

SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING
[DEEMED TO BE UNIVERSITY]

THE ANNUAL QUALITY
ASSURANCE REPORT
(AQAR) SUBMITTED BY
THE INTERNAL
QUALITY ASSURANCE
CELL (IQAC)



2016-17

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SSSIHL

**The Annual Quality Assurance Report (AQAR) of the IQAC
(2016-17)**

Part – A

1. Details of the Institution

1.1 Name of the Institution

Sri Sathya Sai Institute of Higher Learning
(Deemed to be University)

1.2 Address Line 1

Vidyagiri, Prasanthi Nilayam

Address Line 2

Anantapur District

City/Town

Puttaparthi

State

Andhra Pradesh

Pin Code

515134

Institution e-mail address

registrar@sssihl.edu.in

Contact Nos.

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Name of the Head of the Institution:

Prof. K B R Varma

Tel. No. with STD Code:

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Name of the IQAC Co-ordinator:

Dr. Pallav Kumar Baruah

Mobile:

+91 9440699887

IQAC e-mail address:

pkbaruah@sssihl.edu.in

1.3 NAAC Track ID (For ex. MHC0GN 18879)

SSSIHL11303

1.4 NAAC Executive Committee No. & Date:

EC/54/RAR/076 Date: January 08, 2011

(For Example EC/32/A&A/143 dated 3-5-2004.
This EC no. is available in the right corner- bottom
of your institution's Accreditation Certificate)

1.5 Website address:

www.ssihl.edu.in

Web-link of the AQAR:

<http://sssihl.edu.in/sssuniversity/Portals/0/Images/About%20SSSIHL/AQAR/SSSIHL-AQAR-2016-17.pdf>

1.6 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	A++	96%	2003	2008
2	2 nd Cycle	A	3.63	2011	2016
3	3 rd Cycle				
4	4 th Cycle				

In the first accreditation on 21st March 2003, the Sri Sathya Sai Institute of Higher Learning (Deemed to be University) was one of the very few Universities in India to be awarded an A++ rating (95 to 100 percentile) by the National Assessment and Accreditation Council (NAAC).

In January 2011, the NAAC reaccredited Sri Sathya Sai Institute of Higher Learning (Deemed to be University) with an 'A' Grade and a Cumulative Grade Point Average (CGPA) of 3.63 (on a scale of 4.00). This put the Sri Sathya Sai Institute of Higher Learning among the top 7 out of 175 Universities accredited by NAAC.

1.7 Date of Establishment of IQAC: DD/MM/YYYY

23/06/2004

1.8 AQAR for the year (for example 2010-11):

2016-17

1.9 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((for example AQAR 2010-11 submitted to NAAC on 12-10-2011)

- i. AQAR 2011-12 EC_54_RAR_076 dt. 21/11/2012
- ii. AQAR 2012-13 EC_54_RAR_076 dt. 21/11/2013
- iii. AQAR 2013-14 EC_54_RAR_076 dt. 21/11/2014
- iv. AQAR 2014-15 EC_54_RAR_76 dt. 21/11/2015
- v. AQAR 2015-16 EC_54_RAR_76 dt. 21/11/2016

1.10 Institutional Status

University State Central Deemed Private

Affiliated College Yes No

Constituent College Yes No

Autonomous college of UGC Yes No

Regulatory Agency approved Institution Yes No

(e.g. AICTE for Management Courses and NCTE for Teacher Education Courses)

Type of Institution Co-education Men Women

Urban Rural Tribal

Financial Status Grant-in-aid UGC 2(f) UGC 12B

* Recognized under notification no.F.9-11/81-U.3, Government of India, Ministry of Education and Culture (Department of Education), New Delhi dt.10.11.1981 conferred by section 3 of the UGC Act 1956 (3 of 1956), the Central Government.

Grant-in-aid + Self Financing Totally Self-financing

1.11 Type of Faculty/Programme

Arts Science Commerce Law PEI (Phys Edu)

TEI (Edu) Engineering Health Science Management

Others (Specify)

M.Tech.(Computer Science) and
M.Tech.(Optoelectronics and Communications)

1.12 Name of the Affiliating University (for the Colleges)

Not applicable

1.13 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. / University

University with Potential for Excellence

UGC-CPE

DST Star Scheme

UGC-CE

UGC-Special Assistance Programme

Yes

DST-FIST

Yes

UGC-Innovative PG programmes

Yes

Any other
(Specify)

UGC
DBT Projects
DAE Project
ISRO
DRDO
DST-TSDB
DST-SERB
SSSIHL funding

UGC-COP Programmes

2. IQAC Composition and Activities

2.1 No. of Teachers

17

2.2 No. of Administrative/Technical staff

1

2.3 No. of students

0

2.4 No. of Management representatives

1

2.5 No. of Alumni

1

2.6 No. of any other stakeholder and
Community representatives

0

2.7 No. of Employers/ Industrialists

1

2.8 No. of other External Experts

0

2.9 Total No. of members

21

2.10 No. of IQAC meetings held

0

2.11 No. of meetings with various stakeholders: No. Faculty
 Non-Teaching Staff Students Alumni Others

In addition to the above meetings, the outcome of the following meetings with various stakeholders' have also been used as inputs by IQAC:

Committees that cater to academic standards at SSSIHL:

- Academic Council
- Research Conferment Cell
- Board of Studies
- Institutional Ethics Committee
- Institutional Biosafety Committee
- Alumni University Business meet

Committees that cater to quality of life at the different Campuses of SSSIHL:

- Campus-Hostel Management Committee
- Leadership Committee

Committees that cater to governance at SSSIHL:

- Board of Management
- Planning and Monitoring Board

2.12 Has IQAC received any funding from UGC during the year? Yes No

If yes, mention the amount

2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos. International National State Institution Level

(ii) Themes

To enhance the knowledge base of the students, the departments workshops in the following areas:

Biosciences

- 1) Biosciences: Potentials and Future Prospects
- 2) Frontiers in Advanced Biological Research, Immunology and Clinical Sciences
- 3) Food & Nutritional Sciences
- 4) Current Methodologies in Food Microbiology and Nutritional Immunology
- 5) Management & Commerce
- 6) Mergers and Acquisitions – Current trends: Global vs Indian Corporate Scenario
- 7) Capital Markets and Mutual Funds
- 8) Entrepreneurship Workshop
- 9) Infrastructural Development and Public-Private partnership Financing in India
- 10) Managing Corporate expectations-Assertiveness and Integrity
- 11) Women Entrepreneurship and its Different Dimensions

Chemistry

- 12) Frontiers in pure and Applied Chemistry
- 13) Current Research perspective and advanced concepts in Chemistry
- 14) Molecular Techniques and their applications in Clinical Microbiology

Education

- 15) Effective strategies for implementation of the two-year B.Ed. curricula Eternal Sanskrit
- 16) Values and the Sanskrit Language

Mathematics & Computer Science

- 17) Social Entrepreneurship and Innovation
- 18) The National Winter School in Mathematics
- 19) Big Data and Analytics

2.14 Significant Activities and contributions made by IQAC

Following are the activities and contributions in the year 2016-17:

- **Academics:** The Institute from time to time restructures and revamps its courses to meet the current global trends and make the courses competitive.

Introduced M.Sc.(Food and Nutritional Sciences) and B.Sc.(Food and Nutritional Sciences) was started in June 2016 in the department of Food and Nutritional Sciences at Anantapur Campus.

- **Curriculum Enrichment-**

The departments reviewed the feedback with regard to the course content and its outcome received from the outgoing batches of students, alumni, professional practitioners and the subject experts, considered to effectively mentor/monitor the progress of students' w.r.t. as to how to balance the academics with the other activities. The task of taking corrective measures if any, the department assigned this to a panel of faculty (comprising a minimum of three) per class to assist the teacher concerned in holding special sessions (if required) to find the student's pulse/feedback/opinions/suggestions. This particular exercise has been carried out at individual department level and the class feedback based measures that are taken / to be taken are elucidated below:

Biosciences:

- The department has planned to review the syllabus of M.Sc.(Biosciences) Programme.
- A symposium on Informatics, Genetics, Mycology and Antibodies - SIGMA 2018; and a six day workshop on Hands-on Experience in Advanced Research Techniques (HEART) have been planned.

Chemistry:

- Planned to conduct a One-day workshop on Frontiers in Chemical Sciences on 24 Feb 2018.

Mathematics and Computer Science:

- Planned to review the syllabus of UG, PG and MTech.(CS)
- Planned to conduct workshops such as, a two-day workshop on Data Science; and also on Big Data Genomics Synergy; Three-day workshop on Deep Learning; One-day workshop on Intel & Calligo Software Training: An Intro to Artificial Intelligence collaborated with Intel & Calligo software on the basics of Artificial Intelligence.

Physics

- Planned to conduct a one-day workshop on Python for Scientific Computing was held; and PULSAR-2K17A Journey through Physics

- **Research Thrust-**

The close academic interactions that the AQAC members had with different faculty members of SSSIHL resulted in identifying the following research projects and that are illustrated below.

Biosciences:

- A Research Project on 'Bioinformatics Infrastructure facility (BIF)' has been proposed to DBT.

Chemistry:

- A Research Project on 'Defluoridation of Water by Polymer-metal Ion Nanocomposites: Synthesis, Characterization and their Application Studies' has been proposed to Science and Engineering Research Board (SERB), New Delhi. A Research Project on 'Development and Validation of an indigenous high sensitivity – low cost paper based assay for Lp-PLA2 and other cardiac markers to identify Indians at risk for early onset of coronary artery disease' has been sent to 4S Foundation (USA)

Management and Commerce:

- Workshops planned: One day symposium on Exploring Entrepreneurship; Two-day Management Development Programme on Challenges of the Emerging Digital Economy; One-day seminar on Innovation; One-day workshop on Design a joyfully aligned life: Inside Out; One-day workshop on Fostering Winning Culture in an Organisation through Values and Ethics;; A seminar on GST: The Nuts & Bolts of a Good and Simple Tax.

Mathematics and Computer Science:

- A research project viz., Automatic Defense against Zero Day Polymorphic Worms in Communication Networks using Machine Learning Algorithms – SSSIHL funding has been proposed.

Physics

- Research Projects on 'Design and Development of small Organ Imaging Gamma Camera System' and ' Multi model microscope' have been proposed to DST.

In addition to the above IQAC monitors and ensures:

- Online Feedback mechanism for reviewing and improving Quality of Teaching.
- Teaching faculty with Ph.D. and teaching experience.
- Conduction of interdisciplinary Science colloquia every fortnight to facilitate better understanding amongst various Science discipline.
- Recruitment of faculty as per UGC's standards. (2 recruitments at faculty level were made in the year 2016-17).
- Final year postgraduate students (79%) appear for national examinations such as the GATE/JEST, DBT, CSIR-UGC NET etc.
- In addition, students were exposed to over a hundred visiting faculty and guest lecturers from top institutions and organizations in India and abroad.
- Curriculum review through Boards of Studies and Academic Council meetings.
- Collaborative research with sister organisations, Linkages and Research for Societal Benefit.
- Engaging Young Faculty Members in Research.
- Monitoring of campus level activities through Campus-Hostel Management Committee (CHMC)
- Promotion of Public Awareness of SSSIHL's Contribution and Quality Education.

- The merit based open admission policy which is a reflection of how the carefully chosen students excel in both academics and co-curricular area and make use of the best possible facilities available.
- Academic and Administrative ratio is 1 : 1.09 (155 : 169)
- One in four teachers are residential (hostel) in this Integral Education system.
- Sri Sathya Sai Values based Integral Education System is internalised. (The University education system focuses on grooming the Intellectual, Physical, Academic and emotional facets of a personality)

2.15 Plan of Action by IQAC/Outcome

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.

Plan of Action	Outcome / Achievements
<ul style="list-style-type: none"> ● Curriculum review through Boards of Studies and Academic Council meetings. ● Collaborative research with sister organisations, Linkages and Research for Societal Benefit. 	<p>Courses are restructured and revamped based on the inputs received from alumni, industrial experts and guest faculty from time to time. The BoS meetings are held once every two years involving the faculty members of the departments and external experts. The inputs received from different stake holders and considering the latest trends in the particular fields, the BoS proposes changes and modifications in the programmes. The BoS for various departments were conducted in the period from July to October. The Academic Council meeting was conducted on 15th October 2017. The deliberations are given below:</p> <ul style="list-style-type: none"> ○ Ratification of revisions in Syllabi of B.Sc.(Hons.) in Mathematics, M.Sc.(Mathematics), M.Tech.(Computer Science) and Integrated-MCA Programmes and updated academic regulations of M.Tech.(Computer Science) ○ Ratification of revisions in Syllabi of B.Com.(Hons.), BBA and MBA Programmes and revisions in Academic Regulations of MBA Programme: ○ Ratification of revisions in Syllabi & Academic Regulations of M.Sc.(Materials Science) and revised Question Paper pattern for B.Sc.(Hons.) in Physics, M.Sc.(Physics), M.Sc.(Materials Science) and M.Tech. (Optoelectronics and Communications) ○ Approval of revision of syllabi M.Tech.(Optoelectronics & Communications). <p>The institute continues to invest in equipment and infrastructure across the campuses. The expenditure on general equipment and infrastructure during the year was at ₹ 12.39 crores.</p> <p>Providing the best possible facilities for students, scholars and faculty to further excel in their respective areas of interest has always been a priority for the institute administration and Sri Sathya Sai Central Trust.</p> <p>Following are the Research Projects during the year 2016-17:</p>

