

SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

K. D. K. COLLEGE OF ENGINEERING, NAGPUR

GREAT NAG ROAD, NANDANVAN,
440009
www.kdkce.edu.in

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Karmavir Dadasaheb Kannamwar College of Engineering (KDKCE), Nagpur is established in 1984 by BCYRC, a registered society, is a self financed institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University (RTMNU), Nagpur and approved by the All India Council for Technical Education (AICTE), New Delhi & Directorate of Technical Education (DTE), Maharashtra State. **College is awarded with “A” grade by state Government of Maharashtra.**

KDKCE is located in the urban area, at Nandanwan, Nagpur encompassing a sprawling area of 5.55 acres, with actual built up area of 26550.79 Sq. m. It was started with the UG Programs, B.E. in Civil Engineering, Mechanical Engineering and Electrical Engineering (Electronics and Power) Engineering each with intake of 60. College has seen gradual increase in intake, addition of new UG and PG programmes in engineering. Presently, college offers six (06) UG engineering programmes, two (02) PG engineering programmes & MBA. Two departments are approved Centers for Higher Learning and Research by RTMNU, Nagpur leading to Doctoral degree (Ph.D.).

Few UG engineering programmes of the college were accredited in 2002 & 2008 by National Board of Accreditation, New Delhi.

Various statutory cells / committees have been constituted. College has an academic MOU with foreign institution

College has received ISTE National Award in 2003 for Best student chapter & ISTE Best section of country award 2003 and 2005.

College has received an ISO 9001:2015 Certification & Special appreciation award for Best Emerging Chapter of Indian Concrete Institute (ICI) in 2016.

Vision

Service to the Society through Quality Technical Education

Mission

We at KDKCE shall work continuously to achieve,

- Academic Excellence in Engineering and Technology Through Complete dedication to all round Growth of Students.
- Enable the Students to Develop Outstanding Professional with Technical Competence and Management Skills.

- Fulfill the Expectance of the Society and Industries with Ethical Standards for developing Sustainable Solutions

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

1. Two UG programs accredited Twice and one UG program once by NBA
2. Grade A awarded by Government of Maharashtra
3. ISO 9001:2015 Certification
4. Consistent result of more than 90 % of Final year students
5. Students consistently secure University ranks
6. Need based scholarship is availed to the economically weaker students
7. Ragging free campus, as opined by NBA
8. Good faculty retention ratio
9. Faculty members are an ideal blend of youth and experience
10. 27 faculties with Ph.D.
11. Faculty representations in University Bodies Like Chairman BOS, Academic Council, RRC, Senate, etc
12. MOUs with industries and foreign university
13. Funded research projects of 68 Lakh
14. Incubation centre allotted by MSME for 65 Lakh
15. College recognizes and appreciates academic performers.
16. College sponsors faculty for PhD.
17. Incentives and rewards for research paper publications in journals.
18. Mechanical and Civil Engineering department are recognized as Place of Higher Learning leading to Ph.D. by RTMNU.
19. Strong alumni base - alumni supports by way of guiding the students
20. College location in the heart of city
21. Vibrant Entrepreneurship Development Cell
22. Industry - Institute Interaction Cell
23. 24x7 hours medical care.
24. e-Yantra lab is set up through IIT, Bombay
25. International and National Conferences and workshops regularly organized
26. Digital library providing access to e-journals
27. Wi-Fi facility in the college campus
28. Authorised TCS Online Exam centre
29. 150kW Solar power Generation, Solar Water Heater, Bio Gas unit at hostel

Institutional Weakness

1. Book publication and patents need to be enhanced.
2. More funding from industries for academic enhancement is needed
3. Placements in industries needs enhancement
4. Consultancy activities requires upgradation
5. Communication skill of students needs to be improved

6. Average Socio- economic level students needs more effort for their upliftment
7. Selection through competitive examinations needs enhancement.
8. More Quality Improvement programs to be undertaken
9. Being an affiliated institution, chances for curriculum refinement is restricted
10. Limited AQIS grants from AICTE

Institutional Opportunity

1. Strengthen the Industry Institute Interaction for better placement of students.
2. To develop facilities and consultancy for revenue generation
3. To increase the quality of research publications.
4. Networking with institutes of repute can be improved.
5. Industries based add on courses.
6. Research and entrepreneurship activities can be improved
7. Skill Enhancements with industry.
8. New trends in multidisciplinary professional education and new teaching methods.
9. The availability of research grants from Government, research agencies
10. 100 % PG projects to be industry based.
11. AICTE 's broader AQIS avenues would fetch more sanctioned projects

Institutional Challenge

1. Challenge of employability for students.
2. Communication skills
3. Change in technological advancements at a fast rate.
4. Intake quality of students.
5. Rural background student's enhanced effort
6. More faculty with industrial exposure
7. Placement in industries in higher position
8. Decline in the interest towards Engineering education

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The college follows the curriculum offered by RTMNU, Nagpur. Some of the faculty members represent the Board of Studies (BOS), Academic Council, Research Recognition Committee and Senate of RTMNU. Faculty participate actively in the curriculum development workshops and contribute in the updation of syllabus. The curriculum was revamped by RTMNU since 2012-13 progressively till 2015-16. Exam assessment is made in Grade System.

As per the requirements of Outcome Based Education, Course Outcomes (CO), Programme Educational Objectives (PEOs) and Programme Outcomes (POs) are defined in consistence with the vision and mission of

the college.

Academic calendar for the session is scrupulously followed. Teaching file prepared by subject teacher containing details about the teaching plan, teaching execution records including the student performance. Academic progress of students is monitored by class-in-charge, and guardian teachers. Guest lectures, workshops, seminars, industrial visits and extra-curricular activities including technical events are conducted for the overall development of students.

At the end of each semester, feedback is obtained from the students for quality assessment and corrective measures are taken for improvement. The college also obtains feedback from other stakeholders like teachers, alumni and parents.

The college has well equipped central library with a reading room capacity of 200. The digital library provides online access to national and international journals.

The demands and expectations of the corporate sector regarding skill enhancements of students are taken care by offering add on programmes. Apart from this, all the engineering departments organize various value added courses as per needs of the students.

Teaching-learning and Evaluation

Presently there are **191** faculty from Maharashtra and other parts of country. Staff is encouraged to participate in various training programmes /workshops / seminars / conferences /FDPs etc. Senior faculty are nominated on various committees constituted by RTMNU, Nagpur. They are invited as resource persons also. Faculty publishes research papers. AICTE-ISTE sponsored Faculty Development programs, Short term training programs, National level Seminars, International Conference etc. are organized at KDKCE regularly. Faculty have fetched grant from agencies like DST, BARC etc.

Time-table is displayed on notice-boards and college/Department web-site. Learning through NPTEL, e-learning material, journals and periodicals, development of mini and major Projects, Industrial visits, Field work/ site visits, Industrial Internships, Technical competitions, Seminars and Symposiums etc. are also practiced in the college.

An Induction program is conducted for newly admitted students at the start of the session to make them aware about the Academic Monitoring, Facilities, Faculty, Committees, Schemes, Students Associations/Forums/Clubs, contact persons in case of emergency etc.

All Departments conduct Value Added Courses in Program Specific Domains to bridge the gaps in academics and industrial practices.

The college has participated in a nationwide initiative by IIT, Bombay to establish e-Yantra laboratory in 2016-17.

Internal evaluation system of the college includes two mid-term examinations (Sessional I & II) on part and pre-university test (PUT) at the end of the semester on complete syllabus.

The feedback is communicated to faculty members. Parents' meet are conducted & feedback is obtained in

every semester.

Research, Innovations and Extension

College has **R & D cell** for promoting and nurturing research culture. As a result, 27 teachers completed Ph.D. and few submitted thesis.

Few UG/PG projects of inter-disciplinary nature are offered by departments .To encourage industry institute interaction, Industry based projects are also carried out.

Professors from institutes including NITs & IITs and industry personals are invited for Expert lectures. College organizes National & International conference, every year.

College is having Entrepreneurship Development Cell (ED Cell) under the leadership of Dr.C.C.Handa funded by AICTE with grant of Rs. 4.0 Lakh. The activities like entrepreneurship development, incubation centre, skill development are carried under this cell.

College received grants from ministries of Government of India. Incubation Centre has received grant of Rs. 65 lakh for development of 10 incubation from Ministry of MSME, Rs. 9 lakh for scheme YUVA under Ministry of Skill Development & Entrepreneurship. Grant of Rs. 10000/- from National Implementing and Monitoring Agency for Training (NIMAT) by EDI, Ahmadabad is received.College has received more than Rupees 68 lakh grant for the Research projects. Patenting is now becoming priority area. Three patent applications are filed recently, and some are in pipeline.

Over 10 scholars are pursuing Ph.D. **Two scholars** have been awarded their Ph.D. Seven supervisors are guiding doctoral students.

MOUs with 22 organizations have been inked.

For holistic growth of students, the college is undertaking Extension Activities through its NSS unit, Students Departmental Associations/Forums like MESA, EESA, CESA,FACE-IT,ISF, Yoga unit etc.

Infrastructure and Learning Resources

College has an overall built-up area of 26550.787 Sq. meter. Total 42 classrooms, 16 tutorial rooms, 68 laboratories, independent seminar hall for each department, common workshop, central library, closed auditorium, open stage, canteen facility and playground are available in the campus.

Departments have HOD cabin and area for office, staff, seminar halls, wash rooms and rest rooms for girl.

To facilitate power supply, a **250 KVA** transformer is installed with 11KV substation. Solar plant is established with **480** panels of **150KWp**.

College has boys' hostel for **125** & the Girls hostel for **175** students. Hostels are having mess & indoor/outdoor recreational facilities.

A dedicated lease line connectivity of 100 Mbps is available. Wi-Fi connectivity is available.

First Aid boxes at each department and Medical practitioner and nursing staff on the campus are available

The college has sports facilities. Cultural and sports activities are organized through Departmental Students' Associations and annual social gathering 'NAVONMESH' .

There are separate departmental libraries. Centralized library have reading hall for 200 students and total 9,664 titles, with 55,119 books. College subscribed for many national and international journals, e-journals through DELNET and e-books. It has the digital library with **10** computers for providing e-learning facility.

Book bank facility is also available. Specialized services like Reprography, OPAC, In-house/remote access to e-resources, Synchronic Soflib facilities are provided.

College has 793 working machines with adequate number of printers and scanners. Apart from Electrical Maintenance, college has a Maintenance facility for infrastructure & greenery.

Student Support and Progression

College publishes prospectus annually and provides detail information regarding admission, various programs, facilities and placements etc. There are students from various backgrounds. Students from backward categories like SC/ST, VJ/NT, SBC, OBC are supported by scholarship & free ship from Government of Maharashtra. EBC facility is also provided by the state government for economically weaker students.

College provides concession in fees, free book bank facility etc, to the economically weaker students, physically handicapped students and also under the sibling policy.

Mentoring through the 'Teacher-Guardian Scheme' is provided in academic, personal and social issues. Students are motivated to participate in workshops/STTPs on entrepreneurial skills ED Cell.

Students are supported and guided in preparing for the competitive exams such as GATE/GRE/TOFEL/CET/JEE etc. Through language laboratory students are able to improve communication skills. The college also focuses on improving computer literacy.

College has a separate training & placement department, through which the students are trained and informed about the various professional avenues available to them. The students are guided and counseled in terms of their personal and career perspective, through mentoring and counseling sessions. To keep a continuous watch and vigilance over ragging and prevent its occurrence and recurrence, the institute has established an anti ragging committee.

The assorted committees and bodies in the form of forums are established to ensure the effective and efficient functioning of the institutional functions, like Student's Representative Council, for organizing cultural events, conflict resolution, and solving other relevant issues.

Governance, Leadership and Management

College Development Cell (CDC) make recommendations for the improvement and up gradation of existing academics, administration, infrastructure, extra and co-curricular activities. Earlier, the college was having the Local Management Committee (LMC), which had the similar functions as that of CDC.

Principal & Heads of the department monitor & plan quality improvement strategies taking into consideration the feedback of all relevant stakeholders. Feedback obtained from stakeholders serves to give an understanding of local, global trends and future needs which helps in fine-tuning the policies to cater to these needs.

Various academic and administrative committees are constituted with specific allotted task as per the academic and administration plans of the college.

Committees are: like Annual Cultural and Sports, Seminar, Students association, Examinations, Unfair Means Inquiry, Scholarships, Purchase, Discipline, Hostel management, Admissions, Training & Placement, Welfare, Attendance, Library, Women Cell, Grievance Redressal, Anti-ragging, Cleanliness, etc.

The college has implemented e-governance, Students Academic Information System, Administration, Finance & Accounts & Examination.

The performance appraisal is carried out each year which helps the college administration to identify strengths and weaknesses of individual member of teaching and non-teaching.

All teaching and non-teaching staff members are covered under Group Insurance Scheme, Provident Fund, Gratuity, Maternity leaves etc.

The account section of college carry out internal audits. External audit is being carried out by the appointed external auditors.

An Internal Quality Assessment Cell (IQAC) has been set up to monitor and to establish the standards in academics as well as in administration.

Institutional Values and Best Practices

We are committed to one of the important quotes in education i.e. **“Teach As You Preach”** and we act accordingly.

The institution has undertaken numerous safety and security measures in the campus. CCTV cameras have been installed at prominent places. Fire fighting equipments are installed. and 24 hrs security is provided in the campus and boys and girls hostels.

Gender equity is followed in different activities. Counseling of girl students is carried out under the ICC, WDC and WRC.

College has an efficient solid waste management system. Through rain water harvesting, rain water is effectively collected and used in gardening.

Utilization of heat in the form of solar energy to generate electricity is taken up by the college by installing solar panels. The surplus energy generated is returned to the electricity board through the concept of Net metering.

Environmental issue is of immense importance. Carbon neutrality is taken care of, by maintaining good green cover in the campus. Plantation is done in and around the campus. College provides bus facility. College has pedestrian friendly roads and the college works towards plastic free campus and paperless office.

Our best practices include instance; making Continuous efforts in enhancing the **Personality Quotient (PQ)** of the students, wherein, pursuance of transforming the students and making them ready for Campus recruitment, college adapts the strategy of fusion of co-curricular and extra- curricular activities. Organization of National Conference and Paper Presentation competition for students - '**SPARK**' in another Unique Selling Point.

2. PROFILE

2.1 BASIC INFORMATION

| Name and Address of the College | |
|---------------------------------|--|
| Name | K. D. K. COLLEGE OF ENGINEERING, NAGPUR |
| Address | Great Nag Road, Nandanvan, |
| City | Nagpur |
| State | Maharashtra |
| Pin | 440009 |
| Website | www.kdkce.edu.in |

| Contacts for Communication | | | | | |
|----------------------------|----------------------|----------------------------|------------|------------------|-------------------------|
| Designation | Name | Telephone with STD Code | Mobile | Fax | Email |
| Principal | Devendra P. Singh | 0712-2710030 | 9822240806 | 0712-271365 8 | am1_badar@yahoo .com |
| Professor | Avinash M. Badar | 0712-2711400 | 9422115338 | 0712-228381 5 | kdkce4147@gmail. com |

| Status of the Institution | |
|---------------------------|----------------|
| Institution Status | Self Financing |

| Type of Institution | |
|---------------------|----------------|
| By Gender | Co-education |
| By Shift | Day Evening |

| Recognized Minority institution | |
|--|----|
| If it is a recognized minority institution | No |

| Establishment Details | |
|--------------------------------------|------------|
| Date of establishment of the college | 01-01-1984 |

University to which the college is affiliated/ or which governs the college (if it is a constituent college)

| State | University name | Document |
|-------------|--|-------------------------------|
| Maharashtra | The Rashtrasant Tukadoji Maharaj Nagpur University | View Document |

Details of UGC recognition

| Under Section | Date | View Document |
|---------------|------|---------------|
| 2f of UGC | | |
| 12B of UGC | | |

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)

| Statutory Regulatory Authority | Recognition/Approval details Institution/Department programme | Day,Month and year(dd-mm-yyyy) | Validity in months | Remarks |
|--------------------------------|---|--------------------------------|--------------------|---|
| AICTE | View Document | 10-04-2017 | 12 | Extension of approval for the academic year |

Details of autonomy

| | |
|--|-----|
| Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges? | Yes |
| If yes, has the College applied for availing the autonomous status? | No |

Recognitions

| | |
|---|---|
| Is the College recognized by UGC as a College with Potential for Excellence(CPE)? | No |
| Is the College recognized for its performance by any other governmental agency? | Yes |
| If yes, name of the agency | Government of Maharashtra awarded grade A |
| Date of recognition | 19-08-2013 |

| Location and Area of Campus | | | | |
|------------------------------------|----------------------------|------------------|-----------------------------|---------------------------------|
| Campus Type | Address | Location* | Campus Area in Acres | Built up Area in sq.mts. |
| Main campus area | Great Nag Road, Nandanvan, | Urban | 5.55 | 26550.78 |

2.2 ACADEMIC INFORMATION

| Details of Programmes Offered by the College (Give Data for Current Academic year) | | | | | | |
|---|---------------------------------|---------------------------|---|------------------------------|----------------------------|--------------------------------|
| Programme Level | Name of Programme/Course | Duration in Months | Entry Qualification | Medium of Instruction | Sanctioned Strength | No.of Students Admitted |
| UG | BE,Civil Engineering | 48 | XII standard in Science or equivalent with CET or JEE Score | English | 120 | 106 |
| UG | BE,Mechanical Engineering | 48 | XII standard in Science or Equivalent with CET or JEE score | English | 180 | 135 |
| UG | BE,Electrical Engineering | 48 | XII standard in Science or Equivalent with CET or JEE Score | English | 120 | 84 |
| UG | BE,Computer Technology | 48 | XII Standard in Science or Equivalent with CET or JEE Score | English | 90 | 76 |
| UG | BE,Electronics Engineering | 48 | XII Standard in Science or Equivalent with CET or JEE score | English | 90 | 27 |
| UG | BE,Informati | 48 | XII Standard | English | 60 | 43 |

| | | | | | | |
|--------------------|--|----|--|---------|----|----|
| | on Technology | | in Science or Equivalent with CET or JEE score | | | |
| PG | Mtech,Civil Engineering | 24 | BE in Civil Engineering or Equivalent | English | 18 | 15 |
| PG | Mtech,Mech anical Engineering | 24 | BE in Mechanical Engineering or Equivalent | English | 18 | 8 |
| PG | MBA,Manag ement | 24 | U.G.degree in any discipline | English | 60 | 60 |
| Doctoral (Ph.D) | PhD or DPhil,Civil Engineering | 36 | M.Tech.in Civil Engineering or equivalent | English | 10 | 6 |
| Doctoral (Ph.D) | PhD or DPhi l,Mechanical Engineering | 36 | M.Tech.in Mechanical Engineering or Equivalent | English | 10 | 10 |

Position Details of Faculty & Staff in the College

| Teaching Faculty | | | | | | | | | | | | |
|---|------------------|--------|--------|-------|----------------------------|--------|--------|-------|----------------------------|--------|--------|-------|
| | Professor | | | | Associate Professor | | | | Assistant Professor | | | |
| | Male | Female | Others | Total | Male | Female | Others | Total | Male | Female | Others | Total |
| Sanctioned by the UGC /University State Government | 18 | | | | 40 | | | | 132 | | | |
| Recruited | 5 | 2 | 0 | 7 | 5 | 5 | 0 | 10 | 57 | 18 | 0 | 75 |
| Yet to Recruit | 11 | | | | 30 | | | | 57 | | | |
| Sanctioned by the Management/Society or Other Authorized Bodies | 0 | | | | 0 | | | | 98 | | | |
| Recruited | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 46 | 0 | 98 |
| Yet to Recruit | 0 | | | | 0 | | | | 0 | | | |

| Non-Teaching Staff | | | | |
|---|-------------|---------------|---------------|--------------|
| | Male | Female | Others | Total |
| Sanctioned by the UGC /University State Government | | | | 0 |
| Recruited | 0 | 0 | 0 | 0 |
| Yet to Recruit | | | | 0 |
| Sanctioned by the Management/Society or Other Authorized Bodies | | | | 81 |
| Recruited | 51 | 30 | 0 | 81 |
| Yet to Recruit | | | | 0 |

| Technical Staff | | | | |
|---|-------------|---------------|---------------|--------------|
| | Male | Female | Others | Total |
| Sanctioned by the UGC /University State Government | | | | 0 |
| Recruited | 0 | 0 | 0 | 0 |
| Yet to Recruit | | | | 0 |
| Sanctioned by the Management/Society or Other Authorized Bodies | | | | 47 |
| Recruited | 42 | 5 | 0 | 47 |
| Yet to Recruit | | | | 0 |

