



# Revised Perspective Plan 2023 - 2028

Shri Shivaji Education Society, Amravati's

### Shri Shivaji Science College

Shivaji Nagar, Amravati – 444603, M.S., India

NAAC A<sup>+</sup> (3.42) (4<sup>th</sup> Cycle); UGC – CPE (2<sup>nd</sup> Phase) NIRF (Ranking-2022) Rank Band: 151 - 200 ISO 9001:2015 Certified College

Identified by - DST, GoI for FIST, SGBAU as Lead College and Career Katta as "Centre of Excellence"

### Revised

### Perspective Plan 2023 - 2028

(Post NAAC and NEP Implementation)

Prepared and Submitted by

## Internal Quality Assurance Cell (IQAC)

Shri Shivaji Education Society, Amravati's

### Shri Shivaji Science College

Amravati, Maharashtra - 444 603 A UGC - CPE, NAAC - "A+" Grade

**Identified as:** DST – FIST, SGBAU – Lead College **Office:** 0721 – 2991778; **Principal:** 0721 - 2991785

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As a routine policy, IQAC has devised future Perspective Plan for the duration 2021-26. In the meantime, college has gone through the NAAC Assessment for 4<sup>th</sup> Cycle during 29-30 August, 2022. The college has successfully completed the assessment and adjudged as A<sup>+</sup> institute with CGPA 3.42. Recently, the Government of Maharashtra has announced that, new curriculum framework as per National Education Policy – 2020 will be implemented from the academic session 2023 – 2024.

In view of the post NAAC targets set by the college and to meet with the requirements of the National Education Policy- 2020, the IQAC has revised the Perspective Plan of the college to stand strong in the transforming scenario in higher education of the nation.

#### **VISION**

To develop the Institute as a Centre of Higher Learning ever abreast with the expanding horizon of knowledge in the field of Science and to facilitate transformation of students into good human beings, responsible citizens and competent professionals.

### **MISSION**

- To provide quality education, equip them with analytical insights, intellectual maturity, strength of purpose and willingness to work hard conforming to ethical values.
- To be a bridge between the rural-urban divide, taking the benefits of education to the poor and the marginalized, aiming at their empowerment.
- To ensure access to and equity in higher educational opportunity to all deserving and meritorious students with a preferential option for the poor and marginalized, irrespective of caste and creed.
- To attract and develop talented and committed human resource, and provide an environment conducive to innovation, creativity, team-spirit and entrepreneurial leadership.

### MECHANISM TO DEVELOP PERSPECTIVE PLAN

Institutes has an Internal Quality Assurance Cell (IQAC) to develop and monitor the strategic planning of the institutional progress. The prime focus of the IQAC is on development of the Perspective Plan for five years after the NAAC Assessment. The college has completed its NAAC Validity period in the November 2020. As per the routine process, IQAC has taken an initiative to design the Perspective Plan for the period of 2021 – 2026.

In the initial phase, the IQAC has reviewed the previous perspective plan (2015 - 2020) and prepared the deployment document to evaluate attainment of the objectives propose in the plan. Further, the Core Committee for the development of the Perspective Plan was constituted and asked to submit the report within one Month.

The core committee has prepared the draft of the Perspective Plan 2020 - 2025 and placed before IQAC. After through discussion in few rounds of the meeting IQAC reframed the Perspective Plan.

The final approval to the Perspective Plan 2020 - 2025 was given in the Dec. 2020 and eventually the Perspective Plan was renamed as **Perspective Plan 2021 – 2026**.

The revision of the Perspective Plan 2021 - 2026 was scheduled in post winter vacations and carried out by IQAC in the month of October – November 2022. After the various rounds of discussion, final revised draft was placed before IQAC on  $10^{th}$  Jan. 2023. After the discussions on the draft, it is hereby put forth for the approval of the CDC. After the approval of the CDC, the Perspective Plan 2023 - 2028 will bring in to force.