	<p>Mathematics and Computer Science:</p> <ul style="list-style-type: none"> • Automatic Defense against Zero Day Polymorphic Worms in Communication Networks using Machine Learning Algorithms – SSSIHL funding. <p>Physics:</p> <ul style="list-style-type: none"> • Design and Development of Small Organ Imaging Gamma Camera System – SSSIHL & RD. • Multimodal Microscope: Field Trails (PhaseII) – DST-TSDB. • Research based reforms in Physics Instruction: Classroom and Laboratory – VGST, DST, Govt. of Karnataka. <p>Chemistry:</p> <ul style="list-style-type: none"> • Synthesis of novel Andrographolide derivatives as potential anticancer and antibacterial agents – CSIR. • Regiospecific functionalization of Anisotropic Nanoparticles & Implications towards generation Plasmonic Metal Nanoclusters – DST INSPIRE Faculty Award. • Development and Validation of an indigenous high sensitivity low cost paper based assay for Lp-PLA2 and other cardiac markers to identify Indians at risk for early onset of coronary artery disease – 4S Foundation (USA). <p>Biosciences:</p> <ul style="list-style-type: none"> • Augmenting Postgraduate Teaching & Research facilities – DST-FIST. • OMIX research and diagnostic laboratories Pvt. Ltd. – OMIX Research; • Bioinformatics Infrastructure Facility (BIF) – DBT. • Mechanism of ATP secretion and the role of ATP-activated P2 receptors in the Microglial inflammatory response: Implications for multiple sclerosis – DBTD. <p><u>Few Research outputs:</u></p> <ul style="list-style-type: none"> • The first proof-of-concept, associated with the resonant optical gyroscope with a reflector, has been demonstrated. The fabrication of a compact and efficient gyroscope is in the pipe-line. • Raman Spectroscopy has been demonstrated to be an effective and efficient diagnostic tool to investigate the role of homocysteine in bone degradation and mechanical failure. • A new non-invasive scientometric characterisation and evaluation of skeletal hot spots in bone scans of carcinoma prostate patients was established. • Rare-earth ion-doped fluorescent silica nanoparticles have been demonstrated to be very effective to detect femto-gram level of concentration of HIV-1 P24 antigen. • The technology for efficient defluoridation of water, using nanocrystalline Alumina has been established, and field trials have been conducted. • A Gamma camera, comprising of a novel next-generation semiconductor based detector for small-organ imaging, has been designed.
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	<ul style="list-style-type: none"> ● Andrographolide, a bioactive secondary metabolite isolated from a medicinal plant after subjecting it to semi-synthetic transformation, was experimentally proved to have better anti-cancer activity than the prevailing anti-cancer drugs like cisplatin and doxorubicin. This work has been globally acclaimed and awarded an international patent. ● A low-cost surface plasma-coupled emission platform has been tested for different hand-held device applications to diagnose heart ailments, depression, and diabetics with higher accuracy and reproducibility than currently existing systems in the market. ● Microbial fuel cells for wastewater treatment have been developed. ● Clinical trials in the field of regenerative medicine and tissue engineering, leading to the repair and regeneration of cartilage defects of the knee joint, have been successfully conducted. An association of elevated levels of homocysteine and decreased vitamin B with avascular necrosis of the hip bone has been established. Prediction models for multidrug resistant pathogen detection have been developed and validated. ● Near-Real-Time Super Resolution of Aerial Video sequences for Defense Applications, supported by DRDO labs, have been developed. Elliptic Curve Cryptography has been developed for space applications (supported by ISRO). ● MCA students developed an interesting versatile software called EchoSAI which has been in use at the Cardiology Department of the Sri Sathya Sai Institute of Higher Medical Sciences, Whitefield, since May, 2016. ● Multifunctional nutrient-enriched dietary products, with increased shelf life to mitigate anemia, obesity and reproductive health among women, have been developed. In addition, technologies pertaining to spice nutraceuticals as edible oil antioxidants; organic cultivation of nutrient dense tropical microgreens; sugar-free papaya fruit rolls; flaxseed-enriched millet-based cookies and soup mixes; herb-infused ready-to-use guava flakes and low-fat dietetics have been developed. These products are ready to be transferred to enterprising industries. ● Coming to Humanities and Social Sciences, the faculty of Economics has developed a viable model to forecast the rate of inflation. A sustainable model has also been developed which would help to look at economic growth and debt GDP ratio, simultaneously. <p>Active Collaborative Research Projects with International Institutions:</p> <ul style="list-style-type: none"> ● The Department of Physics along with the Dept. of Biosciences, SSSIHL has signed a Memorandum of Understanding with Centre for Biologics Evaluation and Research (CBER), Food and Drug Administration (FDA), Bethesda, Maryland, USA. ● To develop educational and scientific exchange and cooperation on a reciprocal basis for the benefit of the individual researchers and students, Sri Sathya Sai Institute of Higher Learning and Japan Advanced Institute of Science and Technology (JAIST) have signed a Memorandum of Understanding (MOU) - 26th January 2017.
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- The Department of Mathematics and Computer Science, Sri Sathya Sai Institute of Higher Learning, Prasanthi Nilayam has signed a MoU with Herald Logic Pvt Ltd (HL), 2037, A wing, Oberoi Garden Estate, chandivli Farms Road, Andheri E, Mumbai with on Code Development for benefitting Integrated-MCA students projects – 16th March 2017.
- The Department of Biosciences has established a “Centre for Regenerative Medicine and Tissue Engineering” in Collaboration with Sri Sathya Sai Institute of Higher Medical Sciences – Prasanthigram. Faculty from the Department of Biosciences have developed “Autologous Chondrocyte Implantation” to treat the osteochondral defects of the knee in collaboration with the Department of Orthopaedics, SSSIHMS-PG. This project has been approved by the Institutional Ethics Committee of SSSIHL (SSSIHL/IEC/PSN/BS/2012/01) and Clinical Trials Registry of India (CTRI/2015/06/005841). Transplantation of *in-vitro* Cultured Autologous Chondrocytes has been successfully performed in the first patient.
- Faculty from the Department of Biosciences and Physics in collaboration with Centre for Biologics evaluation and Research, US - Food and Drug Administration (FDA) have synthesized fluorescent nanoparticles for ultrasensitive, rapid and specific detection of HIV-1 p24 using Time Resolved fluorescence in a Sandwich ELISA format. The lowest detection limit of this assay is 0.3 pg/ml in blood serum or plasma. There have been no false positive reactions and cross reactivity was not observed when tested using serum/plasma samples infected with other viruses such as Dengue, Hepatitis-B and HCV.

Research for Societal benefit:

Research at the institute continues to touch greater milestones without sacrificing the focus on societal benefit. For instance, SSSIHL faculty are involved in the development of sensors for water monitoring in and around Anantapur District. Successful performance of autologous chondrocyte implantation in a patient with osteochondral defect in collaboration with Sri Sathya Sai Institute of Higher Medical Sciences is a noteworthy achievement by the faculty. This project was completed in 2017.

Besides meeting rural needs, our faculty are also involved in the design and fabrication of high end equipment such as multimodal microscope and resonant optical gyroscope for a variety of applications.

Establishment of Research Conferment Cell:

The functions of the RCC are:

1. Inviting departmental views on the areas of intake of Ph.D students.
2. Monitoring the progress of research and sponsored projects with the help of the respective Deans.
3. To facilitate preparation of major Research Project proposals (if requested) for submission to external agencies.
4. Review of academic regulations governing Doctoral Research Programme.
5. Vetting report on the performance of the Research Scholar in the Comprehensive Viva voce prepared by the Research Supervisor and forwarding the same to the Registrar for approval of the Vice Chancellor.

<ul style="list-style-type: none"> ● Attracting bright Students to the institute (ongoing) ● Increase the use of ICT in the different processes of the university ● Engaging Young Faculty Members in Research ● Campus-Hostel Management Committee 	<ol style="list-style-type: none"> 6. Plagiarism: Vetting the soft copy of the Doctoral Research Thesis and detailed justifications / clarifications provided by the Research Supervisor against each of the items in the plagiarism report and endorsing the thesis to be free of plagiarism. 7. Vetting the report on the colloquium, and the synopsis of the thesis for onward transmission to the Controller of Examinations with 4 copies of the thesis for the purpose of evaluation of the thesis. 8. Vetting of Panel of Examiners proposed by the Research Supervisor for evaluating Ph.D. thesis, for onward transmission to the Controller of Examinations. 9. Any other academic matters as assigned by the Vice-Chancellor. <p>The RCC regularly meets and sends the inputs to the administration accordingly.</p> <p>Mass email campaigns, WhatsApp campaigns to create awareness, and reaching out to the different schools across India with the help of information poster were done by the institute. The institute, in tune with the Revered Founder Chancellor’s philosophy, believes only in creating awareness about this unique institute and not market it. The salient features of the institute were highlighted on the Facebook page of the institute with the help of regular posts during the admissions season which started in November and culminated with the admission test and interview in April. These awareness campaigns helped the institute in attracting a pool of good talent as applicants.</p> <p>The institute graduated to a comprehensive Saral Paypack software which meets all requirements from attendance punch to payslip generation instead of the FOXPRO software.</p> <p>Yearly faculty workshops were organized. Faculty workshop is organized in the last week of May every years. The training for young faculty was given in question paper setting, evaluation, and other rules of engagement.</p> <p>Young faculty members were also encouraged to enrol for doing PhD and those faculty with Ph.D. qualifications were encouraged to undertake supervision of research work either through projects or by research scholars.</p> <p>The four campuses and hostels of SSSIHL are important and co-dependent and complementary parts of the Institute. This committee deliberate and approve all decisions pertaining to the Campus and Hostel to ensure smooth functioning Campus-Hostel dyad.</p> <p>Three meeting were held in the year 2016-17 and issues related to faculty and students, curricular, co-curricular and extra-curricular activities of students, management, parity across campuses, campus-working schedule, campus-workers welfare, facilities like bathroom complex in the hostel, garbage disposal, sports, cultural & self-reliance calendar, access of IT infrastructure to the students were discussed regularly in the CHMC meetings.</p>
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<ul style="list-style-type: none"> ● Leadership Team for Quality assurance ● Sri Sathya Sai Values-based Integral Education ● Promoting Green Energy Initiatives in the institute ● Promoting Public Awareness of SSSIHL's Contribution and Quality Education 	<p>Leadership Team consisting of Vice-Chancellor, Registrar, Controller of Examinations, Directors of the Campuses, Wardens of the Campuses, Heads of Departments and Associate Heads of Departments of the Institute has been established in 2015.</p> <p>This team takes leadership role in all the academic and administrative matters. Points discussed in this meeting were on the topic of Sri Sathya Sai System of Integral Education and how to effectively implement it in the dynamically changing world of today. Detailed deliberations were held on aspects like effective student mentoring, awareness courses, need for cooperation from parents, more teacher's workshops and orientation programmes, collective ownership of students by teachers etc. This plays an active role of quality assurance as per IQAC.</p> <p>Student teacher ratio of 9:1 is maintained as one of the best in the country. The model of integral education adopted at necessitates a favourable student-teacher ratio and a host of residential teachers who are willing to make sacrifices by living with the student-teacher interaction that is the basis of a modern <i>Gurukula</i>.</p> <p>Solar off- grid system was successfully installed and commissioned with 10KVA 240VDC in December 2016 in the Muddenahalli campus of the institute.</p> <p>A well formulated and comprehensive annual report is brought out by the institute every year reporting the milestones achieved in the field of Quality education and other dimensions of holistic development being undertaken for the students in the institute. This is uploaded on the website for the public at large to refer to it.</p> <p>As a part of creating awareness about the institute for prospective applicants during the admissions season, admissions posters briefly describing the salient features of the value based education at SSSIHL is circulated to all the major schools and universities across India.</p> <p>Help of the Sri Sathya Sai Seva Organization, a sister organization of SSSIHL is taken to create awareness about this unique experiment of value based education across the country. This is done through the sevadal volunteers and office bearers of SSSSO.</p>
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* Attached the Academic Calendar of the year as Annexure-I.

PS: Faculty achievements are given in the **Annexure-V**.

2.15 Whether the AQAR was placed in statutory body Yes No

Management Syndicate Any other body Board of Management

Provide the details of the action taken

AQAR along with Annual Report presented in Board of Management on 21/11/2016

The points stated in AQAR reflects in the Annual Report of the institute. The key points and achievements are figured in comparison with the National averages in the Annual Report. The infographics provide qualitative status w.r.t. NAAC parameters and national averages.

Part – B

Criterion – 1

1. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	11	0	11	11
PG	7	0	7	7
UG	10	1*	11	11
PG Diploma	Not applicable	Not applicable	Not applicable	Not applicable
Advanced Diploma	Not applicable	Not applicable	Not applicable	Not applicable
Diploma	Not applicable	Not applicable	Not applicable	Not applicable
Certificate	Not applicable	Not applicable	Not applicable	Not applicable
Others (Professional)	5	0	5	5
Total	33	1	34	34

Interdisciplinary	0	0	0	0
Innovative	3	0	3	3

* Bachelor of Performing Arts in Music- BPA in Music

1.2 (i) Flexibility of the Curriculum: ~~CBCS/Core~~ ✓ / Elective option ✓ / ~~Open options~~

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	✓ All programmes
Trimester	
Annual	

1.3 Feedback from stakeholders* (On all aspects)

Alumni Parents Employers Students

Mode of feedback : Online Manual Co-operating schools (for PEI)

**Please provide an analysis of the feedback in the Annexure*

In order to ensure that the academic curriculum of the Institute is in sync with the developments happening in the scientific, economic and business world, regular interactions are held with the alumni, employers, members from the scientific and business community. Interactions are also held with parents and students of the Institute to analyse and study the impact of the inputs on their career and all round personality development.

The Alumni actively participate in providing feedback on the practical relevance of the courses that they have undergone on their work/profession. They also share the new developments which have happened in the field of their work/profession, which may be included as a part of the curricula. They help the alma mater in the conduct of annual workshops, seminars, and conferences. They are a part of the placement structure for the outgoing batch of students each year by running a programme which makes the students industry ready. (Refer to **Annexure-V**)

The feedback from different stakeholders are factored in the curricular design and upgradation, like starting new courses, new chapters to the syllabi of several courses in various disciplines and modifying the curriculum vis-à-vis the latest trends in the industry and academia.

Students: Through formal and informal interactions in and outside the classroom and through written course-wise feedback every semester. **Refer to Annexure-VI** for the Questionnaire of the online teaching quality feedback. The students also have interactions with the HoDs, Director, senior faculty and administration where their inputs are taken.

Industry: The industrial experts and employers of our students visit the institute for guest lectures, colloquia and give their valuable feedback regarding all aspects of the institute.

Parents: A comprehensive report on the performance of the students, both academic and integral item is sent to the parents when the students go for vacation. The parents share their feedback based on the report and their observations on the growth/development of their ward. A formal/informal interaction with the parents of each ward to appraise them about the performance of the student and elicit feedback about the different dimensions in the student life is also carried out at regular intervals. (Refer to **Annexure-VII**)

Employers: The employers of our students generally use the alumni who are a part of the placement team, to share feedback on the performance of the newly recruited students to reinforce the current practices adopted by the various departments of the institute and at times also suggest introduction of new techniques which can further augment the skill set of the students.

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

- Any change in the Undergraduate programmes like B.Sc. Hons. in Mathematics, Physics and Chemistry is done synergistically involving all the three departments. When the revision of syllabi of B.Sc. (Hons.) in Mathematics was undertaken, topics of Vector Analysis and Boundary Value Problems were also included to give a broad overview to the students in consultation with the Dean of Sciences and all the concerned HoDs. To give thrust to practical learning in M.Sc Mathematics, MATLAB skills were imparted in two stages- Introduction to MATLAB Programming and Advanced MATLAB Programming.
- Department of Management and Commerce undertook revision and updation of syllabi keeping in view the latest trends and skill sets required by the students. For e.g. electives like 'Entrepreneurship and Innovation' was introduced to cover the latest topics viz. angle investors, seed funds, co-working spaces, start-up incubators etc. Talent Management as an elective was introduced.
- Department of Physics revised the question paper pattern by giving stress on internal choice as compared to global choice so that students undertake a more in depth study and gain more knowledge. Courses which need practical orientation like Optoelectronic Sensors were split into theory and practical to give hands on training to students. Syllabuses of few papers were redrafted with updated references. Portions which were obsolete were removed viz. Switching systems and Cross bar switches. Keeping with the spirit of Choice based credit system (CBCS) of the UGC, the

students were allowed to opt for electives from the Department of Mathematics and Computer Sciences to increase the scope of the programme and provide flexibility to the students.

1.5 Any new Department/Centre introduced during the year. If yes, give details.

The building of 'Centre for Research Instruments Facility (CRIF)' has been established in 2016-18 at Prasanthi Nilayam Campus of the Institute. The equipment and infrastructure is being procured and will be made fully functional from 2017-18.

Criterion – 2

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty

Total	Asst. Professors	Associate Professors	Professors	Others
155	88	34	20	13 *

* Others: Teaching Asst. = 6, Part-time = 2, Information scientist =1, Placement Officer = 1, Technical = 2

2.2 No. of permanent faculty with Ph.D.

102/155

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others (Research Faculty)		Total	
R	V	R	V	R	V	R	V	R	V
2	4	0	0	0	2	0	0	2	6

2.4 No. of Guest and Visiting faculty and Temporary

NA

130

13

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended Seminars/ Workshops	22	82	13
Presented papers	38	100	
Resource Persons	1	5	4

2.6 Innovative processes adopted by the institution in Teaching and Learning:

- National Science Day was conducted on Feb 28th 2017 having the theme “Science and Technology for specially abled persons” with the objective to ignite young minds, in service of the country.
- With the help of Multimedia Learning Centre established in all the campuses of the institute, the video conferencing facility is widely used for teaching and conducting workshops/conferences etc.
- Faculty uses learning management system for uploading the details of the lesson plan which help the students to access it and come prepared for the classes (e-Guru portal for SSSIHL)
- The University operationalizes its goals and objectives through a **unique and innovative Sri Sathya Sai System of Values-based Integral Education** which makes it a **modern Gurukula**. The Sri Sathya Sai values-based integral education system aims to seamlessly blend high

academic standards along with the inculcation of basic human values in its students. This university is a modern *Gurukula*, a place where teachers and students live and grow together in love and wisdom. This system of education is being followed in the institute right from its inception. This helps the students to gain leadership skills, communication skills, experiential skills etc.

