

The Annual Quality Assurance Report (AQAR) of the IQAC

Name of the Institution: **V.P. & R.P.T.P. SCIENCE COLLEGE**
Vallabh Vidyanagar-388 120, Gujarat

Year of Report: 2007-08

Part A:

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year

The IQAC was formed in 2007-2008 as per the guideline provided by the NAAC.

The structure along with the names of the IQAC members is as under.

Sr. No.	Status	Name of the member	Address
1.	Chairperson	Dr. D.J. Desai	Principal, V.P.& R.P.T.P. Science College
2	Senior Administrative Officers	Mr. Tushar Majumdar	Deputy Registrar, SPU
		Mr. Raghavjibhai M. Patel	Development Officer, SPU
		Mr. P.D. Patel	O.S., V.P. Sc. College
		Ms. Bhartiben Patel	Head. Clark, V.P. Sc. College
		Mr. Bhaskarbai Parekh	Accountant, V.P. Sc. College
3	Teacher members	Dr. Dali Varghese	Biology Department
		Dr. Nikunj Bhatt	Biology Department
		Dr. B.C. Dixit	Chemistry Department
		Mr. Nilesh Patel	Mathematics Department
		Dr. T.H. Patel	Physics Department
		Dr. Minaxi V. Kumar	Electronics Department
		Mr. L.M. Katara	Librarian
4	Management Nominees	Shree R. P. Patel	I/C Secretary, CVM
		Dr. V.S. Patel	Director, SICART V.V. Nagar
		Dr. P. M. Mehtha	Advisor , Research, Biological Sciences, SICART V.V. Nagar
5	Nominees from Local Society	Dr. D. K. Raval	Professor, Dept. of Chemistry , SPU
		Dr. Vibha Vaishnav	Reader, Dept. of Electronics, SPU
		Dr. M.K. Vasavada	Samip Banglow, Nana bazaar, near Water tank , V.V.Nagar
		Mrs. Ashaben Dalal	President , Jagrut Mahila Mandal, Anand
6	Coordinator IQAC	Dr. Rekha S. Patel	Head, Physics Department

Plan Chalked out and executed by the institution in the year 2007-2008.

- i) For proper functioning of the institution and to increase the efficiency of the system, committees were formed. A coordinator leads each committee and in certain committees, co-coordinators were also appointed (See Appendix A).
- ii) The academic planner shows the functioning of the institute round the year. The planner shows the curricular, co-curricular and the extra curricular activities, which is attached with the prospectus of the college (See Appendix B).
- iii) Keeping in mind the continuous evaluation, this year three internal tests were taken instead of two. The syllabi included in each test were two units for 3 credit course and 1.5 units for 2 credit course.
- iv) The students were encouraged to participate in various academic, co curricular and extra curricular activities conducted by Universities and other Organizations/Institutions (See Appendix C).
- v) The teachers were also encouraged to participate/involve in various academic, co curricular and extra curricular activities conducted by Universities and other Organizations/Institutions (See Appendix D & A).
- vi) The college has published 'V Vision' (the College magazine). The copy of which is enclosed for your perusal. (See the college magazine)

Part B:

1. Activities reflecting the goals and objectives of the institution:

The activities carried out reflecting the goals and objectives for the year are shown in the annual report (see Appendix D).

The goals and the objectives of the college are:

- a) To create and nourish a stimulating learning environment that ensures a globally relevant education, based on eternal human values.
- b) To forge and reward excellence in the curricular as well as extra-curricular sectors so as to ensure the scholars' global competitiveness.
- c) To tap, nurture and unleash the innovative entrepreneurial abilities of scholars and thereby ensuring life long socio-economic value- addition.
- d) To evoke and embellish the finest traits of human excellence that can dovetail into a sustainable career growth curve.
- e) To affiliate, associate, liaise or otherwise synergize with any institution body, entity, ethno-cultural Diaspora and the overall global fraternity in any form whatsoever, in support of the above.
- f) To initiate, consolidate and extrapolate any objectives, function and activities in support of the above.

These are made known to the various stakeholders through prospectus, orientation programme, parents-teachers meeting, academic calendar, personality development programme, communication skills development programme, students counseling, internet facilities, etc.

