates from various regions actively participated in this conference. Along with scientific oral sessions and workshops, hands on training in HPLC, HPTLC and UPLC were conducted in this conference.

Dr. Dinesh Palanivelu, Associate Scientific Manager II, Biocon Research Limited, Bangalore was the chief guest for this conference.

Dr. M. Gandhimathi, Professor, Department of Pharmaceutical Analysis, SRIPMS, Coimbatore

Dr. P. Manoj, Queensland University, Australia

Mr. V. Sridhar, Manager, Analytical division, Incogen laboratories, Hyderabad

Dr. Ravi Subbban, Professor, Department of Chemistry, Karpagam College of Arts and Science

Dr. G. Subramanian, Senior Scientist, Novartis, Hyderabad

2013

1. A National level seminar on Widening the Horizons for Practicing Pharmacists in Industries and Hospitals organized by the department of pharmacy practice, PSG College of pharmacy, co-sponsored by the Department of Science and Technology, New Delhi and TNMGRMU, Chennai, was conducted on 5-6 July 2013. The symposium was inaugurated by Mr. Prafull D. Sheth, Vice President and Founder of FIP and who is also a mentor of SEARPharm Forum: a FIP-WHO forum of national associations of South East Asia. This was followed by his talk on the challenges for Practicing Pharmacists in counterfeit drugs in India.

Mr. Prafull D.Sheth, Vice president, International Pharmaceutical Federation (FIP) delivered a talk on the topic ‘Challenges for Practicing Pharmacist in Counterfeit Drugs in India’

Mr. Satheesh Kumar R, Assistant Manager, Medical Affairs, Orchid Chemicals & Pharmaceuticals Limited, Chennai delivered a talk on the topic ‘Overview of Clinical Research and Opportunities for Pharmacy Students in Clinical Research’
Dr. Aniket Mandrekar, Medical Advisor, Sanofi India Private Ltd, Mumbai delivered a talk on the topic ‘Errors and Good Pharmacy Practice’

Dr. Vijay Venktaraman, KTVR groups Hospital and Head, Cliniminds, Coimbatore delivered a talk on the topic ‘Pharmacovigilance Related employment opportunities’

Dr. Suresh R. Saravdekar, Secretary, IPA- Hospital Pharmacy Division, IPA, Mumbai delivered a talk on the topic ‘Exploring the possibilities for Practicing Pharmacist in Hospitals’

Mr. Anand Harugeri, Patient Safety and Regulatory affairs, Astrazeneca, Bangalore, Karnataka delivered a talk on the topic ‘Drug Safety and Risk factor Assessment’

Mrs. Manjiri S. Gharat Vice President& Chairman – Community Pharmacy Division, IPA, Mumbai delivered a talk on the topic ‘Role of Practicing Pharmacist in Public Health Programmes’

Dr. Rajesh Pandey, Domain consultant, TCS, Mumbai delivered a talk on the topic ‘Opportunities in Medical writing’

Mr. C. Krishna Dass, Senior Medical Officer, Sanofi India Private Ltd, Mumbai delivered a talk on Good Pharmacy Practice

Dr. Saravanan, MD, Professor, General Medicine, PSG Hospitals, Dr. L. Britto Duraisingh, PharmD(PB) Clinical Pharmacist, PSG Hospitals, Dr. Rini Susan Varghese, PharmD(PB) Clinical Pharmacist, PSG Hospitals, Dr. Jayakumar PharmD(PB), Hospital Pharmacist, PSG Hospitals, Dr. Eswari, PharmD(PB) Clinical Pharmacist, GKNM Hospitals, Coimbatore gave a talk on the theme ‘Reliability of Practicing Pharmacist experience in patient care’

2014

1. The International Conference on Drug Delivery (ICODD-2014) was held at PSGCP on the 28th and 1st of March 2014.

   Dr. Imran Ahmad, President and CEO, Jina Pharmaceuticals inc., Illinois, USA delivered a talk on “Improving Therapeutic Efficacy of Drugs Using Lipid Based Drug Delivery System”

   Dr. Heng Wan Sia Paul, Associate Professor, GEA-NUS Pharm, Processing research lab, Department of Pharmacy, National University of Singapore, Singapore delivered a talk on “Importance of Process Science in Pharmaceutical Production”

   Dr. M. Kalyanasundaram, Scientist G & Director Grade, Vector Control
Research Centre (ICMR) Dept. of Health research, Min.of Health & F.W., Govt. of India, Pondicherry delivered a talk on “Target based drug designing for parasitic diseases”

Dr. Mangalaraj, Professor and head, Department of Nano science, Bharathiar University, Coimbatore, delivered a talk on “Drug delivery for targeting cancer”

Dr. R. Manavalan, Research Director, Department of Pharmacy, Faculty of Engineering & Technology Annamalai University, Chidambaram, delivered a talk on “Targeted delivery of drugs to brain from nasal route”

Dato Dr. C. P. Ramachandran, Chairman Program Review Group Pacific Island Countries (GPELF) WHO, Malaysia, delivered a talk on “The Global Program For The Elimination of Lymphatic Filariasis (GPELF) Its Health Impact After 9 Years and Challenges Ahead”

Dr. Ravishankaran, Associate Professor, Department of Nanotechnology, PSG Institute of Advanced Studies, Coimbatore delivered on the theme Nano drug delivery of chemo drugs.

Mr. Arno Enose, Assistant Director, Formulation Research & Development Piramal Enterprises Limited, Mumbai spoke on “Solid dispersions-Beauty of Disorder”

2015

1. International Conference on Roles and responsibilities of pharmacist in chronic disease management, adverse drug reaction and therapeutic drug monitoring on 24th & 25th April 2015.

Dr. Suphat Subongkot, Clinical Pharmacy Division chair, Faculty of Pharmaceutical Sciences, 123 Khon Kaen University, Naimaung ,Muang, Khon Kaen, Thailand delivered a talk on the topic ‘Safe Medication Practice in Oncology Disease Management’

Dr. R. Senthil Kumar, MD., HOD, Department of Endocrinology, PSG Hospitals, Coimbatore, delivered a talk on the topic ‘Long term Management of Diabetes Mellitus’ Prof . Asoka Wettasinghe, Chief Pharmacist, Teaching Hospital, Kandy, Srilanka delivered a talk on the topic ‘Hospital pharmacist responsibilities in disease management’

Dr. RM.PL.Ramanathan, Prof & Head, Department of Pulmonology, PSG Hospitals, Coimbatore delivered a talk on the topic ‘Clinical Pharmacist role in Disease management in Critical Care Area’

Dr. V.Kalaiselvan, Principal Scientific Officer, Indian Pharmacopeia commission, Govt.of India, Ghaziabad delivered a talk on the topic ‘Adverse
Drug Reactions Monitoring & Reporting: India Experience’

Dr. Wong Pei Se, Head in Department of Pharmacy Practice, International Medical University, No.126, Jalan Jalil Perkasa 19, Bukit Jalil, 57000 Kuala Lumpur, Malaysia delivered a talk on the topic ‘Role of Pictograms in Education’

Mr Shangar Subiah, Head – Business Development, IBN SINA Pharmacy, Muscat, Oman delivered a talk on the topic ‘Medication Practices in Middle East and Challenges in Community Pharmacy Administration’

Dr. V. Sankar, Professor & Head, Department of Pharmacy Practice, PSG College of Pharmacy, Coimbatore delivered a talk on the topic ‘Pharmacist role in Therapeutic drug Monitoring’

3.1.13. Mention the initiatives of the institution to facilitate a research culture in the below mention areas

- **Training in research methodology, research ethics and biostatistics.**
  University level workshop for research methodology and exams are conducted. In the medical college on research ethics workshops are conducted junior faculty are requested to attend the workshop

- **Development of scientific temperament** – Institutional Research Committee monitors the research attitude among the students. The students have to make three presentations in a year which improves their scientific temperament

- **Presence of medical/ bio ethics committee**
  Dr. M Ramanathan and Dr. K G Prasanth are the members of Institutional Animal Ethical Committee. Mrs. Rama is a member of Institutional Human Ethical Committee.

- **Research linkages with other institution, universities and centers of excellence (National and international)**
  Right now the institution promotes inter and intra disciplinary research within the institution and other sister institutions. Departments from different specialization are involved in joint research
  PSG College of Pharmacy is actively engaged with collaborative research with other universities and labs within the country and outside the country.
  Collaborators list
  1. Institute of Advanced Studies in Science and Technology, Guwahati, Assam
  2. Annamalai University, Chidambaran
  3. Institute of Forest and Genetic Tree Breeding, Coimbatore
  4. University of Toledo, Toledo USA
• **Research programs in basic science, clinical, operational research, epidemiology, health economics, etc**
  As a pharmacy institution most of our research programs were based on basic science, clinical studies and limited number of research in epidemiology and health economics.

• **Promotional avenues for multi-disciplinary, inter-disciplinary research**
  Pharmaceutical research is a multi disciplinary research, hence there is ample scope for inter- and multi-disciplinary approach. Multi disciplinary research linking Chemistry, biotechnology, informatics, clinical research, proteomics, nanotechnology, and biotechnology are carried out. The ongoing projects clearly reflect that the research at PSGCP is multidisciplinary.

• **Promotional avenues for translational research**
  Translational research which converts bed side observations to bench side as our institution is linked with hospital possibilities for translational research is brighter. Currently two of our projects fall under translational research. The projects are
  
  - Development of glycogen synthase kinase-3β inhibitors for neurogenesis in neurodegenerative disorders
  - Glabridin derivatives for the estrogen receptor β mediated growth control of the prostate cancer cells
  - Development of Nanoparticle Drug Delivery System for Alzheimer’s Disease
  - Preclinical evaluation of modified estrogen receptor beta agonists for prostate cancer treatment
  - Androgen receptor mediated drug development to treat Prostate Cancer

• **Installing a culture of research among undergraduate students**
  Science Club activities help to inculcate research interest among undergraduate students. Discussions on science promotions and research, conduction of quiz and organization of competition among the students on research finding presentation helps them to take up research as their career. The Institution also promotes attending scientific conferences at National level. Other than this the students have given opportunities to do individually case studies, assignments, research projects and internships programs. On all these activities the instilling of culture of research among students is high.

• **Publication based promotion/incentives**
  Faculty promotion is based on their performance and publication of research article in peer-reviewed journals. There are no incentives given to faculty on research paper publication in peer-reviewed journals.

• **Providing travel grant for attending national/international conferences and work shops**
Yes. Faculty is encouraged to attend national and international conferences. Institution provides registration fee and travel grant for attending national conference if the paper is accepted for oral or poster presentation. Faculty attending international conference will receive travel grant based on their cadre if the paper is accepted for oral or poster presentation.

3.1.14. Does the institution facilitate R&D for capacity building and analytical skills in product development like diagnosis kits, biomedical products, etc. for the national/international markets

Yes, the institution developed products in collaboration with pharmaceutical and Herbal pharmaceutical companies. The institution facilitates the students to take up the industrial projects.

Products developed – Department of Pharmacology
Principal Investigator: Dr. M. Ramanathan

- Perment capsules (consists of concentrated aqueous extracts of *Bacopa monnieri*, *Withania somnifera*, *Asparagus racemosa* and *Clitoria ternatea*)
  Indications: Perment is used as an adaptogenic agent for the treatment of sub clinical anxiety and depression.
- Evaluation of different combinations of herbal extracts/formulations for diabetic neuropathic pain
- Isoflavone based new chemical entities have been developed targeting estrogen receptor beta for prostate cancer “Therapeutic Benefits of Novel Daidzein Analogues In Estrogen-Associated Disorders” Ref No./Application No.- 1667/CHE/2013
- A phytoproduct “R-500” (*Aegle marmelos* capsules) for antidepressant and anxiolytic properties from *Aegle marmelos* fruit has been developed with due pharmacological and toxicological evaluation

- Development of entrepreneur skill in health care
  The students passed of the institution are groomed by the hospital pharmacy department in such a way that they can become successful entrepreneurs. A few alumni have established their own pharmacy retail and wholesale units in Tamil Nadu.

- Taking leadership role for stem cell research, organ transplantation and harvesting, biotechnology, medical informatics, genomics, proteomics, cellular molecular biology, nanoscience, etc
  Research already been initiated in the field of Bioinformatics, cellular and molecular biology and Nanoscience. PSGCP have received projects and published research article in journals.
3.1.15 Are students encouraged to conduct any experimental research in Yoga and/or naturopathy
No

3.2 Resource mobilization for research
The funding for research activity is provided by government funding agencies and PSG and Sons’ Charities. The resources for research have also been received through consultancy services as well as through industrial projects. However the major funding is by the Management and sponsorships by Government.

3.2.1 How many departments of the institution have been recognized for their research activities by national /international agencies (ICMR, DST, DBT, WHO, UNESCO, AYUSH, CSIR, AICTE, etc) and what is the quantum of assistance received? Mention any two significant outcome or breakthroughs achieved by this recognition.
All the departments of PSGCP are recognized by DSIR (Department of Science and Industrial Research) for their research activity. National research agencies like ICMR, CSIR, DST, DBT and UGC have funded the research proposal submitted.
The TNMGRMU has recognized Department of Pharmaceutics to do research program leading to the award of PhD.

Significant outcomes are:
- Perment capsules (consists of concentrated aqueous extracts of *Bacopa monnieri*, *Withania somnifera*, *Asparagus racemosa* and *Clitoria ternatea*)
  Indications: Perment is used as an adaptogenic agent for the treatment of sub clinical anxiety and depression
- Evaluation of different combinations of herbal extracts/formulations for diabetic neuropathic pain
- Isoflavone based new chemical entities have been developed targeting estrogen receptor beta for prostate cancer “Therapeutic Benefits of Novel Daidzein Analogue In Estrogen-Associated Disorders” Ref No./Application No.- 1667/CHE/2013
- A phytoproduct “R-500” (*Aegle marmelos* capsules) for antidepressant and anxiolytic properties from *Aegle marmelos* fruit has been developed with due pharmacological and toxicological evaluation
3.2.2. Provide the following details of the ongoing research projects of faculty.

<table>
<thead>
<tr>
<th>Name of the faculty</th>
<th>M. Pharm / Ph.D</th>
<th>Title of the Project</th>
<th>Duration</th>
<th>Grant received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. G. Geetha</td>
<td>M. Pharm</td>
<td>Bioanalytical method development by using RP-HPLC for simultaneous estimation of metformin, Glemipride and voglibose in human plasma</td>
<td>2014-15</td>
<td>-</td>
</tr>
<tr>
<td>Dr. V. Sankar</td>
<td>M Pharm</td>
<td>Diabetes mellitus &amp; Hypoglycemic education for medication adherence</td>
<td>2014-15</td>
<td>Self funded</td>
</tr>
<tr>
<td>Dr. V. Sankar</td>
<td>M Pharm</td>
<td>Rational drug use evaluation</td>
<td>2014-15</td>
<td>Self funded</td>
</tr>
<tr>
<td>Dr. V. Sankar</td>
<td>Ph.D</td>
<td>Risk factor and comorbidity assessment in breast cancer</td>
<td>2014-15</td>
<td>Self funded</td>
</tr>
</tbody>
</table>

2013

<table>
<thead>
<tr>
<th>Name of the faculty</th>
<th>M. Pharm / Ph.D</th>
<th>Title of the Project</th>
<th>Duration</th>
<th>Grant received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. S.E. Maida Engel</td>
<td>Ph.D</td>
<td>Design, synthesis and biological evaluation of novel pancreate lipase</td>
<td>2013-17</td>
<td>-</td>
</tr>
<tr>
<td>Mr. D. Sivakumar</td>
<td>Ph.D</td>
<td>Design, synthesis and biological evaluation of novel ThiaDiazole derivatives</td>
<td>4 years</td>
<td>-</td>
</tr>
<tr>
<td>Mrs. P. Rama</td>
<td>Ph.D</td>
<td>Reslefactor &amp; comeobidify assessment in patients with breastcancer – A case central study</td>
<td>2014-18</td>
<td>-</td>
</tr>
<tr>
<td>Mrs. G. Andhuvan</td>
<td>Ph.D</td>
<td>Impact of health literacy and its outcome as the QOa in Heart failure patient</td>
<td>2012-15</td>
<td>-</td>
</tr>
</tbody>
</table>

2012

<table>
<thead>
<tr>
<th>Name of the faculty</th>
<th>M. Pharm / Ph.D</th>
<th>Title of the Project</th>
<th>Duration</th>
<th>Grant received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. G. Geetha</td>
<td>M. Pharm</td>
<td>Stability indicating RPHPLC assay method for estimation of disulfiram tablet dosage form</td>
<td>2012-13</td>
<td>-</td>
</tr>
</tbody>
</table>

3.2.3. Does the institution have an intellectual property rights (IPR) cell?
Yes, the institution has an IPR cell. The PSG-Science & Technology Entrepreneurial Park (PSG-STEP) was established with the support from Department of Science & Technology, Government of India, IDBI and ICICI at PSG College of Technology to promote technology based enterprises using the core strengths of PSG College of Technology and sister institutions. PSG-STEP has been identified as the nodal
agency by various government departments to implement the schemes and programs to promote innovation, incubation and entrepreneurship in the region. Metayage IP Strategy consulting agency in PSG-STEP helps us for the IPR process.

3.2.4. Has the institution taken any special efforts to encourage its faculty to file for patents? If so, how many have been registered and accepted?

Two patents have been accepted
1. PCT/IB2004/000284: Herbal composition comprising *commiphora mukul* *Allium sativum* and *curcuma longa* to control colestral & blood sugar

One patent filed
3. Isoflavone based new chemical entities have been developed as anti-proliferative agents “Therapeutic Benefits of Novel Daidzein Analogues In Estrogen- Associated Disorders” Ref No./Application No.- 1667/CHE/2013

3.2.5. Does the institution have any projects sponsored by the industry/corporate house? If yes, details of such as name of the project, funding agency and grants received.

Yes, institution has collaboration and sponsored projects from industries
1. Stempeutics Research Pvt Ltd., Bangalore
2. Sami Labs (P) Ltd., Bangalore
3. Arya Vaidya Nilayam (P) Ltd., Madurai

<table>
<thead>
<tr>
<th>Name of the Agency</th>
<th>Researcher</th>
<th>Title of the project</th>
<th>Cost</th>
<th>Duration of the project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stempeutics Research Pvt Ltd, Bangalore</td>
<td>Mr. A. Justin</td>
<td>To evaluate the efficacy of Human Bone Marrow Derived Mesenchymal Stomal Cells (BMMSC, Stempeucel) in a Murine Model of Hind Limb Ischemia</td>
<td>32,500/-</td>
<td>1 month</td>
</tr>
<tr>
<td>Sami Labs (P) Ltd, Bangalore</td>
<td>Mr. Darshit B Shah</td>
<td>In vitro and in vivo evaluation of NCE for its neuroprotective and antiinflammatory effect</td>
<td>35,000/-</td>
<td>3 months</td>
</tr>
</tbody>
</table>
Arya Vaidya Nilayam (P) Ltd, Madurai

Dr. B. Balaji
Evaluation of herbal product for poly cystic ovary syndrome
6 months

Arya Vaidya Nilayam (P) Ltd, Madurai

Mr. S.M. Habibur Rahman
Herbal formulation optimization
3 months

Arya Vaidya Nilayam (P) Ltd, Madurai

Mr. A. Justin
Evaluation of Galactogogue Activity of the Ayurvedic Product
80,000/-
3 months

Arya Vaidya Nilayam (P) Ltd, Madurai

Mr. A. Justin
Behavioural and neurochemical evaluation of Perment® an herbal formulation in chronic unpredictable mild stress induced depressive model.
6 months

3.2.6. List details of
a. Research projects completed and grants received during the last four years (funded by national/ international agencies)

<table>
<thead>
<tr>
<th>Name of the Faculty</th>
<th>Title of Project</th>
<th>Funding Agency</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. M. Ramanathan</td>
<td>Development of glycogen synthase kinase-3β inhibitors for neurogenesis in neurodegenerative disorders</td>
<td>DBT (2011-2014)</td>
<td>66.11</td>
</tr>
<tr>
<td></td>
<td>Standardization, validation and development of herbal formulation for the treatment of neuropathic pain</td>
<td>DST-DPRP (2008-2011)</td>
<td>51.20</td>
</tr>
<tr>
<td></td>
<td>Phytochemical, Pharmacological and</td>
<td>ICFRE (2008-2011)</td>
<td>13.43</td>
</tr>
</tbody>
</table>
### Toxicological Investigation of *Aegle Marmelos* for a New Product

**Dr. C. Vijayaraghavan**  
Development of Nanoparticle Drug Delivery System for Alzheimer’s Disease  
ICMR (2011-14)  
26.00

### Carboxplatin Nanoparticles

**Dr V Sankar**  
Carboxplatin Nanoparticles  
The Tamilnadu Dr MGR Medical University  
0.5

### TDM on Vancomycin

**Dr. Tamilselvan**  
TDM on Vancomycin  
The Tamilnadu Pharmaceutical Welfare trust  
0.06

### Pharmacist Intervention in CTVS

**rs. Prudence Rodrigues**  
Pharmacist intervention in CTVS  
The Tamilnadu Pharmaceutical Welfare trust  
0.09

### Ongoing Projects

<table>
<thead>
<tr>
<th>Name of the Faculty</th>
<th>Title of Project</th>
<th>Funding Agency</th>
<th>Amount (in Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. M. Ramanathan</td>
<td>Elucidation of neuroprotective mechanism of angiotensin in middle cerebral artery occluded rat model</td>
<td>ICMR</td>
<td>41.00</td>
</tr>
<tr>
<td></td>
<td>Androgen receptor mediated drug development to treat Prostate Cancer</td>
<td>DBT-NE Twinning (2012-2015)</td>
<td>46.12</td>
</tr>
<tr>
<td>Dr.C. Vijayaraghavan</td>
<td>Development of Nanofiber Drug Delivery System for Treating Burn Wounds</td>
<td>AICTE</td>
<td>17</td>
</tr>
<tr>
<td>r. K. Umaa</td>
<td>Sequential Optimization for Anti-tuberculosis Drug Development</td>
<td>UGC</td>
<td>7.92</td>
</tr>
<tr>
<td>r. A.Nagarajan</td>
<td>Biogenic Synthesis of Silver nano conjugates with natural products</td>
<td>DST Nanomission</td>
<td>24.8</td>
</tr>
</tbody>
</table>
b. Inter institutional collaborative projects and grants received
   i) National collaborations-ICMR, DST, DBT, AICTE, IFGTB, UGC
   ii) International collaborations –University of Toledo

<table>
<thead>
<tr>
<th>Name of the Faculty</th>
<th>Title of Project</th>
<th>Funding Agency</th>
<th>Amount (in Lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. M. Ramanathan</td>
<td>Elucidation of neuroprotective mechanism of angiotensin in middle cerebral artery occluded rat model</td>
<td>ICMR</td>
<td>41.0</td>
</tr>
<tr>
<td></td>
<td>Androgen receptor mediated drug development to treat Prostate Cancer</td>
<td>DBT-NE Twinning (2012-2015)</td>
<td>46.12</td>
</tr>
<tr>
<td>Mr. Ranjit</td>
<td>Correlating Different Protein targets and Neurodegeneration in <em>in vitro</em> Neuronal Cell Culture Studies</td>
<td>University of Toledo, USA May – July 2014</td>
<td>5000 USD</td>
</tr>
</tbody>
</table>

3.2.7 What are the financial provisions made in the institution budget for supporting students’ research projects?
Student wise project money Rs.10000/- for special chemicals and or maximum RS 2 lakhs per department were given. The regular chemicals and glass wares were provided to the student to do research.

