3.1.2 The institution provides seed money to its teachers for research (average per year; INR in Lakhs)

3.1.2.2 Minutes of the relevant statutory bodies of the University

Sanction Letters and Minutes of Meetings of Research Council

KLE Technological University

Creating Value
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Research and Development

Earlier known as
B. V. B. College of Engineering & Technology

Date: 31.07.2019

Recommended and Sanctioned Capacity Building Projects 2019-20

SN	S/D/C	Name	Project Title	Requested Amount in L	Sanctioned Amount in L	Remarks
1.	CTIE	Prakash Kurdekar	System Design and Development for Smart Campus	5.0	5.0	Recommended
2.	CSE	Narayan D G	KLE Tech Private Cloud	1.8	1.8	Recommended
3.	ME	B B Kotturshettar	Design and Development of Service Rifle for Indian Army	3.5	2.5	Recommended for 2.5L 1.0L sanctioned in 18-19
4.		Krishnaraja Kodancha, Nagaraj Ekbote	Experimental and numerical Fracture assessment using constraint parameter of standard specimen on Aluminium alloy	4.0	2.5	Travel from the TEQIP
5.		G U Raju, Balachandra Halemani	Optimization of Tamarind particles/MWCNT reinforced Hybrid polymer nanocomposites for automotive applications	0.60	0.6	Recommended
6.		V N Gaitonde, Vinayak Kulkarni	Experimental Investigations on surface & sub surface Analysis of machined NiTi Alloys	1.5	1.5	Recommended
7.	A&R	A C Giriyapur	AI laboratory for Autonomous Systems Development	4.66	4.66	Recommended
8.	BT	Uday Muddapur, Zabin Bagewadi	Purification & Molecular Characterization of phytochemicals	1.6	1.5	Recommended Travel from TEQIP
9.		Deepak Yaraguppi, Zabin B	Purification of Biosurfactant & Molecular Cloning	2.5	2.5	Recommended
10.		Laxmikant Patil, Gururaj Tennalli, V S Hombalimath	Green Synthesis of Metallic Nano Particles & their potential biotechnological Applications	1.5	1.2	Recommended Travel and conference from TEQIP
11.	Phy	Rajashree Hodlur	Surface functionalized magnetic nanostructures & their Composites for Biological Applications	0.50	0.50	Recommended after redefining the objectives
12.	ECE	Uma M Ramesh T	Volumetric Content Generation and Processing	15.0	5.0	Recommended
			Total	42.16	29.26	

Recommended by:

Dr. P G Tewari   -

Dr. Uma Mudenagudi   -

The above recommended projects are sanctioned through the Research & Development funding.

Registrar

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Earlier known a[s]
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Research and Development

Recommended and Sanctioned RC, RG, PDDG and FSSG 2019-20 (17.07.2019)

SN	RG	Area	S/D	Name	Group Title	Amount sanctioned in L
A	**Existing RC, RG, PDDG, FSSG**					
1.	RG	Transportation	Civil	S S Quadri	Upgrading the Transportation laboratory with advanced testing equipments	--
2.	RG	Machine Learning	CSE	Meena S M	Intelligent Systems	9.4
3.	RG	Automotive Research	ECE	Nalini Iyer	Centre for Automotive Research	10.4
4.	RC	Embedded and IOT	ECE	Saroja V. S	ESDM	14.4
5.	RC	CMS	Mech	N R Banapurmath	Development of thin film for solar cell, Tribological and sensor applications	34.63
6.	RG	Bio-resource	BT	B S Hungund	Bio resource Development	4.4
7.	PDDG	CIPD	Mech	Ravi Guttal	Product Innovation, Design, Analysis Virtual Prototyping, Physical Prototyping, Product Development, processes, systems and tools	21.75
8.	FSSG	Start up	Mech	Aditya Deshapande	AKMA + Interrow cultivator	--
9.	RG	HPC, DL	CSE	Satyadhyan Chickerur	High Performance Computing, Deep Learning	50.15
10	FSSG	Modelling	CSE	Prakash B Hegade	Semantics & mathematical modelling	0.50
					Total	**145.63**
B	**New RC, RG, PDDG**					
1.	RG	Bio fertilizer	BT	B S Hungund	Sustainable Bio-solutions	3.4
2.	RG	Healthcare	BT	Zabin Bagewadi	Healthcare and Environmental Applications	5.0
					Total	**8.4**

Recommended by:

Dr. P G Tewari   -

Dr. Uma Mudenagudi   -

The above recommended projects are sanctioned through the Research & Development funding.

