Guidelines for the Creation of the Internal Quality Assurance Cell (IQAC) and Submission of Annual Quality Assurance Report (AQAR) in Accredited Institutions

(Revised in October 2013)



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission P. O. Box. No. 1075, Opp: NLSIU, Nagarbhavi, Bangalore - 560 072 India

The Annual Quality Assurance Report (AQAR) of the IQAC

All NAAC accredited institutions will submit an annual self-reviewed progress report to NAAC, through its IQAC. The report is to detail the tangible results achieved in key areas, specifically identified by the institutional IQAC at the beginning of the academic year. The AQAR will detail the results of the perspective plan worked out by the IQAC. (Note: The AQAR period would be the Academic Year. For example, July 1, 2012 to June 30, 2013)

Part - A

1. Details of the Institution Dronacharya College of Engineering 1.1 Name of the Institution Village - Khentawas 1.2 Address Line 1 Farrukhnagar Address Line 2 Gurgaon City/Town State Haryana Pin Code 123506 principal@ggnindia.dronacharya.info Institution e-mail address 0124-2375502/3/4 Contact Nos. Prof (Dr.) B. M. K. Prasad Name of the Head of the Institution:

0124-2275327

9910380104

Tel. No. with STD Code:

Mobile:

Name of the IQAC Co-ordinator:	Prof (Dr.) Sri Krishan Yadav
Mobile:	9910236363
IQAC e-mail address:	deanacademics@ggnindia.dronacharya.info
1.3 NAAC Track ID	12459
1.4 Website address:	www.dronacharya.info

1.5 Accreditation Details

Web-link of the AQAR:

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	В	07	2005	2010
2	2 nd Cycle	В	2.92	2012	2017
3	3 rd Cycle				
4	4 th Cycle				

www.ggnindia.dronacharya.info/AQAR2018

1.6 Date of Establishment of IQAC: DD/MM/YYYY 05/12/2005

1.7 AQAR for the year (for example 2010-11) 2017-18

1.8 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC ((for example AQAR 2010-11submitted to NAAC on 12-10-2011)

i.	AQAR 2016-17	(13/09/2017)
ii.	AQAR 2015-16	(19/09/2016)
ii.	AQAR 2014-15_	(21/08/2015)
iv.	AOAR 2013-14	(12/08/2014)

1.9 Institutional Status	
University	State Central Deemed Private N.A
Affiliated College	Yes \[\sqrt{No} \]
Constituent College	Yes No √
Autonomous college of UGC	Yes No √
Regulatory Agency approved In	nstitution Yes \[\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\sqrt{\cong}}}}} No \[\] \[\
(eg. AICTE, BCI, MCI, PCI, NO	CI)
Type of Institution Co-educati	ion Men Women
Urban	Rural V Tribal
Financial Status Grant-in	n-aid \square UGC 2(f) $\boxed{\lor}$ UGC 12B $\boxed{\lor}$
Grant-in-aid + S	Self Financing ☐ Totally Self-financing √
1.10 Type of Faculty/Programme	
Arts Science	e Commerce Law PEI (Phys Edu)
TEI (Edu) Engineer	ring Health Science Management
Others (Specify)	
1.11 Name of the Affiliating University	ersity (for the Colleges) Maharishi Dayanand University, Rohtak (Haryana)
1.12 Special status conferred by C	entral/ State Government UGC/CSIR/DST/DBT/ICMR etc
N.A.	
Autonomy by State/Centr	ral Govt. / University No

University with Potential for Excellence	UGC-CPE
DST Star Scheme	UGC-CE
UGC-Special Assistance Programme	DST-FIST
UGC-Innovative PG programmes	Any other (Specify)
UGC-COP Programmes	
2. IQAC Composition and Activities	
2.1 No. of Teachers	6
2.2 No. of Administrative/Technical staff	4
2.3 No. of students	2
2.4 No. of Management representatives	1
2.5 No. of Alumni	2
2. 6 No. of any other stakeholder and community representatives	2
2.7 No. of Employers/ Industrialists	2
2.8 No. of other External Experts	1
2.9 Total No. of members	20
2.10 No. of IQAC meetings held	2
2.11 No. of meetings with various stakeholders	
Faculty Non-Teaching Staff	Student Alumni Others

2.12 Has IQAC received any funding from UGC during the year? Yes \square No $\boxed{}$	
If yes, mention the amount	
2.13 Seminars and Conferences (only quality related)	
(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC	
Total Nos. 33 International 1 National 17 State 3 Institution Level	12

3.2.2

(ii) Themes

Virtual Lab, Interview Skills, Electric Power System, Entrepreneurship Awareness Camp, Use of ICT in education, College to Corporate Program Soft Skills & Workplace Management, Cryptography, Scopes and Basics of Quality Tools in Industries, Wireless & Mobile Communication through ICT, Android, Scilab, Information Security, Big Data, Minecraft: Hour of Code, NPTEL Awareness, Programming, Break barriers. Create wealth. Change India, Advancement in Technology and Real Time Challenges, Role of Technology, CISCO Networking, Engineering Physics, Pedagogy for Online and Blended Teaching-Learning Process, Inform, Advise and Inspire

2.14 Significant Activities and contributions made by IQAC:

- Organized the CSI Regional Student Convention (RSC 2018) with the theme of "Advancement in Technology and Real Time Challenges" (ATRTC-2018)" and sponsored by I3india, AD Hospitalities Services and FestPav.com.
- Conducted 5 Entrepreneurship Awareness Camps in association with EDI Ahmedabad under DST -NIMAT Scheme.
- Celebrated **National Technology Day** sponsored by DST, Govt of Haryana. 350 participants took part in celebration of the event.
- International Yoga Day was Celebrated
- Organized a program "Inform, Advise and Inspire" The program was conducted as an online face-to-face interaction with the speakers Mr. Kamlesh Kumar (Senior

- Structural Engineer, Chicago, USA) and Mr. Krashan Singhal (Senior Water Resources Engineer, Chicago, USA) 2nd November, 2017.
- Conducted one-day workshop on "Virtual Labs" in association with IIT Delhi.
- Organized two 15 days AICTE approved Faculty Development Program (FDP) on "Foundation Program in ICT for Education" under (PMMMNMTT), MHRD, Govt. of India in association with IIT Bombay on 24th 25th March 2018.
- Entrepreneurship Development Cell (EDC) of college celebrated E-Week 2018 by conducting many activities inside and outside the campus. 10th 16th February 2018
- Organized a one day "Orientation Program" to make the budding technocrats well acquainted with various labs, facilities as well as execution of academic planning 29th July 2017
- SPIC MACAY Chapter inaugurated in the college.
- Conducted a two-day Technical Enhancement Program (TEP) on "Virtual Lab and Microsoft Office Excel"
- Microsoft Innovation Centre of college organized "Microsoft Azure Workshop" on 31st August 2017.
- ISTE STTP workshop on "ELECTRIC POWER SYSTEM" organized by IIT Kharagpur under National Mission on Education through ICT (NMEICT) sponsored by the Ministry of Human Resource Development, Govt. of India conducted at college campus
- Organized **one-day session on "Interview Skills"** in collaboration with **IBS Business School, Gurgaon** for the Final Year students.
- Organized "ACME-17" One Day Summit by IT Professionals for the final year students driven by the IT Experts and Alumni.
- Organized a workshop on "Google Buzz" for CSE & IT students.
- EDC of college organized "NEN Orientation Program" headed by Ms. Shruti (Regional Manager, Wadhwani Foundations New Delhi).
- ASCE Student Chapter of college hosted "The Motivational Talk for Civil Engineering Students" on 21st Sept 2017. Er. J S Rosha, President, ASCE (Northern India Region,) was the motivational speaker.
- Organized an expert lecture on "Scopes and Basics of Quality Tools in Industries" where keynote speaker was Dr. Rajeev Kumar Saha, Asst. Prof., YMCA UST, Faridabad