2. New academic programmes initiated (UG and PG):

Self financed Industrial Chemistry (vocational) has been restarted.

3. Innovations in curricular design and transaction:

The courses of T. Y. B. Sc. are redesigned in the following subjects as per the present requirement. Dr. D.J. Desai, Dr H. N. Patel and Dr. Rekha S. Patel are working as the chairman, Board of studies- Chemistry, Biosciences, and Physics of S. P. University respectively.

1. Physics
2. Botany
3. Zoology
4. Micro Biology
5. Chemistry
6. Computer Science

4. Inter-disciplinary programmes started:

Nil

5. Examination reforms implemented:

The following modifications are done in examination evaluation pattern

- (i) For attendance marks is given in accordance with the criterion decided by the College.
- (ii) Out of three internal tests, the best two are considered for the internal marks weightage.

6. Candidates qualified: NET/SLET/GATE etc.

Members of the staff are having Ph. D/M. Phil degrees and majority of them are recruited before 1996, so **NET/SLET** is not required.

7. Initiative towards faculty development programme:

Teachers participated in Refresher courses / Workshop/ Seminars/ Symposia/ Science Congress /Training programmes etc.
(See Appendix D).

8. Total number of seminars/workshops conducted:

Nil

9. Research projects

a) Newly implemented:

One major research project sponsored by UGC, New Delhi is awarded to Dr. Minaxi V. Kumar in the subject of Atomic and Molecular Physics The duration of the project is three years(2007-2011)

One minor research project sponsored by UGC, Pune is awarded to Dr. H.N. Patel in the subject of Microbiology for two years (2007-2009)

Three of our staff members presented their Major research proposals in UGC, New Delhi and are awaiting for the results.

b) Completed:

Two Minor research Projects are completed in Chemistry.

10. Patents generated, if any:

Nil

11. New collaborative research programmes:

Dr. Minaxi V. Kumar is having international collaborative research work with Prof. Nigel Mason, Director of research, The Open University, Milton Keynes, UK. She also visited The Open University for four days in the current year during her visit to UK.

She is also having active collaboration with Prof. K. N. Joshipura, Head, Department of Physics, Sardar Patel University, Dr. Chetan Limbachiya of P. S. Science College, Kadi, Gujarat University and Dr. Bobby K. Antony, Tata Institute of fundamental research, Mumbai.

She has also initiated a new collaboration with Prof. Lokesh Tribedi, of Tata institute of fundamental research.

Dr. A.R. Jivani is having collaborative research work with Prof. P.N. Gajjar of Gujarat University, Ahmedabad and Mr. H.J. Trivedi of N.V. Patel Pure and Applied Science College, S.P. University, Vallabh Vidyanagar.

Dr. P.M. Patel is having collaborative research work with Prof. K.L. Balucha, Department of Physics and Astrophysics, University of Delhi, Delhi. And Prof. C.V. Pandya Department of Physics, M.G. Science College, Ahmedabad.

Dr. B.C. Dixit is having collaborative research work with Dr. P.R. Dudhagara, Dr. R.K. Patel, Department of Life Science, North Gujarat University and Dr. Anjana Ghelani, Ramkrishna Institute of applied Science SCET College campus Surat. Dr. B.C. Dixit is also having collaborative research work with Prof. T.B. Shah, Department of Chemistry.

Dr. V. K. Sinha of Industrial Chemistry is having collaborative research work with Dr. M. R. Patel of N.V. Patel Pure and Applied Science College, S.P. University, Vallabh Vidyanagar and Dr. J. V. Patel of Institute of science and Technology for Advanced Studies and Research (ISTAR), Vallabh Vidyanagar

12. Research grants received from various agencies:

UGC Major/Minor Project

Sr. No.	Name of the staff	Grants received	Funding agency
1	Dr. Minaxi V. Kumar (Major)	Rs. 5,92,800/-	UGC, New Delhi
2	Dr. H. N. Patel (Minor)	Rs. 97000/-	UGC, Pune

13. Details of research scholars:

The details of the research students are as under

Sr. No.	Name of the subject	Number of students
1	Chemistry	12
2	Industrial Chemistry	3
3	Physics	1
4	Microbiology	2

14. Citation index of faculty members and impact factor:

Sr. No.	Name of the faculty members	Citations of publishes papers till date	Impact Factor
1	Dr. K. D. Patel	1	--

2	Dr. Minaxi V. Kumar	109	2.02
3	Dr. Dali Varghese	1	--
4	Dr. B. C. Dixit	1	1.47

15. Honors/Awards to the faculty:

Dr. R.D. Chaudhary, of Statistics department has received Hari Om Ashram Prarit, Bhaikaka Inter University Smarak Trust award for best Research Paper publication in Statistics.

