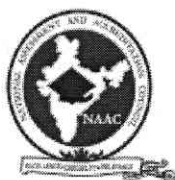


**PEER TEAM REPORT**

Institutional Re-assessment(3rd Cycle)  
of

**Shri Shivaji Education Society Amaravati's  
Science College**  
Congress Nagar , Nagpur, Maharashtra-440012.

**(Visit Dates: 27-29<sup>th</sup> April, 2017)**

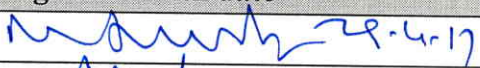
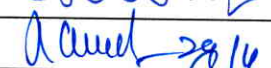
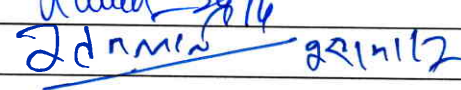


**National Assessment & Accreditation Council**

(An autonomous Institution of the University Grants Commission)

P.O. Box 1075, Nagarbhavi, Bangalore-560 072

## Profile of the Institution

Name of the Institution	Shri Shivaji Education Society Amravati's Science College, Nagpur		
Date of Visit	27-29 April 2017		
Affiliating University	Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur		
Status of the College	Affiliated : <input checked="" type="checkbox"/>	Constituent : <input type="checkbox"/>	Autonomous : <input type="checkbox"/>
Financial Category	Grant-in-aid : <input checked="" type="checkbox"/>	Government funded : <input type="checkbox"/>	Self-financed : <input type="checkbox"/>
Type of College	Men : <input type="checkbox"/>	Women : <input type="checkbox"/>	Co-education : <input checked="" type="checkbox"/>
No. of Departments	Arts : Science : 11 Commerce : Any other: Language 01 Total: 12		
No. of Programmes	UG : 02 PG: 06 M.Phil : Ph.D.: 07 Any other: 1 PG Diploma in Nano-Technology Total: 16		
Year of Establishment	1 <sup>st</sup> July 1967		
UGC recognition	Under 2 (f) and 12 B : Yes		
Location of the College	Urban : <input checked="" type="checkbox"/>	Semi-urban : <input type="checkbox"/>	Rural : <input type="checkbox"/> Tribal : <input type="checkbox"/>
Area of the campus in Acres	3 Acres		
<b>No. of Teachers</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
Permanent :	25	13	38
Temporary:	12	69	81
Total no. of Teachers Ph.D.:	22	11	33
Total no. of Teachers M.Phil	-	01	01
Total no. of Teachers P G:	03	01	04
<b>No. of Non-teaching Staff:</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
Technical Staff :	41	00	41
Administrative Staff :	11	-	11
<b>No. of Students :</b>			
UG : ( B.Sc., BCA)	513	1021	1534
PG: (M.Sc. MCA)	41	241	282
M.Phil.			
Ph.D.	38	19	57
Any Other: PG Diploma	01		01
	<b>Name</b>	<b>Signature with date</b>	
1	Chairperson:	Prof. M S M Rawat	 29.4.17
2	Member-Coordinator:	Prof. K A Raveesha	 28/4
3	Member:	Prof. R L Mathur	 29/4/17
4	NAAC Officer:	Dr Ganesh Hegde	



Date : 29 April 2017

Signature of the Principal and Seal  
S. S. E. S. Amravati's  
Science College, Nagpur.