- Organized one- day workshop on the topic "Introduction to Cryptography" conducted by Prof (Dr.) Rajendra Kumar Sharma, Faculty of Mathematics, IIT, Delhi in college campus.
- Conducted face to face interaction of two AICTE approved Faculty Development Program (FDP) on "Pedagogy for Online and Blended Teaching-Learning Process FDP201x'" under Pandit Madan Mohan Malaviya National Mission for Teachers and Teaching(PMMMNMTT), MHRD, Govt. of India.
- Organized the event of Tree Plantation at college campus.
- Conducted Face to Face Interaction of College to Corporate Program "Soft Skills & Workplace Management" organised by **IIT**, **Bombay** using **A-View**.
- Organized a "Project Exhibition and Poster Presentation-INSPIRE -2017"
- Conducted a five day short term course on "Wireless & Mobile Communication through ICT" under the National Mission on Education through ICT (NMEICT) in collaboration with NITTTR Chandigarh.
- College in association with Network Bulls Gurgaon organized a workshop on "CISCO Networking"
- Microsoft Innovation Centre of college organized a one-day workshop on "Building Your Professional Profile".
- Organized a workshop on "BIG DATA" in association with RCPL India.
- Organized a guest lecture on "Information Security" where Mr. I. L. Narasimha Rao (Project Manager) from C-DAC Hyderabad was the keynote speaker.
- Conducted lecture demonstration on Scilab organized by FOSSEE team, IIT Bombay under the aegis of Pandit Madan Mohan Malaviya National Mission for Teachers and Teaching (PMMMNMTT), MHRD, Govt of India.
- Organized the inter college **Techno-Debate Competition**.
- Google Developer Student Club of college organized a workshop on "Android".
- Blood Donation Camp organized in association with Rotary Club.
- Organized a guest lecture on "Basics Concepts in Engineering Physics". The speaker for the lecture was Dr. Ravi Kant Soni, Department of Physics, IIT-Delhi.
- Organized a series of workshop on "Minecraft: Hour of Code"
- Organized summer school on Microsoft Azure.
- Organized summer school on "Bridging the gap between college and industry"

- Organized summer school on "Assistive Technology."
- Organized summer school on "Internet of Things".
- Organized summer school on "GATE".
- Organized summer school on "VHDL".
- Organized summer school on "Data Science using R".
- Organized summer school on "JAVA & Angular JS".

2.15 Plan of Action by IQAC / Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality Enhancement and the outcome achieved by the end of the year *

Plan of action	<u>Achievements</u>				
- To organize Faculty Development Programme	Many FDPs have been organized during the year				
- More industrial visits for students in core companies to make them understand practical concept of the topics	Many Industrial Visits organized to CSIR-CEERI, Centre of e-Governance, Mahanagar Telecom Nigam Ltd(MTNL), National Institute of Solar Energy, Gwal Pahari, National Institute of Solar Energy, Gurgaon Huawei, Hero Motor Corp, UNO Minda, , Carrier AC and Refrigeration Ltd, Network Bulls, Nano Electrotech Pvt. Ltd., Networkers Guru, ,Automation Engineers A.B. Pvt. Ltd., Dudhmansagar Dairy (Amul), Manesar, Gurgaon, Power Grid Corporation of India Limited, Road Over Bridge, Vulcan Forge Pvt. Ltd.				
- To Enhance cultural activities	Spic Macay Chapter inaugurated				
 College will emphasize to conduct more placement drive of Core Company. 	 Many Core companies visited campus for placement: Samsung R&D Institute India., Capgemini Technology Services India Ltd., 3SC (SS Supply Chain Solutions Pvt. Ltd.), Communications Test Design India Pvt. Ltd., Wipro Limited, Toshi Automatic Systems, Singularity Automation Pvt. Ltd., Nippon Seiki Instruments India (P) Ltd., Minda Nabtesco 				

	Automotive Pvt. Ltd and many more
- More activities will be conducted under student chapter.	 ISTE Student Chapter organized an one day session on "Interview Skills" ISTE Student Chapter organized one- day workshop on the topic "Introduction to Cryptography" ISTE Student Chapter organized a "Project Exhibition and Poster Presentation-INSPIRE -2017". ISTE Student Chapter organized a guest lecture on "Basics Concepts in Engineering Physics". CSI Student Branch organized the "CSI Regional Student Convention (RSC - 2018)" CSI Student Chapter organized "ACME-17" – One Day Summit by IT Professionals. CSI Student Chapter in association with Network Bulls Gurgaon organized a workshop on "CISCO Networking". CSI Student Chapter organized a workshop on "BIG DATA". CSI Student Chapter organized a guest lecture on "Information Security". SPIC MACAY Chapter organized an Inaugural Concert under Versant Series. ASCE Student Chapter hosted "The Motivational Talk for Civil Engineering Students" IMechE Student Chapter organized expert lecture "Scopes and Basics of Quality Tools in Industries". IMechE Student Chapter organized the inter college Techno-Debate Competition. ASCE Student Chapter organized a program named "Inform, Advise and Inspire".
- Entrepreneurship Awareness Camp will be organized under Entrepreneurship Cell.	Entrepreneurship Development Cell organized Five Entrepreneurship Awareness Camps in association Entrepreneurship Development Institute, Ahmedabad
- Extra classes & counselling for weak students at more minute level to improve the results.	Extra classes for academically weak students are conducted.
- Encourage students to participate in various competitions.	Students won many prizes in technical competitions.
	Winners of Diversity Track in "Microsoft

	 Imagine Cup 2018" - Global competition organized by Microsoft. One Project was awarded as the winner and one project won Viewer's Choice Award in NES Innovation Awards 2018 organized by Natarajan Education Society at Pune. Won 2nd prize in "The Young Entrepreneurs Panel" organized by Faridabad Industries Association (FIA) Team selected as finalists in Accenture Innovation Challenge 2017 organized by Accenture. Won 2nd position during FAER-McAfee Scholar Award Program 2017-18 at Bangalore. Awarded as Runner Up (cash prize of Rs. One lakh) in project competition "Inter throne 2017" organized by Reliance Won 4th rank in "Stand India Competition 2017" organized by AICTE & CBR
Promote close alumni interaction with current students.	Regular sessions on technical enhancement conducted by Alumni
To conduct summer schools internship on latest technology at college campus * Attach the Academic Calendar of the	 Organized Summer School on "Microsoft Azure" Organized Summer School on "Bridging the gap between college and industry" Organized Summer School on "Assistive Technology" Organized Summer School on "Internet of Things" Organized Summer School on "GATE" Organized Summer School on "VHDL" Organized Summer School on "Data Science using R" Organized Summer School on "JAVA & Angular JS"

^{*} Attach the Academic Calendar of the year as Annexure.