3.3 Research facilities
The institute has identified three important areas of research in Pharmaceutical sciences which includes drug development and discovery (synthetic and herbal), drug targeting using novel drug delivery and research in clinical Pharmacy. To carry out research in the mentioned areas the institute has got adequate facilities. In the department of Pharmaceutics facilities to carry out nano formulations and targeted drug delivery are created. Similarly in the department of Pharmacology facilities for molecular modeling, and to perform molecular pharmacology work are available. Further, the major advantage of Pharmacy Practice activities is due to the association of PSGCP with teaching hospital.
3.3.1. What efforts have been made by the institution to improve its infrastructure requirements to facilitate research? What strategies have been evolved to meet the need of researchers in emerging disciplines?

Promotion of research and development of infrastructure to do research has been gradually addressed by our trust PSG and Sons’ Charities. Every year college of Pharmacy submits the annual budget for research to the Trust for the approval. Other than the management support for infrastructure development the faculty also requested to get extramural funds for research.

Currently the institute is concentrating on translational research and clinical Pharmacy research. The RAC of the institute as well as institutional research board concentrate on student research. Constant meeting with the expertise and research competition conducted among the student community helps the sustainability of the research in our institute.

The invitation to scientist of the emerging field to our institute and interaction with them and also promoting collaborative research with the new field helped us to meet the current need of research in our institute.

Infrastructure

- Laboratory - Research labs in the area of drug development, nanotechnology and bioanalytical systems.
- Equipments and instruments

Department of Pharmaceutics

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of the instrument</th>
<th>Make/ Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High Pressure cell Homogeniser</td>
<td>2014/9973</td>
</tr>
<tr>
<td>2</td>
<td>Malvern Zeta sizer</td>
<td>2011/MAL1063652</td>
</tr>
<tr>
<td>3</td>
<td>High speed Homogeniser</td>
<td>2012/27-01142</td>
</tr>
<tr>
<td>4</td>
<td>Probe Sonicator</td>
<td>2010/56069AB</td>
</tr>
<tr>
<td>5</td>
<td>Freeze Dryer</td>
<td>2009/139-01-10</td>
</tr>
<tr>
<td>6</td>
<td>Brooke field’s viscometer</td>
<td>2008/E6528305</td>
</tr>
<tr>
<td>7</td>
<td>Tablet punching machine</td>
<td>2014/500805-0814</td>
</tr>
<tr>
<td>8</td>
<td>Dissolution Test Apparatus</td>
<td>2014/DT14490820</td>
</tr>
<tr>
<td>9</td>
<td>Disintegration Test Apparatus</td>
<td>2014/DI14150722</td>
</tr>
<tr>
<td>10</td>
<td>Rotary flask</td>
<td>2008/509089</td>
</tr>
<tr>
<td>11</td>
<td>Texture Analyzer</td>
<td>2014/41324</td>
</tr>
<tr>
<td>S. No</td>
<td>Name of the equipment</td>
<td>Make/Company</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>1.</td>
<td>Laminar airflow</td>
<td>Lafil&amp;vertical</td>
</tr>
<tr>
<td>2.</td>
<td>Co2 incubator</td>
<td>Mco5ac</td>
</tr>
<tr>
<td>3.</td>
<td>Analytical balance</td>
<td>Shmadzu</td>
</tr>
<tr>
<td>4.</td>
<td>Inyerted trinocular phase contrast microscopes</td>
<td>Ae-21</td>
</tr>
<tr>
<td>5.</td>
<td>Elisa reader with spectrophpto meter</td>
<td>Muliscango</td>
</tr>
<tr>
<td>6.</td>
<td>Semi dry plotting unit</td>
<td>Te toxp</td>
</tr>
<tr>
<td>7.</td>
<td>Nikon inverted phage microscope</td>
<td>Ts-100</td>
</tr>
<tr>
<td>8.</td>
<td>Refrigerated table top centri fuge</td>
<td>St16r</td>
</tr>
<tr>
<td>9.</td>
<td>Co2 incubater</td>
<td>Stericyde</td>
</tr>
<tr>
<td>10.</td>
<td>Thermomixers 60mfors eppendorf 1.5ml</td>
<td>Eppendorf 1.5ml</td>
</tr>
<tr>
<td>11.</td>
<td>Millipore direct -93 with pump</td>
<td>Fimal7096d</td>
</tr>
<tr>
<td>12.</td>
<td>Micro wave appliance</td>
<td>Mc7688dd</td>
</tr>
<tr>
<td>13.</td>
<td>Water bath</td>
<td>Guna</td>
</tr>
<tr>
<td>14.</td>
<td>Thermal cycler block</td>
<td>5020-type</td>
</tr>
<tr>
<td>15.</td>
<td>Welwash 4mk2</td>
<td>066-9-10519</td>
</tr>
<tr>
<td>16.</td>
<td>Spectrophpto meter</td>
<td>1510</td>
</tr>
<tr>
<td>17.</td>
<td>Laminar airflow</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Gel rocker</td>
<td>L1-gr-e-100</td>
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<tr>
<td>19.</td>
<td>Electrophpresis</td>
<td>Cs-300</td>
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<tr>
<td>20.</td>
<td>Gel electrophpresis</td>
<td></td>
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<tr>
<td>21.</td>
<td>Freezer godrej</td>
<td>B1hc</td>
</tr>
<tr>
<td>22.</td>
<td>Labindia ph meter</td>
<td>Pico+</td>
</tr>
<tr>
<td>23.</td>
<td>Pcr system</td>
<td>272006308</td>
</tr>
<tr>
<td>24.</td>
<td>Esco/bs2-2 (volt ohm meter) prime bioscience pt</td>
<td>Evom2</td>
</tr>
<tr>
<td>25.</td>
<td>Electro phoros’s power supply min pack</td>
<td>Min 1 pack250–11</td>
</tr>
<tr>
<td>26.</td>
<td>Electro phoros’s power supply versatice biotech</td>
<td>Versatice pack-500</td>
</tr>
<tr>
<td>27.</td>
<td>-80 therome freezer</td>
<td>Model no; 902</td>
</tr>
<tr>
<td>28.</td>
<td>Cryogenic transfer vessels (boicone)</td>
<td>38212</td>
</tr>
<tr>
<td>29.</td>
<td>-20 therome freezer</td>
<td>Model no; plf276</td>
</tr>
<tr>
<td>30.</td>
<td>Ice flacking machine (e-scotsman)</td>
<td>Dd937212p</td>
</tr>
<tr>
<td>31.</td>
<td>Tarsons (spin win mc-00)</td>
<td>Cat1010</td>
</tr>
<tr>
<td>32.</td>
<td>Tarsons (spin win mc-00)</td>
<td>Cat1010 s467</td>
</tr>
<tr>
<td>33.</td>
<td>Isolated Power pack</td>
<td>Bio Equipments</td>
</tr>
<tr>
<td>34.</td>
<td>Chemi-Luminescense Gel Doc system</td>
<td>G-BoxChemi-HRJ6</td>
</tr>
</tbody>
</table>
### Department of Pharmaceutical Analysis

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of the equipment</th>
<th>Make and company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>UV-Visible double beam spectrophotometer-01</td>
<td>1650 PC/ SHIMADZU</td>
</tr>
<tr>
<td>2</td>
<td>UV-Visible double beam spectrophotometer -02</td>
<td>1650 PC/SHIMADZU</td>
</tr>
<tr>
<td>3</td>
<td>HPLC – PDA -03</td>
<td>LC-10-TVP/SHIMADZU</td>
</tr>
<tr>
<td>4</td>
<td>FTIR -04</td>
<td>FTIR8400S/SHIMADZU</td>
</tr>
<tr>
<td>5</td>
<td>HPLC – UV Visible -06</td>
<td>2489 WATERS</td>
</tr>
</tbody>
</table>

### TDM Lab

<table>
<thead>
<tr>
<th>S.NO</th>
<th>Name of the equipment</th>
<th>Make and company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>HPLC</td>
<td>2475/ WATERS</td>
</tr>
<tr>
<td>2.</td>
<td>UPLC</td>
<td>L11CHA791G ACQUITY UPLC – H CLASS</td>
</tr>
<tr>
<td>3.</td>
<td>Smart spec plus spectrophotometer</td>
<td>273BR 06624</td>
</tr>
<tr>
<td>4.</td>
<td>Turbovap LV workstation</td>
<td>TV1319N17775</td>
</tr>
<tr>
<td>5.</td>
<td>Centrifuge</td>
<td>EPPENDROF 5810R</td>
</tr>
<tr>
<td>6.</td>
<td>Pressure +48 Positive manifold</td>
<td>PPM 48 BIOTAGE</td>
</tr>
<tr>
<td>7.</td>
<td>Ultrasonic cleaner</td>
<td>SONICA Spinco Tech</td>
</tr>
<tr>
<td>8.</td>
<td>Digital Balance</td>
<td>BSA2245-cw SATORIUS</td>
</tr>
</tbody>
</table>

Strategies employed to improve research activities through

- MOU - signing MOU with institutes, industries
- Collaborations – Inter and intra collaborative research with national institutions and central labs

### 3.3.2. Does the institution have Advanced Central Research facilities?

Yes. The institution has advanced research center facilities like and the students are permitted to use these facilities

- Bioinformatics,
- Molecular pharmacology,
- Centre for Drug Delivery
- Therapeutic Drug Monitoring lab
3.3.3. Does the institution have a Drug Information Center to cater to the need of researchers? If yes, provide details of the facility.
Yes, Drug Information Center facility is available at the department of Pharmacy Practice. The center subscribes MICROMEDEX clinical material in which the researchers can access research papers published in Clinical Research. This information can be disseminated to physicians and can also be used for counseling the patients. The information available in the center can be used for clinical research. Most of our clinical Pharmacist depends on this information to carry out research in the area of Pharmacoeconomics, Pharmacovigilance, Drug efficacy, Drug interactions and Drug safety.

3.3.4. Does the institution provide residential facilities (with computer and internet facilities) for the research scholars, post doctoral fellows, research associates, summer fellows of various academies and visiting scientists (national/ international)?
Yes.

3.3.5. Does the institution have centers of national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories.
State-of-the-art facility in bioinformatics/ molecular pharmacology and nano drug delivery is available. These facilities are mainly used for academic research purpose by researchers from nearby academic institutes as well as neighboring states. The major attraction for the researchers from other laboratories is to do research in the following areas
1. Particle size analysis and Zeta potential measurement
2. Phytochemical standardization
3. Anti cancer drug screening and utilization of cell culture facility
4. Protein detection
5. Spectral analysis
6. Pharmacological and toxicological screening
7. Cheminformatics and Drug Design
8. Bio analytical method development for drug detection

3.3.6. Clinical trials and research
- Are the clinical trials registered with CTRI (Clinical Trial Research of India)-Yes
- List a few major clinical trials conducted with their outcomes
  Pharmacy College not linked with conduction of clinical trials, unless there is a request. Pharmaceutics faculty are given charge to dispense clinical trial drug in clinical trials.
3.4 Research publication and awards

3.4.1. Does the institution publish any research journal(s)? If yes indicate the composition of the editorial board, editorial policies and state whether it/they/is are listed in any international database.

Yes, the institution publishes a research journal International Journal of Pharma Research (IJPR) half yearly, ISSN number 0975-3532

Editorial board

<table>
<thead>
<tr>
<th>No</th>
<th>Name</th>
<th>Position held</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Sri. L. Gopalakrishnan</td>
<td>Patron</td>
</tr>
<tr>
<td></td>
<td>Managing Trustee</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PSG &amp; Sons’ Charities, Coimbatore</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Dr. M. Ramanathan</td>
<td>Chief editor</td>
</tr>
<tr>
<td></td>
<td>Principal, PSG College of Pharmacy</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Dr. K.G. Prasanth</td>
<td>Editor</td>
</tr>
<tr>
<td></td>
<td>Prof, Dept of Pharmacology</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Mrs. P. Rama</td>
<td>Associate editor</td>
</tr>
<tr>
<td></td>
<td>Asst. Prof, Dept of Pharmacy Practice</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Mr. C. Vaiyana Rajesh</td>
<td>Associate editor</td>
</tr>
<tr>
<td></td>
<td>Asst. Prof, Dept of Pharmaceutics</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Dr. G. Geetha</td>
<td>Publication committee</td>
</tr>
<tr>
<td></td>
<td>Prof, of Pharmaceutical Analysis</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Dr. V. Sankar</td>
<td>Publication committee</td>
</tr>
<tr>
<td></td>
<td>Prof, and Head, Dept of Pharmacy Practice</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Dr. K. Umaa</td>
<td>Publication committee</td>
</tr>
<tr>
<td></td>
<td>Prof, Dept of Chemistry</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Mr. K. Bala Kumar</td>
<td>Publication committee</td>
</tr>
<tr>
<td></td>
<td>Asst. Prof, Dept of Pharmaceutics</td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Mr. Samuel Thavamani</td>
<td>Review committee</td>
</tr>
<tr>
<td></td>
<td>Asso. Prof, Dept of Pharmacognosy</td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Mrs. G. Syamala</td>
<td>Review committee</td>
</tr>
<tr>
<td></td>
<td>Asso. Prof, Dept of Pharmacognosy</td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>Mrs. C. Kalaiyarasi</td>
<td>Review committee</td>
</tr>
<tr>
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Review committee

14. Mr. S.M. Habibur Rahman  
Asso. Prof, Dept of Pharmaceutics  
Review committee

15. Dr. S. Subramanian  
Asso. Prof, Dept of Pharmaceutics  
Review committee

16. Mrs. Andhuvan  
Asso. Prof, Dept of Pharmacy Practice  
Review committee

17. Mrs. A. Prudence Rodrigues  
Asso. Prof, Dept of Pharmacy Practice  
Review committee

18. Dr. B. Balaji  
Asst. Prof, Dept of Pharmacology  
Review committee

Journal policy
The journal has been published twice in a year. The journal publishes peer reviewed research and review articles in the area of pharmaceutical sciences. It is an open access journal and no charges have been levied for publication. The article is published within a period of six months from the date of receipt of the article.
The journal was listed in Google scholar, EBSCO.

3.4.2. Give details of publication by the faculty and students:
Number of research papers published in peer reviewed journals (national/international)
- Number of research papers published in peer reviewed journal (national/international)
  - Monographs-Nil
  - Chapters in Books-4
  - Books edited -
  - Books with ISBN with details of publishers

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<tr>
<td>90.</td>
<td>Saudi Pharmaceutical Journal</td>
<td>2013</td>
<td>13190164</td>
<td>1.47</td>
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<td>0.42</td>
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<tr>
<td>91.</td>
<td>The antiseptic- A journal of medicine and surgery</td>
<td>2010</td>
<td>00035998</td>
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<tr>
<td>92.</td>
<td>The Indian Pharmacist</td>
<td>2010, 11, 2012, 14</td>
<td>09727914</td>
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<tr>
<td>93.</td>
<td>World Journal of Pharmacy and</td>
<td>2014</td>
<td>22784357</td>
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<tr>
<td></td>
<td>Title</td>
<td>Year</td>
<td>Volume</td>
<td>Code</td>
<td>IF 2012</td>
<td>IF 2013</td>
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<tr>
<td>94.</td>
<td>Journal of Liquid Chromatography &amp; Related Technologies</td>
<td>2012</td>
<td></td>
<td>10826076</td>
<td>0.72</td>
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<td>95.</td>
<td>Journal of Pharmaceutical Sciences &amp; Research</td>
<td>2013</td>
<td></td>
<td>9751459</td>
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<tr>
<td>96.</td>
<td>Pharmaceutical Biology</td>
<td>2012,14</td>
<td>17445116</td>
<td>1.55</td>
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<td>0.49</td>
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<tr>
<td>97.</td>
<td>Pharmacognosy Communications</td>
<td>2012</td>
<td></td>
<td>22490159</td>
<td>--</td>
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<tr>
<td>98.</td>
<td>Pharmacology Biochemistry and Behavior</td>
<td>2014</td>
<td></td>
<td>913057</td>
<td>3.05</td>
<td>0.92</td>
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<tr>
<td>99.</td>
<td>Phytotherapy Research</td>
<td>2013</td>
<td></td>
<td>10991573</td>
<td>2.44</td>
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<tr>
<td>100.</td>
<td>Research Journal of Pharmacognosy &amp; Phytochemistry</td>
<td>2014</td>
<td></td>
<td>0975-2331</td>
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<tr>
<td>101.</td>
<td>Research Journal of Pharmacy and Technology</td>
<td>2011</td>
<td></td>
<td>9743618</td>
<td>0.12</td>
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</tr>
<tr>
<td>102.</td>
<td>Steroids</td>
<td>2013</td>
<td></td>
<td>0039128X</td>
<td>2.85</td>
<td>1.144</td>
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<tr>
<td>103.</td>
<td>Technology Spectrum</td>
<td>2013</td>
<td></td>
<td>9746854</td>
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<tr>
<td>104.</td>
<td>The Open Obesity Journal</td>
<td>2014</td>
<td></td>
<td>18768237</td>
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</tr>
<tr>
<td>105.</td>
<td>Toxicology and Industrial Health</td>
<td>2012,12</td>
<td>7482337</td>
<td>1.51</td>
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<td>0.45</td>
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</tbody>
</table>

**Average** | 1.700 | 0.915 | 0.593 | 1.866 | 36.14
3.4.3 Does the institution publish any report /compilations/clinical round-ups as a part of clinical research to enrich knowledge, skill and attitudes?
Yes, The Department of Pharmacy Practice publish quarterly news letter titled “PSG DIC News Digest” it is free service and circulated to all the major hospitals and Pharmacy colleges in Southern India.

Research Report of PSG institutions- important and innovative research findings of all PSG institutes
Science Digest College of Pharmacy compilation of student research report - Proposed preparation for first Science Digest is in progress.

3.4.4. Give details of
- Faculty serving on the editorial boards of national and international journals
- Faculty serving as members of steering committees of national and international conference recognized by reputed organization /societies

<table>
<thead>
<tr>
<th>. No</th>
<th>Particulars</th>
<th>Recognitions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td><strong>National Level</strong></td>
</tr>
<tr>
<td>1</td>
<td>Dr. M. Ramanathan</td>
<td>Member of “Board of Studies in Research” in The Tamil Nadu Dr MGR Medical University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Member of “Board of Studies in Pharmacy” in Kerala University of Health and Allied Sciences</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Member of “Board of Studies in Pharmacy” in Annamalai University</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Member – Scientific Services Committee, Indian Pharmaceutical Congress Association, Mumbai-still 2009 onwards</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Member organizing committee (Technical Advisory Board) 28th Annual meeting of Society for Neurochemistry, India workshop and National Conference, Chennai 2014.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Member, Editorial Board Ancient Science of Life. Published by Wolterskluwer – Medknow</td>
</tr>
<tr>
<td>2</td>
<td>Dr. KG. Prasanth</td>
<td>Editor for IJPR Journal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Secretary of PSG Hospital Safety Committee</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internal auditor for ISO 9001:2008</td>
</tr>
<tr>
<td>3</td>
<td>Mrs. C. Kalaiyarasi</td>
<td>Life Member of Indian Pharmacological Society</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Life Member of Indian Pharmacy Graduates Association</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Qualified Internal auditor for ISO 9001:2008</td>
</tr>
</tbody>
</table>
3.4.5. Provide details for the last four years
   a. Research award received by the faculty and students
   b. National and international recognition received by the faculty from reputed professional bodies and agencies

<table>
<thead>
<tr>
<th>Faculty/ student</th>
<th>Awards/ Recognitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td>National</td>
</tr>
<tr>
<td>Dr. C. Vijaya Raghavan</td>
<td>Best Teacher Award from The TNMGRMU, Chennai. Distinguished Alumni Award from Manipal University, Karnataka. Invited as resource person for National seminar sponsored by AICTE on “Role of nanotechnology in the development of herbal medicine</td>
</tr>
<tr>
<td>Name</td>
<td>Achievement</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mr. S. M. Habibur Rahman</td>
<td>First prize in Oral Presentation at National Conference on Experimental Pharmacology, PSGCP, Coimbatore. June 2012 for the topic Investigating Solid Lipid Nanotechnology in Curcumin Pharmacokinetics and Bioavailability in First prize in Poster presentation for the topic Investigation of role of pluronic F68 and pluronic f127 as surfactants in solubility of drug nanocrystals</td>
</tr>
<tr>
<td>Dr. S. Subramaniam</td>
<td>2nd prize for poster presentation, for the research paper Formulation and Physico-chemical Evaluation of Fexofenadine Transdermal Patches at National scientific seminar on Recent frontiers in pharmaceutical sciences at College of Pharmaceutical sciences, Trivandrum, held on the 15th November 2011.</td>
</tr>
<tr>
<td>Mr. Balakumar</td>
<td>Mr. K. Balakumar received 3rd price for the research paper “Formulation and evaluation of Felodipine tablets by liquisolid compact technique” in national conference held at Trivandrum medical college, Trivandrum, 15th November 2011.</td>
</tr>
<tr>
<td>Name</td>
<td>Accomplishment</td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mr. Vaiyana Rajesh</td>
<td>1st price in the poster for the research paper “Drug delivery to kidney” in National Conference, held at Pulla Reddy College of Pharmacy, Hyderabad, January 2011.</td>
</tr>
</tbody>
</table>
| Mr. Siram Karthik, Doctoral fellow | Best Oral Presentation Award for the research topic Lymphatic targeting of diethylcarbamazine using nanoparticles during ICODD 2014 at PSG College of Pharmacy, Feb-28th- March 01st, 2014.  
Best Poster Presentation Award for the research topic Assessment of Pharmacokinetics and Brain Availability of Curcumin Loaded Solid Lipid Nanoparticle in Wistar Rat in National Conference on Challenges in Drug Delivery Research, 8-9th Nov, 2013 at Amrita School of Pharmacy, Kochi. |
<p>| Mr. Vamshi Krishnan, PG student | Best Poster Presentation Award for the research topic <em>In vivo</em> Evaluation of Curcumin Loaded Solid Lipid Nanoparticle Pharmacokinetics and Bioavailability Studies in Rabbit at International Congress of Pharmacy Graduates, 6-7th October, 2012 at Chettinad Health City, Kelambakkam, Chennai. |
| Dr. M. Ramanathan   | “Professional Excellence Award” from The TNMGRMU, Chennai in recognition of his service rendered to Pharmacy Profession 2011                                                                                  |
| Dr. B. Balaji        | Best Poster Award in an International Conference “Drug Discovery India 2014”, Mumbai                                                                                                                        |</p>
<table>
<thead>
<tr>
<th>Name</th>
<th>Achievement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. S. Divakar</td>
<td>Third prize in poster presentation at “Recent advances in computational drug design”, IIS campus, Bangalore</td>
</tr>
<tr>
<td>Doctoral fellow</td>
<td></td>
</tr>
<tr>
<td>Mr. Ranjith Kumar</td>
<td>Visiting Faculty Researcher Program at University of Toledo from 14\textsuperscript{th} May to 15\textsuperscript{th} July 2014</td>
</tr>
<tr>
<td>Mrs. Kalpana Eluri</td>
<td>First prize for her M Pharm project from Tamilnadu Pharmaceutical Science Welfare Trust 2010-2011</td>
</tr>
<tr>
<td>Mr. Ranjith Kumar</td>
<td>Second prize for his M Pharm project from Tamilnadu Pharmaceutical Science Welfare Trust 2010-2011</td>
</tr>
<tr>
<td>Mr. Sudheer</td>
<td>First prize for his M Pharm project from Tamilnadu Pharmaceutical Science Welfare Trust 2012-2013</td>
</tr>
<tr>
<td>Dr. G. Geetha</td>
<td>Best Teacher Award given by TNMGRMU 2012</td>
</tr>
<tr>
<td>Dr. KY. Kavitha</td>
<td>Best Paper Award “Development and Validation of UPLC method for simultaneous Estimation of Sitagliptin and Simvastatin from its Pharmaceutical Dosage form” at National Seminar on Advanced Chromatographic Techniques at JSS College of Pharmacy Mysore’1&amp;2 February 2013</td>
</tr>
<tr>
<td>Mr. Venkatachalam PG student</td>
<td>Best Paper Award “Novel high sensitive, validated HPLC Bio analytical method for simultaneous quantitative estimation of Curcuminoids”</td>
</tr>
<tr>
<td>Mrs. G. Syamala</td>
<td>Second prize in Pharmacon III 2011 on high performance thin</td>
</tr>
</tbody>
</table>
layer chromatographic quantification of rutin in roots of *Aegle marmelos* by Nehru College of Pharmacy, Kerala.