2.7 Total No. of actual teaching days during this academic year

196

2.8 Examination/ Evaluation Reforms initiated by
The Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

Continuous Internal Evaluation for all courses of study, Double Valuation in Post Graduate courses, Semester system followed right from the inception in the institute, Online Quizzes MCQs using LMS- E-Guru

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop/Academic Council

All the faculty members of Sri Sathya Sai Institute of Higher Learning
--

2.10 Average percentage of attendance of students

93%

2.11 Course/Programme wise distribution of pass percentage:

Title of the Programme	Total no. of students appeared	Division				Pass %
		O & O+ grade Distinction %	A & A+ I %	B grade II %	C grade III %	
Ph.D	11	-	-	-	-	-
M.B.A	72	51	45	4	-	100
M.Tech. in Computer Science	15	53	47	-	-	100
M.Tech. in Optoelectronics and Communications	9	89	11	-	-	100
M.Sc. in Mathematics	13	38	62	-	-	100
M.Sc. in Physics	8	25	75	-	-	100
M.Sc. in Chemistry	12	25	75	-	-	100
M.Sc. in Biosciences	21	48	52	-	-	100
M.Sc.(Food Science and Nutrition)	5	20	80	-	-	100
M.Sc.(Food Technology)	3	33	67	-	-	100

M.Sc.(Material Science)	3	33	67	-	-	100
M.A. in English Language & Literature	4	-	100	-	-	100
M.A. in Economics	20	65	35	-	-	100
Integrated MCA	12	-	100	-	-	100
B.A.	13	38	54	8	-	100
B.Sc.(Hons) Economics	1	100	-	-	-	100
B.A. (Hons.) Economics	16	44	50	6	-	100
B.Sc. (Hons.) Biosciences	27	-	93	-	-	93
B.Sc. (Hons.) Chemistry	24	8	88	4	-	100
B.Sc. (Hons.) Mathematics	27	19	74	-	-	93
B.Sc. (Hons.) Physics	23	13	87	-	-	100
B.Sc. (Food Science and Nutrition)	11	18	82	-	-	100
B.Sc.(Food Technology)	5	-	100	-	-	100
B.Com.(Hons.)	73	41	47	8	-	96
BCA	13	8	92	-	-	100
BBM	41	34	46	17	-	98
B.Ed.	8	75	25	-	-	100

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

Through departmental committees held at every month, Research Advisory Board, Academic Council meetings, Examination Committee, and performance of students results, performance of students at national level exams etc.

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
FDP / Refresher courses	2*
UGC – Faculty Improvement Programme	0
HRD programmes	0
Orientation programmes	0
Faculty exchange programme	0
Staff training conducted by the university	Department of Mathematics & Computer Science-19, Physics- 17, Chemistry- 16,

	Biosciences- 17, Food & Nutritional Sciences- 7, Management and Commerce- 30, Economics- 8, Education- 6, English- 11 and Honorary faculty, teaching assistants and adjunct faculty etc.
Staff training conducted by other institutions	
Summer / Winter schools, Workshops, etc.	18 workshops/seminars 8 departments 130 faculty
Others	22

*

Dr. (Mrs.) Sahida Sharma- 21 days residential training program equivalent to UGC refresher course on "Degree College Teachers Training Program in Chemistry" conducted by the Centre Of Excellence In Science And Mathematics Education Indian Institute Of Science at its Challakere Campus, Kudapura. This training program was supported and approved by MHRD, Govt. of India under 'Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching' and was held from 23rd November 2016 to 13th December 2016.

Dr. A Sunil -Degree College Teachers Training Programme in Chemistry, an equivalent of UGC refresher course held in the Talent Development Centre, Indian Institute of Science, Kudapura, Chitradurga District, Karnataka. (2016)

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	72	0	3	0
Technical + Support Staff	97	0	2	0
Total	169	0	5	0

Criterion – 3

3. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

The “Sai Krishna Award for excellence in research and teaching” has been instituted to recognize the prominent researchers and teachers at the Sri Sathya Sai Institute of Higher Learning each year. This award is given alternately for excellence in Research excellence in teaching. The research awards are given for excellence in research in three categories viz., **a.** Sciences **b.** Management, Commerce, Economics and Education **c.** Languages and Philosophy.

Interdepartmental Science Colloquium provides an opportunity for doctoral research scholars, teaching faculty and visiting experts to share their research experiences with one another. It breaks down barriers

of communication and helps merge traditionally distinct scientific disciplines, thereby creating new opportunities for research. There are around 18-20 sessions in one academic year. (**Annexure-V**)

The Research Advisory Board of the University monitors and gives inputs to faculty in Research, Consultancy and Extension.

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number	3	12	5	3
Outlay in ₹ Lakhs	₹ 271.62	₹ 375.23*	₹ 244.04	₹ 114.75

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number	1	1	1	1
Outlay in ₹ Lakhs	₹ 5	₹ 5	₹ 5	₹ 5

3.4 Details on research publications*

	International + National	Others
Peer Review Journals	233	Books = 4 Articles in Sanskrit = 11
Non-Peer Review Journals	-	
e-Journals	-	
Conference proceedings	100	

* Please refer to **Annexure- V**

3.5 Details on Impact factor of publications:

Range	1.048 – 9.063	Average	2.69	h-index	2	Nos. in SCOPUS	31
Composite Interfaces – 1.048		Chemical Science – 9.063					

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant Sanctioned (Rs. in lakhs)	Received (Rs. in lakhs)
<u>Major projects</u>				
1. Design and Development of Small Organ Imaging Gamma Camera System	2	DST	₹ 90.67	₹ 62.76
2. Multi Model Microscope: Field Trails (Phase II)	3	DST-TSDB	₹ 31.62	₹ 31.62
3. FIST (Fund for Improvement of Science & Teaching Infrastructure)	1	DST	₹ 185 (on 50:50 sharing basis)	₹ 78

4. Development and Validation of an indigenous high sensitivity – low cost paper based assay for Lp-PLA2 and other cardiac markers to identify Indians at risk for early onset of coronary artery disease	5	4S Foundation (USA)	₹ 10	₹ 10
5. Regiospecific Functionalisation of Anisotropic Nanoparticles and Implications Towards Generation of Plasmonic Metal Nanoclusters	1	DST INSPIRE Faculty Award	₹ 35	₹ 35
6. Augmenting Postgraduate Teaching & Research Facilities in Dept. of Biosciences	3	DST-FIST	₹ 88	₹ 88
7. Bioinformatics Infrastructure Facility (BIF)	1	DBT	₹ 16.32	₹ 16.32
8. Mechanism of ATP secretion and the role of ATP-activated P2 receptors in the Microglial Inflammatory response: implications for Multiple sclerosis	3	DBTD	₹ 53.72	₹ 50.87
Minor Projects	0			0
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College	1	Autologous Chondrocyte Implantation	₹3.45	₹3.45
Students research projects- Lean Six Sigma Interventions* (other than compulsory by the University)	6 months	SSSIHL	--	--
Any other(Specify)				
Total		9	513.78	376.02

* Lean Six Sigma interventions carried out for the sister organizations of SSSIHL solely by students of MBA which are then certified by Lean Six Sigma black belt professionals. These are carried out in the odd semester i.e. between June- October every year. There are generally 6-7 such projects every year. These interventions improve the methodology to eliminate problems and inefficiencies to provide a better response to the consumer's needs.

3.7 No. of books published i) With ISBN No. Chapters in Edited Books
ii) Without ISBN No.

3.8 No. of University Departments receiving funds from
UGC-SAP CAS DST-FIST
DPE DBT Scheme/funds

3.9 For colleges Autonomy CPE DBT Star Scheme
 INSPIRE CE Any Other (specify)

Not applicable

3.10 Revenue generated through consultancy

As a matter of policy, the innovations are conceived as contributions of knowledge for the benefit of the society. The Institute provides education at all levels and in all disciplines TOTALLY FREE OF COST. Hence the outcomes of any innovation is also made available for all those who can benefit from them, without any charge. The innovations are focused on the regional and socio-economic needs in the neighbourhood areas of the Campuses and also on the needs of the state(s). They are not pursued with the objective of commercial exploitation.

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number	0	-	-	20	--
Sponsoring agencies	-	-	-	SSSIHL	--

3.12 No. of faculty served as experts, chairpersons or resource persons - 4

3.13 No. of collaborations International National Any other

- The Department of Mathematics and Computer Science, Sri Sathya Sai Institute of Higher Learning, Prasanthi Nilayam has signed a MoU with Herald Logic Pvt Ltd (HL), 2037, A wing, Oberoi Garden Estate, chandivli Farms Road, Andheri E, Mumbai with on Code Development for benefitting Integrated-MCA students projects – 16th March 2017.
- MoU has been signed between Sri Sathya Sai Institute of Higher Learning and Foundation for Innovation and Social Entrepreneurship (FISE), an initiative of Tata Trusts for creating an ecosystem for promoting innovation and entrepreneurship to work towards creating a pipeline of innovative ideas – 3rd August 2016.
- The Department of Physics has signed a Memorandum of Understanding with Grey Scientific Labs, Kommadi, Visakhapatnam, AP, for completion of a project under Technology Development of Transfer (TDT) under the DST, Govt. of India with serial. No. DST/TSG/NTS/2015/67-G dt.2.5.2016.
- To develop educational and scientific exchange and cooperation on a reciprocal basis for the benefit of the individual researchers and students, Sri Sathya Sai Institute of Higher Learning and Japan Advanced Institute of Science and Technology (JAIST) have signed a Memorandum of Understanding (MOU) - 26th January 2017.
- An agreement between TATA Education and Development Trust, C/o Sir Ratan Tata Trust, Bombay House, Homi Mody Street, Fort, Mumbai – 400 001 and department of Chemistry

dt.23.8.2017. The Trust sanctioned an amount of Rs.96.92 lakhs over three years to SSSIHL for the research project title 'ANIRVID' A cellphone based point-of-care diagnostic device (for dopamine and serotonin) to evaluate the effect of Therapeutic interventions on depression and heart ailments.

3.14 No. of linkages created during this year

3.15 Total budget for research for current year in lakhs:

From Funding agency From Management of University/College
 Total

3.16 No. of patents awarded this year

Type of Patent		Number
National	Applied	0
	Granted	0
International	Applied	0
	Granted	0
Commercialised	Applied	0
	Granted	0

3.17 No. of research awards/ recognitions received by faculty and research fellows of the institute in the year 2016-17

Total	International	National	State	University	Dist	College
3	1	2	-	-	NA	NA

3.18 No. of faculty from the Institution who are Ph. D. Guides
 and students registered under them

3.19 No. of Ph.D. awarded by faculty from the Institution

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF SRF Project Fellows Any other*
 * SSSIHL

3.21 No. of students Participated in NSS events:

The **NCC** aims at developing character, comradeship, discipline, a secular outlook, the spirit of adventure and ideals of selfless service amongst young citizens. Source: <http://nccindia.nic.in/en/node/141>

National Service Scheme (NSS) was introduced in 1969 with the primary **objective** of developing the personality and character of the student youth through voluntary community service. 'Education through Service' is the purpose of the **NSS**. Jul 23, 2018.

The sole aim of the NSS is to provide hands on experience to young students in delivering community service. Source: <https://nss.gov.in/>

In line with this overarching objective, the Sri Sathya Sai System of Integral Education that has been developed and is being followed at this institute has a packed schedule that includes academics and participation in various curricular and co-curricular activities throughout the year that include Sports and Games, participation in cultural activities (music, dramatics, etc.), Social Service (Grama seva) etc. The institute aims at producing students who are academically sound, socially responsible and spiritually aware. The way of life at this institute holistically provides the necessary foundations to produce good citizens.

University level	<input type="text"/>	State level	<input type="text"/>
National level	<input type="text"/>	International level	<input type="text"/>

3.22 No. of students participated in NCC events:

University level	<input type="text"/>	State level	<input type="text"/>
National level	<input type="text"/>	International level	<input type="text"/>

3.23 No. of Awards won in NSS:

University level	<input type="text"/>	State level	<input type="text"/>
National level	<input type="text"/>	International level	<input type="text"/>

3.24 No. of Awards won in NCC:

University level	<input type="text"/>	State level	<input type="text"/>
National level	<input type="text"/>	International level	<input type="text"/>

3.25 No. of Extension activities organized

University forum *	<input type="text" value="1"/>	College forum**	<input type="text" value="4"/>
NCC	<input type="text"/>	NSS	<input type="text"/>
		Any other **	<input type="text" value="1"/>

* Grama Seva

** Every campus conducts their own extension activities like river cleaning up, leper colony service, poor feeding, village adoption programmes etc. International Yoga Day organized at the campus level where all students participated on 21st June 2016.

3.26. Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

- Researchers in Department of Food & Nutritional Sciences conducted independent study on ten varieties of tropical microgreens like roselle, French Basil, radish, sunflower etc. for addressing the issue of 'hidden hunger'- micronutrient malnutrition, a major nutritional concern in rural India. This will help the women and small scale farmers to set this up as a commercially viable enterprise.
- Avascular Necrosis a debilitating bone disease. The Dept. of Biosciences, SSSIHL along with the doctors of Dept. of Orthopaedics have done a detailed study on this disease. This will lead to a therapeutic targets which reflect the prognosis of the disease which will be helpful to the patients visiting the hospitals and the society at large.

- The Anantapur Campus faculty of the departments of Bioscience and Home Sciences visit the neighbouring areas to advice women and others about health and cultivation. This enhances the development of appropriate fruit and vegetable preservation technologies for providing avenues for self-employment to rural women. They also taught the newer packaging technologies for rural level product developments (2007 onwards)

Criterion – 4

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	147 acres**	NA	Sri Sathya Sai Central Trust	147 Acres
Class rooms	178	--		178
Laboratories	35	--		35
Seminar Halls	5	--		5
No. of important equipments purchased (\geq 1 lakh) during the current year.		7	UGC, DRDO, DST, SSSIHL Etc.	
Value of the equipment purchased during the year (₹ in Lakhs)	₹ 3227 lakhs (2015-16)	₹ 1045 lakhs		₹ 4272 lakhs
Others (CRIF)\$		₹ 750 lakhs		₹ 750 lakhs

** **Total Area:** The Sri Sathya Sai Institute of Higher Learning (Deemed to be University) comprises Four Campuses viz.,

- 1) Prasanthi Nilayam Campus for men at Prasanthi Nilayam, Anantapur District, Andhra Pradesh
- 2) Anantapur Campus for women at Anantapur, Anantapur District, Andhra Pradesh
- 3) Brindavan Campus for men at Kadugodi, Whitefield, Bangalore, Karnataka and
- 4) Muddenahalli Campus for men at Muddenahalli, Chickballapur district, Karnataka

[Total area in acres]

- 1) Prasanthi Nilayam Campus for men = 20.53 acres
(Academic area=5.20 acres + Playgroud=7.71 acres + Planetarium=2.13 acres + Stadium=5.49 acres)
- 2) Anantapur Campus for women = 82.6 acres
- 3) Brindavan Campus for men = 35.55 acres
- 4) Muddenahalli Campus for men at Muddenahalli, Chickballapur district, Karnataka (in 8.10 acres)

The Central Research Instruments Facility (CRIF) is a new and modern Advanced Research Centre [43,000 sq. ft. (4000 m²)] at the Prasanthi Nilayam Campus.

Total Constructed area: [In sq.m.]

- 1) Prasanthi Nilayam Campus for men = 56,217.38 sq.mts.
(Main building= 44,638 sq.mts. + Humanities building=1,744 sq.mts. + Annexe = 4,088 sq.mts. + Central Library = 5,018 sq.mts. + Planetarium = 729.381 sq.mts.)
- 2) Anantapur Campus for women = 20,018 sq.m. (3 buildings)
- 3) Brindavan Campus for men = 29,874 sq.m. (2 buildings)
- 4) Muddenahalli Campus for men = 4979.60 sq.m. in 8.10 acres

University Administrative building = 4025 sq.m. in 2.25 acres

\$\$ Building and infrastructure facilities for 'Central Research Instruments Facility' (CRIF) has been established.

4.2 Computerization of administration and library

University Management System (UMS) has been initiated in the year 2011-12. Admissions have been totally computerized. Examination module and other modules such as Accounting and Finance, Hostel maintenance, administration, Back-office, etc., are being developed. Admissions module is fully functional.

The Central Library of the Institute is fully networked with INFLIBNET/INFONET with VSAT connectivity with extension of network to other departments by the UGC. EBSCO collection and databases and Science finder are also available in the Institute.

4.3 Library services:

2016-17	Existing		Newly added		Total	
	No.	Value (₹ in lakhs)	No.	Value (₹ in lakhs)	No.	Value (₹ in lakhs)
Text Books	169513	829.86	1567	9.52	171080	839.38
Reference Books	6813	37.1	22	0.135	6835	37.24
e-Books						
Journals	177	2.43	4	0	175	2.3
e-Journals*						
Digital Database	EBSCO- 8500	20.42				
	SCI.FINDER- 34000 Journals (Abstract & Bibliography)					
CD & Video	3328				3328	
Others (specify)						

Note: * E-journals- The Central Library of the institute is fully networked with INFLIBNET/INFONET with VSAT connectivity with extension of network to other departments initially by the UGC. The UGC INFONET - WAN networks all the universities in India. The SSSIHL users can access the databases of Web of Sciences, Science Direct, J-CCC, J-STORE, Oxford University Press, Cambridge University Press and PRO-QUEST through INFLIBNET.