### **IQAC TEAM**

Sr.No.	Name	Category
1.	Dr. G. V. Korpe	Chairperson: Head of the Institution
2.	Hon`ble Dr. V.G. Thakare, Secretary, Shri Shivaji Education Society, Amravati	Member from the Management
3.	Dr. W. S. Barde	IQAC Coordinator
4.	Dr. P. R. Padole	Teacher Member
5.	Dr. Mrs. S. P. Ingole	Teacher Member
6.	Dr. G. A. Wagh	Teacher Member
7.	Dr. D. D. Khedkar	Teacher Member
8.	Dr. M. S. Gaikwad	Teacher Member
9.	Dr. P. A. Nagpure	Teacher Member
10.	Dr. U. S. Junghare	Teacher Member
11.	Sh. Milind Chimote	One Nominee from Local Society
12.	Dr. Pravin Raghuwanshi	One Nominee from Alumni
13.	Sh. Satish Taral	One Nominee from Employers
14.	Sh. Kiran Paturkar	One Nominee from Industrialists
15.	Dr. H. S. Lunge	One Nominee from Stakeholders
16.	Sh. Mahesh Patil	Member from Administrative officers
17.	Ms. Aishwairya Tayade (M.Sc. Env. Sci)	One Nominee from Students

### **Perspective Plan Development Core Committee**

Sr. No.	Name	Category
1.	Dr. G. V. Korpe	Chairman
2.	Dr. W. S. Barde	IQAC Coordinator
3.	Dr. P. R. Padole	Teacher Member
4.	Dr. D. D. Khedkar	Teacher Member
5.	Dr. M. S. Gaikwad	Teacher Member

### STRENGTHS, WEAKNESSES, OPPRTUNITIES AND CHALLANGES (SWOC)

### **STRENGTHS:**

- 1. Parent management with high academic and research interest and social priority
- 2. Proactive, qualified, experienced and experimental teaching faculty holding the important positions in the authorities of affiliating University and NGOs as well.
- 3. Motivated, inspired and meritorious students acquiring various national fellowships.
- 4. Experienced and dedicated technical and non-teaching staff having strong emotional bondage with the students.
- 5. State of Art facilities in smart classrooms, equipped laboratories and library
- 6. NAAC Accredited institute with A<sup>+</sup> Grade (CGPA 3.42) and achieved position in the NIRF -2022 Rank Band 151-200.
- 7. Quality endorsed by own University as Lead College; Central Agencies through provisions of status / grants under CPE and FIST; financial assistance to the minor and major projects and ISO Certification
- 8. Career Katta, an initiative of the Dept of Higher Education, Government of Maharashtra identified the college as "Centre of Excellence" and Model Skill Development Centre.
- 9. Productive research centres with the facility of Central Instrumentation Cell equipped available for research scholars in and around the college. Patents granted to the faculty members
- 10. Dr. Panjabrao Deshmukh Memorial Science Innovation and Activity Centre has the approval of the "Technology Lab" proposing Artificial Intelligence based models.
- 11. Impetus for the students to launch innovative projects and start research work was provided with the help of specially designed scheme offering "Research Fellowship" to UG, PG and Ph.D. Students under the Innovation Cell of the College.
- 12. Dedicated modernized Library Building is coming in to force by the academic year 2023 24 which will facilitate advanced-level learning of the students.
- 13. Digitally enriched laboratories with more than 400 advanced computers for students as well as for the online examinations to be conducted by various agencies like TCS, MKCL, NTA, etc.
- 14. On Campus facility of accommodation for Girls with the capacity of 72 Students.