Shri Shivaji Education Society Amravati's Science College, Nagpur

Peer Team Report on Institutional Re-assessment (Third Cycle) of Shri Shivaji Education Society Amravati's SCIENCE COLLEGE – Nagpur-440012, Maharashtra.	
1.1 Name & Address of the Institution:	Shri Shivaji Education Society Amravati's science college – Nagpur-440012, Maharashtra.
<b>Section I: General Information</b>	
1.2 Year of Establishment:	1967
1.3 Current Academic Activities at the Institution (Numbers):	
• Faculties/ Schools:	01: Science
• Departments/ Centres:	UG: 11 PG: 01
• Programmes/ Courses offered:	UG:02 PG:02
• Permanent Faculty Members:	Total : 38
• Permanent Support Staff:	Total : 52
• Students:	UG – 1534 :PG – 282, PG Dip:01: Ph.D-57, Total : 1874
1.4 Three major features in the institutional Context (As perceived by the Peer Team):	<ul style="list-style-type: none"> <li>• 50 year old College, with “College with Potential for Excellence” status</li> <li>• Grant in aid college offering UG, PG &amp; Ph.D programmes in Science catering to local needs</li> <li>• Co-educated with more than 70% girls</li> <li>• Located in an Urban area with good academic ambiance and Infrastructure</li> </ul>
1.5 Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure):	27 <sup>th</sup> – 29 <sup>th</sup> April, 2017
1.6 Composition of the Peer Team which undertook the on- site visit:	
Chairperson	<b>Prof. M.S.M.Rawat</b> Former VC HNB Garhwal University Garhwal-246174,Uttarkhand
Member Co-ordinator	<b>Prof. K.A. Raveesha</b> Coordinator, Centre for Innovative Studies in Herbal Drug Technology, Department of Studies in Botany, University of Mysore, Manasagangotri Mysuru – 570006, Karnataka
Member	<b>Prof.R.L.Mathur</b> Former Principal, Lachoo Memorial College of Science and Technology Jodhpur-342003,Rajasthan
NAAC Officer:	<b>Dr. Ganesh Hegde</b> , Deputy Advisor





Section II: CRITERION WISE ANALYSIS	Observations
<b>2.1 Curricular Aspects:</b>	
2.1.1 Curricular Planning & Implementation:	<ul style="list-style-type: none"> <li>Adopts curricula designed and developed by the affiliating University.</li> <li>Some senior faculties are members of BOS of affiliating university.</li> <li>Syllabus for UGC Career Oriented Programs developed by the college</li> <li>Value and skilled-oriented as well as vocational certificate programme introduced</li> </ul>
2.1.2 Academic Flexibility:	<ul style="list-style-type: none"> <li>College offers three UGC sponsored Add-on (COC) and six self-financed skill oriented courses.</li> <li>College offers 12 subjects combination in B.Sc., 05 subjects M.Sc, MCA, BCA and Ph.D. as per university norms</li> <li>Choice based credit system (CBCS) for 05 PG programmes</li> </ul>
2.1.3 Curriculum Enrichment:	<ul style="list-style-type: none"> <li>Curriculum update at regular intervals by University</li> <li>Invited lectures, Field visits, Industrial visits and panel discussions adopted to supplement university curricula.</li> <li>Value addition through different Add-on programmes</li> </ul>
2.1.4 Feedback System:	<ul style="list-style-type: none"> <li>Systematic collection and scientific analysis of feedback needed.</li> <li>Feedback from all stake holders needed</li> </ul>
<b>2.2 Teaching-Learning &amp; Evaluation:</b>	
2.2.1 Student Enrolment and Profile:	<ul style="list-style-type: none"> <li>Open and transparent Online-admission process as per govt norms.</li> <li>Admission notices are publicized in print media, notice board and website.</li> <li>Adopts inclusive admission policy catering to diverse student groups</li> <li>College has mentoring system</li> </ul>
2.2.2 Catering to Student Diversity:	<ul style="list-style-type: none"> <li>Counseling and Skill development provided</li> <li>Limited facility for differently-abled students.</li> <li>Remedial Classes and Bridge programmes practiced</li> </ul>
2.2.3 Teaching-Learning Process:	<ul style="list-style-type: none"> <li>Lecture method widely followed</li> <li>Field visit, Study Tour, Industrial Visits, Seminar and Projects in practice</li> <li>ICT enabled class rooms, use of E-Learning sources</li> </ul>