<table>
<thead>
<tr>
<th>Name</th>
<th>Award or Recognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. V. Sankar</td>
<td>Best Teacher Award given by TNMGRMU 2011</td>
</tr>
<tr>
<td>Mr. Nikhil Vinod</td>
<td>Best Poster Award received in National Conference on Infectious Diseases – A Medicinal Chemistry Perspective on 29th &amp; 30th Aug 2014 at Amrita School of Pharmacy, Kochi.</td>
</tr>
<tr>
<td>Mr. Anoop Santhosh</td>
<td>Best Poster Award received in National Conference on “Widening the Horizons for Practicing Pharmacist in Industry &amp; Hospitals” on 5th &amp; 6th July 2013. Best Poster Award received in ICODD 2014 at PSG College of Pharmacy, Feb 28th - March 01st, 2014.</td>
</tr>
</tbody>
</table>

- Post doctoral fellows – 3 (CV Raman fellowship program)
- Dr. Laurent KOUAKOU, Plant Physiologist, Sustainable Management of Natural resources, University of Nangui Abrogoua, Cote d’Ivoire, postdoctoral fellow worked in our lab under the fellowship starting from 1st October 2014 to 31st December 2014 for a period of three months.
- Mr. Damien Shatshibey Tshibangu from Democratic Republic of the Congo under Visiting fellowship category from 1st September 2014 to 30th November 2014 for a period of three months.
- Dr. Aboudoulatif DIALLO from Togo visited under this fellowship for 4 months from August 15th – December 15th 2013
3.4.6. Indicate the average number of post graduate and doctoral scholars guided by each faculty during the last four years

<table>
<thead>
<tr>
<th>No</th>
<th>Name of the faculty</th>
<th>No of Ph D students guided</th>
<th>No of PG student guided</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Dr. M Ramanthan</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>02</td>
<td>Dr. K G Prasanth</td>
<td>----</td>
<td>08</td>
</tr>
<tr>
<td>03</td>
<td>Mrs. Kalaiyarasi C</td>
<td>----</td>
<td>07</td>
</tr>
<tr>
<td>04</td>
<td>Mr. B Prem kumar</td>
<td>----</td>
<td>05</td>
</tr>
<tr>
<td>05</td>
<td>Dr. B Balaji</td>
<td>----</td>
<td>04</td>
</tr>
<tr>
<td>06</td>
<td>Dr. V. Sankar</td>
<td>----</td>
<td>14</td>
</tr>
<tr>
<td>07</td>
<td>Dr. Prudence A Rodrigues</td>
<td>----</td>
<td>08</td>
</tr>
<tr>
<td>08</td>
<td>Mrs. G. Andhuvan</td>
<td>----</td>
<td>08</td>
</tr>
<tr>
<td>09</td>
<td>Dr. T. Tamilselvan</td>
<td>----</td>
<td>07</td>
</tr>
<tr>
<td>10</td>
<td>Mrs. P. Rama</td>
<td>----</td>
<td>04</td>
</tr>
<tr>
<td>11</td>
<td>Mr. S.M.Habibur Rahman</td>
<td>----</td>
<td>05</td>
</tr>
<tr>
<td>12</td>
<td>Dr. S. Subramanian</td>
<td>----</td>
<td>07</td>
</tr>
<tr>
<td>13</td>
<td>Mr. K. Balakumar</td>
<td>----</td>
<td>05</td>
</tr>
<tr>
<td>14</td>
<td>Dr. G. Geetha</td>
<td>06</td>
<td>02</td>
</tr>
<tr>
<td>15</td>
<td>Mr. S. Ravichandran</td>
<td>----</td>
<td>01</td>
</tr>
</tbody>
</table>

3.4.7. What is the official policy of the institution to check malpractices and plagiarism in research? Mention the number of plagiarism case reported

Research Advisory Committee is monitoring through the software available for plagiarism. No such malpractices on plagiarism was reported.

3.4.8 Does the institution promote multi/interdisciplinary research? If yes, how many such research projects have been undertaken and mention the number of departments involved in such endeavors

Yes, the institution promotes multi/interdisciplinary research between the departments and with other sister institutions. The details are given below.
3.4.9 Has the university instituted any research awards? If yes list the awards
Yes, the affiliating University TNMGRMU every year invites research proposal from various affiliated paramedical institution for the award. The research award carries Rs 50,000/- as contingency money to do research
- Dr. V. Sankar received Research award for the project titled carboplatin nanoparticles preparation and evaluation in the year 2011.
- Dr. C. Vijaya Raghavan received research award for the project titled “Development of surface modified lipid nanoparticles for selective targeting of tumor cells in lymph nodes to prevent metastasis and its evaluation in BALB/c mice cancer model in the year 2014.

3.4.10 What are the incentives given to the faculty and students for receiving state, national and international recognition for research contribution
Currently institution is not giving any incentive to the faculty and students for their research contribution at National and International levels. To present their research findings institution is offering travel grant.

3.4.11 Give the details of the postgraduate and research guides of the institution during the last four years
For PG department faculty having 7 years or more teaching/research experience is eligible to be the guide to supervise PG dissertation. The PG/PhD guide available in each department is given below

<table>
<thead>
<tr>
<th>S. No</th>
<th>Name of the Department</th>
<th>Name of the collaborative department</th>
<th>No of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Pharmacology</td>
<td>Department of Nutrition and dietetics, PSG College of Arts and Science</td>
<td>01</td>
</tr>
<tr>
<td>02</td>
<td>Pharmacology</td>
<td>Department of Pharmacology, Manipal College of Pharmaceutical Sciences</td>
<td>01</td>
</tr>
<tr>
<td>03</td>
<td>Pharmacology</td>
<td>Department of Biochemistry, PSG College of Arts and Science</td>
<td>01</td>
</tr>
<tr>
<td>04</td>
<td>Pharmacology</td>
<td>Department of Biotechnology, PSG College of Technology</td>
<td>03</td>
</tr>
<tr>
<td>05</td>
<td>Pharmacology</td>
<td>Department of Nutrition Avinashilingam University</td>
<td>01</td>
</tr>
</tbody>
</table>
### Department of Pharmacology

<table>
<thead>
<tr>
<th>Name</th>
<th>Qualification</th>
<th>Designation</th>
<th>Specialization</th>
<th>No. of Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. M Ramanthan</td>
<td>M Pharm, PhD</td>
<td>Professor</td>
<td>Pharmacology</td>
<td>17 years</td>
</tr>
<tr>
<td>Dr. KG Prasanth</td>
<td>M Pharm, PhD</td>
<td>Professor</td>
<td>Pharmacology</td>
<td>15 years</td>
</tr>
<tr>
<td>Mrs. C. Kalaiyarasi</td>
<td>M Pharm (PhD)</td>
<td>Associate Professor</td>
<td>Pharmacology</td>
<td>10 years</td>
</tr>
<tr>
<td>Dr. B. Balaji</td>
<td>M Pharm, PhD</td>
<td>Associate Professor</td>
<td>Pharmacology</td>
<td>8 years</td>
</tr>
<tr>
<td>Mr. B. Premkumar</td>
<td>M Pharm (PhD)</td>
<td>Assistant Professor</td>
<td>Pharmacology</td>
<td>7 years</td>
</tr>
</tbody>
</table>

### Department of Pharmaceutics

<table>
<thead>
<tr>
<th>Name</th>
<th>Qualification</th>
<th>Designation</th>
<th>Specialization</th>
<th>No. of Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. V. Sankar</td>
<td>M Pharm, Ph.D</td>
<td>Professor</td>
<td>Pharmaceutics</td>
<td>17 yrs</td>
</tr>
<tr>
<td>Mr. Habibur Rahman</td>
<td>M Pharm, (PhD)</td>
<td>Associate Professor</td>
<td>Pharmaceutics</td>
<td>7 yrs 8 months</td>
</tr>
<tr>
<td>Dr. S. Subramanian</td>
<td>M Pharm PhD</td>
<td>Associate Professor</td>
<td>Pharmaceutics</td>
<td>7 yrs 8 months</td>
</tr>
<tr>
<td>Mr. K. Balakumar</td>
<td>M Pharm, (PhD)</td>
<td>Assistant Professor</td>
<td>Pharmaceutics</td>
<td>6 yrs 8 months</td>
</tr>
</tbody>
</table>

### Department of Pharmaceutical Analysis

<table>
<thead>
<tr>
<th>Name</th>
<th>Qualification</th>
<th>Designation</th>
<th>Specialization</th>
<th>No. of Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. G. Geetha</td>
<td>M Pharm, PhD</td>
<td>Professor</td>
<td>Pharmaceutical Chemistry</td>
<td>18 yrs</td>
</tr>
<tr>
<td>Mr. S. Ravichandran</td>
<td>M Pharm (PhD)</td>
<td>Associate Professor</td>
<td>Quality Assurance</td>
<td>14 yrs</td>
</tr>
</tbody>
</table>
### Department of Pharmacy Practice

<table>
<thead>
<tr>
<th>Name</th>
<th>Qualification</th>
<th>Designation</th>
<th>Specialization</th>
<th>No. of Years of Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Prudence A Rodrigues</td>
<td>M Pharm (PhD)</td>
<td>Associate Professor</td>
<td>Pharmacy Practice</td>
<td>9 yrs 11 months</td>
</tr>
<tr>
<td>Dr. V. Sivakumar</td>
<td>M Pharm PhD</td>
<td>Associate Professor</td>
<td>Pharmacy Practice</td>
<td>9 yrs 6 months</td>
</tr>
<tr>
<td>Mrs. G. Andhuvan</td>
<td>M Pharm (PhD)</td>
<td>Associate Professor</td>
<td>Pharmacy Practice</td>
<td>8 yrs 2 months</td>
</tr>
<tr>
<td>Dr. T. Tamilselvan</td>
<td>M Pharm PhD</td>
<td>Assistant Professor</td>
<td>Pharmacy Practice</td>
<td>8 yrs 6 months</td>
</tr>
<tr>
<td>Mrs. P. Rama</td>
<td>M Pharm</td>
<td>Assistant Professor</td>
<td>Pharmacy Practice</td>
<td>7 yrs 5 months</td>
</tr>
</tbody>
</table>

### 3.5 Consultancy

PSGCP have taken consultancy services related to academic research and works from the industry. The major contribution of consultancy is from academic institution. The institution is open to do consultancy job and has an established mechanism to do consultancy.

#### 3.5.1. What are the official policy /rules of the institution for structured consultancy? List a few important consultancies undertaken by the institution during the last four years.

Faculty can do consultancy services in approval with the Head of the Institution and taking permission from the Research Committee. It is also required to take permission from Ethical Committee before starting the consultancy work. Based on the need, the Institution will take up a confidentiality agreement with the company before starting the work. In a few cases, MOU is also signed between the parties. To bring in uniformity and control PRISAM (Pharmaceutical Research Initiative to Strengthen Academia and Manpower) has been formed.

A few important consultancies undertaken by the institution during the last 4 years:

- **Arya Vaidya Nilayam, Madurai**
  Pre-formulation studies and optimization of poly herbal capsules
- **Arya Vaidya Nilayam, Madurai**
  Screening of herbal powder in rat polycystic ovary syndrome model
- **Sami Labs, Bangalore**
  Neuroprotective effect of new molecules in LPS intoxicated neuroblastoma cell lines.
- **Arya Vaidya Nilayam, Madurai**
  Evaluation of Galactogogue Activity of the Ayurvedic Product
- **Stempeutics, Biocon, Bangalore**
3.5.2. Does the university have an industry institution partnership cell? If yes what is its scope and range of activity

Yes, we have an industry institution interaction cell which is in the name of PRISAM.

PRISAM stands for Pharmaceutical Research Initiative to Strengthen Academia and Manpower.

Scope:
This is an initiative aimed at tapping the institutional facilities and expertise of faculty to leverage collaborative research with industry to achieve application of science to develop products and thereby promote the Institution. To have good placements for the student

Activities:
- To explore the possibility of customized curriculum as per the needs of industry. Initially for PG programs introduction of industrial troubleshooting projects, doing PG projects in industry, theoretical update of the subjects, industrial project and practical training at college, will be carried out.
- Incorporate business mode amongst student community related to timelines to meet project execution, document preparation, archiving and following ethics at work etc.
- To introduce good laboratory practices and training the students in practical classes.
- To discuss about current need of the industry in terms of competent manpower and how academia can help them to bring desired skill set.
- Up gradation activities related to DSIR.
- To promulgate the institutional activities in order to persuade industries/manufacturing companies to employ our students in various departments in co-ordination with placement cell.
- To leverage experience and expertise to provide consultancy based services to pharma companies by highlighting the unique facilities in the college that makes it stand apart from other institutions. Unique facilities like: animal house facility, state-of-the-art facility in the branch of neuroscience preclinical studies, *in silico* drug design, nanoparticulate formulations, bioavailability studies, therapeutic drug monitoring etc will be showcased to the prospective industries.
- To publish a research report on an annual basis about the consultancy projects and services rendered to the industry or other universities/institute
- To assess the quality and functioning through feedback from employees and alumni regularly.
3.5.3 What is the mode of publicizing the expertise of institution for consultancy services? Which are the departments from whom consultancy has sought?
Pharmaceutics, Pharmacology, Pharmaceutical analysis are the departments doing consultancy work. The publicizing mode is through web page, through individuals, brochures and alumni of our institution.
The expertise available and the area of interest have been notified in the webpage (www.psgpharma.ac.in), google scholar and IJPR journal. Other than the webpage, the information has also been circulated through brochures, personal communication, Alumni, meetings and seminar.

3.5.4. How does the institution utilize the expertise of its faculty with regard to consultancy Services
Those who are doing consultancy work are given free hand to explore and establish themselves. The institution utilizes their services for the developments
- Advanced Study Center
- Strengthening of the man power
- Research proposals submissions for funding

3.5.5 Give details regarding the consultancy services provided by the institution for secondary and tertiary health care centers and medical / dental practitioners
Not applicable

3.5.6 Give the details regarding the consultancy service provided by the institution and the revenue generated during the last 4 years
Academic consultancy has been provided in the following areas. Average Rs. 1.2 lakhs per annum generated through consultancy.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Areas of Consultancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Particle size analysis and Zeta potential measurement</td>
</tr>
<tr>
<td>2</td>
<td>Phytochemical standardization</td>
</tr>
<tr>
<td>3</td>
<td>Anti cancer drug screening and utilization of cell culture facility</td>
</tr>
<tr>
<td>4</td>
<td>Cheminformatics and Drug Design</td>
</tr>
<tr>
<td>5</td>
<td>Pharmacological and toxicological screening</td>
</tr>
<tr>
<td>6</td>
<td>Protein detection</td>
</tr>
<tr>
<td>7</td>
<td>Spectral analysis (IR + HPLC)</td>
</tr>
</tbody>
</table>

3.6 Extension Activities and Institutional Social Responsibility (ISR)
PSG & Sons’ Charities has been established in the year 1926, with the vision of promoting education and entrepreneurship with the development of the community. Currently, the trust is doing many corporate social responsibilities. PSGCP have
taken the initiative to sensitize its faculty and students on their social responsibilities. The PSGCP institutional social responsibilities undertaken are given below-

- Valar karangal- helping hands, a social unit initiated by 2009 Pharmacy students. Every month students visit old age homes or orphanages. Students can become member on this and they can contribute
- PSGCP has signed an MOU with Indian Pharmaceutical Association Community Pharmacy Division to bring awareness among the community pharmacists on effective use and storage of medicines in the Pharmacy. Through this program we educate the Pharmacists on recent developments new drugs available and communicable disease awareness.
- National NSS activity at Nanjangudu - as part of the NSS activity, our students 10 (5 girls and 5 boys) actively participated in the event. PSGCP is one among the two institutions which participated from TN.
- NSS activity in the adapted village
- Health care activities- as recommended in last year Department of Pharmacy Practice is actively contributing in the health care. Apart from regular work and curriculum the faculty and students of PSG CP are involved in auditing of Prescription pattern, drug interaction and intervention. The documents related to this work are slowly under preparation. Over the years of accumulation of these data it will be highly useful to all Physicians to verify and refer their medications error.
- Safe use of medications in rural hospitals- as a new program our Pharm D interns are dispensing and attending the PSG rural hospitals at Vedapatti and Karadivavi.
  - Prescription pattern
  - Drug interaction and intervention documentation initiated, data bank to create

3.6.1 How does the institution sensitize its faculty and students on its Institutional Social Responsibilities? List the social outreach programs which have created an impact on students’ campus experience during the last four years.

The major emphasis is given on the following headings to the students which have been monitored by the faculty.

- Patient counseling
- Medical camps
- Drug Information
- Healthcare in the Primary Health Centre at Karadivavi and Vedapatti village centre
- A community pharmacy educating program
Students have contributed to the Jammu and Kashmir Natural Disaster Fund
Apart from this the students are sensitized on their social responsibility through moral class in the induction program and through NSS activities.

To sensitize the students and faculties to institutional social responsibilities, PSGCP is conducting outreach program in association with Indian pharmaceutical Association - Community Pharmacy division (IPA-CPD) at Rural Health Center, Karadivavi and Vedapatti villages of Coimbatore district from June -2014. The Pharm. D interns visit twice in a week to provide patient counseling, prescription auditing to identify the medication errors and conducting awareness program on chronic and communicable diseases.

**Activity Report**
PSG Rural Health Center, Karadivavi (June to October-2014)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Patient counseling</th>
<th>No. of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Diabetes patients</td>
<td>120</td>
</tr>
<tr>
<td>2.</td>
<td>Hypertensive patients</td>
<td>70</td>
</tr>
<tr>
<td>3.</td>
<td>Surgery patients</td>
<td>60</td>
</tr>
<tr>
<td>4.</td>
<td>Other patients</td>
<td>50</td>
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</table>

Prescription errors identified and Corrected

<table>
<thead>
<tr>
<th>S.No</th>
<th>Type</th>
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</tr>
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<tbody>
<tr>
<td>1.</td>
<td>Wrong Dose</td>
<td>10</td>
</tr>
<tr>
<td>2.</td>
<td>Wrong spelling</td>
<td>05</td>
</tr>
<tr>
<td>3.</td>
<td>Missed dosage</td>
<td>15</td>
</tr>
<tr>
<td>4.</td>
<td>Missed Duration</td>
<td>08</td>
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Dispensing errors Identified and Corrected

<table>
<thead>
<tr>
<th>S.No</th>
<th>Type</th>
<th>No. of Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Wrong Drug</td>
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</tr>
<tr>
<td>2.</td>
<td>Brand Substitutions</td>
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<tr>
<td>3.</td>
<td>Wrong Strength</td>
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</tr>
<tr>
<td>4.</td>
<td>Wrong Quantity Dispensed</td>
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</tbody>
</table>

PSG Rural Health Center, Vedapatti (June to October-2014).

<table>
<thead>
<tr>
<th>S.No</th>
<th>Patient counseling</th>
<th>No. of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Diabetes patients</td>
<td>100</td>
</tr>
<tr>
<td>2.</td>
<td>Hypertensive patients</td>
<td>50</td>
</tr>
<tr>
<td>3.</td>
<td>Gastro Related</td>
<td>50</td>
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</table>
### Medical Camps conducted

<table>
<thead>
<tr>
<th>S. No</th>
<th>Year</th>
<th>No of Camps</th>
<th>Place</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2010</td>
<td>01</td>
<td>World Asthma Day Camp, Vedapatti May-2010</td>
</tr>
<tr>
<td>2.</td>
<td>2011</td>
<td>01</td>
<td>General Medical Camp, Thondamuthur. March-2011</td>
</tr>
<tr>
<td>3.</td>
<td>2012</td>
<td>01</td>
<td>With NSS</td>
</tr>
<tr>
<td>4.</td>
<td>2013</td>
<td>01</td>
<td>With NSS</td>
</tr>
<tr>
<td>5.</td>
<td>2014</td>
<td>01</td>
<td>With NSS</td>
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</tbody>
</table>

### Drug Information Center Activities

#### Patient Counseling

<table>
<thead>
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<th>S. No</th>
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</tr>
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<tbody>
<tr>
<td>1</td>
<td>2012</td>
<td>10,952</td>
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<tr>
<td>2</td>
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<td>11,012</td>
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<tr>
<td>3</td>
<td>2014</td>
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#### Prescription Auditing

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<td>1,024</td>
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<td>2013</td>
<td>23,201</td>
</tr>
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<td>3</td>
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#### Drug Queries Answered

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<td>2013</td>
<td>35</td>
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<tr>
<td>3</td>
<td>2014</td>
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</table>

#### Dispensing error Reported and Corrected

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<th>No</th>
</tr>
</thead>
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<td>2013</td>
<td>54</td>
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<tr>
<td>3</td>
<td>2014</td>
<td>299</td>
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</tbody>
</table>

#### ADR Reported

<table>
<thead>
<tr>
<th>S. No</th>
<th>Year</th>
<th>No</th>
</tr>
</thead>
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<td>2011</td>
<td>15</td>
</tr>
<tr>
<td>2</td>
<td>2012</td>
<td>155</td>
</tr>
<tr>
<td>3</td>
<td>2013</td>
<td>89</td>
</tr>
<tr>
<td>4</td>
<td>2014</td>
<td>632</td>
</tr>
</tbody>
</table>
3.6.2 How does the institution promote university-neighborhood network and student engagement, contributing to the holistic development of students and sustained community development?

The college promotes organization of different programs in rural areas and villages, like village adaptation, medical camps, class on personal hygiene, green and eco-friendly environment for teaching.

To take part in the National Schemes awareness programs (Free Tobacco Area, HIV awareness rally)

The college provides opportunities to the students to take part in the following activities:

- Health care outreach program in the adopted village
- Providing patient counseling in the hospital
- Functioning of drug information centre
- Educating the school students in the adopted village
- Planting of trees in the adopted village school and maintaining the same during NSS.
- Helping the primary school students of adopted village by providing study aids like dictionary, note books and stationery items.
- Maintaining the library in Vedapatti village school.

3.6.3 How does the institution promote the participation of the students and faculty in extension activities including participation in NSS, NCC, YRC and other National and International programs?

A separate NSS unit recognized by the TNMGRMU, Chennai is functioning in the college. The NSS Co-ordinator will organize the special and regular camps every year. The students are encouraged to enroll themselves in the NSS program.

Blood Donor Club, Youth Red Cross and Red Ribbon Club are also functioning in the college with the designated faculty as in charge. The programs are conducted as per the circulars given by the University.

NSS:

The college has started the NSS program from the year 2004 with one unit. Social activities like giving awareness about solid waste management, education to girl child, save girl child, immunization were emphasized to the villagers. Conducting medical camps, planting trees, setting of medicinal garden, cleaning and maintaining of schools and library were also from part of NSS activity.