2.15 Whether the AQA	AR was placed	in statutory body	Yes \[\sqrt{\sq}}}}}}}\signtarinftite{\sintitta}\sintitita}\signt{\sin}\signtitta}\signt{\sintitta}\sintitita}\signtitta\sintititit{\sintitit{\sintiin}}\signtitta\sintititit{\sintitit{\sintiin}}}}}\signtifien\sintitititititit{\sintititit{\sintiin}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}	No
Management $\sqrt{}$	Syndicat	te Any	other body	
Provide the details of t	the action taker	1		
AQAR was discusse members were incor		Council meeting and th	ne suggestions give	n by the
		Part – B		
Criterion – I				
1. Curricular As	spects			
1.1 Details about A	Academic Progr	rammes		
Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD				
PG	04	00	04	
UG	08	00	08	
PG Diploma				
Advanced				
Diploma				
Diploma				
Certificate				61
Others				08
Total	12	0	12	69
Interdisciplinary				

Innovative

(ii) Pattern of pr	ogramme	s:			
		Pattern	Number of programm	nes	
		Semester	08 UG, 04 PG		
		Trimester			
		Annual			
aspects. Syllabi updating	dback : analysis of the control of	Online Months of the feedback in on/update of regulary the academic country.		ting schools (i	salient
1.5 Any new Departm N.A Criterion – II 2. Teaching, Learnin			ng the year. If yes, give	details.	
2.1 Total No. of	Total	Asst. Professors	Associate Professors	Professors	Others
permanent faculty 186		125	41	20	0
2.2 No. of permanent	faculty w	vith Ph.D.	30		

1.2 (i) Flexibility of the Curriculum: CBCS/Core/Elective option / Open options

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

	Asst. Associate Professors Professors		Professors		Others		Total			
	R	V	R	V	R	V	R	V	R	V
Ī	14	13	1	1	2	2	0	0	17	16

2.4 No. of Guest and	Visiting faculty and	Temporary faculty
	· ISITUING TOOL OFFI	

00		00	Nil	
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2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended Seminars/	19	27	NIL
Presented papers	9	14	NIL
Resource Persons	1	4	NIL

2.6 Innovative processes adopted by the institution in Teaching and Learning:

Multimedia Power Point Presentation, On Line assignments,

Virtual Labs, Spoken Tutorial for first year students,

2.7 Total No. of actual teaching days during this academic year

204

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

Double evaluation, on-line assignments

2.9 No. of faculty members involved in curriculum Restructuring /revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

1	2	2

2.10 Average percentage of attendance of students

81 %

2.11 Course/Programme wise Distribution of pass percentage:

Title of the	Total no. of students	Division				
Programme	appeared	Distinction %	I %	II %	III %	Pass %
B. Tech.	670		58.05%	2.08 %	NIL	60.14 %
		_				

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes:

Frequent meetings with the academic committee of the college and suggests changes in the teaching & learning processes and developed a mechanism in which the Teaching & Learning process is monitored closely. The progress is evaluated by comparing the various parameters

2.13 Initiatives undertaken towards faculty development

Faculty / Staff Development Programmes	Number of faculty benefitted
Refresher courses	24
UGC – Faculty Improvement Programme	00
HRD programmes	110
Orientation programmes	07
Faculty exchange programme	02
Staff training conducted by the university	02
Staff training conducted by other institutions	05
Summer / Winter schools, Workshops, etc.	07
Others (Conferences Attended National & International)	71

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	86	7	3	4
Technical Staff	39	2	1	1

<u>Criterion – III</u>

3. Research, Consultancy and Extension

- 3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution
 - Applied for research projects funding from agencies like DST, AICTE.
 - Faculty members are motivated to attend FDPs, STTPs for enhancement of knowledge in advance areas.
 - Encouraged faculty member to register for PhD.
 - Project exhibition conducted within the department for students to display their prototypes and it was evaluated by external experts.
 - Students are encouraged to write research papers for various International Journals.
 - Students are encouraged to file patents & copyrights.
 - Students are motivated to participate in National level/State level project competition.
 - Three project teams along with faculty coordinator participated in "FAER-McAfee Scholar Award Program 2017-18" organized by the Foundation for Advancement of Education and Research (FAER) and got the scholarship worth Rs. 5000
 - The project titled "Economical Smart Wheelchair with Healthcare Monitoring" under the guidance of faculty member bagged 2nd position in Best Engineering Project Competition 2018 organized by Faridabad Industries Association (FIA)-2018.
 - Two projects are selected for the National Finals of Microsoft Imagine Cup 2018

- Two projects namely "Mobile Assistive Application for Visually Impaired" and "Helping Hand for Alzheimer Patient bagged First and Second Prize under project competition SRIJAN in a technical fest INNOSKILL 2018
- Projects "IoT Based Smart Wheelchair" was awarded as the winner and project "Mobile Assistive Application for visually impaired" won Viewer's Choice Award in NES Innovation Awards 2018.
- The project "IoT Based Connected Streets in Smart Cities" was among the top finalists and the team received the hardware kit in the finale of IoT Challenge 2018 organized by i3indya Technologies in association with Radiance-18 at IIT Bombay.
- Four teams participated in **Jury Round of NES Innovation Awards 2017-18** held at Pune.
- Fifteen students (forming 5 project groups and 2 students as individual entries) participated in **STAND India 2017** competition. **2 Students** made it to **TOP 5** in individual entries while **3 Projects** made it to **TOP 10** in group entries of the competition.
- One student was selected to attend the 5th Undergraduate Summer School held at IISc, Bengaluru.
- Two students for their project "ROUTE FINDER AND COMMUNICATOR FOR BLIND, DEAF AND DUMB" are among one of the four teams selected worldwide by Microsoft.
- Two students attended the **9th National Research Methodology Workshop** organized by **PGI**, **GWALIOR**.
- Project entitled **Anti Collision System INNOTECH** was awarded as runner up and won cash prize of **Rs. 1 lakh** in the category "**Automotive/Public transport**" in the competition **Interthrone 2017.**
- Project titled "SMART POULTRY FARMING SYSTEM" with the theme Disruptive Business got selected to take part in the annual innovation extravaganza Accenture Innovation Challenge at Bengaluru.
- Students participated in the Regional Workshop of **9th India Innovation Initiative 2017** (I3-2017) Project titled **Androaqua** was shortlisted among the **Top 25 Innovators of Northern Region** based on the evaluation.

- Faculty member presented a paper titled "Design and Analysis of linear induction generator for wave energy application" in the conference **INDIACom-2018**.
- Faculty member presented the research paper titled "Perturbation of Absorption Spectral Properties of 2,3,5-Tri Chloro Pyridine and 5-Amino 2-Methoxy Pyridine by Polar and Non-polar Solvents" in 20th International Conference of International Academy of Physical Sciences (CONIAPS-XX) on Recent Advances in Physical Sciences and Future Challenges.

