SHRI SANT GAJANAN MAHARAJ COLLEGE OF ENGINEERING, SHEGAON

APEX QUALITY MANUAL

(ISO 9001:2015)

MASTER COPY

Issue No.	: 02
Issue Date	: 01.07.2023
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SHRI SANT GAJANAN MAHARAJ COLLEGE OF ENGINEERING, SHEGAON

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APPROVAL AND RELEASE AUTHORIZATION

This document has been prepared to define and communicate the Quality Management system (hereafter abbreviated as QMS) & Policy of Shri Sant Gajanan Maharaj College of Engineering, Shegaon (hereafter abbreviated as SSGMCE), for the purpose of effective implementation of QMS system, designed to assist in the achievement of total Student satisfaction. The QMS system mentioned in Apex Quality Manual has been based on the requirement of ISO 9001:2015 & is the property of college, so its circulation is limited to intranet. Preparation of additional copies is not permitted without authorized approval.

Preparing and Issuing Authority:

Reviewing & Approving Authority:

Date: 01.07.2023

Prepared By:	Reviewed & Approved By:	Issued By:
MR	**Principal**	**MR**

REVISION / AMENDMENTS OF RECORD

SR NO	SEC TIO N NO	PAGE NO	ISSUE/REVISION				REASON FOR CHANGE	REVI EWE D BY	APPR OVED BY
			PREV IOUS ISS/R EV. NO.	PREVIO US ISS/REV DATE	NEW ISS/ REV. NO	NEW ISS/REV . DATE			
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SHRI SANT GAJANAN MAHARAJ COLLEGE OF ENGINEERING, SHEGAON

VISION:

To impart world-class Engineering and Management education in an environment of spiritual foundation to serve the global society.

MISSION:

- To develop Excellent learning center through continuous design and upgradation of courses in close interaction with R&D centers, Industries and Academia.

- To produce competent, entrepreneurial, and committed Technical & Managerial human resource, with spiritual foundation to serve the society.

- To develop state of the art infrastructure, centers of excellence and to pursue Research of global and local relevance.

- To strive for 'Sarve Bhavantu Sukhinah' – the ideal of our parent organization Shri Gajanan Maharaj Sansthan through symbiosis of Science and Spirituality.

CORE VALUES

1. Community Development
2. Student Centric learning environment
3. Transparency
4. Green Campus
5. Synergy through team work
6. Commitment through excellence
7. Inculcate entrepreneur activities
8. Adoption to new edge technology

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QUALITY POLICY:

- We are committed to provide quality education to the students, enabling them in their field to cater to the changing and challenging needs of the society. We make efforts for maintaining state of art infrastructure and congenial learning environment, enhancing competency of faculty to very high level and to make them adopt all modern and innovative methods in teaching-learning process. We endeavor in inculcating moral and ethical values amongst the students and staff. This we will achieve by: –

- Complying with applicable statutory and regulatory requirements.

- Meeting the relevant requirements of relevant interested parties.

- Promoting innovative and challenging academic environment for overall knowledge development of student.

- Collaborating with organizations and other institutions for mutual benefits.

- Promoting research and development programme for the growth of economy.

- Disseminating knowledge in the region through continuing educational programmes.

- Carrying out the risk and opportunity analysis of the processes & establish the controls.

- Ensuring the continual improvement of educational management system.

- The Policy is reviewed once in year for system suitability and its effectiveness.

Date: 01.07.2023   **Principal**

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QUALITY OBJECTIVES:

- ➢ To enhance satisfaction of students and interested parties.
- ➢ To increase the number of students going for internship, higher studies, entrepreneurship & jobs.
- ➢ To enhance student participation in technical events and extra-curricular activities.
- ➢ To enhance faculty capabilities though interaction with external world and Research & Development activities.
- ➢ To provide holistic development of students and faculties through spiritual orientation, offering open electives and provide opportunities for creativity and innovations.
- ➢ To increase the success rate of students in examination and career.
- ➢ To enhance the capability of facilities such as hostel, library, sports, and administration.
- ➢ To increase social contribution of the institute.
- ➢ To enhance participation of interested parties such as parents, alumni's through regular meetings and get together.
- ➢ To increase the number of innovative and socially beneficial projects carried out.

Date: 01.07.2023   **Principal**

Quality Objectives are measured, monitored, evaluated, and analyzed through dash board.

1.0   INTRODUCTION:

The SSGMCE is situated at Shegaon in Maharashtra State of India. It is well connected to major cities of India by railways and roadways. This is the place where Shri Sant Gajanan Maharaj made his divine appearance on 23.02.1878 and enlightened millions. Shri Gajanan Maharaj Sansthan is a service organization established in the presence of Shri Gajanan Maharaj Himself, which manages this college of engineering. With the blessings of Shri Sant Gajanan Maharaj, this Sanstha started Engineering College on 23rd August 1983 under the able stewardship of Shri S.S. Patil, (Chairman) to provide quality teaching and quality professional education. The Institute is

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affiliated to Sant Gadge Baba Amravati University, Amravati and approved by AICTE, New Delhi.

Shri Gajanan Maharaj Sansthan is a charitable trust, which has been created with an objective of promoting professional education, spiritual guidance, and service wings. Shri Sant Gajanan Maharaj is a divine and guiding force to the students and staff of SSGMCE. The campus of the SSGMCE is developed over an area of 82 acres. It houses the Academic block, Administrative Block, SGIARC, Workshops, Library, Sports Complex, Prayer & Yoga Halls to mention important ones. The campus amenities include – New & Old Auditorium, New seminar hall, Computer Centers, Dispensary, Power House with 500 KVA Generator, Guest House, Transport facilities, Students Consumers Cooperative Store etc. The academic building is well connected through cement roads to hostels, residential areas, and the shopping center. The campus has five boys' hostels and three girls' hostels with capacity to accommodate around 1,500 students. The campus has about 82 furnished flats, Sopan Bhavan, and Principal's Bungalow. The campus has facilities like banking with ATM, Dispensary, Energy Park, Nursery, shopping centre and canteen. The SSGMCE provides inter communication facilities and many other facilities as above for proper ambience to about 1,800 students.

SSGMCE offers its students highly qualified, experienced, and committed faculty of various disciplines for the cause of producing knowledgeable engineers and managers. The blend of faculty members consists of many Ph.D., Master Degree Holders, and Bachelor Degree Holders.

The SSGMCE has well equipped laboratories, computer centers with latest computers with up-to-date software. The various state-of-art teaching aids and the classrooms are available that help the instructors to make demonstrations and presentations more effective. The classrooms at SSGMCE have been designed to provide a stimulating learning experience. SSGMCE houses one of the best Library with about 91,000 books, 112 Journals of national and international standard. SSGMCE provides hygienic cafeteria and canteen facilities. Many scholarships are awarded to the deserving and needy students in the form of yearly payments and waiver of fees, mess and hostel charges etc. Students are encouraged to take part in the development of projects. They undertake technical presentations and extra-curricular competitions. The best projects are suitably awarded. Various guidance measures are also taken for competitive exams like GATE, GRE, and TOEFL etc. This motivates the students to do their best.

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Regular parents–teacher's meetings are encouraged. In the reception a Parents Visitor Book is kept and parents are encouraged to record their observations about the College. Such suggestions/comments are valuable for continuous improvement of the SSGMCE. Parents are communicated about the progress performance/feedback of their wards through letters / e-mails / SMS and records are maintained.

SSGMCE students have many opportunities to participate in a variety of activities both academic and extra-curricular at college level and also at university/state, National and International level for an all-round personality development. A group of students is attached to a particular faculty, with whom these students interact on regular basis and faculty acts as facilitator/counselor/mentor. This helps in solving problems of the students.

The SSGMCE strictly follows the guidelines issued by AICTE, State Government Bodies and the affiliating university. The College maintains up-dated folders of latest norms, rules, and regulations of the AICTE, Government of Maharashtra and Affiliating University and the statutory and regulatory requirements of these agencies, as required.

The SSGMCE has set high standards of performance and has fully equipped itself with the required resources in the shape of qualified and competent manpower, equipments / machines, and infra-structure to meet the requirements of this QM under International ISO Standard –ISO-9001: 2015.

Address:

Shri Gajanan Shikshan Sanstha's Shri Sant Gajanan Maharaj College of Engineering

Khamgaon Road, SHEGAON – 444203, Dist. Buldhana (M.S.) INDIA

Official Phone:8669638081 / 8669638082

Extension: 101, 103, 107

Email: principal@ssgmce.ac.in / registrar@ssgmce.ac.in

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PURPORSE:

The purpose of the QMS is to develop and implement the Quality Management System adopted by Shri Sant Gajanan Maharaj College of Engineering, (SSGMCE) Shegaon. It has been prepared to outline how the SSGMCE conducts its affairs with respect to the achievements and assurances of quality. It is also intended to serve as a document for the SSGMCE own staff / work force for the understanding of the SSGMCE's Quality Policy and Objectives.

This manual describes SSGMCE's QMS Management System based on ISO 9001:2015 QMS. It includes SSGMCE QMS Policy and elaborates how it is implemented and sustained throughout the organization. The ISO 9001:2015 standards core elements are described with reference to Key organizational procedures. The purpose of QMS Management System is to ensure services rendered are continues to meet the highest standard demanded by the students, & interested parties and are carried out in an environmentally responsible and safe manner.

SCOPE:

The scope of SSGMCE includes:

"Imparting education to graduate, post graduate in the field of Engineering &

Management"

Computer Science & Engineering — B.E.

Electrical Engineering (Electronics & Power) — B.E.

Electronics & Telecommunication Engineering — B.E.

Information Technology — B.E.

Mechanical Engineering — B.E.

Electrical Power System — M.E.

Digital Electronics — M.E.

Computer Engineering — M.E.

Advanced Manufacturing & Mechanical Systems Design — M.E.

Master of Business Administration — M.B.A.

PhD courses are also offered in the following streams Computer Science & Engineering,

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Electrical Engineering (Electronics & Power), Electronics & Telecommunication Engineering, Mechanical Engineering, and Master of Business Administration.

EXCLUSION:

The Scope does not include the following requirements/clauses: -

Design & Development: The SSGMCE is affiliated to Sant Gadge Baba Amravati University, Amravati which prescribes the courses/syllabus etc.

This manual covers the QMS management system of SSGMCE involved in Academic: teaching-learning and the associated legal requirements, Environmental/Energy Aspects, and their management as per ISO 9001: 2015.

This manual describes SSGMCE's Quality Management System (QMS) based on ISO 9001:2015. It includes SSGMCE Quality Policy and elaborates how it is implemented and sustained throughout the organization. The ISO/IS standards core elements are described with reference to Key organizational procedures. The purpose of QMS is to ensure product and service quality which continues to meet the highest standard demanded by the organization and Students and to ensure that the product, processes, and services are carried out in an environmentally responsible and safe manner.

The QMS Management System is applicable to all the processes of college.

BOUNDARIES:

Limited Up to college campus only

LEGAL STATUS (Affiliations)

Trust Registration Number: **F-569**

AICTE Approval No.:**1-4792001**

University Affiliation No.: AU/8/1/1172/2000 Dt. 02.09.2000

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2.0 NORMATIVE REFERENCES, DOCUMENTS & FORMS:

QMS Process model:

- Quality Management System-Requirements Manual ref. no. ISO 9001: 2015
- All the applicable statutory and regulatory requirements like AICTE/ UGC/Technical Board etc.
- NBA, NAAC, UGC requirements.
- All the applicable policies & code of conduct established by Shri Gajanan Shikshan Sanstha, Shegaon.

3.0 TERMS & DEFINITIONS:

Organization: Shri Sant Gajanan Maharaj College of Engineering, Shegaon

Product- Academic services

Student – End Users.

Interested party: Community around 3 KM radius, Students, employees, visitors, statutory and regulatory bodies, parents contractors and suppliers.

Supplier- Registered vendors.

Acceptable risk: Risk that has been reduced to a level that can be tolerated by the organization having regard to its legal obligations and its own QMS policy

Workplace: Any physical location in which work related activities are performed under the control of the organization

QMS Management System: The part of an organization's management system used to develop and implement its QMS policy and manage its product.

QMS Policy: Overall intentions and direction of an organization related to its QMS performance as formally expressed by top management.

QMS Objective: Overall QMS goal, consistent with the QMS policy that an organization sets itself to achieve.

QMS Target: Detailed performance requirements, applicable to the organization or parts thereof, that arises from the QMS objectives and that needs to be set and met in order to achieve those objectives.

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QMS performance: Measurable results of an organization's management of its QMS requirements.

Nonconformity: Non –fulfillment of a requirement. A non conformity can be any deviation from relevant work standards, practices, procedures, legal requirements, etc.

Internal audit: Systematic, independent, and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the QMS management system audit criteria set by the organization are fulfilled.

Preventive action: Action to eliminate the cause of a potential nonconformity. Preventive action is taken to prevent occurrence whereas corrective action is taken to prevent recurrence.

Corrective Action: Action to eliminate the cause of detected non-conformity.

Continual Improvement: Recurring process of enhancing the QMS management system in order to achieve improvements in overall QMS performance consistent with the organizations QMS policy.

ABBREVATION:

SSGMCE: Shri Sant Gajanan Maharaj College of Engineering, Shegaon

QMS: Quality Management System

ISO: International Organization for Standardization

AQM: Apex Quality Manual

ISS: Issue

REV: Revision

No.: Number

MR: Management Representative

CAPA: Corrective Action Preventive Action

IA: Internal Audit

MRM: Management Review Meeting

HR: Human Resource

F&A: Finance & Accounts

Maint.: Maintenance

ADMN: Administration

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# SHRI SANT GAJANAN MAHARAJ COLLEGE OF ENGINEERING, SHEGAON

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QUALITY MANAGEMENT SYSTEM:

SSGMCE has developed, documented, established, implemented and maintained a process-based Quality Management System considering all the applicable requirements of the four standards ISO 9001: 2015. It has adopted the Plan Do Check Act (PDCA) cycle for all the identified processes applicable in the organization. The details of these processes including the outsourced process are given in the procedure manual. The processes are measured, monitored, and controlled at various stages of Institutional operation.