Qualification Details of the Teaching Staff

| Permanent Teachers | | | | | | | | | | |
|------------------------------|------------------|---------------|---------------|----------------------------|---------------|---------------|----------------------------|---------------|---------------|--------------|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 5 | 2 | 0 | 2 | 2 | 0 | 5 | 2 | 0 | 18 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 1 | 5 | 0 | 52 | 16 | 0 | 74 |

| Temporary Teachers | | | | | | | | | | |
|------------------------------|------------------|--------|--------|----------------------------|--------|--------|----------------------------|--------|--------|--------------|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 44 | 0 | 96 |

| Part Time Teachers | | | | | | | | | | |
|------------------------------|------------------|--------|--------|----------------------------|--------|--------|----------------------------|--------|--------|--------------|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Details of Visting/Guest Faculties | | | | | |
|---|-------------|---|---------------|---|--------------|
| Number of Visiting/Guest Faculty engaged with the college? | Male | | Female | | Total |
| | | | | | |
| | 0 | 0 | 0 | 0 | 0 |

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

| Programme | | From the State Where College is Located | From Other States of India | NRI Students | Foreign Students | Total |
|-----------------|--------|---|-------------------------------|--------------|---------------------|-------|
| Doctoral (Ph.D) | Male | 6 | 0 | 0 | 0 | 6 |
| | Female | 10 | 0 | 0 | 0 | 10 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| UG | Male | 1489 | 94 | 0 | 0 | 1583 |
| | Female | 848 | 16 | 0 | 0 | 864 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| PG | Male | 66 | 0 | 0 | 0 | 66 |
| | Female | 75 | 0 | 0 | 0 | 75 |
| | Others | 0 | 0 | 0 | 0 | 0 |

| Provide the Following Details of Students admitted to the College During the last four Academic Years | | | | | |
|--|--------|---------------|---------------|---------------|---------------|
| Programme | | Year 1 | Year 2 | Year 3 | Year 4 |
| SC | Male | 89 | 100 | 66 | 78 |
| | Female | 61 | 62 | 43 | 58 |
| | Others | 0 | 0 | 0 | 0 |
| ST | Male | 5 | 16 | 10 | 11 |
| | Female | 6 | 2 | 2 | 2 |
| | Others | 0 | 0 | 0 | 0 |
| OBC | Male | 137 | 192 | 167 | 181 |
| | Female | 86 | 117 | 98 | 98 |
| | Others | 0 | 0 | 0 | 0 |
| General | Male | 69 | 104 | 99 | 93 |
| | Female | 27 | 49 | 43 | 48 |
| | Others | 0 | 0 | 0 | 0 |
| Others | Male | 43 | 48 | 52 | 51 |
| | Female | 31 | 26 | 13 | 17 |
| | Others | 0 | 0 | 0 | 0 |
| Total | | 554 | 716 | 593 | 637 |

3. Extended Profile

3.1 Program

Number of courses offered by the institution across all programs during the last five years

Response : 11

Number of self-financed Programs offered by college

Response : 11

Number of new programmes introduced in the college during the last five years

Response : 00

3.2 Students

Number of students year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 2588 | 2383 | 2373 | 2291 | 2356 |

Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 246 | 246 | 246 | 246 | 114 |

Number of outgoing / final year students year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 614 | 373 | 663 | 641 | 692 |

Total number of outgoing / final year students

Response : 2983

3.3 Teachers

Number of teachers year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 190 | 166 | 158 | 152 | 151 |

Number of full time teachers year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 190 | 166 | 158 | 152 | 151 |

Number of sanctioned posts year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 190 | 166 | 158 | 152 | 151 |

Total experience of full-time teachers**Response : 1494.2****Number of teachers recognized as guides during the last five years****Response : 10****Number of full time teachers worked in the institution during the last 5 years****Response : 518****3.4 Institution****Total number of classrooms and seminar halls****Response : 50****Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)**

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 880.67 | 889.33 | 782.64 | 690.19 | 520.86 |

Number of computers

Response : 793

Unit cost of education including the salary component(INR in Lakhs)

Response : 0.85

Unit cost of education excluding the salary component(INR in Lakhs)

Response : 0.34

NAAC

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The institution ensures effective curriculum delivery through a well planned and documented process

Response:

K.D.K. College of Engineering is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur and follows curriculum designed by the Board of studies of the university. The institute has well developed structure for effective implementation of the curriculum prescribed by the University. Institute develops and deploys action plans through IQAC which helps to coordinate all programmes under one roof which in turn ensures excellence of each activity. Each programme has a set of perspective Vision and Mission, which are aligned with Vision and Mission of the Institute. Program Educational Objectives (PEO) and Program Outcomes (PO) are scripted for each programme and Course Outcomes (CO) are defined for each course (theory and practical). COs with POs are mapped to assess the learning by setting attainment targets for students' performance.

At the start of academic session, Principal conducts a meeting with deans and heads of the departments to prepare academic calendar for the session. Heads of departments discuss action plans to arrive at an optimal and effective way for implementing those plans. These plans are deployed through Programme Assessment and Quality Improvement Committee (PAQIC) meetings. Time table is prepared for each programme prior to the start of every semester. Each faculty prepares teaching file for the conduction of theory and practical courses. Teaching file consists of important information such as course details, time table, teaching plan and record of course delivery along with details of teaching methods and teaching aids. A record of theory attendance, practical/assignment/tutorial, record of practical/tutorial attendance with performance evaluation, record of project work engagement and progress is also maintained. Continuous assessment report of student's performance is prepared. The report is assessed internally by PAQIC which includes heads of departments and class in-charges. It is used to monitor the attainment level of CO, PO, PEO leading to attainment of Mission and Vision of the programme.

Institute aims at effective curriculum delivery by providing required state of the art facilities in classrooms, tutorial rooms, seminar halls and laboratories. Institute encourages use of different teaching aids such as softwares, LCD projectors, wall charts and models. ICT based teaching is practiced. Computer based training packages, lecture series like NPTEL are used to make learning interesting. Additionally interactive methods like videos, quizzes, seminars, objective tests, group discussions, are incorporated for effective learning process.

Every faculty member is assigned a group of students for mentoring throughout the session. Mentors conduct meeting with mentees and record their difficulties, requirements and suggestions to take necessary actions related to curriculum implementation. Faculty Development Programs are conducted to enrich faculty members with updated knowledge, comprehensive skills and right attitude. Faculty is encouraged to participate in continuing education programmes run by elite institutes for exchange of knowledge and skill. Above mentioned teaching-learning process helps students assimilate the curriculum effectively and receive additional inputs in the form of technical skills needed by the industry.

All these efforts are aimed at imparting quality education.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

1.1.2 Number of certificate/diploma program introduced during the last five years

Response: 0

1.1.2.1 Number of certificate/diploma programs introduced year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 0 | 0 |

| File Description | Document |
|---|-------------------------------|
| Details of the certificate/Diploma programs | View Document |

1.1.3 Percentage of participation of full time teachers in various bodies of the Universities/ Autonomous Colleges/ Other Colleges, such as BoS and Academic Council during the last five years

Response: 100.98

1.1.3.1 Number of teachers participating in various bodies of the Institution, such as BoS and Academic Council year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 39 | 37 | 32 | 28 | 29 |

| File Description | Document |
|--|-------------------------------|
| Details of participation of teachers in various bodies | View Document |
| Any additional information | View Document |

1.2 Academic Flexibility

1.2.1 Percentage of new Courses introduced out of the total number of courses across all Programs

offered during last five years**Response:** 0

1.2.1.1 How many new courses are introduced within the last five years

| File Description | Document |
|---------------------------------------|-------------------------------|
| Details of the new courses introduced | View Document |

1.2.2 Percentage of programs in which Choice Based Credit System (CBCS)/Elective course system has been implemented**Response:** 81.82

1.2.2.1 Number of programs in which CBCS/ Elective course system implemented.

Response: 9

| File Description | Document |
|---|-------------------------------|
| Name of the programs in which CBCS is implemented | View Document |

1.2.3 Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years**Response:** 0

1.2.3.1 Number of students enrolled in subject related Certificate or Diploma or Add-on programs year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 00 | 0 |

| File Description | Document |
|---|-------------------------------|
| Details of the students enrolled in Subjects related to certificate/Diploma/Add-on programs | View Document |
| Any additional information | View Document |

1.3 Curriculum Enrichment**1.3.1 Institution integrates cross- cutting issues relevant to Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum**

Response:

Cross cutting issues like Gender, Environment and Sustainability, Human Values and Professional Ethics, find an ample space when it comes to applying them positively into the curriculum. The institute believes in maintaining healthy environment for all of its stakeholders.

Gender:

Women empowerment is a key issue in today's world. The institute has constituted various committees such as Women Development Cell, Women Redressal Cell and Internal Complaint Committee. These committees are formed to promote gender equity and also deal with related issues of safety and security of girl students and ladies staff. Counseling of girl students is also done. No discrimination of students is done in class rooms, in labs, in allocation of projects and mini-projects and also in various posts of departmental student's forums. The entire college activity functions with co-existence and performance of all the students, without any discrimination.

Environment and Sustainability:

As per the directives of Supreme Court of India, students have a compulsory subject of Environmental Engineering in second year of all programmes. In this subject, students study basic components of environment and its application to tackle issues such as pollution control, green gases etc. In Civil Engineering programme, students learn Environmental Engineering as one of the core subjects and students are opting for electives on Environment and sustainability of Air pollution and solid waste management, Water and waste water treatment. Many Projects are undertaken by final year students relating to environmental issues like climate change, water pollution, sewage treatment, air pollution, rain water harvesting, runoff modeling, flood prediction, green concrete etc. Sustainability issues such as use of natural resources in building construction, materials, energy conservation etc. are also dealt in projects. Some of the projects undertaken in other programs are based on the principles of environment and sustainability energy conservation, environmental protection, use of natural resources etc.

Human values and professional ethics:

First year curriculum is common for all the programmes, which includes a compulsory subject on Ethical science. Syllabus of Information Technology includes a subject on Social and Ethical aspects of IT. Students are made aware that ragging is banned in campus and undertaking from students and parents are taken during admission process. Campus of the institute has constituted an Anti-Ragging committee and is a ragging free campus. Industrial visits, internships, mini projects and field projects make the students aware about the importance of team work, leadership quality and professional ethics. Plagiarism checks are made compulsory for final year projects reports and research papers.

Each year the institute organizes a science model and poster competition "Avishkar" for school and junior college students and project competition "Nirman" for polytechnic students. All departments have student's forum viz. CESA, MESA, EESA, FACE-IT, ISF which conduct various programs related to human values and professional ethics, some of which are stated below:

Communicative English workshop, internet literacy program, personality development program, moral values, ethics awareness workshop, street shows, interview techniques workshop, breast cancer awareness

program, community Service, blood donation camp, tree plantation, clean and green initiatives, Swachha Bharat Abhiyan, etc.

| | |
|---------------------------------|-------------------------------|
| File Description | Document |
| Any Additional Information | View Document |
| Link for Additional Information | View Document |

1.3.2 Number of value added courses imparting transferable and life skills offered during the last five years

Response: 36

1.3.2.1 Number of value-added courses imparting transferable and life skills offered during the last five years

Response: 36

| | |
|---|-------------------------------|
| File Description | Document |
| Details of the value-added courses imparting transferable and life skills | View Document |
| Brochure or any other document relating to value added courses. | View Document |
| Any additional information | View Document |

1.3.3 Percentage of students undertaking field projects / internships

Response: 22.18

1.3.3.1 Number of students undertaking field projects or internships

Response: 574

| | |
|---|-------------------------------|
| File Description | Document |
| List of students enrolled | View Document |
| Institutional data in prescribed format | View Document |
| Any additional information | View Document |

1.4 Feedback System

1.4.1 Structured feedback received from 1) Students, 2)Teachers, 3)Employers, 4)Alumni and 5)Parents for design and review of syllabus-Semester wise/ year-wise**A.Any 4 of the above****B.Any 3 of the above****C. Any 2 of the above****D. Any 1 of the above****Response:** A.Any 4 of the above

| File Description | Document |
|---|-------------------------------|
| Any additional information | View Document |
| Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management | View Document |
| URL for stakeholder feedback report | View Document |

1.4.2 Feedback processes of the institution may be classified as follows:**A. Feedback collected, analysed and action taken and feedback available on website****B. Feedback collected, analysed and action has been taken****C. Feedback collected and analysed****D. Feedback collected****Response:** B. Feedback collected, analysed and action has been taken

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |
| URL for feedback report | View Document |

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average percentage of students from other States and Countries during the last five years

Response: 6.54

2.1.1.1 Number of students from other states and countries year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 110 | 127 | 159 | 175 | 207 |

| File Description | Document |
|---|-------------------------------|
| List of students (other states and countries) | View Document |
| Institutional data in prescribed format | View Document |

2.1.2 Average Enrollment percentage (Average of last five years)

Response: 74.71

2.1.2.1 Number of students admitted year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 554 | 716 | 588 | 629 | 337 |

2.1.2.2 Number of sanctioned seats year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 756 | 756 | 756 | 756 | 756 |

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| Any additional information | View Document |

2.1.3 Average percentage of seats filled against seats reserved for various categories as per

applicable reservation policy during the last five years**Response:** 100

2.1.3.1 Number of actual students admitted from the reserved categories year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 246 | 246 | 246 | 246 | 114 |

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| Any additional information | View Document |

2.2 Catering to Student Diversity**2.2.1 The institution assesses the learning levels of the students, after admission and organises special programs for advanced learners and slow learners****Response:**

The Institute has a large number of students coming from rural background. An orientation program is conducted at the beginning of the course. The students are given a time to adjust to the college atmosphere. Meanwhile, they are continuously monitored and assessed

- i) By the subject teachers based on class room discussions, performance in class tests etc., and
- ii) By the guardian teachers/ mentors in regular meetings to classify them as advanced learners and slow learners.

Advanced learners:

Advanced learners are continuously motivated and encouraged to strive for higher goals by providing additional inputs for better career planning and growth like:

- Topics on content beyond syllabus are taught to satisfy their higher needs for knowledge.
- Advanced courses are conducted for them after the college working hours or in vacations.
- Motivation given to access latest online journals, reference materials and help them to understand the emerging trends in their field of study.
- Special group discussion sessions are held for them and training for campus recruitment is provided.
- They are encouraged to organize and participate in Student Association, extra-curricular and co-curricular activities to develop managerial, problem solving abilities and leadership qualities in

them.

- Help them to publish their work in Conferences/Journals collaboratively.
- Provide opportunities to develop their creativity by participating and organizing intercollegiate as well as national level technical symposiums and other competitions.
- Encouraging them with extra care to obtain University ranks.
- Institution provides financial assistance for advanced technical activities.
- Encouragement is given to them to prepare for competitive examinations like UPSC, GATE, CAT examinations.

Slow Learners:

A special care is taken for slow learners and all efforts are made to bring them in the main stream.

- It is observed that many a times due to change in background; students become slow learners which is a temporary phase. Counseling is done by mentor teacher, class-in-charge and Head of the Department to make the students adjust to the surroundings.
- Remedial classes are conducted for such students.
- Slow learners are encouraged to meet the subject teachers individually and get their difficulties solved and improve subject understanding.
- Special classes for communication skills are conducted for such students in order to make them understand class proceedings and to build confidence in them.
- They are given extra assignments and a choice of re-examination for improvement in their scores.
- There is a continuous interaction with parents of slow learners. Mentor teachers inform progress of their mentees to the parents and call them for discussions in the interest of students.

Slow learners are mixed with advanced learners in all activities including practical, industrial visits, seminars and project work in order to make them understand and learn the normal practices in Engineering and Technology.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

2.2.2 Student - Full time teacher ratio

Response: 13.62

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |

2.2.3 Percentage of differently abled students (Divyangjan) on rolls

Response: 0.08

2.2.3.1 Number of differently abled students on rolls

Response: 2

| File Description | Document |
|--|-------------------------------|
| List of students(differently abled) | View Document |
| Institutional data in prescribed format | View Document |
| Any other document submitted by the Institution to a Government agency giving this information | View Document |
| Any additional information | View Document |

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

Teaching faculties of the institute have undergone various faculty development programs including 'Wipro – Mission 10X' which explicitly deals with organizing the teaching-learning process around student centric methods. At KDKCE, students are trained with different modes of student centric methods listed below:

| Sr.No. | Course Delivery Methods | Modes | Process |
|--------|-----------------------------|---|--|
| 1. | Regular Teaching Techniques | Class room Lectures & E- Learning Resources | Classroom lectures interspersed with disc main resource for sound understanding fundamentals, design and implementation carried out with conventional black-board as through PPTs using LCD projec explanation and visualization. NPTEL v source e-sources are used. |
| 2. | Experiential Learning | Experiential learning supports students in applying their knowledge understanding to real-world problems in a formal guided manner. Laboratory sessions Simulations | Students are made to perform laboratory better understanding and verification concepts including result interpretation conclusions under faculty supervision. The institute has a variety of software for and graphic visualization of results engineering problems. Experiments are Computer simulation giving hands on ex world problems. |
| 3. | | Students at K.D.K. College of Engineering are made to participate in di | |

| | | | | |
|----|---|--|--|--|
| | | | requiring brainstorming and case studies by consultation with field experts. Below are some of the activities used: | |
| | Participative learning | | <p>Assignments: Assignments are given regularly to students to ensure their engagement with subject and its understanding.</p> <p>Case Studies: Students are asked to carry out a case study from the field to enhance understanding and learning.</p> <p>Invited Talks: People from reputed industries, and institutions are invited for delivering an expert talk about their practices.</p> <p>Industrial tours/ field Visits & Internship: Industrial tours, field visits and internships are organized to make the students acquainted with industry practices and work ethics followed by submission of a report.</p> | |
| 4. | Problem Solving Methodology | | <p>This learning mode forms the most important part of the curriculum. Students will be required to work in groups at undergraduate and individually at postgraduate level. It involves problem definition, brainstorming for alternative solutions, and selection of optimum solution, implementation and follow up of the problem.</p> <p>Mini Projects & Project: Mini projects are carried out in the initial stages of study under faculty guidance wherein students solve small problems and provide hardware/software solutions. Project is finding solution to a real life problem under faculty supervision with acquired knowledge, literature, data sheets, consulting an expert, and carrying out field visits. Students prepare project reports, seminars and defend the solutions in terms of technical competence and economic viability.</p> | |
| 5. | Co-curricular and Extra-curricular activities | | Students are given various opportunities to showcase their talent, communication and technical competency through brainstorming sessions, quizzes, numerous contests, seminars and technical symposiums held on their campus. This provides a healthy competition among students towards pursuit of knowledge. | |

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

2.3.2 Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc.

Response: 57.37

| | |
|--|-------------------------------|
| 2.3.2.1 Number of teachers using ICT | |
| Response: 109 | |
| File Description | Document |
| List of teachers (using ICT for teaching) | View Document |
| Any additional information | View Document |
| Provide link for webpage describing the " LMS/ Academic management system" | View Document |

| | |
|---|-------------------------------|
| 2.3.3 Ratio of students to mentor for academic and stress related issues | |
| Response: 13.55 | |
| 2.3.3.1 Number of mentors | |
| Response: 191 | |
| File Description | Document |
| Year wise list of number of students, full time teachers and students to mentor ratio | View Document |

| |
|--|
| 2.3.4 Innovation and creativity in teaching-learning |
| Response: |
| The teaching-learning process is made interesting by use of innovative and creative techniques for all round personality development of students. |
| 1. Interactive learning: |
| Classroom lectures and Laboratory performance are the main source of course delivery for understanding of concepts and practical applications interspersed with discussions with students. Students are encouraged to interact during lectures and practicals. Models, prototypes, charts are used regularly for explaining complex theory and machines. |
| 2. Tutorials: |
| Tutorials are conducted for difficult subjects for a student batch of 25-30 enabling a free discussion and problem solving sessions. |
| 3. Computer-assisted learning: |
| Every Department has its own Computers center having printers, LCD projectors, application software with Wi-Fi connectivity. Students learn modelling, analysis and system behavior through computer |

simulations. They use software for graphical visualization of results for better understanding.

4. Audio-visual Resources:

NPTEL lectures, Video lectures by IIT professors, open resource demonstrations and lectures are shown to the students regularly.

5. Project-based learning:

Real time projects are given to the students under the guidance by both faculty and Industry/Research personnel.

6. Educational tours :

The College regularly organizes overseas educational tours for students for acquainting them with global developments. Educational tours are regularly organized to visit Indian industries also.

