

**SDM COLLEGE OF ENGINEERING AND TECHNOLOGY**

**Dhavalagiri, Dharwad-580002, Karnataka State, India.**

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# **Internal Quality Assurance Cell**

[ Department of Physics ]

## **REPORT**

### **On**

## **The Annual Quality Assurance Report **AQAR****

### **[ 2022-23 ]**

1<sup>st</sup> July 2022 to 30<sup>th</sup> June 2023

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**Prepared and Maintained**

**By**

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## Part – A

### DATA OF THE INSTITUTION

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#### 1. **Name of the Institution:** SDM College of Engineering and Technology.

- Name of the Head of the institution: **Dr. K. Gopinath**
- Designation: **Principal**
- Does the institution function from own campus? **Yes**
- Phone no./Alternate phone no.: **0836-2464638**
- Mobile no.: **9538677470**
- Registered Email: **principal@sdmcet.ac.in**
- Alternate Email: [\*\*kgopinath@gmail.com\*\*](mailto:kgopinath@gmail.com)
- Address : **Dhavalagiri, Kalghatgi Road**
- City/Town : **Dharwad**
- State/UT : **Karnataka State**
- Pin Code : **580002**

#### 2. **Institutional status:**

- Autonomous Status (*provide the date of Conformant of Autonomous Status*): **DD-MM-YYYY**
- Type of Institution: Co-education/Men/Women? : **Co-education**
- Location: Rural/Semi-urban/Urban: **Urban**
- Financial Status: Grants-in aid/ UGC 2f and 12 (B)/ Self-financing? : **Self financing**

- Name of the IQAC Coordinator/Director: **Dr. Umakant P. Kulkarni**
- Phone no. /Alternate phone no.: **9448915301**
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## PART-B

### CRITERION I - CURRICULAR ASPECTS

#### 1.1 Curriculum Design and Development

##### 1.1.1 Programmes for which syllabus revision was carried out during the Academic year.

Name of programme	Programme Code	Dates of revision
NA	NA	NA

##### 1.1.2 Programmes/ courses focused on employability/ entrepreneurship/ skill development during the Academic year.

Programme with Code	Date of Introduction	Course with Code	Date of Introduction
NA	NA	NA	NA

#### 1.2 Academic Flexibility

##### 1.2.1 New programmes/courses introduced during the Academic year

Programme/Course	Date of introduction
NA	NA

##### 1.2.2 Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College

level during the Academic year.					
Name of Programmes adopting CBCS	UG	PG	Date of implementation of CBCS / Elective Course System	UG	PG
Already adopted (mention the year)				NA	NA
<b>1.3 Curriculum Enrichment</b>					
1.3.1 Value-added courses imparting transferable and life skills offered during the year					
Value added courses		Date of introduction		Number of students enrolled	
NA		NA		NA	
1.3.2 Field Projects / Internships under taken during the year					
Project/Programme Title			No. of students enrolled for Field Projects / Internships		
NA			NA		
<b>1.4 Feedback System</b>					
1.4.1 Whether structured feedback received from all the stakeholders.					
1) Students	2) Teachers	3) Employers	4) Alumni	5)Parents	
Yes	No	No	No	Yes	
1.4.2 How the feedback obtained is being analyzed and utilized for overall development of the institution? (Maximum 500 words)					
<ul style="list-style-type: none"> <li>Centralized Student Feedback from college.</li> </ul>					
<b>CRITERION II -TEACHING-LEARNING AND EVALUATION</b>					
<b>2.1 Student Enrolment and Profile</b>					
2.1. 1 Demand Ratio during the year					
Name of the Programme	Number of seats available	Number of applications received		Students Enrolled	
NA	NA	NA		NA	
<b>2.2 Catering to Student Diversity</b>					

<b>2.2.1. Student - Full time teacher ratio (current year data)</b>						
Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of full time teachers available in the institution teaching only UG courses	Number of full time teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses	
NA	NA	NA	NA	NA	NA	

**2.3 Teaching - Learning Process**

**2.3.1 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)**

Number of teachers on roll	Number of teachers using ICT ( <i>LMS, e-Resources</i> )	ICT tools and resources available	Number of ICT enabled classrooms	Number of smart classrooms	E-resources and techniques used
04	04	Online Tools	5	5	Need based

**2.3.2 Students mentoring system available in the institution? Give details. --NA (maximum 500 words)**

Number of students enrolled in the institution	Number of fulltime teachers	Mentor: Mentee Ratio
NA	NA	NA