- 15. Well-equipped auditoriums including Multipurpose Hall, Sir C. V. Raman Auditorium, A. V. Theatre and Open Arena for various activities.
- 16. College has good facility for Basketball and Lawn Tennis Courts with electrification flood lights arrangement.
- 17. On-campus accommodation facility with Gymnasiums for girls and boys.
- 18. Pioneer institute for Guardian Teacher Scheme
- 19. Complete Chain of courses from HSSC to Post PG (research) is available under one roof
- 20. Enrolment of the good number of in house and other students to Online Add on and Value Based Courses conducted by college shows preparedness to enter into the new methodologies envisaged in Blended Mode of Learning proposed by UGC
- 21. College has NCC (150 Boys and 162 Girls) and NSS (200 Volunteers) Units
- 22. The capacity of (Comprehensive use of ICT by teaching faculties makes learning a joyful experience
- 23. Significant blending of pedagogies by maximum teachers to conserve democratic participation of the students in classroom
- 24. One of the very few institutes encashing the benefit of CBCS scheme to earn additional credits for students by providing them "General Interest Courses"
- 25. Lush green, hygienic, and huge campus with maintenance of the diversity of the flora and fauna
- 26. Noteworthy active collaborations and MoUs with the teaching, research, industrial and Non-Government institutions
- 27. Availability of the Online Learning Resources from Swayam, NPTEL, Amrita Virtual Lab, etc. through Local Chapter and Nodal agency
- 28. Significant Extension and Outreach activities realized remarkable social impressions; and offer from the Government agency like MPCB to establish Ambient Air Quality Monitoring Centre.
- 29. Cultural activities earned topmost position in the University as "General Champion" for the 2019 and 2022.
- 30. Sensor-based water uplifting system reduced the water loss to the greatest extent and saving electricity too.
- 31. Transformed rooftop in to Energy Harvesting Base with the help of installation of the Solar System of 31 KW, solar lamp-posts in college campus and solar water heater at Girls Hostel to enforce utilization of the Green Energy.

#### **WEAKNESSES:**

- 1. Being institution offering conventional UG courses, students choosing placement opportunities are very few and opportunities for internships are limited
- 2. Limited scope for revisions and modifications in the curriculum and examination reforms at institute level due to administrative set up of the University
- 3. Placement opportunities are very less due to inadequate growth of industries in local area
- 4. Regional barrier resulted into lack of student admissions from other state and nations
- 5. Alumni Association needs strengthening in terms of financial support from alumnus and eventual provisions from the institute in general and students in particular
- 6. Extension activities needs regional expansion to receive recognition at state and national level
- 7. Institute has to reach philanthropists, NGOs, and individuals to receive support to various innovative programs, scholarships and infrastructural developments
- 8. The crunch of negligible financial support from the government agencies does not allow institute to offer any fellowships to the students at its own
- 9. Lack of openings for faculty and student exchange
- 10. The lack of proficiency in English communication, ICT applications, hands on training of modern equipments reduces capabilities of non-teaching staff
- 11. Single faculty Science College has limitation to offer skill components in linguistics and communication to the greater level

#### **OPPRTUNITIES:**

- 1. Institutional Innovation Council and Science Innovation and Activity Centre working under college is the most prospective platform to bring innovative ideas of the students and the faculties to reality and scale them up
- 2. Potential CIC of the institution opens new vistas to emerge as Popular Research Centre
- 3. Strengthening of Innovative Pedagogy Development Centre will conceive many teaching methods to upgrade learning levels
- 4. Addition of the new faculties in almost every department will lead to conception of interdisciplinary research
- 5. MoU established with various associations will be concretised by offering Internships and Student Exchange Programme.
- 6. Transformation of the ICT classroom in to the smart classrooms to enhance enjoyable experience in the learning process

- 7. Legacy of the excellence in Cultural Activities will be uplifted to State and the National Level
- 8. Incorporation of dedicated schemes under Career Counselling and Entrepreneurship

  Development Cell to produce more employer as well as employable graduates
- Addition of the PG Courses, Online Courses, provisions of the selective courses from SWAYAM, NPTEL and other platforms will offer complementary knowledge and skill component to the students
- 10. Participation of the motivated faculties in workshops/training programmes at National and International level will cater resourcefulness to them
- 11. Competing for the financial support under various schemes like PMMMNMTT, CPE, FIST, BUILDER, STAR, etc. will reinforce the facilities and confer progressive learning environment
- 12. Experimental aptitude of the faculties will make very affluent gelling in to the forthcoming transformations due to enforcement of the National Education Policy.