7. Field visits:

Local site/industrial visits are organized for all students. Students see and identify different equipment learnt in a classroom. Discussion with field personal gives an insight to the prevailing technologies. Sometimes students get ideas relating to projects during such visits.

8. Interaction with Alumni :

There is a strong Alumni interaction in the college. Alumni meet is held every year in the college campus. Students are encouraged to interact with alumni for their career planning. Alumni give Guest lectures and conduct awareness/ training programs in the college campus.

9. Student Association & Technical chapter activities:

Students from each Department form an Association under the guidance of faculty-in-charge and HoD having their own office bearers. Students learn to plan, arrange finance and execute many Technical and non-technical activities at intercollegiate and college level. This execution helps the students develop an insight into managerial functioning and economics. It also cultivates Leadership qualities in some students.

10. Navonmesh :

College regularly organizes Navonmesh, Annual social gathering. Medals are given to meritorious students for academic excellence while Prizes and certificates for in other activities.

11. NSS Activities:

Students organize and participate in various Social activities guided by faculty. They learn the importance of working for social causes and for the development of nation.

12. Robot Club & other Technical activities:

College sponsors and encourages students for technical activities and to participate in various national level technical competitions.

1. Robotics Club
2. Auto Club
3. Milliamdroid Club

13. Entrepreneurship Development Cell and Incubation Center

ED Cell conducts training program for faculty and students. MSME has granted incubation center for promoting startups.

Thus, students are not only given technical knowledge but activities are arranged innovatively and creatively so that there will be a growth of all round personality of a student at KDKCE.

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 100

| File Description | Document |
|---|-------------------------------|
| Year wise full time teachers and sanctioned posts for 5 years | View Document |
| List of the faculty members authenticated by the Head of HEI | View Document |

2.4.2 Average percentage of full time teachers with Ph.D. during the last five years

Response: 7.43

2.4.2.1 Number of full time teachers with Ph.D. year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 19 | 15 | 13 | 8 | 7 |

| File Description | Document |
|--|-------------------------------|
| List of number of full time teachers with PhD and number of full time teachers for 5 years | View Document |
| Any additional information | View Document |

2.4.3 Teaching experience per full time teacher in number of years

Response: 7.86

| File Description | Document |
|---|-------------------------------|
| List of Teachers including their PAN, designation,dept and experience details | View Document |

2.4.4 Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years

Response: 7.96

2.4.4.1 Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 10 | 1 | 1 | 0 | 1 |

| File Description | Document |
|--|-------------------------------|
| Institutional data in prescribed format | View Document |
| e-copies of award letters (scanned or soft copy) | View Document |

2.4.5 Average percentage of full time teachers from other States against sanctioned posts during the last five years

Response: 7.18

2.4.5.1 Number of full time teachers from other states year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 15 | 12 | 13 | 10 | 9 |

| File Description | Document |
|---|-------------------------------|
| List of full time teachers from other state and state from which qualifying degree was obtained | View Document |
| Any additional information | View Document |

2.5 Evaluation Process and Reforms

2.5.1 Reforms in Continuous Internal Evaluation(CIE) system at the institutional level

Response:

The Institute is affiliated to R.T.M. Nagpur University, Nagpur and follows the examination pattern of the University. College has authority to test the students for 20% of marks.

Internal evaluation system of the college is continuously monitored and modified for its effectiveness. Earlier, the internal evaluation was based upon one Sessional examination conducted at the end. The pattern could not give justice to some students if they could not prepare well for the whole syllabus due to illness, some important personal reason etc.

Thus, it was decided by the IQAC/College committee that one mid-term and one end-term sessional examination should be conducted in each semester to give students a fair chance to perform. The system was prevalent for about five batches. However, this system was not giving a practice for University examination. With increasing competition at the university level, it was decided that a pre-university test must be introduced at semester end to prepare the students for final University examination.

Accordingly, the present pattern is set wherein two mid-term examinations are conducted and at the end of the semester, pre-university test is conducted on complete syllabus as per R.T.M. Nagpur university pattern which mainly is a descriptive examination which tests the concept understanding, detailed mathematical analysis and applications.

It was observed that students are able to clear University examinations with flying colors but fail to register similar success at state and national level examinations like GATE as these examinations are mostly of objective nature. Hence, it was decided two years back that objective tests are to be introduced to help the students prepare for state and national level examinations. Apart from these examinations, class tests, surprise tests, quizzes etc. are conducted by respective subject teachers. Assignments are given on a regular basis and are also evaluated. The final internal assessment marks are calculated by considering all the tests and assignments. Students are informed in advance about the parameters of internal evaluation system.

Laboratory work is assessed on a continuous basis and grades are given. Similarly, the Project work, case studies and industrial visits are assessed by seminars delivered by students on a regular basis along with viva-voce. Thus, it can be said that the college follows a Continuous Assessment System for Internal Evaluation.

The examination schedule is displayed in advance in the academic calendar and is followed by entire college. The quality of question paper is at par with most of the universities' question papers. The objective tests include questions from GATE and other important examinations in concerned subject. All

question papers list the COs for which the examination is conducted.

The answer books are evaluated in a given time and are displayed to students. Their doubts are cleared if any and the results are finalized. Parents' meets are conducted in each semester to inform the progress of their wards and to take feedback from the parents as well.

After result finalization, CO, PO, PSO attainment is calculated by faculty members.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

2.5.2 Mechanism of internal assessment is transparent and robust in terms of frequency and variety

Response:

The Internal Assessment system for both theory and laboratory examinations is totally transparent. Internal Assessment is carried out in a systematic manner for theory, practical and project work as described above in 2.5.1. All parents are given information letter well before start of the new semester indicating the important events including examinations with probable dates to be conducted in forthcoming academic session. The detail academic calendar is available on college website and displayed on notice-boards in the Department. Thus, students know well in advance about the dates of examination and they can plan their study accordingly. The information is available with parents also.

Students are informed about the parameters of Internal Evaluation system well in advance. They are continuously reminded by the mentor teachers and class-in-charges to be regular in all teaching-learning activities as they are continuously being monitored.

All examinations are conducted as per academic calendar. Students are given a fair chance of good performance as examinations are conducted on small parts of the syllabus. There is a variety of pattern of examination like Sessional, objective, class test, quiz etc. conducted at different times. They are permitted to appear in the re-sessional examination if they fail to appear due to some sound reason in the regular sessional examination. If student is not able to attend a re-sessional examination also due to medical reason, then he is judged on the basis of any of the examination he has appeared in for the same topic. If he/she has missed all examinations, then the student is given an opportunity to appear in an oral examination or marks proportional to his/her performance in other tests are awarded. Students are permitted to appear in re-sessional examinations for performance improvement.

A Parents' meet is organized in each semester and information about the date and time is once again given to parents either through telephonic call or via SMS. Parents are shown complete student record including attendance, marks scored in each subject, assignments submitted, extra-curricular and other activities attended by their wards. Parents can also view the answer sheets. Letters are sent to parents of students

having less attendance or less marks asking for improvement.

The examination schedule is prepared such that the students get an opportunity to appear in at least one type of examination for the course and is evaluated. Thus, it can be stated that the evaluation system is robust in terms of frequency and variety.

The answer copies of all examinations and grades of assignments or Practical examinations are displayed as soon as the evaluation is carried out. Students check answer copies and put signatures on them. In case of any discrepancy, they are advised to bring the matter to the notice of concerned teacher and get it solved. The matter can always be discussed with mentor teacher, class-in-charge or Head of the Department if remains unsolved at the subject teacher level.

It is always ensured that all students are satisfied with their internal assessment.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

2.5.3 Mechanism to deal with examination related grievances is transparent, time-bound and efficient

Response:

All the examinations are conducted as per academic calendar. Answer copies are shown and student queries are solved by the concerned subject teacher till their satisfaction. Marks and grades are displayed on notice boards and are available with class-in-charge and Head of the Department. Thus, the whole process is very much transparent.

Mentors and Class-in-charges continuously guide the students including informing them the process of tackling examination related grievances.

Internal Examination: Students first talk with subject teacher and get the matter sorted out. If problem is not solved, they approach the class-in-charge who in consultation with subject teacher tries to find the solution. If the matter still remains unsolved, students can always approach Head of the Department who solves the matter in consultation with higher authorities if required. As per R.T.M. Nagpur University directives, all internal marks are to be submitted on-line within a stipulated time frame. Thus, the process of sorting out grievance becomes time-bound.

University Examination: Students bring to the notice of Class-in-charge problem faced in examination form submission, issue of admission card or any discrepancy in University result. The matter is handed over to the faculty- in-charge of University examination related matters from concerned Department. The faculty member in consultation with Head of the Department and Principal reports the matter to Rashtrasant Tukadoji Maharaj Nagpur University through concerned clerk of the college who tries to get the solution. If required, the faculty member personally visits R.T.M. Nagpur University and gets

appropriate solution.

As students can directly talk to the class-in-charge who is a subject teacher and hence is easily approachable, the process starts quickly. Class-in-charge acts as a mediator between student and higher authorities. Hence, the process becomes very efficient and student is not required to move around in the college to get the things sorted out. However, student can always approach to Head of the Department, Vice-Principal or Principal for his/her grievance and all authorities take an immediate action whenever required.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

2.5.4 The institution adheres to the academic calendar for the conduct of CIE

Response:

The Institute is affiliated to Rashtrasanta Tukadoji Maharaj Nagpur University, Nagpur. The university sends academic calendar for whole session which includes dates for start and end of odd and even semesters, dates for university examinations for regular students and students with backlog well in advance. Vacations are also mentioned in the calendar given by R.T.M. Nagpur University. All affiliated colleges have to follow the calendar of R.T.M. Nagpur University, Nagpur.

College prepares academic calendar based on academic calendar given by R.T.M. Nagpur University. Academic calendar of college shows dates for start and end of odd and even semesters, dates for internal and university examinations and probable dates for other activities apart from regular academics with sufficient time in between for the students for self-study and preparations. Follow up of this calendar depends upon the University schedule. If there is a shift in dates as per university calendar, similar shift takes place in college calendar. However, usually, the calendar is followed.

The Institute has adopted the Continuous Evaluation Strategy for assessment of students' performance which is described in detail in 2.5.1 and 2.5.2. The assessment process consists of number of parameters which include two mid-term sessional examinations and one pre-university test along with class tests, surprise tests, objective tests, quizzes, seminars, practical performance and viva-voce in each semester. As explained in sections 2.3.1 and 2.3.4, apart from regular teaching-learning process, students carry out many activities in each semester. Thus, it becomes imperative that all of these, i.e. academics, activities and examinations can go together with suitable time span available for self-study and preparation for examinations in between, calendar must be followed.

Thus, the institution tries to follow the academic calendar at its end. If extra time is available due to shift in university examinations, it is utilized for arranging extra preparatory lectures for difficult subjects, additional lectures for lateral entry students or a short term course on some advanced topic for the benefit of students.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

2.6 Student Performance and Learning Outcomes

2.6.1 Program outcomes, program specific outcomes and course outcomes for all programs offered by the Institution are stated and displayed on website and communicated to teachers and students

Response:

The Program outcomes and Program Specific outcome are defined in various meetings held by Head of the Department with eminent persons from industries, academia and teachers of the institute. Teachers are always part of the defining process. Course objectives and outcomes are framed based on guidelines given by R.T.M. Nagpur University, Nagpur by concerned teachers. All these outcome statements along with vision and mission of the Institute and Department are published on

- College website <http://www.kdkce.edu.in>
- Department website <http://www.kdkce.edu.in/Departments>
- Display boards in the Department
- Departmental Newsletter
- Apart from this, vision & mission statements are disseminated to all the stakeholders of the programs through faculty meetings, student awareness workshops, student induction programs, parents meet etc.

New admitted students are informed about these concepts at induction programs. Every teacher, before start of his/her first lecture, informs course objectives and course outcomes. After completion of each unit of the course, teacher again informs about the CO and tests the students for its attainment. COs are displayed on all examination question papers and laboratory experiment manuals.

Students are informed about the objectives of any new program/ activity conducted for them and how it will be beneficial for them in fulfilling the POs and PSO. Feedback is taken from students after every semester in terms of achievement of POs and PSO through academics and other activities conducted in the campus.

Thus, continuously POs, PSO and COs are disseminated to teachers and students.

| File Description | Document |
|---|-------------------------------|
| COs for all courses (exemplars from Glossary) | View Document |
| Any additional information | View Document |
| Link for Additional Information | View Document |

2.6.2 Attainment of program outcomes, program specific outcomes and course outcomes are evaluated by the institution

Response:

As per AICTE guidelines and the model curriculum, the curriculum for each program is framed by R.T.M. Nagpur University, Nagpur. It includes the subjects belonging to Basic Science & Humanities, Professional courses and their distribution in core and elective subjects, Interdisciplinary subjects along with seminars & projects. The curriculum includes technical theoretical aspects as well as practical approach, including applications appropriate to the program. The curriculum is designed with an expectation that being in a professional program, students will be acquainted with the latest technological developments and extra efforts may be taken if required like arranging industrial visits and invited guest lectures.

R.T.M. Nagpur University has provided the syllabus with Course outcomes (COs) for some programs while Course teachers have framed the course outcomes for others. They are mapped with different units of the syllabus. COs are informed to the students at the beginning of the course and are also available on college website. Subject teacher informs students about the mode of assessment for evaluation of COs. In general, there are two sessional examinations based on two units each and end semester pre-university test based on whole syllabus. In addition to these tests, class tests, surprise tests, quizzes, objective tests etc. are conducted and are used wherever necessary to assess the attainment of COs.

Program Outcomes are defined by National Board of Accreditation, New Delhi and are to be fulfilled by all programs run by affiliated colleges while the Program Specific Outcomes (PSOs) are defined by individual programs. The add on course based and curriculum based COs are mapped with Program outcomes and Program Specific Outcomes (PSOs). Co-curricular and Extra-curricular activities, industrial visits & training programs, Guest/Expert lectures etc. are conducted in order to fulfil some of the program and program specific outcomes which are not covered by the regular program curriculum.

The CO attainment is calculated based on students' performance in various internal examinations and University examination in the scale of 1-3. It is observed that the attainment varies depending upon the difficulty level of the subject and may lie in the range of 1-2 for the subjects in the beginning of the program, which increases as students get accustomed to the Engineering curriculum and may lie in the range of 2-3 by the time they reach final semester.

The PO and PSO attainment is calculated for complete batch of students which progresses through all the courses of a particular program including Co-curricular and Extra-curricular activities and the project work. The attainment is calculated based upon the association level, i.e., low-moderate-high, of a particular course/ CO/ activity with respect to the PO or PSO in the scale of 1-3. The attainment level for POs and PSOs for most of the programs lies between 2.3-3.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

| | |
|---|-------------------------------|
| 2.6.3 Average pass percentage of Students | |
| Response: 90.72 | |
| 2.6.3.1 Total number of final year students who passed the examination conducted by Institution. | |
| Response: 557 | |
| 2.6.3.2 Total number of final year students who appeared for the examination conducted by the institution | |
| Response: 614 | |
| File Description | Document |
| Institutional data in prescribed format | View Document |

2.7 Student Satisfaction Survey

| | |
|---|-------------------------------|
| 2.7.1 Online student satisfaction survey regarding teaching learning process | |
| Response: | |
| File Description | Document |
| Database of all currently enrolled students | View Document |

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 Grants for research projects sponsored by government/non government sources such as industry ,corporate houses, international bodies, endowment, chairs in the institution during the last five years (INR in Lakhs)

Response: 8.43

3.1.1.1 Total Grants for research projects sponsored by the government/non-government sources such as industry, corporate houses, international bodies, endowments, Chairs in the institution year-wise during the last five years(INR in Lakhs)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 2.80319 | 0.28 | 1.42 | 1.25 | 2.68 |

| File Description | Document |
|---|-------------------------------|
| List of project and grant details | View Document |
| e-copies of the grant award letters for research projects sponsored by non-government | View Document |

3.1.2 Percentage of teachers recognised as research guides at present

Response: 5.26

3.1.2.1 Number of teachers recognised as research guides

Response: 10

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| Any additional information | View Document |

3.1.3 Number of research projects per teacher funded, by government and non-government agencies, during the last five year

Response: 0.04

3.1.3.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 4

| File Description | Document |
|---|-------------------------------|
| Supporting document from Funding Agency | View Document |
| List of research projects and funding details | View Document |
| Funding agency website URL | View Document |

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations including incubation centre and other initiatives for creation and transfer of knowledge

Response:

The institution is having a well established Eco Systems for development, innovation & incubation activities. The institution is having a very active Entrepreneurship Development Cell Since many years funded by AICTE with grant of Rs. 4.0 Lacs. The activities like entrepreneurship development, incubation centre, skill development are carried under this cell. The institute has received various grants from different ministries of Government of India. The Incubation Centre has receive grant of Rs. 65 Lakhs for development of 10 incubation from Ministry of MSME, New Delhi. A grant of Rs. 9 Lakhs. For scheme YUVA under Ministry of Skill Development & Entrepreneurship, New Delhi. Grant of Rs. 0.1 Lakh from National Implementing and Monitoring Agency for Training (NIMAT) through Entrepreneurship Development Institute, Ahmadabad. The institution have jointly organized many Faculty Development Programme, Entrepreneurship Awareness Camp, Entrepreneurship Development Programm, with MITCON Consultancy Services (Government Recognized Training Institute) for Students and Teachers for duration of 3 days to 30 days through ED Cell and provided training to more than 100 faculties and 1500 students. These programmes were funded by Department of Science and Technology, National Science and Technology Entrepreneurship Development Board, New Delhi, Ministry of Human Resource Development, Government of India, New Delhi. The topic of Innovation & creativity has been incorporated into the syllabus of Mechanical Engineering with initiative of our college faculty Dr. C. C. Handa. The activity of innovation & creativity is developed in the students through mini projects, Project Work, Case Study as a regular part of curriculum. The UG and PG students are encouraged & motivated to take live projects from industry in the final year. The students are advised to undertake design , fabrication & development projects in place of study projects. Various activities are conducted through departmental student associations like MESA, CESA, EESA, ISF, FACE-IT, Club-Auto, Club-Robo, National Level technical event "Spark" for students, International Conference for faculties to promote innovation, creativity & incubation. The institution is also having "KDK Entrepreneurship Alumni wing" to promote and support the incubation activity. Recently more than 100 students have participated in competitions like SAE, BAHA & Go-kart at National level with promising performance. The equal numbers of students have participated in various robotic competitions and achieved positions. The activities mentioned are not only open to the entire departments but to outside the college.

Creation of transfer of knowledge wealth is concerned and focus of the college through activities like, publications of research papers, under graduate, post graduate, and doctoral research, Industrial project work, innovation , consultancy and development activities. The college is motivating faculties to acquire the doctoral degree and by now 27 faculty members have achieved Ph.D. degree and 10 are in progress. The students at under graduate and post graduate level are encouraged to undertake industry consultancy

projects, issues, technology development innovative project, agri-based projects as course work. The industrial problems, consultancy projects are also encouraged. Mechanical Engineering, Civil Engineering, Physics Departments have been awarded as Ph.D. research centers by R.T.M. Nagpur University, Nagpur and at present having 16 Ph.D. scholars perusing their research work with 8 approved Ph.D. supervisors. Innovation and creativity is a part of regular course.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

3.2.2 Number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the last five years

Response: 10

3.2.2.1 Total number of workshops/seminars conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 2 | 3 | 2 | 1 | 2 |

| File Description | Document |
|--|-------------------------------|
| Report of the event | View Document |
| List of workshops/seminars during the last 5 years | View Document |
| Any additional information | View Document |

3.3 Research Publications and Awards

3.3.1 The institution has a stated Code of Ethics to check malpractices and plagiarism in Research

Response: Yes

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| Any additional information | View Document |

3.3.2 The institution provides incentives to teachers who receive state, national and international

recognition/awards**Response:** Yes

| File Description | Document |
|------------------------------------|-------------------------------|
| List of Awardees and Award details | View Document |
| e- copies of the letters of awards | View Document |

3.3.3 Number of Ph.D.s awarded per teacher during the last five years**Response:** 1.9

3.3.3.1 How many Ph.Ds awarded within last five years

Response: 19

| File Description | Document |
|--|-------------------------------|
| URL to the research page on HEI web site | View Document |
| List of PhD scholars and their details like name of the guide , title of thesis, year of award etc | View Document |
| Any additional information | View Document |

3.3.4 Number of research papers per teacher in the Journals notified on UGC website during the last five years**Response:** 1.06

3.3.4.1 Number of research papers in the Journals notified on UGC website during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 45 | 22 | 41 | 28 | 37 |

| File Description | Document |
|--|-------------------------------|
| List of research papers by title, author, department, name and year of publication | View Document |
| Any additional information | View Document |

3.3.5 Number of books and chapters in edited volumes/books published and papers in national/international conference proceedings per teacher during the last five years

Response: 1.58

3.3.5.1 Total number of books and chapters in edited volumes / books published, and papers in national/international conference-proceedings year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 42 | 37 | 43 | 72 | 64 |

| File Description | Document |
|---|-------------------------------|
| List books and chapters in edited volumes / books published | View Document |

3.4 Extension Activities

3.4.1 Extension activities in the neighbourhood community in terms of impact and sensitising students to social issues and holistic development during the last five years

Response:

Through social, ethical, professional and holistic development of the student, the institution aims at development of sensitivity in young generation toward society, social issues, community issue, ethics, human values, professional values, environment awareness, gender disparities, social inequality, rural development & technologies, etc. The ethics and value education is itself taught as a subject at 1st semester level. The institute is having a very vibrant NSS unit which undertakes above mentioned activities. The similar type of social development activities are also undertaken at department level, student forum/association like MESA, CESA, EESA, ISF, FACE-IT, professional society student chapter like ISTE Student Chapter, IEEE Students Chapter, etc.