**2.4 Teacher Profile and Quality**

**2.4.1 Number of full-time teachers appointed during the year**

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D.
05	04	01	Nil	03

**2.4.2 Honors and recognitions received by teachers**

<i>(Received awards, recognition, fellowships at State, National, International level from Government, recognized bodies during the year)</i>				
<i>Year of award</i>	<i>Name of full-time teachers receiving awards from state level, national level, international level</i>	<i>Designation</i>	<i>Name of the award, fellowship, received from Government or recognized bodies</i>	
2022-2023	Nil	Nil	Nil	
<b>2.5 Evaluation Process and Reforms</b>				
2.5.1 Number of days from the date of semester-end/ year- end examination till the declaration of results during the year				
Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
NA	NA			
2.5.2 Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year <i>*Do not include re-evaluation/ re-totalling</i>				
Number of complaints or grievances about evaluation		Total number of students appeared in the examination	Percentage	
NA		NA	NA	
<b>2.6 Student Performance and Learning Outcomes</b>				
2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink) ---NA				
2.6.2 <b>Pass percentage of students (COE)</b>				
Programme Code	Programme name	Number of students appeared in the final year examination	Number of students passed in final Semester /year examination	Pass Percentage



NA	NA	NA	NA	NA

### 2.7 Student Satisfaction Survey

2.7.1 Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

NA

## CRITERION III - RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 Promotion of Research and Facilities

3.1.1 The institution provides seed money to its teachers for research,

Yes if yes give details

Name of the teacher getting seed money	The amount of seed money	Year of receiving grant	Duration of the grant
Nil	Nil	--	--

3.1.2 Teachers awarded National/International fellowship for advanced studies/ research during the year

	Name of the teacher awarded the fellowship	Name of the Award	Date of Award	Awarding Agency
National	NA	NA	NA	NA
International	NA	NA	NA	NA

### 3.2 Resource Mobilization for Research

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

Nature of the Project	Duration	Name of the funding Agency	Total grant sanctioned	Amount received during the year
Major projects	--	Nil	Nil	Nil
Minor Projects	--	Nil	Nil	Nil
Interdisciplinary Projects	--	Nil	Nil	Nil
Industry sponsored Projects	--	Nil	Nil	Nil
Projects sponsored by the University/ College	--	Nil	Nil	Nil
Students Research Projects ( <i>other than compulsory by the College</i> )	--	Nil	Nil	Nil
International Projects	--	Nil	Nil	Nil
Any other(Specify)	--	Nil	Nil	Nil
Total	--	Nil	Nil	Nil

3.2.2 Number of ongoing research projects per teacher funded by government and non-government agencies during the years --Nil

### 3.3 Innovation Ecosystem

3.3.1 Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of Workshop/Seminar	Name of the Dept.	Date(s)
Nil	Nil	----

3.3.2 Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year				
Title of the innovation	Name of the Awardee	Awarding Agency	Date of Award	Category
Nil	NIL	NIL	NIL	NIL
3.3.3 No. of Incubation centre created, start-ups incubated on campus during the year				
Incubation Centre	Name	Sponsored by		
NA	NA	NA		
Name of the Start-up	Nature of Start-up	Date of commencement		
NA	NA	NA		
3.4 Research Publications and Awards				
3.4.1 Ph. Ds awarded during the year				
Name of the Department		No. of Ph. Ds Awarded		
Physics		Nil		
3.4.2 Research Publications in the Journals notified on UGC website during the year				
	Department	No. of Publication	Average Impact Factor, if any	
National				
International	Physics	03	2.5	
3.4.3 Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year				
Department		No. of publication		
Physics		Nil		

3.4.4 Patents published/awarded during the year						
Patent Details		Patent status <b>Published/ Filed</b>	Patent Number	Date of Award		
Nil		Nil	Nil	Nil		
3.4.5 Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or Pub Med/ Indian Citation Index						
Title of the paper	Name of the author	Title of the journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citations
					SDMCET	
3.4.6 h-index of the Institutional Publications during the year. (based on Scopus/ Web of science)						
Title of the paper	Name of the author	Title of the journal	Year of publication	h-index	Number of citations excluding self citations	Institutional affiliation as mentioned in the publication
3.4.7 Faculty participation in Seminars/Conferences and Symposia during the year :						
No. of Faculty	International level		National level		State level	Local level
Attended Seminars/ Workshops						
Presented papers						
Resource Persons						
3.5 Consultancy						

3.5.1 Revenue generated from Consultancy during the year				
Name of the Consultant(s) department	Name of Consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)	
Nil	Nil	Nil	Nil	
3.5.2 Revenue generated from Corporate Training by the institution during the year				
Name of the Consultant(s) & Department	Title of the Programme	Agency seeking training	Revenue generated (amount in rupees)	Number of trainees
NA	NA	NA	NA	NA
3.6 Extension Activities				
3.6.1 Number of extension and outreach programmes conducted in collaboration with industry, community and Non-Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year				
Title of the Activities	Organising unit/ agency/ collaborating agency	Number of teachers <b>co-ordinated</b> in such activities	Number of students participated in such activities	
Nil	Nil	Nil	Nil	
3.6.2 Awards and recognition received for extension activities from Government and other recognized bodies during the year				
Name of the Activity	Award/recognition	Awarding bodies	No. of Students benefited	
Nil	Nil	Nil	Nil	
3.6.3 Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year				