16. Internal resources generated:

The internal resources are generated through the following:

1. Alumni Association Fund
2. Golden Jubilee Fund
3. Best College Prize Fund
4. Prize Fund

17. Details of departments getting SAP, COSIST(ASSIST)/DST. FIST, etc. assistance/recognition:

NA

18. Community services:

Several one-day camps such as blood donation camp, medical check up camp for thalassemia, Tree Plantation, campus cleaning etc. were organized.

In blood donation camp 192 bottles blood were donated by our students. 82 students participated in Thalassemia testing camp. An amount of Rs. 2887/- collected by the students was donated to government affiliated blind school, at Vathvadi. Dr. Ashok Vishwakarma delivered a lecture on Gandhiji and non-violence on the celebration of "Ahinsa Din" 2nd Oct.07

Dr. Rekha S. Patel organized the women day on 8th March with BAPS (Bochasanvasi Akshar Puroshattam Swaminarayan Sanstha). Three eminent women were honored in this programme. Major Rekha S. Patel along with about 18 cadets visited Old age Home at Anand Dham, Lambhel. She was one of the judges in poster competition organised by N.V. PAS College and Community Science Center, Sardar Patel University.

Dr. Minaxi V. kumar was one of the judges in the debate competition for secondary and higher secondary schools of Anand district, organised by Gujarat Govt. and also was a quiz master in the Anand district level quiz competition organised by GUJCOST. She was Co-convenor of the National Topical Conference held at Physics Dept., S.P.U. She gave a talk on Electron Atom/ Molecule interaction, SPU Efforts. She has also been appointed as a treasurer, Indian Physics association, V.V. Nagar Chapter.

Dr. Daly Varghese and Dr. N.B. Bhatt were in the panel of judges for science project presentation competition for secondary and higher secondary schools of Anand district, organised by Gujarat Govt.

19. Teachers and officers newly recruited:

Teachers:

- i) Mrs. P.S. Chaudhary in Physics Department.
- ii) Dr. Rajeev Bhatti in Biology Department.

20. Teaching – Non-teaching staff ratio:

1.58:1

21. Improvements in the library services:

Reference /referral service, Power backup facility, addition of two new Inverter cum UPS

22. New books/journals subscribed and their cost:

Sr. No.	Year	Amount Spent (Books)	No. of Books	Amount Spent (Periodical/Journals/Magazines)	No. of Periodical/Journals/Magazines
1.	2007-2008	College Budget(1) Rs. 44,551	124	Periodical/Journals Rs. 10,468	16
2	2007-2008	College Budget(2) Rs. 61,030	208	Magazines Rs. 3,941	17
3	2007-2008	UGC Budget Rs. 55,153	171	--	--
	Total	Rs. 1,60,734	503	Rs. 14,409	33

23. Courses in which student assessment of teachers is introduced and the action taken on student feedback:

Student assessment of teachers is done in all the courses offered in the college. The concerned teachers are cautioned for improvement.

24. Unit cost of education:

- (i) With salary Rs. 18,550.53/-
- (ii) Without salary Rs. 1447.73/-

25. Computerization of administration and the process of admissions and examination results, issue of certificates:

Administration and the process of admissions and examination results, issue of certificates etc. are computerized.

26. Increase in the infrastructure facilities

A research cabin is erected in the department of Electronics. The proposal is made to change the infrastructure of the Microbiology laboratory, which is under consideration.

A new BCA laboratory with 60 new computers and a server has been started from the current year.

27. Technology upgradation:

Three new computers are purchased this year apart from the computers purchased for the BCA laboratory. A proposal is made for installation of LAN system throughout the college.