One village is adapted for three years. During which extension works covering education, health, sanitation and infrastructure are taken up. The details are given in table.
NSS Special Camp Activity – (2013-14)
A NSS Special Camp was organized at Nagarajapuram Elementary School, Vedapati Panchayat from 05.01.2014 to 11.01.2014. With contributions from Lions Club, Airport, Coimbatore ten benches (worth Rs. 25,000) were sponsored to the elementary school which had no benches until then. Vivekananda Youth Club, Paneermadai sponsored 50 plates and tumblers (worth Rs. 3800) to the noon meal centre at the school. Besides these the NSS volunteers donated 50 slates and chalk pieces to the students at the Balwadi, while dictionary and stationery items were given to 50 students in the school. As part of the camp, the school premises was cleaned, compound wall white washed and the main gate which was damaged in May 2013 was fixed. Dr. Mahadevan, Govt. Medical College Hospital created awareness on AIDS, Mr. Rajkumar, Hand-in-Hand, an NGO working on Solid Waste Management System presented a power point on adverse use of plastics on environment. Dr. Selvaraj, Associate Professor, Dept. of Psychology, Govt. Arts College correlated Psychology with Personality Development. Awareness programmes like importance of education, road safety and various govt. schemes were screened with the help of Field Publicity Office, Coimbatore. Thannambikkai Masilamani instilled confidence among the volunteers by his speech on Confidence.

NSS Special Camp Activity – (2014-15)
NSS Special camp was organized at Nagarajapuram Elementary School, Sathya Nagar, Vedapati Panchayat from 04.01.2015 to 12.01.2015. NSS volunteers of PSG College of Pharmacy have sponsored benches and chairs (worth Rs. 20,000) to the elementary school which had few benches until then. Besides these the NSS volunteers have also donated stationery items and ‘T’ shirts to all the 54 students of the school. About 54 students were examined for a medical check-up with the help of PSG RHC. A medicinal garden was inaugurated with about 25 medicinal plants in PSG Rural Health Centre, Vedapatti in the presence of Dr. Thiyagarajan, Medical Officer, PSG RHC. Vedapatti library was also cleaned by NSS Volunteers. As part of the camp, the school premise was cleaned and white washed. Dr. Mahadevan, Government Medical College Hospital created awareness on AIDS. Mr. Jeganathan, Consultant from Rotary Club, Coimbatore gave a talk on the topic ‘Team Building’ and emphasized the team work by giving various interesting activities. Awareness programs like save female child, clean India and different government schemes available for social uplift were conducted to the villagers by rally, lecture and screening documentary films with the help of Mr. Chandrasekaran, Directorate of Field Publicity, Coimbatore. Thannambikkai Masilamani instilled confidence among the volunteers by his speech on Confidence. Mr. Venu Gopal, Yoga Master, Nehru Matriculation School has taught the importance of Yoga with various exercises. Mr. A. Krishna Kumar, senior training officer, PSG Industrial Institute gave an excellent life skill training to NSS Volunteers.
<table>
<thead>
<tr>
<th>S. No</th>
<th>Name of the Village adapted</th>
<th>Period</th>
<th>No of beneficiaries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>School</td>
</tr>
<tr>
<td>1.</td>
<td>Nagarajapuram, Vedapatti Panchayat</td>
<td>2014-15</td>
<td>57</td>
</tr>
<tr>
<td>2.</td>
<td>Nagarajapuram, Vedapatti Panchayat</td>
<td>2013-14</td>
<td>45</td>
</tr>
<tr>
<td>4.</td>
<td>Nambiyazhaganpalayam, Vedapatti Panchayat</td>
<td>2011-12</td>
<td>40</td>
</tr>
</tbody>
</table>
NSS PHOTOS
FIXING OF THE MAIN GATE OF THE SCHOOL BY NSS VOLUNTEERS

White washing of school compound by NSS Volunteers
Students painting the benches donated to Nagarajapuram elementary school in Vedapati panchayat.

Awareness rally to stress the Solid Waste Management System in the adopted village.
Cleaning of Vedapati hospital premises by NSS Volunteers

Educating school students by NSS Volunteers

Validactory Function: Dr. M.Ramanathan, Principal donating stationeries required for school children
YRC and RRC
Youth Red Cross and Red Ribbon Club are functioning

Blood donor club
Volunteers have been regularly donating blood to PSG Blood Bank.

3.6.4 Give details of the social surveys, research or extension work, if any, undertaken by the institution to ensure social justices and empower the underprivileged and the most vulnerable section of society
No

3.6.5 Does the institution has a mechanism to track the students’ involvement in various social movements/activities that promote citizenship roles
No

3.6.6 How does the institution ensure the involvement of the community in its outreach activities and contribution to community development? Give details of the initiatives of the institution that have encourage community participation in its activities
We have a special officer (liaison officer) at the centers. During the program the village head is always been involved. The government officials also been brought to the village to educate the society. Apart from Rotary Club, Lions club is also actively involved
The local community has shown active participation in the following areas: Energy savings, Personal hygiene, Conservation of the electrical energy, Treatment and Disposal of Waste, tree plantation, livestock health camps, School maintenance and temple cleaning.

3.6.7 Give details of awards received by the institution for the extension activities and other contribution to social /community development during the last four years
- Green campus award by the NGO at Hyderabad
- NSS program participation at National level

3.6.8 What intervention strategies have been adopted by the institution to promote the overall development of students from rural /tribal back ground?
Language class, communication skill practices, and scholarships are provided
3.6.9 What initiatives are taken by the institution to promote social –justice and good citizenship amongst the students and staff? How have such initiatives reach out to the community?

PSGCP treats all students and faculty equally and does not discriminate based on religion, caste and back ground. PSGCP also adapts mentorship program through that their language communication skills are developed. We have made uniform as mandatory so it helps the students to come of out the complex. Every stage we emphasize on good practices which might help their career as well as the community.

3.6.10. How does the institution align itself with the annual themes / programs of WHO/ICMR?

Every year the annual theme is given by the Pharmacy Council of India. Based on the theme, the Pharmacy week celebrations are conducted in the month of November. There are lectures and participation in the rally to promote the theme in the community. There is an elocution competition among the students on the theme. Last year (2014), the theme given by the Pharmacy Council of India was “Responsible Use of Medicines: Role of Pharmacist”.

World Stroke Day was observed on 29th October 2014. An awareness rally was organized. NSS volunteers of PSGCP brought awareness to the public about the prevention of stroke by distributing pamphlets, shouting the slogans and displaying the banners & placards during the rally.

3.6.11. What is the role of the institution in the following extension activities?

Awareness creation regarding potable water supply, sanitation and nutrition
Awareness creation regarding water borne diseases and air borne communicable diseases
Awareness creation regarding non-communicable diseases – cardiovascular diseases, diabetics, cancer, mental health, accident and trauma
Awareness creation regarding the role of healthy life style and physical exercise for the promotion of health and prevention of diseases
Pharmacoeconomics evaluation in drug utilization
Promotion of mental health and prevention of substance abuse
The awareness program on HIV AIDS, TB, Malaria, school health and anti-tubercular campaigns oral health care etc.,

3.6.12 Do the faculty members participate in community health awareness programs?

Yes. As a pharmacist and part of the health team our faculty are involved in drug related counseling activity.
3.6.13 How does the institution align itself and participate in national program for prevention and control of diseases?
PSG College of Pharmacy coordinates with PSG hospitals on such activity and no direct involvement of PSGCP in the health sector.

3.7. Collaboration
PSG CP has taken the initiative and completed a few projects with national and international collaborations.

3.7.1 How has the institution’s collaboration with other agencies impacted the visibility, identity and diversity of campus activities? To what extent has the institution benefitted academically and financially because of collaboration.

The institution has collaboration with Universities, institutions, research labs and industries which has given visibility and identity, which made PSGCP as one among the top 7 Private Pharmacy colleges in India (Career 360 magazine May 2015). The institution has collaborated at different levels

University level: Annamalai University, Chidambaram
University of Toledo, Ohio, USA
Manipal College of Pharmaceutical Sciences, Manipal

Central laboratories: IASST, Guwahati
Rajiv Gandhi Centre for Biotechnology, Trivandrum
Dr. Ambedkar centre for Biomedical Research,
Delhi University
Indian Forest Genetics and Tree Breeding Institute,
Coimbatore

Industry level: AVN, Madurai
Sami Labs, Bangalore
Stempeutics Pvt Ltd., Bangalore

Academic development: Higher end research, dissemination of knowledge to students, infrastructure development and students placement.

Financial development: New equipments purchased and infrastructure development

Diversity: The institution diversified the field of research into nanotechnology, molecular pharmacology and drug development.
Role of each collaborator:

<table>
<thead>
<tr>
<th>Name of the Collaborator</th>
<th>Title of the study</th>
<th>Role of the collaborator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr V Ramamurthy Professor Department of Biotechnology PSG College of Technology Coimbatore</td>
<td>Preclinical evaluation of modified estrogen receptor beta agonists for prostate cancer treatment</td>
<td>His contribution in this study is to elucidate the mechanism of inhibition of cell growth by the developed molecules towards ERβ. His expertise in molecular techniques will also be used to screen <em>in vitro</em> efficacy of the synthesized molecules.</td>
</tr>
<tr>
<td>Dr S Kabilan Professor Department of Chemistry Annamalai University Chidambaram</td>
<td>Development of glycogen synthase kinase-3β inhibitors for neurogenesis in neurodegenerative disorders</td>
<td>His contribution towards the study will be in the synthesis of new molecules. He will aid in the development of synthetic scheme and characterization of synthesized compounds.</td>
</tr>
<tr>
<td>Dr P Rani Professor Department of Biotechnology PSG College of Technology Coimbatore</td>
<td>Development of glycogen synthase kinase-3β inhibitors for neurogenesis in neurodegenerative disorders</td>
<td>She is responsible for the enzymatic evaluation of newly developed compounds. She will also aid in the molecular techniques related to neurogenesis.</td>
</tr>
<tr>
<td>Dr Jibon Kotoky Professor I &amp; Sectional in-charge Biological &amp; Chemical Sciences, Division of Life Sciences, IASST, Assam</td>
<td>Androgen receptor mediated drug development to treat Prostate Cancer</td>
<td>He holds the responsibility of establishing drug discovery set up in the North eastern region. He will also contribute in the synthetic chemistry.</td>
</tr>
<tr>
<td>Dr. Murugesan, Scientist G Institute of Forest and Genetic Tree Breeding, Coimbatore</td>
<td>Phytochemical, Pharmacological and toxicological investigation of <em>Aegle Marmelos</em> for a new product</td>
<td>He is a scientist from Forest institute; he is the PI of the project. Provided with raw material and helped in evaluation process and supply of the extracts</td>
</tr>
<tr>
<td>Dr. Ramesh Varier, Managing Director, Arya Vaiday Nilayam,</td>
<td>Standardization, validation and development of</td>
<td>Ayurvedic physician, having keen interest in validating the Ayurvedic preparation using</td>
</tr>
</tbody>
</table>
Madurai herbal formulation for the treatment of neuropathic pain modern techniques. Industrial partner in many projects and constantly interact for consultancy work

Dr. Z. Shah, Associate Professor, Department of Medicinal Chemistry, University of Toledo, Toledo USA Correlating different protein targets and neurodegeneration in vitro neuronal cell culture studies. International standard on neuronal research. The trained faculty has been able to establish it in our molecular pharmacology lab. Gave confidence on the research. Planning to extend the work

3.7.2 Mention the specific examples of how these linkages promote

Curriculum development

Curriculum for the Pharmacy program is designed by the affiliating university. Hence, there is no direct benefit to implement the findings in the curriculum. However, additional inputs to the students are given to include the newer techniques and topics to study along with the regular subjects who are given through assignments and power point presentations.

Internship

University of Toledo, Ohio – Two months Exchange program for Pharm D interns With Collaborations of other foreign universities, Pharm D interns have been visited and undergone specific training in dispensing medicines, pharmacy inventory management and patient care.

<table>
<thead>
<tr>
<th>S. No</th>
<th>Name of the Student</th>
<th>Place Visited</th>
<th>Duration of visit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ms. V. Kanaka Durga</td>
<td>University of Toledo, Ohio, USA</td>
<td>July to October-2013</td>
</tr>
<tr>
<td>2</td>
<td>Ms. Kavitha Dokka</td>
<td>University of Toledo, Ohio, USA</td>
<td>September to November-2014</td>
</tr>
<tr>
<td>3</td>
<td>Ms. Kshama Indoria</td>
<td>University of Toledo, Ohio, USA</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Ms. K. Ramya Krishnan</td>
<td>University of Toledo, Ohio, USA</td>
<td></td>
</tr>
</tbody>
</table>

Industrial link also helps the B. Pharm students to undergo training in the Pharmaceutical industry. Four students have undergone one month training at Chennai through this link on Regulatory and Quality assurance.

<table>
<thead>
<tr>
<th>Name</th>
<th>Industrial Orientation training for production management personnel conducted at Tamilnadu Pharmaceutical Sciences Welfare Trust from 06.10.2014 to 07.11.2014</th>
</tr>
</thead>
</table>
**On – the –job training**

PG Students are encouraged to undergo training in the industry for a maximum of 10 months period. Currently, students are working in the industries/formulations at Chennai/ Ahmedabad/ Hosur. The training has been helpful for the placement of students.

| Dinesh Par Formulations, Kelambakkam, Kanchipuram | II year M Pharm Project training in FR & D |
| Guhan Himadeep | |
| Hemnath | |

**Faculte exchange and development**

Dr. B. Balaji, Assistant Professor visited Molecular Biotechnology and Bioinformatics Lab of International Institute of Information Technology, Pune in 2011. During his stay for one month in Pune he learned molecular techniques related to PCR and transfection.

Dr. V. Sankar, Professor & Head, Department of Pharmacy Practice, visited Children’s Hospital of Eastern Ontario, Canada in the year 2012.

Dr. M. Ramanathan US visit helped to upgrade, understand and learn the professional activities which has been implemented in our institute.

- Establishment of model pharmacy in the college based on UT model
- Implementation of the clinical pharmacist activity in the hospitals
- Drug discovery lab

**Research**

Product development

Arya Vaidya Nilayam, Madurai - PERMENT® Capsules

Arya Vaidya Nilayam, Madurai – Formulation for neuropathic pain.

Indian Forest Genetics and Tree Breeding, Coimbatore – Capsules R-500 Antidepressant capsules
**Publication**
The following publications are made through our collaborators

<table>
<thead>
<tr>
<th>Name of the Collaborator</th>
<th>Publication detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr P Rani Professor, Department of Biotechnology PSG College of Technology, Coimbatore</td>
<td>• Darshit B.S., Balaji B., Rani P. and Ramanathan M., 2014. Identification and <em>in vitro</em> evaluation of new leads as selective and competitive glycogen synthase kinase-3β inhibitors through ligand and structure based drug design. <em>J Mol Graph Model</em>, 53C:31-47.</td>
</tr>
</tbody>
</table>
Consultancy

- Capsules - formulation having the Galactogoggue effect has been screened.
- PCOS – Different formulations were screened for polycystic ovary syndrome.
- Sami Labs – New chemical entities were screened for neuroprotection.
- Stempeutics and Biocon – Their part of the work has been done in image analyser.

These linkages between industry and institution helped the college to develop in the areas of
- Product development
- Formulation development
- Molecular Pharmacology
- *In vivo* studies
- Drug discovery

These activities also given the college an identity and visibility among other pharmacy institutes

Extension

These linkages have helped to extend the pharmaceutical services and understand the newer trend in the pharmaceutical field. This link also helped to explore the newer technologies and techniques in drug delivery and development.

Student placement

Placement cell of the college utilize this link effectively for the student placement. The exposure and training the students have during their curriculum have certainly improved their knowledge and confidence. Currently our students are placed well in the industry and are performing well.

To improve the activities of the pharmacy practice department faculties from specific fields invited to interact with students and faculties. A few of them are
- Dr. Cynthia R Gross, Professor, University of MINNESOTA
- Dr. SD Rajendran, Head, Medical Affairs, Sristek Clinical research Solution Ltd, Chennai
- Prof. Raj Vidya, Immediate Past Chairman, IPA-CPD, Mumbai
- Mr. Ulagappan - Community Pharmacy Manager, USA
3.7.3. Has the institution signed MoUs or filed patents with institutions of national/international importance/other universities/industries/corporate houses etc? If yes, how they enhanced the research and development activities of the institution.

The institution has signed MOU with the following institutions and industries:
- University of Toledo, Ohio state, Toledo, USA
- Arya Vaidya Nilayam, Madurai
- Stempeutics Pvt Ltd., Bangalore
- CPD division of IPA
- Children’s hospital, Eastern Ontario, Ottawa, Canada

The institution has two patents:
- PCT/IB2004/000284: Herbal composition comprising *commiphora mukul* *Allium sativum* and *curcuma longa*-Ant repellent 1 patent filed
- Isoflavone based new chemical entities have been developed as anti-proliferative agents “Therapeutic Benefits of Novel Daidzein Analogues In Estrogen- Associated Disorders” Ref No./Application No.- 1667/CHE/2013

Certainly, the MOU enhanced the research and developmental activities and the institution is constantly working on enhancing the research and developmental activities.

3.7.4. Have the institution–industry interactions results in the establishment/creation of highly specialized laboratories

Yes. The following laboratories have been established in PSGCP with the guidance of the industrial experts in Research Advisory Committee. The major industrial player is Arya Vaidya Nilayam, Madurai.

- Drug design/Molecular modeling lab
- Molecular Pharmacology lab
- Bio-analytical lab
- Centre for Drug Delivery

3.7.5 Give details of the collaborative activities of the institution with the following

- Local bodies/community:
  - IPA-CPD division organizing a series of program to benefit the community pharmacist in drug development and dispensing.
- State government/central government:
  - State university: Annamalai – Research and Development – Anticancer drug development
- National bodies:
- Funds for research has been received from DST, DBT, ICMR and AICTE
- Collaborative project with Institute of Advance Studies in Science and Technology, Guwahati Assam in the area of drug development

- International agencies
  - College of Pharmacy and Pharmaceutical Research, University of Toledo, USA in research and faculty and student exchange program

- Health Care Industry- Biomedical, Pharmaceutical, Herbal, Clinical Research organizations (CRO)
  - **Stempeutics Research Pvt. Ltd.,**
    Akshay Tech Park
    #72 & 73, 2nd Floor,
    EPIP Zone, Phase 1,
    Whitefield, Bangalore – 560066 India.
  - Biocon pharmaceuticals, Biocon Foundation
    20th KM Hosur Road,
    Electronic City,
    Bangalore – 560 100
  - Arya Vaidya Nilayam
    Vilachery Main Rd, Pasumalai
    Madurai, Tamil Nadu
  - Sami labs
    19/1, 19/2, 1st Main, 2nd Phase,
    Peenya Industrial Area,
    Bangalore, Karnataka 560058

  with all these industries PSGCP have done consultancy, product development and lab establishments.

- Service sector
  - Lion’s club and Rotary club – in NSS activities they contribute both through supply of resources and materials.

- Any other (specify)

### 3.7.6 Give details of the activities of the institution under public-private partnership
Nil
Criterion IV
Infrastructure and Learning Resources
<table>
<thead>
<tr>
<th>Key aspects</th>
<th>Process/Approach</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Physical facilities</td>
<td>• As per established guidelines of regulatory bodies Pharmacy Council of India, All India Council for Technical Education and affiliating University.</td>
<td>• Effective delivery of curriculum.</td>
</tr>
</tbody>
</table>
| 4.2 Library as learning resource | • State of the art library, digital library, 8000 plus books, open source information portals, e-journals.  
• Team of Library personnel  
• Library committee  
• Definite budget allotment  
• Constant upgrading | • Student exposure to latest knowledge.  
• Improvement in competency.                                          |
| 4.3 IT Infrastructure     | • Separate IT department.  
• Internet services as well as hardware and software maintenance.  
• Technological Innovations | • Good access to information superhighway. Working towards WIFI campus. |
| 4.4 Maintenance of campus Facilities | • Separate maintenance department for general maintenance.  
• Biomedical department does equipment maintenance.  
• AMC for equipments | • Prompt servicing and follow ups for smooth running of equipments and infrastructure. |
4.1 Physical Facilities

4.1.1 How does the institution plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization?
The institution strictly follows the AICTE, PCI, and TN MGR Medical University norms to have adequate infrastructure facility to conduct Pharmacy courses. There is a Maintenance Committee in the college to check the working conditions of the equipments. Yearly audit by Biomedical Department on equipments also help the institution to make available the necessary infrastructure facility to run the courses in pharmacy.
The planning is done on the basis of demand (number of students, number of practical) and coordination between Academic Committee and Maintenance Committee.
The proper and optimal utilization of the infrastructure is monitored by the respective lab in charge. The Academic Committee also audits the practical designed for the students covering the equipments available in the lab. Every lab has got job card.

4.1.2 Does the institution have a policy for the creation and enhancement of infrastructure in order to promote a good teaching-learning environment? If yes, mention a few recent initiatives.
Yes. To enhance the teaching learning process Power point presentation, LCD, establishment of in-silico simulation labs, Computer Aided Drug Discovery Labs have been initiated for promoting a good teaching-learning environment. The outcome of this learning process is encouraging.

4.1.3 Has the institution provided all its departments with facilities like office room, common room and separate rest rooms for women students and staff?
Yes. Provided.

4.1.4 How does the institution ensure that the infrastructure facilities are barrier-free for providing easy access to college and hospital for the differently-abled persons?
The Institution does not have any disabled students right now. However, to support the disabled persons the Institution has lifts, toilets and wheelchairs within the college premise. Ramps with railings and separate parking facilities are also provided for them.
4.1.5 What special facilities are available on campus to promote students interest in sports and cultural events/activities?

PSGCP has physical education department to encourage and foster sporting activities among the students and staff. PSGCP is situated in the health campus where it has got a separate ground for Basketball, Cricket, Tennis court and facilities for indoor games. A 1000 capacity centralized air conditioned auditorium is available to conduct cultural and other academic program. The Students Council, along with the different clubs, has been constituted to encourage cultural and other extracurricular activities. Annually sports and cultural meet (Sangamam) is conducted by the respective secretaries of the Students council. The best sports and cultural personalities are awarded at the college day function. Apart from this students have participated and won prizes on the competitions conducted at state level.

4.1.6 What measures does the institution take to ensure campus safety and security?

A Safety Officer is available to look into the safety issues. All buildings are equipped with fire fighting capabilities as well as multiple exits to ensure safe eviction during fire. Safety drills are also regularly conducted with various coded alarms. We also have a security system all over the campus to deal with security issues. CCTV cameras have been attached the images can be viewed in the administrative block.

4.1.7 Facility of Animal House

- Is animal house maintained as per CPCSEA guidelines?
  Yes, a common animal house facility to carry out experiments is maintained within the health campus as per CPSCSEA guidelines. Approved institutional Animal Ethical Committee is responsible to sanction, observe and restrict the animal usage. Medical college Principal is the Chairman of the committee. Two faculties from the Pharmacy College are the members in the committee.

- Whether records of animal house are maintained for learning and research activities?
  Animal Ethical Committee approves all animal research and prior permission is required from the committee before conducting any animal research. The issue of animals is recorded in the animal house as per the CPSCSEA norms. Form D has been maintained to show the utilization of animals.

- Does the animal house have approval for breeding and selling experimental animals as per CPCSEA guidelines?
  Yes
4.1.8 Provide the following details on the use of laboratories / museums as learning resources:

- **Number**- twenty laboratories in different specialties of Pharmaceutical sciences are functioning to conduct experiments related to Pharmaceutical Chemistry, Pharmaceutical Analysis, Pharmaceutics, Pharmacology, Pharmacy Practice and Pharmacognosy.

- **Maintenance and up-gradation**- Annual maintenance for the lab equipments is done by the respective companies. The infrastructure of the labs are inspected and maintained by the Maintenance department. Regular upgradation is done as per necessity of the departmental research and learning processes.

- **Descriptive catalogues in museums**- A museum (60 sq meters) as per the norms of PCI has been established and maintained which display pharmacy-related articles.