#### **CHALLENGES:**

- 1. Decreasing attendance in the classrooms due to excessive emphasis on the online education and overuse of the digital gadgets
- 2. Declining importance of the conventional courses over the applied may degrade the foundation of the knowledge
- 3. Offering interdisciplinary courses in the framework of new NEP-2020 curriculum.
- 4. Higher level knowhow of the technological advances in T, L & E for the senior faculties
- 5. Incorporation of changes or addition of the Skill Components in the existing curriculum devised by affiliating University
- 6. Placement for the students with graduate degree with Basic Sciences
- 7. Costs applicable to publish research papers in journal indexed in Scopus/Web of Science, etc.
- 8. Research in the fundamental aspects of the sciences may not lead to the Patents
- 9. Sustainability of the Science Innovation and Activity Centre due to paucity of the funds
- 10. Attracting International students due to regional limitations
- 11. Tracking the progress of the students after completing their education from the institute is difficult
- 12. Receiving the donations from the alumnus, philanthropists and making the provisions of the scholarships

### **INSTITUTIONAL PREPAREDNESS FOR NEP - 2020**

### Multidisciplinary/interdisciplinary:

It is straightforward to form the cluster institutions under the aegis of parent education society opting different academic disciplines like science, arts, humanities, languages, law, education, physical education, health and vocational so that students can find endless possibilities of the subject combinations.

The institute itself offers the major science courses (Physical, Chemical, Life, Mathematical, earth and Computer Sciences) and vocational courses (Forensic Science, Data Science and Computer Applications, biotechnology) for the UG and PG degree programmes. In view of the transformations envisioned in NEP-2020, respective adaptations will be planned under the specially constituted committee.

The institution offers Ph.D. programmes with adequate research facilities in major science subjects. The faculty and research students are encouraged to undertake interdisciplinary/multidisciplinary research projects. To establish MoUs with HEI and research institutes offering some special courses, so that students can opt for these courses.

To set up the Centres of Courses offered in most of the Indian and Foreign Universities.

### **Academic Bank of Credits (ABC):**

The courses will be designed with imaginative and flexible curricular structures; this will offer multiple entries and exit points and create new possibilities for the lifelong learning. The affiliating university has already adopted a Choice Based Credit System - CBCS for UG, PG degree programs, which permits the student to choose among the number of elective and general courses. The institute has established MoUs with various educational and research institutes to undertake student and faculty exchange programs.

The objectives of these MoUs may be extended for earning the credits from the courses offered by either party under MoU. The institute is registered as SWAYAM\_NPTEL Local Chapter and the students are encouraged for enrolling on the courses from where the students may earn credits from renowned HEIs.

### **Skill Development:**

The affiliating university initiated the implementation of LOCF for the UG programme which is consistent with the objectives of NEP of fostering quality and outcome-based education. It includes the translation of academic research into innovations for practical use in society and the economy. Thereby increase in both public and private sector investment in higher education and increase in the rich and larger body of students through alternative learning modes such as open and distance learning modes and use of the MOOCs Measures are adopted to enhance the bench skills of the students such as the introduction of the Project work, Summer training programmes, internship and industrial training programmes, etc.

Career-oriented programs/Skill courses like Astronomy and Astrophysics, Clinical Laboratory Technology, Cosmetology, Eco-tourism and wildlife photography, Gardening and Land Scalping are introduced as add-on courses at the UG level which have flexible entry and exit. To set up the centre for topmost Indian and Foreign Universities offering courses on top demanding skills. The Institute will focus on the courses that encompass Basic Skill building, Sector-Specific training Pre-Employment Training and Allied Activities. Institute is Planning for starting contemporary subjects such as Artificial Intelligence, Design Thinking, Data Analytics, Machine Learning, and Holistic Health at the undergraduate level which are touted as the career choices of tomorrow. The institute is registered for Spoken tutorial, an online initiative by IITs, here students can learn various free and Open Source Software all by themselves.

### Appropriate Integration of Indian Knowledge System (teaching in Indian Language, culture, using online course):

Teachers are encouraged to create subject material in the regional language and to translate vocational courses and value-added online courses run by the institute into the regional language. Teachers are encouraged to write scientific articles in the local newspapers and deliver popular science lectures in the regional languages. The courses will be designed for the promotion and improvement of local skills in the local language.

### **Focus on Outcome-Based Education (OBE):**

The new model under NEP-2020 called STEAM-focused on experiential, application-based learning and research-based internship. As a part of holistic, all-encompassing education, students will be given internship opportunities with local industries, businesses and local communities as well as research internships to improve their employability. Ph.D. students and

faculty are encouraged to undertake high quality outcome-based research to produce intellectual property (Patents and Copyrights).