4. CONTEXT OF THE ORGANIZATION (CLAUSE 4)

"A Good system shortens the road to the Goal"
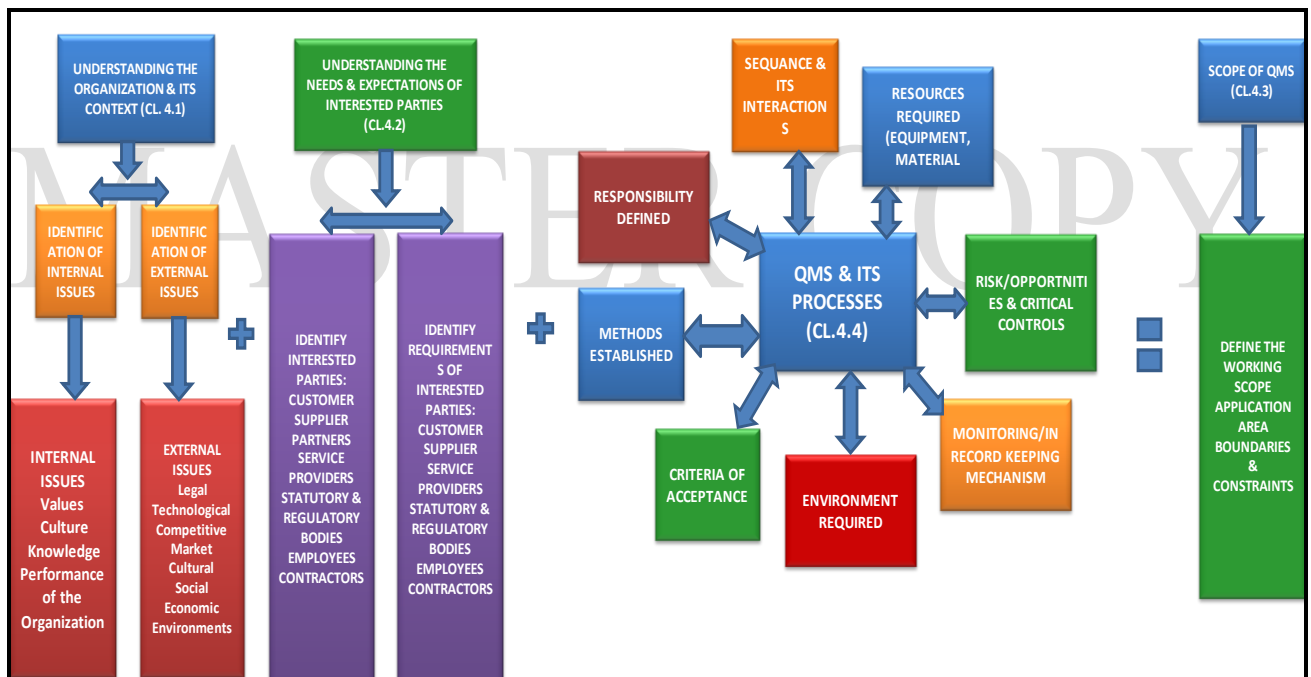
Understanding the organization and its context (Cl.4.1)

The SSGMCE determines external and internal issues that are relevant to its purpose and its strategic direction that affect its ability to achieve the intended result(s) of its QMS. Such issues include conditions affected by or capable of affecting the organization's quality performance. The issues are monitored and reviewed.

SSGMCE also ensures-

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- Access to the applicable legal and other requirements

- Application methodology to monitor, review and action over academic & administrative performance

▪ SSGMCE has identified the issues; risk associated with it and has planned the control measure to mitigate these risks. For this, it has carried out SCOT analysis at Institutional level and departmental level. The actions on this SCOT analysis are planned, carried out, monitored, and reviewed as per the operating procedure "Risk assessment and controls."

▪ The SCOT analysis of SSGMCE, is as given as follows-

SCOT ANALYSIS	
STRENGTHS:	**CHALLENGES:**
• Devoted, committed and visionary management	• Less productive utilization of time and infrastructure for research and academic development
• Strong spiritual and value-based foundation	• Limited exposure to external world
• State of the art and well-maintained infrastructure and amenities for teaching, learning, and R&D, including ultra-modern Auditorium and Seminar Hall, residential campus	• Lack of employability skills in students leading to inadequate placements
	• Lack of language proficiency both English and Foreign languages
• Outstanding infrastructure for sports	• Lack of intense orientation amongst faculty and students for participation in R&D
• Dedicated experienced and hard-working faculty and staff, with continuous efforts for their qualification up gradation	• Attraction and retention of good Human resources
	• Lack of good quality (academics and attitude) students
• Environment conducive to learn, excel and grow; with a strong academics and motivation to	• Dearth of students' participation in industry related short courses launched by the college, declining academic interest amongst students and their

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students for international exposure

- Robust and dynamic systems in place
- Strong community service culture
- Active and performing ED cell and incubation centre
- A strong alumni collaboration and their cooperation for institute development
- Increasing Interaction with industry. Recognition by DSIR, Mah. Chamber of commerce, MEDA, CII etc.
- MOUs with state level Industrial Associations
- University valuation sub centre

class attendance

- Less interdepartmental and multidisciplinary activities and projects
- Lack of career guidance for students: GRE. TOEFEL, IELTS, civil services, Defense

OPPORTUNITIES:

- National and international tie-ups (Academic, research, Industry)
- Need of technologies and skill training for the betterment of society (NSDC) with emphasis on rural area
- To build a strong academic brand which could be taken as role model by others
- Opportunity to create entrepreneurs and incubators in their respective areas

THREATS:

- Absence of diverse student and staff population
- New local and foreign upcoming and expanding technical educational institutes including IITs, NITs and IIMs
- Ever changing govt. and regulatory policies for technical education and NBA certification
- Fluctuation in economic and market environment affecting placement in core branches
- Student intake doesn't meet

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- To explore alumni network
- Horizontal and vertical expansion
- Scope for Placement in upcoming and expanding industries / companies
- Scope for organizing industry related, job oriented and need based training courses
- Access to online courses for skill / competency development of our students and faculty
- Representation of faculty in industries / universities / institutes body / boards as experts / resource person / members
- Revenue generation through technology transfer and commercial sponsorship from industries.

- prerequisites of engineering and management education
- Delays in release of Govt. scholarships
- Rising stake holder (faculty, student, industry) expectations
- Poor paying capacity of home university students
- Liberal policies adopted by other technical institutes

The detailed action plan is prepared to tackle the Challenges , take advantages of Opportunities and counter the Threats.

The different internal and external issues and responsible department for assessing needs and expectations and taking actions to meet them are given in table.

Table: Internal and external issues and responsible department

Sr. No	Issues related to	Responsible Departments
A	External	
1.	Legal (Statutory and Regulatory)	Registrar

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	compliances	
2.	Impact of Technical / Technological changes on curriculum	IQAC cell & HODs
3.	Competitive market - Admissions	Admission committee
4.	University policies and practices	Dean Academics and HODs
5.	Industries institute interaction related to internship / projects / jobs	T& P Office
6.	Accreditation	IQAC Cell
7.	Sponsored projects and funds	R & D Coordinator and HODs
8.	Coordination with Alumni	Alumni Association
B	**Internal**	
1.	Performance of the organization	Top Management
2.	Capex/ Budget monitoring	Top Management
3.	Programme for bright and slow learner	Dean Academics and HODs
4.	Improving capabilities and competitiveness of faculty	HODs
5.	Improving student campus selection	T&P office
6.	Data and information collection, monitoring, evaluation, and analysis	IQAC
7.	Internal Examinations	Dean Exams
8.	Extra and cocurricular activities	Sport director and cultural council
9.	Availability of Books and Journals in library	Librarian and HODs
10.	Hostel management	Chief warden
11.	Student issues	Registrar

- SSGMCE has developed, documented, implemented QMS and continuously monitors its effectiveness.

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Understanding the needs and expectations of interested parties (Cl.4.2)

✓ SSGMCE has identified the interested parties, their needs and expectations and makes programs and plans to meet these requirements. The SSGMCE monitors and reviews this information regularly in various meetings. It ensures its compliance obligations related to these needs and expectations.

The needs and expectations of interested parties are captured through different surveys, meetings, forums and reviewed in meetings.

The interested parties, requirements, and responsible department for assessing needs and expectations and taking actions to meet them is as given in table.

Table: Interested parties, requirements, and responsible department

Interested Party Category	Requirements	Responsible Department
Student	Availability of reliable and quality education and experience as per requirement	Resp. Dept. HODs/IQAC cell
Suppliers / Contractors / Service providers	Transparency in dealing, Timely placement of orders, Timely payment of bills, Long term relation with vendors, Acceptance as a partner	Purchase
Statutory Bodies	Compliance to environmental norms, License validity, Energy efficiencies	Admin, Safety and All Concerned departments
Administration	Compliance to statutory requirements, Care for society, Aid to administration during need.	Admin
People / Staff	Job satisfaction, Pay and Perks, Opportunity for innovation and creativity, Knowledge Development, Employee Welfare facilities, Grievance handling, Career development and training, Social and cultural	Admin,Safety

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	environment in the Township	
Society / NGOs	Infrastructure development in the region, Educational/health facilities, Environmental protection	HR/Admin
Employers / Organizations providing internship, employment, sponsorships	Reliable, Trustworthy, Trained/Skilled Students	T&P
Alumni	Help in the transition from student to alumni. Be helpful to alumni on their journeys in life. Provide valuable information and resources to alumni.	Alumni Committee & Management
Parents	Timely communication, 360 Degree Development of student, Safety & Security	Management & Faculties

Determining the scope of the Quality Management System (Cl.4.3)

The scope of QMS is **"Imparting education to graduate, post graduate in the field of Engineering & Management."**

QMS and its Processes (Cl.4.4)

The SSGMCE has established, implemented, maintained, and continually improve QMS for ensuring that the training related to institutional services carried out by it conform to specified Student, statutory and regulatory requirements, and contextual issues.

The SSGMCE has determined –

- The processes needed for the QMS and their application throughout the organization.

- The inputs required and the outputs expected from these processes,

- The sequence and interaction of these processes,

- The criteria and methods (including monitoring, measurements, and related performance indicators) needed to ensure the effective operation and control of these processes,

- The resources needed for these processes and ensure their availability, the responsibilities, and authorities for these processes,

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- The risks and opportunities and evaluate these processes and implement any changes needed to ensure that these processes achieve their intended results.

The major processes of SSGMCE are classified into institutional processes and Support/Administration processes. SSGMCE has developed department manuals giving details related to these processes, the department organization chart and roles and responsibility.

The processes are operated as per applicable Statutory and Regulatory and academic requirements.

The resources required for effectively carrying out these processes are determined through budgetary planning process and also through reviews during the meetings as per the approvals.

The risk and opportunity related to each process has been identified at and SSGMCE management ensures that the action plans arising out of this is implemented and monitored.

SSGMCE QMS procedures are reflected in Planning, General Systemic Process & QMS Procedure, Non-Conformance Management covering risk assessment, Incident reporting and analysis, emergency preparedness.

SSGMCE has established and maintained documented procedures for Student Needs Management, Training, Continual improvement, Planning and Resource Management, Monitoring and measurement, Management Review.

Management of SSGMCE is committed for Student, interested parties and stakeholders' satisfaction and continual improvement, through its QMS policy and objectives.
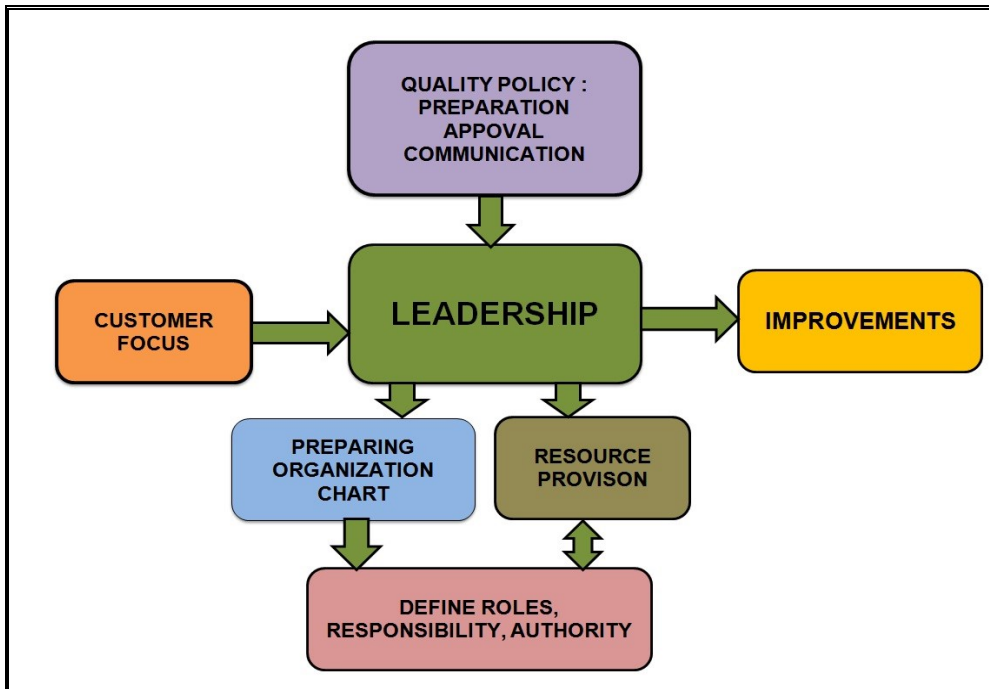
List of processes & procedures are given in Annexure IV.