- **Usage of the above by the UG/PG students**- The labs, instruments, and other infrastructure have been utilized both by the UG and PG students to the maximum and the utility ranges from 80-100%.

4.1.9 Dentistry

- Dental chairs in clinic – specialty wise
- Total dental chairs
- Schedule of chair side teaching in clinics – specialty wise
- Number of procedures in clinics per month and year
- Mobile dental care unit
- Facilities for dental and maxillofacial procedures
- Dental laboratories

Not Applicable

4.1.10 Pharmacy

- **Pharmaceutical Science Laboratories**- PSGCP has required number of labs as per the regulation of PCI and AICTE to conduct B. Pharm, M. Pharm and Pharm D programs which covers subjects related to Chemistry, plants, drug formulations, drug pharmacological actions, clinical pharmacy, quality control and assurance and biotechnology..

- **Museum for drug formulations**- A model Hospital Pharmacy (66 sq meters) has been established where different formulations of the drug have been explained. This also functions as lab to teach Hospital Pharmacy subject.

- **Machine room**- A machine room attached with Department of Pharmaceutics is equipped with the basic Drug Manufacturing equipments
on a smaller scale. This facility helps to prepare different drug formulations where the students are trained in drug formulations studies.

- **Herbarium / crude drug museum** - A herbarium/crude drug museum has been established in the Department of Pharmacognosy with display of various herbs and crude drug products. A herbal garden on half acre of land has been established with aromatic plants which will be beneficial to the patients visiting our hospital.

- **Balance room** - Yes, the institution has a separate balance room in the Department of Pharmaceutical Chemistry.

- **Chemical store** - Yes, a central chemicals store, as per norms, with all the necessary chemicals to conduct experiments is available. A store-in-charge has been appointed in this regard to maintain the store records. Apart from central stores every lab has been provided with a storage facility and separately the stock has been maintained for smooth conduct of the labs.

- **Instrumentation facilities** - Adequate instrument facility has been available in all the labs as per the PCI norms. The detailed equipments costing more than RS 5 lakhs has been given in 4.1.16

- **Pilot plant** - The Pharmaceutics department has a work station for tablet/capsule manufacturing along with other basic pilot plant facilities. It is located in the machine room.

- **Computer aided laboratory** - The Pharmacology department has a well established chem/bio-informatics lab and pharmacological simulations are being conducted using computer software.

### 4.1.11 Yoga and Naturopathy

In the PSG IMS & R hospitals a separate facility for Yoga and Naturopathy is available. PSGCP utilizes this facility.

- **Demonstration hall with teaching facility to cater to the needs of the students**
  Yes

- **Diet Service Management Department**
  Yes

- **Yoga cum multipurpose hall for meditation and prayer**
  Yes

- **Solarium compatible for multimedia presentation**
  Yes

- **Mud Storage Unit**
  Yes

- **Outdoor Facilities - Walking track with reflexology segment**
  Yes
• Swimming Pool
  No
• Naturopathy blocks
  No

4.1.12 Homoeopathy
  • Museum and demonstration room (Homoeopathic Pharmacy Laboratory, Pathology Laboratory, Community Medicine, Homoeopathic Materia Medica, Organon of Medicine including History of Medicine)
  • Repertory with Computer Laboratory and Demonstration Room
  Not Applicable

4.1.13 Nursing
  • Nursing Foundation Laboratory
  • Medical Surgical Laboratory
  • Community Health Nursing Laboratory
  • Maternal and Child Health Laboratory
  • Nutrition Laboratory
  • Pre clinical Laboratories
  • Specimens, Models and Mannequins
  Not Applicable

4.1.14 Ayurveda
  • Herbal Gardens
  • Museum Herbarium
  • Panchakarma Facility
  • Eye Exercises Clinic
  • Kshara Sutra and Agni Karma Setup
  • Ayurveda Pharmacy
  Not Applicable

4.1.15 Does the institution have the following facilities? If so, indicate its special features, if any.
  • Meditation Hall
    Yes (common facility across the campus)
  • Naturopathy blocks
    Yes (common facility across the campus)
4.1.16 Provide details of sophisticated equipments procured during the last four years.
The list of equipments costing more than Rs 5L available in each department is given below

**Department of Pharmaceutics**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Name of the instrument</th>
<th>Make/ Company</th>
<th>Amount (in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>High Pressure cell Homogeniser</td>
<td>2014/9973</td>
<td>18</td>
</tr>
<tr>
<td>2</td>
<td>Malvern Zeta sizer</td>
<td>2011/MAL1063652</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>High speed Homogeniser</td>
<td>2012/27-01142</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Probe Sonicator</td>
<td>2010/56069AB</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Freeze Dryer</td>
<td>2009/139-01-10</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>Brooke field’s visometer</td>
<td>2008/E6528305</td>
<td>1.1</td>
</tr>
<tr>
<td>7</td>
<td>Tablet punching machine</td>
<td>2014/500805-0814</td>
<td>3.8</td>
</tr>
<tr>
<td>8</td>
<td>Dissolution Test Apparatus</td>
<td>2014/DT14490820</td>
<td>1.6</td>
</tr>
<tr>
<td>9</td>
<td>Disintegration Test Apparatus</td>
<td>2014/DI14150722</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>Rotary flask</td>
<td>2008/509089</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>Texture Analyzer</td>
<td>2014/41324</td>
<td>18</td>
</tr>
</tbody>
</table>

**Department of Pharmacology**

<table>
<thead>
<tr>
<th>S. No</th>
<th>Name of the equipment</th>
<th>Make/Company</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Laminar airflow</td>
<td>Lafil&amp;vertical</td>
<td>1,50,000</td>
</tr>
<tr>
<td>2</td>
<td>Co2 incubator</td>
<td>Mco5ac</td>
<td>5,30400</td>
</tr>
<tr>
<td>3</td>
<td>Analytical balance</td>
<td>Shmadzu</td>
<td>22,800</td>
</tr>
<tr>
<td>4</td>
<td>Inyertedtrinocular phase contrast microscops</td>
<td>Ae-21</td>
<td>2,50,000</td>
</tr>
<tr>
<td>5</td>
<td>Elisa reader with spectrophptometer</td>
<td>Muliscango</td>
<td>7,00,000</td>
</tr>
<tr>
<td>6</td>
<td>Semi dry plotting unit</td>
<td>Te toxp</td>
<td>1,19,048</td>
</tr>
<tr>
<td>7</td>
<td>Nikon inverted phage microscope</td>
<td>Ts-100</td>
<td>9,00,000</td>
</tr>
<tr>
<td>8</td>
<td>Refrigerated table top centri fuge</td>
<td>St16r</td>
<td>5,55,000</td>
</tr>
<tr>
<td>9</td>
<td>Co2 incubater</td>
<td>Stericyde</td>
<td>3,00,000</td>
</tr>
<tr>
<td>10</td>
<td>Thermo mixers 60mfors eppendorf 1.5ml</td>
<td>Eppendorf 1.5ml</td>
<td>2,00,000</td>
</tr>
<tr>
<td>11</td>
<td>Millipore direct -93 with pump</td>
<td>Fimal7096d</td>
<td>-</td>
</tr>
<tr>
<td>12</td>
<td>Micro wave appliance</td>
<td>Mc7688dd</td>
<td>-</td>
</tr>
<tr>
<td>13</td>
<td>Water bath</td>
<td>Guna</td>
<td>5140</td>
</tr>
<tr>
<td>S.No</td>
<td>Name of the equipment</td>
<td>Make and company</td>
<td>Cost</td>
</tr>
<tr>
<td>------</td>
<td>--------------------------------------------------------</td>
<td>------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>1</td>
<td>UV-Visible double beam spectrophotometer-01</td>
<td>1650 PC/ SHIMADZU</td>
<td>3.50</td>
</tr>
<tr>
<td>2</td>
<td>UV-Visible double beam spectrophotometer -02</td>
<td>1650 PC/SHIMADZU</td>
<td>3.50</td>
</tr>
<tr>
<td>3</td>
<td>HPLC – PDA -03</td>
<td>LC-10-ATVP/SHIMADZU</td>
<td>9.89</td>
</tr>
<tr>
<td>4</td>
<td>FTIR -04</td>
<td>FTIR8400S/SHIMADZU</td>
<td>21.86</td>
</tr>
<tr>
<td>5</td>
<td>HPLC – UV Visible -06</td>
<td>2489 WATERS</td>
<td>3.50</td>
</tr>
</tbody>
</table>
4.2 Clinical Learning Resources
In pharmaceutical sciences, PCI have introduced Pharm D program in 2008. Earlier in late nineties Pharmacy Practice program at PG level was introduced. Both the programs need clinical departments. PSGCP utilizes the clinical facility available in PSG Medical College to teach Clinical Pharmacy as well as Pharm D students.

4.2.1 Teaching Hospital
- **Year of establishment**- PSGCP is associated with PSG IMS & R MCI approved teaching hospital which is established in the year 1985. This is one of the major strengths of the institute. Because of this association PSGCP has able to take part in the pharmaceutical care.
- **Hospital institution distance**- The hospital is located within the health campus where the Medical College and other paramedical colleges including Pharmacy College are located.
- **Whether owned by the college or affiliated to any other institution?**
  PSGCP does not own the hospital. All the clinical teaching for Pharm D and Pharmacy Practice students have been carried out in PSG IMS & R hospitals which is also a unit under PSG and Sons’ Charities.
- **Are the teaching hospitals and laboratories accredited by NABH, NABL or any other national or international accrediting agency?**
  Yes, the hospital has got NABH accreditation and the labs have got NABL accreditation.
- **Number of beds**- 900
- Number of specialty services- 13
- Number of super-specialty services- 16
- Number of beds in ICU / ICCU / PICU / NICU- 21/6/10/24
- Number of operation theatres- 11
- Number of Diagnostic Service Departments- 5
- Clinical Laboratories- 5
- Service areas viz. laundry, kitchen, CSSD, Backup power supply, AC plant, Manifold Rooms, pharmacy services- Yes available
- Blood Bank services- Yes available
- Ambulance services- Yes
- Hospital Pharmacy services- Yes
- Drug poison information service- Yes
- Pharmacovigilance- Yes. A peripheral Pharmacovigilance centre is available in the Pharmacology department of the medical college.
- Mortuary, cold storage facility- Yes
- Does the teaching hospital display the services provided free of cost? Yes
- What is the mechanism for effective redressal of complaints made by patients?
  Grievance committee is established to address patient complaints. The complaints have been taken care of by the Hospital administration. PSGCP does not have role on this.
- Give four years’ statistics of inpatient and outpatient services provided.
  Department of Pharmacy Practice in the hospital does services for the inpatient and outpatients. Their service mainly provided in the area of the drug information, drug usage, drug storage, important side effects, drug interactions, drug food interactions, dosage forms and dose calculations. The number of patients attended to by the clinical pharmacists in the hospital for past four years is given below

<table>
<thead>
<tr>
<th>S. No</th>
<th>Year</th>
<th>No. of In-patients</th>
<th>No. of Out-patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2011</td>
<td>600</td>
<td>545</td>
</tr>
<tr>
<td>2.</td>
<td>2012</td>
<td>2890</td>
<td>2796</td>
</tr>
<tr>
<td>3.</td>
<td>2013</td>
<td>3369</td>
<td>3289</td>
</tr>
<tr>
<td>4.</td>
<td>2014</td>
<td>4778</td>
<td>4672</td>
</tr>
</tbody>
</table>
• Does the hospital display charges levied for the paid services? - Yes
• Are the names of the faculty and their field of specialization displayed prominently in the hospital?  
  Yes
• Is pictorial representation of the various areas of the hospital displayed in a manner to be understood by illiterate patients?  
  Yes
• Is there a prominent display of ante-natal, mother and child health care facilities?  
  Yes
• How does the hospital ensure dissemination of factual information regarding rights, responsibilities and the health care costs to patient and the relatives/attendants?  
  The hospital administration ensures the dissemination of the hospital related information to patients, their relatives and attendants. The information is available on the web page, hospital help desk and in public relation officer’s office.
• How does the hospital ensure that proper informed consent is obtained?  
  The Human Ethical Committee ensures that proper informed consent is obtained.
• Does the hospital have well-defined policies for prevention of hospital acquired infections?  
  Yes. There is an established Hospital Infection Control Committee which creates the policies and reviews the processes in this regard.
• Does the hospital have good clinical practice guidelines and standard operating procedures?  
  Yes
• Does the hospital have effective systems for disposal of bio-hazardous waste?
  Yes

• How does the hospital ensure the safety of the patients, students, doctors and other health care workers especially in emergency department, critical care unit and operation theatres? Are the safety measures displayed in the relevant areas?
  Yes. We have a separate safety department in the hospital. The major function of the safety committee is repeated auditing of the safety measures followed in the hospitals. Safety measures are displayed in the hospital and colleges premises. As part of the safety measures proper use of surgical, drugs, syringes and disposal of the waste also been taught to the employers.

• How are the Casualty services/Accident and Emergency Services organized and effectively managed?
  Through the Emergency Department, a code system has been established to ensure the effective management of emergencies.

• Whether the hospital provides patient friendly help-desks at various places.
  Yes

• Does the hospital have medical insurance help desk?
  Yes

• What are the other measures taken to make the hospital patient friendly?
  The public relation office department and hospital administrative authorities address all patient complaints and grievances.

• How does the hospital achieve continuous quality improvement in patient care and safety?
  Through the Quality Control department, regular audits and remedial measures are conducted to ensure quality improvement in patient care and safety.

• What are the measures available for collecting feedback information from patients and for remedial actions based on such information?
  There is a separate feedback form which patients can fill and deposit in feedback boxes and these are then processed by the HR department.

• How does the institution ensure uniformity in treatment administered by the therapists?
  Through the Hospital Policy making committees

• Does the institution conduct any orientation training program for AYUSH based paramedical staff?
  Not Applicable
4.2.2 What specific features have been included for clinical learning in the out-patient, bedside, community and other clinical teaching sites?
Clinical Pharmacists have been appointed in the hospital and they have been exposed to Drug Utilization study, Drug Information centre, and medication counseling for the inpatients and outpatients. In the Community Pharmacy at the hospital, they are taught on Prescription Auditing, Drug Dispensing and counseling the patients on drug utilization.

4.3 Library as a Learning Resource

4.3.1 Does the library have an Advisory Committee? Specify the composition of the committee. What significant initiatives have been implemented by the committee to render the library student/user friendly?
The Library is having an Advisory Committee named as “Library Committee” having the following members.

<table>
<thead>
<tr>
<th>S. No</th>
<th>Name and designation</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Dr. M. Ramanathan, Principal</td>
<td>Chairman</td>
</tr>
<tr>
<td>02</td>
<td>Mr. J. Mahendran, Senior Librarian</td>
<td>Secretary</td>
</tr>
<tr>
<td>03</td>
<td>Mrs. Maida Engels, Assistant Professor</td>
<td>Member</td>
</tr>
<tr>
<td>04</td>
<td>Mr. C. Vaiyana Rajesh, Assistant Professor</td>
<td>Member</td>
</tr>
<tr>
<td>05</td>
<td>Dr. KY. Kavitha, Associate Professor</td>
<td>Member</td>
</tr>
<tr>
<td>06</td>
<td>Mrs. C. Kalaiyarasi, Associate Professor</td>
<td>Member</td>
</tr>
<tr>
<td>07</td>
<td>Mrs. S. Vanitha, Assistant Professor</td>
<td>Member</td>
</tr>
<tr>
<td>08</td>
<td>Dr. Prudence Rodrigues, Associate Professor</td>
<td>Member</td>
</tr>
<tr>
<td>09</td>
<td>Mr. S. Hareenth, Student Representative – UG</td>
<td>Member</td>
</tr>
<tr>
<td>10</td>
<td>Mr. A. Praveen, Student Representative – PG</td>
<td>Member</td>
</tr>
<tr>
<td>11</td>
<td>Ms. Jeeva Nair, Student Representative – Pharm D</td>
<td>Member</td>
</tr>
</tbody>
</table>

Significant initiatives implemented
- Book lending period increased from 5 days to 7 days for UG level
- Book lending period increased from 5 days to 15 days for PG Level
- Library’s own Reading Hall timing revised (Up to midnight 12)
- Initiation taken to issue reference material on overnight basis
- Initiation taken to open library on all 365 days

4.3.2 Provide details of the following
- Total Area of the Pharmacy College Central Library: 6000 Sq.Feet
- Total seating capacity
  Inside the Library: 150
  Outside the Library (Own Book Reading Hall): 100
• Working Hours (on Working Days, On Holidays, before examination, during examination, during vacation)
  On working Days : 8 am to 9 pm
  On Holidays : 8 am to 9 pm
  Before examination : 8 am to 9 pm
  During examination : 8 am to 9 pm
  During vacation : 8 am to 9 pm

• Layout of the Library (Individual reading carrels, Lounge area for browsing and relaxed reading, IT zone for accessing e-resources)
  Enclosed

• Clear and prominent display of floor plan; adequate sign boards; fire alarm; access to differently-abled users and mode of access to collection

• Facility provided in the needy area

List of Library staff with their qualification
2. G.Vijayaram B.Com,
3. B.Prakasan +2 with C.L.I.Sc
4. K.Nagarani M.Com,
5. K.Saranya B.Sc (Computer Science)
6. R.Rajeswari +2 with C.L.I.Sc
7. S.Vijayalakshmi 10 with C.L.I.Sc
8. A.Jamunarani +2 with C.L.I.Sc
9. M.Radha +2 with C.L.I.Sc
10. P.Kanagaraj 8th std
11. P.Maniyan 10th Std
12. G.Ganapathy 10th Std
13. V.Krishnan Plus 2

4.3.3 Give details of the library holdings

• Print (Books, Back Volumes, Theses, Journals)
  Books : 8424
  Back volumes : 520
  Theses : 200
  Journals : 66

• Average number of books added during last three years : 1575

Non Print (CD-ROM/ DVD) : 125

Electronic (e-books, e-journals)
  e-books : 1025
  e-journals : 625

Book Bank – Not available

Question Bank : Available for the past 10 years
4.3.4 To What extent is ICT deployed in the Library? Give details with regard to

- Library automation: Partial
- Total number of computers for general access: 41 Nos
- Total number of Printers for general access: 02 Nos
- Internet bandwidth: 1GB
- Institutional Repository: Available
- Content management system for e-learning: Available
- Participation in resource sharing networks/Consortia: DELNET

4.3.5 Give details of specialized services provided by the library:
- Reference Service
- Reprography/Scanning Service
- Interlibrary Loan Service
- Information Deployment and Notification Service
- OPAC (Online Public Access Catalogue)
- Internet access facility
- Article(s)/Book (s) download Service
- Printout Service
- In-house/Remote access to e-resources (like Clinical Key with MDConsult, ProQuest Medical Library, Ovid special collection database, Micromedex)
- User Orientation
- Assistance in Searching Database
- DELNET Facility

4.3.6 Provide details of the annual library budget and the amount spent for purchasing new books and journals:

- Annual Budget: 23,00,000.00
- Amount spent for books: 10,96,000.00
- Amount Spent for Journals & Database: 12,04,000.00
- Note: salary for Library staff and maintenance are given through centralized budget

4.3.7 What are the strategies used by the library to collect feedback from its users? How is the feedback analyzed and used for the improvement of the library services?

- YES. By distributing questionnaire to the students and staff members, their feedback will be collected and the possible changes also will be made according to their requirements.
• Library meetings with the members and the class representative are conducted to know the functioning of the library and additional facilities required.

### 4.3.8 List of efforts made towards the infrastructural development of the Library in the last four years.
- E-Gate System introduced
- Barcode label introduced for computerized book issue and return
- Electromagnetic Sensormatic system introduced for controlling book theft
- CCTv camera installed inside and outside the library
- New online database (like Micromedex, ProQuest Medical Complete, Ovid Sp, Clinical Key with MD consult)
- A separate own book reading facility has been provided to PSGCP students within the Health Science campus central library complex.

**PSG College of Pharmacy - Central Library - Best practice of the library**
- User education program to motivate the students towards the library resources
- Feedback from the outgoing students (performance evaluation of library services and facilities by the outgoing students)
- Library committee for decision-making
- Extended working hours of the library before and after the class hours
- Current awareness service / news paper clippings
- Reprographic service
- Suggestion box (students requirements and suggestions)
- Interlibrary loan/ referral services
- Overnight issue of books/CDs
- Automated library circulation control
- Barcoded library circulation control
- E-gate register
- CCTV control
- Internet facility

### 4.4 IT Infrastructure
#### 4.4.1 Does the institution have a comprehensive IT policy regarding
- IT Service Management - Yes
- Information Security - Yes
- Network Security - Yes
- Risk Management - Yes
- Software Asset Management - Yes
- Green Computing - Yes (Own Hospital information system)
4.4.2 How does the institution maintain and update the following services?
Hospital Management Information System (HMIS)
Electronic Medical Records System (EMR)
Digital diagnostic and imaging systems including PACS
Yes. The above facilities are available and maintained in the hospital by the Department Information and Technology (IT). PSGCP does not have any role on this except accessing the facilities for the academic as well as research work.

4.4.3 Give details of the institution's computing facilities i.e., hardware and software.
- Number of systems with individual configurations
  The number of computers available in the college is 110. The computers are used for teaching, research and administrative purpose. The configuration for the individual computers are
  o I3 Processor with 4GB RAM
  o I5 Processor with 4GB RAM
  o Core 2 DUO with 2 GB RAM
- Computer-student ratio - 1:10
- Dedicated computing facilities
  All the sophisticated equipments are attached with computing facilities.
  LAN facility - Yes
  Wi-Fi facility - No
- Proprietary software
  WINDOWS/Forms 6i and ORACLE 118/MS OFFICE
- Number of nodes/ computers with internet facility - 20 in digital library
- Any other (specify)

4.4.4 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?
Every five years, the systems are upgraded and software acquired as per requirements.

4.4.5 Give details on access to online teaching and learning resources and other knowledge and information database/packages provided to the staff and students for quality teaching-learning and research.
Licensed versions of IOWA and MICROMEDEX online learning resources for staff and students are available.
4.4.6 What are the new technologies deployed by the institution in enhancing student learning and evaluation during the last four years and how do they meet new / future challenges?
The newer technologies used in the institution includes teaching using power point presentations, explaining the concepts through models, simulation lab facilities, mimic the pharmacological experiments, computer assisted teaching. Other than this the power point presentation of the teaching material is available in the intranet which students can access whenever it is required. An exclusive digital library is available in the institution. Students and teachers are having free access to this.

4.4.7 What are the IT facilities available to individual teachers for effective teaching and quality research?
Adequate IT facilities are available for teachers as well as access to SCIENE-DIRECT for conducting research.

4.4.8 Give details of ICT-enabled classrooms/learning spaces available within the institution. How are they utilized for enhancing the quality of teaching and learning?
Four class rooms and one seminar hall at central facility is available for integrated class room teaching. Wherever visual learning is required this facility has been used for teaching. The teaching and learning outcome through this method is found to be enhanced while explaining the concepts.

4.9 How are the faculty assisted in preparing computer-aided teaching-learning materials? What are the facilities available in the institution for such initiatives?
The IT department and the digital library in the health campus have adequate facilities for the faculty members to prepare class notes for teaching and learning process. Faculty prepares their class presentation in power point. The educational videos from You Tube also been downloaded to teach students.

4.4.10 Does the institution have annual maintenance contract for the computers and its accessories?
No. The IT Department of the institution looks into these matters.

4.4.11 Does the institution avail of the National Knowledge Network (NKN) connectivity? If so, what are the services availed of?
No

4.4.12 Does the institution avail of web resources such as Wikipedia, dictionary and other education enhancing resources? What are its policies in this regard?
The Institution uses resources from Wikipedia, YouTube and other sources for education. There are no specific policies for using these open resources. However IT department blocks some of the web pages which are not relevant for education process.