Name of the scheme	Organising unit/ agency/ collaborating agency	Name of the activity	Number of teachers <b>co-ordinated</b> such activities	Number of students participated in such activities
Nil	Nil	Nil	Nil	Nil

### 3.7 Collaborations

#### 3.7.1 Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of Activity	Participant	Source of financial support	Duration
Collaborative Research	Dr. P.V Raghavendra	Self finance	2022-23

#### 3.7.2 Linkages with institutions/industries for internship, on-the-job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration <b>(From-To)</b>	participant
NA	NA	NA	NA	NA

#### 3.7.3 MoUs signed with institutions of national, international importance, other institutions, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose and Activities	Number of <b>students/teachers participated under MoUs</b>
Nil	Nil	Nil	Nil

## CRITERION IV - INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 Physical Facilities

#### 4.1.1 Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
Nil	NA

#### 4.1.2 Details of augmentation in infrastructure facilities during the year

Facilities	Existing	Newly added
Campus area	--	--
Class rooms	--	--
Laboratories	01	--
Seminar Halls	--	--
Classrooms with LCD facilities	05	--
Classrooms with Wi-Fi/ LAN	05	--
Seminar halls with ICT facilities	--	--
Video Centre	--	--
No. of important equipments purchased ( $\geq$ 1-0 lakh) during the current year.	Nil	
Value of the equipment purchased during the year (Rs. in Lakhs)	---	100000
Others	Nil	Nil

### 4.2 Library as a Learning Resource

#### 4.2.1 Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or partially)	Version	Year of automation
NA	NA	NA	NA

#### 4.2.1 Library Services:

	Existing	Newly added	Total

	No.	Value	No.	Value	No.	Value Value
Text Books	NA	NA	NA	NA	NA	NA
Reference Books	NA	NA	NA	NA	NA	NA
e-Books	NA	NA	NA	NA	NA	NA
Journals	NA	NA	NA	NA	NA	NA
e-Journals	NA	NA	NA	NA	NA	NA
Digital Database	NA	NA	NA	NA	NA	NA
CD & Video	NA	NA	NA	NA	NA	NA
Library automation	NA	NA	NA	NA	NA	NA
Weeding (Hard & Soft)	NA	NA	NA	NA	NA	NA
Others (specify)	NA	NA	NA	NA	NA	NA

4.2.2 E-content developed by teachers such as: e-PG-Pathshala, CEC (under e-PG-Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the teacher	Name of the module	Platform on which module is developed	Date of launching e - content
NA	NA	NA	NA

### 4.3 IT Infrastructure

#### 4.3.1 Technology Upgradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Available bandwidth (MGBPS)	Others



Existing	04	Nil	Nil	Nil	Nil	01	Physics	200 MGBPS	--
Added	00	Nil	Nil	Nil	Nil	00	Physics	--	--
Total	04	Nil	Nil	Nil	Nil	01	Physics	--	--

**4.3.2 Bandwidth available of internet connection in the Institution (Leased line)**

.....NA..... MBPS /GBPS

**4.3.3 Facility for e-content**

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
NA	NA

**4.4 Maintenance of Campus Infrastructure**

4.4.1 Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurred on maintenance of physical facilities
Dept Budget			

4.4.2 Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website) ---

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## CRITERION V - STUDENT SUPPORT AND PROGRESSION

### 5.1 Student Support

#### 5.1.1 Scholarships and Financial Support

	Name /Title of the scheme	Number of students	Amount in Rupees
Financial support from institution	NA	NA	NA
Financial support from other sources			
a) National	NA	NA	NA
b) International	NA	NA	NA

#### 5.1.2 Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implementation	Number of students enrolled	Agencies involved
Nil	Nil	Nil	Nil

#### 5.1.3 Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students by Guidance for Competitive examination	Number of benefited students by Career Counselling activities	Number of students who have passed in the competitive exam	Number of students placed
2022-23	NA	NA	NA	NA	NA

#### 5.1.4 Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	No. of grievances redressed	Average number of days for grievance redressal
NA	NA	NA

## 5.2 Student Progression

### 5.2.1 Details of campus placement during the year

On campus		Off Campus	
Name of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
NA	NA	NA	NA

### 5.2.2 Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of Programme admitted to
2022-23	NA	NA	NA	NA	NA

### 5.2.3 Students qualifying in state/ national/ international level examinations during the year (eg: NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	No. of Students <b>selected/qualifying</b>	<b>Registration number/roll number for the exam</b>
NET	NA	NA
SET	NA	NA
SLET	NA	NA
GATE	NA	NA
GMAT	NA	NA

CAT	NA	NA
GRE	NA	NA
TOFEL	NA	NA
Civil Services	NA	NA
State Government Services	NA	NA
Any Other	NA	NA

5.2.4 Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Participants
NA	NA	NA

### 5.3 Student Participation and Activities

5.3.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/ medal	National/ International	Sports	Cultural	Student ID number	Name of the student
2022-23	NA	NA	NA	NA	NA	NA