5.LEADERSHIP (CLAUSE 5)

"Quality sustainability is everyone's Responsibility"

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Leadership and commitment (Cl.5.1)

General (5.1.1)

The Principal has overall responsibility for management commitment for development and implementation of Quality Management Systems. Top management of SSGMCE includes Principal, Dean and Department heads. Top management through its active involvement and participation in various activities, programmes and functions promotes awareness and implementation of QMS.

IQAC activities, Faculty Development & Student Development Programmes, Energy conservation cell, improvement teams, celebration of environment- safety weeks, annual function etc. has been initiated by top management to create awareness about QMS. During this the management appreciates and rewards the employees for their innovative ideas and improvement and good work. Through regular meetings and reviews it ensures compliance to statutory and legal requirements, Student needs and expectations and provides the resources needed for QMS.

SSGMCE management is committed to provide resources for effective implementation of QMS to achieve the intended results. This is carried out through budget planning process and regular review meetings.

Prepared By: MR	Reviewed & Approved By: Principal	Issued By: MR

SSGMCE Management conducts various meetings with the functional groups and also with the interested parties to understand their needs and expectation and makes the efforts to fulfill the requirements

Top management of SSGMCE demonstrates leadership and commitment w.r.t. the QMS by:

➤ taking accountability for the effectiveness of the QMS;

➤ ensuring that the QMS policy and objectives are established for the QMS and are compatible with the context and strategic direction of the organization;

➤ ensuring the integration of the QMS requirements into the organization's business processes;

➤ promoting the use of the process approach and risk-based thinking;

➤ ensuring that the resources needed for the QMS are available;

➤ communicating the importance of effective QMS and conforming to the QMS requirements;

➤ ensuring that the QMS achieves its intended results;

➤ engaging, directing and supporting persons to contribute to the effectiveness of the QMS;

➤ promoting improvement;

➤ Supporting other relevant management roles to demonstrate their leadership as it applies to their areas of responsibility.

Student focus (Cl.5.1.2)

➤ SSGMCE defines its institutional services as per AICTE/UGC/Technical board/Regulatory norms and Student as end users.

➤ SSGMCE management focuses on enhancing Student and interested parties satisfaction.

➤ SSGMCE strives continuously to enhance Students' satisfaction and meet the requirements of interested parties'. Student feedback and complaints are recorded and reviewed to initiate corrective and preventive actions for Student satisfaction.

Requirements/needs of students, parents and prospective employers of graduating students are understood, documented and appropriate actions are taken to meet the same. Requirements of these customers are communicated in the organization at all levels. The customers are made aware of their requirements through college brochure, advertisements, and Webinars/seminars and during counseling at the time of admission. The SSGMCE understands the requirements of the

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customers through various mechanisms such as parent meets, students' meets, alumni meets, student feedback surveys and other formal or informal interactions with them. The College ensures to fulfill the customer requirements and their satisfaction.

To give the direction to SSGMCE, top management has provided the management policy and objectives. It makes efforts to provide quality, safe and environment friendly work environment. The details are addressed in Student Feedback/Suggestion Review report.

QMS Management System Policy (Cl.5.2)

SHRI SANT GAJANAN MAHARAJ COLLEGE OF ENGINEERING, SHEGAON
QUALITY POLICY

We are committed to provide quality education to the students, enabling them in their field to cater to the changing and challenging needs of the society. We make efforts for maintaining state of art infrastructure and congenial learning environment, enhancing competency of faculty to very high level and to make them adopt all modern and innovative methods in teaching-learning process. We endeavor in inculcating moral and ethical values amongst the students and staff. This we will achieve by–

- Complying with applicable statutory and regulatory requirements
- Meeting the relevant requirements of relevant interested parties
- Promoting innovative and challenging academic environment for overall knowledge development of student
- Collaborating with organizations and other institutions for mutual benefits
- Promoting research and development programme for the growth of economy
- Disseminating knowledge in the region through continuing educational programmes
- Carrying out the risk and opportunity analysis of the processes & establish the controls
- Ensuring the continual improvement of educational management system.

The Policy is reviewed once in year for system suitability and its effectiveness.

Date: 01.07.2023   **Principal**

The Vision and Mission statements, Policy, Objectives of SSGMCE have been deliberated at various levels before finalization and issue. These have been displayed at the prominent places in College for information of all concerned.

Prepared By: MR	Reviewed & Approved By: Principal	Issued By: MR

We communicate this policy to all personnel working with & on behalf of SSGMCE and to Interested Parties on demand. The policy, key elements, objectives and targets are discussed within the organization and conveyed to employees to ensure their involvement and commitment. The information is displayed at key locations throughout the work place and included in employee's trainings and meetings on an ongoing basis. These are reviewed periodically (at lease once in a year in MRM) to ensure appropriateness, effectiveness and continuing suitability to the organization.

The top management communicates the importance of effective QMS, promotes continual improvement, PDCA based Process approach, Student and stakeholder focus risk based thinking and supports relevant management roles to demonstrate leadership to their areas of responsibilities.

Roles and responsibilities and authorities are delegated to individuals as per the capabilities, experience and norms of the company.

The Management forms various teams/committees/groups to deal with Institutional issues and regular reviews of this are taken in different meetings.

Management Roles, Responsibility & Authority (Cl.5.3)

Management of SSGMCE establishes QMS policy organizational objectives, and QMS management system framework. It is committed for providing leadership and communication, defining objectives and targets, establishing and meeting statutory, legal and Student/interested parties requirements, ensuring continual improvement of processes and products, delegating appropriate responsibilities to meet the QMS objectives and appointment of management representative.

The management representative is responsible for ensuring the QMS requirements are understood, implemented and maintained throughout the organization, ensures that the corrective actions are implemented to resolve the issues identified during external and internal audits, conducting internal/external audits as per ISO 9001:2015, NAAC/NBA/AICTE requirements and reporting on effectiveness of the system to the top management. Management representative also ensures promotion of awareness of Students' requirements throughout the organization.

Various committees are formed to look after the delegated area. The roles and responsibilities of committees are specified.

Functional roles, responsibilities and interrelationship are defined through organizational chart, corporate policy and key procedures of system. Functional level managers (HODs) are responsible to ensure that all their subordinates and staff understand the corporate/Institutional goals and objectives, the scope of QMS Management System and their roles within that system.

For ensuring the quality for product and services, the QMS Management System is established, implemented and maintained as per the goals and objectives set by the organization in accordance to ISO 9001:2015. The top management and department heads coordinate the performance of QMS Management System.

The organizational hierarchy is as per the organogram presented in Annexure I.

Responsibility and authority for various functions and works including QMS Management System are demonstrated in the Responsibility & Authority document.

6. PLANNING (CLAUSE 6):

"Success does not just happen. It is planned for.

Proper planning, preparation and control prevents poor performance."
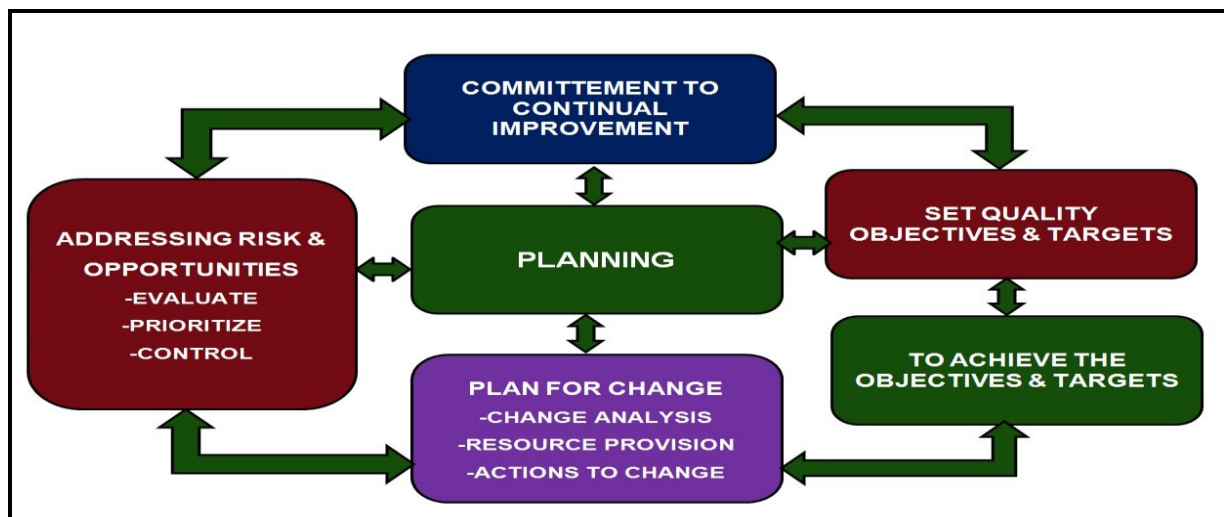
SSGMCE is committed to ensure that their institutional service conforms to Regulatory and QMS standards and requirements of Students. Quality of the education is ensured through identifying

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and understanding the students' requirements through contract review i.e. College's brochure, which describes the courses and other details.

As and when required to meet new customer needs and to be better equipped to face the changes in the field of education and industrial requirements, the quality system is modified and these modifications are documented as per prescribed procedures to maintain the integrity of the quality management system.

The planning for the annual activities related to Academics, Maintenance and Research-Development is carried out through the academic planning process coordinated by the Dean academic. All the department heads submit their departmental requirements to Principal who review and finalize it.These are compiled, reviewed and submitted to the management for approval. The allocation of funds and the work planning takes place as per the approved budget. The budget provisions are reviewed periodically by the management council. The HODs plan their internal departmental work as per the guidelines issued by the Dean academic and the discussions held in Principal, HODs meeting.

Periodic MRM, internal audits and structured documentation provide effectiveness to quality system. Corrective & Preventive actions are taken to control the non-conformities in the services provided and the teaching-learning processes and quality system.

Actions to address risks and opportunities (Cl.6.1)

While planning for the QMS, SSGMCE has considered the issues and the requirements and determined the risks and opportunities that need to be addressed to:

➢ give assurance that the QMS can achieve its intended result(s);

➢ enhance desirable effects;

➢ prevent, or reduce, undesired effects;

➢ achieve improvement

Risk and Opportunities related to Contextual Issues

• **SSGMCE** has determined the risk and opportunities and planned the actions to give assurance that the QMS can achieve intended results, enhance the output, prevent or reduce undesirable effects and are compatible with context of the organization to achieve continual improvement and stake holder satisfaction.

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- Risk and opportunities related to QMS are addressed and documented information is maintained by MR at Institutional level and by Department Head/Departmental ISO coordinators at Department level .

- The effectiveness of these actions is evaluated during meetings, audits and reviews.

- Details are given in Procedure Risk Assessment & Control (SSGMCE/PR/MR-07).

Major Business Risk and Key Strategic Challenges identified by SSGMCE as follows:

- ❖ Academic Risk
- ❖ Technological Risk
- ❖ Legal (Statutory & regulatory) compliance risk
- ❖ Financial Risk
- ❖ Operational risk
- ❖ Reputational Risk
- ❖ Strategic Risk
- ❖ Student Enrollment (Declining) Risk

❖ **Legal and other requirements/ Compliance obligations** - As part of its responsibilities Registrar in coordination with IQAC coordinator/concerned authority deals & maintains a liaison with all applicable outside agencies and statutory bodies regarding regulatory and statutory requirements. Regulatory requirements related to product are reviewed and complied by academic incharge / IQAC Coordinator. The legal and other requirements are also considered as part of objectives and performance targets.

The Legal requirements are identified and compliance ensured through regular reviews.

SSGMCE has allocated responsibilities to Registrar, Dean Exam,Dean Academic ,HODs to ensure continuous compliance of the entire statutory and regulatory requirement .

❖ **Objectives & Targets (Cl.6.2)-**

"Objectives are not commands. They are commitments."

The QMS objectives are set by the department heads considering the QMS policy, directives of the Management, Student requirements, performance of previous years, benchmarks of counterpart and organization's statutory and mandatory requirements. The resources are provided by the management and the performance is monitored on regular basis.

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MR	Principal	MR

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QUALITY OBJECTIVES

- To enhance satisfaction of students and interested parties.

- To increase the number of students going for internship, higher studies, entrepreneurship & jobs.

- To enhance student participation in technical events and extra-curricular activities.

- To enhance faculty capabilities though interaction with external world and Research & Development activities.

- To provide holistic development of students and faculties through spiritual orientation, offering open electives and provide opportunities for creativity and innovations.

- To increase the success rate of students in examination and career.

- To enhance the capability of facilities such as hostel, library, sports and administration.

- To increase social contribution of the institute.

- To enhance participation of interested parties such as parents, alumni's through regular meetings and get together

- To increase the number of innovative and socially beneficial projects carried out

Date: 01.07.2023   **Principal**

Quality objectives at organization level are percolated to department/functional level as follows-

Engineering/MBA Departments as a part of Department Performance Evaluation Dashboard.