The different activities like blood donation, Share & Care for Old aged orphanage, Traffic awareness programme, Clean India, gender equality, awareness and development activities in rural areas, etc. Other than the extension activities undertaken by the students through departmental student association, college has very vibrant NSS unit having 100 students from various departments in it. The various activities are undertaken by the students like rural development, health checkup, blood donation, help to needy, poor & old people, tree plantation, environment awareness, village development and awareness of Swaccha Bharat Abhiyan, health awareness, women safety, gender equality, etc, every year. The unit is approved under government scheme. Promotion of health awareness and yoga is regular activity of the college. Regular health awareness programmes are undertaken for faculty and students.

The institute is undertaking its extension activities in nearby villages. Many activities like medical camp, career awareness, technology awareness and transfer, Swaccha Bharat Abhiyan, skill development and job generation are conducted as Educational Social responsibility by the college with active participation of all faculty members and students. A village Vihirgaon, about 12 km from Nagpur and slum nearby college are places where extension activities are undertaken. Skill development and employment generation is done through awareness and training.

The institute is very actively involved with industries associations and industries in and around Nagpur through interactions and MOU's. The college is regularly involved and interacts with Vidharbha Industrial Association (VIA), Nagpur and institute is core member of VIA . The various departments have developed active MOU's with various industries, training agencies and Institutes for mutual interaction, exchange and growth. The college has 22 active MOU's. The departments have kept rural technologies, indigenous technology, and low cost automation as focus for their research work.

The activity, project groups are formed in such a way to promote gender and social equality. The students are given exposure to industrial environment for developing professional values & ethics. The group activities promote development of social behaviors and leadership in the students. The institute have dedicated faculty for undertaking guardian teacher scheme to monitor academic & holistic development of students. Department like Mechanical Engineering has kept technology & machineries for agriculture as their focus for student project work.

| File Description | Document |
|---------------------------------|-------------------------------|
| Link for Additional Information | View Document |

3.4.2 Number of awards and recognition received for extension activities from Government /recognised bodies during the last five years

Response: 2

3.4.2.1 Total number of awards and recognition received for extension activities from Government /recognised bodies year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 1 | 1 | 0 | 0 |

| File Description | Document |
|---|-------------------------------|
| Number of awards for extension activities in last 5 years | View Document |
| e-copy of the award letters | View Document |

3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

Response: 13

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last

five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
| 3 | 3 | 2 | 2 | 3 |

| File Description | Document |
|---|-------------------------------|
| Reports of the event organized | View Document |
| Number of extension and outreach programs conducted with industry,community etc for the last five years | View Document |

3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

Response: 16.93

3.4.4.1 Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year-wise during the last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
| 403 | 552 | 515 | 249 | 314 |

| File Description | Document |
|---|-------------------------------|
| Report of the event | View Document |
| Average percentage of students participating in extension activities with Govt. or NGO etc. | View Document |

3.5 Collaboration

3.5.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years

Response: 7

3.5.1.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 2 | 3 | 2 | 0 | 0 |

| File Description | Document |
|---|-------------------------------|
| Number of Collaborative activities for research, faculty etc. | View Document |
| Copies of collaboration | View Document |

3.5.2 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 9

3.5.2.1 Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 00 | 5 | 3 | 1 | 0 |

| File Description | Document |
|--|-------------------------------|
| e-copies of the MoUs with institution/ industry/ corporate house | View Document |
| Details of functional MoUs with institutions of national, international importance, other universities etc. during the last five years | View Document |

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The institution has adequate facilities for teaching- learning. viz., classrooms, laboratories, computing equipment, etc.

Response:

As per AICTE norms, Land area required is 2.5 acres. The College is situated in heart of city with an area of 222,577.103 sq.m. (5.55 acres) The total built-up area is 26550.787 sq.m.. The state-of-the-art infrastructure promotes a good teaching-learning environment. The Vision of college is “Service to the society through Quality Technical Education” which aptly provides to all the stake holders with various facilities for Teaching and learning. Total 42 classrooms, 16 tutorial rooms 68 laboratories, independent seminar hall for each department, common workshop, central library, closed auditoriums, open stage, canteen facility and playground are available in the campus. Most of the classrooms are equipped with multimedia teaching aids. State of the art facilities are available in the laboratories with investment of more than 7 crores. Each laboratory is equipped with sufficient number of required experimental setups. College management ensures availability of adequate physical infrastructure considering AICTE and RTMNU norms. Whenever additional course is started or curriculum needs arise it is ensured that required physical infrastructure is available on time. Every department has dedicated laboratories and classrooms. Considering the contact hours of each course, classroom and laboratory utilization timetable is planned by the departments. Resources are shared across departments whenever needed. Every department has computer laboratories which are utilized for on-line examinations, aptitude tests, project development and competitions by students of different departments.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

4.1.2 The institution has adequate facilities for sports, games (indoor, outdoor),gymnasium, yoga centre etc., and cultural activities

Response:

- College has playground with sports facilities like basketball, volleyball, football,Cricket, mix cricket, tug of war ,athletics etc.
- Apart from outdoor games college has made a provision of indoor games such as table tennis, carom, chess etc.
- College has a multistation gymnasium at Hostel B with facilities such as free weight exercises.
- Specialized coach is appointed to train the students participating in various university, inter university, zonal level tournaments.
- Every year college promotes students to participate in various sports events conducted by RTMNU Nagpur & other organization.
- College has recently organized Late Bhausaheb Mulak running trophy of CHESS TITAN

(Intercollegiate chess competition) in association with NDCA(Nagpur District Chess Association)

- Each Year College conducts sports meet under the banner of NAVONMESH.
- Every year college conducts cultural activities through mega event NAVONMESH wherein various cultural activities like dance, singing competition, student personality show, quiz, debate competitions, Antakshari, etc. are organized.
- Every year college confers Best student award to all-rounder student.
- Yoga is practiced in college campus and supervised by Dr. G.H.Agrawal

Details of facilities for sports, games and cultural activities which include specification about area/size, year of Establishment and user rate is given below-

| Sr. No. | Particulars | Area/Size | Yr.of Establishment | User Rate |
|---------|-----------------------|-------------------------------------|---------------------|---------------|
| | Games(indoor) | Total Area:559.905 m ² | | |
| 1 | Chess | 106 m ² | 1984 | 20-25 per day |
| 2 | Table Tennis | - | 1984 | 5-10 per day |
| 3 | Carom | 113.875 m ² | 1984 | 30-35 per day |
| 4 | Fencing | - | 2013 | 2-4 per day |
| 5 | Pool Table | 550 m ² | 2017 | 5-10 per day |
| | Games(outdoor) | Total Area: 9911.820 m ² | | |
| 1 | Football | 90*120 meter | 1984 | 25-30 per day |
| 2 | Cricket | - | 1984 | 30-40 per day |
| 3 | Basketball | 45*90 meter | 2011 | 20-25 per day |
| 4 | Volley Ball | 9*18 meter | 1984 | 20-25 per day |
| 5 | Athletics | - | 1984 | 60-70 per day |
| 6 | Tug of War | - | 1984 | 20-30 per day |
| 7 | Gym for Hostel | 340.03 m ² | 2005 | 20-25 per day |

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

4.1.3 Percentage of classrooms and seminar halls with ICT - enabled facilities such as smart class, LMS, etc

Response: 60

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 30

| File Description | Document |
|--|-------------------------------|
| Number of classrooms and seminar halls with ICT enabled facilities | View Document |
| any additional information | View Document |
| Link for additional information which is optional | View Document |

4.1.4 Average percentage of budget allocation, excluding salary for infrastructure augmentation during the last five years.

Response: 22.64

4.1.4.1 Budget allocation for infrastructure augmentation, excluding salary year-wise during the last five years (INR in Lakhs)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 189.15 | 191.28 | 180.00 | 104.55 | 167.00 |

| File Description | Document |
|---|-------------------------------|
| Details of budget allocation, excluding salary during the last five years | View Document |
| Audited utilization statements | View Document |
| Any additional information | View Document |

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Response:

Library is automated using Integrated Library Management System (ILMS)

- Library uses Synchronic Soflib Software having nature of automation as partially from

Year 2008 and automation as fully since 2012-13 that supports all in-house operations of the Library. These functions usually include circulation, acquisitions and cataloguing etc.

- **OPAC:** Online Public Access Catalogue (OPAC) consists of Acquisition, Cataloging, Circulation, Serials control and Web OPAC facility which allows students and faculty to browse a book by author, title, publisher or any keyword.
- Barcode based circulation of books is implemented.

- Library is having collections of e- journals and e- books.
- Central Library has a provision of access to e-journals like IEEE, ASME, ASCE and EBSCO, NPTEL video lectures, DELNET, Project Report for UG,PG & Ph.D programmes. For this purpose a separate arrangement in Digital Library is made where students & staff can access, download, print the open access journals & research papers, also they can listen to the video lectures with the help of audio-visual aids.
- Services of Library are planned in such a way that its functioning is always user friendly with more focus on student's convenience and their activities.

The details of ILMS are –

| Sr.No | Name of software | ILMS Nature | Automation (Fully / Partially | Version | Year of Automation |
|-------|---------------------|-------------|--------------------------------|---------|--------------------|
| 1 | Synchronic Software | Soflib | Fully | 4.9 | 2012-2013 |
| 2 | Synchronic Software | Soflib | Fully | 4.10 | 2013-2014 |
| 3 | Synchronic Software | Soflib | Fully | 5.1 | 2014-2015 |
| 4 | Synchronic Software | Soflib | Fully | 5.2 | 2015-2016 |
| 5 | Synchronic Software | Soflib | Fully | 5.3 | 2016-2017 |

1.For NPTEL Video lectures (hard-disk of 8 TB)- 10.0.7.250/course

2.ERP +OPAC for library-10.0.6.253

3.OPAC/Liabray book search link: (only work if you are login in ERP)

a. For LAN link is: 10.0.6.253/student Log/OPAC.aspx

b. For WAN Link is(work from anywhere across the Globe-Internet is required):

117.211.163.44/student Log/OPAC.aspx

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

4.2.2 Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment

Response:

Knowledge resources for library enrichment

College ensures library enrichment in the form of-

- There is a collection of 1370 Educational CDs in the library. The CDs include technical lectures, videos and demos pertaining to subject areas such as Computer Technology, Information Technology, Electronics Engineering, Mechanical Engineering, Electrical engineering , Civil Engineering and MBA .
- Library is having collection of rare books, special reports which helps overall development of students and faculty.
- The library has been provided with around 92 copies of rare books
- Library is having 48 copies of special reports for students/faculties reference.
- More than 55000 Volumes are available in the library.
- Near-about 10000 Titles are available in the library.
- Ph.D. reports and proceedings of conference are available.

Sample list of rare books is given below-

| Sr No | Name of the Book/ Manuscript | Name of the Publisher | Name Author | ofNum Copi |
|-------|---|--|-------------------|---------------|
| 1 | Knack the illustrated encyclopedia | Marshal cavendish Ltd, London | Pretsmann | 24 |
| 2 | New encyclopedia Britannica propaedia | encyclopedia Britannica; London | McHenry R. | 32 |
| 3 | World of Science the Human Factor | Southside Publishers Ltd, London | Bender Lionel | 32 |
| 4 | Mechanical Design And Systems Handbook | Mc Graw Hill, New York | Rotharth A | 01 |
| 5 | Handbook of Mechanical Engg. | John Willy | M Kutz | 01 |
| 6 | Architectural Contract Documents Production | Mc Graw Hill | Berg Thomas | 01 |
| 7 | Langes Handbook of Chemistry | Mac Graw Hill | Dean John | 01 |
| 8 | Microsoft Encyclopedia for Networking | Practice Hall | Tul.och Mitch | 02 |
| 9 | 21 Century Positioning Provensseling Precept | Kinder Brother And Association, Delhi | Jack G.K. | 01 |
| 10 | Gear Handbook the Design Manufacturer And Application of Gears | Mc Graw Hill ,Delhi.. | Dudley D.W | 01 |
| 11 | Process Measurement Instruments Engineering Handbook | Chilton Book Co. Vadodara | Liptak.B.G | 01 |
| 12 | Electronics Handbook | Cyber Media (Indian | Whitaker Jerry C. | 01 |
| 13 | Gardeners Chemical Synonyms And Trade Names | Grower Publishing . Londen | Pearce J | 01 |

| | | | | |
|----|---|----------------------------------|--------------|----|
| 14 | Encyclopedia of Networking and Telecommunications | Tata Mc Graw Hill , Delhi | Sheldon TOM | 01 |
| 15 | Matter Energy (Physics in action Encyclopedia of Science | The Oxford, Ltd. Delhi | Clark john | 01 |
| 16 | Ecology and Environment Encyclopedia of Science | New Oxford | Morgon S | 01 |
| 17 | National Building Code of India 1983 | Indian standard institute, Delhi | ED Committee | 01 |
| 18 | Encyclopedia of Science Project . | Shooting Star Press, New York | Robson Pam | 01 |
| 19 | Quality Control Handbook | Mc GRaw Hill Delhi | Juran J.M. | 01 |
| 20 | Encyclopedia of Physics | CBS Publishers , New York | Besacon R. | 02 |

*Complete list of rare-books, special reports , educational CDs ,SPARK Proceedings etc are given in additional information.

| | |
|---------------------------------|-------------------------------|
| File Description | Document |
| Any additional information | View Document |
| Link for Additional Information | View Document |

4.2.3 Does the institution have the following:

- 1.e-journals
- 2.e-ShodhSindhu
- 3.Shodhganga Membership
- 4.e-books
- 5.Databases

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: B. Any 3 of the above

| File Description | Document |
|---|-------------------------------|
| Details of subscriptions like e-journals,e-ShodhSindhu,Shodhganga Membership etc. | View Document |
| Any additional information | View Document |

4.2.4 Average annual expenditure for purchase of books and journals during the last five years (INR in Lakhs)

Response: 12.38

4.2.4.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 2.92 | 10.46 | 11.28 | 15.05 | 22.19 |

| File Description | Document |
|---|-------------------------------|
| Details of annual expenditure for purchase of books and journals during the last five years | View Document |
| Audited statements of accounts | View Document |
| Any additional information | View Document |

4.2.5 Availability of remote access to e-resources of the library

Response: Yes

| File Description | Document |
|--|-------------------------------|
| Details of remote access to e-resources of the library | View Document |
| Any additional information | View Document |

4.2.6 Percentage per day usage of library by teachers and students

Response: 12.1

4.2.6.1 Average number of teachers and students using library per day over last one year

Response: 336

| File Description | Document |
|---|-------------------------------|
| Details of library usage by teachers and students | View Document |
| Any additional information | View Document |

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

The institution has a dedicated internet leased-line to cater to the requirements of internet for all the students and staff. Management of the internet services is carried out with expertise and day-to-day maintenance is outsourced for better services with minimum hindrance. Latest anti-virus software is being used in the institution for providing a safe and secure environment for digital activities. Manageable routers and fiber optic network is in place for quality service in the institution. An ERP system is managed by the staff of Information and Computer Technology thereby bringing all the institutional activities under the ambit of computer based working environment.

The College is having well established IT facilities in the entire campus. Each department has their own computing facility with adequate number of Computers, printers and scanners. All the computers in the laboratory are connected in a single network. College ensures availability of adequate physical IT infrastructure. Whenever additional curriculum needs arise, it is ensured that required IT infrastructure is available on time. The college regularly upgrades both software and hardware facilities as per the academic requirements. Deployment of IT infrastructure is done through System Administrations team. All the academic and administrative IT requirements are addressed by this team. The Free Wi-Fi facility is available in the campus for staff members and students. Better access to internet has enabled faculty members to provide more of real time and challenging assignments to the students.

The following are the strategies for deploying and updating IT infrastructure and associated facilities:

- The college procures new upgraded version of computers and peripherals
- Software as per the requirements of each department is procured and students are allowed to undertake project or related assignments on the software.
- Wi-Fi facilities are upgraded as per the requirement.
- Wi-Fi facility is provided to each staff and student wherein, they can access for all types of e-learning resources.
- The computers are regularly upgraded with Anti Virus.
- Each department has dedicated computer lab, Seminar Hall and e-learning facilities.
- ICT- Classroom facilitates modern techniques of teaching.
- All the systems are connected by Single LAN.
- 76 CCTV's are installed to have strict surveillance and monitoring of all the events and happenings in the college.
- Moreover, the institution is a regular organizer of Online Exams for many reputed organizations like, CAG of India, Tata Consultancy Services (TCS), IBPS, RBI, JEE, GATE, AIIMS, SSC of India, MPSC, UPSC, TCS, Indian Air Force etc. This provides an excellent exposure of conducting

online examinations and gives a chance for upgradation and enhancements of the IT infrastructure along with revenue generation.

- Jionet Wifi is provided in complete campus which is smart, simple and Secured hi speed network.

IT facilities including Wi-Fi with date of updation and nature of updation is provided/uploaded in additional information

For more information or photos see www.kdkce.edu.in/PhotoGallery.aspx IT Facility in dropdown list

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

4.3.2 Student - Computer ratio

Response: 3.26

| File Description | Document |
|----------------------------|-------------------------------|
| Student - Computer ratio | View Document |
| Any additional information | View Document |

4.3.3 Available bandwidth of internet connection in the Institution (Lease line)

>=50 MBPS

35-50 MBPS

20-35 MBPS

5-20 MBPS

Response: >=50 MBPS

| File Description | Document |
|--|-------------------------------|
| Details of available bandwidth of internet connection in the Institution | View Document |
| Any additional information | View Document |

4.3.4 Facilities for e-content development such as Media Centre, Recording facility, Lecture Capturing System (LCS)

| | |
|---|-------------------------------|
| Response: Yes | |
| File Description | Document |
| Facilities for e-content development such as Media Centre, Recording facility,LCS | View Document |
| Any additional information | View Document |
| Link to photographs | View Document |

4.4 Maintenance of Campus Infrastructure

4.4.1 Average Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, as a percentage during the last five years

Response: 12.25

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year-wise during the last five years (INR in Lakhs)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 166.84 | 72.62 | 81.16 | 87.28 | 57.93 |

| | |
|--|-------------------------------|
| File Description | Document |
| Details about assigned budget and expenditure on physical facilities and academic facilities | View Document |
| Audited statements of accounts. | View Document |
| Any additional information | View Document |

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

The college has appointed external agencies for maintenance and repair of infrastructure, equipment and other support facilities. College management appoints agencies for cleaning of campus, laboratories ,library , sports complex ,computers, classrooms and other Physical infrastructure. The Electrical, Civil and Computer & Information Technology department mainly supervises work of electrical, civil and computer maintenance work. Each department has lab in charge who informs verbally or in writing to the concern in-charge for maintenance of electrical, civil and computer work.

The college is having following policies for maintenance of electrical fixtures, computers and civil work:

The maintenance work is carried out by maintenance wing or some private contractor under departmental supervision.

After maintenance work, bill is forwarded and sanctioned by Principal of college. Apart from this each Head of Department get some fund in the form of imprest from college for maintenance of labs which they carry out with inhouse or private contractors.

Computer and support facility maintenance:

- AMC contract is given to external agency for the maintenance of all computers within the college. AMC staff from the service provider company maintains the computers and peripherals.
- Internet connectivity maintenance, CCTV security system and network connectivity, system administration team is available.
- The purchases of new computers , printer refilling, antivirus etc. is supervised by the department.
- Laboratory and other equipments like LCD projectors are maintained by technical supporting staff to some extent. In case of any repair & requirement, service is hired from outside agencies by calling quotations for the same.