5.3.2 Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

NA

### 5.4 Alumni Engagement

5.4.1 Whether the institution has registered Alumni Association? Yes/No, if yes give details (maximum 500 words): NA

5.4.2 No. of registered Alumni: NA

5.4.3 Alumni contribution during the year (in Rupees) : <b>NA</b>
5.4.4 Meetings/activities organized by Alumni Association : <b>NA</b>
<b>CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT</b>
<b>6.1 Institutional Vision and Leadership</b>
6.1.1 Mention two practices of decentralization and participative management during the last year (maximum 500 words) ----
6.1.2 Does the institution have a Management Information System (MIS)? Yes/No/Partial: Yes
<b>6.2 Strategy Development and Deployment</b>
6.2.1 Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):
❖ Curriculum Development
❖ Teaching and Learning
❖ Examination and Evaluation
❖ Research and Development
❖ Library, ICT and Physical Infrastructure / Instrumentation
❖ Human Resource Management
❖ Industry Interaction / Collaboration
❖ Admission of Students
6.2.2 : Implementation of e-governance in areas of operations:
❖ Planning and Development
❖ Administration
❖ Finance and Accounts

❖ Student Admission and Support

❖ Examination

### 6.3 Faculty Empowerment Strategies

6.3.1 Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2022- 23	Nil	Nil	Nil	Nil

6.3.2 Number of professional development / administrative training programmes organized by the Colleges for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	Dates (from-to)	No. of participants (Teaching staff)	No. of participants (Non-teaching staff)
	Nil	Nil	Nil	Nil	Nil

6.3.3 No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	Date and Duration (from – to)

6.3.4 Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Fulltime	Permanent	Fulltime

6.3.5 Welfare schemes for

Teaching	

Non teaching		
Students		
<b>6.4 Financial Management and Resource Mobilization</b>		
6.4.1 Institution conducts internal and external financial audits regularly (with in 100 words each)		
6.4.2 Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year (not covered in Criterion III) -Nil		
Name of the non government funding agencies/ individuals	Funds/ Grants received in Rs.	Purpose
<b>Nil</b>	<b>Nil</b>	<b>Nil</b>
6.4.2 Total corpus fund generated --Nil		
<b>6.5 Internal Quality Assurance System</b>		
6.5.1 Whether Academic and Administrative Audit (AAA) has been done?		
Audit Type	External	Internal
	Yes/No	Yes/No
	Agency	Authority
Academic	Yes	Faculty from other Institution
Administrative	NA	NA
6.5.2 Activities and support from the Parent – Teacher Association (at least three) NA		
6.5.3 Development programmes for support staff (at least three) NA		

6.5.4 Post Accreditation initiative(s) (mention at least three)

**6.5.5**

- a. Submission of Data for AISHE portal : (Yes /No) NA
- b. Participation in NIRF : (Yes /No) NA
- c. ISO Certification : (Yes /No) NA
- d. NBA or any other quality audit : (Yes /No) Yes

6.5.6 Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting activity	Duration (from-----to-----)	Number of participants
	NA	NA	NA	NA



## **CRITERION VII - INSTITUTIONAL VALUES AND BEST PRACTICES**

### **7.1 - Institutional Values and Social Responsibilities**

7.1.1 Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period (from-to)	Participants	
		Female	Male
Nil	Nil	Nil	Nil

7.1.2 Environmental Consciousness and Sustainability/Alternate Energy initiatives such as: NA  
Percentage of power requirement of the College met by the renewable energy sources

7.1.3 Differently abled (Divyangjan) friendliness

Items Facilities	Yes/No	No. of Beneficiaries
Physical facilities	NA	NA
Provision for lift	NA	NA
Ramp/ Rails	NA	NA
Braille Software/facilities	NA	NA
Rest Rooms	NA	NA
Scribes for examination	NA	NA
Special skill development for differently abled students	NA	NA
Any other similar facility	NA	NA

7.1.4 Inclusion and Situatedness

Enlist most important initiatives taken to address locational advantages and disadvantages during the year						
Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date and duration of the initiative	Name of the initiative	Issues addressed	Number of participating students and staff
NA	NA	NA	NA	NA	NA	NA
7.1.5 Human Values and Professional Ethics						
Code of conduct (handbooks) for various stakeholders						
Title		Date of Publication		Follow up (maximum 100 words each)		
NA		NA		NA		
7.1.6 Activities conducted for promotion of universal Values and Ethics						
Activity		Duration (from-----to-----)			Number of participants	
NA		NA			NA	
7.1.7 Initiatives taken by the institution to make the campus eco-friendly (at least five) Yes						
7.2 Best Practices						
Describe at least two institutional best practices Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link						
7.3 Institutional Distinctiveness						
Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust Provide the weblink of the institution in not more than 500 words						

## SUMMARY OF NOTEWORTHY OUTCOMES

**Year 2022-23**

[July to June]