Students are encouraged to participate in various Tech-Fests, Science Fairs, Innovation, Competition, etc. for exploring the practical side of their learning and promoting innovation among students. The research internships with faculty and researchers at their own or other HEIs/research institution for undertaking product-based research and to further improve their employability and entrepreneurship.

### **Distance Education/Online Education:**

NEP-2020 emphasized distance education / online education expand the access to education and training for employed students; since its flexible scheduling reduce the effects of the time constraints imposed by personal responsibilities and commitment. The Institute has already started working on these aspects. The facility is created for imparting online education and teachers are encouraged to create online add-on and skill courses. Teachers are encouraged to develop econtent and online teaching material. To cope up with the advanced teaching skills and to understand current online teaching trends, teachers are encouraged to participate in advanced pedagogy training programs. The institute is registered as SWAYAM-NPTEL Local Chapter and the students are encouraged for enrolling on the SWAYAM NPTEL courses from where the students can earn credits from renowned HEIs. The institute is Nodal Center Amrita University Virtual Lab. It is providing an opportunity for all the students of the institute to use virtual labs, free of cost under the Nodal Center Programme. It is to provide high-quality remote laboratory access in science discipline for students and teachers of the country through vlab.amrita.edu and is applicable to undergraduate and postgraduate students including Physical Sciences, Biological Sciences, Chemical Sciences, Computer Science and Electronics. The institute is registered for the spoken tutorial- an online initiative by IITs, where one can learn various Free and Open Source Software all by oneself. To set up the centres for universities offering distance education and online education on top demanding skills.

### **OBJECTIVES**

The goals to be achieved during 2023–2028 are formulated for the development with respect to following aspects:

- 1. New Programmes
- 2. Innovative Teaching Learning Process
- 3. Research & Development
- 4. Human Resource and Management
- 5. Support services and facilities for Students
- 6. Infrastructure Development & Management
- 7. Extension and Outreach Activities
- 8. Career Guidance and Placements
- 9. Best and Innovative Practices
- 10. Management Information System
- 11. Alumni Relations

### 1. COURSES/ PROGRAMMES TO BE INTRODUCED

- PG in Microbiology
- PG in Mathematics
- PG Diploma in Cyber security and PG Diploma in Content Writing
- BVoc / skill development courses
- Short Term Courses
- Bridge Courses
- Introduction of GIC at PG level

Courses like PG in Geoinformatics, B.Sc. (Data Analytics as one subject), PG Diploma in Data Analysis and PG Diploma in Soil Testing are proposed for the academic session 2023 – 2024.

Also, in view of enriching/supporting the present curriculum and value-based education following small courses/activities will be introduced.

- Enrichment of curriculum as per need at department level.
- Yoga education
- Communication Skill and Personality Development
- Disaster management
- Women Grooming center
- Value Education and Professional Ethics
- Feedback on curriculum.

### 2. ENHANCEMENT OF TEACHING, LEARNING & EVALUATION (TLE) PROCESS

To cater to the needs of the advanced and slow learners along with the conventional chalk-and-talk teaching, some measures for improvement will be taken.

- Use of ICT in Teaching & Learning will be encouraged.
- Use of Audio Video in the Teaching and Learning process
- Establishment of smart classrooms.
- Self-learning through seminars, field/industry visits will be encouraged.
- To introduce bridge courses & short-term certificate courses.
- Introduction of e-learning and development of e-content
- To cater to the needs of slow learners remedial coaching will be continued.
- To create and maintain the learning ambience, more learner centric activities such as guest lectures, workshops and competitions for the students will be organized.
- The constant formative and summative evaluation will be continued.

### 3. RESEARCH & DEVELOPMENT

To achieve goals of quantitative and qualitative increase of research output the college he following initiatives will be taken:

- Improving human resource through organization of workshops/conferences.
- Publication in top journals and presentation in national/international conferences will be encouraged.
- Faculty will be encouraged to undertake major and minor research projects from UGC and other funding agencies.
- To get recognition of research laboratory from agencies like DST/DBT/Industries
- Improving existing laboratories and creating new infrastructure and facilities for quality research.
- Existing Central Instrumentation facility will be enhanced.
- Collaborative research will be encouraged.
- Faculty/departments will be encouraged to undertake consultancy services.
- Faculty will be encouraged to develop e-resource for research scholars.