All these Journals are available to all the students and staff over our institute campus network. These Journals cover various teaching and research disciplines actively pursued by the departments.

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing	1044	Labs = 14	All the computers in the institute have internet browsing facility		Computer Centres = 4	44	406	106
Added	68	Students computers = 556						
Total	1112							

4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

The University has provided Laptops for all the Research Scholars, and PC for teachers. The University has established Multimedia Learning Centre and English Language Labs at Prasanthi Nilayam, Anantapur and Brindavan Campuses to cater to the needs of video-conferencing. The University is in the process of establishing Multimedia Learning Centre and English Language Lab at its fourth campus also and as an interim arrangement, the computer center of the campus is being used for all the video conferencing facilities. All the Campuses are centrally provided with the Computer Centres. The student - computer ratio is **2.3 : 1 (1303 : 556)**.

E-journals- EBSCO & Scifinder: The Central Library of the University is fully networked with INFLIBNET/INFONET with broadband VSAT connectivity with extension of network to other departments initially by the UGC. The UGC INFONET - WAN networks all the universities in India. The SSSIHL users can access the databases of Web of Sciences, Science Direct, J-CCC, J-STORE, Oxford University Press, Cambridge University Press and PRO-QUEST through INFLIBNET.

We have a well-established Computer Centres at the Prasanthi Nilayam Campus which are fully networked. The Central Library is also networked with INFLIBNET/INFONET with 1 Gbps NKN/NMEICT connectivity and the internet connectivity is 100Mbps.

This facility has been extended to other campuses as well by a dedicated 2 mbps connections to each of the offsite campuses. All the e-journals are available to all the students and staff over our university campus network

4.6 Amount spent on maintenance in ₹ lakhs :

i) ICT	8.15
ii) Campus Infrastructure and facilities	2.82
iii) Equipments	1.61
iv) Others	0.42
Total :	13.11

Criterion – 5

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

- In tune with the philosophy of the Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba, education is imparted TOTALLY FREE OF COST to all the students for all courses of study.
- In Sathya Sai Hostels, all students willingly undertake all the tasks to run the hostel and stay as one big family with one fourth of the teachers staying in the hostel. The students naturally pick up soft skills, get personal counselling from the teachers and get coaching and guidance on not only academic aspects but also aspects regarding life. All this facilitate a great amount of multi-skill-development. They also get coaching for games, music etc. in this unique self-reliance model.
- Rich pool of faculty visiting the university helps the students in deciding their career path and guidance for competitive examinations.
- The senior and junior students live as one family, which facilitates cooperation and not competition among the students. The concept of ragging is unheard of in Sathya Sai Hostels.
- Grievance redressal mechanism exists. A student can approach his/her room teacher with his/her grievance. If the student is not satisfied, the student can approach the floor teacher, warden. Campus Hostel Management Committee has also been set up in August 2015 which will also look into such issues. If still not satisfied the matter can be escalated to the Vice-Chancellor.
- The preceptorial system that ensures that each student has a teacher who is a mentor and helps the student develop a holistic personality. Mentors also review the progress of their mentees and make a collective and comprehensive review during the mentors' meetings.
- One of the significant teaching-innovations is “E-Guru” software package developed by a faculty and his project student, which enables the teachers to upload all the teaching material, quizzes, syllabus, session-wise schedule of each course, old question papers, standard formats for submission to examinations section, etc. This enhances the effectiveness of teaching-learning to a great extent.

5.2 Efforts made by the institution for tracking the progression

Students appear for the different competitive examinations and the results obtained are communicated to the university which is published in the annual report every year.

The passed out students fill an online form every year circulated by the university, updating the university about the details of their progression.

Information of job placement is provided in a structured manner by the CATALYST team which facilitates placement of the passing out students.

University has integrated courses in sciences where the student progresses directly into the respective master's degree by obtaining a minimum CGPA.

During their course of study, students are evaluated from time to time and wherever necessary, remedial classes, tutorial classes are conducted. Students are being encouraged to take up projects and dissertations in their final year of study so that it can help them to focus on a problem at hand and pursue research beneficial for the society.

5.3 (a) Total Number of students

UG	PG	Ph.D.
842	392	69

(b) No. of students outside the state
(out of 1303)

802

(c) No. of international students

8

Men	No	%	Women	No	%
	-	-		8	0.6%

Last Year (2015-16)						This Year (2016-17)					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
292	18	17	127	-	454*	344	18	18	91	-	471

* Newly enrolled

Demand ratio: 1 of 5 admitted

Dropout %: 0.05% of Admitted

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

Students of post graduate programmes are given special coaching for taking different competitive examinations like UGC NET, JRF, GATE etc. Faculty members focus on the format and type of questions generally asked in these competitive examinations and are actively involve in helping the students in solving model question papers. The students are evaluated and mentored one on one on a weekly basis. The teachers keep in mind the special skill sets required to be successful in these examinations and impart the same to the students as part of the teaching learning process.

No. of students beneficiaries

All PG students of the relevant departments are given coaching for competitive examinations and the interested students take the examinations. (42 out of 53)

5.5 No. of students qualified in these examinations

NET	8	SET/SLET	-	GATE	24	CAT	-
IAS/IPS etc	-	State PSC	-	UPSC	-	Others *	5

* JRF, JEST

*5.6 Details of student counselling and career guidance

Students are given inputs about the different avenues available in their respective course of study from time to time throughout their period of study at the institute. Interaction with rich pool of visiting and guest faculty also broadens their perspective and gives them clarity about the career path to be chosen by them. Students are encouraged to take up projects in the 3rd year under graduation in their areas of interest which can lead to the student pursuing research or career in that field. Career guidance to final year PG students is given by alumni in a unique forum of CATALYST where tips for CV preparation, mock interviews, generating leads for the passing out students is done.

No. of students benefitted – All PG and final year UG students.

5.7 Details of campus placement *

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
22	128	97	31**

* The remaining students who pass out pursue higher studies at SSSIHL or elsewhere (IISc, IITs, etc.,)

** The off-campus placements are also done by alumni referrals.

Our Placement Officer has close interaction with Business and Industry and, therefore, many organizations are aware of the institute's Philosophy, functioning, academic excellence and positive attitude of the students. They also know of the uniqueness of the Integral Education system of the institute, with its special emphasis on moulding the students into a wholesome and balanced personality, academically Sound and Spiritually Aware. Many organizations, who have employed our students and observed their competence and sense of commitment to basic values, seek our graduates repeatedly. Most of these graduates are occupying good and rewarding positions in India and abroad and many of them have progressed to very senior levels.

The alumni of the institute play an important role in helping graduating students find suitable employment opportunities in their chosen vocation.

They achieve this through an outreach programme called CATALYST (Corporate Aptitude Training – an Arena to Leverage Your Skills and Talents) where graduating students are coached in preparing résumés, the application process, interview techniques, networking and the like. The programme has been very successful.

- 5.8 Details of gender sensitization programmes- Gender related problems never occur in this institute as the campuses for men and women are different with dedicated men and women staff respectively. Revered Found Chancellor, Bhagawan Sri Sathya Sai Baba has said, “Women should never be slighted or treated with disrespect. Wherever women are honoured, there is prosperity and happiness.’

In **Awareness courses**, the inputs relating to gender sensitivity are also provided. Students both men and women are exposed to the discourses of the Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba, who had many times spoken at length about the exalted status given to women in Indian Culture. This makes a very deep impression on the young minds of the students.

5.9 Students Activities

- 5.9.1 No. of students participated in Sports, Games and other events

State/ University level* National level International level

No. of students participated in cultural events

State/ University level* National level International level

*All students participate in the institute Annual Sports and Cultural Meet.

Note: Participation in sports, cultural and literary activities is mandatory for all students at all campuses and is indeed an integral part of the learning process. This is remarkably demonstrated by the Annual Sports and Cultural Meet, which climaxes from 11th to 15th January every year with athletic and sports competitions and by the high quality of dramas and musical programmes presented to thousands of visitors in the Sai Kulwanth Hall. It may be reiterated that this kind of participation of students in sports, cultural and other activities is rather rare even in the best of our universities.

The infrastructural and other facilities needed for sports and cultural activities available to students and faculty at the SSSIHL are exceptionally good. These include a world class indoor stadium, tennis courts, a well-maintained hill view open stadium including a cricket ground, an excellent gymnasium along with well-equipped sports facilities in each campus.

- 5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports: State/ University level National level International level

Cultural: State/ University level National level International level

.10 Scholarships and Financial Support	Number of students	Amount
Financial support from institution	1303*	₹ 19.8 crores
Financial support from government	-	-
Financial support from other sources	4	₹ 9,78,355
Number of students who received International/ National recognitions	-	-

*** Education is provided TOTALLY FREE OF COST to all the students of the institute following the philosophy of Revered Founder Chancellor.**

5.11 Student organised / initiatives

Fairs : State/ University level National level International level

Exhibition: State/ University level* National level International level

* **Annual Sports and Cultural Meet** is held every year which is held in the Sri Sathya Sai Hill view stadium and in the Sai Kulwant Hall. It is witnessed by thousands which includes school children of many schools who specially come to witness this spectacle.

Exhibition as part of National Science Day celebrations on 28th Feb 2017 on the theme Science and Technology for Specially abled persons.

5.12 No. of social initiatives undertaken by the students

- GRAMA SEVA / VILLAGE SERVICE

Manava Seva is Madhava Seva (Service to man is service to God).
Bhagawan Sri Sathya Sai Baba, Revered Founder Chancellor

For 1200+ young University students (and their teachers), nine days of their academic year is spent in the service of village folks from over 150 villages in one of the most poverty-stricken districts in India. This includes distribution of food packets, clothes and other items, along with devotional singing, in a manner that carries a message of hope.

The entire project - the planning, resourcing, organizing and implementation - is largely managed by the University students and teachers from start to finish. Women students spend most of the night packing tens of thousands of food packets. The Men students spend the better part of each day going to individual homes in each village to personally serve this prasadam to the villagers for ten continuous days.

Why is this part of the University curriculum?

The Revered Founder Chancellor, when initiating this project in the year 2000, stressed that the greatest beneficiaries of this are not the villagers, but to the students and teachers, who not only realize the current state of affairs of the less fortunate (and are humbled in the process), but also get inspired to live their lives along a higher ideal. As He often said, education is for life and not merely for a living.

No. of People Served	3,00,000	Food packets distributed
Villages Covered	153	~ Dhotis distributed: 42305
Students involved	1330	~ Sarees distributed: 46260
Teachers involved	160	
Sevadals (volunteers)	450	
Vehicles & drivers	52	

- Adoption of a lepers colony of 25 families near the town of Anantapur for the last twenty five years where the students render service once in a month taking care of various dimensions of health and hygiene, education, social issues, self-sufficiency etc.
- Students under the able guidance of the teachers, participate regularly in 'Village Integrated Programmes' and take up service activities namely providing smokeless *chulhas*, solar bottle bulbs, painting the school and houses, enacting street plays on social and health issues, sanitation etc.

- Students and staff of the institute are regular donors of blood to the blood banks of the two Super Speciality Hospitals in Prasanthi Nilayam and Bangalore.
- Students of all the campuses periodically take up tree plantation initiatives in and around their campus areas.

The following activities are being undertaken by the alumni under the aegis of Sri Sathya Sai Institute of Higher Learning-

- Regular medical camps are conducted all over the globe where treatment and medicines are given totally free of cost. Narayan Seva- mass feeding is also a part of these camps.
- Establishing and running of 2 children's homes and 3 schools in different parts of the country imparting value education free of cost to underprivileged children.
- An ongoing tree plantation initiative in the three mandals in and around Puttaparthi for the last 7 years in which a total of 32,000 plants have been planted till date out of which 5000 are coconut plants.
- Distribution of blankets and warm clothing to the less fortunate in major cities all over the country every year, at the onset of winter

5.13 Major grievances of students (if any) redressed: No issues raised.

Criterion – 6

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

THE VISION

To assist generations of students acquire Self-knowledge (*Atma Vidya*) and Self-confidence (*Atma Vishwas*), so as to cultivate Self-sacrifice and earn Self-realisation; thereby moulding them into leaders who will benefit society.

THE MISSION

To mould well-rounded holistic individuals – professionally sound, socially responsible and spiritually aware – who embody noble values and a right attitude, through Educare (*Integral Education based on Human Values*) that caters to the physical, intellectual, emotional, psychological and spiritual dimensions of the human personality.

THE UNDERLYING PHILOSOPHY

The Sai educational institutions have been established not merely to enable students to earn a living but to make them acquire good traits, lead ideal lives, and give them ethical, moral and spiritual strength. I have established them with a view to inculcate love and teach good qualities to students. They will learn here humility, discipline and faith.

I have established these institutions to impart spiritual education as a main component and worldly education as a secondary one. Education should enable one to cultivate good qualities, character and devotion. The teaching of the university curricula is only the means employed for the end, namely, spiritual uplift, self-discovery and social service through love and detachment.

This will be a Gurukula - a place where teachers and taught will grow together in love and wisdom - and like the ancient system of education, it will develop in its students a broad outlook and promote virtues and morals, which serve to foster noble ideals in society.

This Institute will be a temple of learning where youth are shaped into self-reliant, contented and enterprising heroes of action and self-sacrifice, for the purpose of serving humanity.

Sri Sathya Sai Baba
Revered Founder Chancellor

THE CORE PURPOSE OF THE UNIVERSITY IS:

- To impart true, ideal education, and mould students as ideal citizens wedded to the service of society.
- To provide the youth with an education which, while cultivating their intelligence, will also purify their impulses and emotions and equip them with the physical and mental disciplines needed for drawing upon the springs of calmness and joy that lie in their own hearts.
- To help students to cultivate self-knowledge and self-confidence, so that each one can learn self-sacrifice and earn self-realisation.
- To blossom students as true representatives of Bharatiya Samskriti, spreading tolerance, charity and brotherhood throughout the World.
- To equip students for the role of future leaders of India, as persons of integrity and character, as embodiments of truth, justice (righteousness), peace and love; and to confer on them the courage to stand up against injustice, indiscipline, immorality and falsehood.

Elaborating the purpose and philosophy of the University, the Revered Founder Chancellor says, *“This Institute has not been established just to prepare you for earning degrees... Teaching you the University curricula, preparing you for the university examinations, and awarding you university degrees – these are only means employed for the end, namely – spiritual uplift, Self-discovery and social service through love and detachment. Our objective is to provide the youth with an education, which while cultivating their intelligence will also purify their impulses and emotions, and equip them with the physical and mental disciplines needed for drawing upon the springs of calmness and joy that lie within their own hearts. Our hope is that by their lives, they will be shining examples of spiritual awareness and its beneficial consequences to the individual and society.”*

6.2 Does the Institution has a Management Information System

Yes. The University has implemented a computer based University-wide Management System (UMS) that include modules for managing the Examination Section, Admissions, University Administration, Hostel etc. Moreover, the finance section has Management Information System which facilitates all kinds of information in a very structured manner for meetings of Board of Management, Finance committee, Trust Meetings and such other related administrative matters. Moreover, the finance section works on Tally for accounting, Saral Paypack for payroll and TDSMan for online TDS filing. This facilitates all kinds of information in a very structured manner for meetings of Board of Management, Finance committee, Trust Meetings and such other related administrative matters.

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

To supplement the conventional classroom chalk-talk method, the following avenues are created by the University for Effective learning of the subject by the students.

- Class projects for students to extend and reinforce understanding of the concepts taught in the class.
- Dissertation/Project Work is compulsory for all the postgraduate/professional courses in their final year curriculum. This trains the students to develop the capacity to analyze large amounts of data and draw conclusions. It also cultivates the ability to clearly define a research problem and choose an appropriate research methodology to address the research problem.
- Industrial tours/corporate visits are organized in all the professional programmes to complement classroom teaching. These are usually organized at the end of the first year during the summer holidays. The objective of the industry visit is to enable the student to see the relevance of the concepts studied and expose them to different/emerging technologies. These visits also give them opportunities to interact with technical experts and carry out their final year projects in the areas of current interest to the Industry. It also builds a bridge between academia and industry.
- Each department organizes at least one or two seminars/workshops per year and International Seminar/Workshops periodically in focused Thrust areas of Research. These facilitate the exposure of students to the current research/market trends and equip the students to face the real challenges in the World after they complete Undergraduate and Postgraduate studies.
- Internal workshops, special guest lectures are also organized by various departments periodically to make students appreciate industry's perspective to learning.
- The final year professional programmes students are allowed to attend and present high quality research papers in national and international conferences organized by other institutions. (Number of M.Tech. students have attended and presented papers and demonstrations in various Conferences.)
- Students are also encouraged to write articles and publish papers based on the Research Work they undertake as part of their course curriculum or otherwise.