Electrical Maintenance

- Each department lodges a complaint about the electrical maintenance work and give their requirement of electrical appliances to the incharge .
- The college is having 11KV substation, which is also maintained by electrical department.
- Other laboratory equipment are maintained by technical supporting staff to some extent. In case of any repair & requirement, service is also hired from outside agencies.

Civil work maintenance

- The civil renovation work and maintenance work of entire college is supervised by civil department.
- Each department lodges a complaint about civil maintenance work and requirement. Civil maintenance team then fulfills the requirement.

Other Maintenance Activities:

- Maintenance of garden, tree plantation, landscapes mainenance, external and physical beautification of the college campus, too, have been outsourced.

- Gardeners and labors who have been appointed by the agency that has been awarded the contract. Maintenance department supervise these activities also. Apart from this, student volunteers from college NSS unit, student forums undertake plantation work periodically on the campus in the form of social service.
- Maintenance, cleaning, housekeeping, sanitary maintenance and cleaning of all the class rooms, sports complex, laboratories, library, hostel buildings, hostel mess, college canteen too, have been outsourced. Substaff appointed in the respective sections supervise these activities.
- Round the clock security on the college campus is done by the external agency appointed for security purpose and also by some of the college staff.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years

Response: 71.86

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 1971 | 1705 | 1565 | 1670 | 1714 |

| File Description | Document |
|--|-------------------------------|
| Upload self attested letter with the list of students sanctioned scholarships | View Document |
| Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years | View Document |
| Any additional information | View Document |

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution besides government schemes during the last five years

Response: 3.64

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution besides government schemes year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 230 | 179 | 37 | 5 | 1 |

| File Description | Document |
|---|-------------------------------|
| Number of students benefited by scholarships and freeships besides government schemes in last 5 years | View Document |
| Any additional information | View Document |

5.1.3 Number of capability enhancement and development schemes –

1. For competitive examinations
2. Career counselling
3. Soft skill development
4. Remedial coaching
5. Language lab
6. Bridge courses
7. Yoga and meditation
8. Personal Counselling

A. 7 or more of the above

B. Any 6 of the above

C. Any 5 of the above

D. Any 4 of the above

Response: A. 7 or more of the above

| File Description | Document |
|---|-------------------------------|
| Details of capability enhancement and development schemes | View Document |
| Any additional information | View Document |
| Link to Institutional website | View Document |

5.1.4 Average percentage of student benefited by guidance for competitive examinations and career counselling offered by the institution during the last five years

Response: 0.41

5.1.4.1 Number of students benefited by guidance for competitive examinations and career counselling offered by the institution year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 4 | 2 | 13 | 18 | 11 |

| File Description | Document |
|---|-------------------------------|
| Number of students benefited by guidance for competitive examinations and career counselling during the last five years | View Document |
| Any additional information | View Document |

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

Response: 9.85

5.1.5.1 Number of students attending VET year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 300 | 151 | 194 | 383 | 151 |

| File Description | Document |
|--|-------------------------------|
| Details of the students benefited by VET | View Document |
| Any additional information | View Document |

5.1.6 The institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases

Response: Yes

| File Description | Document |
|--|-------------------------------|
| Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee | View Document |
| Details of student grievances including sexual harassment and ragging cases | View Document |

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 33.23

5.2.1.1 Number of outgoing students placed year-wise during the last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
| 225 | 145 | 198 | 194 | 211 |

| File Description | Document |
|---|-------------------------------|
| Self attested list of students placed | View Document |
| Details of student placement during the last five years | View Document |
| Any additional information | View Document |

5.2.2 Percentage of student progression to higher education (previous graduating batch)

Response: 11.07

5.2.2.1 Number of outgoing students progressing to higher education

Response: 68

| File Description | Document |
|--|-------------------------------|
| Upload supporting data for student/alumni | View Document |
| Details of student progression to higher education | View Document |

5.2.3 Average percentage of students qualifying in State/ National/ International level examinations during the last five years (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil Services/State government examinations)

Response: 27.22

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: NET/ SLET/ GATE/ GMAT/ CAT/ GRE/ TOEFL/ Civil services/ State government examinations) year-wise during the last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
| 5 | 8 | 22 | 43 | 61 |

5.2.3.2 Number of students who have appeared for the exams year-wise during the last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
| 150 | 125 | 110 | 102 | 95 |

| File Description | Document |
|---|-------------------------------|
| Upload supporting data for the same | View Document |
| Number of students qualifying in state/ national/ international level examinations during the last five years | View Document |

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) during the last five years.

Response: 28

5.3.1.1 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-wise during the last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
| 5 | 8 | 5 | 6 | 4 |

| File Description | Document |
|--|-------------------------------|
| Number of awards/medals for outstanding performance in sports/cultural activities at national/international level during the last five years | View Document |
| e-copies of award letters and certificates | View Document |

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

Active Student Council and Representation of Students on Academic & Administrative Bodies/Committees of the Institution.

The Principal will notify the selection process of student's representation. Every year the R.T.M. Nagpur

university conducts Election for the students council, Accordingly KDK College of Engineering forms Students Council having representation of students from First Year and all the branches. All those elected members Elects one Secretary of Students Council under section 40[2][b]. The Secretary represents KDK College on students council of RTMNU to solve the problems of students.

Every Department is also having a separate student association like EESA, MESA , CESA, FACE IT, ISF . Every Student Association is having representation from each class. The Post of President, Secretary, Treasurer, PRO, Event Incharges, Publicity incharge etc. are elected from students.

Every Year College organizes Navonmesh (Annual Social Gathering) and SPARK, A National level paper presentation competition. For this yearly event a separate Students committee comprises students from all departments is formed to organize the event.

Following are the roles and responsibilities of the Students association and Students council.

Role of the Students association and Students council.

1. To officially represent all the students in the College.
2. To identify and help solve problems encountered by students in the College.
3. To communicate its opinion to the college administration on any subject concerning to the students and on which the council wishes to be consulted.
4. To promote and encourage the involvement of students in organizing Curricular , Co-curricular, Extra Curricular and Extension activities.

Responsibilities Students association and Students council.

1. To promote the interests of students among the college administration, staff and parents.
2. To inform students about any subject of concerns.
3. To consult students on any issue of importance.
4. To organize financial campaigns for college and charitable activities.
5. To organize educational and recreational activities for students.
6. To participate in developing the college educational projects and to promote among the students.
7. To organize an activity to recognize the efforts of students involved in various college activities.
8. To propose activities to the college administration that would improve the quality of life in the college.
9. To maintain good relations, out of mutual respect, with the College staff and parents.

| File Description | Document |
|---------------------------------|-------------------------------|
| Link for Additional Information | View Document |

5.3.3 Average number of sports and cultural activities/ competitions organised at the institution level per year

Response: 37.4

5.3.3.1 Number of sports and cultural activities / competitions organised at the institution level year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 39 | 39 | 38 | 36 | 35 |

| File Description | Document |
|--|-------------------------------|
| Report of the event | View Document |
| Number of sports and cultural activities / competitions organised per year | View Document |

5.4 Alumni Engagement

5.4.1 The Alumni Association/Chapters (registered and functional) contributes significantly to the development of the institution through financial and non financial means during the last five years

Response:

K.D.K. College of Engineering, Nagpur

Alumni Association

An Alumni association is formed by the T&P department and continuous interaction is done with pass out students for their better placements and also for the benefit of students presently studying in the college. The KDKCE Alumni registration under charity commissioner is under process. Principal of KDKCE is the President of the Alumni association. Vice Principal, Dean, Alumni Incharge, One faculty and two Alumni are the office bearers of the Alumni Association.

The T&P department has helped many pass out students in obtaining jobs either by organizing campus interviews or by sending the students to companies where vacancies exit. The department has organized campus interviews of various companies for the Alumnis. The department had even tried to place the Alumnis in US companies.

The department conduct meeting with their alumni for feedback which is very helpful in deciding CO, PO and PEO for the courses. This feedback will also help to recommend certain changes in the syllabus of RTM Nagpur university. This feedback will also help to conduct certain bridge courses to meet the industry demand which is not included in the RTMNU Syllabus. Some of the alumni also conduct guest lecture in the college to guide the current batch.

The department had also helped the Alumnus by providing information and guidance about higher studies in the country and abroad in getting apprentice training in local and regional companies etc. the Alumni cell praised their contribution towards the growth of their Alma matter and emphasized the need for further strengthening the linkage between the alumni and current students of KDKCE. The Alumni contact the Alumni Association and college office for collecting their degree certificate, recommendation letter for higher studies in foreign university, and collect transcript of their course.

All pass out students can register their name on line in the website www.kdkce.org in Alumni association. The current batches have to compulsory register their name for Alumni Association online before taking transfer certificate from college. Presently the alumni cell has a revised database of about 3000 Alumni with their latest occupation and addresses and an alumni directory has been prepared which contains all the relevant information about the Alumni.

Every year (Preferably in the last week of January on Founder days of college) one alumni meet is organized at KDKCE campus. This alumni meet give the platform to students and alumni to interact with each other. Some of the Final year Projects are also guided and even sponsored by our alumni's for present final year batches of colleges.

| File Description | Document |
|---------------------------------|-------------------------------|
| Link for Additional Information | View Document |

5.4.2 Alumni contribution during the last five years(INR in Lakhs)

? 5 Lakhs

4 Lakhs - 5 Lakhs

3 Lakhs - 4 Lakhs

1 Lakh - 3 Lakhs

Response: 1 Lakh - 3 Lakhs

| File Description | Document |
|---------------------------------------|-------------------------------|
| Any additional information | View Document |
| Alumni association audited statements | View Document |

5.4.3 Number of Alumni Association / Chapters meetings held during the last five years

Response: 5

5.4.3.1 Number of Alumni Association /Chapters meetings held year-wise during the last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
| 1 | 1 | 1 | 1 | 1 |

| File Description | Document |
|--|-------------------------------|
| Number of Alumni Association / Chapters meetings conducted during the last five years. | View Document |
| Any additional information | View Document |
| Report of the event | View Document |

NAAC

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the institution

Response:

The Vision of the Institute

“Service to the Society through Quality Technical Education”

Articulation of the vision:

We believe that zest of providing a quality technical education coupled with strong fundamentals and better understanding would propel us to perform better and better. This, indeed, will help us to build the persona and character of the students, which would yield best result in their performance in all related domain such as technology, industry, society, nation and the world as well.

The Mission of the Institute

We at KDKCE shall work continuously to achieve:

- *Academic Excellence in Engineering and Technology through Complete dedication to all round Growth of Students.*
- *Enable the Students to Develop Outstanding Professional with Technical Competence and Management Skills.*
- *Fulfill the Expectance of the Society and Industries with Ethical Standards for developing Sustainable Solutions*

Articulation of the mission:

The mission of the institute would be the reality if we could create the professionals with technical competence and managerial skills with no compromise on values and ethics. In the journey towards accomplishment of the vision, the positive attitude to fulfill the expectance of the society and industry with purity would be the key factor to lead towards an excellence.

The college is governed by the set of standard operating procedures, guided by the experienced senior level faculties and advisory board members, where the Principal, as the head of the institution, is consulted on all matters such as academics, administration, and infrastructural development and targets are made for each task on hand. Through its academic strategy, extra and co-curricular activities, students are nurtured in acquiring knowledge, inculcating values, imbibing good citizenship, culture, developing life skills as well as training them for successful careers. Through various extension activities, the college tries to make students to understand the need of the marginalized sections of society and work for its betterment. Individual department in a spirit of unity and camaraderie, which is backed by the strong infrastructure and administrative policy, perform all these.

The institute aspires to achieve its vision and mission through well-conceived perspective plan, which broadly specifies the thrust area as

1. Enhancing the quality of Teaching – Learning
2. Promotion of research among staff and student
3. Improving Entrepreneurship development & Industry – Institute – Interaction
4. Engaging extension activities
5. Quality Assurance Measures

In implementing the above plans, teacher also plays key role by their active participation and decision making as laboratory in-charge, Class in-charge, faculty in-charge of student's body, teacher guardian, etc.

This has made the institution with strong vision & mission objective to exist in the competitive scenario.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

6.1.2 The institution practices decentralization and participative management

Response:

The College recognizes the importance of the opinion of every employee and therefore, practices decentralization and participative management in its entire academic and administrative affair.

The college has an organization structure that includes vice principal, dean, heads of department, Officer In-charge of examination, faculty members, office superintendent, librarian, and non teaching staff headed by the principal. The principal takes the decision in the interest of college. All the decisions are taken in the meeting of the top level and senior faculty members and the task is distributed to appropriate level. Majority of the academic activities are being handled by faculties in the department guided by head of department. The head(s) of department conducts periodic meetings of all respective faculty members actively involved in handling academic activities in the department. Heads take suggestions from the faculties for betterment of the academics and administration and forward the same to the college administration. All the department is sanctioned an Imprest Amount to meet the sundry expenses in a session. The office superintendent takes up the matter related to non-teaching staff to the Principal, who puts the matter before the top administration level for further decisions. Thus, decentralization helps in effective and quality transformation of education to the students.

The participative culture helps to ensure transparency in both academic and administration.

Various Co-curricular, extracurricular activities undertaken are Spark, Nirman, Avishkar, and Navonmesh etc. The object of participative management and decentralization is evident from the various programs organized in the college.

Case Study: Conduction of National Level Seminar ‘SPARK’**Objective:-****The objectives of organizing SPARK are:**

- Inculcate literature review practices.
- Make students able to understand and communicate research findings and write a technical paper.
- Create awareness on professional and social ethics.
- Developing their presentation skill and leadership qualities.
- Make student able to understand the application of modern tools

3) The Context:-

- To make student understand the changes that is taking place in the engineering & technology throughout the world.
- Participate in such activity to make student understand the engineering concepts, modern tools, professional ethics, presentation and leadership qualities and importance of socio-technical need of the society.
- To provide a platform to the student to exhibit academic excellence, this has been practiced at KDKCE since 12 years.

4) The Practice:-

A national level seminar for students has been conducted in the college since 2005. Each year, any one department is given the responsibility of its conduction on rotation basis wherein a committee of the faculty members from the entire department is constituted to look after various activities of the seminar. The quality of papers, the deliberations, the discussions on engineering & technology advances, etc have the permanent footprints of success. The content of the souvenir can depict the legacy of the success of the event and undoubtedly, it has not only become the best practice but also the tradition of the institute.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

6.2 Strategy Development and Deployment**6.2.1 Perspective/Strategic plan and Deployment documents are available in the institution****Response:**

The leadership provides clear vision and mission to the institution. The functions of the institution and its academic and administrative units are governed by the principles of participation and transparency. Formulation of perspective plans, objectives, directives and guidelines with specific plans for

implementation by aligning the academic and administrative aspects improves the overall quality of academics and administration.

The college has the following perspective plans:

1. **Enhancing the quality of Teaching – Learning**
2. **Promotion of Research among staff and students**
3. **Improving Entrepreneurship Development and Industry-Institution- Interaction**
4. **Engaging extension activities**
5. **Quality Assurance Measures.**

Example of one activity successfully implemented based on the strategic plan:

Title of Practice: Promotion of Research among the faculty:

Objective:

- To upgrade the qualification and knowledge of the faculty and students
- To bring the research culture in the institute
- To establish recognized center of higher learning & research leading to Ph. D. and facilitate further research.

The Context:

- As a place of higher learning, we understand the need of research activity to impart quality education. This can be done by promoting and encouraging the staff to undertake the doctoral research work. This has enabled to acquire 27 faculties to get Ph. D. Degrees.

The Practice

Through the initiative and motivation by the Principal to the faculty members of the institute for taking up doctoral research work, many faculties have achieved doctoral status and many are undergoing to achieve the same.

Total faculty members having doctoral status in the year 2006 was 03, which rose to 27 in the year 2017.

The list given below is a testimony of the research orientation among the faculties. Besides faculties, the students are also motivated to attend the conferences, workshop for up-gradation of knowledge and encouraged to write research papers in journals of repute and take-up projects which brought many accolades to the institute. The college also holds the International level and national level seminar/conferences to provide the platform to the students and staff to present their research findings. The incubation center is again a stride taken by the college in the direction of promoting research and application of the technology for the professional and societal development.

Various expert lectures by eminent person motivate staff and students to undertake advanced topic for their research work.

University has accorded Place of Higher Learning & Research Center leading to Ph. D. and M.E. by

Research

Evidence of Success

Following list is testimony to the practice adopted for the promotion of research among the faculty in the past.

| SN | Year | Year wise attainment of Ph.D. | Cumulative Ph. Ds in each year |
|----|------|-------------------------------|--------------------------------|
| 1 | 2006 | 03 | 03 |
| 2 | 2010 | 03 | 06 |
| 3 | 2011 | 02 | 08 |
| 4 | 2012 | 01 | 09 |
| 5 | 2013 | 01 | 10 |
| 6 | 2014 | 03 | 13 |
| 7 | 2015 | 04 | 17 |
| 8 | 2016 | 03 | 20 |
| 9 | 2017 | 07 | 27 |

| File Description | Document |
|--|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |
| Strategic Plan and deployment documents on the website | View Document |

6.2.2 Organizational structure of the institution including governing body, administrative setup, and functions of various bodies, service rules, procedures, recruitment, promotional policies as well as grievance redressal mechanism

Response:

College has organizational structure:

Governing Board

The K.D.K. College of Engineering is managed by Backward Class Youth Relief Committee (BCYRC), Nagpur, which has its governing board..

College Development Cell (CDC)

The College Development Cell (CDC) comprises of Chairman, Secretary and/or representative of Management, Principal, Vice Principal, Dean and nominated representatives of teaching and non-teaching staff. This cell can make recommendations for the improvement and up gradation in the existing academic, administration, and infrastructure, extra and co-curricular activities.

Principal and Vice Principal

The Principal and Vice Principal are involved in the implementation of the perspective plans of the College. They ensure efficient functioning of academic and administration through the departments and various committees constituted for the respective task.

Internal Quality Assurance Cell (IQAC):

IQAC has been established in the college, which meets regularly to assess the quality deliverance of engineering education in the institute leading to achieve the course and program outcomes.

Dean(s)

Dean(s) of student affair and research and development ensure the effective functioning of student related activities and problems and promotion of R & D as per the college perspective plan and instructions of the principal.

Head(s) of Departments

The Heads of Departments ensure that the academic calendar provided by the university/college is implemented properly and efficiently.

Committees for specific task

Various academic and administrative committees are constituted for specific task as per the academic and administration plans of the college.

The Committees are: Annual Cultural and Sports, Seminar, Students association, Examinations, Scholarships, Purchase, Discipline, Hostel management, Admissions, Training & Placement, Library, Women Cell, Grievance Redressal, Anti-ragging, etc.

Office Superintendent

Office Superintendent is the head of Non-Teaching and Non-Technical staff and ensures the administration of various sections runs properly and efficiently as per the college plans and instructions of the Principal and Vice-Principal.

Service Rules

The college follows the service rules as per the provision of relevant annexure of university, statute and directives, state government and statutory bodies under ministry of HRD.

Recruitment of Faculty:

Recruitment of faculty is done as per the norms and statutory provisions of University, State Government and AICTE. After calculation of the vacancies, No Objection Certificate is obtained from the university after applying 100/200 point roster for implementing constitutional reservation policy and advertisement is published in leading Newspapers. The interviews are conducted by the selection panel duly constituted by the university. Recommendations of the selected candidates are sent to the University for its further Approval. Upon receipt of the approval letter, appointment is offered to the concern candidate. The list of

appointed candidate is communicated to the university.

Promotion Policy

The College has Self-Appraisal Method to evaluate the performance of the faculty in teaching, research and extension programs. At the end of the academic year, every faculty submits the Self Appraisal Form duly endorsed by the Head and is evaluated on the basis of academic credentials, research contribution, quality enhancement, campus life enrichment, contribution to the university work and extensions services as per the guidelines of the statutory bodies.

As per the provisions of the university, Performance Appraisal is evaluated for implementing the Career Advancement Scheme.

The Principal appreciates performance of any faculty member during monthly staff meetings notable and then persuades the other faculty members to follow such best practices in the interest of the College and self-development.

The administration, through IQAC, encourages the faculty members to take up the Quality Objective to increase the performance in transforming knowledge to the students.

Grievance Redressal Mechanism

The college has Grievance Redressal Cell. The cell meets regularly to look into the complaints.

The mechanism to analyze the grievances is given below:

- The grievances/complaints can be given to the Grievances Redressal Cell.
- Segregation of the grievance/complaint received is done based on its nature
- A report is submitted by the Cell to the Principal/Vice Principal
- As per the cell report the action is taken thereon.
- If required, the Principal set up an inquiry committee to study and resolve the matter.