Description	Weightage					Score
Quantitate Key Indicators	4	3	2	1	0	
Number of certificate / value-added courses / organized by the department	4	3	2	1	0	
Percentage of students completing certificate / value-added courses / online courses like MOOCS / SWAYAM / e_Pathshala/ NPTEL etc.	>=50	50-35	35-20	5-1	0	
Percentage of field projects / sponsored projects	>=35	35-20	20-10	10-5	0	
No. of Students undergoing industry internship	>=35	35-20	20-10	10-5	0	
Enrolment Ratio (First year student)	>=90	>=80	>=70	>=60	0	

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Pass percentage of students (Final Year)	>=90	90-80	80-70	70-60	< 60
Success rate without backlogs	25-20	20-15	15-10	10-05	<5
Success rate in stipulated period	15-12	12-9	09-6	6-3	<3
Academic Performance in Third Year	10-8	8-6	6-4	4-2	<2
Academic Performance in Second Year	10-8	8-6	6-4	4-2	<2
Percentage of full-time teachers with Ph.D.	>=75	75-60	60-50	50-30	< 30
Average teaching experience of full-time teachers (Years)	>=15	15-12	12-9	9-6	<6
Faculty Cadre Proportion Marks	>=25	25-20	20-15	15-10	<10
Student-Faculty Ratio (SFR)	<=15	< = 19	< = 23	< = 25	>25
Faculty Retention	>=90	>=75	>=60	>=50	0
Consultancy (from Industry) (INR In Lakhs)	10-8	8-6	6-4	4-2	<2
Number of Faculty as resource person	4	3	2	1	0
Grants Received (INR In Lakhs) from Government and Non-Government for research projects / endowments	>=4	4-3	3-2	1-0.25	<0.25
Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship	4	3	2	1	0
Number of research papers in the Journals notified on UGC website	4	3	2	1	0
Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings	4	3	2	1	0
Number of extension activities carried out in the neighborhood community	4	3	2	1	0
Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship	4	3	2	1	0
Number of functional MoUs with institutions, other universities, industries, corporate houses etc.	4	3	2	1	0

Capacity building and skills enhancement initiatives taken by the institution include the following.
  1. Soft skills
  2. Language and communication skills
  3. Life skills (Yoga, physical fitness, health and hygiene)
  4. ICT/computing skills
	All of the above	3 of the above	2 of the above	1 of the above	0

Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution	>=40	40-30	30-20	20-5	>5
Percentage of placements of outgoing students	>=60	60-40	30-40	30-10	>10
Percentage of students progressing to higher education	>=10	10-7	7-4	4-1	<1
Percentage of students qualifying in state/national/ international level examinations during the year (eg: JAM/CLAT/GATE/	>=10	7-10	7-4	4-1	<1

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MR	Principal	MR

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GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)					
Number of awards/medals for outstanding performance in sports/cultural activities at university/state/national / international level (award for a team event should be counted as one)	4	3	2	1	0
Number of students participated in sports and cultural events/competitions (organized by the institution/other institutions)	4	3	2	1	0
Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies	4	3	2	1	0
Number of teaching/Nonteaching undergoing FDP during the year, Orientation / Induction Programs, Refresher Course, STTP	4	3	2	1	0
Percentage of Faculties using ICT Tools	>=60	60-40	40-30	30-10	>10
E-Learning Resources developed by Faculty	4	3	2	1	0
Number of Curricular, Extra-Curricular, and Club Activities organized	4	3	2	1	0
Number of Guest Lectures conducted by Industry Person	4	3	2	1	0
Number of Patents filed/published	4	3	2	1	0
Number of Copyrights	4	3	2	1	0
Qualitative Key Indicators	**Yes(5)**	**No(0)**	**Remarks**		**Score**
Dissemination of Vision Mission among stakeholders					
Delivery details of content beyond syllabus					
Department Academic Calendar					
Course File					
Continuous Assessment in the laboratory as per rubrics					
Class Test Question Papers Aligned with Outcome-Based Education (OBE)					
Relevance of Assignments to COs					
CO-PO-PSO Attainment					
Innovative teaching learning Practices (Blended Learning, Peer Teaching, Flipped Classroom, Project-Based Learning (PBL), virtual lab					
Student Mentoring System					
Stake Holders' Feedback collected and					

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Analyzed (Alumni, Student, Employer, Parents, Faculty, Industry Expert)				
Action Taken Report on Feedback				
Mechanism to Assess Slow and Bright Learner				
Up gradation of Lab Facilities				
Industry Supported Laboratories Utilization				
Impact analysis of industry institute interaction				
Stock Verification				
Maintenance of Equipment				
Industrial training/ visits organized for students				
Departmental minutes of meetings				

The same is audited during the academic audit.

The targets are decided by management annually and maintained as per objective performance reporting format. The targets and the Management programmes as well as documented information of monitoring the same is maintained by ISO cell/resp. department. department level objectives in lined with Policy and Institutional level objectives, targets, Management programmes and monitoring is ensured at department level as per the procedure' Management Programme.

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7. SUPPORT (CLAUSE 7)

Resource Management (Cl.7.1):

"Resources coupled with an emphasis on technology, continuous learning and professionalism is the quality structure of an organization."
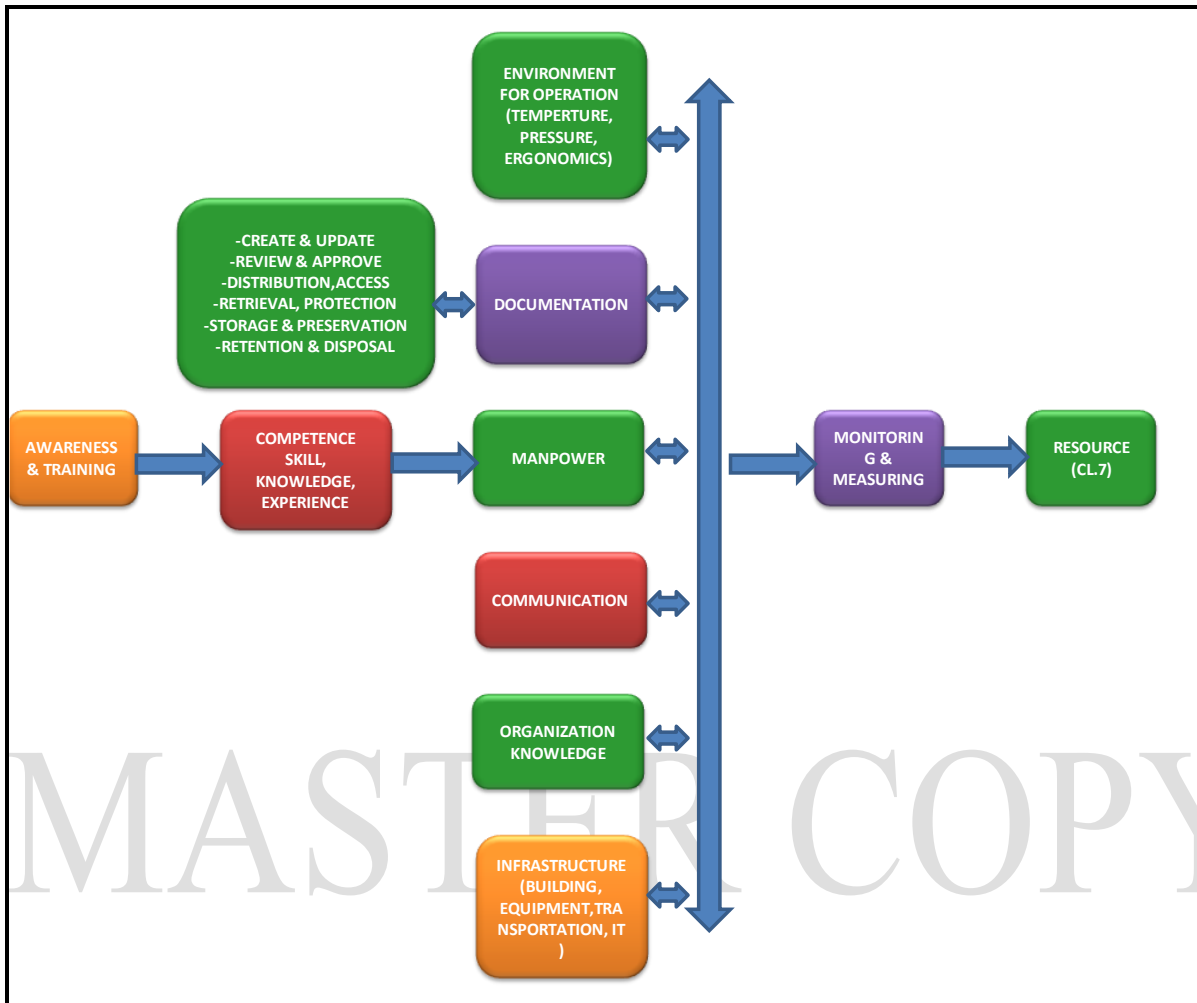
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Resources for achieving QMS plans and objectives in terms of finance, manpower, raw material, inventory, spares and consumables are allocated against forecasted requirements and are reviewed and supplemented when necessary.

(a)   The Principal is responsible for the effective control and provision of resources. To implement and maintain the QMS for continual improvement, its effectiveness and to enhance the students' teaching learning experience / requirements / needs, SSGMCE has provided adequate resources in the shape of experienced and competent faculty (both in-house and visiting) / staff/ building and infrastructure/ computer facilities (both Hardware & Software), courseware and related facilities.

(b)   Review of resource requirements are carried out formally at management reviews meetings at various forums and also at the time of any change in courses offered. The

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requirements for resources also informally monitored continuously to ensure performance meets targets.

Follow up with corporate management is done periodically to ensure availability of resources.

❖ **Competence, Training and Awareness (Cl.7.2,7.3)**

Service book are maintained as part of employees' personal records at Registrar. All employees are allocated responsibilities on basis of defined qualification for respective position. Department heads are responsible for identifying employees' training needs. Annual reviews are carried out to measure and evaluate the competence of performance of the personnel. Competence is evaluated through annual performance appraisal based on Key Result Areas (KRAs). Trainings are provided in the SSGMCE by administrative department.

Adequate care is taken to ensure that the personnel performing work affecting qualities of the education provided / services are adequately trained, experienced and are competent to carry out process control and other processes. The present work force is taken to be adequately qualified, experienced and competent in their respective functional areas. The Registrar is responsible for formulating and executing the various processes to ensure that the right human resource is available when and where required.

Competence, Awareness and Training: SSGMCE has a well defined system of –

a)   Identifying competency needs for personnel performing activities affecting T-L process by following a well defined recruitment procedure.

b)   All staff is regularly sent for skills up gradation in the form of STTP, workshops, trainings and other interactions with experts and visiting faculties.

c)   There is a constant evaluation of teaching and non teaching staff by their superiors and also in the form of students' feedbacks which provides an input regarding the effectiveness of trainings imparted.

d)   All the employees are made aware of the relevance and importance of their activities and how they contribute to achievement of the Quality Objectives by conducting regular awareness sessions and formal and informal interactions by the Principal and MR.

e)   Appropriate records of experience, training & qualifications are available with the Administration Office / Registrar.

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❖ **Infrastructure& Work Environment (Q Cl.7.1.3, 7.1.4):**

SSGMCE maintains a safe & comfortable work environment for all its employees, visitors & students. Workplaces are established to support personal comfort & productivity. Equipment, tools and facilities are made available at appropriate locations & workplaces. Safety warnings & notices are posted at appropriate locations. Ventilations, exhaust are provided at suitable locations for free air movement for maintaining humidity & temperature gradient. Computer software & hardware facilities are provided at each functional level along with local area network for monitoring data base. Provisions of lavatories, rest rooms, etc, is made at different locations of the college. Storage for hazardous waste & chemicals are provided for & material safety data sheet is maintained.. House keeping activity is monitored periodically and records maintained.

Infrastructure

SSGMCE has ample and well-furnished campus including amenities, thereby creating a suitable & congenial environment conducive to learning. SSGMCE is one of the best Educational Colleges as per standard set by Government of Maharashtra.

a. The campus is having a well constructed academic block having well lighted and ventilated class rooms. The faculties and supporting staff have been provided proper work place in terms of cabins with Internet facility, staff rooms and conference rooms, girls and staff common rooms. Utilities like DG sets, water supply and water coolers, internal roads, hostel, mess, toilets etc. are in place and well maintained.

b. Adequate number of computers, equipments, instruments, hardware, software and well equipped laboratories (with Internet facility) / library facilities is available and maintained with latest technology and journals of the International Standard.

c. Supporting services/amenities include auditorium, dispensary, power house, guest house, transport facilities, banking facilities (ATM), students' consumer cooperative stores, canteen, Intercom facility etc. are available and well maintained.

Working / Learning Environment

The College is located at one of the best environmental friendly locations in Shegaon. It is well connected by road and Railway. College provides transport facilities to its employees and students. Layout of the College, rooms, facilities provided therein are one of the best available in any College. Beyond academics, besides pedagogical pursuits, the students take initiatives in

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organizing seminars, panel discussions, guest lectures etc. These occasions provide good opportunity for industry interaction. The institute believes in celebrating various festivals. Blood donation camps are held periodically. In order to build a strong body and develop balanced psychology, Yoga and Meditation activities are carried out which form base for spiritual development.

The college management has instituted merit performance cash scholarships. Students of the college who excel in their academic performance are awarded every year various institutional prizes to encourage them further. Apart from this, free-ships in hostel and mess are given to deserving students. Fee concessions are also given.

For academic development of the students, there exist IEEE, ISTE, SAE Students Chapters, Departmental staff and students associations and Alumni Association. The college is sponsoring students for attending workshops / seminars / conferences and organizes technical tours and industrial visits. The college conducts Entrepreneurship Awareness Programme every year and organizes Lecture Series – by eminent people.

Regular interaction between Institute and parents takes place in the interest of students. Regular interactions are arranged with parents with free lodging, boarding and local hospitality.

Uniform is made compulsory for the students and staff. Prayer is rendered before commencement of the first lecture.

Classrooms are well ventilated, lighted and sitting arrangement including facilities in side the lecture rooms are sufficient and well organized. Environment in and around the College is very conducive for un-interrupted studies and provides serene surroundings.

For students: Ergonomics in seating arrangements, teaching aids facilities for light and airflow, hygiene, cleanliness, etc.

For Teacher: Adequate facility for privacy as required during parent teacher meeting, self-study, preparation for lectures etc.

Fire extinguishers and first aid boxes are provided at various locations in the campus. Doctors / Hospital facilities are available as well.

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❖   **Monitoring and measuring resources(Q Cl.7.1.5)**

The SSGMCE has determined and provided the resources needed to ensure valid and reliable results when monitoring or measuring is used to verify the conformity of products and services to requirements.

It has ensured that the resources provided:

a) are suitable for the specific type of monitoring and measurement activities being undertaken;

b) are maintained to ensure their continuing fitness for their purpose.