28. Computer and Internet access and training to teachers and students:

Computer and internet access facilities are available to teachers and students on payment of Rs. 1000 per head per year. Majority of the teachers are already trained. Institute is trying to upgrade with high speed connectivity.

29. Financial aid to students:

The management provides financial support from CVM Scholarship fund and Bhaikaka foundation scholarship fund, for education of the poor and needy students.

Meritorious students are awarded Gold medals and cash awards from Golden Jubilee Fund.

This year the government scholarship for SC students amounting to rupees 53,093/-, for ST students rupees 1,01,680/-, and for Baxi students Rs. 1,47,540/- (total 3,02,313/-) has already been paid to the respective students.

30. Support from the Alumni Association and its activities:

Needy students have been given scholarship from the association fund. The fund is also used for maintenance of the various facilities of the college.

31 Support from the Parent-Teacher Association and its activities:

Very few parents attended the meeting held twice in the current year. The feedback is collected from the parents and some of them expressed their views.

32. Health services:

Thalasaemia/Bolld Check-up camps were conducted and the doctors referred them to the concerned hospitals. University health center provides health services to all the students and faculty free of charge.

33. Performance in sports activities

Dr. N.R. Patel, Dr. M. M. Morekar, Dr. T.H. Patel and student Secretary Mr. Sahil Mansuri encouraged the students to participate in sports and games organized by Sardar Patel University as well as college .

Girl's badminton team won inter college badminton tournament of sardar patel university, vallabh vidyanagar. The members of the winner's team are,

- (1) PINAL FATABHAI BARIA (F.Y.B.SC.)
- (2) PRATISHTHA VIJAY SHAILY (F.Y.B.SC.)
- (3) RAINA DEVENDRASINGH GAHARWAR (T.Y.B.SC.)
- (4) DIXITA ASHOKBHAJ PATIL (S.Y.B.SC.)

Girl's volley ball team of our college has secured third position in Inter college volley ball tournament of Sardar Patel University, Vallabh Vidyanagar.

Pratishtha Vijay Shaily (F.Y.B. Sc.) was selected for the badminton team of Sardar Patel University, Vallabh Vidyanagar and has participated in the inter university badminton tournament, which was held at Vallabh Vidyanagar.

Shweta Arvindbhai Patel and Pratishtha Vijay Shaily were selected for the volley ball team of Sardar Patel University, Vallabh Vidyanagar and had participated in the inter university volley ball tournament which was held at Vijaywada (Andra Pradesh).

Hitesh Nathabhai Chavda was selected for the athletics team of Sardar Patel University, Vallabh Vidyanagar and has participated for the inter university athletics tournament, which was held at Chidambaram (Tamilnadu).

Annual sports day was organized on 22nd january 2008 at Shastri Maidan, V. V. Nagar.

The following students have been awarded as,

BEST ATHELETE (BOYS) : HITESH NATHABHAI CHAVDA S.Y.B.SC.
IIND BEST ATHELETE (BOYS) : SAHIL ISMAILBHAI MANSURI T.Y.B.SC.
BEST ATHELETE (GIRLS) : KHUSHBU PARESHKUMAR SHUKLA S.Y.B.SC.

IIND BEST ATHELETE (GIRLS) : HEMLATA BASPURE

34. Incentives to outstanding sportspersons:

Prizes and Certificates are awarded to the outstanding sportspersons.

35. Student achievements and awards:

The Gold medal awardees of our college are :

Ms. Hamali J. Prajapati has got three gold medals (i) in theory examinations of F.Y. B.Sc., S.Y. B.Sc. and T.Y. B.Sc. examinations taken together, (ii) in Chemistry, sponsored by Smt Kamalaben Chandulal Desai and also (iii) gold medal sponsored by Dr. Kanubhai Chunibhai Desai.

Mr. Mehul Kumar A. Patel, in Electronics,

Mr. Ramesh N Solanki in Mathematics and Statistics,

Ms. Sweety R. Patel in Botany,

Ms. Sheeja Vijayan in the External Assessment in theory examinations of S.Y. B.Sc. and T.Y. B.Sc. examinations taken together and Mr. Tejas K. Vaishnav in Physics.