	<ul style="list-style-type: none"> <li>• College has good language lab</li> <li>• Teaching Plan prepared and adopted.</li> </ul>
2.2.4 Teacher Quality:	<ul style="list-style-type: none"> <li>• Recruitment of faculty is as per University and state govt. regulations.</li> <li>• Out of 119 teachers, 01 with D.Sc, 33 are with PhD and 02 are with M.Phil.</li> <li>• College supports faculty development programmes.</li> <li>• Out of 119 teachers 38 are regular teachers and remaining are on Ad-hoc/CHB/Contract basis</li> </ul>
2.2.5 Evaluation Process and Reforms:	<ul style="list-style-type: none"> <li>• Revaluation mechanism in place</li> <li>• Reforms and procedures of affiliating university adopted.</li> <li>• Unit tests and IA Test conducted</li> <li>• Credit weight age given to students participating in extra curricular activities</li> </ul>
2.2.6 Student Performance and Learning-Outcomes:	<ul style="list-style-type: none"> <li>• Good Pass percentage in all the courses</li> <li>• Many students of the college have earned placed in the university merit list</li> <li>• College has mechanism to analyze short fall in learning outcomes and suggest improvement measures</li> </ul>
<b>2.3 Research, Consultancy &amp; Extension:</b>	
2.3.1 Promotion of Research:	<ul style="list-style-type: none"> <li>• Research Committee is in place.</li> <li>• 30 faculties recognized as Research Guides</li> <li>• 07 subjects recognized as Research centers</li> <li>• Organized 04 International, 15 National Conferences/Seminars/workshops</li> <li>• Seed money provided</li> <li>• Last four years 07 faculty awarded Ph.D</li> <li>• Incentive provided for better research publications by faculty</li> </ul>
2.3.2 Resource Mobilization for Research:	<ul style="list-style-type: none"> <li>• 05 UGC major and 17 minor research projects completed</li> <li>• 05 Major Research projects under DST Women Scientist Programme completed</li> <li>• 01 BRNS major research project is ongoing in Microbiology department</li> <li>• College has received funds under CPE programme, 03 faculty members received the travel grants by UGC/DST</li> </ul>
2.3.3 Research Facilities:	<ul style="list-style-type: none"> <li>• Basic research facility developed from CPE &amp; Other Grants.</li> <li>• Access to E-resources provided through INFLIBNET, N-LIST and Wi-fi facility</li> <li>• Inadequate Research journals and modern Sophisticated equipments.</li> </ul>

	<ul style="list-style-type: none"> <li>Central Instrumentation Facility needed</li> </ul>
2.3.4 Research Publications and Awards :	<ul style="list-style-type: none"> <li>h-index is 18, citations is 1434 and I<sub>10</sub> index is 43</li> <li>Microbiology, Nanotechnology and Physics departments have good publications</li> <li>More Teachers need to be motivated for research culture and publications in standard journals.</li> <li>419 publications in journals, 284 conference presentations and 38 books by faculty.</li> <li>College publishes a biannual Research Journal</li> </ul>
2.3.5 Consultancy:	<ul style="list-style-type: none"> <li>Some consultancy services provided through Geology Department</li> <li>Good scope for improvement of consultancy</li> </ul>
2.3.6 Extension Activities and Institutional Social Responsibility:	<ul style="list-style-type: none"> <li>Extension activities mainly through NSS, NCC</li> <li>Sensitizes students for ISR</li> <li>Programmes on social/Environmental issues organized.</li> </ul>
2.3.7 Collaborations	<ul style="list-style-type: none"> <li>Some International, National, State level Informal linkages exists.</li> <li>Formal MOU'S with industries and Institutes needed for faculty development, research &amp; placement</li> </ul>
<b>2.4 Infrastructure and Learning Resources:</b>	
2.4.1 Physical Facilities:	<ul style="list-style-type: none"> <li>Campus area 29,89,13.40 square meter with built up area of 6714.816 square meters</li> <li>Adequate number of class rooms(27), student labs with ICT facility and 03 museums</li> <li>Girls hostel with 100 capacity</li> <li>Outdoor and indoor Sports facilities available supported by Gymnasium, auditorium, Canteen, Conference hall</li> <li>02 Silent generators and 27 KVA solar plant</li> </ul>
2.4.2 Library as a Learning Resource:	<ul style="list-style-type: none"> <li>Library housed in 552.027 Sq.Mts with a seating capacity for 150.</li> <li>36656 books on rack, and 25 journals</li> <li>Automation of library with OPAC</li> <li>N-List and INFLIBNET facility</li> <li>32 Computers with Internet and LAN</li> <li>Reprographic facilities.</li> </ul>
2.4.3 IT Infrastructure	<ul style="list-style-type: none"> <li>341 computers, 10 Laptops and 17 LCD</li> <li>Wi-Fi and Internet facility in campus</li> </ul>