### 4. HUMAN RESOURCE MANAGEMENT

The human resource strategy of this plan is aimed at increasing the strength of the human resources that includes faculty & staff

#### A. Faculty

- The promotion of faculty members through Career Advancement Scheme (CAS) is in place as per the UGC norms.
- For effective implementation of new courses faculty will be deputed for training and short-term courses.
- Training programmes and workshops for teachers will also be organized.
- Faculty will be honoured for their quality research.
- To groom leadership among the faculty, opportunity will be given to shoulder various responsibilities in administrative process of the college.
- The college will look after the welfare of the faculty.

### B. Non-teaching Staff

For the quality processes that are expected to maintain in enhancing standard of the institution a trained staff is essential.

In this regard following activities will be undertaken –

Organizing trainings for administrative and technical staff. The college will look after time bound promotions and welfare of the staff members.

### 5. SUPPORT SERVICES AND FACILITIES FOR STUDENTS

Following support services and facilities will be made available/enhanced for students.

- Career counseling cell
- Placement cell
- NET/SET coaching
- Language laboratory to improve the communication skills
- Guardian -Teacher Scheme
- Grievances Redressal Cell, Anti Ragging Cell
- Looking towards increasing enrollment of the girls special efforts will be taken to groom leadership amongst them.
- Games and Sports indoor and outdoor facilities will be increased.

### 6. INFRASTRUCTURE

Additional infrastructural facilities will be created to cater to the needs generated by the proposed development plans.

Among them the facilities to be created in the near future are-

- New library building.
- Renovation of auditorium
- Wi-Fi in campus
- Advanced IT infrastructure
- Enhancement of NRC.
- Separate class rooms for PG students.
- Construction of new classrooms.
- Non-residential students center.
- Grooming Theatre.
- Students Study Centres -
  - ✓ Wildlife and Bird conservation study centre.
  - ✓ Limnological and fish study centre.
  - ✓ Plant diseases diagnosis study centre.
  - ✓ Remote sensing study centre.
  - ✓ Astronomy and Astro -Physics study center.
  - ✓ Environment Monitoring centre.
  - ✓ Communication Skills study centre.
  - ✓ Open Source Software study centre.
  - ✓ Data analysis study centre.
  - ✓ Spiritual and Value Education study centre.
  - ✓ Dr Punjabrao Deshmukh's vision study centre.

### 7. EXTENSION AND OUTREACH ACTIVITIES

Along with its academic pursuits the institution shoulders the social responsibilities from time to time.

- Extension activities in collaboration with educational institution of national repute, GOs and NGOs will also be organized.
- Efforts will be taken for carbon neutrality in the campus.
- During the conference and workshops some of the indirect beneficiaries like farmers, small scale industrialists and officials from GOs and NGOs will be invited for an interaction with the field experts.
- Conducting Green Audit with respect to use of renewable energy, water harvesting and Carbon Neutrality, hazardous waste management, e-waste management and biodiversity.
- Energy Audit
- Science Awareness programme.
- Organization of Students Academic extension activities.

- Institutional Social responsibility
- Environmental Awareness Camp & Conservation.
- Establishment of Student Grooming Centers.
- Installation of solar power system and water harvesting.

### 8. BEST AND INNOVATIVE PRACTICES

Following best practices will be strengthened:

- Rain water harvesting
- Energy conservation measures
- Use of renewable energy sources.
- Waste disposal management, e-waste management and recycling of materials.
- Noise and Air Pollution Monotoring
- Academic and Administrative audit by external peers
- Students Satisfaction Survey

Apart from these best practices college has decided to implement some innovative ideas which will help the institution to improve its quality.

- Introduction of Management Information System.
- Online Admissions of PG
- E- Attendance of students.
- E-academic diary
- Innovations in laboratory teaching will also be encouraged.

### 9. ALUMNI RELATIONS

- Provision of online registration for alumni.
- More opportunities will be created for alumni to organize various programmes on campus and engage with students and faculty.
  - Alumni will be encouraged to support activities of the college.