### Department of Physics

<b>Sl. No</b>	<b>Outcome</b>	<b>Baseline 2022 Jan-Dec</b>	<b>Current 2022-23 Jan-June 2022 July22- June23</b>
1	Indexed Journal Publications	<b>02</b>	<b>01+03=04</b>
2	Other – Paper/article Publications	<b>Nil</b>	<b>Nil</b>
3	Book Publications	<b>Nil</b>	<b>Nil</b>
4	Book Chapter Publications	<b>Nil</b>	<b>Nil</b>
5	IPR Publications	<b>Nil</b>	<b>Nil</b>
6	IPR Granted	<b>Nil</b>	<b>Nil</b>
7	No. of Funded Projects sanctioned	<b>Nil</b>	<b>Nil</b>
8	Total Funds Received.	<b>Nil</b>	<b>Nil</b>
9	Total Projects- Ongoing	<b>Nil</b>	<b>Nil</b>
10	% Of Placement	<b>NA</b>	<b>NA</b>
11	No. of Offers	<b>NA</b>	<b>NA</b>
12	Highest Package L/A	<b>NA</b>	<b>NA</b>

13	Lowest Package L/A	<b>NA</b>	<b>NA</b>
14	% - of Students Graduated	<b>Nil</b>	<b>Nil</b>
15	No. of startups	<b>NA</b>	<b>NA</b>
16	Consultancy  <b>Total Number:</b> <b>IRG generated:</b>	<b>Nil</b>	<b>Nil</b>
17	No. of Conferences Conducted	<b>Nil</b>	<b>Nil</b>
18	No. of Workshops/ Seminar/ conducted	<b>Nil</b>	<b>Nil</b>
19	No. of Workshops/ Seminar/ conferences attended  (Faculty + Students= Total)	<b>02</b>	<b>02+00=02</b>
20	No. of awards / recognitions received  (Faculty + Students + dept/Institution= Total)	<b>Nil</b>	<b>Nil</b>
21	No. of New Infrastructure / Programs/space/laboratories created	<b>Nil</b>	<b>Nil</b>
22	No. of networking/society connect programs conducted.	<b>01</b>	<b>Nil</b>
23	No. of learning materials created and published	<b>Nil</b>	<b>Nil</b>
24	No. of new process/procedures added.	<b>Nil</b>	<b>Nil</b>
25	No. of products/ Applications created	<b>Nil</b>	<b>Nil</b>
26	Budget Sanctioned	<b>1,15000</b>	<b>1,25000</b>

	In Lakhs of rupees		
27	Total Expenditure In Lakhs of rupees	<b>50,000</b>	<b>100000</b>
28	Any other note-worthy events/activities	-	-

**Note:** Details of all these claims mentioned in the above table is to be given in the next section of this report under the title “**strategic plan implementation report**” along with evidences.

**SDM College of Engineering & Technology, Dharwad**  
**Department of Physics**

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Sl. No.	Best practices
1	Active teaching techniques are adopted for theory and laboratory courses, such as encouraging the students to involve and contribute to the topic under discussion.
2	Before commencement of each UNIT in the class-room, faculty meeting will be held to discuss the lesson plan of that UNIT. Implementation of learning objectives; expectations from the students after learning the UNIT will be discussed.
3	Short-time activities (2 – 4 min) are planned during the class hours to express the abilities and interests of the students. Sometimes, faculty members may share their motivational (research / academic) experiences with students.
4	Faculty members will design a case study problem on the topic taught. It will be given to the group of students to solve. The case study problem may be experimental based or analytical based. To solve the case study student should have the thorough knowledge of the topic taught. Purpose of the case study is to make student apply their knowledge in design or to improve their experimental skill.

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**FUTURE PLANS OF ACTION FOR NEXT ACADEMIC YEAR: 2023-24**

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1. Science awareness program in nearby village
2. Submitting 01research project proposals for funding
3. Supporting for the improvement in institute **National level ranking** (NIRF)

*Dr. P. V. Raghavendra*

*Name & Signature of the Coordinator-IQAC*

*Dr. K.I. Maddani*

*Name & Signature of the Head*

*Date: 01-07-2023*

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**SDM College of Engineering and Technology  
Dhavalagiri, Dharwad-580002**

**Department of Physics**

**STRATEGIC PLAN (2022-23) IMPLEMENTATION REPORT**

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**[ 2022-23 ]**

**1<sup>st</sup> July 2022 to 30<sup>th</sup> June 2023**

**Date of Publication: 1<sup>st</sup> July 2023**

**Reference: 5 Year Plan 2022-23 to 2026-27**



## **INTRODUCTION:**

The purpose of this document is to record the **annual performance** of the Department based on their stated strategic plan for the year **-2022** (starting from 1<sup>st</sup> January 2022 and ending by 30<sup>th</sup> June 2023).

In charge person indicted against each perspective/ Key areas have participated in the audit process and the records maintained by them are seen thoroughly by the audit team.