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number			1	
Outlay in Rs. Lakhs			3,50,000/-	

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number			08	
Outlay in Rs. Lakhs			342500 /-	

3.4 Details on research publications

	International	National	Others
Peer Review Journals	2	7	
Non-Peer Review Journals	57	21	
e-Journals	22	18	
Conference proceedings	16	3	

3.	5	Details	on]	Impact	factor	of	publicat	tions

Range 3 - 7 Average 4 h-index 4.6 Nos. in SCOPUS 4

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

Nature of the Project	Duration	Name of the	Total grant	Received
Nature of the Project	Year	funding Agency	sanctioned	
Major projects	1	MHRD (SIH)	350000	350000
Minor Projects	1	DST- NIMAT, FAER, TIME Institute, Reliance, Motorola, Natarajan Education Society, CII	342500	342500
Interdisciplinary Projects				
Industry sponsored				
Projects sponsored by the University/ College				
Students research				
projects				
(other than compulsory				
by the University)				
Any other(Specify)				
Total				

3.7 No. of books publis	shed i) With ISBN No.	2	Chapters in Edited Bool	ks 2
	ii) Without ISBN N	No.		
3.8 No. of University D	Departments receiving fur	nds from N. A	Λ.	
	UGC-SAP	CAS	DST-FIST	
	DPE		DBT Scheme/fund	s
3.9 For colleges	Autonomy	СРЕ	DBT Star Scheme	
	NSPIRE	CE	Any Other (specify)	DST-NIMAT,
				DST-Hry, CSI, MHRD

3.10 Revenue generated through consultancy	

3.11 No. of conferences organized by the Institution

Level	International	National	State	University	College
Number		1	1		
Sponsoring		DST-Hry	CSI		
agencies					

3.12 No. of faculty served as experts, chairpersons or resource persons 5
3.13 No. of collaborations International 13 National 26 Any other
3.14 No. of linkages created during this year 210
3.15 Total budget for research for current year in lakhs:

From Funding agenc	y 20	From Management of University/College	10
Total	30		

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	22
	Granted	NIL
International	Applied	NIL
	Granted	NIL
Commercialised	Applied	NIL
	Granted	NIL

3.17 No. of research awards/ recognitions received by faculty and research fellows Of the institute in the year

	Total	International	National	State	University	Dist.	College
ſ		1	9	1			5

3.18 No. of faculty from the Institution who are Ph. D. Guides and students registered under the				
3.19 No. of Ph.D. awarded by facu	lty from the Inst	itution NA		
3.20 No. of Research scholars rece	iving the Fellow	ships (Newly e	enrolled + existing ones)
JRF SRI	F Pro	oject Fellows [12 Any other	8
3.21 No. of students Participated in	n NSS events:			
	University level	145	State level	94
	National level	186	International level	
3.22 No. of students participated i	n NCC events:			
	University level	0	State level	0
	National level	0	International level	0
3.23 No. of Awards won in NSS:				
	University leve	49	State level	0
	National level	0	International level	0
3.24 No. of Awards won in NCC:	Ni	1		
	University level	0	State level	0
	National level	0	International level	0

	University forum	2	College fo	orum	34		
	NCC	0	NSS	7		Any other 10	
	Iajor Activities durir Responsibility	ig the year	r in the sph	ere of	extensio	n activities and Institutional	i
•	4 th International Yog	;a Day (IY	D) was cele	ebrated	l .		
•	Short term course or in association with N					on through ICT" was conducted	ed
•	Organized a one-day	workshop	on "Buildi	ng You	ur Profess	sional Profile"	
•	Kharagpur under Na	tional Mis	sion on Ed	ucation	through	EM" organized by IIT ICT (NMEICT) sponsored t. of India conducted at	l
•	Organized the face to "Foundation Progra of India in associati	ım in ICT	for Educa			approved FDP on IMMNMTT, MHRD, Govt.	
•		Teaching-I				d (FDP) on "Pedagogy for x" under (PMMMNMTT),	
•	Conducted a five - through ICT" in col	•				ss & Mobile Communication	n
•	October 2017. The p Malaviya National I	orogram wa Mission fo 89 remote us departm	as conducte r Teachers centres acr	d unde and Toss Inc	r the aegi Ceaching dia attend	EE team, IIT Bombay on 12tl is of Pandit Madan Mohan (PMMMNMTT), MHRD, led the live session. 18 faculty ge of Engineering,	

• Two faculty members attended a short term course on "Optical Fiber Communication

Networks and Troubleshooting" at NITTTR, Chandigarh.

3.25 No. of Extension activities organized

- One faculty member attended 7 days Faculty Development Program on "Soft Computing Techniques and Applications (SCoTA-17)" organized by Banasthali University
- One student was selected for The Asia MSP Summit 2018 by Microsoft at Taiwan, Taipei.
- Four students attended a two day workshop on "Android Development and Ethical Hacking Workshop" at DTU, New Delhi organized by WAC.
- 5 students attended the Tech Invent at Chandigarh University, Punjab.
- Six students participated in COGNIZANCE 2018, the technical fest of IIT Roorkee
- 4 students participated in SPEED -2018 and got the first prize in the competition.
- Team Ravishing Icebergs ranked in Microsoft Big Idea Challenge 2018 attended Microsoft App Innovation Circle Hands on Lab session on the topic: Cross Platform mobile Apps (Xamarin) & Mobile DevOps at Microsoft Gurgaon Office.
- 4 students attended the Global Exhibition on Smart Grid organized by India Smart Grid Forum (ISGF).
- Faculty along with the students have participated in a national level Off Road competition "MEGA ATV" organized by AUTO SPORTS INDIA
- 4 students attended the conference "Ng-India Angular Conference" and were the part of organizing team and worked along with Microsoft MVP
- 2 students participated in grand finale of Rotary In-tech Olympiad 2018 in collaboration with the Rotary Club and got the First Prize in the Competition.
- ME Department students visited the expo Auto Expo Component 2018 at India Expo Mart Pragati Maidan New Delhi organized by SAE Student Chapter, Dronacharya College of Engineering, Gurgaon.
- 8 students participated in prelims round of IOT Challenge 2018 held at Chandigarh University, Punjab.
- Three students conducted the workshop on "Introduction to Android" and "Why we need programming?" at Holy Cross School.

- Two teams along with faculty member participated in The Innovation Festival celebrated at National Science Centre, New Delhi.
- 7 teams participated in MIMAMSA Quiz organized by **IISER Pune** at **Miranda House**, **New Delhi** on **6th January 2018**.
- Two teams participated in "Science Quiz Contest" under Haryana State Council for Science & Technology (HSCST) organized by the G. C. Sec. 14 Gurgaon.
- Four Students attended "Entrepreneurship Summit" organized by Indian Institute of Foreign Trade (IIFT), New Delhi.
- 6 Microsoft Student Partners (MSPs) from college attended Microsoft Azure Day hosted by Microsoft Corporation Pvt. Ltd, Gurgaon.
- One student attended **BizTalk360** organized a **Techmeet 360** with Microsoft Corporation on the **Microsoft Azure Day**.
- Four students attended the NTPC Electron Quiz Competition at NTPC Noida.
- One faculty member along with three students attended the "Annual Inter Student Chapter Meet 2017" organized by IMechE SRM student.
- 6 MSPs from college attended Microsoft Student Partner Summit 2017 organized by Microsoft.
- 6 students attended "Global Artificial Intelligence Bootcamp" organized at Microsoft Office, Gurgaon.
- Twelve students participated and attended the event "EDUCATION TAKE OFF" organized by The Times of India.
- 8 Students participated in the Negotiation Table 2017organized by IIT Delhi
- One student along with a Microsoft trainer went as a trainer in a six days Azure Discovery Training Session organized by Microsoft at BITS, Pilani Campus
- 1 student along with his teammates of team Division 42 attended 30 hours DCB Bank Innovation Carnival and Fintech hackathon hosted by DCB and Dev Accelarators, at Incuspaze Solutions Private Limited