### **SHORT-TERM GOALS**

- To keep faculty members abreast with the latest trends and developments in Research,
   Technology and Teaching methodologies.
- To motivate the faculty to remain exposed to the Industrial processes & activities.
- Majority of the students should graduate with Distinction/Honors in all branches.
- To continue the special classes for non-English medium students to improve their Communication Skills.
- All information concerning students/ staff to be made available online.
- To make the Campus green and chemical free.
- To go for the energy auditing of the whole campus.
- We shall strive to produce more national level players in upcoming years.
- Conducting faculty and student development programs for cutting edge trends and technologies.

### LONG TERM GOALS

- To build & promote teams of experts in the upcoming trends and technologies in education sector.
- To promote quality research and undertake research projects keeping in view their relevance to needs and requirements of technology in local industry.
- To institute a sustained quality system embedded with a conscious, consistent and programmed action.
- To create an enabling academic environment for students embedded with sincerity, discipline and commitment.
- To mould humane citizens of the nation.
- To establish globally the brand image of the college.
- To emerge as a Model College for commerce education.

### METHODOLOGY TO ATTAIN GOALS

Goals: The goals identified have been to bring three 'Hs' together in an integrated manner viz. Hand (to develop skills), Head (to gain advanced knowledge) and Heart (to inculcate human values)

To achieve these goals, a set of following objectives are identified through this perspective plan.

- 1. To uphold continuously good academic performance with 100% results;
- 2. To inculcate learner centric and effective teaching learning process;
- 3. To ensure transparency and credibility in the process of students' evaluation;
- 4. To develop a comprehensive system of student mentoring and student support;
- 5. To take care of horizontal and vertical up gradation of students considering the limits of time and expectations;
- 6. To create a research culture in faculty and students.
- 7. To launch value added and skills development programmes improving the employability of students;
- 8. To motivate students for self-employment and to enable them to emerge as entrepreneurs;
- 9. To involve a friendly, efficient and flawless administrative set up ensuring a smooth day to day functioning;
- 10. To empower faculty about emerging trend in their profession for academic advancement.

### INSTITUTIONAL DEVELOMENT PLAN (IDP) IN ACCORDANCE WITH NEP-2020

#### **Pillars of Transformation:**

- Develop multilingualism diversification;
- Graduate and Post Graduate Education design as per the job market;
- Curriculum makes interesting, higher level and employable;
- Research & Innovation;
- Infrastructure and Green Campus Development;
- Information and communication Technology & IT enabled smart classes;
- Academic-Industry Relationships;
- Social Outreach.

Goal: There are three types of goals- process, performance, and outcome goals.

### Short Term: (0-2 Years)

- Preparing the Roadmap for curricular reforms in a phased manner, focusing on multidisciplinary and holistic education
- Initiating the revision of curriculum to facilitate flexible choices, inviting feedback of the students.
- Integrating traditional pedagogies with modern and innovative pedagogical approaches
- Implementing the UGC Regulations on Academic Bank of Credits in a phased manner.
- Provision of Seed Grants for research to the newly inducted faculty, and promoting the teachers to integrate research with teaching.
- Integrating Value and Skill-based courses in the curriculum of each programme of study.
- Multidisciplinary Research Centre to act as a bridge between institute and industries.
- Promoting the culture of cross-disciplinary and interdisciplinary research by allowing the students in the subjects other than their core subjects.
- Pedagogy to make education more experiential and holistic;
- Increasing hostel facilities as needed.
- Establishment of various clubs for up-skilling of the students.
- Revision of syllabi to integrate multidisciplinary skill component
- Linkages with regional/national and international innovation hubs.
- Establishment of various clubs for up-skilling of the students.
- Clustering of colleges from parent society to enhance the gross Enrolment ratio.
- Empowering students through flexibility in course choices