The college has kept a guardian-teacher for group of students who looks into the various issues of the respective students and provides redressal.

We have kept suggestion/complaint boxes at prominent places in the college premises to provide easy access for staff and students to put forth their grouses, which are opened regularly and prompt redressal is done.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

6.2.3 Implementation of e-governance in areas of operation

- 1.Planning and Development
- 2.Administration
- 3.Finance and Accounts
- 4.Student Admission and Support
- 5.Examination

A. All 5 of the above

B. Any 4 of the above

C. Any 3 of the above

D. Any 2 of the above

Response: B. Any 4 of the above

| File Description | Document |
|---|-------------------------------|
| Screen shots of user interfaces | View Document |
| ERP Document | View Document |
| Details of implementation of e-governance in areas of operation Planning and Development,Administration etc | View Document |
| Any additional information | View Document |

6.2.4 Effectiveness of various bodies/cells/committees is evident through minutes of meetings and implementation of their resolutions

Response:

The committees/bodies constituted for the specific task works effectively and transparently and are evident through the meetings.

Various committees/bodies along with their member's details are as below:

The Anti-Ragging Committee for each session comprises of 15 members with Principal Dr D P Singh as Chairman, have conducted 12 meetings in last 5 years.

Student Counselor Committee is headed by Dr G H Agrawal, Dean Students.

OBC and Minority Cell is headed by the principal.

Internal Complaint Committee is headed by Mrs S S Kshirsagar Presiding Officer comprised of 9 members, have conducted 14 meetings in last 5 years.

Women Development Cell's Chairperson is Mrs. A L Tulankar with 3 member committee

Women Redressal Committee is headed by Dr. S S Ambekar with 6 member committee. The report of the committee is submitted to the DTE, Maharashtra Govt. every month.

Internal Quality Assurance Cell comprised of members from Management, Administration, faculty, Industry, Alumni, and Student.

For Example: One activity successfully implemented based on the Minutes of meeting

Title of Practice: Ragging – free campus

Objective: Ragging is a menace and legal offence and hence the college wishes to eradicate this menace from the campus through collective and coercive effort.

Context:

The incidents of ragging in educational institutions are becoming a national issue. College wish that all the senior students of KDKCE will respect the dignity of every student in the campus and express their solidarity towards them and act as desired, so that we can continue to maintain “RAGGING – FREE INSTITUTION” status for ever. Remember the fact: Awareness on ragging leads to eradication of ragging.

Practice

College practices zero tolerance on ragging of students. College has constituted Anti-Ragging Committee to look into the matter related to ragging complaints, if any. The college has sets up squad of faculty members. The duty of the squad is to keeps vigil on and off campus and also near-by area of the campus before, during and after the college working hours. This act deters student not to indulge in any form of ragging activity. The squad also visits hostel and near-by area to pass on the message to the students for deterrence. Similar action is undertaken by lady faculty members for the girl students. College also appoints specific staff to visit hostel during the late evening or night regularly and on special occasion deemed necessary. The squad, along with the warden, counsel students not to indulge into any kind of activity, which would invite disciplinary action against them. The hostel visit report is maintained by the warden.

In case, the complaint related to ragging is received. The anti-ragging committee inquires the matter. If the act of ragging is proved beyond reasonable doubt, the action is recommended to the authority and disciplinary action is taken against the culprit. The action ranges from suspension from the class/institute, rustication or if the matter is serious then, the same would be reported to the police for further action. However, no major case of ragging reported in the campus and the college is near to zero ragging campus.
ttt

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Response:

The institution has effective welfare measures for teaching and non-teaching staff

Employee's Provident fund

The institution has the mandatory provision of EPF and contributes the eligible amount to the respective EPF account.

Gratuity

Every staff of the institute is given a gratuity as a social security after his/her retirement

Group Insurance

College has taken an initiative to have the group insurance for those who are willing to be the part of this initiative

Maternity Leave

College renders a maternity leave to eligible lady staff as per the rules of the government

Medical Health Care Centre Facility

A separate Ayurvedic College and Hospital is being run by the society in the same campus, which is available round the clock for the faculty as well as students for any medical emergency.

Fee Concession

Under the institutional social responsibility, college provides the financial aid in the form of Fee concession to the needy students.

Promotions

Faculty members, based on the qualification, services, and outcome of the performance appraisal, are given promotion on to the higher post or financial benefits.

Publication Incentives

For participation in the National or International Conferences and for publishing research papers in the National or International Journals, its registration fees and the cost for the participation are given. Publication in highly reputed journal is encouraged through award/prize.

Sponsorship for knowledge up-gradation

Faculty members are sponsored for attending STTP, workshops, seminar, and conferences for up-grading their knowledge.

Sponsorship for higher studies

Faculty members, if opting for higher studies, leading to enhancement of quality, are sponsored either in terms of finance or in terms of leave.

Career counseling for Engineering and MBA aspirants

College provides counseling for engineering and MBA aspirants by conducting sessions in and around the region.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

6.3.2 Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 13.8

6.3.2.1 Number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 45 | 19 | 15 | 29 | 8 |

| File Description | Document |
|---|-------------------------------|
| Details of teachers provided with financial support to attend conferences,workshops etc. during the last five years | View Document |
| Any additional information | View Document |

6.3.3 Average number of professional development /administrative training programs organized by the institution for teaching and non teaching staff during the last five years

Response: 7.2

6.3.3.1 Total number of professional development / administrative training programs organized by the Institution for teaching and non teaching staff year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 16 | 9 | 8 | 2 | 1 |

| File Description | Document |
|---|-------------------------------|
| Details of professional development / administrative training programs organized by the Institution for teaching and non teaching staff | View Document |
| Any additional information | View Document |

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

Response: 24.88

6.3.4.1 Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 70 | 68 | 34 | 18 | 20 |

| File Description | Document |
|--|-------------------------------|
| Details of teachers attending professional development programs during the last five years | View Document |
| Any additional information | View Document |

6.3.5 Institution has Performance Appraisal System for teaching and non-teaching staff

Response:

The College has adopted a mandatory Self-Appraisal Method to evaluate the performance of the faculty in teaching, research and extension programs. At the end of the academic year, every faculty submits the Self Appraisal form duly endorsed by the Head and is evaluated on the basis of academic credentials, research contribution, quality enhancement, campus life enrichment, contribution to the university work and extensions services as per the guidelines of the statutory bodies.

The evaluation of teaching faculty by the student has been adopted in our college, which helps in self-evaluation and development.

As per the provisions of the university and statutory bodies, Performance Appraisal is mandatory for implementing the Career Advancement Scheme.

The Principal appreciates notable performance of any faculty member during monthly staff meetings and then persuades the other faculty members to follow such best practices in the interest of the college and self-development.

The administration, through IQAC, encourages the faculty members to take up the Quality Objective to increase the performance in transforming knowledge to the students.

| Outcome of the review of the Appraisal | Decision Taken |
|---|---|
| Increase in the academic results of the subject | Faculty is conveyed to take efforts in increasing result of his/her subject. |
| Increase in the research activity | Financial assistance and other facilities for carrying activities to be provided. |
| Up-gradation of knowledge | Financial assistance is to be provided to attend workshop and to organize the international conferences/seminar |
| Self assessment | Through Feed-back system |
| Quality Assurance Measures | Going for accreditation and re-accreditation |

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

College prepares the annual budget of each department and financial allocation is done for the recurring and non-recurring items. The internal audit of the expenditure is conducted by our office accounts department, which is then audited by Chartered Accountant. An external auditor is appointed by the college which performs an audit of the financial statements of the college. The financial records of the College are audited after the end of each fiscal year and are certified.

The last audit was done for the financial year 2016-17. There were no objections taken by the auditor.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

6.4.2 Funds / Grants received from non-government bodies, individuals, Philanthropists during the last five years (not covered in Criterion III) (INR in Lakhs)

Response: 0.95

6.4.2.1 Total Grants received from non-government bodies, individuals, philanthropists year-wise during the last five years (INR in Lakhs)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0.95 | 0 | 0 | 0 | 0 |

| File Description | Document |
|--|-------------------------------|
| Details of Funds / Grants received from non-government bodies during the last five years | View Document |
| Any additional information | View Document |
| Annual statements of accounts | View Document |

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

Before the financial year begins, Principal, Heads of Departments prepare the college budget. College budget includes recurring & non-recurring expenses such as salary, electricity and internet charges, equipment and facilities, maintenance cost, stationery and other consumable etc. It includes planned expenses such as purchase of lab equipment, furniture and other development expenses.

Mobilization of fund is done through tuition fee and consultancy, besides conduction of various off-line & online examination of competitive nature.

The optimal utilization of fund is as given below:

- For salary, arrears, & welfare measures
- For mandatory deposits, annual fee of statutory bodies/university, etc
- For creation and maintenance of academic infrastructure
- For purchasing of equipments and software
- For research and development

- For organization of International & National Conferences/Seminar
- For conduction of Curricular, Co-curricular, Extra-curricular and extension activities
- For recurrence expenses, etc.

The institute utilizes its resources in its optimal format. The college earmarks fund for various head. The best alternative is opted. College is also trying to harness renewable energy sources leading to optimal use of conventional energy.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

Response:

(IQAC) monitor the academic quality regularly. The institution takes up academic audit to accomplish both accountability and quality improvement. The administrators and staff practiced self-assessment, etc to achieve the quality in education.

The academic audit committee consists of authorities. To bring out improvements, the committee interacts with the head(s) and faculty to assess the progress and suggestions are placed before IQAC for further action.

Best practices - 1;

Title of the practice: Teaching – Learning:

Objective:

To enable the students to understand and attain the outcome of the program through teaching – learning process.

The practice:

The quality of teaching by the faculty is monitored. The staff member is advised to have thorough study & preparation of content for the delivery before taking a class. Feedback from the students is taken to assess the quality of teaching. The different tests, academic activity are some of the assessment mode of the subject. A revision of difficult portion, if required is taken. The IQAC studies feedback of the students and give recommendations to improve the quality of teaching & referred to Principal for the approval. The university result implies the quantum of effort put in by the faculty to have better pass result of the student.

Evidence of success:

The incremental success of the college students is the testimony of the effective teaching – learning monitoring.

Best practices - 2;**Title of the practice: Monitoring of Research Activity****Objective:**

- To upgrade the qualification and knowledge of the faculty and students
- To bring the research culture in the institute
- To establish recognized center of higher learning & research leading to Ph. D. and facilitate further research.

The Practice

Through the initiative and motivation by the Principal to the faculty members of the institute for taking up doctoral research work, 27 faculties have achieved doctoral status as on 2017, 3 have submitted their thesis and many are undergoing to achieve the same.

The number is a testimony of the research orientation among the faculties. Besides faculties, the students are also motivated to attend the conferences, workshop for up-gradation of knowledge and encouraged to write research papers and take-up projects. The college also holds the International and national level seminar/conferences to provide the platform to the students and staff to present their research findings. The college has incubation center for promoting research and application of the technology for the professional and societal development. Various expert lectures by eminent person motivate staff and students to undertake advanced topic for their research work.

University has accorded Place of Higher Learning & Research Center leading to Ph. D. and M.E. (by Research).

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms

Response:

The IQAC assesses and review the teaching-learning process (TLP) of the institute; and recommends steps to be taken to achieve the quality parameters.

The structure of IQAC is:

| SN | Name of Person | Category | Designation |
|----|---|------------------------|-------------|
| 1 | Dr. D P Singh, Principal | Principal | Chairman |
| 2 | Shri Yashraj Mulak, Treasurer, BCYRC | Management | Member |
| 3 | Dr. A M Badar, Prof. & Vice Principal | Administrative Officer | Member |
| 4 | Dr. G H Argawal, Prof. & Dean (SD) | | Member |
| 5 | Dr. C C Handa, Prof. & HOD, MED | Senior Teachers | Member |
| 6 | Dr. Valsson Varghese, Prof. & HOD, CED | | Member |
| 7 | Dr. S S Ambekar, Asso Prof. & HOD, EED | | Member |
| 8 | Prof. G D Randive, Asso Prof. & HOD, FYBE | | Member |
| 9 | Dr. A A Jaiswal, Asso Prof. & HOD, CT | | Member |
| 10 | Dr. S P Khandait, Prof. & HOD, IT | | Member |
| 11 | Dr. S H Randhir, HOD, MBA | | Member |
| 12 | Dr. N R Dhange, Prof., CED | | Member |
| 13 | Dr. D K Parbat, Sr. Lect., Govt. Poly, NGP | Local Society | Member |
| 14 | Shri Jitendra Wasnik, MD, Narayani Ent. NGP | Industry | Member |
| 15 | Shri Mukund Patki, MD, Seepage Control, NGP | | Member |
| 16 | Er. Mohan Pidurkar, Asst Prof., PJLCOE, NGP | Alumni | Member |
| 17 | Ms Kalyani Trivedi, VIII Sem, ETRX Dept | Student | Member |
| 18 | Dr. P D Khandait, Prof. & HOD, ETRX | Coordinator | Member S |

For examples;

| SN | Outcome of the review | Decision taken |
|----|---|---|
| 1 | Assessment of TLP to be done by each department from its stake holders | Feedback to be taken, analyzed and result of the be conveyed to the staff for want of improvement. |
| 2 | Increasing Industry - Institute Interaction | The heads are requested to send students to the in the internship. The students to be encouraged field/industrial projects. |
| 3 | Attainment of quality benchmark in TLP such as attainment of CO and PO. | Head(s) of department is informed to take measure the set target in attainment of CO & PO through teaching & assessment techniques. |

Example 1: Feedback Mechanism

TLP is assessed based on feedback taken at stages given below:

- Mid-session of semester
- End-Semester
- Extra & Co-curricular activity
- Program Exit

Format of the feedback is prepared by heads of department in consultation with the authority and gets approved in IQAC. Feedback is collected and consolidated, analyzed by each department

The observations and recommendation are processes through IQAC.

Example 2: Teaching – Learning Process (TLP)

The college believes strongly that the best approach to teaching and learning quality is to provide freedom for teachers and students to undertake self-motivated improvement activities with the goal of continuous improvement in their performance.

In addition to the expertise and knowledge of the teacher, which form the main input, views are sought from students, visiting experts, and external examiners, graduates, parents, etc for necessary inputs for improvement in the existing curriculum & teaching – learning practices. Moreover, college has faculties deputed to the university academic bodies, which reviews and provide adequate inputs in the improvement of curriculum.

The college has taken many initiatives to bring the improvement in the quality in teaching-learning process.

Teaching and learning support: including initiatives targeting the teachers (i.e. Teaching), the students (i.e. learning). Examples include continuing education for faculty, pedagogy enhancement, student support (e.g. mentoring and career advice), support for student learning (focused on inputs, such as the introduction of new pedagogical tools, or on outputs, such as the development of certain abilities for the students). These initiatives make the teacher to identify benchmarks, promote good practices and scale them up across to meets teacher and student expectations. A quality teaching framework allows the institution to monitor support, track teacher and student satisfaction, and study the impact on the learning process.

In the process of achieving quality benchmarks, the TLP is assessed and necessary measures are taken in delivery of content & assessment of understanding achieved is done. Through the assessment, the attainment levels of course outcomes and program outcome are derived. The IQAC reviews the attainment and issues further recommendations.

The methodologies of teaching – learning include the complete follow up of university exam schemes, academic calendar of university and college, smart class room teaching, industrial visits, internship of students, etc. These methodologies built up good academic career of the student.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

Response: 10

6.5.3.1 Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 11 | 7 | 16 | 9 | 7 |

| File Description | Document |
|--|-------------------------------|
| Number of quality initiatives by IQAC per year for promoting quality culture | View Document |
| Any additional information | View Document |
| IQAC link | View Document |

6.5.4 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); timely submission of Annual Quality Assurance Report (AQAR) to NAAC; Feedback collected, analysed and used for improvements
2. Academic Administrative Audit (AAA) and initiation of follow up action
3. Participation in NIRF
4. ISO Certification
5. NBA or any other quality audit

A. Any 4 of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1 of the above

Response: C. Any 2 of the above

| File Description | Document |
|---|-------------------------------|
| e-copies of the accreditations and certifications | View Document |
| Details of Quality assurance initiatives of the institution | View Document |
| Any additional information | View Document |
| Annual reports of institution | View Document |

6.5.5 Incremental improvements made during the preceding five years (*in case of first cycle*) Post accreditation quality initiatives (*second and subsequent cycles*)

Response:

The institute adopts the following quality enhancement initiatives:

Choice Based Credit System (CBCS)

Choice based credit system (CBCS) for PG courses, where the students can choose the prescribed courses, as the core, and elective or soft skill courses, from a range of options, rather than to simply consume what the curriculum offers. They can learn at their own pace and the assessments are graded based on a credit system. It provides an opportunity and flexibility to complete the programme by earning the required number of credits.

Student Centered Learning

Student-centered learning is an instructional approach in which students influence the content, activities, materials, and pace of learning. This learning model places the student (learner) in the center of the learning process. The approach includes such techniques as substituting active learning experiences for lectures, assignments and problems requiring critical or creative thinking.

Newsletter to increase participation of the stakeholders

To improve the extent of participation of all stakeholders, college publishes newsletter describing the outcomes, events and activities, quality improvement practices, the future plans etc. this will keep the stakeholders informed, and would encourage them to put in more effort for improving the quality.

Industrial Visits and Collaborations with Industries

These practices are already a part of many technical programs. Providing the students an inside experience of the industry gives the enough knowledge and equips them with the skill set that will help them survive in the real world. This increases the credibility of the program.

Research and Development Cell

A properly functioning research and development cell will build a research culture among the students and faculties. It will also help the teachers to translate their theoretical knowledge into action. Having a culture of research and training inside the institution would provide practical skills and encourage faculties to take up research projects and Ph. Ds.

Continuous feedback from various stakeholders

Collecting feedback is very important. One of the most efficient ways to achieve continuous improvement is feedback mechanism. The feedback from students, faculties, alumni, and other stakeholders will give necessary insights into areas of improvement.

Collaborating the practices of IQAC with departmental plans

For the academic quality enhancement, department takes up the recommendations of the IQAC. It has been noticed with the continuous persistence and persuasion of the policy matters, the college have witnessed the incremental improvements in many aspects viz. results, publication by staff and students, attainment of doctoral status, performances in extra, co-curricular and extension activities by the students, etc.

The content in additional information depicts the incremental improvement of the college in preceding five years:

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |

NAAC

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

Response: 5

7.1.1.1 Number of gender equity promotion programs organized by the institution year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 4 | 1 | 0 | 0 | 0 |

| File Description | Document |
|---|-------------------------------|
| Report of the event | View Document |
| List of gender equity promotion programs organized by the institution | View Document |
| Any additional information | View Document |

7.1.2

1. Institution shows gender sensitivity in providing facilities such as:

1. Safety and Security
2. Counselling
3. Common Room

Response:

1. Institution shows gender sensitivity in providing facilities such as:

1. Safety and Security

- The institution has taken numerous safety and security measures in the campus. 65 CCTV cameras have been installed at prominent places in the campus, including main gate, important corridors, cafeteria, all entrances, classrooms, boys and girls hostels etc.
- The campus is proved to be secure due to its well maintained security system that is outsourced. The security guards are vigilant and present 24x7 at all important locations in the campus and also at the boys and girls hostels.
- Specific rules and regulations about the timings, visitors etc are followed in boys and girls hostels.
- The appointed Warden takes care of all the requirements, problems, rules and regulations, in the hostel.
- Faculty members make surprise visits to hostels during night hours also.

- The college supports anti ragging drive. Anti ragging committee takes care of and keeps an eye on the activities in the college. Anti ragging forms are filled up and submitted by the students and parents.
- The college has a Women Development Cell, Women Redressal Cell and Internal Complaint Committee, which deal with the safety and security of girl students and female staff in the campus. These committees also organize activities to motivate, strengthen and spread awareness about health, nutrition, extension activities etc. among the females in the campus.
- An open and transparent system is adopted for selection of staff, whether male or female and we are proud to have nearly 50% dedicated and learned female staff.
- Doctor and nursing assistance to provide medical care is available in the campus in the form of Bhausaheb Mulak Ayurvedic Mahavidyalaya hospital.
- It can be stated with due pride that no incidence of sexual harassment against women have occurred in the institute due to good discipline in the campus.

1. Counseling

- Counseling of students is carried out under the Internal Complaint Committee, Women Development Cell and Women Redressal Cell.
- These committees have been formulated to deal with issues related to gender bias, promote gender sensitivity and educate male and female members regarding gender equality.
- Various programs are conducted through these committees, like motivational talks, health related issues, self defense techniques, environment conservation etc.
- Apart from these committees the college has well developed teacher guardian scheme, through which the guardian teacher carries out counseling of students from time to time.
- The teachers counsel and guide the students to inculcate confidence in them. They are motivated to perform better and also to being a good human being. The counseling includes social and ethical aspects too.
- Human and ethical values are so imbibed in the students, that no incidence of misbehavior against women has ever been observed in the campus.