Mr. Ramesh N Solanki received the cash award of Rs. 400/- instituted by Prof J A Inamdar. Ms. Snehaben Rajendrabhai Mithaiwala received a cash prize Rs. 2100/- sponsored by Mr. Rameshbhai Patel, (Rinjol) Canada for securing first position in S.Y. B.Sc. Chemistry.

Mr. Vimal Dabhi (in Mathematics), Mr. Parmar Govindbhai (in Mathematics) and Maulik Joshi (in Chemistry) stood first , second and third position respectively in the state level Minaxi lalit Science Test Award Organised by Gujarat Science Academy.

Ms. P. Regita of S.Y. B. Sc. Microbiology stood First in scientoon competition at a State level seminar and article writing competitions jointly organized by J. & J. Science College and Gujarat state Biotechnology Mission, at kalol, Gujarat.

Mr. Kirti M. Korot, research student of Dr. Minaxi Vinodkumar secured 2nd prize in state level best research paper presentation competition held by Gujarat Science Congress at Bhavnagar.

The toppers (15) in various subjects received medals/prizes for their performance in academics. Four teachers and two Ph. D. Students were also awarded gold (plated)

medals for obtaining their Ph. D. degree during the year. The expenditure incurred for awarding the prizes exceeded Rs. 20,000/-.

NCC Achievements:

INTERNATIONAL

SUO Sutaria Mit Bankim represented INDIA at RUSSIA in youth exchange programme camp.

NATIONAL

SUO Alpu K. Maharaj represented Gujarat contingent for Republic Day Camp at New Delhi. She is also awarded Governor's medal for the best NCC senior wing cadet of NCC Directorate of Gujarat.

L.CPL Rana Krishna Sinh V. represented Gujarat contingent for Republic Day Camp at New Delhi. He participated in Rajpath march past, New Delhi.

36. Activities of the Guidance and Counseling Cell:

Each teacher is allotted 20/25 students for Guidance and Counseling once a month or as frequently as may be required and is recorded. During counseling the counselor tries to find out the problem being faced by the students. The counselor also tries to inculcate the value based education, patriotism, discipline, general awareness, globalization, etc..

Course counseling was done by two organizations for SY/TY B. Sc. Students.

37. Placement services provided to students:

Emergency Management and Research Institute, Government of Gujarat gave 8 students of Biology department placement in their firm.

MOTIF (BPO) gave two T. Y. B. Sc. students placement in their firm.

Fifteen students of T.Y. B.Sc. Chemistry appeared for a campus interview conducted by Transpak industry Limited, Kalali Baroda.

Most of the students prefer to join higher studies.

38. Development programmes for non-teaching staff:

C⁺⁺ course is made compulsory for non-teaching staff.

39. Best practices of the institution (Please see Academic calendar and Annual Report of the college)

- Celebration of all mega festivals in the college by the students.
- Student's Counseling
- Personality Development Programme (PDP)
- Parents Teachers Meeting
- Cultural activities
- Science Seminar, Quiz Competition, Poster Competition
- Creative Gallery
- NSS and NCC
- Sports and Games
- Study tours/ Field study/Industrial tours

- Continuous monitoring of attendance of students
- Publication of college magazine

40. Linkages developed with National / International, Academic /Research bodies

The college is linked with SICART (Sophisticated Instrumentation center for applied research and testing)

The college is also linked with GIDC (Gujarat Industrial development Corporation), Vithal Udhyog Nagar.

41. Any other relevant information the institution wishes to add:

Organisation of lectures / Special talk by eminent scholars / Scientists from local national/International level.

Seminars/Workshops/Lectures organized by Departments:

- Department of chemistry organized a A lecture by Prof Dr. D. I. Bramhatt P.G. Deptatment of S P University.
- Physics Department celebrated Fermi Day on 29th Sep. 07 in the name of the great Physicist Enrico Fermi by arranging a lecture on the topic “ FERMI’S LIFE AND WORK” by Prof. A.R. Jani , Dept of Physics , S.P. University.
- Department organized a lecture by Prof. Nigel John Mason, Open University London, U.K.
- Department also organized a lecture on Astronomy by Prof. B.Y. Thakore of Dept of Physics , S.P. University.
- A lecture on “Global Warming” by Mr. Dhawal Patel of Nature Club, V.V. Nagar and another lecture on Endocrinology by Prof. A.V.R.L.N.Acharya, Dept.Of Bioscience, S.P. University were arranged by the Department of Biology.
- Industrial Chemistry Dept. of the college organized a Two-day lecture series cum seminar for T.Y. B.Sc. students.
- Department of Microbiology organised a guest lecture by Dr. Ujjawal Trivedi, Reader, Department of Bio Sciences and another guest lecture by Dr. Ranjan Chakroborty, Associate Prof. and Asst. Chair, East Tennessee State University, USA.