### Long Term (5-10 Years)

- Integrated UG, PG and research programmes in all disciplines
- Introduction of additional departments to run multidisciplinary programmes
- Restructuring the programmes with renewed focus on global competency
- Tie-ups with national/international universities for collaborative academic and research programmes
- Fully functional International Students Office with large no. of international students on roll.
- Widening the range of community-based courses.
- Establishing the Centre for Multidisciplinary Education and Research.
- Introduction of additional PG programs to run multidisciplinary courses.
- Use of emerging disruptive technologies for necessary transformation in the education system.
- Digital content in multiple Indian and foreign languages to address the issue of linguistic diversity.
- Establishing centres of excellence to promote state of the art research, teaching and extension with quantitative outcomes
- Empowering Centre for Innovation, Skill and Entrepreneurship Development for dissemination of employable skills and training.
- Revitalize academic program structure with an innovative system of multiple entry and
  exits with options toward certificate, diploma, UG degree general, or degree research, and
  one or two years of Master's degree as per new guidelines of NEP.
- destructing of syllabus and pedagogy in a new design.
- Students at all HEIs will be provided with opportunities for internship with local industry, as well as research internships with faculty and researchers
- Implementation of the remaining targets envisioned in NEP-2020

### PLAN OF ACTION

The IQAC proposes the following plan of action to achieve the goals and objectives listed in the perspective plan for the academic years 2023-24 to 2027-28:

### T, L and E Strengthening:

- 1. College shall apply for the Star College Status to upgrade learning experience for the students
- 2. DBT Builder Proposal will be Submitted to strengthen the PG teaching and research activities.
- 3. Psychometric Test will be conducted to identify High Performing and Low Performing Students to channelize specialized activities.
- 4. IQAC shall plan for Bridge Courses to help students switching from other streams to strengthen their basic concepts.
- 5. Attendance follow up and improvising methodologies will be enforced.
- 6. Continuous and Consistent Internal Examinations will be conducted to assess the students and help them to improve and perform better in the University exams.
- 7. Guest lectures will be organized by inviting experienced faculty from reputed teaching and research institutes.
- 8. IQAC proposes to automate the college library.
- 9. College will Introduce more scholarships for students.
- 10. Students shall be motivated to pursue higher education.
- 11. Increase the number of E- content in the library.

#### **Innovation and Incubation in Research:**

- 1. IQAC shall motivate the students and faculty towards research activities
- 2. Innovation Cell in collaboration of Dr Panjabrao Deshmukh Science and Innovation Activity Centre will launch competitive harvesting of the innovative ideas of the students and offer incentives to the students in the form of Research Fellowship, awards, industry support etc.
- 3. The college will conduct inter collegiate research competitions like Avishkar for the research students.
- 4. Various workshops, training programmes, conferences and seminars will be organized.

#### **Extension and Outreach:**

- 1. More value-added certificate courses shall be planned and introduced.
- 2. NCC and NSS units will focus on improvement of social connectivity and help students to evolve into socially conscious and responsible citizens.
- 3. IQAC proposes to improve the campus infrastructure and ensure its optimum utilization to make it a more environment friendly and a greener campus.
- 4. IQAC shall plan to organize inter-collegiate competitions to facilitate exposure to the students through inter-college participations.
- 5. IQAC proposes to improve the sports facilities on the campus.
- 6. The Career Counselling Cell will be reinforced to intensify career guidance for the students
- 7. The placement cell shall plan and conduct training workshops to equip the students to perform well during the placement process.

### **Faculty Development**

- 1. Faculty Development Programmes will be organized and teachers will be motivated to participate in FDP from the high repute institutes.
- 2. Introduce soft skill development program for non-teaching staff.
- 3. IQAC propose to conduct Academic & Administrative audit, Energy Audit. Gender audit and environment audit.
- 4. IQAC proposes to strengthen Innovative Pedagogy Development Centre to devise unique teaching methods.

The IQAC shall continuously strive to achieve the goals and objectives of the perspective plan keeping the vision and mission statement of the college in view.



### Shri Shivaji Education Society, Amravati's

### Shri Shivaji Science College, Amravati



Shivaji Nagar, Morshi Road, Amravati (MS) India - 444 603

NAAC Accredited by Grade A' with CGPA 3.42 (4th Cycle) | UGC awarded status of College with Potential for Excellence (2th Phase)
Included in NIRF (Ranking 2022) Rank Band 151 - 200 | ISO 9001:2015 Certified College Identified by DST, Govt. of India for FIST and Sant Gadge Baba Amravati University as Lead College