	<ul style="list-style-type: none"> <li>• ICT facility maintenance satisfactory.</li> </ul>
2.4.4 Maintenance of Campus Facilities:	<ul style="list-style-type: none"> <li>• Green and Clean campus</li> <li>• Campus satisfactorily maintained</li> <li>• AMC adopted for maintenance of equipments</li> </ul>
<b>2.5 Student Support and Progression:</b>	
2.5.1 Student Mentoring and Support:	<ul style="list-style-type: none"> <li>• Prospectus and hand book containing all information provided</li> <li>• SC, ST, OBC and other Govt. scholarship available for students.</li> <li>• Institutional Scholarships provided</li> <li>• Student mentoring system is in practice</li> <li>• Registered Alumni association supports college</li> <li>• College has placement cell, Grievance Redress Cell, Women Development Cell and Anti-ragging committee.</li> <li>• College has competitive examination coaching centre for UPSC/MPSC, UGC NET/SET/CSIR run by Alumni</li> </ul>
2.5.2 Student Progression:	<ul style="list-style-type: none"> <li>• Some students are placed in industries.</li> <li>• Student progression from UG to PG is satisfactory</li> <li>• Drop out rate for UG is 14% and PG is 8%</li> </ul>
2.5.3 Student Participation and Activities:	<ul style="list-style-type: none"> <li>• One student participated in International level competition (2016) in China with partial finance from college</li> <li>• Good participation in sports at the inter university and state levels</li> <li>• Students participate in cultural and literary competitions</li> <li>• Satisfactory participation of students in NSS and NCC activities.</li> </ul>
<b>2.6 Governance, Leadership and Management:</b>	
2.6.1 Institutional Vision and Leadership:	<ul style="list-style-type: none"> <li>• College has a defined vision and mission to empower students.</li> <li>• Harmonious relationship among management, staff and stakeholders.</li> <li>• Teachers participate in decision making process</li> </ul>
2.6.2 Strategy Development and Deployment	<ul style="list-style-type: none"> <li>• Structured organizational structure.</li> <li>• LMC constituted as per rules</li> <li>• Decision through various committees.</li> <li>• Perspective plan need to be developed with well defined action plan.</li> </ul>
2.6.3 Faculty Empowerment Strategies:	<ul style="list-style-type: none"> <li>• College encouraged participation of faculty in conferences, seminars and workshops.</li> </ul>

	<ul style="list-style-type: none"> <li>• Performance appraisal system practiced.</li> <li>• Faculty development programmes encouraged</li> </ul>
2.6.4 Financial Management and Resource Mobilization:	<ul style="list-style-type: none"> <li>• Government grants and student fees are the main sources.</li> <li>• Accounts are audited regularly by internal and external audit</li> <li>• Grants for infrastructure development and research need to be mobilized from different funding agencies/Alumni/State Government</li> </ul>
2.6.5 Internal Quality Assurance System:	<ul style="list-style-type: none"> <li>• Active and participatory IQAC</li> <li>• Routine quality assurance activities done</li> <li>• Academic and examination audits exist but need improvement</li> <li>• College is member of Asia Pacific Quality Network (APQN) so college is connected with International Quality Network (IQN)</li> </ul>
<b>2.7 Innovations and Best Practices:</b>	
2.7.1 Environment Consciousness:	<ul style="list-style-type: none"> <li>• Clean and Eco-friendly campus</li> <li>• Roof-top Rainwater Harvesting, Hazardous waste management renewable energy source (Solar Plant) E-waste management and Vermicomposting unit exist.</li> <li>• Incinerator in Girls Common Room and Girls Hostel</li> </ul>
2.7.2 Innovations:	<ul style="list-style-type: none"> <li>• Soil-less roof top organic gardening</li> <li>• Scientific temperament propagation in society through outreach.</li> </ul>
2.7.3 Best Practices:	<ul style="list-style-type: none"> <li>• Awareness about atrocities in work place</li> <li>• Good extension activity through adoption of village</li> </ul>