4.4.13 **Provide management details on the provision made in the annual budget for the update, deployment and maintenance of computers in the institution.**

The annual budget allocated for the computers and IT maintenance are given below

<table>
<thead>
<tr>
<th>Year</th>
<th>Maintenance / purchase cost in Rs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>1,83,238</td>
</tr>
<tr>
<td>2012</td>
<td>4,81,337</td>
</tr>
<tr>
<td>2013</td>
<td>5,61,891</td>
</tr>
<tr>
<td>2014</td>
<td>4,88,869</td>
</tr>
</tbody>
</table>

4.4.14 **What plans have been envisioned for the transfer of teaching and learning from closed institution information network to open environment?**

There is a proposal for a curriculum web portal with individual student login.

4.5 **Maintenance of Campus Facilities**

4.5.1 **Does the institution have an estate office / designated officer for overseeing the maintenance of buildings, class-rooms and laboratories?** If yes, mention a few campus specific initiatives undertaken to improve the physical ambience.

There is a Maintenance department to oversee the maintenance of buildings and classrooms. Lab equipments are maintained by the Biomedical Department. There is a green initiative across the campus to improve the physical ambience. Restoration works like painting etc are also done from time to time.

4.5.2 **How are the infrastructure facilities, services and equipments maintained? Give details.**

Biomedical Department conducts regular audit on equipments and provides services along with annual maintenance of all equipments by the concerned companies from whom these equipments have been procured. The Institutional Maintenance committee will report the equipment related issues to the Biomedical department for necessary action.

4.5.3 **Has the institution insured its equipments and buildings?**

Yes

*Any other information regarding Infrastructure and Learning Resources which the institution would like to include.*
Criterion V
Student Support and Progression
## Criteria – V Student support and progression

<table>
<thead>
<tr>
<th>Key aspects</th>
<th>Process/Approach</th>
<th>Outcome</th>
</tr>
</thead>
</table>
| **5.1 Student mentoring and Support** | • Constitution of a Mentorship program.  
  • Individual students assigned to a faculty mentor.  
  • Student council for student welfare.  
  • Heavy emphasis placed on extracurricular activities.  
  • Independence given to organize events | • Counseling, advice, academic progression, and focus on weak students. |
| **5.2 Student progression** | • Initiating career counseling in 3rd year  
  • Individual attention  
  • Student problem redressal.  
  • Guidance through Industry Institution Initiation | • Well rounded and confident students  
  • Career oriented and joining for higher education. |
| **5.3 Student participation** | • Independence given to students for running of extracurricular activities.  
  • Life schooling. | • Enhancement of student communication skills and personality development.  
  • Responsibility, Managerial skill development. |
5.1 Student Mentoring and Support

5.1.1 Does the institution have a system for student support and mentoring? If yes, what are its structural and functional features?
Yes, the institution has students mentoring and support. Ten students have been allocated from different classes to one faculty. Mentorship involves academic assessment, identification and nurturing of individual talents and counseling.

5.1.2 Apart from classroom interaction, what are the provisions available for academic mentoring?
Tutorial hours are allocated as part of the timetable for each year. Depending on the free hours 1-3 tutorial class per week is allocated for the students. Other than this the teacher has given free hand to make observation on student attitude during practical class. The student can also meet the principal during working hours to discuss on the developmental activities and career opportunities.

5.1.3 Does the institution have any personal enhancement and development schemes such as career counseling, soft skills development, career-path-identification, and orientation to well-being for its students? Give details of such schemes.
The institution has clubs and training workshops. The student can take part in the club activities depending on their interest. The PSGCP have constituted the different clubs such as Science Club, Music and Dance Club (MAD club), Chemozhli Perravai (Tamil Mandram), Nature Club. Soft skills/personality development training programs are also conducted. All these activities are monitored by Student’s Welfare Committee.
The career path development is concentrated by Industry Institute Interaction Cell. Every month a personality from a field is invited to address the students. The interaction is mainly focused on career development and employment opportunities.

5.1.4 Does the institution have facilities for psycho social counseling for students?
Yes. The Department of Psychiatry, PSG Hospitals offers this service through clinical psychologist. Student who needs psycho-social counseling are taken to the hospital. Apart from this through mentorship students are given counseling.

5.1.5 Does the institution provide assistance to students for obtaining educational loans from banks and other financial institutions?
Yes. The necessary documents like bonafide certificate, fee structure, affiliation orders from the councils required for applying bank loan are provided by the office. Other than this scholarships provided by other NGOs are availed by the students for
example, Vijayalakshmi Trust scholarship, Chief Minister scholarship for Farmer’s students and Tea Board scholarship etc.

5.1.6 Does the institution publish its updated prospectus and handbook annually? If yes, what are the main issues / activities / information included / provided to students through these documents? Is there a provision for online access?

A student handbook is available at the beginning of each calendar year, which includes university regulations regarding the course and exams. It also includes information like holidays and schedule for internal exams. The information related to functioning of various committees such as Anti-Ragging, Redressal committee (Evaluation process), Disciplinary committee and Student Grievances and Redressal committee are included in the academic calendar.

5.1.7 Specify the type and number of institution scholarships / free ships given to the students during the last four years. Was financial aid given to them on time?

Institution provides research scholarship to PhD students. Three scholarships are available for the students. The scholarship is awarded for a maximum of three years. Currently three students are each from Department of Pharmaceutics, Department of Pharmacy Practice and Department of Pharmacology are availing the scholarship. The scholarship is given by cheque every month on time.

5.1.8 What percentage of students receives financial assistance from state government, central government and other national agencies?

Four M Pharm students are receive AICTE Scholarship. The percentage of B. Pharm students receiving financial assistance from state and central governments are given below
5.1.9 Does the institution have an International Student Cell to attract foreign students and cater to their needs?
A separate cell does not exist in this regard. However, foreign students are admitted to all programs through the Alumni link and website.

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B.Pharm</td>
<td>M Pharm</td>
<td>Pharm. D</td>
<td>B.Pharm</td>
</tr>
<tr>
<td>Internatio</td>
<td>-</td>
<td>-</td>
<td>1/60</td>
<td>-</td>
</tr>
<tr>
<td>nal students</td>
<td></td>
<td></td>
<td>1/30</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>B.Pharm</td>
<td>M Pharm</td>
<td>Pharm. D</td>
<td>B.Pharm</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>6/72</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4/72</td>
<td>1/30</td>
</tr>
</tbody>
</table>

5.1.10 What types of support services are available for

- **Overseas students**- Every year few students from foreign origin and NRI students join PSGCP for education. Institution supports these students in visa processing and obtaining eligibility certificates from the University.
- **Physically challenged / differently-abled students**- PSG health campus is eco and disabled friendly campus. Lift and ramp facilities with railing, separate parking space etc is provided for these students. In the institute disabled students are not studying.
- **SC/ST, OBC and economically weaker sections**- the students admitted through reservations are eligible to get scholarships from the government. Institution helps these students to get their scholarships. Additional emphasis is given through mentorship on language, creating a conducive and comfortable environment for these students.
- **Students participating in various competitions/conferences in India and abroad**- Students are constantly encouraged to attend and participate in various competitions/conferences in India and abroad. The students who are attending the conferences/competitions are given permission. Travel allowance is provided for the students attending the competitions.
- **Health centre, health insurance etc.**- PSGCP is attached with medical college hospital. During the admission health checkup for all the students are conducted at free of cost. All the students are covered under health insurance scheme of the hospital (Personal accidental policy coverage up to RS 1 lakh).
- **Skill development (spoken English, computer literacy, etc.)**- PSGCP identifies the student’s skill and encourages them to further develop it. The
medium of instruction in the class is English. For students who are not able to follow the language separate classes for Spoken English have been organized in first year. As part of the curriculum UG students have classes on Computer literacy. In final year there is an intensive communication skills development program for two weeks. The outcomes of these events are promising and students are able to progress well in their career.

- **Performance enhancement for slow learners** - Identification of slow learners is done based on the entry level assessment and learning outcome. To improve the performance of the slow learners continuous assessment tests, group formation with student leaders are constituted and they are directly controlled by the concerned faculty to monitor them.

- **Exposure of students to other institutions of higher learning/corporates/business houses, etc.** - The students in the final year and Pharm D students interns are given a chance to have an exposure other than college training to outside institutions. Hence all the students of fourth year B. Pharm will undergo two weeks training in any one of the following areas like industry/clinical research/hospital pharmacy/marketing training. PhD students are given a chance to work in the lab of other institutions. One of the research scholars worked for two months in USA to learn newer techniques in the field of molecular research.

- **Publication of student magazines, newsletters** - There is a college magazine PHARMA QUINTESSENCE and a newsletter from Department of Pharmacy Practice PSGDIC (quarterly) are published.

5.1.11 Does the institution provide guidance and/or conduct coaching classes for students appearing for competitive examinations (such as USMLE, PLAB, GPAT, NCLEX, CGFNS, IELTS)? If yes, what is the outcome?
PSGCP provide coaching and awareness programs for GPAT. Students have been guided for GRE and TOEFL. The institution training students for GRE and TOEFL have been invited to PSGCP to bring awareness among students.

5.1.12 Mention the policies of the institution for enhancing student participation in sports and extracurricular activities through strategies / schemes such as

- **Additional academic support and academic flexibility in examinations** - Institution strongly believes in extracurricular activities to improve physical and mental strength. To encourage and support the student participation, special rewards are constituted. Students have participated in inter and intra collegiate events and won prizes. The attendance of the participating students has been considered for calculations. The students those who are not able to attend their internal exams re-examination have been organized.
PSGCP does not have control on their final exams. Apart from attendance flexibility additional class are also designed for these students.

- **Special dietary requirements, sports uniform and materials** - Sports uniform is provided to the students in the first year of their studies and sports materials are available at the sports ground.
- **Any other (specify)** - Not applicable

5.1.13 Does the institution have an institutionalized mechanism for student placement? What are the services provided to help students identify job opportunities, prepare themselves for interviews, and develop entrepreneurship skills?

PSGCP has placement cell. Institution provides soft skills training to help students in interview preparation. The Institution also arranges for campus interviews through the placement cell. An Entrepreneurial cell to foster entrepreneurship among the students has been constituted.

**Institute Industry Initiative** program has been started to improve the percentage of student placements in industries and update the current trends in the pharma field. The goal was set to bring awareness to the undergraduate, post-graduate and Pharm D students about the requirements to enter into that particular industry and also to know the expectation of the industry from the students.

The policy of the college is to prepare and update the list of Industry experts spreading across various disciplines, such as pharmaceutical, clinical trial organisations, Intellectual property management, data mining, medical coding, medical writing, medical transcription, clinical pharmacy, pharmacy practice, marketing and business development, biotechnology, nutraceuticals, food and beverage and others.

It is proposed to conduct interactive session with students and industry experts on 3rd Saturday or Friday of every month so that regular classes of the students will not get affected.

Further it was proposed to arrange for a short training program or impart some additional knowledge on a particular topic to enable the students to face the job market with confidence.
## Interactive Sessions held

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>27.01.2014</td>
<td>Dr. Saravanan Vice-President Xertz Solutions, Chennai</td>
<td>Career Opportunities and Training for Pharmacovigilance</td>
</tr>
<tr>
<td>15.02.2014</td>
<td>Mr. Appaswamy GM-Marketing-Asia-Pacific (Heart Valve Division) TTK Healthcare Limited, Chennai</td>
<td>Career Opportunities in Healthcare Sector for Paramedics</td>
</tr>
<tr>
<td>18.04.2014</td>
<td>Mr. Shankar, AGM Delvin Formulations New No. 25, 12th Cross Street Shastri Nagar, Adyar, Chennai-600 020</td>
<td>Career Opportunities in pharmaceutical industry for Pharmacy Graduates</td>
</tr>
<tr>
<td>21.06.2014</td>
<td>Mr. K. Thangaraj, M.Com, PGDBA(Ph.D) General Manager Genius Nature Herbs P. Ltd. Pachapalyam, Coimbatore</td>
<td>Industry Expectations from Pharmacy Graduates</td>
</tr>
<tr>
<td>22.08.2014</td>
<td>Mr. John Jeyaseelan Manager Microbiological Laboratory 12-A, Cowley Brown Road (East) R.S. Puram, Coimbatore</td>
<td>Pharma Career Prospects and Guidance for Facing Interview</td>
</tr>
<tr>
<td>17.10.2014</td>
<td>Mr. J. Venkatesh, M.Pharm Manager-Quality Assurance Auro Lab No.1, Veerapanjan Road Sivagangai Road Gandhi Nagar, Madurai-625 020</td>
<td>Career Prospects in Pharmaceutical Industry</td>
</tr>
<tr>
<td>20.11.2014</td>
<td>Manager, ELCOM-GRE Toppers - Head Office No 1132-36, 3rd Floor, Natraj Medicare Building, Opp Central Theater, Mettupalayam Road,</td>
<td>Higher Studies Abroad-An Overview</td>
</tr>
</tbody>
</table>
5.1.14 How does the institution provide an enriched academic ambience for advanced learners?
Advanced learners are identified based on interaction and expression of self interest. They are given additional coaching and encouraged to participate in research and developmental activities. The institution has state-of-the-art research facility where the interested students can take part in the research as part of their curriculum activity. The students are also encouraged to attend seminar and conferences.
Students have received awards for their academic excellence at university level. The following students have received university gold medal for securing university first rank under TNMGRMU:

<table>
<thead>
<tr>
<th>Year</th>
<th>Student Name</th>
<th>Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>Mr. A. Justin</td>
<td>M Pharm (Pharmacology)</td>
</tr>
<tr>
<td>2012</td>
<td>Ms. Kabila</td>
<td>Pharm D (PB)</td>
</tr>
<tr>
<td>2014</td>
<td>Mr. Venakteshwara Rao</td>
<td>Pharm D</td>
</tr>
</tbody>
</table>

5.1.15 What percentage of students drop-out annually? Has any study been conducted to ascertain the reasons and take remedial measures?
A 3% dropout in the Pharm D program was observed due to personal reasons. No dropouts have been observed in the B Pharm program.

5.1.16 Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus during the last four years).
Twenty three students have been selected through campus interview between 2011 and 2014.

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Pharm</td>
<td>15</td>
<td>-</td>
<td>02</td>
<td>06</td>
</tr>
<tr>
<td>Pharm D</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>M Pharm</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Totally three companies have visited namely
1. Abbott Health Care Pvt Ltd, Mumbai
2. Point Perfect Transcription Services (India) Pvt Ltd, Coimbatore
3. Alembic Pharmaceuticals Ltd, Vadodara, Gujarat

5.1.17 Does the institution have a registered Alumni Association? If yes, what are its activities and contributions to the development of the institution?
Yes. PSG CP has an Alumni Association which was started in the year 2005. Currently more than 600 students have registered their names in the association. Till date 6 Alumni meets were organized at PSGCP. Office bearers of the association are selected by nomination whenever it is needed.

Members of Alumni Association (2015)

*President:* Dr. M Ramanathan, Principal, PSGCP
*Vice President:* Mr. Sivapathavelan
*General Secretary:* Mr. B Balaji
*Joint Secretary:* Mr. N Rajesh Kumar
*Treasurer:* Mr. Subash
Executive Committee Members:
Mr. R Sivakumar
Mr. K Manikandan
Mr. Chandra mouli
Mr. Prabhu
Mrs. T Gayathri
Mr. Divakar
In the last 5 years, three Alumni meetings have been organized on the following dates:

- **February 8th, 2015**

- **April 5th, 2014**
September 10th, 2011 (Decennial year celebrations)

The PSG CP alumni association does activities to achieve the following objectives:

- To encourage the members to take an active interest in the activities and progress of the Alma matter.
- To award Scholarship and Aid to the poor students of the college
- To prove assistance and facilities for all-round development of the college.
- To promote and encourage friendly relations among all the members of the Association.
- To keep Alumni informed about the Alma Mater.
- To promote career guidance, interaction with Industry and continuing education and also,
- To serve the common cause of the member's interest in general.

### 5.1.18 List a few prominent alumni of the institution

<table>
<thead>
<tr>
<th>Name</th>
<th>Current Position</th>
</tr>
</thead>
</table>
| Dr. Saravanan S             | Postdoctoral Research Scientist  
Goethe-Universitat Frankfurt, Germany                                      |
| Ms. Sobana G                | Drug InspectorGovernment official, Tamil Nadu Government                          |
| Mr. Thomas Mathew Kokad     | Entrepreneur - Kokad Pharmaceuticals, Cochin Kerala                               |
| Ms. Pooja Parameswaran      | Research Associate, Berg Biosystems – Boston, Massachusetts, USA                  |
| Mr. Kaviarasu M             | Chairman & CEO  
Valli Pharma Industries, Coimbatore                                              |
| Mr. Velayutham Kanniappan   | Technical Operation Scientist  
Novel/Gavis, Somerset, New Jersey, USA                                         |
| Ms. Mariam Alexander        | Entrepreneur - Sangrose Pvt Ltd                                                  |
| Mr. Abraham Mathew Kandathil| Legal Associate  
Samvad Partners                                                                 |
| Ms. Jeslyn Mary Joseph      | Product Support Specialist - Al-Essa Group, Kuwait                               |
| Ms. Ruby Mathew Eappen      | Deputy Quality Assurance Manager  
Interport Ltd., Croydon, Greater London, UK                                       |
| Mr. R. Vigneshwar           | Clinical Dictionary Analyst - Pharmaceutical Companies of Johnson and Johnson, USA|
5.1.19 In what ways does the institution respond to alumni requirements?
Generally the alumni contact us in connection with issuance of certificates, to inform about their promotion, and/or changeover of the company. For their requests for reference letters, and transcript requests the Institute responds immediately with details. During annual Alumni meetings and interactions they share their valuable feedback on current trends in industry.

5.1.20 Does the institution have a student grievance redressal cell? Give details of the nature of grievances reported. How were they redressed?
PSGCP has Grievance Cell where the students can get their grievances resolved. Students write their grievances and drop them in the complaint drop box. Grievances like improvement in sanitary facilities, water quality, and electricity supply addressed immediately by the Maintenance Committee in the college as well as by the Engineering Department in the campus. No other grievances are reported by the students.

5.1.21 Does the institution promote a gender-sensitive environment by (i) conducting gender related programs (ii) establishing a cell and mechanism to deal with issues related to sexual harassment? Give details.
PSG health campus has a common Sexual Harassment Cell to address gender related issues. The committee will take appropriate action on the issue. Two faculties of PSGCP are members in this committee. As the college has more than 50% female students the institution is conscious of a healthy gender sensitive environment and at the same time no specific gender related programs are conducted. To address faculty related issue in PSG health campus a separate committee has been constituted. Two of our faculty members are there in the committee.

5.1.22 Is there an anti-ragging committee? How many instances, if any, have been reported during the last four years and what action has been taken in these cases?
The institution has an Anti-Ragging committee. The details of the committee were given in the academic calendar. No instances of any ragging have been reported in the last four years. Every year undertaking from parent and student has been taken at the time of admission stating he/she will not indulge in the ragging.

5.1.23 How does the institution elicit the cooperation of all its stakeholders to ensure the overall development of its students?
A Parent Teacher Cell has been constituted to keep regular communication with parents with respect to the progress of their wards. Parents are also encouraged to give their inputs regarding their wards and also other suggestions for development of the institution.
5.1.24 How does the institution ensure the participation of women students in intra and inter-institutional sports competitions and cultural activities? Provide details of sports and cultural activities where such efforts were made.
PSGCP organizes sports meet (Kreeda) and cultural event (Sangamam) every year through the Students council at the Intra college level and allows the participation of students at the Inter college events. Sports events are conducted through Physical Education department. PSGCP has conducted a Regional sports meet named ALMIDON – 2011. This is a inter-college sports meet where all pharmacy colleges of Coimbatore and Erode district participated.
Cultural meet
Sangamam the intra college cultural meet has been conducted every year with many cultural activities.

5.1.25 Does the institution enhance the student learning experience by providing for rotation from the teaching hospital to the community and district hospital during the internship period?
Pharm D students during the one year internship period interact with the community and attend community pharmacy programs at community hospitals at Vedapatti and Karadivavi.

5.1.26 Does the institution has immunization policy for its students and staff?
Yes, it is done

5.1.27 Does the institution give thrust on students growth in terms of:
- Physical development- The common gym, Sports Club take care physical development of the students.
- Emotional control- Counseling cell and mentorship system helps in emotional control
- Social dimension and- NSS activities
- Spiritual growth- Moral classes are provided for students

5.2 Student Progression

5.2.1 What is the student strength of the institution for the current academic year? Analyze the Program-wise data and provide the trends (UG to PG, PG to further studies) for the last 4 years
Total strength for the current academic year (2014 -2015)
B Pharm - 58
M Pharm - 30
Pharm D - 30
Pharm D (PB) - 4
UG to PG (2011 to 2014) – 75 students
PG to further studies (2011-2014) – 09 students- Pharmaceutics & Pharmacology

5.2.2 What is the number and percentage of students who appeared/qualified in examinations for Central/State services, Defense, Civil Services, etc.?
Six graduates have qualified for the post of Tamil Nadu State Drug Inspector and one graduate is working with the Postal Department.

5.2.3 Provide category-wise details regarding the number of post graduate dissertations, Ph.D. and D.Sc. theses submitted/accepted/rejected in the last four years.

<table>
<thead>
<tr>
<th>Department</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG dissertations- Accepted</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharmaceutics</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>10</td>
<td>10</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Pharmaceutical Analysis</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Pharmacy Practice</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>PhD – submitted/ accepted</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>DSc</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

5.2.4 What is the percentage of graduates under AYUSH programs employed in the following?

- AYUSH departments/Hospitals,
- Multinational companies,
- Health clubs,
- Spas,
- Yoga wellness centers,
- Yoga studios,
- Health clubs,
- Own Yoga cubes/studios?
Not Applicable
5.3 Student Participation and Activities

5.3.1 List the range of sports, cultural and extracurricular activities available to students. Furnish the program calendar and provide details of students' participation.

PSGCP conducts sports and cultural meet every year. In the sports meet the students participate in the games and field events. Similarly cultural competition will be held in the month of March under the title *Sangamam*. To add on the extracurricular activities separate competitions in music, art and painting are carried out by the MAD Club. *Tamil mandram (Chemozhi Perravai)* brings out hidden talents among the regional students. Further to promote extracurricular activities intra and inter collegiate sports and cultural meets are conducted.

Students for the sports and cultural meet have been divided into four groups based on colour. Red worrier, Black panthers, White ninjas, Striking blue. The events are divided as onstage and off stage. The entry and participation of students were based on each team.

Based on the above the following list of participation among students are furnished.

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
<th>Students participated</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Boys</td>
</tr>
<tr>
<td>2011</td>
<td>Sports meet</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Sangamam’11</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>MAD club</td>
<td>6</td>
</tr>
<tr>
<td>2012</td>
<td>Sports meet</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Sangamam’11</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>MAD club</td>
<td>8</td>
</tr>
<tr>
<td>2013</td>
<td>Sports meet</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Sangamam’11</td>
<td>120</td>
</tr>
<tr>
<td></td>
<td>MAD club</td>
<td>9</td>
</tr>
<tr>
<td>2014</td>
<td>Sports meet</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>Sangamam’11</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>MAD club</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Chemmozhi Perravai</td>
<td>25</td>
</tr>
</tbody>
</table>
5.3.2 Give details of the achievements of students in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National /International, etc. during the last four years.

2011

Ms. Shahanaz S.A III B Pharm won 2nd prize in the state level Elocution competition conducted among pharmacy colleges during National Pharmacy week celebrations at TNMGRMU, Chennai in November 2011.

Ms. Aemi Cherian, Ms. Kabila, and Mr. Britto (M Pharm & Pham D students) got 4th place in the state level Quiz competition conducted among pharmacy colleges during National Pharmacy week celebrations at TNMGRMU, Chennai in November 2011.