The SSGMCE has system of performance evaluation of the students, semester wise, and annual examination organized by University. Apart from such examination, internal / sessional evaluation is undertaken through unit tests, tutorial, assignments, practical & viva. The Dean Exams ensures that the internal exam question papers are reviewed for appropriateness and that the exam setters are provided with due guidelines about the format of the question papers, quality of the question paper (as checked by a competent faculty or HOD) to ensure consistency and quality of the paper setting.

The laboratory experiments /instruments/equipments are properly and accurately set-up by the laboratory Instructors/assistants before students undertake the same. Wherever required, such instruments / equipments are always kept ready to use mode by Lab. Assistants. The lab. experiments are validated before start of each semester. Similarly at the beginning of each semester, all the equipments/instruments /workshop equipments are validated for working conditions in the laboratories. In case the same are out of order, those are repaired internally and/or externally. Preventive maintenance schedules are followed to ensure proper functioning of the experiments.

Control of monitoring and measuring equipment/instrument

Measurement of equipments/instruments used to establish product conformance, environment, health and safety monitoring are subjected to systematic calibration checks at established intervals to verify its accuracy to specified limits

Monitoring and measurement of the process and resources is carried out through the regular reviews and meetings .

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❖ **Organizational knowledge (Q Cl. 7.1.6):**

SSGMCE conduct training programmes for its employees. SSGMCE lays emphasis on learning and sharing of knowledge through training & developmental activities, Improvement/Research/Learning lessons presentations by employees. SSGMCE intranet has dedicated Knowledge Management portal for sharing of internal learning and knowledge by all departments.

Knowledge sharing with external stakeholders is being done through various stakeholders meets organized for the purpose. SSGMCE organizes Knowledge is shared whenever new initiatives involving stakeholders are taken up. All Purchases and works contracts are awarded through tendering by knowledge sharing with vendors.

• The library maintains the project reports, research paper, conference proceeding for sharing and enhancing the knowledge.

Internal and External Communication (Cl.7.4)

"Good communication is less about saying what you mean, and more about defining what you say."

SSGMCE has determined the internal and external communication relevant to QMS and specified what, when, with whom, how, who, about communication. The communication takes place through different modes:

1. Personal Interaction
2. IT systems,
3. Emails,
4. Social groups,
5. Reports,
6. Surveys/Feedbacks,
7. Meetings,
8. Displays,
9. Sirens,
10. Announcements.

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i) Internal communication in regard to the processes of QMS between various departments and functions is ensured through various documents viz. quality procedures, work instructions; through formal and informal contact meetings and formal letters / circulars.

ii) The achievements of the various departments / individuals are communicated by displaying on the Notice Boards and also circulated among departments for motivation to others. Staff level communication and reporting of daily activities are communicated and shared during the standing meeting chaired by the Principal.

iii) The effectiveness of processes is reviewed during Management Review Meetings and is communicated through discussion during these meetings, and minutes of meeting. The list of reports and information to be submitted to various authorities is prepared and documented.

Documented Information (Cl. 7.5)

Control of documented information: documentation & records:

"If it's worth doing, it's worth documenting."

"Do what you say and say what you do "

"Write what you do and do what you write"

Control of documented information consist of control of documents and records. Documents and records are of any form soft or hard, document, form, photograph or drawing including audio video clips.

General: Quality Policy, Quality Objectives, Quality Planning, Control of Processes, Quality Procedures are prepared and well documented. To monitor the effectiveness of the system, forms/Registers and work instructions, where ever applicable have been designed. MR, assisted by the functional heads is responsible for setting up a documentation control system in the SSGMCE. Quality Management System Manual has been designed to fulfill the requirements of the ISO 9001: 2015. The various QMS Documents are listed below.

(i) Apex Quality Manual

(ii) Rules & Regulations Manual

(iii) Procedures Manual

(iv) Work Instruction Manual

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(v) Laboratory Manual

(vi) Responsibility & Authority Manual

(vii) Form / Formats

(viii) Files/Records/Registers

For easy reference, the various procedures, work instructions and forms/formats are grouped into the following subscriptions under different sections as described below.

i)   DPT - Covering all Academic departmental activities.

ii)   ECC - Covering Extra Co-curricular activities.

iii)   ECR - Covering Extra Curricular activities.

iv)   HST - Covering Hostel activities.

v)   LIB - Covering Library activities.

vi)   MNT - Covering all Maintenance departmental activities.

vii)   MR -   Covering MR's activities.

viii)   OFF-   Covering all Administrative (Office) level activities.

ix)   STR - Covering all Stores activities.

x)   SUP - Covering all Supporting level activities.

Procedures are numbered as –

SSGMCE   /   PR   / DPT – 00

Common / Procedure / Section-Number of Procedure

Work Instructions are numbered as -

SSGMCE   /   WI   / DPT – 00

Common / Work Instruction / Section- Number of Work Instruction

Forms/Formats are numbered as -

SSGMCE   /   FRM   / DPT – 00

Common / Form or format / Section- Number of Form or format

Details are described in Procedure **"Documents record and data control" (SSGMCE/PR/MR-01)** with title as.

Apex Quality Manual: AQM has been prepared by MR, reviewed, and approved by the principal. All ISO Cell members, Deans and HODs have assisted the MR in preparation of AQM. For easy

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identification, the entire AQM has been divided into sections and it is abbreviated as SSGMCE-AQM. Each page contains a header. It describes, TITLE as "Apex Quality Manual" as a controlled copy. The Revision No. as "REV No". and date of revision as "REVISED ON". The document number describes the name as "SSGMCE–AQM-Number". The date of implementation of the Quality Management System is mentioned as "W.E.F." and date is mentioned. Document numbers are

marked as "SSGMCE-AQM-Document number". The first part gives the short form of institution i.e. "SSGMCE", second part is "AQM" i.e. Apex Quality Manual and third part is "Document number/clause number/Appendix number". The sections have been identified with the concerned clause and clause description. All the processes needed for effectiveness of the quality management systems have been identified in the form of Quality Procedures and Work Instructions. These processes cover Teaching, Conducting Laboratory Experiment, Purchasing, Admission, Examination, and Library, T&P, Admin office, Hostels etc. The process interaction has also been established for continual improvement.

Control of documents:

The QMS Manual, procedures, work instructions, references are controlled. Changes of these are maintained under revision control.

SSGMCE controls documents required by the quality management system and shall ensure that unintended use of any obsolete document is prevented. SSGMCE has established and maintained procedure "Document Control" to control all documents that form part of its management system [Internal as well as of External Origin] such as policy statements, procedures, specification, calibration tables, charts, text books, posters, notices, memoranda, software, plans, regulations, standards and other normative documents etc. Master list of documents (F/MLD) is maintained to identify the revision status and distribution.

A copy of each of this controlled document are kept for later reference and the retention period is defined in master list of documents.

Any regulatory requirements for retention period of these documents are followed.

The following is considered in the procedure "Document Control":

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a)   All documents, including those maintained in a computerized system, issued as part of the quality management system are reviewed and approved by authorized personnel before issue.

b)   All documents are identified to include:

— a title;

— a unique identifier on each page;

— the date of the current edition (Amendment/Revision) and/or edition number;

— page number to total number of pages (e.g. "Page 1 of 5," "Page 2 of 5"); — authority for issue.

c)   Current authorized editions and their distribution are identified by means of a list: A document distribution list is maintained which records the latest revision distributed and the receiving personnel name.

d)   Only current, authorized editions of applicable documents are available at points of use. Applicable version of the document is made available to relevant personnel through Management Representative.

e)   In case documents are amended by hand then the concerned personnel signs and enters the date where the change was carried out. Only authorized personnel can change a document in this way. Subsequently revised document is also issued.

f)   Changes to documents are identified. The procedure describes how the changes to the document in computer and hard copy are carried out and controlled.

g)   Documents remain legible.

h)   All documents are reviewed & approved before issuing to any personnel by authorized person. Authorized personnel will review, revise/update (If required), and approve the documents periodically at least once in year.

i)   Obsolete documents properly identified with date are removed from location of use. Any superseded documents which are retained for further use are properly identified.

j)   At least one copy of an obsolete controlled document is retained for a specified time period or in accordance with applicable specified requirements

Each document is identified uniquely. This includes title, document number, issue number, date of issue, amendment/ revision number, date of amendment/ revision, page numbering, total number of pages, approving authority, reviewing authority and issuing authority.

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MR	**Principal**	**MR**

Detailing the procedure requirement:

i)   The first issue of AQM has been identified as SSGMCE-AQM with Rev. No. "00", where AQM means Apex Quality Manual.

ii)   Section: Each section has been individually identified as per clause number. Each page has revision number, revision date, title and section details.

iii)   Forms and registers have been identified with the respective sections in the Quality Procedures and the Work Instructions.

iv)   All the Quality Manuals are issued in a controlled manner. Table of Contents and Index and Revision Status Sheets are stamped as "CONTROLLED COPY" in red ink with a rubber stamp. All obsolete documents are maintained with MR The soft copies of obsolete documents are maintained in a folder named "Obsolete documents" having subfolders such as (i) Obsolete Procedures, (ii) Obsolete Work Instructions and (iii) Obsolete Forms/Formats.

v)   The Master Copy is marked as "MASTER COPY" in red ink on the reverse of the document with a rubber stamp. An uncontrolled photocopy of the original controlled copy will have no authenticity in the College. The distribution of the controlled copy within the College will be as per the distribution list. All revisions are issued to the controlled copyholders only. Any copy of Apex Quality Manuals issued outside the College is marked as "uncontrolled" in red ink on the bottom of the front page. All such holders of uncontrolled copy are not entitled to receive any revisions to this manual, as and when occurs.

vi)   The soft copies as "Read Only" files of the Quality Manual, Quality Procedure Manual, various quality manuals as listed are maintained at internal server of SSGMCE at address "online system" for ready and online reference of staff of SSGMCE.

vii)   All documents are destroyed after the retention period is over. All modified documents are removed from the work place and are replaced with pertinent current revised documents. The obsolete documents are kept in the same folder below the current documents. The earlier version of the modified documents are marked "Obsolete " with a rubber stamp in red ink, alongside of the controlled copy stamp. If the superseded document or its part is retained for future reference or for legal requirements, otherwise the superseded documents are also destroyed. Records of all superseded master copies are maintained.

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viii)   Amendments and revisions are carried out if there is a change in the Quality policy, objectives, international standard, product, management, user requests. The changes are initialized through a document revision request form. When revised, only the page number, revision number, revision date are changed. The revision number of the first issue is 00, it will be incremented once for each revision (i.e. 01, 02, 03 and so on).

ix)   The records are maintained for objective evidence of effective control and evidence of the conformance to the requirements of the Quality Management System and the international standard (ISO 9001:2015). The records are legible, retrievable, and have been suitably marked and their retention period is given for documents of internal and external origin. Disposition of the documents has also been defined.

x)   All processes needed for the management system activities, resources, product realization (where applicable) and measurements have been defined.

xi)   The interaction between various processes, their input / output and the exercise of control has been defined. The purpose is ensuring proper inputs and to progressively monitor & review in order to obtain desired outputs (to match inputs). The interaction of the processes defined includes purchase, admission, examination, library etc. to mention a few.

xii)   Quality procedures are written for various processes and its list is referred in Appendix-III.

By following the procedure, SSGMCE ensures the document control on internal and external documents.

Control of records: Records required in support of QMS Management system are identified & maintained at appropriate functional level. Records are stored & maintained in a manner that is easily accessible & minimizes deterioration, loss or damage. Records maintained electronically are provided with appropriate security & network backups. After minimum retention period, records are either stored at offsite location or destroyed.

SSGMCE has established procedure "Control of Records" for identification, collection, indexing, access, storage, maintenance, retention and safe disposal of records. Records are created concurrently with performance of each activity that affects the quality. List of records is maintained (F/MLR).

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The date and, where relevant, the time of amendments to records is captured along with the identity of personnel making the amendments.

SSGMCE defines the time period that various records pertaining to the quality management system, including processes, are to be retained.

SSGMCE ensures that the records are legible and easily retrievable. Records are stored in such environment that damage, deterioration, loss or unauthorized access is prevented. Retention of record is determined considering the applicable legal and other requirements.

i)   Principal, MR, Deans and HODs/Section In-charges are responsible to maintain quality records in their respective area of operation. A quality record is maintained to demonstrate achievements of the required quality, evidence of the conformity to the requirements and effective operation of the quality management system. Each record has its retention period defined.

ii)   Quality records are maintained for future reference and as an objective evidence of the effective implementation of the quality management system.

iii)   The quality records are reviewed as and when required and are retrievable and stored at appropriate locations.

iv)   Quality records, as required are available for client's evaluation within the specified retention period, if the same has been agreed in the contract.

v)   A Quality Record Matrix depicting various important records, its responsibility and its retention period is addressed in Quality Procedures Manual.

8. OPERATIONS (CLAUSE 8)

"Plan your next move, because every step contributes towards your Goal"

Operational planning and control (Cl.8.1)

SSGMCE is promoting education since 1983. The education and related processes are, therefore, well established and maintained at the College.

Teaching processes are carried out under controlled conditions, which includes-

1.   The availability of information that describes the characteristics of the course curriculum (syllabus)

2.   The availability of works instructions as required in the laboratory.

3.   The use of suitable equipment during the practical session.

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4.   Availability of teaching aids such as A/V aid, LCD, etc., if required.

5.   The implementation of monitoring and measurement of teaching learning process.

The SSGMCE plans, implements and controls the processes needed to meet the requirements for the Academic: teaching-learning and Maintenance of Institutional, and to implement the actions determined, by:

a) Determining the requirements for the Institutional functions;

b) Establishing criteria for:

1) The processes;

2) The acceptance of product;

c) Determining the resources needed Academic: teaching-learning and Maintenance of Institutional to achieve conformity to the specified requirements,

d) Implementing control of the processes in accordance with the criteria;

e) Determining, maintaining, and retaining documented information to the extent necessary:

1) To have confidence that the processes have been carried out as planned;

2) To demonstrate the conformity of Academic: teaching-learning and Maintenance of Institutional to their requirements.