## **AUDIT TEAM:**

1. **Chairman:**Principal, SDMCET, Dharwad
2. **Members:**
  - a) Dean Academic Program
  - b) Dean R & D
  - c) IQAC Coordinator— Member Secretary

## **INSTITUTIONAL VISION AND MISSION:**

### **VISION:**

To develop **competent** professionals with **human values**.

### **MISSION:**

- M1.** To have **contextually relevant** Curricula.
- M2.** To promote **effective Teaching Learning** Practices supported by **Modern Educational Tools and Techniques**.
- M3.** To enhance **Research Culture**.
- M4.** To involve the **Industrial Expertise** for connecting Classroom contents to real-life situations.
- M5.** To inculcate **Ethics and soft-skills** leading to overall personality development.

**ADDITIONAL FOCUS:**

F1: Curriculum relevance- **M1**

F2: Academic/ Exam results- **M1, M2, M4**

F3: Research papers, Sponsored Projects, Root cause analysis for rejected papers and filling gap.- **M3**

F4: Value additions: Teaching, Soft skills, Use of ICT / Presentation, Discussion Groups  
(Communication skills)- **M2 & M5**

F5: Community oriented services- **M3 & M5**

F6: Placement.

F7: Accreditation and Ranking: NBA, NAAC and NIRF -**M1 to M5 & Establishment of strong IQAC  
to support quality checks and Institutional repository.**

F8: National Educational Policy- NEP-2020 – **M1 to M5.( Experiential Learning)**

**CONTACT DETAILS:**

1. Dr.KumarI.Maddani, Professor and Head, Department of Physics, SDM College of Engineering and Technology, Dharwad-580002.

Email: ki\_maddani@rediffmail.com

Mobile: 9008448957

2. Dr. P. V. Raghavendra, FacultyI/C- Strategic Plan, Department of Physics, SDM College of Engineering and Technology, Dharwad-580002.

Email: pvrkaranth@gmail.com

Mobile: 9741997904

<b>Year 2022</b>					
<b>Focus</b> [1]	<b>Perspective/ Key Areas</b> [2]	<b>PLANNING</b> [3]	<b>Observations / Remarks by Auditors</b>		
			<b>Outcomes achieved</b> [4]	<b>Reasons for any deviation</b> [5]	<b>Further action plan, if applicable</b> [6]
<b>F1 / M1</b>  <b>Curriculum Relevance</b>	<b>Re-establishing the relevance of critical thinking in Course outcomes and raising learning levels focusing on Experiential learning of NEP-2020.</b>	<b>Activity-1: BOS Meet.</b> <b>Outcome/Target:</b> 1.To revise and reframe the syllabus to fulfill OBE. <b>In-charge Faculty:</b> Dr. K I Maddani, Phone no: 9008448957 Email: ki_maddani@rediffmail.com	<ol style="list-style-type: none"> <li><a href="#">BOS meet</a> was conducted on 10th Aug 2022. Dr. M. K. Rendale of GIT, Belagavi attended the meeting and gave useful feedback on syllabus revision.</li> <li>Syllabus is revised for a tune of 10%.</li> <li>BOS report in a prescribed format is documented.</li> </ol>		
	<b>Re-establishing the relevance of Program Articulation Matrix-PAM</b>	<b>Activity-1: DUGC Meeting</b> <b>Outcome/Target:</b> 1. To conduct reviewmeeting on the relevance of Program Articulation Matrix. <b>In-charge Faculty:</b> Dr. K I Maddani Phone no: 9008448957 Email: ki_maddani@rediffmail.com	<ol style="list-style-type: none"> <li>The <a href="#">Pre-BOS meeting</a> of DUGC members conducted on 06-04-2022 at 3.00 PM</li> <li>Discussed with the DUGC members on Program Articulation Matrix (PAM) and concluded to continue with the existing PAM.</li> </ol>		
	<b>Conducting internal and External Audits</b>	<b>Activity-1: Annual Academic audit</b> <b>Outcome/Target:</b> <b>1. Internal</b> Annual academic audit by	<ol style="list-style-type: none"> <li>Conducted Internal Annual academic audit by Dr. Varsha Joshi</li> </ol>		

		IQAC <b>2. External</b> annual academic audit by experts from IIT or NIT.  <b>Faculty Incharge :</b> Dr. K I Maddani Phone no: 9008448957 Email: ki_maddani@rediffmail.com	of IQAC cell on Date: 02.09.2022.  2. Conducted <a href="#">external annual academic audit</a> by <b>Dr. R. Prabhu, Department of Physics, IIT Dharwad</b> , on Date-23.07.2022. It is suggested that, a. Desired duration for Practical courses is 3 hours instead of 2 hours. b. Softskill related activities may be included in the academic curricula.
	<b>Others-</b> if any	--	