- The first Face to Face Interaction of the IIT, Bombay Professors with the students using A-View was held at Dronacharya College of Engineering, Gurgaon (RC Id-1216)
- 3 Microsoft Student Partners attended an event, "The Angular Day" at Microsoft Office, Gurgaon.
- Two teams were selected in World Food India Hackathon organized by the Ministry of Food Processing Industries, Government of India.
- One student was selected as one of the Finalists for the Cappemini Tech Challenge in Data Science Challenge.
- Two students attended the workshop RENDEZVOUS 2017 "AUTOMOBILE ENGINE MACHANICS AND IC ENGINE WORKSHOP" organized by IIT Delhi.
- 20 students attended the workshop on "Game Development" organized by Jamia Hamdard University, Delhi.
- Two students attended the event "NEN E-Leader Workshop".
- Four students attended the workshop "AUTOKRITI 9.0 AUDI A4 V6 and MERCEDES Engine Overhaul Workshop"
- 1 student attended the two days Global Training Partner Summit held at Microsoft office, Gurgaon
- 14 students attended one day workshop titled "Architectural Implications of Security in IoT Processors" at School of Information Technology Building IIT Delhi
- 5 students attended the event Hit Refresh In Conversation with Satya Nadella
- 6 students attended the "Mining Summit" organized by CII at Jacaranda Hall, India Habitat Centre, New Delhi.
- 2 students attended an event, "Artificial Intelligence: imagining the future" held at Microsoft Office Gurgaon.
- 1 student was invited for Technical Session on behalf of Microsoft Technical Community NCR by Kendriya Vidyalaya Sangathan, Delhi Cantt.
- 1 student participated in a National Competition on Rural and Swadeshi Startup Meet, i2S@2017, organized by UNNAT BHARAT ABHIYAN at IIT Delhi.

- Organized one-day session on "Interview Skills" in collaboration with IBS Business School, Gurgaon for the Final Year students.
- Organized a workshop on "Google Buzz"
- An expert lecture was organized on "Scopes and Basics of Quality Tools in Industries" where keynote speaker was Dr. Rajeev Kumar Saha, Asst. Prof., YMCA UST, Faridabad
- Organized a workshop on "CISCO Networking" in association with Network Bulls Gurgaon
- Organised many Industrial Visits to CSIR- CEERI, Centre of e-Governance, Mahanagar Telecom Nigam Ltd(MTNL), National Institute of Solar Energy, Gwal Pahari, National Institute of Solar Energy, Gurgaon Huawei, Hero Motor Corp, UNO Minda, , Carrier AC and Refrigeration Ltd, Network Bulls, Nano Electrotech Pvt. Ltd., Networkers Guru, Automation Engineers A.B. Pvt. Ltd., Dudhmansagar Dairy (Amul), Manesar, Gurgaon, Power Grid Corporation of India Limited, Road Over Bridge, Vulcan Forge Pvt. Ltd.
- Organized summer school on "Microsoft Azure".
- Organized summer school on "Bridging the gap between college and industry".
- Organized summer school on "Assistive Technology."
- Organized summer school on "Internet of Things".
- Organized summer school on "GATE"
- Organized summer school on "VHDL"
- Organized summer school on "Data Science using R".
- NSS volunteers of college visited the Om Shanti Retreat Centre of Brahmakumari's (ORC).
- Organized seven days NSS Annual camp on the theme "Cashless Training and Digital India Awareness".
- Students and faculty coordinator of NSS wing had attended International Volunteer Day at India Habitat Centre.
- NSS Wing organized Tree Plantation at college campus.

- NSS Wing organized a Blood Donation Camp in association with Rotary Blood Bank Gurgaon.
- Organised "NSS merit certificate distribution ceremony".
- NSS Wing organized Celebrated Rashtriya Ekta Diwas.
- Swachh Bharat Abhiyan was executed in college campus.
- A quiz competition was organized to celebrate the Constitution Day.
- Celebrated Good Governance Day.
- Celebrated 71st Independence Day.
- Celebrated 23rd International Women's Day.

Criterion - IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly	Source of	Total
		created	Fund	
Campus area	10.4	-	Institution	10.4
	Acre			Acre
Class rooms	45	-	Institution	45
Laboratories	75	-	Institution	75
Seminar Halls	9	-	Institution	9
No. of important equipment's purchased (≥ 1-0 lakh) during the current year.	-	0	Institution	0
Value of the equipment purchased during the year (Rs. in Lakhs)	-	19.54	Institution	19.54
Others	-	102.6	Institution	102.6

4.2 Computerization of administration and library

- All offices are having dedicated computer systems with peripherals like printers, scanners etc.
- Payroll is completely automated.
- College is using DCORE software package to manage teaching, learning, student's details, academic performance of the students and staff details
- Digital Library- e-Granthalaya Library Management Software
- Membership of N-List is renewed
- DELNET Membership is renewed
- Membership of British Council of India is renewed

4.3 Library services:

	Exis	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value	
Text Books	34006	7770859	32	25600	34038	7796459	
Reference Books	11056	1393847	-		11056	1393847	
e-Books	97000	5000	-	5000	97000	10000	
Journals	141	1128731	18	154679	141	1283410	
e-Journals	8415	85590	-	85590	8415	171180	
Digital Database	-	-	-	30000	-	30000	
CD & Video	-	-	-	-	-	-	
Others (specify)	-	-	-	62390	-	62390	

4.4 Technology up gradation (overall)

	Total Computer s	Compute r Labs	Internet	Browsin g Centres	Compute r Centres	Offic e	Depart - ments	Othe rs
Existin g 2015-16	1011	11	70 MBPS		1	1	8	
Added 2016-17	NIL		NIL		NIL	NIL		
Total	891	11	70 MBPS		1	1	8	

4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

- All labs are connected with LAN
- Entire campus is having Wi-Fi environment
- College is having 70 MBPS bandwidth for internet usage.
- NPTEL video lectures are available at college library & website for faculty & students.
- Training programs for faculty members & students are organized by Spoken Tutorials, IIT Bombay, NITTTR Chandigarh.
- Organized an industrial visit to Centre For e-Governance, Ministry of Electronics and Information Technology (MeitY), New Delhi.
- Organized an industrial visit to **Huawei Telecommunications India Pvt. Ltd.**, **Mahanagar Telecom Nigam Ltd (MTNL) and Network Bulls.**
- Organized one day workshop on "CISCO Networking" in association with Network Bulls Gurgaon.
- Organized guest lecture on "Information Security" in association with C-DAC Hyderabad
- Organized a series of workshop on "Minecraft: Hour of Code".
- Celebrated **National Technology Day** sponsored by DST, Govt of Haryana.
- Organized a workshop on "Google Buzz" for CSE & IT students.
- Conducted a five day short term course on "Wireless & Mobile Communication through ICT" in collaboration with NITTTR Chandigarh.
- Conducted face to face interaction of two AICTE approved (FDP) on "Pedagogy for Online and Blended Teaching-Learning Process FDP201x" under (PMMMNMTT), MHRD, Govt. of India.
- Lecture demonstration on Scilab was organized by FOSSEE team, IIT Bombay on 12th October 2017. The program was conducted under the aegis of Pandit Madan Mohan Malaviya National Mission for Teachers and Teaching (PMMMNMTT), MHRD, Govt of India. Total 89 remote centres across India attended the live session. 18 faculty

members from various department of **Dronacharya College of Engineering**, **Gurgaon** attended the session.