Planning of these processes to meet the requirements of the students/ clients is being achieved through Quality Procedures, Work Instructions, and Laboratory Practical Instruction Sheets, contained in various Manuals, developed in each of the specific functional areas.

The Quality system developed has been formulated to -

a)   Identify and document measures to indicate the performance of the teaching processes and quality indicators to ensure continuous improvement.

b)   The processes right from selection, training, and evaluation of faculty. Mechanisms to prepare course material and class room sessions by referring to syllabus, text / reference books, and incorporating knowledge imparting techniques are in place.

c)   The statutory / regulatory requirements of all government bodies, AICTE, University, UGC, Labor law and all other applicable requirements are met and mechanisms to ensure and audit them are in place.

d)   Processes to provide an environment of spiritual foundation to the students are also in place.

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e)   The student council is formed for solving student related issues.

SSGMCE Measures the output of its planning is suitable for the conformity of the requirements.

It plans, implements, and control the processes needed for the Academic: teaching-learning. The Academic: teaching-learning activity takes place as per the requirement and instructions of IS and Student and regular communications are maintained with them.

SSGMCE –

- ☐ Controls planned changes and review the consequences of unintended changes, taking action to mitigate any adverse effects, as necessary.

- ☐ Ensures that all the statutory, regulatory, and other requirements are complied with.

- ☐ The SSGMCE has established, implemented, and maintained the process(es) needed to prepare for and respond to potential emergency situations (related to environment, OH&S) identified. Emergency Preparedness & Response Plan is prepared to tackle the emergencies.

- ☐ SSGMCE has identified Student who procures the product. The Academic: teaching-learning is planned and carried out as per the requirements of Student and as per the instructions received from Student from time to time.

- ☐ The Academic: teaching-learning parameters are monitored as per the operational manuals by qualified staff. Documented information related to Academic: teaching-learning is maintained. All the processes required to support the Academic: teaching-learning are carried out as per the PDCA cycle.

- ☐ The outsourced processes such as contractual works are supervised and monitored.

- ☐ Emergency Preparedness & Response plan is prepared and circulated. It is implemented and monitored for its effectiveness.

- ☐ Regular communications are maintained with Student and the documented information is maintained.

- ☐ Changes required for Academic: teaching-learning by Student are communicated to concerns and carried out.

- ☐ The selection of the externally provided product/ services is as per the qualifying requirements.

- ☐ Identification and traceability in the product is maintained.

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Customer – Related Processes(Cl.8.2)

The brochure of the SSGMCE provides detailed information about the courses and facilities available. The brochures are reviewed for accuracy and contents. The information about the course and other related data is also provided to the DTE, Mumbai for up-dation in the information brochure and website, published and distributed to the aspirants during the admission process done at Maharashtra state level by DTE, Mumbai. The brochures clearly specify the courses offered by the SSGMCE. The information indicated in these documents helps the students to decide to join the SSGMCE. The students appear for entrance examination conducted by DTE, Mumbai which announces the result online on their website. The fees structure is decided by the Shikshan Shulka Samiti (SSS) Maharashtra State, Mumbai. All the statutory and regulatory requirements of affiliated University, Technical Education authorities both at State and Central levels are complied with. SSGMCE is committed to provide the education/industrial training/placements, so as the student's aspirations to join the Colleges are fulfilled. The SSGMCE also organize personality development programmes and extra-curricular activities for overall development of the students. The SSGMCE meets the statutory and regulatory requirements as are applicable in line with the affiliated University and AICTE both academically and otherwise. As required, the SSGMCE is also committed to provide any additional requirements by way of additional inputs/resources to the deserving students in line with the quality policy and objectives.

Students, parents, employers themselves are considered to be customers. Right from time of their admission till the student leaves the SSGMCE after graduating, proper care is taken of the students.

Customer Communication

Well-established channels exist for effective communication with the students/clients. At the time of admission, prospectus / SSGMCE's brochure provides all relevant information to students/parents. Students also approach the SSGMCE, where all relevant information is provided to them to decide to join the SSGMCE in the event of their selection. After a student is admitted to the SSGMCE, students are communicated in the form of lectures, tutorials, assignments, resolving problems, occurring on day-to-day basis including circulating important information on the Notice Boards. Students grievances / complaints are effectively resolved.

Student's feedback is analyzed and corrective and preventive actions are taken for continuous improvement, as required. The progress performance (including any disciplinary action being taken) of the student is communicated to the guardian / parents. In case of disciplinary action of the serious nature, parents are advised to the College for counseling.

Parent meets are organized when required and they are appraised of their wards progress, colleges' plans etc.

Prospective employers who may employ the students graduating from the SSGMCE are also kept appraised and in communication by the T&P cell of engineering college   Proper placements brochures detailing the SSGMCE and the students available for employment are printed every year and circulated to the industries and corporate.

Design and Development (Cl.8.3) (Not Applicable)

No element of design and development is carried out as all the prescribed course contents are based on the documents supplied by the SGBA University.

Purchasing (Cl.8.4)

PRINCIPAL/ BOG is responsible for purchase approvals. Purchase Officer assists PRINCIPAL in procurement activities. Purchases include books / publications / periodicals and laboratory instruments / equipments / computers / hardware / software & services of visiting faculty.

Purchase Process

The material/item is procured with the required technical specification and quality requirements. Purchases can be made through telephone/ purchase orders/faxes. Wherever possible, purchases are made from the registered suppliers; otherwise emergency purchases are made with the approval of PRINCIPAL. The control of emergency purchases is exercised through deputing one / two staff/faculty while making cash / emergency purchases.

Purchasing Information

Purchase documents contain information clearly describing the product and/or services ordered along with inspection requirements for acceptance of material / method of product release.

Verification of the Purchased Product

As required, Purchase Officer specifies the verification arrangements, in case of verification of purchased products. The verification of the purchased product is done by:

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i) Verifying the test certificate provided by the supplier as an evidence of correctness of the purchased products.

ii) Verifying the material, carried out by the supplier and details furnished.

iii) Material is accepted after verification / inspection at SSGMCE.

Only when it is ascertained that the material meets the requirements, it is accepted.

In case, it is required to verify the material at supplier's works, the verification requirements are clearly specified on the P.O. for compliance by the supplier.

Production and Service Provision (Cl.8.5)

Control of production/service provision

SSGMCE ensures that correct & detailed information of various courses / programmes offered is made available to students in the form of prospectus/ brochures/leaflets. The syllabus and courses are distributed to the available teaching faculty as per the academic calendar designed in the beginning of every academic year by the Dean Academic in consultation with the Principal and HODs and the various academic councils. Classrooms and other infrastructure are allocated for maximum utilization. During the course of studies at the SSGMCE, every semester, syllabus based on the university pattern is made available to the students, which specifies the detailed structuring of the Programme, subject-wise. SSGMCE provides a suitable congenial and clean environment. WIs for various processes are available for use. Instruments/equipments needed for undertaking experiments are ensured to be in proper working conditions.

Practical Instruction Sheet is made available to the students for undertaking laboratory experiments. The availability and use of monitoring and measuring devices is ensured. Methods to evaluate students' performance and also the performance of teaching faculty are designed and put in place to ensure quality of education imparted. Adequate counseling is given to students on the vocational and future opportunities available. Placement efforts are made before a student passes from the SSGMCE.

Validation of the processes for production/service provision

Based on the prescribed syllabus provided by the university, the SSGMCE plans and monitors, semester-wise, scheduled man-hours/lectures vs. actual man-hours/lectures delivered in order to achieve maximum inputs to the students. All practical experiments offered to students are first validated by the concerned faculty/lab Asstt. and its results are compared with standard results and

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records of such observations are also available. This ensures correct and tested experiments are offered. All the equipments/ instruments are listed and ensured that they are always in working condition. In case of any rectifications, those are undertaken by the trained laboratory assistants .The above experiments and equipments are re-validated after each semester and records are maintained for such validations. The classroom sessions conducted by the teaching faculty are also validated by evaluating the lesson plans by senior faculties and also by random evaluation by peer or senior faculty who attend the sessions. The students also evaluate the teaching faculty by giving online feedback of the sessions at the end of the semester. The other indicators of the effectiveness of the teaching process are the attendance records to classes, students results, failures, dropouts, campus placement records. When ever new faculty is employed or there is a changeover of faculty due care is taken to ensure the consistency of delivery.

In case, student secures less marks than prescribed or does not qualify or fails in the examination, additional resources / inputs in the form of additional classes, tutorials or extra sessions are held for such students to improve/enhance their performance.

The practical experiments, whose results cannot be verified and are classified as special process experiments are thoroughly explained to the students with reasons and logic, as to why and how the results of such experiments are verified.

The chemicals in laboratories and other raw materials in workshops and books in the library are properly identified for easy accessibility.

Identification and Traceability

During the stay of students at SSGMCE, their identification is through the Roll Number, for a particular semester. Students are provided with Identity Cards with photographs for easy identification. Registrar maintains all admission records of students and also maintains records of student's performance both in-house & at university level.

Customer Property

The SSGMCE exercise care and control with students (customer's property) pre-qualification certificates like high school / intermediate board certificates, birth certificates and relevant mark sheets, as applicable, while these documents are under SSGMCE's custody / control or being used

by the SSGMCE. SSGMCE identifies, verify, protect and safeguard these documents, while in their custody.

The students who are also indirectly customer supplied products where in the parents are the customers are also taken good care of. This is done by ensuring a safe and secure environment on the campus and the hostels. Adequate security measures are taken to ensure the safety of the students and their material belongings on the campus. General hygiene, cleanliness, good quality food etc. are provided on the campus.

Provision for medical aid, infirmary are made. In case of any untoward incidence like sickness, accident, or any other, the parents of the concerned students are immediately informed.

Preservation of product

a)   The various academic materials like syllabus, course materials, books , lesson plans, practical instruction manuals etc are taken well care of to ensure timely availability and good preservation by following processes as defined in various procedures of document and data control, record keeping etc.

b)   It is ensured that the students at the SSGMCE are occupied in studies and self-development activities. These include Cultural and Entertainment programmes; Sports, Athletics & Games; Personality Development etc.

c)   Hostel facilities, if needed, separately for both girl and boy students are provided by the SSGMCE. Hostels are under the administrative control of wardens and chief warden, who reports to the Principal. A dispensary is available in the SSGMCE campus. Ample medical facilities are also available in the form of Allopathic, Ayurvedic and homeopathic clinics including pathological laboratory, physiotherapy, naturopathy in Shri Gajanan Maharaj Sansthan Shegaon, our parent organization.

d)   The SSGMCE has Training and placement programmes which help the students in career planning, personality development, industry – institute interaction, summer in-plant training, industrial visits, entrepreneurship development and campus placements.

e)   Sports and games facilities include both in-door and out-door games. The in-door facilities include - badminton courts, table tennis halls, chess, carom, yoga hall and Gymnasium. The out-door facilities include – hand ball courts, volley ball courts, foot ball court, lawn tennis court, ball badminton court, kabaddi, kho kho, basket ball courts, cricket pitches and courts, 400 meters

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running track etc. The SSGMCE participates in inter-college / university debates, games, gymnastics, quiz events and have won several University colours in almost all the games and events.

f)   Laboratory In-Charges/Assistants/students are advised to properly handle the chemicals/ lab equipments/instruments in order to avoid damage/loss or accident. Hand gloves/ Aprons/Eyes Glasses are available for safety purpose and students/staff is encouraged to use them.

g)   Lab. In-Charge properly preserves and stores the chemicals to ensure proper and timely use of the same in order to avoid its expiry period; as otherwise, this may adversely affect the results of the experiments.

h)   Once in a year, stock verification of material/equipments available in the laboratory is carried out. As required, Lab. In-Charge prepares the list of the material/equipments/instruments with their status of breakages/damages/lost and takes waiver/ write off/replacement from the competent authority.

Post-delivery activities

1.   Collecting feedback from students and industry to serve as input for instructional design, development and modification.

2.   Feedback from Industry, Alumni, participating organizations in campus placement and other concerned sources.

3.   Feedback from the students at the end of every semester on various aspects of the course taught to them.

Control of changes

1.   Principal reviews QMS through a formal structured meeting, which is held, at least once in three months, preferably within a month from Internal audit. The purpose of this meeting is to ensure the continuing suitability, and effectiveness of QMS established as per ISO 9001:2015.

2.   This review includes assessing opportunities for improvement and the need for changes in the QMS, including the Quality Policy and Quality Objectives.

3.   The agenda of this review meeting is: Follow up action from previous MRM, review of Quality Policy and Quality Objectives, result of Audit, student's feedback, process performance, service conformity, performance of suppliers, status of corrective action, changes in QMS, recommendations for improvement and resource requirements.

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MR	**Principal**	**MR**

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4.   The record of Management Review is maintained in the form of minutes, which includes decisions and actions related to improvement of the effectiveness of the QMS and its processes, improvement of education related to student's requirements and resource needs.

Release of products and services(Cl.8.6)

The Instructional process in the SSGMCE is planned, documented, and executed under controlled conditions for the attainment of desired goals. The flow chart for teaching activity is given in table below

The major components of the instructional process to be controlled are:

Scope	Responsibility
1) Need Assessment	HOD
2) Instructional Design & Development	Dean Academics
3) Imparting Instructions/Teaching	Faculty, Dean Academics
4) Conduct of Internal and External Examinations	Dean Exam, COE
5) Outcome Measurement/Evaluation	Faculty
6) Discipline	HOD, Deans, Principal
7) Major support processes like administration, co-curricular activities, library, sports and extra-curricular activities	Dean Academics, Student Council, HOD
8) Short Term Courses	Concerned Faculty

The control of instructional process in the SSGMCE includes the following:

1.   Planning & execution of instruction as per curriculum needs for core and professional courses, with or without laboratory component, in compliance with

2.   References/codes designed curriculum and guidelines of UGC/AICTE.

3.   Ensuring adequacy of qualified and trained manpower and physical infrastructure according to designed curriculum and class strength.