6.3.2 Teaching and Learning

- Open ended experiments at both UG and PG levels (Physics) to enthuse students to come out with new ideas.
- Lean six sigma interventions are conducted by the students of MBA for solving the problems encountered by the different sister organizations to improve their efficiency and productivity. The students are then certified by a six sigma professional.
- Participative learning by students through departmental colloquium sessions
- Problem solving sessions and surprise tests are conducted regularly to induce constant touch of the students with the course materials.
- Tutorial Classes are given for every subject to enhance problem solving skills.
- Technology assisted Learning - Access to e-content: repository of video lectures, animated videos on concepts, e-books, white papers, old question papers, etc. which students are permitted to access in their free time.
- As a part of the institute's initiative to improve and maintain teaching quality, the SSSIHL regularly conducts a formal and structured Online Teaching Quality Feedback Student Feedback mechanism at the end of every semester. The same is communicated to individual teachers for their self-introspection and development.

6.3.3 Examination and Evaluation

The whole admissions test process is conducted through University Management System (UMS) package. UMS is a well-protected and composite software package initiated by the University.

- Examination has Continuous Internal Evaluation (CIE) and End semester examination as its components. The CIE comprises assignments, seminars, quiz tests and students participation in class in addition to periodic tests. Some departments using the e-guru platform, administer online test to the students. The evaluation tests are conducted with clockwork precision and the final semester results are declared within a couple of months.
- Examination Committee monitors and advises administration regarding performance of students and identify weakness if any. The exams pass-rate for the year 2016-17 for Undergraduate and Postgraduate Programmes are 93% and 95% respectively. The examination and evaluations for Ph.D. Programmes are based on minimum standards specified in the UGC's minimum standards for PhD Programmes.
- Electronic Document Dispatch & Receipt System (EDDRS) has been implemented for dispatch and receipt of examination related information in an online format. This in conjunction with Question Paper Scrutiny Board (QPSB) which is already in place makes the paper setting process a very smooth and streamlined one.
- The examination and evaluations for Ph.D. Programmes are based on minimum standards specified in the UGC's standards for PhD Programmes.

6.3.4 Research and Development

Research Advisory Board and departmental Research Committee gives valuable input to the research faculty and students.

- As stated above, Research at the university continues to touch greater milestones without sacrificing the focus on **societal benefit**. SSSIHL faculty are involved in the development of sensors for water monitoring in and around Anantapur District, Andhra Pradesh. Successful performance of *autologous chondrocyte* implantation in a young patient with *osteocondral* defect in collaboration with Sri Sathya Sai Institute of Higher Medical Sciences (SSSIHMS) is a noteworthy achievement by the faculty.
- SSSIHL Central Research Instruments Facility (CRIF) has been created with the objective of providing the latest and advanced characterization/analytical tools to carry out translational research in various areas of Science and Technology. These in essence, include physical, biological, chemical, materials science, food and also computational and interdisciplinary areas. SSSIHL CRIF also houses a complement of specialized research facilities housing several sophisticated state-of-the-art instruments in the areas of disease biology and plasmonics.
- Regular Seminars, Workshops are organized by each department in their chosen contemporary areas of interest. An interdepartmental Science Colloquium is conducted once in a fortnight. The colloquium provides an opportunity for doctoral research scholars and the teaching faculty to share their research experiences, insights and observations with fellow researchers.
- Visiting Scientists, Educationists and Executives from Industry visit the University regularly and interact with faculty members and research scholars thereby, making them aware of recent developments in their respective subject areas.
- This would enable our researchers to keep pace with the scientific developments taking place globally; and to publish their research findings in peer reviewed high impact journals; and through their concerted efforts to carry out research in cutting edge areas of Science and Technology and contribute to the needs of the society at large.

6.3.5 Library, ICT and physical infrastructure / instrumentation

- All the faculty have access to computers and are encouraged to explore various knowledge data bases. The University has 1Gbps Internet connectivity under the aegis of the National Knowledge Network (NKN), for academic and research pursuits of staff and students. All the campuses of the University are interconnected via 2Mbps leased lines. The University is part of INFONET, E-Journal Consortium. We therefore get access through INFLIBNET to nearly 10,000 online Journals in various disciplines, from fifteen International Publishers. All these Journals are available to all the students and staff over our University campus network. These Journals cover various teaching and research disciplines pursued by the department.
- Students have access to online course material in the browsing centers of the institute where they can pick up skills from the tutorials of renowned faculty and information about the latest trends in their fields of study.
- The Library every year procures latest books pertaining to the different fields of study based on the recommendation of the respective HoDs. This includes latest editions
- The finance section works on Tally for accounting, Saral Paypack for payroll and TDSMan for online TDS filing
- Teaching aids do facilitate effective teaching as well as learning, and all the required facilities like LCD projectors, OHPs, Magnetic White Boards, Smart Class rooms etc are available. They enhance the quality of teaching and aid the students to grasp the lessons and concepts thoroughly. Multimedia learning centres and language labs are also available for the students to pick up the necessary skills.
- Library in the hard and electronic form is used extensively by teachers as well as students. **Library books Purchase Committee** decides the quality and need for purchasing books and journals. The central administration decides based on the recommendations of the Committee with Vice-Chancellor as the Chair-Person.
- Physical infrastructure plays a major role in improving the quality of research undertaken, curricular, co-curricular and extra-curricular learning of students. The university continuously adds and upgrades its infrastructure to meet the quality needs of the students, teachers, research scholars and support staff.
- Addition of Central Research Instruments Facility (CRIF) as a cutting edge research facility has enhanced the effectiveness of research conducted at SSSIHL.

6.3.6 Human Resource Management

- The dictums of Bhagavan Sri Sathya Sai Baba of ‘Work is Worship’ and ‘Duty is God’ motivates all the staff and students of the institute to give their best to every task at hand.
- The university has a diverse management culture. Bhagawan says that “There is only one Caste – The Caste of Humanity. People of all regions, religions, languages, etc mingle with one another as one extended family akin to different limbs and organs of the human body and function in a synergetic way – one coexisting with another with genuine concern, empathy and dynamic balance.
- Annual faculty workshop for the entire teaching faculty before the start of the academic year for reviewing the goals set and setting objectives and action plan for achieving effective teaching.
- Career advancement of the teaching and non-teaching faculty is taken up regularly without fail and increments are also given whenever they are due.
- Faculty are encouraged to apply for research projects and find solutions to some problems identified by the different research and funding agencies
- Students and faculty members interact with the industrial experts and academia and get valuable inputs about the latest trends in their respective fields.
- All the staff and students of SSSIHL have world class health facilities at their disposal totally free of cost due to the presence of two general hospitals and two super specialty hospitals run by the parent organization.
- Children of the staff get free education in the schools run by the parent trust, SSSCT.
- The institute has excellent sports facilities and gymnasiums in all the campuses and all items of day to day needs are provided at a nominal costs to the staff and students.
- The elevating spiritual talks, congregational singing and celebration of different global festivals provide food for the soul to the staff and students and broaden their perspective.

- Senior executives from various organizations where the alumni of the university are working or have worked in the past, provide valuable feedback during their visits to Prasanthi Nilayam regarding them (alumni) and also about the inputs and skills to be provided to the students in future. They also give suggestions regarding curriculum updating.
- The education in Sri Sathya Sai Institute of Higher Learning (Deemed to be University) is IMPARTED TOTALLY FREE OF COST for all courses of study.

6.3.7 Faculty and Staff recruitment

Through Selection Committee as prescribed by the UGC under the regulations of Deemed to be Universities, 2010.

An employment notice is published in the website of the University inviting applications for faculty positions. The employment notice specifies and eligibility criteria for faculty position. On receipt of applications, the same will be sent to the Head of the concerned Department for scrutiny. Eligible candidates are called for giving a demonstration lecture to teachers and students. Based on the demonstration lecture, eligible candidates are shortlisted and called for an interview by a duly constituted Selection Committee consisting of the Vice-Chancellor as Chairperson, two external subject experts, Dean of the Faculty, and Head of concerned Department.

Based on the qualifications, experience and performance in the interview and if found suitable, the Selection Committee recommends the candidate for appointment as Assistant Professor/Associate Professor, as the case may be.

6.3.8 Industry Interaction / Collaboration

The university has taken many steps in the past few years in bringing the various disciplines at the university and SSSIHMS together to discuss issues from various perspectives and identify projects that will benefit society. This has led to interdisciplinary collaborations of SSSIHL with SSSIHMS and external agencies in areas such as the rapid detection of endemic diseases, diabetic retinopathy, development of a cost effective multi-modal microscope, regenerative medicine and tissue engineering, etc.

○ **Collaboration with external agencies:**

The Dept. of Mathematics & Computer Science has research collaborations with the following organizations:

- ARM
- Zentron Labs
- NVIDIA (We are recognized by NVIDIA as CUDA Teaching and Research Centre)
- IBM
- DRDO: ADE
- ISRO: ADRIN

At the end of each academic year, final year graduating students from various departments go on official visits to reputed organizations to get a feel of how theoretical knowledge is translated in real world. Some companies visited in 2016-17 were Sundaram Clayton, ISRO Satellite Center, KLA Tencor, Tejas Networks, Mahindra & Mahindra, Care Hospital, UNIBIC Biscuits, Green Park Hotel, Ashok Leyland, Renault Nissan, Symrise AG, Nilgiris Dairy etc.

Department of Biosciences:

I – Industrial collaboration

- 1) Name of the company: OMIX Research and Diagnostic Research Laboratories Pvt ltd (startup) – Bengaluru, India
- 2) National or International: Indian
- 3) Title or relevant info of collaboration: Detection of Antimicrobial Resistance (AMR) Genes in bacterial cultures and clinical isolates
- 4) Date on which MOU was signed, if any: October 1st 2017

II – Academic collaboration

- 1) Name of the Academic Institution:
Prof. V. Nagaraja, President, Jawaharlal Nehru Centre for Advanced Scientific research, Bengaluru
- 2) National or International: Indian
- 3) Title or relevant info of collaboration: Genomic analyses of clinically isolated extensively drug resistant and pan drug resistant gram negative bacteria

Joint Publications with Dr. Indira Hewlett, US-FDA, USA

- a) L.A. Avinash Chunduri, Aditya Kurdekar, Mohan Kumar Haleygirisetty, Bulagonda Eswarappa Pradeep, K. Venkataramaniah and Indira K. Hewlett. Femtogram Level Sensitivity achieved by Surface Engineered Silica Nanoparticles in the Early Detection of HIV Infection. Scientific Reports 2017 Aug 2;7(1):7149. PMID: 28769052.

b) L.A. Avinash Chunduri, Aditya Kurdekar, Bulagonda Eswarappa Pradeep, Mohan Kumar Haleyurgirisetty, K. Venkataramaniah and Indira K. Hewlett. Streptavidin conjugated ZnO nanoparticles for early detection of HIV infection. Advanced materials letters. 2017, 8(4), 472-480.

c) Aditya Dileep Kurdekar, L. A. Avinash Chunduri, Sai Manohar Chelli, Mohan Kumar Haleyurgirisetty, Eswarappa Pradeep Bulagonda, Jiwen Zheng, Indira K. Hewlett and Venkataramaniah Kamiseti. Fluorescent silver nanoparticle based highly sensitive immunoassay for early detection of HIV infection. RSC Adv., 2017,7, 19863-19877

6.3.9 Admission of Students

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6.4 **Welfare schemes**- Education is imparted completely FREE OF COST in this institute and for those students who are under privileged, the mess charges are also waived. Teachers and non-teaching staff of the institute can avail residential facilities at a nominal cost. Two super specialty hospitals and two general hospitals one each in Prasanthi Nilayam and Bengaluru cater to the health needs of the students, teachers and non-teaching staff of the institute. There are fair price shops run by the parent trust where all the essential day to day items are available for a nominal price.

6.5 Total corpus fund generated

₹ 4.01 crores

6.6 Whether annual financial audit has been done

Yes

No

6.7 Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	No		Yes**	VC
Administrative	No		Yes**	VC

** Research conferment cell, Internal Quality Assurance Committee, Internal audit

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes Yes

No

For PG Programmes Yes

No

Note: Double evaluation of scripts takes more than 30 days.

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

Examination Reforms Unit sponsored by UGC helped the institute in incorporating some healthy examination reforms. These activities in addition to some more are successfully being implemented in the institute. They are viz., 10 points scale grading system, semester system, structured question papers (internal choice over global choice so that students study the whole syllabus without skipping anything), Continuous Internal Evaluation and End Semester Examination pattern, question bank inputs (all the previous question papers are maintained in the library for ready reference of students) , double evaluation in PG and professional programmes etc.,

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

Not applicable

6.11 Activities and support from the Alumni Association

The alumni of the institute play an important role in helping graduating students find suitable employment opportunities in their chosen vocation. They also help in academic inputs and industrial exposure.

They achieve this through an outreach programme called CATALYST (Corporate Aptitude Training – an Arena to Leverage Your Skills and Talents) where graduating students are coached in soft skills and in preparing résumés, the application process, interview techniques, networking and the like. The programme has been very successful.

Alumni contribute to the development of the institution in many ways. They provide valuable feedback regarding various courses and help in updating them. They help the alma mater in the conduct of annual workshops, seminars, and conferences. They are a part of the placement structure for the outgoing batch of students each year. They assist the departments by providing the list of latest references followed in similar programmes of overseas universities.

Alumni also help in formulation of courses and syllabus as members of the Board of Studies, help the research scholars with their research. Also help the students appreciate the unique value based education model of the institute.

6.12 Activities and support from the Parent – Teacher Association

The support of the parents is sought in the following manner:

Parents of all the new students have a meeting with the warden, director and faculty at the time of joining the institute.

Feedback is taken from the parent at the end of each semester. Hostel warden sends a progress report at the end of each semester and parent's feedback and comments are received. Parents are required to meet the director/warden/resident teachers one in an academic year to appraise them of the progress of their ward in five dimensions of education practiced at SSSIHL namely intellectual, physical and cultural, devotional and service.

6.13 Development programmes for support staff

Career Advancement Scheme regularly promotes support and non-teaching staff. They are sent for courses on computers and are allowed to enrich their job description by following job rotation.

6.14 Initiatives taken by the institution to make the campus eco-friendly

All the Campuses have facilities like use of biogas, vermicomposting, use of eco-friendly briquettes for cooking, solar heaters for hot water, water-harvesting facility, and proper waste disposal. The institute also promotes students to take up tree plantation programmes on a regular basis.

Criterion – 7

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

Few Research outputs:

- The first proof-of-concept, associated with the resonant optical gyroscope with a reflector, has been demonstrated. The fabrication of a compact and efficient gyroscope is in the pipeline.
- Raman Spectroscopy has been demonstrated to be an effective and efficient diagnostic tool to investigate the role of homocysteine in bone degradation and mechanical failure.
- A new non-invasive scientometric characterisation and evaluation of skeletal hot spots in bone scans of carcinoma prostate patients was established.
- Rare-earth ion-doped fluorescent silica nano particles have been demonstrated to be very effective to detect femto-gram level of concentration of HIV-1 P24 antigen.
- The technology for efficient defluoridation of water, using nanohas been established, and field trials have been conducted.
- A low-cost multi-modal microscope has been designed and fabricated, and awaits .
- A Gamma camera, comprising a novel next-generation semi-conductor-based detector for small-organ imaging, has been designed.
- Andrographolide, a bioactive secondary metabolite isolated from a medicinal plant after subjecting it to semi-synthetic transformation, was experimentally proved to have better anti-cancer activity than the prevailing anti-cancer drugs like cisplatin and doxorubicin. This work has been globally acclaimed and awarded an international patent.
- A low-cost surface plasma-coupled emission platform has been tested for different hand-held device applications to diagnose heart ailments, depression, and diabetics with higher accuracy and reproducibility than currently existing systems in the market.