- Two faculty members attended a short term course on "Optical Fiber Communication Networks and Troubleshooting" at NITTTR, Chandigarh.
- One faculty member attended 7 days Faculty Development Program on "Soft Computing Techniques and Applications (SCoTA-17)" organized by Banasthali University
- One student was selected for The Asia MSP Summit 2018 by Microsoft at Taiwan, Taipei.
- Four students attended a two day workshop on "Android Development and Ethical Hacking Workshop" at DTU, New Delhi organized by WAC.
- 4 students attended the Global Exhibition on Smart Grid organized by India Smart Grid Forum (ISGF).
- 6 students attended "Global Artificial Intelligence Bootcamp" organized at Microsoft Office, Gurgaon.
- 8 students participated in prelims round of IOT Challenge 2018 held at Chandigarh University, Punjab.
- Three students conducted the workshop on "Introduction to Android" and "Why we need programming?" at Holy Cross School.
- Two teams along with faculty member participated in The Innovation Festival celebrated at National Science Centre. New Delhi.
- 7 teams participated in MIMAMSA Quiz organized by **IISER Pune** at **Miranda House**, **New Delhi** on **6th January 2018**.
- Two teams participated in "Science Quiz Contest" under Haryana State Council for Science & Technology (HSCST) organized by the G. C. Sec. 14 Gurgaon.
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- One student attended **BizTalk360** organized a **Techmeet 360** with Microsoft Corporation on the **Microsoft Azure Day**.

- 6 MSPs from college attended Microsoft Student Partner Summit 2017 organized by Microsoft.
- One student along with a Microsoft trainer went as a trainer in a six days Azure Discovery Training Session organized by Microsoft at BITS, Pilani Campus
- 3 Microsoft Student Partners attended an event, "The Angular Day" at Microsoft Office, Gurgaon.
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- 20 students attended the workshop on "Game Development" organized by Jamia Hamdard University, Delhi.
- Four students attended the workshop "AUTOKRITI 9.0 AUDI A4 V6 and MERCEDES Engine Overhaul Workshop"
- 2 students attended an event, "Artificial Intelligence: imagining the future" held at Microsoft Office Gurgaon.
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- 5 students attended the event Hit Refresh In Conversation with Satya Nadella
- 6 students attended the "Mining Summit" organized by CII at Jacaranda Hall, India Habitat Centre, New Delhi.
- 1 student was invited for Technical Session on behalf of Microsoft Technical Community NCR by Kendriya Vidyalaya Sangathan, Delhi Cantt.

4.6 Amount spent on maintenance in lakhs:

i) ICT 18.54

ii) Campus Infrastructure and facilities 13.45

iii) Equipment 2.61

iv) Others 36.35

Total: 70.95

Criterion - V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

- Notices regarding various activities and student support programs are prominently displayed on notice boards.
- E-mail & SMS to all students regarding various student support services are sent frequently.

5.2 Efforts made by the institution for tracking the progression

- Complete Information of every student is maintained at the department level
- This information is updated fortnightly
- Detailed analysis of the sessional examination is being done at department level and corrective actions are initiated wherever required.

5.3 (a) Total Number of students

U. G.	P. G.	Ph. D.	Others
1598	54	NIL	NIL

(b) No. of students outside the state

768

(c) No. of international students

NIL

No	%
1377	83.35

Men

No	%
275	16.65

Women

Last Year						This Year					
General	SC	ST	OBC	Physicall y Challeng ed		Genera 1	SC	ST	OB C	Physicall y Challeng ed	Total
1306	78	0	549	0	1933	1193	49	3	407	0	1652

Demand ratio

Dropout % 1.84

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

No. of students beneficiaries

966

5.5 No. of students qualified in these examinations

NET

IAS/IPS etc

SET/SLET

State PSC

GATE

UPSC

12

CAT

Others

5.6 Details of student counselling and career guidance

- Counselling of final year students is being done at a very minute level.
- Career guidance cell guides students about various options after B. Tech.
- Organized a one-day workshop on "Building Your Professional Profile".
- Organized one-day session on "Interview Skills" in collaboration with IBS Business School, Gurgaon for the Final Year students.
- Organized summer school on "Bridging the gap between college and industry".
- Organized a program "Inform, Advise and Inspire".
- Conducted Face to Face Interaction of College to Corporate Program "Soft Skills & Workplace Management" organised by IIT, Bombay using A-View.

-	Counselling of final year students is being done at a very minute level.	527
	No. of students benefitted	

5.7 Details of campus placement

	Off Campus		
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
130	389	230	44

5.8 Details of gender sensitization programmes

- Celebrated the 23rd International Women's Day.
- 3 female students conducted the session on "Microsoft Azure Workshop".
- Dronacharya College of Engineering Gurgaon with NITTR, Chandigarh conducted a five - day short term course on "Wireless & Mobile

Communication through ICT" under the National Mission on Education through ICT (NMEICT) from 30th October to 3rd November 2017. 21 female faculty members from ECE, CSE, IT & CSIT Departments of Dronacharya College of Engineering, Gurgaon attended the short term course.

- 4 female MSP's students organized a one-day workshop on "Building Your Professional Profile".
- Female faculty member is the coordinator of Google Developer Student Club.
- Microsoft Innovation Center of college organized a series of workshop on "Minecraft: Hour of Code". The key speakers of the workshop were the female Microsoft Student Partners (MSPs).
- Female faculty member attended "Prof. B. S. Garg Felicitation Seminar on Green Chemistry on Human health and Environment" organized by Green Chemistry Network Centre, University of Delhi, Delhi.
- 2 female students attended World Biofuel Day-2017 Celebrations at Constitution Club of India, New Delhi.
- 1 female faculty member being the Student Branch Counsellor of CSI represented the college at the two day conference "TechNext India 2018' and received the award "Best Institute of the Year" under the category "Innovative pedagogical approaches and tools"
- 2 female faculty member attended the awareness workshop "Technology Enhanced Learning (NPTEL)" organized by IIT Madras
- Two female faculty members represented college in the "Feedback Session of QEEE Coordinators" at IIT Madras.
- Female faculty members attended one day expert talk on Electrical Solar Vehicle Design and Development organized by the Imperial Society of Innovation Engineers, INDIA (ISIEINDIA) at IIT Delhi
- 1 female faculty member attended one day workshop on "Induction Program" was held at AICTE Head Quarters, New Delhi
- 1 female faculty member attended GDG DevFest 2017 organized by GDG New Delhi at Investopad, Gurgaon.
- 1 female faculty member attended one day national seminar on the topic "Stochastic Processes and Applications" conducted by department of statistics, M.D. University, Rohtak on 11th November 2017
- 1 female faculty member presented the research paper titled "Perturbation of Absorption Spectral Properties of 2,3,5-Tri Chloro Pyridine and 5-Amino 2-Methoxy

Pyridine by Polar and Non-polar Solvents" in 20th International Conference of International Academy of Physical Sciences (CONIAPS-XX) on Recent Advances in Physical Sciences and Future Challenges, organized by Faculty of Science, Osmania University, Hyderabad.