4.   Provision of requisite material support.

Control of nonconforming outputs (Cl.8.7)

It is ensured that the teaching learning processes, which do not conform to specified requirements, is identified and controlled.

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1.   In the Institute, the Student and service Nonconformity is classified as:

A. Not adhering to the course curriculum / incomplete coverage of syllabus.

B. Student's failure in Examination.

C. Poor attendance (less than minimum required) in classroom and practical.

D. Misbehavior in college hostel.

E. Poor teaching of a faculty or shortfall in infrastructure etc.

2.   The controls required and related responsibilities and authorities for dealing with nonconforming Students/ Product/ Service are defined in a documented procedure. Record of such nonconformities is maintained.

3.   The nonconformities are disposed suitably by proper corrective Action. Eg. . If a student does not secure prescribed % of marks, to improve his/her performance, additional inputs in the form of additional classes/tutorials/assignments/practicals are organized. As required, counseling is also undertaken and at times, parents of the students are called for joint counseling.

4.   When nonconformities are corrected it is subject to re – verification to demonstrate conformity to the requirements.

5.   Appropriate data is determined, collected and analyzed to demonstrate the suitability and effectiveness of the QMS and to evaluate where continual improvement of the effectiveness of the QMS can be made.

6.   This includes data generated as a result of monitoring and measurement and from other relevant sources.

7.   During Management Review this data is analyzed. The analysis of data provides information relating to student satisfaction, conformity to service requirements, characteristics and trends of processes and products including opportunities for Preventive and Suppliers.

9.PERFORMANCE EVALUATION: MEASUREMENT, DATA ANALYSIS AND AUDITS (CLAUSE 9):

"Performance evaluation speaks a tremendous amount about organizations ability and likelihood for success"

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❖   **Requirements-**Measurement and analysis processes are carried out to record the facts. The decision making process is based on the facts received through measurement and analysis of data. The data includes academic performance, process performance, vendor performance, Student satisfaction, achievement of objectives and programs, financial results, results of internal audits, management review & department reviews.

College has defined procedures to ensure that product/services/systems conformance, continual improvement through periodical performance evaluation/examination of students, feedback on faculty, Management Review Meetings and Internal Quality Audits.

Monitoring, Measurement, Analysis And Evaluation (Cl.9.1)

The SSGMCE has determined:

a) What needs to be monitored and measured?

b) The methods for monitoring, measurement, analysis and evaluation needed to ensure valid results;

c) When the monitoring and measuring is performed;

d) When the results from monitoring and measurement is analyzed and evaluated.

☐   The SSGMCE evaluates the performance and the effectiveness of QMS, fulfillment of compliance obligations and retains appropriate documented information as evidence of the results.

☐   The monitoring, measurement, analysis and evaluation is ensured through the regular monitoring of the processes by Department head, IQAC and top management through Daily/Monthly Review meetings.

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The teaching learning processes being the main service provided by the college, there are various mechanisms put in place to measure the quality of the same. Student feedbacks, peer reviews, expert evaluations, bench marking, examination results, placement records, feedback from organizations coming for campus placement selections are all used as measuring techniques.

Inputs from all these are analyzed, reviewed, and when required statistical techniques are used. This outcome is used for further improvement.

The College has systems/methods to measure and monitor the processes, which affect the quality of education to students.

The points which are usually looked into

•   Quality of service which includes classroom sessions, lab practical, guidance given for seminars and projects, campus placement etc.

•   Time taken for various activities like collection of fees, delivery of receipts, issuance of certificates, clearance of refunds, timely delivery of scholarships, concessions, display of internal evaluation, results, verification of journals, response and reply to students and staff applications.

•   Feedback of students, performance evaluation of students, review of instructions, ensuring equipment / instruments are always in working and operating conditions etc. are some of the measures undertaken.

Performance of the teaching learning process (TLP) on the students during stay at the College is measured through examinations conducted by the university and sessionals by way of tutorial, practical, viva on continual basis. Project reports are also evaluated and sessional marks are added to the final results. Dean Examination maintains the records. In case, additional inputs are required by way of additional classes, procurement of additional equipments/instruments/computers/books etc., the same are also provided through special approvals of the Principal.

Outcome of campus placements is also an indicator and is used in the process.

Student and Interested Parties Satisfaction (Q Cl.9.1.2)

SSGMCE has identified various interested parties such as employers, alumnis, students, parents, staff ,suppliers, public, regulatory bodies, Non-Government Organizations etc. SSGMCE makes the efforts to plan and implement the programme to satisfy the needs and expectations of Students

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and interested parties by planning the programme and activities. The perceptions, of these are assessed by SSGMCE through meetings, complaints, feedbacks, audit/inspection report etc.

The information is collected using the following established mechanism:

1.   Feedback from the students at the end of every semester on various aspects of the course taught to them.

2.   Feedback collected from the industry during the campus interviews.

3.   Feedback from students after they spend six months in industry for their project semester.

4.   Feedback from the six months project semester of the students, on the quality of students and their usefulness to the industry.

The information thus collected is summarized, and analyzed and the results of the analysis are used as a feedback to further improve the system.

SSGMCE holds periodic meetings with its Students, and have continuous interaction with Student for monitoring of Academic: teaching-learning.

SSGMCE identifies, assesses and monitors Students and interested parties perception by means such as:

1.   Cell/committee meeting.

2.   Vendors meeting.

3.   Meetings with Student

4.   Legal cases and penal actions.

5.   Slogans suggestion during various events and programmes.

6.   Inspection reports by regulatory other agencies like NBA / NAAC

The College through defined system/procedure monitors the performance of the students through out their stay at the College and ensures students perform, as required. In case, additional inputs in the form of tutorial/ assignments/ extra classes are required for the weaker students and those are organized. Due attention is also paid to the students feedback on the faculty and students complaints are resolved through counseling. In order to understand the requirements of customer student's feedback, parent's perception surveys are conducted atleast once in two years. This shall give the real feedback and perception for continual improvement. Similarly student's complaints are given attention for resolution. Student's perception about faculty is also undertaken during and at the end of each semester in order to find out causes for complaints and improvements. In case

some faculties require training or counseling, the HOD, Deans or Principal do the needful. Some training programmes by external agencies for faculty are also conducted if required.

❖ **Legal and other requirement and its Compliance** - SSGMCE identifies applicable legal and other requirement through internet and law manuals and evaluates the requirements for review of compliance to relevant legislations, regulations applicable, at least once in a quarter to maintain it up-to-date.

Evaluation of Compliance:

SSGMCE has established, implemented and maintained the process needed to evaluate fulfillment of its compliance obligations. SSGMCE:

a) determines the frequency with which compliance will be evaluated;

b) evaluates compliance and action taken if needed;

c) maintains knowledge and understanding of its compliance status.

Legal register is prepared and updated by MR/IQAC Coordinator and documented information is retained with the concerned department as evidence of the compliance evaluation result(s).

❖ **Analysis & Evaluation (of data) (Cl. Q 9.1.3) -** Data related to process, product, environment, occupational health and safety performance is analyzed for identifying opportunities for continual improvement. The output of analysis is reviewed periodically during management review and weekly/monthly Meetings.

The results of analysis are used to evaluate:

a) conformity of products and services;

b) the degree of Student satisfaction;

c) the performance and effectiveness of the management system;

d) if planning has been implemented effectively;

e) the effectiveness of actions taken to address risks and opportunities;

f) the performance of external providers;

g) the need for improvements to the quality management system.

SSGMCE collects and analyses appropriate data to determine the suitability and effectiveness of the QMS and to identify improvements that can be made. This includes data generated by measuring and monitoring activities and other relevant sources.

SSGMCE analyses this data to provide information on:

a) Student satisfaction and/or dissatisfaction;

b) Conformance to Student/Academic/UGC/Technical Board/ NAAC/NBA/AICTE requirements;

c) Evaluation of interested parties, supplier;

d) Equipment (Software/Hardware) utilization

e) Resource utilization

f) Performance Analysis

g) Data analysis related to undesirable operation/events.

h) Nonconformance to Product/Service requirement

i) Risk assessment

NOTE Methods to analyses data can include statistical techniques.

Internal Audit (Cl.9.2)

ISO coordinator coordinates all audit related activities associated with QMS System. Internal audits are carried out at regular intervals(6 Monthly) to ensure all elements of QMS system are reviewed. NBA/NAAC/Applicable statutory, regulatory Sansthan Policies and practices are also are checked as a part of audit.

Internal audits of an QMS is performed once in a year by trained auditors who are free from responsibility for the activity being audited which-

a) improves energy performance;

b) conforms to:

— the SSGMCE's own requirements for its QMS;

— the QMS policy, objectives and targets established by the SSGMCE;

— the requirements of this document;

c) is effectively implemented and maintained.

SSGMCE prepares the procedure covering following:

a) plans, establishes, implements and maintains (an) audit programme(s) including the frequency, methods, responsibilities, planning requirements and reporting, which takes into consideration the importance of the processes concerned and the results of previous audits;

b) defines the audit criteria and scope for each audit;

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c) selects auditors and conduct audits to ensure objectivity and the impartiality of the audit process;

d) ensures that the results of the audits are reported to relevant management;

e) takes appropriate actions in accordance with continual improvement, Non-conformity and corrective actions;

f) retains documented information as evidence of the implementation of the audit programme(s) and the audit results.

The audit process includes preparation of audit schedule based on the status and importance of the activity, audit frequency, audit scope and considering results of previous audits and reporting to BOG. Personnel trained in the Internal Quality Audits and who are independent of those having a direct responsibility for an activity are deployed to audit the activity. Implementation and effectiveness of the corrective action is verified through a follow-up audit, as required. Results of audit are discussed in BOG/MRM.

Corrective actions are taken not only in the functional areas where NCs are observed but also in other functional areas.

The details are given in **Procedure " Conducting Internal Audit"(SSGMCE/PR/MR-02)**. Various audits are carried out in SSGMCE like Statutory & Regulatory audit, Technical audits, Environmental audits, safety audits, electrical/Energy audits, Financial audits, Quality audits etc.

Audit Results : These include the strength, opportunities for improvement and suggestions from internal and external audits and are reviewed by management representative for functional area audited. The outcome includes corrective actions and preventive actions initiated as well as opportunities for continual improvement. The output of internal and external audit is reviewed in Management Review.

Management Review (Cl.9.3)

Management review is carried out twice in year after internal audit to ensure its continuing suitability, adequacy, effectiveness and alignment with the strategic direction of the organization. Different committee meetings are also conducted and documented as per NBA/NAAC guidelines.

Detailed description is given in **procedure" Conducting Management Review" (SSGMCE/PR/MR-03)**

The management review include consideration of:

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a) the status of actions from previous management reviews;

b) changes in external and internal issues that are relevant to the quality management system;

c) information on the performance and effectiveness of the quality management system, including trends in:

   1) customer satisfaction and feedback from relevant interested parties;

   2) the extent to which quality objectives have been met;

   3) process performance and conformity of products and services;

   4) nonconformities and corrective actions;

   5) monitoring and measurement results;

   6) audit results;

   7) the performance of external providers;

d) the adequacy of resources;

e) the effectiveness of actions taken to address risks and opportunities;

f) opportunities for improvement.

The outputs of the management review include decisions related to continual improvement opportunities and any need for changes to the QMS, including:

a) opportunities for improvement;

b) any need for changes to the quality management system;

c) resource needs.

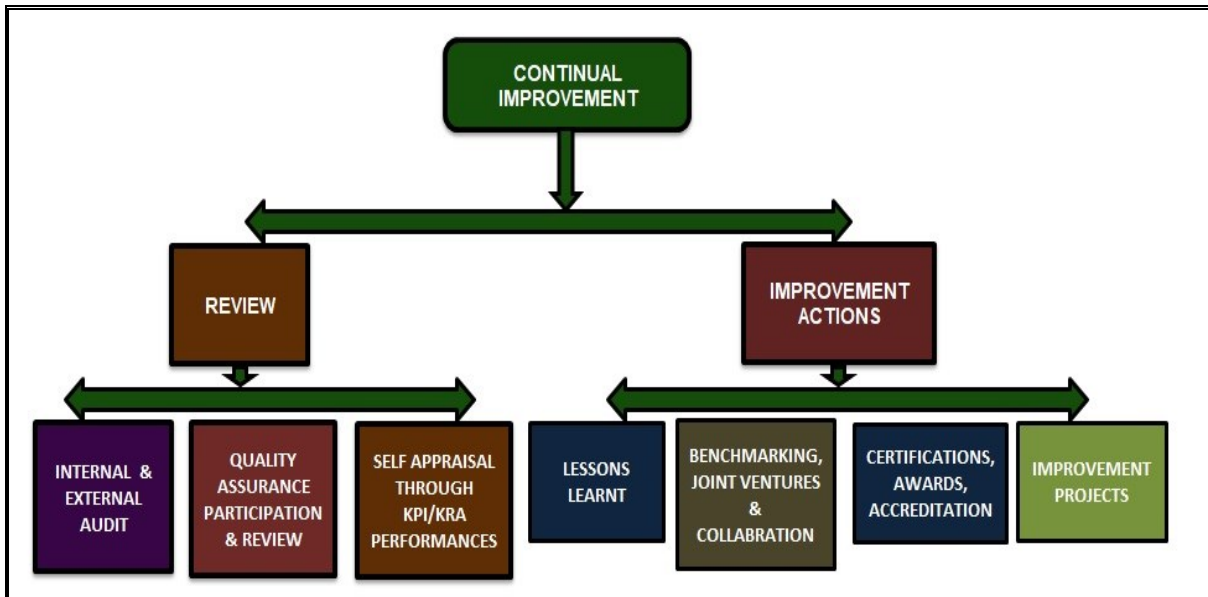Minutes of meeting are intimated to all concerned for effectiveness of QMS and maintained in documented form.