<b>Year 2022</b>					
Focus [1]	Perspective/ Key Areas [2]	PLANNING [3]	<b>Observations / Remarks by Auditors</b>		
			<b>Outcomes achieved</b> [4]	<b>Reasons for any deviation</b> [5]	<b>Further action plan, if applicable</b> [6]
<b>F2</b>  <b>M1,M2,M4</b>  <b>Exam Results</b>	<b>Bridge Courses</b>	<b>Activity-1:</b> Identification of Slow learners <b>Outcome/Target:</b> 1.To identify slow learners who perform below the set target. <b>Activity-2:</b> Counseling of Slow learners for Extra classes <b>Outcome/Target:</b> 1.To improve the academic performance of the slow learners <b>Budget:</b> NIL	1. After II IA, <a href="#">students</a> who secured less than 15 marks in both the internals together are identified and reported to the HOD. Impact: 5 in the scale of 1(least) to 5 (high).  1. Identified 20 Students are <a href="#">counselled</a> and most of the students have not shown interest in attending additional tutorial classes. Instead they suggested and agreed to get the clarification for their doubts personally. Impact: 3 in the scale of 1(least) to 5 (high).		

		<p><b>In-charge Faculty:</b>  <b>Dr. BahubaliMurgunde</b>  Phone no: 9008109930  Email:  bkmurgunde@gmail.com</p>	
	<p><b>Tutorials for complex courses</b></p>	<p><b>Activity-1:</b> Tutorial classes on selected topics  <b>Outcome/Target:</b>  1.To enhance the academic performance of the students  <b>Budget:</b> NIL</p> <p><b>In-charge Faculty:</b>  <b>Dr. BahubaliMurgunde</b>  Phone no: 9008109930  Email:  bkmurgunde@gmail.com</p>	<p>The tutorial classes were conducted for subjects designed in the curriculum and masked in the course file.</p>
	<p><b>Strengthening Experiential Learning component</b></p>	<p><b>Activity-1:</b> Identification of Topics/experiments for Case study  <b>Outcome/Target:</b>  1. To improve the experimental learning ability  2. Study of electrical properties of metals of given length</p> <p><b>In-charge Faculty:</b>  <b>Prof. Praveen N. Vaidya</b>  Phone no: 9741731113  Email: pnvaidya1@gmail.com</p>	<p>1. Identified the topic entitled“Study of electrical properties of metals of given length” for <a href="#">case study</a>.  2. 2<sup>nd</sup> Semester B division Students studied the electrical properties of copper wire of given length on 05-11-2022, at 2.30 PM in the Physics lab. 20 students demonstrated the experiment and submitted the report.  Impact :3 in the scale of1(least) to5 (high).</p>

	<b>Industry Connectivity for Class room</b>	--	--	--	--
	<b>Others- if any</b>	--	--	--	--

Focus [1]	Perspective/ Key Areas [2]	Year 2022			
		PLANNING [3]	Observations / Remarks by Auditors		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
<b>F3</b> <b>M3</b> <b>Research</b>	Quality assessment of all research proposals	<b>Activity-1:</b> Research Review committee <b>Outcome/Target:</b> Formation of Research Review committee <b>In-charge Faculty:</b> Dr. P. V. Raghavendra Phone no: 9741997904 Email: pvrkaranth@gmail.com	Research Review committee is established with following faculty members  1) Dr. K. I. Maddani - Chairman 2) Dr. P.V. Raghavendra - Member		
	<b>IPR:</b> Copyrights and Patents  <b>Paper Publications</b>	--	--	<u>02 faculty members</u> published research paper in the international journals	

**Funded  
Projects**

**Outcome/Target:**

1. Publishing 02 papers in international journals

**In-charge Faculty:**

Dr. P. V. Raghavendra  
Phone no: 9741997904  
Email: pvrkaranth@gmail.com

**Activity-2: Funded  
Projects**

**Outcome/Target:**

1. Submitting upto 02 research project proposals for funding

**In-charge Faculty:**

Dr. P. V. Raghavendra  
Phone no: 9741997904  
Email:  
pvrkaranth@gmail.com

1) Paper entitled “ZnO:Ca MSM ultraviolet photodetectors”, published in Optical Materials, 124 (2022) 111960 by [Dr. P. V. Raghavendra et al](#) in the month of February 2022.

(Scopus indexed, Elsevier Publication)

**Quartile:Q2**

2) Paper entitled “Formation and characterization of Oleylamine stabilized Ceria nanoparticles”, published in Materials Today: Proceedings, 2022, 67, pp. 210–214 by [Dr. Bahubali Murgude et al](#) in the month of July 2022.

(Scopus indexed, Elsevier Publication)

**Submitted 03 Research and 02 FDP [proposals](#) for funding by VGST**

1) Submitted the research proposal Entitled “Design and development of low cost energy storage devices by synthesizing nanostructured metal oxides” of amount of 3.00 lac for VGST under RGS scheme by **Dr. Bahubali Murgude**(PI) in the month of Feb-2022.

2) Submitted the research proposal Entitled “Surface Modification of some transparent conducting oxide using some Carbon nanostructures and its applications for photocatalytic activity. ” of amount of 20 lac for VGST under K-Fist L1 scheme by **Prof Praveen N Vaidya** (PI) in the month of Feb-2022.