3. Common Room

- The institute provides common rooms for girls and boys.
- The institute provides well equipped girls common room with sanitary napkin vending machine.

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |

7.1.3 Alternate Energy initiatives such as:

1. Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 97.04

7.1.3.1 Annual power requirement met by the renewable energy sources (in KWH)

Response: 215079.432

7.1.3.2 Total annual power requirement (in KWH)

Response: 221651

| File Description | Document |
|---|-------------------------------|
| Details of power requirement of the Institution met by renewable energy sources | View Document |
| Any additional information | View Document |
| Link for Additional Information | View Document |

7.1.4 Percentage of annual lighting power requirements met through LED bulbs

Response: 52

7.1.4.1 Annual lighting power requirement met through LED bulbs (in KWH)

Response: 23725

7.1.4.2 Annual lighting power requirement (in KWH)

Response: 45625

| File Description | Document |
|--|-------------------------------|
| Details of lighting power requirements met through LED bulbs | View Document |
| Any additional information | View Document |

7.1.5 Waste Management steps including:

- **Solid waste management**
- **Liquid waste management**
- **E-waste management**

Response:

Solid waste management

1. We at KDK, have a good solid waste management system in the campus.
2. The total solid waste collected in the campus is 50 Kg/day. Waste generation from tree droppings and lawn management and kitchen waste is a major solid waste generated in the campus. However it also includes papers and bottles which is segregated at source by providing separate dustbins for Bio-degradable and Plastic waste. Each disposal point is furnished with separate dustbins for

collection of dry waste and wet waste. The capacity of dustbin is 20 kg.

3. The other solid waste generated in the campus is collected in a waste container and is taken away by 'Kanak Resources', a venture of Nagpur Municipal Corporation.
4. The main objective of the solid waste management system in the campus is to promote the Environment Management and Conservation in the College Campus.
5. Composting and recycling are the methods adopted by the institute.
6. The Civil Engineering Department of the college takes up Projects for students of VII and VIII Semesters in Solid and Liquid Waste Management, which enhances the knowledge about waste management in the students and motivates them for proper management of solid and liquid waste.
7. Mini Projects are also taken up in VI Semester Civil Engineering so as to make the students aware of the importance of waste management systems.

- **Liquid waste management**

1. The Institute has an efficient drainage system for liquid waste generated in the campus.
2. No specific hazardous liquid waste is generated in the campus.
3. In Chemistry laboratory of the institute, the chemicals used and experiments performed are non-hazardous and do not produce harmful waste.
4. No other laboratory in the institute generates any type of hazardous liquid waste.
5. An effective drainage system is available in the laboratories which is adequate for the disposal of liquid waste generated in the laboratories.
6. The sewer carrying the liquid waste is designed by the experts with all proper provisions along with ventilation and manholes. Sewers are then connected with the main sewer of municipal corporation which convey the sewage to Bhandewadi waste treatment plant.
7. The Curriculum of RTM Nagpur University also includes Waste Water Treatment as an Elective subject in VIII Semester Civil Engineering and in Engineering Chemistry at I Semester level under Water Technology. This adds to the understanding about waste management in the students.

- **E-waste management**

The e-waste generated is sold off for further disposal.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

7.1.6 Rain water harvesting structures and utilization in the campus

Response:

Roof Rain Water Harvesting (RRWH) at KDK Campus

Introduction:

Rain water harvesting (RWH) is a technique of collection and storage of rainwater into natural reservoirs or tanks, or the infiltration of surface water into subsurface aquifers (before it is lost as surface runoff). One method of rainwater harvesting is rooftop harvesting.

Objectives

- To increase recharge of groundwater by capturing and storing rainwater, by rainwater harvesting from rooftop run-offs.
- To store the water for gardening & washing purpose.

Need for rainwater harvesting

1 Increasing water demand

- The rapid rise in human population has made optimum use of fresh water imperative.
- Urban water supply systems in particular are under tremendous pressure to meet the needs of the population as well as industry and large-scale construction.
- The increased need for water results in lower groundwater levels and depleted reservoirs.
- Consumption of polluted water creates health hazards.
- The use of rainwater is a useful alternative

2 Variations in water availability

- The availability of water from sources such as lakes, rivers and shallow groundwater can fluctuate strongly.
- Unchecked rainwater runoff is causing soil erosion.
- Collecting and storing rainwater can provide water for domestic use
- Rainwater may also provide a solution when the water quality is low or varies during the rainy season in rivers and other surface water resources.

3 Responsibilities towards protecting Nature

- Using more rainwater helps to conserve & augment the storage of ground water
- It helps to arrest sea water intrusion in coastal areas
- It helps to avoid flood & water stagnation in urban areas
- Reduces water and electricity bills

4 Advantage of collection and storage near the place of use

- Collecting and storing water close to households improves the accessibility and convenience of water supplies.
- It costs less to collect rainwater than to exploit groundwater.
- Only traditional knowledge, skills and materials can be used to collect the water and no government technical assistance is required for repair and maintenance.
- Collecting rainwater is the only way of recharging water sources and revitalizing dry open wells.
- It gives an opportunity for communities to come together and work closer. It allows for the decentralized control and community management of water.
- It will provide productive employment to the rural poor in their own villages.

5 Quality of water supplies

- Water supplies can become polluted either through industrial or human wastes or by intrusion of minerals such as arsenic, salt or fluoride.
- Rainwater is considered as fresh water.
- Rainwater is generally of good quality.

Context of rainwater harvesting

- The soil in the college campus has a good infiltration rate.
- For the gardening purpose, water is required daily.
- For the washing of vehicles large quantity of water is required.
- This requirement is satisfied by the water stored by rainwater harvesting.
- In the KDK campus rainwater harvesting system has been installed in Block A, Block B & Girls Hostel. The roof runoff water is collected through network of pipe lines and stored in the wells. There are three wells in the campus where the roof runoff water is stored. The total capacity of storage is 900 m³. The remaining roof runoff water is allowed to infiltrate in the ground for recharge. The stored water is used for gardening and washing of vehicles.
- In the region, because of less rainfall, there is scarcity of water. This practice has solved the problem of deficiency of water and the ground level of water has increased. The stored water is supplementary for the gardening and washing purpose.
- **Water Harvesting Capacity of KDK Campus**
- Block, A=4067 m², Block, B=2282 m², Girls Hostel=477 m²
- Total Area= 6826 m²

| Area m ² | Average Depth of Rainfall (m) | Volume of Runoff m ³ | 30 % losses | Total Q |
|---------------------|-------------------------------|---------------------------------|-------------|---------|
| 6826 | 0.4 | 2730 | 819 | 1911 |

- Total Quantity of Runoff =1911 m³
- The available total capacity of harvesting in KDK campus = 900 m

Cost of Installation:

The approximate cost of installation at each building in KDK campus was Rs 150000/- in 2012

The total cost of installation of system was of Rs 450000/-

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

7.1.7 Green Practices

- **Students, staff using**

- a) **Bicycles**
- b) **Public Transport**
- c) **Pedestrian friendly roads**
 - **Plastic-free campus**
 - **Paperless office**
 - **Green landscaping with trees and plants**

Response:

a) Students, staff using Bicycles

About 10% students and staff regularly use bicycles. The boy's and girl's hostels are very near to the college campus, so students walk to the college daily.

b) Public Transport

Institute provides bus facility for students plying from different locations and routes. This adds to the environmental conservation. Bus stop for city bus transportation service is located in front of the college, hence it is convenient for the students using city bus service. The RTM Nagpur University Curriculum includes Industrial and Site Visits for students of all branches. College buses are employed to carry students to and from the Industries and Sites.

c) Pedestrian friendly roads

The roads inside the campus are pedestrian friendly as all vehicles are compulsorily parked in the parking area.

d) Plastic-free campus

Efforts are taken by the institute to create plastic free campus. Students and staff are counseled against use of plastic. Use of plastic is prohibited in the Seminar and Project reports of students.

e) Paperless office

The institute attempts towards making the office paperless. Open Wi-Fi facility is provided throughout the campus and important information is forwarded to all by e-mails.

f) Green landscaping with trees and plants

Trees are natural source of Oxygen and are greatly responsible in reduction of the Green House gas ie. CO₂. Hence, care is taken to increase the green cover in the campus and conserve the Environment.

- The college has a large number of trees throughout the campus.
- It also has lush green lawns.
- Trees like Neem, Peepal and Gulmohar are planted in large numbers. These are considered as more Oxygen giving trees and hence better environment conservation.
- More trees are planted each year to beautify the campus and to achieve eco friendly environment. The maintenance of garden and plants has been outsourced and proper care is taken.
- Environmental studies is a compulsory subject taught at 3rd/4th semesters of all engineering

programs as per RTMNU syllabus and guidelines.

- This helps in inculcating awareness about the environment among the students.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

7.1.8 Average percentage expenditure on green initiatives and waste management excluding salary component during the last five years

Response: 0.8

7.1.8.1 Total expenditure on green initiatives and waste management excluding salary component year-wise during the last five years(INR in Lakhs)

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|----------|---------|---------|---------|----------|
| 23.35910 | 2.93027 | 2.69317 | 1.19419 | 2.577811 |

| File Description | Document |
|---|-------------------------------|
| Green audit report | View Document |
| Details of expenditure on green initiatives and waste management during the last five years | View Document |
| Any additional information | View Document |

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

1. Physical facilities
2. Provision for lift
3. Ramp / Rails
4. Braille Software/facilities
5. Rest Rooms
6. Scribes for examination
7. Special skill development for differently abled students
8. Any other similar facility (Specify)

A. 7 and more of the above

B. At least 6 of the above

C. At least 4 of the above

D. At least 2 of the above

Response: C. At least 4 of the above

| File Description | Document |
|--|-------------------------------|
| Resources available in the institution for Divyangjan | View Document |
| Any additional information | View Document |
| link to photos and videos of facilities for Divyangjan | View Document |

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years

Response: 0

7.1.10.1 Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 0 | 0 |

| File Description | Document |
|---|-------------------------------|
| Number of Specific initiatives to address locational advantages and disadvantages | View Document |
| Any additional information | View Document |

7.1.11 Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)

Response: 13

7.1.11.1 Number of initiatives taken to engage with and contribute to local community year-wise during the last five years

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 4 | 2 | 2 | 2 | 3 |

| File Description | Document |
|--|-------------------------------|
| Report of the event | View Document |
| Details of initiatives taken to engage with local community during the last five years | View Document |
| Any additional information | View Document |

7.1.12

Code of conduct handbook exists for students, teachers, governing body, administration including Vice Chancellor / Director / Principal /Officials and support staff

Response: Yes

| File Description | Document |
|--|-------------------------------|
| Any additional information | View Document |
| URL to Handbook on code of conduct for students and teachers , manuals and brochures on human values and professional ethics | View Document |

7.1.13 Display of core values in the institution and on its website

Response: Yes

| File Description | Document |
|--|-------------------------------|
| Any additional information | View Document |
| Provide URL of website that displays core values | View Document |

7.1.14 The institution plans and organizes appropriate activities to increase consciousness about national identities and symbols; Fundamental Duties and Rights of Indian citizens and other constitutional obligations

Response: Yes

| File Description | Document |
|---|-------------------------------|
| Details of activities organized to increase consciousness about national identities and symbols | View Document |
| Any additional information | View Document |

7.1.15 The institution offers a course on Human Values and professional ethics

| | |
|--|-------------------------------|
| Response: Yes | |
| File Description | Document |
| Any additional information | View Document |
| Provide link to Courses on Human Values and professional ethics on Institutional website | View Document |

| | |
|--|-------------------------------|
| 7.1.16 The institution functioning is as per professional code of prescribed / suggested by statutory bodies / regulatory authorities for different professions | |
| Response: Yes | |
| File Description | Document |
| Any additional information | View Document |
| Provide URL of supporting documents to prove institution functions as per professional code | View Document |

| | |
|---|-------------------------------|
| 7.1.17 Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years | |
| Response: 7 | |
| File Description | Document |
| List of activities conducted for promotion of universal values | View Document |
| Any additional information | View Document |

| | |
|--|--|
| 7.1.18 Institution organizes national festivals and birth / death anniversaries of the great Indian personalities | |
| Response: | |
| <p>The institute has vision to see the students, not just passing out with quality technical knowledge, but also inculcate the ethical values, so that they can efficiently help to solve the various societal issues.</p> <ul style="list-style-type: none"> • Institution organizes National festivals like Republic Day and Independence Day. • The program includes the hoisting of National flag, singing of National Anthem, followed by speeches, tree plantation etc. • All the teaching, non-teaching staff and students attend the function. • Institute also celebrates the birth anniversaries of great Indian Personalities, like Mahatma Gandhi, | |

SardarVallabhbai Patel, Dr. BabasahebAmbedkar, Dr.A.P.J. Abdul Kalam etc. These functions witness the presence of teaching, non-teaching staff and students.

- The organization of these programs inculcate human values, patriotism and ethics in staff and students.
- These practices in the institute, emphasize the importance of values and ethics and ignites the students for working towards for betterment of society.
- The students also get to know, realize and understand the lives, and the noble work carried out by great personalities, for the society.
- On the occasion of these celebrations, the students and staff carry out tree plantation, cleaning of the campus and nearby areas, poster and project competitions etc.

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |

7.1.19 The institution maintains complete transparency in its financial, academic, administrative and auxiliary functions

Response:

The college has continuously and successfully maintained the quality of education, as is evident from various academic parameters. Since its inception, all the requisite norms of governing authorities have been implemented to see that service to the society through quality technical education is served.

Staff, students and the stakeholders enjoy the association with the institution due to its transparency in entire process of academics and administration.

Financial Transparency

The students pay fees through bank, while salaries to the staff are also made through bank. The expenses are appropriately utilized. The entire financial management is audited each year by external auditors. Students desirous of financial aid are being supplemented with scholarships by the management, thus attaining the human value segment. The college follows a practice of inviting quotations before purchase of equipments, consumables, computers, furniture and fixtures for use in laboratories and campus. Comparative statements of quotations is prepared and put up for sanction after recommendation by Head of the Department, Principal and IQAC. Purchase order is placed and payments towards the purchase are made through cheques. Canteen and security contracts are also dispensed after inviting quotations.

Academic Transparency

The college conducts two sessional examinations and one pre university examination, which are based on university paper pattern. The papers are evaluated immediately after the examination and marks are displayed on the notice board. Papers are shown to the students for signing it. They can raise their grievances about the marks obtained, which are taken care of in complete satisfaction of the students. The marklist is also displayed on the notice board. This exhibits complete transparency in examination and marking system. The college works on the policy of bestowing the faculty with incentives and awards for

their excellence in imparting quality education to students, patents, paper publication etc.

Administrative Transparency

The college administration is always pleased and enthusiastic in extending complete support for the overall development of the student. All the decisions related to effective administration are taken through meetings of various committees like IQAC, CDC, PAQIC, DAB, WDC, ICC, WRC etc. and the recommendations are implemented. This exhibits the administrative transparency of the college.

The stakeholders like alumni, parents, dependents of staff and society at large, are enthusiastically associated with the college due to the efforts of inculcation of human values, professional ethics and development of the society with complete transparency.

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |

7.2 Best Practices

7.2.1 Describe at least two institutional best practices (as per NAAC Format)

Response:

Best Practice – I

Personality Quotient (PQ) refers to the ability to understand oneself and others for effective communication and teamwork. We, at KDKCE, believe that an individual's personality consists of both how much he/she knows and how he/she portrays himself/herself. Therefore, both, technical and professional grooming is evident. Enhancement of PQ an integral part of all the student's activities taken up during each academic year. PQ provides a unique setting for developing valuable leadership skills and capacities in individuals confronting diverse public and private sector challenges. It is said that majority success traits come from personality skill besides technical skill blended with intelligence.

Title: - Making Continuous efforts in enhancing the Personality Quotient (PQ) of the students.

Objectives :-

The objective of developing Personality Quotient is to:

- Prepare them on problem solving skills.
- Provide symbolic, verbal, and graphical interpretations of statements in a problem description.
- Make them able to understand team dynamics & effectiveness.
- Make them create awareness on Engineering Ethics and Human Values.
- Instill Moral and Social Values, Loyalty and also to learn to appreciate the rights of others.
- Inculcate analytical thinking process.
- Transform the students and make them ready for Campus recruitment.

The context :

Major percent of our success in life is based on our ability to communicate with and get along with others. Therefore, a meager percent is based on our technical ability. Communication ranks among the top five skills sought out by most employers, and one of the most difficult to find in the average students.

Undoubtedly, communication skill is an important aspect of a successful career. To be effective, you need to understand how you communicate what is most important to you. Then learn how others communicate, and how to simply adjust your style to connect more effectively with them.

KDKCE conscientiously moved ahead with an effort in developing personality quotient of its stakeholders through numerous activities that provide platform to showcase their talents and make them notice every nuance of varied personality.

The Practice

- In pursuance of transforming the students and making them ready for Campus recruitment, college adapts the strategy of fusion of co-curricular and extra-curricular activities. The program outcomes along with course outcomes are achieved through well-thought activities, which make students to bring-in positive changes and explore the excellence within them. Through the meticulous assessment of the student's attainment of PO & CO in each semester, college administration, through the IQAC advisory members, suggests various co-curricular and extra-curricular activities to be undertaken for the students so as to achieve the objective. The college, then based on the nature and extent of the activity, ask the head of departments to plan and act. A coordinator/incharge of the activity is decided in the meeting and modalities are worked out. The event committee invites students to participate. The event is held with its entire objective leading to development of personality quotient. Success of every activity inculcates personality traits in the participating students. Many such activities are conducted every year for the intended purpose.

List of activities that were undertaken in recent year are as follows:

Debate, Robot war, Robot race, Student's Parliament, Layout planning, Bridge-it, Amplifia, PLC design, Student Development Program, Expert Lecture, EESA (Electrical Engineering Students Association), MESA (Mechanical Engineering Students Association), CESA (Civil Engineering Students Association), FACE-IT (Students Association of CT & IT Departments), ISF, ICI activities, Industry visits, Entrepreneurship Development programsetc.

Navonmesh, Annual Sports Meet comprising of indoor and outdoor games, Marathon, activities undertaken by the students' associations, Garbha Fest, Kite festival, Freshers Day, Yoga Day etc.

Extension Activity:

Environment Awareness and tree plantation drive, donations to Orphanage, Blood donation camps, Organ donation awareness, drug de-addiction campaign, Neki ki Deewar, Avishkar- science Model and poster competition for schools and junior college students, Nirman- Project competition for Polytechnic students, career counseling, adoption of village, cleanliness drive, energy saving, no plastic use, etc.

Research activity:

SPARK, International Conference, presentation skill competition, etc.

1. Evidence of success:-

- This practice has become the preeminent practice of the institute, imbibing behavioral competency and encouraging students to work in a spirit of unity and camaraderie. The students who enter the engineering education get transformed into competent professionals with improved personality traits. Many students excel in university/state/national level activities and have won accolades. The list is a testimony to the success of the practice.

List of event and success (Sample)

- **Problem encountered and resources required:**
- At the first instance, reluctance of the students to participate in the activity
- Societal impact on the thought process of the students making them hesitant at the initial level.
- Sense of thrashing in the competition.
- University Academic schedule and its precariousness
- **Resources required:**
- Counseling of the students to make them participate.
- A team of experts for the assessment process
- Motivation & encouragement through awards and prizes.

Contact Details:-

- Name of Principal: Dr.D.P.Singh
- Name of the Institution: KDK College of engineering, Great Nag Road, Nandanvan
- Nagpur-440009
- College Phone: 0712 271 0030
- Fax: 0712-2713658
- Website: www.kdkce.edu.in
- Email: principal@kdkce.edu.in
- Mobile: 094221 15338

Best Practice II

1) Title: - Organization of National Conference and Paper

Presentation competition for students - 'SPARK'

2) Objective:-

The objectives of organizing SPARK are:

- Inculcate analytical review habits.
- Make them able to understand symbolic, verbal, and graphical interpretations of statements in a problem description.
- Make them able to understand and assimilate research findings and write a technical paper.
- Create awareness on professional and social ethics.

- Develop their presentation skill.
- Make them learn the application of modern tools.
- Develop in them the leadership quality and communication skill.
- Motivate them to take up latest technological advancements in their presentations.