- Microbial fuel cells for waste water treatment have been developed.
- Clinical trials in the field of regenerative medicine and tissue engineering, leading to the repair and regeneration of cartilage defects of the knee joint, have been successfully conducted. An association of elevated levels of homocysteine and decreased vitamin B with avascular necrosis of the hip bone has been established. Prediction models for multidrug resistant pathogen detection have been developed and validated.
- Near-Real-Time Super Resolution of Aerial Video sequences for Defense Applications, supported by DRDO labs, have been developed. Elliptic Curve Cryptography has been developed for space applications (supported by ISRO).
- Multifunctional nutrient-enriched dietary products, with increased shelf life to mitigate anemia, obesity and reproductive health among women, have been developed. In addition, technologies pertaining to spice nutraceuticals as edible oil antioxidants; organic cultivation of nutrient dense tropical microgreens; sugar-free papaya fruit rolls; flaxseed-enriched millet-based cookies and soup mixes; herb-infused ready-to-use guava flakes and low-fat dietetics have been developed. These products are ready to be transferred to enterprising industries.
- Coming to Humanities and Social Sciences, the faculty of Economics has developed a viable model to forecast the rate of inflation. A sustainable model has also been developed which would help to look at economic growth and debt GDP ratio, simultaneously.

Research of Societal benefit:

Research at the institute continues to touch greater milestones without sacrificing the focus on societal benefit. For instance, SSSIHL faculty are involved in the development of sensors for water monitoring in and around Anantapur District. Successful performance of autologous chondrocyte implantation in a patient with osteochondral defect in collaboration with Sri Sathya Sai Institute of Higher Medical Sciences is a noteworthy achievement by the faculty. This project was completed in 2017.

Besides meeting in rural needs, our faculty are also involved in the design and fabrication of high end equipment such as multimodal microscope and resonant optical gyroscope for a variety of applications.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

As explained under the point 2.15 w.r.t 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 have been explained in detail. The initiatives that the institute needs to take in order to improve and sustain quality in teaching and research were discussed in the meeting of IQAC. The points that emerged from this discussion and action taken are listed below.

- Promoting Excellence in Research and Teaching:
- Collaborative Research with National and International Agencies to give a fillip to research quality
- Increase the use of ICT in the different processes of the university
- Attracting bright Students to the institute (ongoing)
- Well-Structured UG-PG-MTech-PhD Programs and augmenting with new programs:
- Promoting Public Awareness of SSSIHL's Contribution and its involvement in imparting Quality education
- Leadership Team

7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)

- 1) Academic:
Sri Sathya Sai System of Integral Education is being imparted totally free of cost with stress on experiential learning
(Please refer to **Annexure-VI** for details)
- 2) Administrative:
Online Teaching Quality Feedback
(Please refer to **Annexure-VII** for details)

Best Practices at SSSIHL since Inception 1981:

- Socially relevant projects are encouraged
- Exposure to top academia and industrialists
- Committed and dedicated teaching fraternity
- Totally free education of high quality
- Values-based Integral education
- Vibrant academic environment
- Holistic ambience catering to body, mind and spirit
- Rich student diversity
- Preceptorial System
- Awareness Programme
- Self-reliance programmes
- Extension programmes – Grama Seva
- Annual Sports and Cultural Meet – 100% participation
- Punctuality in all schedules
- No student unrest at any point of time.
- No concept of Ragging at all in the hostels

The Institute works with clockwork precision:

- Academic Year commences on the 1st of June every year.
- Academic Year concludes on the 15th April every year.
- Admission Entrance Examinations for all Programmes is held from April 17-30 every year.
- Convocation ceremony of the institute is held on the 22nd of November every year.
- April 15th to May31st – Summer Vacations every year.
- 15 days Winter Vacation in October-November every year.
- Examination results always declared in time – within a month of the examinations for Undergraduate Programmes.

7.4 Contribution to environmental awareness / protection

A two credit Environmental Awareness is offered in the first and second semester of all the Undergraduate students. The department of Biosciences offers elective courses in Environment. Solar off- grid system was successfully installed and commissioned with 10KVA 240VDC in December 2016 in the Muddenahalli campus of the institute.

7.5 Whether environmental audit was conducted? Yes * No

* Environmental audit is done at all the Campuses and Hostels in an informal way. It is pertinent to share the following processes carried out in the campuses which show concern for the environment:

Energy conservation: All the Campuses and Hostels promote usage of CFL bulbs for energy consumption. Combustible non-toxic waste like coconut shells, paper, carton boxes that is produced in the hostel is used as fuel for the boiler in the kitchen. The institute is in the process of adopting LED bulbs for all the street and office lighting.

Use of renewable energy: Solar heating panels are used in all the four hostels as a renewable energy for the requirement of hot water for the students and in the kitchen. Solar panel street lights are also used. Kitchen is a zero LPG zone running on briquettes which is made by saw dust, groundnut shells, rice husk. There is a proposal to introduce solar power in a phased manner in the institute in the coming academic years.

Water harvesting: Some of the has created a provision for water harvesting. The rain water from the hostel building flows into a specially made soak pits on either side of the hostel through pipes and a cement channel. This helps in recharging the bore well which is in front of the hostel. This bore well is used for meeting the hostel water requirements.

Plantation: Tree plantation is taken up on a regular basis by the students under the guidance of the hostel teachers. The students participate in planting trees like neem, coconut and *kanuga* (local fast growing variety) in and around the campuses under self-reliance activities.

Efforts for Carbon neutrality: Biomass gas and gobar gas is used in place of fossil fuels and fire wood thus preventing pollution of the atmosphere. The institute campuses have lot of greenery which reduces the CO₂ content though the institute is located in dry region of Rayalaseema, Andhra Pradesh.

Hazardous waste management: A Radiation Safety Officer (RSO), certified and authorised by AERB has been nominated to take care of procurement and storage of radioactive material and disposal of radioactive waste as per AERB guidelines. RSO has been submitting the Annual reports of Radioactive material usage and radioactive waste disposal in adherence to AERB regulations.

The radioactive material procured by SSSIHL from BRIT: Board of Radiation and Isotope Technology (a unit of BARC) is for research purpose only and is of very minimal strength / activity (few micro- milli Ci). After using the material for research purposes, depending on the half-life of the isotope and permissions from AERB, this radioactive waste is categorized and disposed as per the AERB norms

e-waste management: Institute adopts buy back policy and obsolescence removal policy and through which e-waste management is controlled.

Drip irrigation facility is available in one of the campuses of the institute.

As part of National Science Day celebrations, students actively participated in a lively discussion on ‘Reduction of carbon footprint will bring Radical change in our life style.’ This helped in creating awareness about environmental concerns in students.

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis):

SWOC analysis

Strength (Salient Features)-

- **Unique blend of Spiritual and Secular Education-** Following the dictum of Revered Founder Chancellor, ‘Education is for life and not merely for a living’, this institute helps a student in acquisition of both secular and spiritual knowledge. This enables a student to connect to his/her Divine inner self resulting in a calm, focused and intuitive mind.
- **Modern Infrastructure-** This Institute provides modern infrastructure to the students like digital classrooms, high speed broadband connectivity, well-equipped libraries & research laboratories and excellent sports facilities. It houses an indoor stadium, an outdoor stadium, a planetarium, accommodation for teaching and non-teaching staff and has two super-specialties and two general hospitals for health related issues (free of cost). The student-computer ratio of the institute is 2.5:1 which is very high compared to the national average.
- **Academic Excellence-**
 - More than 70% of the teachers have Ph.D. qualification and another 15% are pursuing doctoral research. There is a 33% increase in teaching faculty strength and 57% increase in doctoral research scholars in the last four years. Research Scholars represent 6% of the total student population at SSSIHL, a figure far above the national average. Experts from academia and industry visit the institute from time to time and share their rich experience with students in forums like departmental colloquium, guest lectures, workshops and conferences held in the institute.
 - The university has adopted the semester system right from its inception (over 34 years) and a credit based grading system on a 10 point scale comprising continuous internal evaluation (CIE) and End Semester Examination (ESE) for the students. This helps the students to progressively improve their performance and have a sound conceptual knowledge. The pass percentage of students since the inception of the institute is well above 90% in undergraduate programmes

and 96% in postgraduate and professional programmes. On an average, 40 % of the students secure distinction in the semester examination and one out of every four final year post-graduate students qualify in national exams such as GATE/JEST, CSIR-UGC-NET. The pass percentage in competitive examinations is far above national average.

- **Compulsory Residential Character-** The students live in the hostel following the ideal of ‘each lives for the other and all live for God’. This equips them with the soft skills and life skills in a practical way. The hostel runs as a self-sufficient unit where the students take care of all activities of the hostel. This makes them appreciate the dignity of labour and spirit of work. They also acquire the traits of adaptability, empathy and team work. Nearly one third of the teaching faculty stay with the students in the hostel and are readily available round the clock for students to freely discuss both academic issues and personal matters with them.
- **Socially Relevant Research-** According to our Revered Founder Chancellor, knowledge that is not translated into skills that benefit society is useless. Thus, research topics across all departments are chosen with great diligence, leading to translation research or directed basic research like sensors for Disease Biology, Tropical Microgreens – A viable answer to malnutrition in rural India, Next-Gen Plasmonics Technology for point-of-care diagnostics, deflouridation, Spirit at Work, Values in Management etc. A state of the art Central Research Instruments Facility, will give further impetus to the interdisciplinary research leading to societal benefit.
- **Free Education-** The Institute offers education TOTALLY FREE OF COST for all courses of study.
- **Service Dimension-** The students are encouraged to experience the deep inner satisfaction of giving joy to others through selfless service. The students under the able guidance of the teachers run the hostel as a self-sufficient unit. They take care of departments like Housekeeping, Health Care, Publications, Culinary tasks, Entertainment, Provision Stores without any external support. These self-reliance activities enable students to become self-confident and independent, and also contribute to leadership and entrepreneurial development. The students and teachers of the institute participate in Grama Seva, a sacred activity of serving nearly 3,00,000 poor and needy of the nearly 150 villages around Puttaparthi. This is being modified from this year onwards to make it an ongoing activity rather than a one off event with an objective to give a better hands on experience to the students. Activities being contemplated are- Skill development of youth, Vocational training, inculcating cleanliness culture, tree plantation.
- **Cultural Dimension-** SSSIHL on an average has student representation from almost all the states of India making it rich in diversity. This helps in a healthy exchange of ideas, beliefs and facilitates mutual appreciation of cultural nuances, instilling in them the virtue of ‘Unity in Diversity.’ All students are also exposed to life lessons in forums like Summer Course in Indian and Spirituality, Awareness Courses, Moral Classes, Dramatics, Public speaking etc.
- **Physical Dimension-** The students are trained to overcome their physical limitations and strive for excellence. Daily yoga classes are conducted for the students at the hostel. Students have to participate in compulsory morning exercises and games every day. All students enthusiastically participate in different sports and cultural events in the ‘Annual Sports and Cultural Meet’.
- **Gender Sensitivity-** Gender related problems never occur in this university as the campuses for men and women are different with dedicated men and women staff respectively. Revered Found Chancellor, Bhagawan Sri Sathya Sai Baba has said, “Women should never be slighted or treated with disrespect. Wherever women are honoured, there is prosperity and happiness.’ Students are taught this ideal of respect for women during their course of study.
- **Clockwork Precision-** The academic year commences on 1st June and ends on April 15th the subsequent year. The results of every semester are declared within two and half months of the end of the semester.

Spirit of Camaraderie- The students live in the hostels in a spirit of camaraderie. One alumnus recollects, “When I entered the hostel for the first time, the seniors came forward and helped me to feel at home. I was surprised that the word ragging is unheard of in Sri Sathya Sai Hostels.”

Weaknesses-

- Though the system at SSSIHL doesn't have any obvious weakness, the newly admitted students in our unique system of Integral Education may have some difficulties to adjust to the system in the initial stages. Nevertheless, the same students after a couple of months of experiencing the system seem to enjoy the system at SSSIHL and continue to practice the same in future life.

Opportunities-

- Conducive atmosphere for students to achieve academic excellence.
- Lot of opportunities for students to develop and chisel their academic skills and talents.
- Students can go beyond the mundane to enquire and explore the real purpose of life and inculcate virtues of ethical and moral living.
- Due to the rural set up of the institute, there is immense potential to undertake need based research for the benefit of the society.

Challenges-

- In this internet age with so many distractions, temptations and instant gratifications, it is the biggest challenge to make young minds of the students to be focussed and self-sufficient and inspire them to dive deep within to know the true purpose of life.
- Maintaining Sathya Sai System of Integral Education for making ideal Sai student / Ideal Citizen.
- Contemplating on multi-disciplinary programmes and advanced research with a policy on social relevance for the neighbourhood and the society.

8. Plans of institution for next year:

Road Map Ahead:

The quality initiatives SSSIHL need to take in order to improve and sustain quality in teaching and research were discussed. The points that emerged from this discussion are listed below.

- Advanced Central Research Instruments Facility for carrying out research in emerging areas of science encompassing Physics, Chemistry, Biosciences, Computer Science is being established under a single roof.
- Curricula of select UG, PG, and Professional Programmes, are revisited on a regular basis to meet emerging global challenges.
- Alignment of thrust areas of teaching and research with the vision of SSSIHL.
- The emphasis on quality research for societal benefits to strengthen the ongoing scientific collaborations with like-minded organizations/academic community both at national and international levels.
- Elaborate discussions among the faculty across various disciplines in the institute culminating in finding out the latent talent that is associated with the young minds at the institute.

- As planned in the previous year, robust quality assurance system which is in place would be further strengthened.
- Faculty Training in-House and by deputation to other External Institutions (National and International)
- Promoting Green Initiatives in the institute.
- Continue to address to the needs of villagers by running programmes like soft skills and computer literacy. Promoting rural entrepreneurship and innovation through proposed Institute Industry Interface Cell (IIC). This will help activities like helping farmers to identify soil / weather compatible crops through the research efforts of faculty, conversion of waste materials into useful products etc.
- Continue to have certificate course in skill development once a year in the Department of Management & Commerce and Department of Mathematics & Computer Science.
- Identifying exotic plants in and around Anantapur district for medicinal applications.
- It is proposed to direct our efforts towards the development of functional materials.

PK Baruah

Signature of the Coordinator, IQAC

Name: Dr. Pallav Kumar Baruah

K B R Varma

Signature of the Chairperson, IQAC

Name: Prof. K B R Varma




SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING
 (Deemed to be University)

Academic Calendar 2016/17

SUMMER SEMESTER

JUNE		
1	Wed	Summer Semester Commences
17-19	Fri-Sun	Summer Course in Indian Culture & Spirituality ^{††}
JULY		
6	Wed	Eid al-Fitr*
19	Tue	Guru Poornima*
22-26	Fri-Tue	Supplementary End-Semester Examinations
AUGUST		
15	Mon	Independence Day*
25	Thu	Sri Krishna Janmashtami*
SEPTEMBER		
5	Mon	Ganesh Chaturthi*
18-22	Sun-Thu	Study leave for End-Semester Examinations Phase 1 ^{††}
OCTOBER		
23 Sep-1 Oct	Fri-Sat	End-Semester Examinations Phase 1
2	Sun	Gandhi Jayanti*
3-11	Mon-Tue	Dasara Celebrations Grama Seva Activities ^{††}
9	Sun	Durgashtami*
10	Mon	Mahanavami*
11	Tue	Vijayadasami*
12	Wed	Muharram*
13-16	Thu-Sun	Study leave for End-Semester Examinations Phase 2 ^{††}
17-19	Mon-Wed	End-Semester Examinations Phase 2
19	Wed	Summer Semester Ends
30	Sun	Deepavali*
20 Oct – 3 Nov		Winter Vacation

* Holiday

†† Classes Suspended

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WINTER SEMESTER

NOVEMBER		
4	Fri	Winter Semester Commences
12-13	Sat-Sun	Akhanda Bhajan
22	Tue	SSSIHL 35 th Annual Convocation
23	Wed	Bhagawan Baba's 91 st Birthday*
DECEMBER		
25	Sun	Christmas*
JANUARY		
1-15	Sun-Sun	Annual Sports & Cultural Meet ^{††}
13	Fri	Bhogi*
14	Sat	Makarāsankranti*
26	Thu	Republic Day*
FEBRUARY		
20-24	Mon-Fri	Supplementary End-Semester Examinations
25	Sat	Mahashivaratri*
MARCH		
26-31	Sun-Fri	Study Leave for End-Semester Examinations ^{††}
29	Wed	Ugadi*
APRIL		
1-15	Sat-Sat	End-Semester Examinations
5	Wed	Sri Ramanavami*
14	Fri	Good Friday*
15	Sat	Winter Semester Ends
24	Mon	Sri Sathya Sai Aradhana Mahotsavam
16 Apr – 31 May		Summer Vacation
6 May		SSSIHL Admissions Tests - Ph.D. programmes
27 April - 11 May		SSSIHL Admissions Tests & Interviews - UG, PG and PP programmes
1 Jun		Academic Year 2017/18 commences

Summary of SSSIHL Alumni Workshop -2016 13th, August 2016

Venue : Prasanthi Nilayam, Puttaparthi

Date : 13 August 2016

There were around 120 SSSIHL-Alumnus who made it for the **SSSIHL Alumni Workshop-2016** in person. And about 15 dialled in and participated in the proceedings from remote.