3) Submitted the FDP proposal Entitled “Novel Low dimensional Semiconductor quantum wells for the Clean energy and degradation of organic hazards” of amount of 3.00 lac for VGST under FDP-ENGG scheme by **Prof Praveen N Vaidya**(PI) in the month of Feb-2022

4) Submitted the research proposal Entitled “Synthesis, characterization and biological activities of solid state and solution state metal complexes with P-L and M-L stability constants” of amount of 20 lac for VGST under K-Fist L1 scheme by Prof Praveen N Vaidya(Co-PI) in the month of Feb-2022.

5) Submitted the FDP proposal Entitled “Challenges in framing the Basic sciences Curricula in NEP scenario of Technological Education ” of amount of 3.00 lac for VGST under FDP-ENGG scheme by Prof Praveen N Vaidya (Co-PI) in the month of Feb-2022

Focus	Perspective/ Key Areas	Year 2022			
		PLANNING	Observations / Remarks by Auditors		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
<b>F4</b> <b>M2 &amp; M5</b>  <b>Value additions</b>	Learning for Placement	-NA-	-NA-	-NA-	-NA-
	Soft Skills	--	--	--	--
	Discussion Group	--	--	--	--
	English Communication Skills	--	--	--	--
	Use of ICT Information Communication Technology	<b>Activity-1</b> Utilization of Online resources <b>Outcome/Target:</b> 1. Utilization of online resources for teaching learning process. 2. Sharing of learning materials through Google class room and YouTube channel <b>In-charge Faculty:</b> Dr. P. V. Raghavendra Phone no: 9741997904 Email: pvrkaranth@gmail.com	1. Utilized online resources in regular teaching-learning process.  2. Learning resources are shared through Youtube channel, google class room and What's Groups.		
Others- if any	--				

Focus	Perspective/ Key Areas	Year 2022			
		PLANNING	Observations / Remarks by Auditors		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]



<b>F5</b> <b>Community Oriented Services</b>  <b>M3 &amp; M5</b>	<b>Awareness Program</b> <b>Activity-1:</b> Awareness Program <b>Outcome/Target:</b> 1. Awareness Program on Importance of NEP 2020 in education for high school students <b>In-charge Faculty:</b> Dr. K I Maddani, Phone no: 9008448957 Email: ki_maddani@rediffmail.com	1. Conducted talk on <a href="#">Importance of NEP 2020</a> in education for government high school students on 28-11-22 in the college seminar hall in association with Vivakanada Foundation Dharwad. 2. 50 students attended and student feedback was taken orally. 3. The impact is 5 in the scale of 1(least) to5 (high).		
	<b>Learning Programs through workshops</b>	--	--	--
	<b>Technology Transfer Programs</b>	--	--	--
	<b>Others- if any</b>	--	--	--

Focus	Perspective/ Key Areas	Year 2022			
		PLANNING	Observations / Remarks by Auditors		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
<b>F6</b> <b>Placement</b>	No. of Offers	-NA-	--	--	--
	No. of students getting Placed	-NA-	--	--	--
	pay packages being offered	-NA-	--	--	--
	MoUs	--	-	-	-
	Internship	-NA-	-	-	-
	Others- if any	--	-	-	-

Focus	Year 2022				
	Perspective	Perspective/ Key Areas	Observations / Remarks by Auditors		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
<b>F7</b> <b>Accreditation and Ranking</b>	<b>NBA</b> <b>Faculty I/C:</b> <b>Prof. Praveen N. Vaidya</b> Phone no: 9741731113 Email: pnvaidya1@gmail.com	Supporting for the attainment of Institutional activity	Furnished the required documents to the higher authorities		
	<b>NAAC</b> <b>Faculty I/C:</b> <b>Dr. Bahubali Murgunde</b> Phone no: 9008109930 Email: bkmurgunde@gmail.com	Supporting for the attainment of Institutional activity	Furnished the required documents to the higher authorities		
	<b>NIRF</b> ranking. <b>Faculty I/C: -</b> <b>Dr. K I Maddani</b> Phone no: 9008448957 Email: ki_maddani@rediffmail.com	Supporting for the attainment of Institutional activity	Furnished the required documents to the higher authorities		

Focus	Year 2022				
	Perspective	Perspective/ Key Areas	Observations / Remarks by Auditors		
			Outcomes achieved [4]	Reasons for any deviation [5]	Further action plan, if applicable [6]
<b>Others</b>	--	--	--	--	--

**22Remarks**-by the auditing team.

The progress report mentioned above is presented by the concerned department team, verified for its correctness by the auditing team and approved by the concerned authorities mentioned below.

Name and Signature with Date of the concerned authority								
<b>2022</b>								
	DUGC Member Secretary	IQAC Coordinator	Faculty I/C of Strategic Plan	<b>Head of the Department</b>	Member-3 Audit Team	Member-2 Audit Team	Member-1 Audit Team	<b>PRINCIPAL</b>