K. Siddharth secured 3rd prize for his research work presentation titled “Formulation and evaluation of felodipine by liquisolid compact technique” at National Scientific Seminar on Recent Frontiers in Pharmaceutical Sciences at College of Pharmaceutical Sciences, Medical College, Thiruvananthapuram held on 15th Nov 2011.

Mrs. Porchelvi secured Best Poster award for her research paper presentation titled “Impact of Pharmacist role in Medication Error reporting – A prospective study” in the National Conference on Preclinical and Clinical Challenges in Drug Discovery held on 10th & 11th November 2011 at Kovai Medical Center and Hospital, Coimbatore

Ms. Rajalakshmi secured 2nd prize for her research work presentation titled “Formulation and Physicochemical evaluation of Fexofenadine hydrochloride transdermal patches” at National Scientific Seminar on Recent Frontiers in Pharmaceutical Sciences at College of Pharmaceutical Sciences, Medical College, Thiruvananthapuram held on 15th Nov 2011.

2012

Mr. A. Justin is the University topper in M Pharm (Pharmacology) specialty and received Gold Medal from TNMGRMU, Chennai for his academic excellence.

Mrs. Shalini Devi Penmetsa secured the first prize for the research paper titled “Folate Conjugated Solid Lipid Nanoparticles for Targeting cancer cell”, in the ICMR Sponsored National Seminar on Novel concepts in Drug Delivery systems and Devices held at Sankarlingam College of Pharmacy, Sivakai on 9th and 10th April 2012

Mrs. Shalini Devi Penmetsa’s M. Pharm thesis titled “Folate Conjugated Solid Lipid Nanoparticles for Targeting cancer cell”, done under the guidance of Dr. V. Sankar, has been selected as best M. Pharm Pharmaceutics thesis in the Sangrose PSG Pharma Best Thesis Award for the year 2012.
Mr. A. Sudheer, II- M.Pharm student’s project titled "Evaluation of neuroprotective effect of telmisartan and nimodipine in middle cerebral artery occlusion (MCAo) induced focal ischemia in rats" completed under the guidance of Dr. M. Ramanathan & Mr. A. Justin secured second rank with a cash award of Rs 7,000 from the Tamil Nadu Pharmaceutical Welfare Trust, Chennai.

2013
B Mahendran (Ist prize) and SC Baviya (IIInd prize) of IV B Pharm won cash awards for the best questions and effective interaction during the interactive session of the Industry Student Interaction Workshop conducted at PSGCP on 02.03.2013.

Fifth year Pharm D Students Mr. MSS Subrahmanyam secured 1st place in Best Poster Presentation and Ms. Kshama Indoria secured 1st place in Best Oral Presentation, at “National Conference on Patient reported outcomes in Pharmacovigilance” conducted on 24th March 2013 at Ananthapur, AP.

L Gowtham of Final Year B Pharm secured the 149th rank at the All India Graduate Pharmacy Aptitude Test (GPAT) held on 18th of May 2013. Ms Grace Mary John of 4th Pharm D and H.Ravikiran of 4th B Pharm were crowned as the female and male voice of PSGCP at the inaugural ‘Voice of PSGCP” music competition held by the PSGCP MAD club on the 7th of April 2013.

M Pharm student S Karthik under the guidance of S.M. Habibur Rahman, Assistant Professor, Department of Pharmaceutics has got 1st place and won cash award Rs10000 and a certificate in Pharmaceutics research project competition conducted by Tamil Nadu Pharmaceutical Welfare Trust for 2013-14.

Final year Pharm D student G. Manas Kumar, under the guidance of Dr. T. Tamilselvan, Assistant Professor, Dept of Pharmacy Practice, has got 3rd place and won cash award Rs 6000 and a certificate in Pharmacy Practice research project competition conducted by Tamil Nadu Pharmaceutical Welfare Trust for 2013-14.

Final year B Pharm student Thivya Nandhakumar won the 4th prize in the state level annual elocution competition conducted by the IPA at Vinayaga College of Pharmacy, Salem

2014
Mr Siram Karthik, research scholar won the first prize in the oral presentation of ICODD-2014. In the same event Mr. RM Arun, M Pharm student, won the first prize in the poster section. Ms Shruthi Sukumar, M Pharm student and Mr Anoop Santhosh, Pharm D student, won the second and third prize respectively for the poster section.

Mr Vamshi Krishna Karanam, M Pharm student, won the second prize for best oral presentation at PHARMA TRANSPRIERE international conference held at Creative Educational Society’s College of Pharmacy, Kurnool, AP on January 31 2014.
The two member team of Ram Pravin Kumar (Second B. Pharm) and Vivekanandan (Second B. Pharm) were the winners of the PSGCP Science Quiz competition.

R Nithya, M Pharm (Pharmaceutics) student, under the guidance of Mr. Habibur Rahman, Associate Professor, won a scholarship Rs 6000 for M Pharm Research thesis from TN Pharmaceutical Welfare and Science Trust on 22 November 2014.

Grace Mary John, Brejeet KV, Elen Charly, Pharm D students won II Prize (Rs. 9000 cash and certificate) from Tamil Nadu Pharmaceutical Welfare and Science Trust on 22 November 2014 for their research project under the guidance of Mrs. Prudence A Rodrigues, Associate Professor, Department of Pharmacy Practice.

Anna John Viany, Parul Elsa Thomas, Vivek Thomas John, Pharm D students won III Prize (Rs. 6000 cash and certificate) from Tamil Nadu Pharmaceutical Welfare and Science Trust on 22 November 2014 for their research project under the guidance of Mr. A. Justin, Assistant Professor Department of Pharmacy Practice.

5.3.3 Does the institution provide incentives for students who participate in national / regional levels in sports and cultural events?
The students are provided with on duty status as well as travel expenses to participate in sports and cultural events.

5.3.4 How does the institution involve and encourage its students to publish materials like catalogues, wall magazines, college magazine, and other material? List the major publications/materials brought out by the students during the last four academic sessions.
PSGCP publishes annual college magazine PHARMA QUINTESSENCE. It is a compilation of student achievements and released by students during the College Day celebrations. Student editor works on this under the guidance of a staff editor. Catalogues on social themes are prepared by NSS team. Short movies on various social issues are also made by the students. Wall papers through Science Club activities are made by students.

5.3.5 Does the institution have a Student Council or any other similar body? Give details on its constitution, activities and funding.
Yes. The institution has a Student Council. Students nominate from themselves for the various posts in the council.
That is, the Student’s council is an association comprised of representatives elected by the students of PSGCP. The council was established in 2008 under the guidance of the faculty and runs under the basic principle of “Students Welfare”. The council was constituted to encourage the students to take part in extracurricular activities other than their dedication to academics. It conducts annual college activities like culturals, sports, college day, and also organizes student’s welfare and
developmental programs such as seminars, welfare activities, personality development, and career opportunity activities. These activities enable the student to develop leadership qualities, organization and communication skills. Care is also taken that the maximum number of students takes part either directly or indirectly in the functioning of the Students Council.

5.3.6 Give details of various academic and administrative bodies that have student representatives in them. Also provide details of their activities.
All student class representatives are linked with the Academic and Library committees. At the administrative level, students are represented in the Anti-ragging committee. In IQAC, two students are nominated. In the hostel management, two student representatives are nominated from our institution.

<table>
<thead>
<tr>
<th>Name of the student</th>
<th>Particulars</th>
<th>Name of the committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Class Representatives</td>
<td>I, II, III &amp; IV year B Pharm/ Pharm D</td>
<td>Academic</td>
</tr>
<tr>
<td>Ref. Page No.113</td>
<td>Library</td>
<td></td>
</tr>
<tr>
<td>Class Representatives (8)</td>
<td>III &amp; IV year B Pharm/ Pharm D</td>
<td>Anti Ragging</td>
</tr>
<tr>
<td>President &amp; Secretary of Students council</td>
<td></td>
<td>IQAC</td>
</tr>
<tr>
<td>Hostel students (Male – 2 members, Female - 2 members)</td>
<td>IV B Pharm IV Pharm D</td>
<td>Hostel</td>
</tr>
</tbody>
</table>

Any other information regarding Student Support and Progression which the institution would like to include.
Criterion VI
Governance, Leadership and Management
## Criteria – VI Governance, Leadership and Management

<table>
<thead>
<tr>
<th>Key aspects</th>
<th>Process/Approach</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1 Institutional Vision and Leadership.</td>
<td>• Quality objectives and clearly stated vision mission</td>
<td>• Decentralization of governance</td>
</tr>
<tr>
<td></td>
<td>• Established Governing Council</td>
<td>• Active participation of faculty in governance</td>
</tr>
<tr>
<td></td>
<td>• Established organization structure</td>
<td>• Responsible for their role &amp; commitment to organisation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2 Strategy Development and Deployment.</td>
<td>• Governing council formulates policies in academics and research</td>
<td>• Clear cut direction for future growth.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.3 Faculty Empowerment Strategies.</td>
<td>• Clear recruitment and promotional policies, performance based appraisal</td>
<td>• Retention of faculty</td>
</tr>
<tr>
<td></td>
<td>• Faculty welfare schemes</td>
<td>• Conductive atmosphere created for effective functioning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.4 Finance Management and Resource Mobilization.</td>
<td>• Concisely monitored by the trust</td>
<td>• Effective budgeting and financial management</td>
</tr>
<tr>
<td></td>
<td>• Maintenance of corpus fund</td>
<td>• Meaningful use of resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.5 Internal Quality Assurance System.</td>
<td>• Conduct of periodic academic audits</td>
<td>• Review on teaching learning process.</td>
</tr>
<tr>
<td></td>
<td>• Annual ISO audits</td>
<td>• Successful annual renewals of ISO audits.</td>
</tr>
<tr>
<td></td>
<td>• IQAS established</td>
<td></td>
</tr>
</tbody>
</table>
6.1 Institutional Vision and Leadership

6.1.1. State the mission and vision of the institute
The vision and mission of the institution are given below.

VISION
To be one of the premier institutes in Pharmacy Education, Research and Pharmacy Practice at national and international level

MISSION
- Employ innovative, practical oriented teaching methods and to have conducive atmosphere in the institution
- Design cutting edge research in the field of Pharmaceutical sciences, Clinical Pharmacy & Drug Development
- Develop viable outreach programs with the aim of extending Pharmaceutical care to the society
- Foster an entrepreneurial spirit & create job opportunities globally

6.1.2 Does the mission statement define the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, the institution's tradition and value orientations, its vision for the future, etc.
Yes. All the academic, co-curricular, extracurricular and research activities of the college are planned and executed keeping in view the Mission and objectives.

6.1.3. How is the leadership involved in
- Developing E-Governance strategies for the institution- E-governance is followed for meeting intimation, leave approval, annual appraisal and for pay related matters.
- Ensuring the organization's management system development, implementation, and continuous improvement- Annual improvements in different areas are assessed through submission of feedbacks in HR portal which is available in the institution intranet.
- Interacting with its stakeholders- The Principal of the college is directly involved in the interaction. Different committees have been formed to address various issues concerning stakeholders. For example Industry Institution Interaction committee, Placement and Admission committee. Each committee has their own set of specific responsibilities and report directly to Principal. The contact details of the responsible faculty are provided for any clarification and interaction to the stakeholders.
- Reinforcing a culture of excellence- The leadership of the college PSGCP has been given full support from the management and statutory bodies for effective implementation of the policies taken, academic decisions & rules
& regulations. The regulation and rules made have been circulated to the faculty, stakeholders, parents to keep them in the know.

- **Identifying organizational needs and striving to fulfill them** - All the organization requirements are collected annually by email and dispersed to various departments through the lab-in-charge.

6.1.4 Were any of the top leadership positions of the institution vacant for more than a year? If so, state the reasons.

No

6.1.5 Does the institution ensure that all positions in its various statutory bodies are filled and meetings conducted regularly?

Yes. The Governing Council meets once in a year and reviews the institution progress and recommends policies and strategies. The Research Advisory Board reviews on the research progress of the institution and gives its recommendations to the GC for approval. The annual budget requirement for the departments in relation to research has also been finalized by the RAC.

6.1.6 Does the institution promote a culture of participative management? If yes, indicate the levels of participative management.

Yes, Annual Strategic Initiative Forum (SIF) meetings are conducted by the management with all the head of institutions. In this forum the performance of the institution will be presented based on key result analysis. This forum also helps the management to have an overview of the institution activities and the growth. Monthly faculty meeting within the institution also raises and tackles various governing issues.

6.1.7 Give details of the academic and administrative leadership provided by the university to its affiliated colleges/constituent units and the support and encouragement given to them to become autonomous.

PSGCP is a self-financing institute. Hence inputs from the affiliating University with respect to academics and administration are meager.

6.1.8 Have any provisions been incorporated / introduced in the University Act and Statutes to provide for conferment of degrees by autonomous colleges?

Not applicable

6.1.9 How does the institution groom leadership at various levels? Give details.

PSGCP feels leaders are not born they are developed and groomed, in this line all faculty members employed in PSGCP have been placed under different committees
to acquire leadership qualities. They are also given tasks and additional responsibilities from time to time as per requirements.

6.1.10 Has the institution evolved a knowledge management strategy which encompasses the following aspects such as access to
- **Information Technology**- Yes, Intra and internet provisions are there for staff and students in each department.
- **National Knowledge Network (NKN)**- No
- **Data Bank**- Access to external research databases is also available.
- **Other open access resources along with effective intranet facilities with unrestricted access to learners**- Available

6.1.11 How are the following values reflected in the functioning of the institution?
- **Contributing to National development**- Through National Service Scheme (NSS), Red Cross Society, and various other outreach programs, students are involved in camps and educational awareness programs for the public in rural areas.
- **Fostering global competencies among students**- No
- **Inculcating a sound value system among students**- Student council is made responsible to organize various student events and give them a real life learning experience regarding organizational skills and interpersonal interactions and problem solving.
- **Promoting use of technology**- Evidence based learning with the use of technology is followed in research and in clinical studies.
- **Quest for excellence**- By motivation and through Industry Institution and inter-institutional academic interactions.

6.1.12 Has the institution been indicted / given any adverse reports by National Regulatory bodies? If so, provide details.
No

6.1.13 What are the projected budgetary provisions towards teaching, health care services, research, faculty development, etc.?

<table>
<thead>
<tr>
<th></th>
<th>2010 – 11 Rs. in lakhs</th>
<th>2011 – 12 Rs. in lakhs</th>
<th>2012 – 13 Rs. in lakhs</th>
<th>2013 – 14 Rs. in lakhs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching</td>
<td>113.72</td>
<td>124.90</td>
<td>157.87</td>
<td>171.68</td>
</tr>
<tr>
<td>Research</td>
<td>65.3</td>
<td>75.0</td>
<td>87.2</td>
<td>92.5</td>
</tr>
<tr>
<td>Faculty development</td>
<td>0.89</td>
<td>1.86</td>
<td>0.90</td>
<td>1.13</td>
</tr>
</tbody>
</table>
6.2 Strategy Development and Deployment

6.2.1 Does the institution have a perspective plan for development? If yes, what aspects of the following are considered in the development of policies and strategies?

- **Vision** - To be the pioneer in the pharmacy education, research and practicing aspects of pharmacy
  - Mission – Updation of knowledge, innovation in research
  - Cutting edge pharmaceutical research with latest technology
  - Contributing in the developmental activities in pharmaceutical care

- **Teaching and learning** - Teaching and learning are integral to the academic institution, hence all the faculty members are encouraged to attend teaching workshops, seminars and conferences to incorporate the latest developments in teaching and learning.

- **Research and development** - PSGCP has been recognized as Industrial and Scientific organization by DSIR, Government of India. Further institution recognizes research as an important component to have growth and for sustainability of the Institution. Therefore to monitor the growth and development of research in the institution as separate R&D Committee has been constituted. In addition the institution also has RAC to facilitate research activities among students and faculty at different levels.

- **Community engagement / outreach activities** - In health care our students go to the rural hospitals to educate the community on drug utility. Apart from this NSS program has been organized every year to have outreach programs.

- **Human resource planning and development** - As per the statutory body guidelines, Human Resources for teaching and non-teaching staff are followed in the recruitment. Developmental activities for faculty are initiated through orientation program for various important aspects. Annually the faculty members are assessed by their performance. The HR department collects the appraisal forms from the faculty with a confidential report from the Principal.

- **Industry interaction** - The Industry Institution Interaction Cell of the college is involved in inviting experts from the industry to interact with staff and students and update them with the latest developments and requirements of the Pharmaceutical Industry. The Placement Cell helps students to get in-plant training and placements within the industry. A separate initiative, PRISAM was launched last year focusing on training man-power for the industrial need. This department consists of faculty trained in industry system.

- **Internationalization** - We have a system of student and faculty exchange programs with foreign institutions. Faculty members are also encouraged to attend international conferences in their respective fields of expertise. Through our international partnership PSGCP is working hard for internationalization.
6.2.2 Describe the institution's internal organizational structure (preferably through an organogram) and decision making processes and their effectiveness.

**ORGANISATION STRUCTURE**

ISO are involved in various decision-making processes. Strategic initiative Forum organized by PSG and Sons’ Charities and monthly staff meetings also contributes to this process.

- **Is there a system for auditing health care quality and patient safety? If yes, describe** - PSGCP is not involved, it is under the purview of Medical Director PSG Hospitals.

- **How often are these review meetings held with the administrative staff?** Every fortnight the preceptors meet and review the outcomes. The Head of the Department of Pharmacy Practice is the person responsible for the same.

6.2.3 Does the institution conduct regular meetings of its various Authorities and Statutory bodies? Provide details.

- The institutional GC meeting will be held once in a year in the month of November

- The RAC meeting will be held twice a year in the March and October
- Internal meetings with respect to different ISO based committees are conducted regularly.
- Head of the Department meeting as and when required
- Faculty meeting every two months
- PTA meeting yearly twice in the month of April and September
- Student representative meeting twice in a year December and June

<table>
<thead>
<tr>
<th>S. No</th>
<th>Statuary body</th>
<th>Meetings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Governing Council</td>
<td>Once in a year</td>
</tr>
<tr>
<td>2.</td>
<td>Research Advisory Board</td>
<td>Twice in a year</td>
</tr>
<tr>
<td>3.</td>
<td>ISO</td>
<td>MRM - Four times in a year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Internal Audit - twice a year</td>
</tr>
<tr>
<td></td>
<td></td>
<td>External audit – once in a year</td>
</tr>
<tr>
<td>4.</td>
<td>HOD</td>
<td>Monthly once</td>
</tr>
<tr>
<td>5.</td>
<td>PTA meetings</td>
<td>Yearly twice</td>
</tr>
<tr>
<td>6.</td>
<td>Student representative meetings</td>
<td>Yearly twice</td>
</tr>
<tr>
<td>7.</td>
<td>Faculty meetings</td>
<td>Once in two months</td>
</tr>
</tbody>
</table>

### 6.2.4 Does the institution have a formal policy to ensure quality? How is it designed, driven, deployed and reviewed?

The institution has formal policies to ensure quality education and quality assurance which has been driven, deployed and received periodically. The quality products outcome has been ensured through
- Admission of students through merit into various program
- Quality teachers having different exposure and expertise have been appointed to teach and do research
- Industrial oriented teaching and learning process
- Continuous and comprehensive evaluation process

The quality has been ensured through internal and external audit of the teaching/learning process. Internal audit is done periodically by academic and examination committee. Separate committee on maintenance will look on quality procedures and effective functioning of the equipments. External audit is conducted by the member of ISO. It is done annually.

### 6.2.5 Does the institution encourage its academic departments to function independently and autonomously and how does it ensure accountability?

Yes. All the academic departments are allowed to function independently and autonomously. The accountability of the academic departments lies with Head of the Department. The roles and responsibilities of the heads have been well defined. The required facilities for smooth functioning of the academic activities have been ensured.
6.2.6 During the last four years, have there been any instances of court cases filed by and / or against the institution? What were the critical issues and verdicts of the courts on these issues?
None

6.2.7 How does the institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder-relationship?
Yes. An anonymous grievance box provision is provided for students. After every quarter, feedback from students is collected. Any valid grievance represented at the Student Representative meeting and at the annual general body meeting has been implemented after assessment. Based on the nature of the complaints, it is referred to the department concerned for rectification.

6.2.8 Does the institution have a mechanism for analyzing student feedback on institutional performance? If yes, what was the institutional response?
Yes. Institution has a mechanism to analyze the student feedback. All valid and justifiable grievances are swiftly sorted out through committees and communicated back to the students.

6.2.9 Does the institution conduct performance audit of the various departments?
Yes. The performance audit of the institution is carried out annually through Annual ISO audits. This audit will ensure the conduct of academic activities, examination, student performance, achievement of the objectives including materials and equipment maintenance. Co-curricular activities, staff turnover, and social responsibilities are reviewed during the approval inspections by various statutory bodies like Pharmacy Council, TNMGRMU, AICTE etc.

6.2.10 What mechanisms have been evolved by the institution to identify the developmental needs of its affiliated / constituent institutions?
Not applicable

6.2.11 Does the institution and hospital have their own updated websites? If so, is the information regarding faculty and their areas of specialization, days of availability, timings, consultation charges available on the website?
Yes, PSGCP has its own website www.psgpharma.ac.in and all the details related to the institution are provided.
6.2.12 What are the feedback mechanisms and documentations to evaluate the outcomes of these exercises?
The effective functioning and governance of the institute has been ascertained through effective feedback system from the Management, stakeholders, students and faculty. The documents available for the effect is feedback collected. The information has been carefully analyzed and implemented to have quality outcomes.

6.2 Faculty Empowerment Strategies

6.3.1 What efforts have been made to enhance the professional development of teaching and non-teaching staff? What is the impact of Continuing Professional Development Programs in enhancing the competencies of the university faculty?
The institution supports the teaching and non-teaching staff for higher studies and distance mode education. Professional development is fast tracked by Continuous Pharmacy Education (CPE) programs, workshops, and seminars.

<table>
<thead>
<tr>
<th>Teaching staff</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mrs. C. Kalaiyarasi</td>
<td></td>
</tr>
<tr>
<td>2. Mr. B. Premkumar</td>
<td></td>
</tr>
<tr>
<td>3. Mr. G. Venkatesh</td>
<td></td>
</tr>
<tr>
<td>4. Mr. S.M. Habibur Rahman</td>
<td></td>
</tr>
<tr>
<td>5. Mr. S. Ravichandran</td>
<td></td>
</tr>
<tr>
<td>6. Mrs. S. Malathi</td>
<td></td>
</tr>
<tr>
<td>7. Mrs. G. Syamala</td>
<td></td>
</tr>
<tr>
<td>8. Mr. B. Samuel Thavamani</td>
<td></td>
</tr>
<tr>
<td>9. Mrs. G. Andhuvan</td>
<td></td>
</tr>
<tr>
<td>10. Mrs. P. Rama</td>
<td></td>
</tr>
<tr>
<td>11. Mr. Siva Selvakumar</td>
<td></td>
</tr>
<tr>
<td>12. Mr. K. Balakumar</td>
<td></td>
</tr>
<tr>
<td>13. Mr. D. Sivakumar</td>
<td></td>
</tr>
<tr>
<td>14. Mrs. S. E. Maida Engels</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non teaching staff</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15. Mrs. R. Visalakshi</td>
<td></td>
</tr>
<tr>
<td>16. Mr. S. Karthik Kumar</td>
<td></td>
</tr>
<tr>
<td>17. Mr. Y. Asad kumar</td>
<td></td>
</tr>
<tr>
<td>18. Mrs. T. Kanniammal</td>
<td></td>
</tr>
</tbody>
</table>
6.3.2 What is the outcome of the review of various appraisal methods used by the institution? List the important decisions.
The appraisal methods help to overcome the barriers in teaching and learning process. It also provides the platform for the faculty to self-evaluate his/her performance periodically. It also helps in fine-tuning the targets and objectives.