The day started with prayers, followed by Alumni participating in the Moral Class on Friday morning with all students at the Auditorium. Six of the Alumni shared their experiences on how the learnings from the portals of SSSIHL and the integral education was helpful in their professional life, followed by Aarthi. Post the Moral Class, the participants split up as sciences, Management and Economics groups to have separate sessions with the respective departments.

Sciences

After an initial catch up at the Audiovisual Room with Dr.Siva Shankar Sai, the Alumni split up to the Physics, Chemistry, Mathematics & Computer Science (DMACS) and Bioscience departments, to have their subsequent meetings out there.

The Chemistry department had planned a Skype based dial-in.

1. Department of Management Studies (DMS)

The DMS alumni were split-up into four streams - General Management, Banking , Finance , Sales & Marketing . The sessions involved Direct interaction, Sharing of work-life experiences, Explanation of certain subject streams, Question and Answer sessions.

For complete Synopsis - refer [link](#)

2. Economics

Alumni along with the department faculty had an one hour brainstorming session. Post this alumni interacted with current students for another 2 hours. The discussions revolved around equipping students with relevant skills to meet market demands through a sustained alumni engagement. Broad areas of intervention and areas of interactions were then chalked out.

For complete synopsis - refer [link](#)

3. Department of Physics (DPHY)

The meeting comprised of four sessions: Two parallel sessions in the morning, 1) Interaction of alumni with M.Sc students moderated by the HOD and two faculty members

2) Interaction of alumni with M.tech students moderated by the Dean

and two sessions in the afternoon,

3) An open house discussion with alumni and all the students- both M.Sc and M.tech

4) A faculty-alumni interaction session where various aspects ranging from curriculum improvement to collaborations on projects and facilitation of internships were discussed. An action plan was also formulated.

Complete Synopsis available at link- [Physics Dept- Alumni interaction](#)

4. Department of Chemistry (DCHEM)

The meeting started with a welcome address by Prof. G Nageswara Rao, Head of Department, Chemistry. He gave an overview of ongoing research work in the department, its focus on the Research Themes like *Sensors & Nanotechnology and Bio-inspired applications*. It churned a good bit of discussions between the Alumni, Staff and Students - all focussed on how to enhance the Alumni- Department collaborations.

For Complete synopsis refer links: [MOM Actionables](#)

5. Department of Biosciences (DBIOS)

It started with meeting the Head of Department of Biosciences, followed by catch-up with the Professors and the Research Scholars. Also the MSC Students were engaged-with during the afternoon session. It all revolved around how we could engage and collaborate to benefit the current students, lecturers and the department at large. Various avenues available to the students post M.Sc, both in terms of research and jobs were discussed. In addition, discussed the importance of generating more fresh ideas, that could lead to enhancing the entrepreneurial spirit in **students**.

For Complete Synopsis - refer [link](#)

6. Department of Mathematics and Computer Science (DMACS)

The Alumni split into two groups with the faculty. One group interacted with the M. Tech students, this group also had a discussion on catalyst. The other group had interaction with M.Sc students. This was followed by a combined discussion among the Alumni and the faculty. The discussions focussed on fine tuning the ideas, suggestions from the outcome of initial discussions with the students and come up with a roadmap for the action items.

For Complete Summary- refer [Summary](#)

For complete MoM - refer [MoM](#)

Wrap Up Session in the evening.

It started with each department's Alumni SPOC sharing details of what their respective action plan for the year is likely to be.

In summary - it was decided that we will have more frequent tracking this year for achieving more measurable results. The next Alumni Workshop will be on *19th Aug 2017.

Both the Lunch and Dinner was at the Hostel. It was completely like a Home-coming for all Alumni. The institute truly made each Alumni feel like they are always very welcome!

Every month we will be having a telephone/Online conference on 4th Saturday of every month at around 8:00PM

Jai Sairam



SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING
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CONFIDENTIAL FEEDBACK ON TEACHING QUALITY

The purpose of this feedback/assessment is to help improve the overall quality of teaching.

- * *Kindly respond to the following questions **in relation to the quality of teaching of this course.***
- * *Your **honest opinion** is solicited and your feedback will **not** have any influence on your grade.*

Indicate the response to the following questions on a scale of 1 to 6 where **1 is Strongly Disagree** and **6 is Strongly Agree**.

CORE TEACHING

- 1 The course was covered effectively in an organized manner (includes uniform spacing of course lectures and assignments).
- 2 Lectures were communicated effectively (i.e. clarity of expression, reinforcement of key ideas).
- 3 Passion in teaching the subject was evident.

PEDAGOGY

- 4 Appropriate teaching aids (includes blackboard/slides/videos/demos), when necessary, were used effectively.
- 5 A variety of questioning techniques were employed to enhance learning.
- 6 A broad perspective of the subject was given to stimulate learning.

CLASS INTERACTION

- 7 Class participation/discussion was encouraged.
- 8 Accessibility for clarifying doubts/queries (inside and outside the class) was adequate.
- 9 Doubts/queries on the subject were answered convincingly.

CONDUCT OF CIE

- 10 Syllabus was taught comprehensively.
- 11 Learning was enhanced by the effective use of assignments and tests.
- 12 Grading of assignments/answer scripts was impartial.
- 13 Students were given timely feedback on their performance.

STUDENT-CENTRIC TEACHING

- 14 Classes kept the students interested and focused.
- 15 Students' point of view in class discussions was considered.
- 16 Openness to accept errors & omissions was shown.

DISCIPLINE AND VALUES

- 17 Discipline was maintained in class.
- 18 Values and the teachings of Bhagawan were seamlessly integrated into the teaching process.

OVERALL RATING

- 19 How would you rate the overall quality of teaching?



SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING

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Teaching Quality Feedback

Questionnaire for Experiment based Practicals:

- P1: Effective theoretical guidance related to practicals was given.
- P2: Planning and execution of practicals were explained.
- P3: Appropriate methodology to carry out the practicals was explained.
- P4: Practicals were supervised effectively.
- P5: Doubts and questions raised during the practicals were clarified effectively.
- P6: Helpful comments/suggestions were given on lab records for improvement.
- P7: Time given for practicals was adequate.
- P8: Equipment for practicals were in working condition.
- P9: Prescribed minimum number of practicals were completed and performed.
- P10: Evaluation of practicals was fair and impartial.
- P11: Any other suggestions and improvements. (Descriptive question with word limit of 50 words)



Teaching Quality Feedback

Questionnaire for Software Laboratory:

- P1: Effective theoretical foundation related to programming exercises was given.
- P2: Planning and execution of programming or mini-project related exercises were explained.
- P3: Appropriate methodology to implement the software solution was explained.
- P4: Software lab sessions were supervised effectively.
- P5: Doubts and questions raised during the programming sessions were clarified effectively.
- P6: Assignments were corrected on time.
- P7: Constructive comments/suggestions were given on assignment/ lab exercises.
- P8: Time given for exercises/assignments was adequate.
- P9: Computing equipment were in working condition and of capability needed to perform the tasks.
- P10: Any other suggestions and improvements. (Descriptive question with word limit of 50 words)

Name of the Student: **AKSHAY RAO**
RegdNo: **16454** Class: **I MBA / II MBA** Room No: **B19**

FEEDBACK FROM PARENTS

(If you need more space for providing feedback, please use the back side of this page)

Akshay has always prided himself as a student of Swami's institution and has lived up to its values and culture. We are extremely happy parents of Akshay and thank Swami and all his teachers for inculcating such such values in him which will always stand in good stead forever.

Name of the Student: **ABHISHEK GANAPATHY**
RegdNo: 16451 Class: I MBA / II MBA Room No: B11

FEEDBACK FROM PARENTS

(If you need more space for providing feedback, please use the back side of this page)

We would like to convey our heartfelt gratitude to the teachers for all the consistent guidance, support and feedback. We consider it our good fortune time and again that Abhishek is getting this opportunity to be completing his MBA course in the most prestigious institution founded by Bhagwan Baba. It has been an enjoyable, rich learning experience which apart from academic learning also focusses on the overall character building of students.

Our heartfelt gratitude for all the care, love and guidance.
Jai Sairam

Interdisciplinary Science Colloquium and Research Publications

The Interdisciplinary Science Colloquium provides an opportunity for doctoral research scholars, teaching faculty and visiting experts to share their research experiences with one another. It breaks down barriers of communication and helps merge traditionally distinct scientific disciplines, thereby creating new opportunities for research.

All the science departments (across campuses) of the university participate, using the videoconference facility.

The topics for 2016/17 were:

DATE	PRESENTER	DESIGNATION	TOPIC
16 Jul 2016	Prof. Ravi Prakash	Prof. Emeritus, Council of Scientific & Industrial Research (CSIR)	Global Climate Change and Conservation Practices
30 Jul 2016	Dr. Vinayak Sinha	Dept. of Earth Sciences, Indian Institute for Scientific and Engineering Research (IISER), Mohali	The Earth's Changing Atmospheric Chemistry and Its Relevance to us
6 Aug 2016	Prof. Tushar Kanthi Chakravarthi	Dept. of Organic Chemistry, Indian Institute of Science	Hybrid Structures Herald New Promises
20 Aug 2016	Prof. K B Naidu	Visiting Professor, SSSIHL	Mathematics for Life-Sciences
3 Sep 2016	Dr. (Mrs.) S Chandra	Member, Krishnamurthy Institute of Algology, Chennai	Algae and their Biotechnological Applications
17 Sep 2016	Dr. E N Prabhakaran	Professor, Indian Institute of Science	Principles of NMR Spectroscopy
12 Nov 2016	Sri C Rangacharyulu	Dept. of Physics and Engineering Physics, University of Saskatchewan Saskatoon, SK, Canada	Nuclear Science and Technologies – For Intellectual Curiosity and Wellness of the Living
17 Dec 2016	Sri K B Chandran	Emeritus Faculty, Biomedical Engineering, University of Iowa, USA	Application of Computational Simulations in the Human Circulatory System
21 Jan 2017	Prof. Sriparna Bhattacharya	Asst. Research Professor, Dept. of Physics, Clemson Nanomaterials Center, Clemson University, USA	Thermoelectric Materials for Energy Sustainability
28 Jan 2017	Sri Knud-Erik Sorensen	Co-founder and CEO, Scandi Biogas, Denmark	From Waste to Energy Factory
4 Feb 2017	Prof. Venkata R Neralla	Visiting Professor, SSSIHL	Arctic Scientific Expedition to the Vicinity of the North Pole
18 Feb 2017	Dr. (Mrs.) Ambati Padmaja	Asst. Professor, Dept. of Food & Nutritional Sciences, SSSIHL	Studies on the Plant Extracts as Natural Antioxidants in Improving the Stability of Pufa-Rich Edible Oils
3 Mar 2017	M Anupam Kumar	Doctoral Research Scholar, Dept. of Chemistry, SSSIHL	Graphene Based Nanomaterials for Electrochemical Determination of Biologically and Chemically Important Molecules
4 Mar 2017	Sri B Vijay Sekhar Reddy	RELX India Pvt. Ltd.	Features of 'SCOPUS' (Bibliographic Database)
18 Mar 2017	Pradeep Kumar Badiya	Doctoral Research Scholar, Dept. of Chemistry, SSSIHL	Low-Cost Biomaterials for Bioprocessing and Plasmonic Applications

Research Publications in Peer reviewed Journals**Faculty of Sciences**

Srinath M Seshadri and Chandrasekaran V, Isogeny-based Quantum Resistant Undeniable Blind Signature Scheme, *International Journal of Network Security* (2018).

K S Sridharan, M Ramya, V Krishnaven, Certain Investigations on IRIS Recognition using Hybrid Approach of Fourier Transform and Bernstein Polynomials, *Pattern Recognition Letters*, 94,154-162 (Apr 2017).

Y Lakshmi Naidu, C R Saranya, Paired Neighbourhood set on Interval Graphs, *International journal of Pure & Engineering Mathematics*, 4, 21-26 (2016).

K Chaitanya, Pavan Tanay, K Yogesh Murthy, P D Kartheek, and Baruah P K, GPU Accelerated Image Segmentation using Cascaded Hierarchical Models, *International Journal of Engineering Science (IJESC)*, 6, 3687-3691 (2016).

Ramesh Sharma, S Balasubramanian, N Uday Kiran, Some Remarks on Ricci Solitons, *Journal of Geometry* (2017).

K Chaitanya, Pavan Tanay K, Srikanth Khanna, Chandrasekaran V, Baruah P K, Kartheek Diwakar Pingali, Sai Hareesh Anamandra, GPU Accelerated Video Super Resolution Using Transformed Spatio-temporal Exemplars, *International Journal of Grid and Utility Computing* (2017).

Srinivasu P D N, Vamsi D K K, Aditya, Biological Conservation of Living Systems by Providing Additional Food Supplements in the Presence of Inhibitory Effect: A Theoretical Study Using Predator–Prey Models, *Differential Equations and Dynamical Systems* (2017). DOI: 10.1007/s12591-016-0344-4

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Title- Sri Sathya Sai System of Integral Education (SSSSIE)

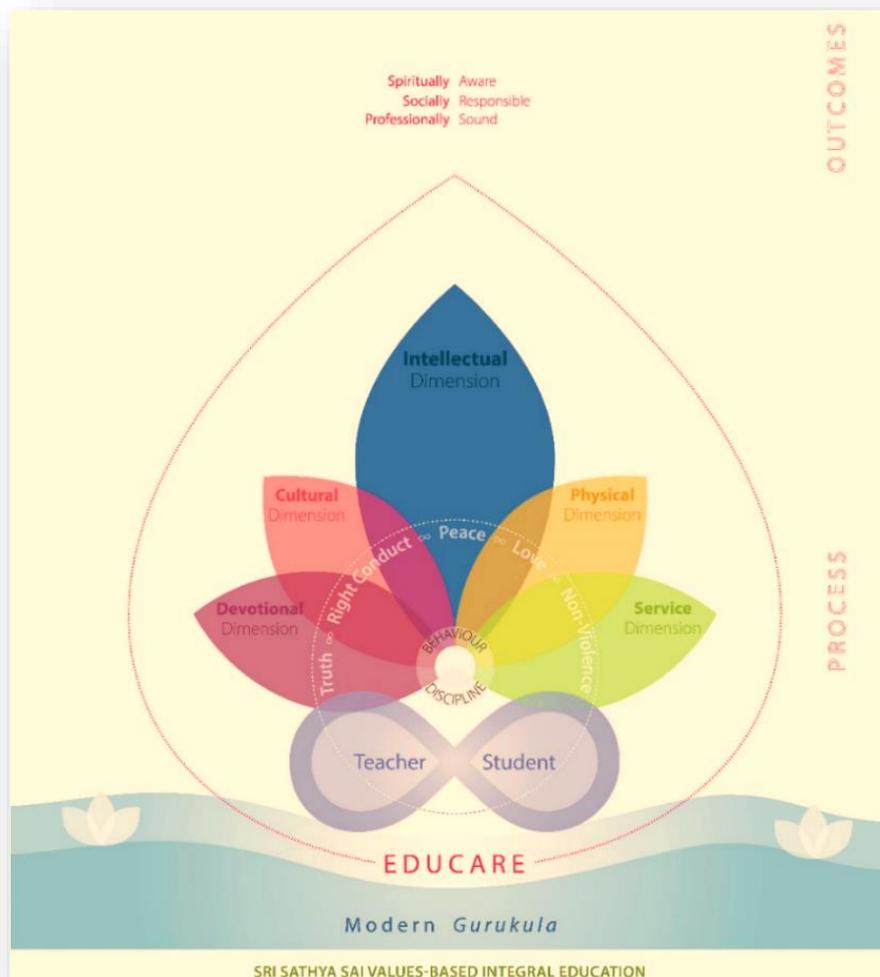
Objectives of the Practice- According to the Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba- *End of Education is Character*. Keeping in mind this dictum, the objective of this 'best practice' is to impart education which moulds students into ideal citizens wedded to the service of the society. SSSSIE aims to combine academic competence with development of good character, noble attitudes and values, social sensitivity and spiritual awareness in all students.