- 1 female faculty member attended one week Faculty Development Program on Soft Computing Techniques and Applications (SCoTA-17) under the Scheme of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, MHRD, Government of India organized by Banasthali University, Rajasthan
- The project under the guidance of female faculty member of bagged 2nd position in Best Engineering Project Competition 2018 organized by Faridabad Industries Association (FIA)-2018.
- Three project teams and a female faculty coordinator participated in "FAER-McAfee Scholar Award Program 2017-18" organized by the Foundation for Advancement of Education and Research (FAER) and got a Project scholarship.
- Two teams under the guidance of female project mentor bagged two prizes in NES Innovation Awards 2018.
- The project "IoT Based Connected Streets in Smart Cities" under the guidance of female faculty member participated in the finale of IoT Challenge 2018 organized by i3indya Technologies in association with Radiance-18 at IIT Bombay was among the top finalists and the team received the hardware kit
- Two students V. Sai Anila(18562), Tamanna Sood(18557) from Microsoft Innovation Center of Dronacharya College of Engineering, Gurgaon, got selected in Microsoft Patent Program(MPP) for their project "ROUTE FINDER AND COMMUNICATOR FOR BLIND, DEAF AND DUMB" on 28th August, 2017. They are among one of the four teams selected worldwide by Microsoft - RESEARCH PATENT.
- Project "Route Finder and Communicator for Blind, Deaf and Dumb" made by female students got selected in Microsoft Patent Program(MPP)
- Project entitled Anti Collision System INNOTECH under the guidance of female faculty member was awarded as runner up and prize of Rs. 1 lakh in the category "Automotive/Public transport" of Interthrone 2017.
- Project titled "SMART POULTRY FARMING SYSTEM" under the guidance of female faculty member got selected to take part in the annual innovation extravaganza Accenture Innovation Challenge.

5.9 Students Activities

5.9.1 No. of students participated in Sports, Games and other events

State/ University level 6	National level 1	International level
No. of students participated in cu	lltural events	
State/ University level 2	National level	International level
5.9.2 No. of medals /awards won by s	students in Sports, Games	and other events
Sports: State/University level 1	National level 1	International level
Cultural: State/ University level 1	National level	International level
10 Scholarships and Financial Support		

5.1

	Number of students	Amount
Financial support from institution	30	1840500
Financial support from government	20	
Financial support from other sources	17	850000
Number of students who received International/ National recognitions		

5.11 Student organised / initiatives	S			
Fairs : State/ University level	1	National level 8	International level	_
Exhibition: State/ University level	1	National level 2	International level	

5.12	No. of social initiatives undertaken by the students	13	
5.13 N	Major grievances of students (if any) redressed:	Nil	

Criterion - VI

6. Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Vision – To be a renowned name in the field of Education and Academic Excellence while maintaining International Standards, Integrity and Ethics.

Mission – To provide innovative & quality education with high standards to achieve academic excellence.

To Respect and Comply with University and AICTE Norms, International Quality Standards and Legal requirements.

To continually improve our competitive edge through innovations, motivation, suggestion schemes and Student Feedbacks.

6.2 Does the Institution has a management Information System

• Yes- College has **DCORE**- College's customized Management Information System

6.3 Quality improvement strategies adopted by the institution for each of the following:

6.3.1 Curriculum Development

- College is affiliated to M. D. University Rohtak and the change in curriculum is being done by the university. Representatives of the college put their point of view in all meetings held at MD University, Rohtak regarding the development of curriculum.
- Above than University curriculum, NPTEL, Spoken Tutorial, QEEE certifications and online International Certification done in every semester.

6.3.2 Teaching and Learning

All the class rooms are equipped with LCD Projectors and High Speed Internet connectivity. All classes are divided into two tutorial groups for proper mentoring. Online assignments, PPTs, notes, lab manuals and other information related with subject is available on college website for student reference.

6.3.3 Examination and Evaluation

- University exams are conducted by M. D. University Rohtak,
- Three internal sessional are conducted by the college every semester to judge the performance of students at various intervals.
- College is also one of the spot evaluation centres of M. D. University where answer sheets of university exams are evaluated.

6.3.4 Research and Development

- Students are encouraged for Paper Publications and Paper Presentation.
- Students are encouraged for filing Patents & copyrights
- College has well established R&D Lab with latest equipment's.
- Students are encouraged to participated in various project competitions in state and national level.

6.3.5 Library, ICT and physical infrastructure / instrumentation

- Library is maintained digitally.
- Remote centre of IIT Bombay and IIT Kharagpur for conducting FDPs.
- Nodal Centre of IIT Delhi for Virtual Labs.
- Resource Centre of Spoken Tutorial of IIT Bombay for online certifications.
- e-Yantra Lab.
- Microsoft Innovation Centre.
- Pearson Lab for online certification examination.
- Auditorium having capacity of 500 person.
- All labs are equipped with latest machines and software.
- EDC and Incubation Lab
- All class rooms, tutorials rooms, seminar halls, conference room, laboratories pertaining each department is enabled with ICT tools
- Cafeteria, medical room, sports area adequate vehicle-parking space for students and staff are functioning effectively.

6.3.6 Human Resource Management

College is having its separate human resource department for addressing the grievances of the staff members. This department also takes care of all activities related with human resource management in the college. Suggestion box is also available on Website.

6.3.7 Faculty and Staff recruitment

Before the beginning of semester, all HODs are requested to give the requirement for next semester. Advertisements in two leading News Papers are published and candidates can also through career with us on website and eligible candidates are called for interview by the Human Resource Department. Interview is conducted by an expert committee which also includes subject experts. All terms & conditions and service rules are explained to the selected candidates. Appointment letter is offered to all selected candidates.

6.3.8 Industry Interaction / Collaboration

- Microsoft Microsoft IT Academy
- Pearson-Pearson Testing Centre
- ORACLE for Oracle IT Academy
- IIT Bombay- Remote Centre for conducting workshops & FDPs
- IIT Kharagpur- Remote Centre for conducting workshops & FDPs
- NPTEL- Local Chapter for Online courses
- CISCO for CISCO Networking Academy
- Huawei Industrial Visit of students
- Maruti Industrial Visit of students
- Network Bulls Industrial Visit of students
- Android ATC Authorized Training Centre
- Spoken Tutorial (IIT Bombay) Resource Centre for Faculty Development Program, Online Certification, Awareness Session
- iTEP Education India- For English language proficiency test
- Kyushu Institute of Technology, Japan- For Joint research, exchange of academic & publication, exchange of faculty members for research, discussion and lectures.
- Consultancy Development Centre (CDC) is an Autonomous Institution of the Department of Scientific and Industrial Research (DSIR), Ministry of Science and Technology, Government of India. For the Programme "Building Capacities for Consultancy Development & Knowledge Management with Partner Institution (KMPI).
- QEEE an initiative of MHRD For D2S (Direct to Student) Program

- C++ Institute Authorized Academy Program- For e-learning system to deliver C/C++ courses
- IIT Delhi (Virtual Lab)-Nodal Centre for virtual lab
- Bosch India Ltd- Training Programme for Students
- Cocube .- For pre-employment assessment skills & Aptitude Test
- Nicco Venture Ltd.- For pre-employment assessment skills & Aptitude Test
- Ted consulting- For development and deployment of Cloud based services
- Xentaqsys Technologies PVT LTD For DCORE software package for managing information across various departments and administration. And for maintaining website
- Franciscan Solutions Pvt. Ltd- For online panel for managing college information & SMS
 & Mailing services
- Confederation of Indian Industry (CII)- For interaction with industry experts
- International Forum for Excellence in Higher Education (IFEHE) For conducting National Creativity Aptitude Test (NCAT) for students.
- Indian Institute of Remote Sensing, Indian Space Research Organization (IIRS),
 Dehradun- to provide training and research in various applications of Remote Sensing,
 GIS and GPS for natural resource management and associated technologies
- CSIR-CEERI-To promote academic and research cooperation for the enhancement of knowledge and vision.
- Association of Geospatial Industries (AGI)
- American Society of Civil Engineers (ASCE)
- National Entrepreneurship Network (NEN)
- American Centre Library, New Delhi
- British Council Library, New Delhi
- National Science Library, NISCAIR, New Delhi
- Developing Library Network (DELNET), New Delhi
- N-LIST (INFLIBNET), Ahemdabad

6.3.9 Admission of Students

Admission process for all the engineering colleges in Haryana is through on-line process by Haryana State Counselling Society, Govt. of Haryana on the basis of ranking in JEE (Mains) results.