6.3.3 What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff have benefitted from these schemes in the last four years? Give details.
Provident fund including pension scheme, gratuity, health insurance, medical leave, maternity leave, accidental policy are available for the employees. Concession in the medical treatment is offered. Eighty percent of the faculty benefitted from the scheme. NEST programs, staff and cultural day celebrations are conducted for the well-being of the staff.
The non-teaching staff have been provided with provident fund, gratuity, health insurance, medical leave, maternity leave, pension scheme, accidental policy, concession in the medical treatment, subsidized food in canteen, ESI, issuance of uniforms, subsidized transport facility, advance payment during festival seasons for the purchase of clothing.

6.3.4 What are the measures taken by the institution for attracting and retaining eminent faculty?
Eminent faculty members are given academic freedom to achieve their goals and targets. They are also encouraged to attend national and international conferences with financial support. (refer with point 2.4.9)

6.3.5 Has the institution conducted a gender audit during the last four years? If yes, mention a few salient findings.
Yes, we have an equitable gender distribution across all departments and disciplines. Every year gender audit is carried out to assess the student admissions. This also helps us to maintain even gender ratio in the campus. Some of the observations made during the gender audit is given as table

<table>
<thead>
<tr>
<th>Course</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>B Pharm</td>
<td>18</td>
<td>33</td>
<td>33</td>
<td>32</td>
</tr>
<tr>
<td>M Pharm</td>
<td>7</td>
<td>14</td>
<td>10</td>
<td>18</td>
</tr>
<tr>
<td>Pharm D</td>
<td>21</td>
<td>22</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>Pharm D (PB)</td>
<td>4</td>
<td>3</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>
6.3.6 Does the institution conduct any gender sensitization programs for its faculty?
No

6.3.7 How does the institution train its support staff in better communication skills with patients?
A general orientation program after recruitment is conducted for all classes of employees, where they are trained in communication and other relevant matters such as safety and gender discrimination.

6.3.8 Whether the research interests of teaching faculty are displayed in the respective departments?
Yes, as Institution policy faculty are requested to identify their area of interest in research. The interested and thrust area of research for each department has been displayed in the web page as well in the display board outside the department which helps the students and academic researchers to select the faculty for their collaborative research.

6.3.9 Do faculty members mentor junior faculty and students?
Yes, mentorship is part of the college activity; the students are posted under the senior faculty for mentorship. Similarly junior faculties are guided by the senior faculty to understand the system existing in the institute, academic and research development.

6.3.10 Does the institution offer incentives for faculty empowerment?
No

6.4 Financial Management and Resource Mobilization

6.4.1 What is the institutional mechanism available to monitor the effective and efficient use of financial resources?
The financial resources will be allotted based on the annual budget, which will be finalized upon the previous audited budgets.

6.4.2 Does the institution have a mechanism for internal and external audit? Give details.
Yes. This is done by the accounts department of the parent trust.

6.4.3 Are the institution's accounts audited regularly? Have there been any audit objections, if so, how were they addressed?
Yes. There have been no audit objections.
6.4.4 Provide the audited statement of accounts with details of expenses for academic, research and administrative activities of the last four years.
The audited statements for four financial years have been enclosed.

6.4.5 Narrate the efforts taken by the institution for resource mobilization.
The institution has taken necessary steps for resource mobilization. The major heads of funds mobilization includes tuition fees, research grants, consultancy, grants to conduct developmental activities and interest earned from endowment deposits. Management and institution facilitates the faculties to apply for research grant and do consultancy services. Average in a year Rs. 70-80 lakhs funds have been mobilized through projects. This helps to train the research scholars, effective teaching and good research publications. PSGCP is positive in these aspects. Around 4 crores of funds have been mobilized.

6.4.6 Is there any provision for the institution to create a corpus fund? If yes, give details.
Yes. Development fund has been maintained under PSGCP.

6.4.7 What are the free / subsidized services provided to the patients in the hospital?
Not Applicable

6.4.8 Does the institution receive fund from philanthropic organizations / individuals towards patient care? If yes, give details.
Not Applicable

6.4.9 Do patients from other states/abroad come for treatment, reflecting the unique quality health care provided by the institution?
Not Applicable

6.5 Internal Quality Assurance System to completely retype and taking the point of 1st cycle.

6.5.1 Does the institution conduct regular academic and administrative audits? If yes, give details.
Yes, the Institution conducts regular audit (quarterly) on the academic activities by the Academic Committee. Administrative audits are done annually. All of these audits are done by the ISO. One external audit from the ISO TUV Rheinland audits the academic and administrative process annually for certification.
6.5.2 Based on the recommendations of the Academic Audit, what specific follow-up measures have been taken by the institution to improve its academic and administrative performance?
Based on ISO Internal / external audits
Academic aspects
- Introducing day order pattern
- Including practical classes in II year Pharmaceutical Technology
- Based on the feedback system the first year Biostatistics was handed over to Dr. B. Balaji of Pharmacology department instead of visiting faculty
- Implementation of English language classes
Administrative aspects
- Planning for Research Advisory Board
- Setting up of Disciplinary committee
- Documentation pattern

6.5.3 Is there a central unit within the institution to review the teaching-learning process in an ongoing manner? Give details of its structure, methodologies of operations and outcome?
Yes. The teaching/learning process is reviewed through the committee meeting at the starting and end of the year. The review is made on the student performance difficulties encountered in the teaching learning process. In the review meet the class teacher of the respective classes take part.
Monthly review of the academic activities is also done through submitting monthly appraisal form indicating the details of the academic problems encountered.

6.5.4 How has IQAC contributed to institutionalizing quality assurance strategies and processes?
IQAC has been recently constituted in our institution. The quality assurance strategies and process in the institution has been contributed mainly through ISO.

6.5.5 How many decisions of the IQAC have been placed before the statutory authorities of the institution for implementation?
Continuous improvement related to academics and examination patterns has been placed before the academic committee and same has been implemented effectively.

6.5.6 Are external members represented in the IQAC? If so, mention the significant contribution made by such members.
Yes, IQAC has been recently constituted and initial phase of discussions have been conducted.
6.5.7 Has the IQAC conducted any study on the incremental academic growth of students from disadvantaged sections of society?
No

6.5.8 Are there effective mechanisms to conduct regular clinical audit of the teaching hospital? Give details.
Not applicable

6.5.9 Has the institution or hospital been accredited by any other national/international body?
Yes. The hospital has been accredited by NABH and the labs have been accredited by NABL.

6.5.10 Does the hospital have institutional and individual insurance schemes to cover indemnity claims?
Yes. Individual, group, and accidental policy insurance are available.

Any other information regarding Governance, Leadership, and Management which the institution would like to include.
Criterion VII
Innovations and Best Practices
<table>
<thead>
<tr>
<th>Key aspects</th>
<th>Process/approach</th>
<th>Outcome</th>
</tr>
</thead>
</table>
| 7.1 Environmental Consciousness | • Certified green campus  
• Emphasis on solar power  
• Effluent and recycling plans | • Contribution to carbon neutrality  
• Emphasis on energy conservation and water saving |
| 7.2 Innovations             | • Problem oriented learning in Clinical Pharmacy                                | • Better prepared graduates to deal with real world clinical settings |
| 7.3 Best Practices          | • Periodic assessment in academics and evaluation of governance  
• Personality development programs  
• Interactions with experts from industry | • Better academic performance  
• Development of soft skills among the students  
• Alumni feedback  
• Exposure to latest developments in the Pharmaceutical industry |
7.1 Environment Consciousness

7.1.1 Does the institution conduct a Green Audit of its campus? 
PSG institutions have taken utmost care to keep the campus as green campus. In the health campus, a separate team has been appointed to monitor green environment as well as use of energy levels, emission of gas and water harvesting. Green audit of the campus is being done yearly once by central audit team of PSG institutions.

7.1.2 What are the initiatives taken by the institution to make the campus eco-friendly?

- **Energy conservation**- The campus encourages optimum use and conservation of energy resources. A 1250 KVA OLTC transformer is now installed to regulate voltage and energy conservation. There is also a 880 KVA lighting voltage stabilizer installed. 125KW energy efficient mortars, variable frequency drives (240KW) are installed. SON street lights were replaced with EE-LED lights. Electronic chokes are now used instead of conventional chokes. Also, illumination levels are optimized by conducting energy audits.

- **Use of renewable energy**- Solar hot water system (36,250 LPD) has been installed for bathing, kitchen, and laundry at the PSG Hospitals. This system generates 6.25 Lakh KWh. We also have a Solar Steam generator in the laundry of the hospital and this generates 77,760 KWh. Current green energy to the total energy consumed by the campus comes to about 35%. The aim is to reach 85% in future.

- **Water harvesting**- We aim for a rational and equitable distribution of water across the campus as per norms (120-150 LPD).
  - TWAD/NTADCL Source – 5 Lakh LPD
  - RO Drinking water – 20 cubic meters per hour
  - Ozonised water at user points as per ISO:10500:2012
  - Rain water harvesting pits - 240 MLD/annum
  - Charging of water table directly with 100-150m bore
  - 100% recycling of STP water
  - Positive water balance through 100% recycling and RWH
  - Ground water level has been improved
  - Salinity has dropped to 1200ppm from 3500ppm.
  - Optimum usage of water has been done through 100% metering, improved methods of consumption, and building awareness among the consumers, display boards across the campus for efficient water usage and awareness.
- **Solar panels**- Solar roof top PV –panels 5X100KW are installed to reduce the heat gain of building inside the campus.

- **Efforts for carbon neutrality**- Green processes should result in a good reduction of carbon dioxide emissions. Through green initiative PSG curtailed 4121 tons of CO₂ emission which is equivalent to about 736,000 trees to absorb this CO₂. About 37% of intended green cover has been achieved.

- **Plantation**- **Botanical or Medicinal significance**- A medicinal plant garden with more than 50 varieties of medicinal plants in about half acre medicinal garden inside the campus is available.

- **Bio-hazardous waste management**- Biomedical waste is handled as per Tamil Nadu Pollution Control Board norms (TNPCB). All staff and technicians are trained by TNPCB. The wastes are classified by a color code system. There is a cautionary BIOHAZARDS label attached to the waste containers and the wastes are processed at the Common Treatment Facility (CTF). We use an incinerator (800 celsius) and autoclave the waste at 120 degrees. Paper wastes are disposed after putting them through a shredder. Biowastes are disposed of by treating with disinfectant and buried in deep burial pits at secured landfills.

- **E-waste management**- The E- waste generated in the campus has been cleared through certified bodies. The institution pays to the outsourced agencies for the E-waste clearance.

- **Effluent treatment and recycling plant**- This is done in consultation with Sainath Envirotech, Tuticorin. ETP is designed as per UASBR followed by sequential batch reactor that would treat at a flow rate of 100 cubic meter/hr so that the present available capacity of 800 KLD. The effluent generated in the campus is treated within 8 hours and by extending the operational hrs to 20, the same STP modules could be used to treat an additional 1200 KLD.

- **Recognition / certification for environment friendliness**
  - Green campus certified

- **Any other (specify)**-
  - Environmental friendly material usage in the campus is encouraged:
  - Paper and plastic cups curtailed in the campus
  - Plastic carry bags replaced by brown covers in pharmacy and other shops
  - All indents now made online
  - Cotton mops are adopted for housekeeping
  - Water soluble paints for walls
  - 100% recycling of water
  - Only 10% artificial lights used during daytime
  - All areas well ventilated and adequate open space all around campus.
7.1.3 How does the institution ensure that robust infection control and radiation safety measures are effectively implemented on campus?

An Infection Control Team has been established at the PSG Hospital which has come up with a working manual for Infection control in the campus. Standardized and established scientific protocols for radiation safety are employed in the hospital, especially with respect to the X-ray room.

7.2 Innovations

7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the institution.

- **Innovation in Education Pattern** - Initiation of platform presentations as part of continuous assessment pattern has extensively raised the level of learning and value addition among the students. Practical oriented approach in all aspects of curriculum has resulted in the improvement of thinking ability and desire to continue the practices in both industrial and hospital sectors.

- **Innovations in Research** - Both undergraduate and post graduate research work are being monitored continuously, right from the initiation of the research by faculty from varied disciplines. Appointment of faculty with specialization in basic science qualification and industrial exposures resulted in a better impact on industrial knowledge among the students. Competition among students in research finding presentation helped the students to get motivated and know the research areas.

- **Innovations in Governance** - Governance of the institution through a well planned organization structure and its continuous attention leads to the development of educational and research promotional activities. E-governance, decentralized and creation of an atmosphere for effective team work.

7.3 Best Practices

7.3.1 Give details of any two best practices that have contributed to better academic and administrative functioning of the institution.

**Best Practice I**

1. **Title**
   Periodical Assessment in academics and evaluation of governance

2. **Objectives of the Practice**
   Designing curriculum through evidence based learning process covering the following:
- Orientation program at student entry level
- Industrial outlook for second year students
- Hospital training for third B Pharm and fourth Pharm D and model Pharmacy setup
- Industrial training for the Fourth B Pharm students
- Soft Skilled development program for fourth year students
- Exposure to community pharmacies for Pharm D students

3. The Context
There is an increasing demand for Pharmacy graduates in the healthcare sector. The present syllabus hasn’t fully equipped so as to fit the student into the modern pharmaceutical industry as well as healthcare because of drastic strides made in pharmaceutical technology, clinical pharmacy, and other pharmaceutical disciplines. Therefore PSGCP decided to introduce these objectives into the curriculum design to increase the competitive edge of the graduates. These objectives covers a wide range of student competencies make sure that students are employable not only in India but also in foreign countries. A benchmark survey has been made with other successful educational institutions in India. Their best practices are observed and integrated in the curriculum. This resulted in raising the quality of training that graduates receive during their studies at the institution.

4. The Practice
The orientation program was introduced to create awareness and understanding about the Pharmacy course to fresher by
- Introducing various departments and their activities through faculty introduction.
- Introduction about the college academic activities, University regulations regarding teaching/learning process
- Examination and evaluation process
- Explanation of certifying bodies that inspect and evaluate the institution on a regular basis.
- Identifying the talents of the students and allocating them to the various clubs like Science Club, Mad Club on that basis.
- Explanation of the role of the Student Council and its structure, nomination procedure, and functions.

The Industrial Outlook program for Second B Pharm students is designed to give our students and early exposure to the latest developments and workings of the Pharma industry. The students are taken on a two day tour in this regard and exposed to various manufacturing processes in state of the art technology. Additional aspects like research and marketing is also given a brief exposure. Students are also encouraged to foster entrepreneurial thought after this tour and contribute their ideas to the Entrepreneur Cell.
The third year B Pharm and Pharm D students are given training in various aspects of Hospital Pharmacy and Dispensing Practices. They are exposed to the setup of a model pharmacy in the college premises. This helps them to get hands on training and experience in the field of Community Pharmacy.

Industrial training for final year B Pharm students allocates the students to various industries in the southern region of India with a view to help them get hands on experience and training in various aspects of manufacturing, quality control, R&D, and marketing.

Soft Skills training is given for our students to develop their personality and presentation skills. It also help the students to tackle job interviews with verve and confidence. Focus is also given on developing EQ as well as interpersonal skills. These are very important today for any person working in the Pharmaceutical Industry, especially when it comes to functioning in higher management and executive roles. Other skills honed in this training are conflict resolution and handling of stressful and difficult situations.

As part of our 2025 program initiated by the PSG management, PSGCP conducted a benchmarking exercise with other successful educational institutions in the country. As part of the process, we visited institutions like BITS Pilani, Pune College of Pharmacy, IIT Chennai to observe their best practices in academics and governance. Some of these best practices have been incorporated as part of our curriculum.

5. Evidence of Success

The overwhelmingly positive feedback from the students

Good understanding of academic and college activities by our students due to the orientation program. Our students clearly know what they have taken on and what to expect during the course of their program. Their ambitions are effectively stoked and they are motivated right at the start because the orientation program shows them as to what could be achieved by them during their years at our institution.

Improved academic involvement and enhanced confidence levels during classroom presentations.

Effective participation in social outreach programs such as NSS and initiating a helping hand for poor students through the program Valarkarangal. These outreach programs have helped to inculcate an attitude of compassion and selfless service into our students and to use their skills for the underprivileged sections of our society.

Various club activities have enhanced the interpersonal relationship among the students. It has also given them confidence to meet real-life challenges and take on responsibilities.

The performance of our graduates in the pharmaceutical industry and their handling of various challenges and taking on responsibilities are a direct reflection of the success of our Soft Skills program. Relevant oral feedback from the industry higher-
ups is also very encouraging. Also, our graduates are facing interviews without any signs of nervousness or fear.

6. Problems Encountered and Resources Required
The design of the Orientation Program needs to be further strengthened by identifying nuances in the feedback regarding the orientation course.
To compress vast amounts of information in a lucid manner without information overfeed and fatigue during orientation. The right balance between perfunctory information and excessive information is the challenge for conducting an effective orientation.
Securing permission for industrial visits and training especially for patented processes. This has been a real challenge because many industries have their own views regarding the amount of time they entertain outsiders for training and exposure. They are also very protective of their patented manufacturing practices and trade secrets. An appropriate confidentiality clause agreement could be the solution to this problem.
Planning appropriate date and time for these visits and training during the curriculum design.
Finding appropriate time for the various extracurricular activities of the various clubs without impinging on the academic calendar is also a challenge that we encounter.
More resources are required for further strengthening the Soft Skills program.

7. Notes
The reception of the orientation program was overwhelmingly positive as evidenced by the fresher feedback garnered at the end of the program. Industrial visit at the second year as well as the industrial training at the final year proved highly productive for the students in terms of their exposure to the latest know-how in the Pharmaceutical industry. Personality Development programs through soft skills and communication training proved to be very useful for our outgoing graduates, especially those who have come from rural areas and lacking confidence in their English communication skills. The Hospital training and Model Pharmacy setup gave them hands-on experience regarding patient interaction and counseling.

1. Title-2
Integrated and Interdisciplinary approach in research and innovations

2. Objectives
   - Promoting interdisciplinary research and publications on peer reviewed journal
• A Research Advisory Board has been constituted to invoke a dynamic research program and to promote active participation of all faculty in research and to initiate research in thrust areas to improve healthcare through advancing the knowledge and skills of Pharmacists.

3. Context
In recent times, there has been an explosion in terms of innovations and new technologies in almost every sub-discipline of the Pharmaceutical sciences. A thorough knowledge of the latest know-how or techniques is essential to get a good and viable footing for a career in the Pharma industry. The current syllabus does not meet all these requirements and is constantly lagging behind because of the pace of innovations and the rapidly changing scenario in technology and best practices. Therefore acquired current industrial knowledge is a big value addition to the individual pharmacist. So there is an acute need for our students to get maximum exposure in this regard. Regular interaction visits by stalwarts and other experts from the Pharma industry will help in a big way for our students to get an idea as to the skills that they will need to hone to jump start their entry level positions.

4. The Practice
The feedback from reveals HR and technical personnel from Industry that the students need to focus on certain key areas to secure employment in industry. Further, the students also expressed their opinion that they would like to know the possible career opportunities for them. To bring it in to practice III & PRISAM have been constituted.

Dr. M. Ramanathan, Principal, suggested to conduct monthly interaction with industrial experts for the entire year wherein we have decided to invite 12 to 14 industry experts for interactive session with the students. The goal was set to bring awareness to the undergraduate, post-graduate and Pharm D students about the requirements to enter into that particular industry and also to know the expectation of the industry from the students.

Further it was proposed to arrange for a short training program or impart some additional knowledge on a particular topic to enable the students ready to face the job market with confidence.

Refer Page 184 section 5.1.13
PRISAM- Pharmaceutical Research Initiative to Strengthen Academia and Manpower

An initiative aimed at tapping the Institutional facilities and expertise of Faculty to leverage collaborative research with Industry able to achieve application of science to develop products thereby promotes the Institution. To have good placements for the student PRISAM focuses to

- To explore the possibility of customized curriculum as per the need of industry. Initially for PG programs introduction of industrial troubleshooting projects, doing PG projects in industry, theoretical update of the subjects, industrial project and practical training at college, will be carried out.
- Incorporate business mode amongst student community related to timelines to meet project execution, document preparation, archiving and following ethics at work etc.
- To introduce good laboratory practices and training to students in practical classes.
- To discuss about current need of the industry in terms of competent manpower and how academia can help them to bring desired skill set.
- Up gradation activities related to DSIR.
- To promulgate the institutional activities in order to persuade industries/manufacturing companies to employ our students in various departments in co-ordination with placement cell.
- To leverage our experience and expertise to provide consultancy based services to pharmaceutical companies by highlighting unique facilities in the college that makes it stand apart from other institutions. Unique facilities like: animal house facility, state of the art facility in the branch of neuroscience preclinical studies, in silico drug design, nanoparticulate formulations, bioavailability studies, therapeutic drug monitoring etc will be showcased to the prospective industries.
- To publish a research report on an annual basis about the consultancy projects and services rendered to the industry or other universities/institutes.
- To assess the quality and functioning through feedback from employees and alumni regularly.

**Deliverables:**

- To apply and promote research based activities among students/faculty as per the present need.

**Courses conducted:**

Under **PRISAM**, two courses are to be conducted,

- PG Diploma in Pharmaceutical Quality Assurance
- PG Diploma in Pharmaceutical Regulatory Affairs

It will be a full time course, which prepares the students to pursue their career in the pharmaceutical and healthcare industry. To teach this industry oriented program
qualified and skilled teaching professionals are available with adequate industry knowledge and exposure.

5. Evidence of Success
There has been very good feedback from the students as well as the industry in this regard and the interactions have been very productive and healthy. It has given the college a new focus for the development of module courses for our students to make them more proficient for beginning a career in the Pharmaceutical industry. Many of our candidates have found employment in the same industry where they did their industry projects.
This interaction with the industry has also encouraged entrepreneurship skills of interested students. As a specific example, one of our students has developed a new herbal formulation for preventing hair loss and has now his own small scale plant in Tamil Nadu after finishing his M Pharm at our college.
Many of our newer graduates are doing very well in the industry as evidenced from their employer’s feedback. This has also helped to develop brand PSGCP in the industry as our pool of successful alumni is increasing with the passing years.
Also, this has also resulted in increasing the confidence levels of our students, especially post-graduation. Rather than stumbling blindly into the industry without knowledge of expectation, now our students are aware as to what is required of them in the industry.

6. Problems encountered and resources required
Availability of the concerned resource persons from the industry and academia (both national and international) for a longer duration of stay is desirable to enable consistent interaction with faculty and students. But because of their extremely busy schedules, it is a challenge. There are many suggestions from the experts for the improvement of research activity and collaboration, but it is a challenge to implement all these suggestions in a timely manner.
Faculty also find it a challenge to allocate adequate time to fully benefit from these interactions.
A secure server access to share discussions related to probable projects is highly required. Video conferencing equipment by which the experts can directly interact with the institution without the need to travel for project related queries with faculty is also required.
Enabling the experts to get associated as Adjunct faculty may benefit the students considerably to know the latest developments in the Pharmaceutical Industry.
7. Notes
This best practice has helped immensely in developing the urgency in publishing in high impact peer reviewed journals. Receipt of grants more than Rs 480 Lakhs from various funding bodies is a good measure of the progress made by the institution in promoting research. The constitution of the Research Advisory Board has encouraged faculty to actively participate in research. Industry Institution Interaction cell has brought better awareness about the current opportunities and trends in the Pharma field. Initiation of PRISAM has given more impetus to innovations and new technologies in various disciplines so as to increase the employability of the students.

*Any other information regarding Innovations and Best Practices*