10.IMPROVEMENT (CLAUSE 10)

"There is no such thing as perfect or complete…..

only continuous improvement"

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❖ **QMS Improvements (Cl.10.1,10.3)-** QMS Policy & objectives are framed in view of ensuring continual improvement in process, product, environmental, energy as well as performance. External and internal audit reports, Student feedbacks, and results of data analysis are reviewed for opportunities of improvement.

❖ SSGMCE continually improves the suitability, adequacy and effectiveness of the management system by using its tools. SSGMCE also considers proper handling, storage & disposal of Hazardous material as per laid down norms mentioned in Material safety data sheet (MSDS) as well as stated by regulatory bodies as applicable. Hazardous waste is also disposed as per the regulations.

Continual improvement is achieved through:

☐ Formation of improvement circle/cell, their trainings, meetings, presentations and awards.

☐ Formation of improvement teams in Departments.

☐ Preparation, submission of Detail project report for approval and implementation.

☐ Preparation and implementation of plan with the help of concerns.

☐ Institutional betterment studies.

☐ Improvement project related to Safety, Environment and energy.

☐ Feedback and suggestions from employees, contractors, regulatory bodies and public.

☐ Through QMS objectives, Management programme at Institutional and Department level.

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☐ By taking actions on non-conformities/ findings during various audits internal audit of QMS, safety audit, energy audit, electrical inspection, academic inspection, internal reviews during meetings, complaints etc.

☐ Committee meetings, MRM, and Other meetings.

☐ Corrective actions are taken. Root cause analysis and reporting is carried out in the respective meetings.

Continuous improvement is being planned and managed through –

a) Importance of quality policy and relevance of the procedures and work instructions in the activity performed by faculty/staff of the College having been known to them;

b) The reasons and analysis of the failed students;

c) Implementation of the objectives by quality improvement programmes like FDP(Faculty Development Programme),Lesson plan activity, Mission 10X etc.

d) Proper planning and execution of internal quality audits;

f) Analysis of data for customers/students complaints and process nonconformity;

g) Corrective and preventive actions;

h) Management reviews; and

Suggestions for improvements from employees.

Principal, MR, Dean and HODs are responsible for the continuous improvement of quality management systems. Management of the College has taken actions to ensure that Quality policy / Objectives are well understood by all staff of the College. Mission and vision has been displayed prominently both in English and Marathi at various places at the college. The findings of the Internal Audit and nonconformance found in the systems are discussed in the MRM meetings. The faculty, as required, is suitably trained on the new technology and new teaching aids available and are procured for the benefit of the students and teachers. Additional facilities in the form of books/ computers/ instruments/ equipments which add to the better performance of the students, are procured at priority basis.

Non-conformity and Corrective Actions (Cl.10.2)-Non conformities raised are analyzed & Corrective actions are taken to prevent re-occurrences.

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Details are given in procedures **" Control of Non-conforming Product"(SSGMCE/PR/MR-06)," Corrective Action"(SSGMCE/PR/MR-05)," Preventive Action"(SSGMCE/PR/MR-04) " resp.**

i) The students whose performance has not been up to the mark are counseled, their performance discussed in the Heads Group meeting and a suitable corrective action taken which may include.

    * Providing additional opportunities to improve and conform to requirements

    * Modifications in the programme.

ii) Regarding non-conformance of instructional performance with the instructional design or non-conforming performance of the instructor, action is taken based on a documented procedure/norms & rules of the institute. Actions entail giving feedback to the concerned faculty and/or planning and implementing a corrective action under intimation to Head.

iii) Regarding physical infrastructure disposition of non-conforming product is carried out by taking up and examining the matter at the appropriate level. Action may include maintenance or rejection of goods or services.

- SSGMCE ensures and explores the opportunity for improvement through the corrective and preventive actions on non-conformities identified/detected during the operations of processes.

- Root cause analysis reports are prepared for every defect/deviation and analyzed by all the concerned Departments for necessary corrective and preventive actions.

- It determine opportunity for improvement and implementing necessary actions to achieve the intended outcome of its QMS.

- By planning and implementing the improvement programmes, technical working practices and technical skill improvement.
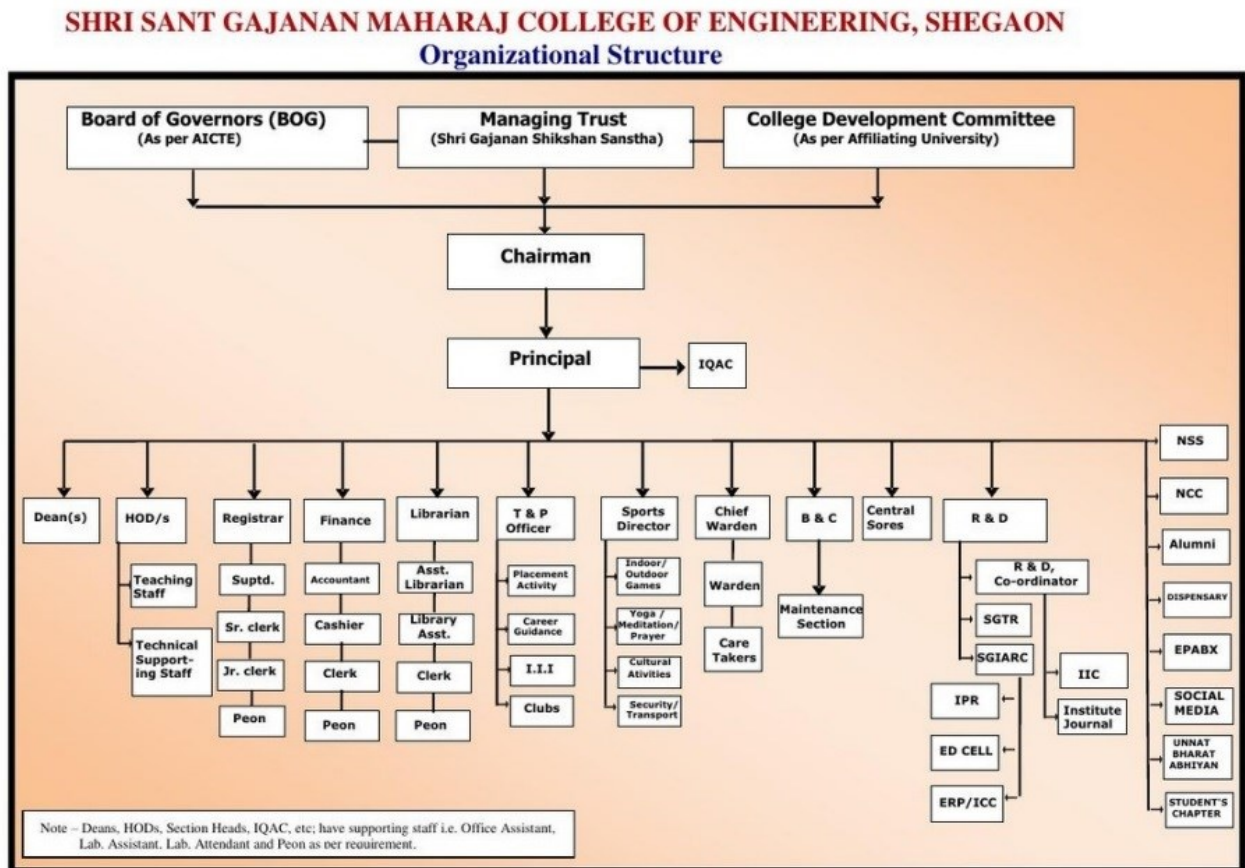
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ANNEXURE-I

A.ORGANIZATION CHART

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Organizational Structure

Note – Deans, HODs, Section Heads, IQAC, etc; have supporting staff i.e. Office Assistant, Lab. Assistant. Lab. Attendant and Peon as per requirement.

Details about Roles, Responsibility and authority is given in Registrar File/IQC File.

B.PDCA AND PROCESS WISE RESPONSIBILITIES TABLE

SR. NO.	PROCESS	RESPONSIBILITY
A	**Plan**	
1.	Academic: teaching-learning Planning	PRINCIPAL/ HOD
2.	Resources, Material and Budget Planning	PRINCIPAL/HOD
3.	Manpower Planning: Recruitment, training, Awareness, Organizational knowledge	HR/Admin

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4.	Operational Planning (Activities under different Departments)	Resp. HOD
5.	Incident management	Resp. HOD
6.	Environment & Safety Planning	I/C
7.	Risk Planning	All HOD
8.	Maintenance Planning	B & C
9.	Security Planning	Security Officer
10.	Legal Compliance Planning and Monitoring	Registrar
11.	QMS Planning: Policy, Objectives, Management Programme	QMS MR/IQAC Coordinator and implementation group
B	Do	
1	Activities carried out by individual Department and documented information maintained by them	HODs
2	Implementation of Controls	HOD
C	Check	
1	Monitoring and Measurement of Planned activities	HODs.
2	Analysis and Evaluation	HODs
3	Internal Audit	MR/IQAC Coordinator
4	Various meetings	Management
D	Act	
1	Management Review Meeting and identification of Controls-	Committee Meeting
2	Improvement-	
	- Corrective Actions	Concerned HOD
	- Incident Analysis	Concerned HOD
	- Document Change	HODs/MR/IQAC Coordinator

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ANNEXURE – II

INTERNAL AND EXTERNAL COMMUNICATION CHARTS

Internal and external communication, the ways and mode is as per following Table-

From	To	Mode
Internal		
Employees	Management	• Meeting • Suggestion box • Direct interaction • Training • Intranet
Management	Employees	• Notice Board • Meetings • Trainings • Websites • Circulars • Intranet
External		
Student	Organization	• Telephone/Fax/Internet • Complaints • Audits • Work Orders • Amendments • Feedback forms • Student Meets
Interested Parties (Employer/NGOs/Alumni/Parents etc.)	Organization	• Complaints(Tele/Cell phonic, Written, emails) • Notices • Committee Meetings
Organization	Interested Parties including Students	• Visits • Emails/Fax/Tele/Cell phonic • Student meets • Displays • Committee meetings

ANNEXURE –III

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QMS REQUIREMENT AND ITS COMPLIANCE

ISO 9001:2015	System Compliance in Quality Manual
1.Scope	Scope is Defined and boundaries specified
2.Normative Reference	Mentioned
3.Terms and Definitions	All abbreviations used are included
4.Context of Organization	The SWOT/SCOT analysis of SSGMCE is carried out and actions on weaknesses planned. Interested parties identified and their requirements gathered for fulfillment. QMS processes mapped in Department manuals
5/5.1 Leadership	Top management consisting of Principal and HODs provide direction and motivation for carrying out work.
5.2 Policy	QMS Policy approved by Principal communicated to all employees
5.3 Org. role, Responsibility, Authority	Roles, Responsibilities and Authorities of all employees are defined and available with HR
6.Planning	Working organized as per PDCA Cycle. Same described in QMS Manual
6.1 Addressing the action on Risk and Opportunities	SCOT and Risk analysis carried out.
6.2 Objectives and Planning	QMS Objectives at Institutional level and Department level Prepared. Management program for the same prepared.
7.Support	Management provides the resources required for effective implementation of plans
7.1 Resources	Resource requirements are identified and fulfilled.
7.2 Competence	Training of personnel coordinated by HR/Admin.

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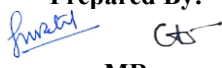| Document No.: SSGMCE/AQM		Apex Quality Manual		
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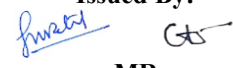| 7.3 Awareness	Awareness about QMS build-up through training
7.4 Communication	Internal and external communication channels are well established. Participation of employees ensured through Safety/environment week, Safety meetings etc
7.5 Documented Information	Documents such as QMS Manual, Operating Procedures, Department Manual, Work Instructions, Checklist are prepared.
8. Operation	Planning of operation of activities and their implementation carried out at each Department.
8.1 Operation Planning and Control to 8.3	Academic: teaching-learning is taking place as per Academic: teaching-learning Plan and daily Scheduled Academic: teaching-learning. Support activities are also according to it.
8.4	Selection and evaluation of vendor and service provider is carried out. External provided products inspected. Contractor work monitored.
8.5	Operation, maintenance and support activities are planned and carried out as per Annual Academic: teaching-learning Plan and daily Scheduled Academic: teaching-learning.; and statutory and regulatory bodies. The SOP, Work Instructions are developed for carrying out these activities.
8.6	Academic: teaching-learning is as per the Student requirements. The product release is controlled as per communication received from Student.
8.7	Non-conformities raised during audits are attended and compliance report prepared.
9.Performance Evaluation	Evaluation of performance through monitoring of objectives and parameters ensured.
9.1 Monitoring, measurement, Analysis and evaluation	Academic: teaching-learning is as per the directives of Student guidelines. Support activities also according to it. Legal register prepared. Compliance to legal requirements ensured. Monitoring of all activities ensured through meetings as well as online monitoring.

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9.2 Internal Audit	Internal audit carried out with defined periodicity. Compliance ensured.
9.3 Management Review	Management review meeting with defined periodicity. Also review meetings such as different committee meeting, and other meetings conducted.
10.Improvement	Improvement through Objectives, Improvement teams ensured.
10.2 Non-conformity and Corrective Action	Root Cause analysis Report of non-conformities are prepared.
10.3 Continual Improvement	Improvement projects evaluated and monitored.

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ANNEXURE –IV

LIST OF QUALITY PROCEDURES

S.N.	Document No.	Clause	Title of Procedure
1	SSGMCE/PR/MR-01	7.5	Document Record and Data Control
2	SSGMCE /PR/MR-02	9.2	Internal Audit
3	SSGMCE /PR/MR-03	9.3	Management Review
4	SSGMCE /PR/MR-04	-	Preventive Action
5	SSGMCE /PR/MR-05	10.2	Control of Corrective Action
6	SSGMCE /PR/MR-06	10.2/8.7	Control of Non-conforming Products
7	SSGMCE /PR/MR-07	6.1	Risk Assessment & Control
8	SSGMCE /PR/MR-10	10.3	Planning for Continuous Improvement

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