6.4 Welfare schemes for

Teaching	3
Non-teaching	5
Students	4

6.5 Tot	al corpus fund gene	erated				
6.6 Wh	nether annual financ	ial audit has b	een done	Yes √	No	
6.7 Wh	nether Academic and	d Administrati	ve Audit (AAA) have been de	one?	
	Audit Type	Ext	ternal	Internal		
		Yes/No	Agency	Yes/No	Authority	
	Academic	Yes	ISO	Yes	Committee	
	Administrative	Yes	ISO	Yes	Committee	
6.9 Wh	For nat efforts are made	r PG Program		√ No us College for	Examination F	Reforms?
C 10 W	714CG4	- les de l'Union			41 66:1: 4- 1/-	N.A.
	hat efforts are made lleges?	e by the Unive	ersity to promote	e autonomy in	the affiliated/c	N.A.

6.11 Activities and support from the Alumni Association

- Alumni made students aware about the differences between present education system and actual demands of Industries. They also disseminate significant tips on **Aptitude Test, Technical Test, HR Interview** etc. in Alumni Connect Programme.
- Alumni also support in Summer Training and Industrial training.
- Alumni visit campus time to time and guide students for projects and research work.

6.12 Activities and support from the Parent – Teacher Association

- Two parent-teacher meetings are held in every semester in college. Parents are given brief about the progress of their ward and also discussed the scope of the improvement.
- Suggestions and feedback from parents are also taken into consideration.

6.13 Development programmes for support staff

- Motivational lectures are conducted for non-teaching staff.
- Awards & certificates are also being issued for best performers.
- Skilled Development Programs are conducted for enhancement of their skills.

6.14 Initiatives taken by the institution to make the campus eco-friendly

The college is ISO 14000 certified. College is using Water Harvesting in campus. Solar Heating System is used in hostel for heating water in winters. Class rooms are made in such a way that adequate sun light and fresh air comes in all class rooms. Use of plastic items is prohibited in college canteen. Tree plantation activity is organized by NSS Wing of the college.

Criterion - VII

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the Functioning of the institution. Give details.

Innovations:

- a) Teaching curriculum is as per the Maharshi Dayanand University, Rohtak syllabus. However, all departments conduct a few more practical than prescribed in the syllabus of MDU to enlarge practical knowledge of students. These extra practical are inspired from the current industry demand and motivate them for paper publication and paper presentation on those topics.
- b) Spoken tutorial certification from IIT Bombay is introduced for all the students.
- c) Faculty members are using NPTEL Videos in their classes for better understanding of the concepts.
- d) Facility of virtual labs is available for the students.
- e) Assignments are given on-line and all notes, lab manuals; FAQs etc. are available on college website for the reference of the students.
- f) Various initiative under different student chapters are organized to channelize the talents of students like CSI, IEEE, ASCE, Entrepreneurship Development cell, Google Developer Group, etc.

7.2 Provide the Action Taken Report (ATR) based on the plan of action decided upon at the beginning of the year

- FDP's are organized in collaboration with industries like IIT Bombay, IIT Kharagpur, IIT Madras, Network bulls etc.
- Proper mentoring system is designed.
- Aptitude classes are organized for final year students for better placements.
- Extra classes for academically weak students are planned in off hours.
- Students are encouraged for attending conferences & seminar

	Give two Best Practices of the institution (please see the format in the NAAC Self-study annuals)				
Г	- Online Assignments				
	- Parents Teacher Meeting				
*P	*Provide the details in annexure (annexure need to be numbered as i, ii,iii)				
7.4	Contribution to environmental awareness / protection				
	- Encourage the students to submit the assignments online.				
	- The college is working towards implementing a completely paperless policy.				
	- Planted more than 100 trees in the campus.				
	Whether environmental audit was conducted? Yes \(\sqrt{ No} \) No \(Any other relevant information the institution wishes to add. (for example SWOT Analysis)				
	OT Analysis: engths:				
-	College is accredited by NAAC till March 2017				
-	Permanent Affiliation with Maharishi Dayanand University				
-	Remote Centre of IIT Bombay and IIT Kharagpur for FDPs.				
-	Students hold top ranks in University exams (In the last 5 years' students have grabbed				
	maximum University ranks in M. D. University).				
-	Development of students through various programs like online certifications of International				
	level.				
-	Spoken Tutorial Certification from IIT Bombay,				

Project Competition is organized every year.

SWOT Analysis:

Weaknesses

- Limited linkages with Core Industry
- Need to improve the communication skill of the students.
- Less paper presented by faculty & students in national and international conferences

SWOT Analysis:

Opportunities

- Entrepreneur Development Cell- The growing interface between entrepreneurship and education is bridging the chasms which make entrepreneurship a distant career option. Entrepreneur Development Cell of the college provides awareness to students about entrepreneurship and its scope for young technocrats.
- Consultancy development Centre. CDC is an Autonomous Institution of the Department of
 Scientific and Industrial Research (DSIR), Ministry of Science and Technology,
 Government of India set up for promotion, development and strengthening of consultancy
 skills and capabilities in the country. College in collaboration with CDC deliver certificate
 course of CDC in Technical Consulting & Management.
- Industrial Visit- Students are provided industrial exposure to give practical knowledge.
- Online certifications course from NPTEL, QEEE, Spoken Tutorials.
- College to corporate program joint initiative of Cooperate and IIT BombayX

SWOT Analysis:

Threats

- Rapidly changing technology requires more efforts to meet the standard expected by the engineering professionals.
- Students are least interested in core industry.

8. Plans of institution for next year

- Placement in core companies will be emphasized.
- Conduct summer school internship on latest technology within the Campus.
- Focus more on research and development.
- Encourage students to participate in various competitions.

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Annexure A

Abbreviations:

CAS - Career Advanced Scheme

CAT - Common Admission Test

CBCS - Choice Based Credit System

CE - Centre for Excellence

COP - Career Oriented Programme

CPE - College with Potential for Excellence

DPE - Department with Potential for Excellence

GATE - Graduate Aptitude Test

NET - National Eligibility Test

PEI - Physical Education Institution

SAP - Special Assistance Programme

SF - Self Financing

SLET - State Level Eligibility Test

TEI - Teacher Education Institution

UPE - University with Potential Excellence

UPSC - Union Public Service Commission