3) The Context:-

Engineering is a profoundly creative process and technology is an outcome of engineering. It is important for the students to understand the changes that are taking place in engineering & technology throughout the world. The best way to know the development is reviewing the research papers, understanding the application and taking up further for the study. It also includes presenting the findings and its application and discussing the future of engineering through scientific breakthroughs that might occur along the way. To make it happen, the students must be provided suitable platform. We at KDKCE, initiated this process 12 years ago and it has become our USP.

4) The Practice:-

This national level conference for students has been conducted in the college since 2005. Every year, any one department is given the responsibility of its conduction on rotation basis. The administration, along with the head of departments, nominate the convener for the seminar and a committee is constituted that comprises of the faculty members from all the departments, to look after various activities of the seminar viz. communication, calling papers in their respective domains, screening, selection, hospitality, inauguration, proceedings, evaluation, awards, valedictory etc. The participation includes students from other states also. The interaction of students with experts, readily brings out the academic values among the students.

5) Evidence of success:-

The conduction of the event since 12 years, is a testimony of providing a platform for the students to exhibit their technical talent. With the passage of every year, college is witnessing the participation of more and more numbers. The participation of the students from other institutes of the region became the encouraging factor. The quality of papers, the deliberations, the discussions on engineering & technology advances, etc have the permanent footprints of success. The content of the proceedings can depict the legacy of success of the event and undoubtedly, it has become the best practice of the institute.

Year wise list of paper received and presented in the SPARK

6) Problems encountered and resources required:-

- Students lack of knowledge in proper review of the literature and taking out notes.
- Writing statement of the research finding
- Presentation fear.
- **Resources required:-**
- Open access to the available literature
- Guidance, encouragement and motivation for the write-up and presentation.
- Expert panel for verification and scrutiny of papers.
- A complete team under the leadership of convener for successful completion of competition.
- A team of expert judges.

- ICT infrastructure.

7) Contact Details:-

- Name of Principal: Dr.D.P.Singh
- Name of the Institution: KDK College of engineering, Great Nag Road, Nandanvan
- Nagpur-440009
- College Phone: 0712 271 0030
- Fax: 0712-2713658
- Website: www.kdkce.edu.in
- Email: principal@kdkce.edu.in
- Mobile: 094221 15338

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

7.3 Institutional Distinctiveness

7.3.1 Describe/Explain the performance of the institution in one area distinctive to its vision, priority and thrust

Response:

The vision of the Institute is: “Service to the Society through Quality Technical Education”.

In the process of attaining the vision of the institute, we, at KDKCE, believe in the need to explore the excellence that lies within the students. To identify and bring out the inner excellence of students, technical grooming and motivation is required.

The college, since its inception, has been working for the upliftment of the academic quality of the students of this region. Our priority has been in reaching out to the backward areas of the region and counsel the students for achieving higher education, thus enabling the process of developing the society and the nation at large.

The college has taken steps to explore the scientific and technical talents of students at school, junior college, Polytechnic and engineering and help them serve the society in a better way.

Pertaining to the Institute Social Responsibility, the college owes a great sense of responsibility in building the technical inclination among the budding students. In view of this, the college takes up the following programs:

1. COUNSELING FOR HIGHER EDUCATION:- The institute has been counseling the students for taking up higher education of their choice for many years. More efforts are being taken in the backward

areas of the region. Our faculty goes to such areas, interacts with the teachers and students, identifies the problems and tries to give amicable solution. College also provides resource material for their study. KDKCE being the institute of engineering, provides a better scientific and technical environment for students to showcase their talent.

2. AVISHKAR: - Model and poster competition for 8-12 standard students based on scientific fundamentals. The event is organized to motivate the students and bring out their talents. Students are given information about advancements in science and technology. Best entries are awarded.

3. NIRMAN: - Project competition for polytechnic students. Students from diploma in engineering participate in this event and exhibit their talent. College provides expert lecture on technological advancements. Best entries are awarded.

4. SPARK: - National conference and technical paper presentation competition. This event is conducted for undergraduate engineering students since 12 years. The fruitful interaction between experts and students, brings out academic values among the students. Best papers are awarded.

5. INDIAN AIR FORCE COMMON ADMISSION TEST: The INDIAN AIR FORCE has been conducting its Fast Track Selection procedure for the whole of central India in our campus for the past 15 years.

6. CAMPUS RECRUITMENT TRAINING: The CRT programs are organized regularly to enhance the placement of students. These programs include personality development, aptitude building and communication skill.

These programs develop leadership quality, responsibility, work coordination, communication and presentation skills and ethical values in students. Thus, efforts are taken by the entire college staff and management to cater to the shaping of the future of students in a distinctive manner by providing them platform to showcase their talent and bring out their scientific and technical capabilities along with cultivating a genuine inclination towards higher education

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

5. CONCLUSION

Additional Information :

The institute is imparting technical education since more than three decade despite many constraints and serving the society.

College conducts the free coaching in summer especially for the backward class students of Naxalite affected area. Conduction of Yoga and meditation is regular practice by college faculty as well as through social organizations like Gayatri Shakti Peeth Vichar Kranti Abhiyan Youth Organization of Nagpur. Special medical camps for Cancer detection & sickle cell identification are arranged. College has recently conducted Teacher Training Induction Program on Foundation Course on Human Values and professional Ethics, an initiative of AICTE.

Some of our best practices is Publishing Departmental Magazines; College Newsletter/Magazine etc. College frequently conducts Computer awareness programs for nearby slum area. During notabandi, a special workshop on digital transactions was organized.

Various cells / committees such as **Internal Quality Assurance Cell (IQAC), College Development Cell(CDC), Grievance Redressal Committee, Anti Ragging Committee, Internal Complaint Committee, Student Counselor, Women Development Cell, Women Redressal Committee, Committee for SC/ST, Minority Cell and OBC Cell** have been constituted. All the Departments have PAQIC (Programme Assessment and Quality Improvement Committee) consisting of HOD and senior faculty, DAB (Department Advisory Board) consisting of eminent academicians & industrialists which provides fillip to the vision of the college.

Concluding Remarks :

KDKCE, Nagpur is preferred destination for aspiring students due to quality education, matching infrastructure, robust teaching-learning practices as well as holistic growth and good employability of the students.

College is having clearly defined vision and mission statements striving to impart quality education. Being adopted with best practices like Outcome based education, CRT, welfare schemes to both faculty and students is expecting to fulfill the stake holder needs and aspirations.

KDKCE promotes all-round development of the students by providing various opportunities to showcase their academic, technical, cultural, and sports talents. There are various student clubs like Club-Auto, Club-Robo etc. that help the students to pursue their interests. The overall result expected from the graduates is to become responsible citizens and lifelong learning professionals. College is definitely proving to be a strong Learning centre for the Community around.

College is looking forward towards the students' preparation for Digital India. Skill based courses are also being initiated to fulfill the Make in India initiative of Nation.

As per NAAC guidelines, we have completed the first step of Assessment and Accreditation. The Institutional Information for Quality Assessment (IIQA) is approved on 09/12/2017 with Track Id- **MHCOGN100071**.

It gives immense pleasure to submit **Self Study Report** of our college to NAAC, Bangalore for first cycle of accreditation. The report is an outcome of collective efforts of all faculty and staff. It contains true and genuine information on the various parameters. This report is prepared as per the guidelines laid down by NAAC.

NAAC

6.ANNEXURE

1.Metrics Level Deviations

| Metric ID | Sub Questions and Answers before and after DVV Verification | | | | | | | | | | | | | | | | | | | | |
|-----------|--|---------|---------|---------|---------|---------|------|------|------|-----|-----|---------|---------|---------|---------|---------|----|---|---|----|---|
| 1.2.3 | <p>Average percentage of students enrolled in subject related Certificate/ Diploma programs/Add-on programs as against the total number of students during the last five years</p> <p>1.2.3.1. Number of students enrolled in subject related Certificate or Diploma or Add-on programs year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>1473</td> <td>1286</td> <td>1053</td> <td>770</td> <td>817</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>0</td> <td>00</td> <td>0</td> </tr> </tbody> </table> | 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | 1473 | 1286 | 1053 | 770 | 817 | 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | 0 | 0 | 0 | 00 | 0 |
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | | | | | | | | | | | | | | | | | |
| 1473 | 1286 | 1053 | 770 | 817 | | | | | | | | | | | | | | | | | |
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | | | | | | | | | | | | | | | | | |
| 0 | 0 | 0 | 00 | 0 | | | | | | | | | | | | | | | | | |
| 1.3.2 | <p>Number of value added courses imparting transferable and life skills offered during the last five years</p> <p>1.3.2.1. Number of value-added courses imparting transferable and life skills offered during the last five years</p> <p>Answer before DVV Verification : 42</p> <p>Answer after DVV Verification: 36</p> | | | | | | | | | | | | | | | | | | | | |
| 2.4.4 | <p>Percentage of full time teachers who received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the last five years</p> <p>2.4.4.1. Number of full time teachers receiving awards from state /national /international level from Government recognised bodies year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>1</td> <td>1</td> <td>0</td> <td>1</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>1</td> <td>1</td> <td>0</td> <td>1</td> </tr> </tbody> </table> | 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | 10 | 1 | 1 | 0 | 1 | 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | 10 | 1 | 1 | 0 | 1 |
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | | | | | | | | | | | | | | | | | |
| 10 | 1 | 1 | 0 | 1 | | | | | | | | | | | | | | | | | |
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | | | | | | | | | | | | | | | | | |
| 10 | 1 | 1 | 0 | 1 | | | | | | | | | | | | | | | | | |
| 3.1.3 | <p>Number of research projects per teacher funded, by government and non-government agencies, during the last five year</p> <p>3.1.3.1. Number of research projects funded by government and non-government agencies during the last five years</p> | | | | | | | | | | | | | | | | | | | | |

Answer before DVV Verification : 32

Answer after DVV Verification: 4

3.3.4 Number of research papers per teacher in the Journals notified on UGC website during the last five years

3.3.4.1. Number of research papers in the Journals notified on UGC website during the last five years

Answer before DVV Verification:

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 52 | 24 | 48 | 30 | 40 |

Answer After DVV Verification :

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 45 | 22 | 41 | 28 | 37 |

3.4.3 Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the last five years

3.4.3.1. Number of extension and outreach Programs conducted in collaboration with Industry, Community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., year-wise during the last five years

Answer before DVV Verification:

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 5 | 4 | 3 | 2 | 5 |

Answer After DVV Verification :

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 3 | 3 | 2 | 2 | 3 |

3.4.4 Average percentage of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the last five years

3.4.4.1. Total number of students participating in extension activities with Government Organisations, Non-Government Organisations and programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. year-wise during the last five years

Answer before DVV Verification:

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 2113 | 2081 | 1635 | 979 | 1059 |

Answer After DVV Verification :

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 403 | 552 | 515 | 249 | 314 |

3.5.1 Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc during the last five years

3.5.1.1. Number of linkages for faculty exchange, student exchange, internship, field trip, on-the-job training, research, etc year-wise during the last five years

Answer before DVV Verification:

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 15 | 7 | 5 | 0 | 3 |

Answer After DVV Verification :

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 2 | 3 | 2 | 0 | 0 |

3.5.2 Number of functional MoUs with institutions of National/ International importance, Other Institutions, Industries, Corporate houses etc., during the last five years (only functional MoUs with ongoing activities to be considered)

3.5.2.1. Number of functional MoUs with institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years (only functional MoUs with ongoing activities to be considered)

Answer before DVV Verification:

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 5 | 10 | 5 | 2 | 0 |

Answer After DVV Verification :

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 00 | 5 | 3 | 1 | 0 |

4.2.5 Availability of remote access to e-resources of the library

Answer before DVV Verification : Yes

Answer After DVV Verification: Yes

4.2.6 Percentage per day usage of library by teachers and students

4.2.6.1. Average number of teachers and students using library per day over last one year

Answer before DVV Verification : 336

Answer after DVV Verification: 336

5.1.3 Number of capability enhancement and development schemes –

1. For competitive examinations
2. Career counselling
3. Soft skill development
4. Remedial coaching
5. Language lab
6. Bridge courses
7. Yoga and meditation
8. Personal Counselling

Answer before DVV Verification : A. 7 or more of the above

Answer After DVV Verification: A. 7 or more of the above

5.1.5 Average percentage of students benefited by Vocational Education and Training (VET) during the last five years

5.1.5.1. Number of students attending VET year-wise during the last five years

Answer before DVV Verification:

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 300 | 151 | 194 | 383 | 151 |

Answer After DVV Verification :

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 300 | 151 | 194 | 383 | 151 |

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) during the last five years.

5.3.1.1. 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-wise during the last five years

Answer before DVV Verification:

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 6 | 9 | 6 | 6 | 4 |

Answer After DVV Verification :

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 5 | 8 | 5 | 6 | 4 |

6.3.2 Average percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

6.3.2.1. Number of teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies year-wise during the last five years

Answer before DVV Verification:

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 69 | 23 | 15 | 30 | 14 |

Answer After DVV Verification :

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 45 | 19 | 15 | 29 | 8 |

6.3.4 Average percentage of teachers attending professional development programs viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Program during the last five years

6.3.4.1. Total number of teachers attending professional development programs, viz., Orientation Program, Refresher Course, Short Term Course, Faculty Development Programs year-wise during the last five years

Answer before DVV Verification:

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 75 | 76 | 108 | 28 | 51 |

Answer After DVV Verification :

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 70 | 68 | 34 | 18 | 20 |

6.5.3 Average number of quality initiatives by IQAC for promoting quality culture per year

6.5.3.1. Number of quality initiatives by IQAC for promoting quality year-wise for the last five years

Answer before DVV Verification:

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 49 | 52 | 34 | 28 | 12 |

Answer After DVV Verification :

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 11 | 7 | 16 | 9 | 7 |

7.1.1 Number of gender equity promotion programs organized by the institution during the last five years

7.1.1.1. Number of gender equity promotion programs organized by the institution year-wise during the last five years

Answer before DVV Verification:

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 11 | 9 | 6 | 4 | 4 |

Answer After DVV Verification :

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 4 | 1 | 0 | 0 | 0 |

7.1.9 Differently abled (Divyangjan) Friendliness Resources available in the institution:

1. Physical facilities
2. Provision for lift
3. Ramp / Rails
4. Braille Software/facilities
5. Rest Rooms
6. Scribes for examination
7. Special skill development for differently abled students
8. Any other similar facility (Specify)

Answer before DVV Verification : B. At least 6 of the above

Answer After DVV Verification: C. At least 4 of the above

7.1.10 Number of Specific initiatives to address locational advantages and disadvantages during the last five years 7.1.10.1. Number of specific initiatives to address locational advantages and disadvantages year-wise during the last five years

Answer before DVV Verification:

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 18 | 34 | 30 | 17 | 4 |

Answer After DVV Verification :

| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 0 | 0 |

| 7.1.11 | <p>Number of initiatives taken to engage with and contribute to local community during the last five years (Not addressed elsewhere)</p> <p>7.1.11.1. Number of initiatives taken to engage with and contribute to local community year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="304 427 1046 562"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>7</td> <td>7</td> <td>3</td> <td>3</td> <td>4</td> </tr> </tbody> </table> <p>Answer After DVV Verification :</p> <table border="1" data-bbox="304 640 1046 775"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>4</td> <td>2</td> <td>2</td> <td>2</td> <td>3</td> </tr> </tbody> </table> | 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | 7 | 7 | 3 | 3 | 4 | 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | 4 | 2 | 2 | 2 | 3 |
|---------|---|---------|---------|---------|---------|---------|---|---|---|---|---|---------|---------|---------|---------|---------|---|---|---|---|---|
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | | | | | | | | | | | | | | | | | |
| 7 | 7 | 3 | 3 | 4 | | | | | | | | | | | | | | | | | |
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | | | | | | | | | | | | | | | | | |
| 4 | 2 | 2 | 2 | 3 | | | | | | | | | | | | | | | | | |
| 7.1.17 | <p>Number of activities conducted for promotion of universal values (Truth, Righteous conduct, Love, Non-Violence and peace); national values, human values, national integration, communal harmony and social cohesion as well as for observance of fundamental duties during the last five years</p> <p>Answer before DVV Verification : 12 Answer After DVV Verification :7</p> | | | | | | | | | | | | | | | | | | | | |

2.Extended Profile Deviations

| ID | Extended Questions | | | | | | | | | | | | | | | | | | | | |
|---------|--|---------|---------|---------|---------|---------|------|------|------|------|------|---------|---------|---------|---------|---------|-----|-----|-----|-----|-----|
| 1.1 | <p>Number of courses offered by the institution across all programs during the last five years</p> <p>Answer before DVV Verification : 11</p> | | | | | | | | | | | | | | | | | | | | |
| 2.1 | <p>Number of students year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="196 1379 986 1491"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>2588</td> <td>2383</td> <td>2373</td> <td>2291</td> <td>2356</td> </tr> </tbody> </table> | 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | 2588 | 2383 | 2373 | 2291 | 2356 | | | | | | | | | | |
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | | | | | | | | | | | | | | | | | |
| 2588 | 2383 | 2373 | 2291 | 2356 | | | | | | | | | | | | | | | | | |
| 2.2 | <p>Number of seats earmarked for reserved category as per GOI/State Govt rule year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1" data-bbox="196 1693 986 1805"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>1324</td> <td>1144</td> <td>1114</td> <td>1066</td> <td>1072</td> </tr> </tbody> </table> <p>Answer After DVV Verification:</p> <table border="1" data-bbox="196 1883 986 1995"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>246</td> <td>246</td> <td>246</td> <td>246</td> <td>114</td> </tr> </tbody> </table> | 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | 1324 | 1144 | 1114 | 1066 | 1072 | 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | 246 | 246 | 246 | 246 | 114 |
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | | | | | | | | | | | | | | | | | |
| 1324 | 1144 | 1114 | 1066 | 1072 | | | | | | | | | | | | | | | | | |
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | | | | | | | | | | | | | | | | | |
| 246 | 246 | 246 | 246 | 114 | | | | | | | | | | | | | | | | | |
| 3.1 | <p>Number of teachers year-wise during the last five years</p> | | | | | | | | | | | | | | | | | | | | |

| | <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>190</td> <td>166</td> <td>158</td> <td>152</td> <td>151</td> </tr> </tbody> </table> | 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | 190 | 166 | 158 | 152 | 151 |
|---------|--|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | | | | | | | |
| 190 | 166 | 158 | 152 | 151 | | | | | | | |
| 3.2 | <p>Number of full time teachers year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>190</td> <td>166</td> <td>158</td> <td>152</td> <td>151</td> </tr> </tbody> </table> | 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | 190 | 166 | 158 | 152 | 151 |
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | | | | | | | |
| 190 | 166 | 158 | 152 | 151 | | | | | | | |
| 3.3 | <p>Number of sanctioned posts year-wise during the last five years</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>190</td> <td>166</td> <td>158</td> <td>152</td> <td>151</td> </tr> </tbody> </table> | 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | 190 | 166 | 158 | 152 | 151 |
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | | | | | | | |
| 190 | 166 | 158 | 152 | 151 | | | | | | | |
| 3.5 | <p>Number of teachers recognized as guides during the last five years</p> <p>Answer before DVV Verification : 312</p> <p>Answer after DVV Verification : 10</p> | | | | | | | | | | |
| 3.6 | <p>Number of full time teachers worked in the institution during the last 5 years</p> <p>Answer before DVV Verification : 842</p> <p>Answer after DVV Verification : 518</p> | | | | | | | | | | |
| 4.2 | <p>Total Expenditure excluding salary year-wise during the last five years (INR in Lakhs)</p> <p>Answer before DVV Verification:</p> <table border="1"> <thead> <tr> <th>2016-17</th> <th>2015-16</th> <th>2014-15</th> <th>2013-14</th> <th>2012-13</th> </tr> </thead> <tbody> <tr> <td>880.67</td> <td>889.33</td> <td>782.64</td> <td>690.19</td> <td>520.86</td> </tr> </tbody> </table> | 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | 880.67 | 889.33 | 782.64 | 690.19 | 520.86 |
| 2016-17 | 2015-16 | 2014-15 | 2013-14 | 2012-13 | | | | | | | |
| 880.67 | 889.33 | 782.64 | 690.19 | 520.86 | | | | | | | |
| 4.4 | <p>Unit cost of education including the salary component(INR in Lakhs)</p> <p>Answer before DVV Verification : 0.8472</p> <p>Answer after DVV Verification : 0.85</p> | | | | | | | | | | |
| 4.5 | <p>Unit cost of education excluding the salary component(INR in Lakhs)</p> <p>Answer before DVV Verification : 0.3402</p> <p>Answer after DVV Verification : 0.34</p> | | | | | | | | | | |