Part C:

Detail the plans of the institution for the next year.

1. Curricular Aspects

Introduction of new courses:

Conducting Bridge courses

Spoken English Classes

Encourage the teachers to deliver latest relevant information in their fields

Train the teachers to use the latest information technology etc.

2.Teaching –Learning and Evaluation

Arrange seminar/workshop/conference/symposia for students as well as teachers

Motivate teachers to do Minor/Major research projects

Organize more and more invited / endowment lectures by all the departments.

Strengthen the college to maximize the use of information technology

Self-Appraisal by teachers, student's assessment of faculty performance and Management/expert assessment of faculty are to be done

Arrangement of quizzes during the academic year.

3. Research Consultancy and Extension

Encourage non Ph. D./M. Phil staff to pursue Ph. D/M. Phil.

Encourage all the staff to involve actively in research work

Encourage staff for Minor /Major research projects

Encourage staff for National/International collaborative work

Arrange 10 days annual camp in NSS

Extension of community services in NSS (adopt a nearby village)

Celebration of different Days in the interest of society and nation (e.g. Aids day, No tobacco day, Women Day etc.)

Establishment of WDC in the college and carrying out different programmes under it

4. Infrastructure and Learning Resources

Renovation of Microbiology lab.

To develop an English Language lab.

To provide a separate cabin for those staff who are actively involved in research

Establishment of INFLIB NET connection to the library and departments.

More books related to value based education, general knowledge/awareness, and more copies of the Reference books

Addition of more scientific/research Journals.

Internal/External test papers of our college as well as nearby colleges should be made available in the library

To make copies of syllabi of all subjects taught in the college available in the Library.

5. Students Support & Progression

Felicitation of out standing Academic/NCC/NSS/Sports etc. students with incentives in terms of marks too.

Provision of indoor games facilities in the college.

Reduction of dropout rates.

To provide more number of scholarships to the needy and talented students through Government/University/Banks/Private agencies.

Strengthen the student counseling and organize career counseling for final year students

Strengthen Alumni association and involve Alumni in participation in overall development of the college/students/creation of infrastructure/fund generation/placement activity etc.

6. Governance & Leadership

The management takes care of the college as and when required.

Generate more financial resources by fetching the funds from UGC under different categories.

Generate more financial resources from Alumni association/Golden Jubilee fund/ Prize fund etc.

7. Innovative Practices

Strengthening the staff club and its activities.

Felicitation of staff for National/International achievements.

Strengthen the involvement of the staff in consultancy/linkage wherever possible.

Organization of more curricular/co curricular/extra curricular activities to achieve the goals and objectives of the college.

Addition of value-based education by organizing lectures/debate/elocution etc.

Felicitation of outstanding Alumni.

Dr. Rekha. S. Patel
Name
& Signature of the Coordinator,
IQAC

Dr. D.J. Desai
Name
& Signature of the Chairperson,
IQAC

**Prof. V. S. Prasad,
Director
National Assessment Accreditation Council,
2/4 Dr. Rajkumar Road, P. O. Box. No. 1075
Rajajinagar, Bangalore –560 010.**

Sub. AQAR report of V. P. & R. P. T. P. Science College, for the year 2007-2008.

Respected Sir,

Please find herewith the copy of Annual quality assurance report (AQAR) of V. P. & R. P. T. P. Science College, for the year 2007-2008 along with necessary attachments.

With thanks and regards

Name Dr. Rekha. S. Patel
& Signature of the Coordinator,
IQAC

Name Dr. D.J. Desai
& Signature of the Chairperson,
IQAC

Attachments:

1. Appendix A
2. Appendix B
3. Appendix C
4. Appendix D
5. Annual Report Part I by Principal
6. Annual Report Part II by Vice President of Central Committee
7. College Magazine