Section III: OVERALL ANALYSIS	Observations
3.1 Institutional Strengths:	<ul style="list-style-type: none"> <li>• Good academic ambience and Infrastructure</li> <li>• Serving the cause of higher education and functioning in the heart of Nagpur City.</li> <li>• Supporting management and sound financial position</li> <li>• Good organizational structure</li> </ul>
3.2 Institutional weaknesses:	<ul style="list-style-type: none"> <li>• Large number of contributory/Ad-hoc/Contract teacher</li> </ul>



	<ul style="list-style-type: none"> <li>• Institution-industry interaction is inadequate</li> <li>• PG departments under self financing scheme</li> <li>• Shortage of land for future development</li> <li>• Vacant regular teaching posts since many years</li> </ul>
3.3 Institutional Opportunities:	<ul style="list-style-type: none"> <li>• Promoting new startup, finishing schools and entrepreneurship</li> <li>• Tapping the enlightened and experienced Alumni for student placement and higher studies.</li> <li>• Encouragement of collaborative and interdisciplinary activities for local area development</li> <li>• Revenue generation through consultancy and research grants from funding agencies</li> <li>• Obtaining autonomous status for the college</li> </ul>
3.4 Institutional Challenges:	<ul style="list-style-type: none"> <li>• New sources for funding besides student fees to be explored</li> <li>• Improvement of campus placement</li> <li>• Establishment of central instrumentation facility for research and teaching</li> <li>• Appointment of qualified teaching staff on regular basis</li> </ul>

<b><i>Section IV: Recommendations for Quality Enhancement of the Institution</i></b>
<ul style="list-style-type: none"> <li>• Introduction of new job oriented and skill based subjects to attract students.</li> <li>• Regular appointment against sanctioned teaching and non-teaching posts.</li> <li>• Appointment of temporary teachers as per UGC qualification</li> <li>• Strengthen career, counseling and guidance cell, research cell and extension activities cell</li> <li>• Improvement on campus placement through placement cell</li> <li>• Teachers need to avail more minor and major research projects from funding agencies</li> <li>• Utilize the potential of alumni association for overall development of the college</li> <li>• Institute industry interface to be strengthened with internship programmes and</li> </ul>

projects work

- Strengthen consultancy services
- Efforts be made for autonomous status
- Strengthen the students labs and add relevant new titles and journals in the library
- Establish a central instrumentation facilities for teaching and research

*I agree with the observation of the Peer Team as mentioned in this report.*



Seal of the Institution

*Ughale*  
29.04.2017  
Principal  
S. S. E. S. Amravati's  
Science College, Nagpur.

*Signatures of the Peer Team Members:*

Name and Designation		Signature with date
<b>Prof. M. S. M Rawat</b> Former VC HNB Garhwal University, Garhwal-246174	Chairperson	<i>M. S. M Rawat</i> 29.4.17
<b>Prof. K.A. Raveesha</b> Coordinator, Centre for Innovative Studies in Herbal Drug Technology, Department of Studies in Botany, University of Mysore, Manasagangotri, Mysuru – 570006, Karnataka	Member Co-ordinator	<i>K.A. Raveesha</i> 29/4/17
<b>Prof. R.L. Mathur</b> Former Principal, Lachoo Memorial College of Science and Technology, Jodhpur-342003	Member	<i>R.L. Mathur</i> 29/4/17
<b>Dr. Ganesh Hegde</b> , Deputy Advisor.	NAAC Officer	

Place: Nagpur, Maharashtra

Date: 29<sup>th</sup> April, 2017