Context- Education is increasingly becoming an instrument for filling the minds with mere information. The students are charged substantially high fees in the name of imparting world class education. The sole purpose of education has become earning a livelihood and not acquiring life skills. The worth of an educational institution is being judged by the placements and pay packages it can offer to its students. Revered Founder Chancellor observed- At present, colleges are infected with anxiety and perplexity, discontent and ill-discipline, irreverence and futility; they have lost the status of temples of learning, where youth are shaped into self-reliant, contented and enterprising heroes.

In this context, Sri Sathya Sai Baba, the Revered Founder Chancellor, had foreseen the need for values based education programme and had taken concrete steps to implement the same into a formal educational system known as SSSSIE. He observed- *The crisis in educational field is well known. Many attempts have been made to bring about changes in the educational system. But it is forgotten that what gives education its true value and significance is its moral and spiritual content.*

Practice- The word education, according to the Oxford dictionary, has come out of the root word *educare*. According to the Revered Founder Chancellor, Bhagawan Sri Sathya Sai Baba- The word Educare has its origin in the Latin word, 'educere', which means 'to elicit'. Educare has two aspects, the worldly and the spiritual. Worldly education brings out the latent knowledge pertaining to the physical world. Spiritual education brings out the inherent divinity in man. So, both worldly and spiritual education is essential, without which the human life has no value.

This unique model of education was established on the lines of **Gurukula** system of education of the yore to make the students Professionally Sound, Socially Responsible and Spiritually Aware. It has five dimensions- Intellectual, Cultural, Devotional, Physical and Service to develop the students in holistic individuals.



The unique and distinctive features of this system of education are:

- Equal emphasis on curricular and co-curricular aspects
- Integrating values with secular knowledge through curriculum and classroom teaching
- Curriculum steeped in rich Indian Culture
- Synthesis of Science and spirituality
- Compulsory residential system
- One in five teachers stay in the hostels guiding and mentoring the students in academics and other aspects
- Inculcating the spirit of self-reliance in students in the hostels- self-reliance means reliance on one's own innate capabilities and talents which is facilitated in the students through dignity of labour and respect for work
- Open admissions policy irrespective of caste, creed, religion or income or region
- Free education for all students

As the Sri Sathya Sai System of Integral Education offers FREE EDUCATION for all irrespective of caste, creed, religion or region with no fees whatsoever have been charged from any students; no non-recurring budget (salaries) are taken from State or Central Govt.; and totally a residential nature of education have been offered – no constraints have been encountered so far by Sri Sathya Sai Institute of Higher Learning.

Evidence of Success- According to Bharat Ratna Dr. APJ Abdul Kalam, the then President of India at the 21st Convocation of the Sri Sathya Sai Institute of Higher Learning dt. 22.11.2002:

“The purpose of real education is to initiate a learning process that transforms students into good human beings with knowledge and value systems. Is values-based education possible? Sri Sathya Sai Institute of Higher Learning has given an answer in the affirmative. I would like to congratulate the Institute for this noble education.”

Few tangible results of the SSSSIE:

- Academic calendar is followed scrupulously with clockwork precision
- Teachers and students grow in a spirit of camaraderie hence there has never been an occasion of student unrest or ragging.
- Alumni Impact Analysis: An alumni impact analysis survey was carried out in the year 2011 where total of 744 alumni completed the survey. The broad findings are given below:

7 in **10** alumni felt that their experience at the university contributed “**VERY SIGNIFICANTLY**” to developing their ability / competence in one or more of the following:

Integrity n = 388

Work ethics

Concern for society and environment

Dealing with different types of people

Working in teams

9 in **10** alumni felt that their experience at the university contributed “**SIGNIFICANTLY**” to developing their ability / competence in one or more of the following:

Patience and perseverance n = 388

Inspire others by example

Leadership

Organizing time effectively

Title- Teaching Quality Feedback (TQF)

Objectives of the Practice- According to the Revered Founder Chancellor Bhagawan Sri Sathya Sai Baba, a teacher should be an '*acharya*' who teaches students by his *acharana*- conduct (practice). Teachers should not only have knowledge of the subject but the skills to impart the same to the students. He/she should have the spirit of being a student for life to never stop learning and kindle the same spirit in the students. Objective feedback from the 'taught' about the teaching process goes a long way in providing the necessary inputs to the teacher to assess his/her teaching vis-à-vis the benchmarks of an ideal teacher and bring about the necessary improvements.

Context- The rigour of the present day workplace like corporates, research institutions, entrepreneurship etc., requires the students to be thorough in their basics, also acquire additional knowledge in their specific fields of study and also be innovative in their approach. Due to this, the teaching process is witnessing a paradigm shift from the traditional chalk and talk method to the interactive and participative type of teaching enhanced by the modern teaching aids available to the teachers. In this context, to undertake effective teaching, the feedback from students about the teaching process becomes very important. For the feedback to be effective, following points had to be addressed:

- Has to be confidential so that students can give candid and constructive inputs about the teaching process.
- The questionnaire should be designed in such a way that it captures information about all the aspects of teaching learning process.
- The analysis of the feedback to be presented to the faculty in a way so that they can take steps to improve/modify (if required) their teaching process

Practice-

A committee was constituted to do an in-depth review of the teaching learning process and it arrived at the six broad dimensions of **Core Teaching, Pedagogy, Class Interaction, Conduct of CIE, Student Centric Teaching, Discipline & Values** and 3 to 4 questions in each dimension. A Likert scale of Strongly Disagree- Strongly Agree was employed for scaling the responses of the students. Different set of questionnaires were designed for Theory, Experiment based Practicals and Software Lab. The questionnaires are coded in PHP and administered through a specially dedicated server. The feedback

sessions in the respective computer labs of the campuses were kept completely anonymous to elicit candid responses from the students.

Feedback is recorded at the end of every semester from the students about the teaching process of the semester. The responses received are automatically compiled through a computer programme and are made available to the faculty and the HoDs at the beginning of the next semester. The HoDs receive the feedback of the faculty members of the whole department and they counsel/advise wherever necessary after going through the reports of the individual faculty. Following are the set of questions for a theory subject.



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CONFIDENTIAL FEEDBACK ON TEACHING QUALITY

The purpose of this feedback/assessment is to help improve the overall quality of teaching.

* Kindly respond to the following questions **in relation to the quality of teaching of this course.**

* Your **honest opinion** is solicited and your feedback will **not** have any influence on your grade.

Indicate the response to the following questions on a scale of 1 to 6 where **1 is Strongly Disagree and 6 is Strongly Agree.**

CORE TEACHING

- 1 The course was covered effectively in an organized manner (includes uniform spacing of course lectures and assignments).
- 2 Lectures were communicated effectively (i.e. clarity of expression, reinforcement of key ideas).
- 3 Passion in teaching the subject was evident.

PEDAGOGY

- 4 Appropriate teaching aids (includes blackboard/slides/videos/demos), when necessary, were used effectively.
- 5 A variety of questioning techniques were employed to enhance learning.
- 6 A broad perspective of the subject was given to stimulate learning.

CLASS INTERACTION

- 7 Class participation/discussion was encouraged.
- 8 Accessibility for clarifying doubts/queries (inside and outside the class) was adequate.
- 9 Doubts/queries on the subject were answered convincingly.

CONDUCT OF CIE

- 10 Syllabus was taught comprehensively.
- 11 Learning was enhanced by the effective use of assignments and tests.
- 12 Grading of assignments/answer scripts was impartial.
- 13 Students were given timely feedback on their performance.

STUDENT-CENTRIC TEACHING

- 14 Classes kept the students interested and focused.
- 15 Students' point of view in class discussions was considered.
- 16 Openness to accept errors & omissions was shown.

DISCIPLINE AND VALUES

- 17 Discipline was maintained in class.
- 18 Values and the teachings of Bhagawan were seamlessly integrated into the teaching process.

OVERALL RATING

- 19 How would you rate the overall quality of teaching?



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Teaching Quality Feedback

Questionnaire for Experiment based Practicals:

- P1: Effective theoretical guidance related to practicals was given.
- P2: Planning and execution of practicals were explained.
- P3: Appropriate methodology to carry out the practicals was explained.
- P4: Practicals were supervised effectively.
- P5: Doubts and questions raised during the practicals were clarified effectively.
- P6: Helpful comments/suggestions were given on lab records for improvement.
- P7: Time given for practicals was adequate.
- P8: Equipment for practicals were in working condition.
- P9: Prescribed minimum number of practicals were completed and performed.
- P10: Evaluation of practicals was fair and impartial.
- P11: Any other suggestions and improvements. (Descriptive question with word limit of 50 words)



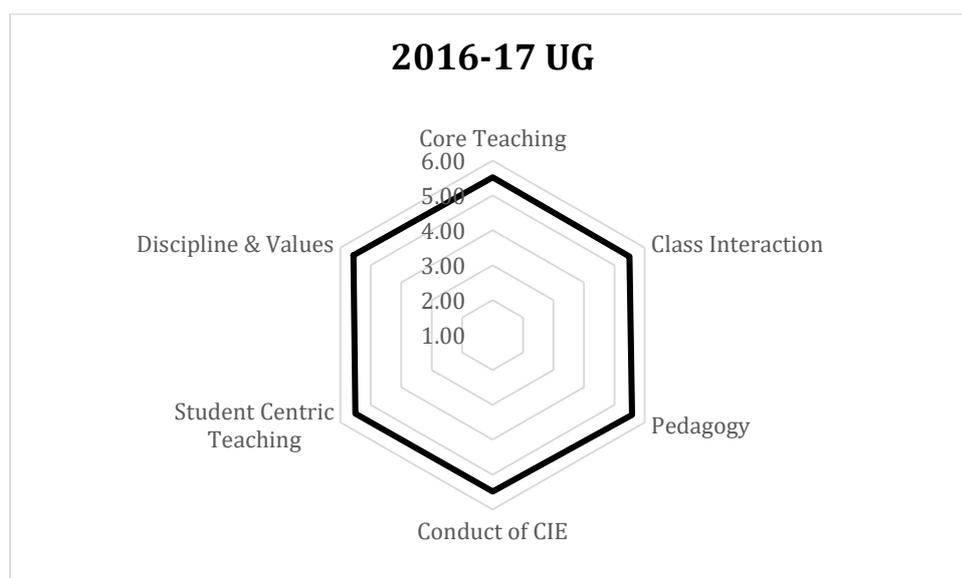
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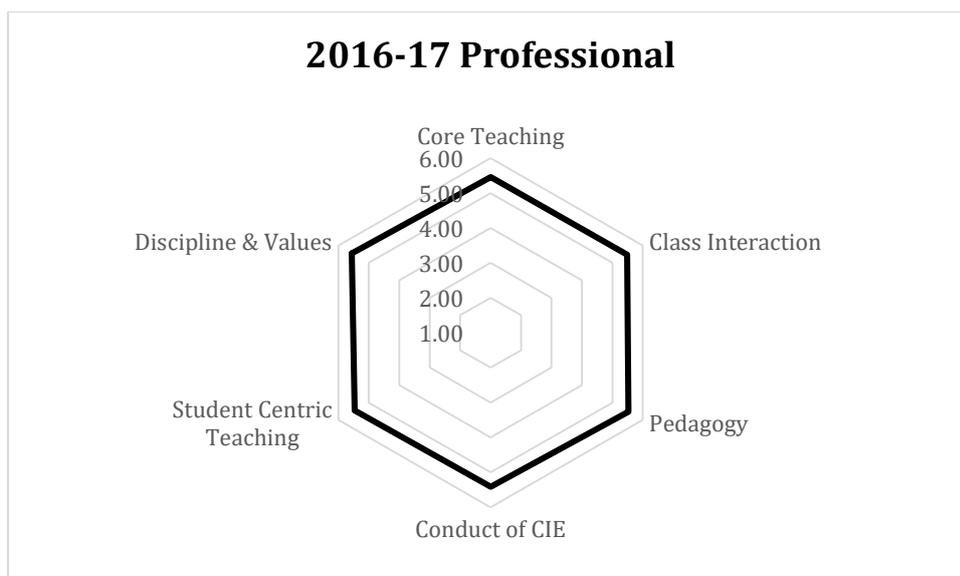
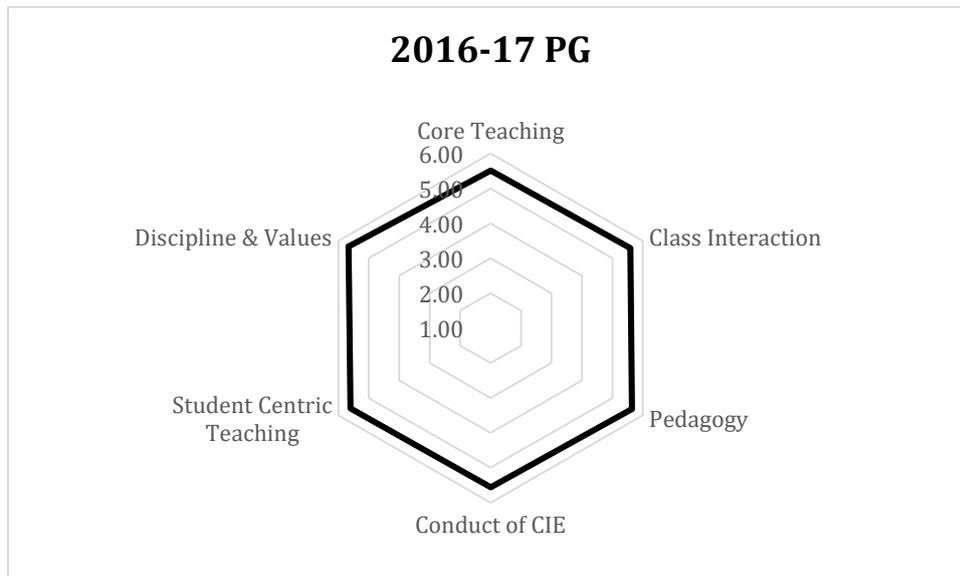
Teaching Quality Feedback

Questionnaire for Software Laboratory:

- P1: Effective theoretical foundation related to programming exercises was given.
- P2: Planning and execution of programming or mini-project related exercises were explained.
- P3: Appropriate methodology to implement the software solution was explained.
- P4: Software lab sessions were supervised effectively.
- P5: Doubts and questions raised during the programming sessions were clarified effectively.
- P6: Assignments were corrected on time.
- P7: Constructive comments/suggestions were given on assignment/ lab exercises.
- P8: Time given for exercises/assignments was adequate.
- P9: Computing equipment were in working condition and of capability needed to perform the tasks.
- P10: Any other suggestions and improvements. (Descriptive question with word limit of 50 words)

Evidence of Success- The feedback of students helps the teachers to ascertain the areas where improvement is needed (if any). This helps them in planning for the classes in a better way for the subsequent semester. The HoDs study the feedback reports of the individual faculty and use it as an effective tool to allocate subjects to the teachers in the subsequent semesters. The subjects where the feedback from the students is poor, the HoDs initiate corrective action. They also identify the strong areas of a faculty based on the feedback and give them subjects in those areas while deciding the workload in the following semesters. The feedback is also taken into consideration as one of the components in selecting the best teacher for Sai Krishna Best Teacher award from each campus once in two years. Radar chart of winter semester 2017-18-theory for the Undergraduate, Postgraduate and Professional Programmes are attached for reference.





Problems Encountered and Resources Required- Few issues were encountered regarding administering the feedback to the whole student community at the end of the semester through the campus intranet. This was initially addressed by dedicating the net connectivity only to the computer labs during feedback time. After the installation of dedicated lease lines from the individual campuses to the main campus this problem also has been addressed.

Notes (Optional)