Registrar

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Research and Development

Date: 05/05/2018

Sanctioned Research Group, PDDG projects, Faculty student start-up projects and Sanctioned amount for the year 2018-19

S N	Name	Title	School/Dept	Sanctioned Amount
1	Dr Prakash Patil	Smart system for early detection of plant diseases & pest infestation (RG)	MCA Department	2,35,000/-
2	Prof. Aaditya Deshapande	Product design & development grant (PDDG) for Agricultural equipment	AKMA Systems *Start -up.*	2,10,000/-
			Total	4,45,000/-

Recommended by the review committee for the year 2018-19.

Recommended by:

Dr P G Tewari   :

Dr Uma Mudenagudi :

Sanctioned Research Group, PDDG projects, Faculty student start-up projects for the year 2018-19.

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Research and Development

Recommended Capacity Building Proposals 2018-19 (Phase 2)   Date: 02/11/2018

SN	S/D	Name	Project Title	Amount sanctioned in L	Remarks
1	CTIE, ME, ECE, CSE	Prakash Kurdekar	Product Design & Development for Smart Campus	5.00	Recommended
2	CSE	Somshekhar Patil, Amit K, M Moin Mulla	Software Defined Networking Test bed	1.00	Recommended
3	ECE	Nalini Iyer, Dr Saroja V S	Intelligent Power management System	1.00	Recommended as a part of ESDM cluster
4	Mech	Mantesh Choukimath Dr N R Banapurmath	High Temperature Stress Bearing Light Polymer based Nano Composite using BNNT/h-BN for Hypersonic Aircraft applications	3.00L	Equipment part is Recommended & processing needs to be done from CMS
				1.00	Recommended
5		Adarsh Patil , Dr N R Banapurmath , Dr A M Hunashyal	Effect of Micro and Nano fillers on the Mechanical properties of Aluminum metal matrix nano composites (MMNCs).	4.13	Equipment part is Recommended & processing needs to be done from CMS
				0.80	Recommended
6		B B Kotturshetar, Ravi Guttal, Balachandra H, Gururaj Fattepur	Design & Development of Low cost electric bike	1.55	Recommended
7		Ravi Guttal , Gururaj Fattepur	Additive Manufacturing for Innovative Design & Production	1.40	Recommended
8		G U Raju , Balachandra H	Development & characterization of tamarind particles/MWCNT reinforced hybrid polymer nanocomposites	0.60	Recommended
9	BT	Anil Shet	Production, Optimization and Characterization of Microbial Pectinase and its industrial application studies	--	Not presented
10	SMSR	Chetan V Hiremath	Research Capability Enhancement (RCE)	--	Suggested to conduct from the school and TEQIP funding
11	SMSR	Gurubasavarya Hiremath	Introduction of PG Diploma in " Family Business Management Programme "	--	Out of scope: Suggested to use the students and submit the new proposal
12	MCA	S.V.Budni , Nagaraj Chakalabbi	Computer Network Practice Lab	-	Suggested to propose from the department
			Subtotal for clusters	8.13	For the clusters
			Subtotal for projects	11.35	For different projects
			Total	19.48	

Recommended by:
Dr. P G Tewari   :
Dr Uma Mudengudi   :
The above projects are sanctioned through the Research & Development Funding.

Registrar

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Research and Development

Sanctioned   Capacity building project 2018-19 (23.6.2018)

N	S/D	Name	Project Title	Sanctioned Amount	Remarks
1.	CSE	S D Desai	Optimization of 3D Reconstruction Technique for CT image	0.40	First year can be started with open source, HPC facility will be provided centrally
2.	CSE	P G Sunita H Neha Shankar	Depression detection by capturing & analyzing EEG signals	0.75	RA is not required and expert can be hired on hourly basis
3.	CSE	Shankar G Neha T	3D object analysis	0.00	HPC facility will be provided centrally
4.	CSE	Narayan D G	Data Center Networking	3.00	One RA with 15K and training budget from TEQIP grant
5.	Mech	Vinayak N Kulkarni V.N. Gaitonde	Experimental Investigations on Machinability Aspects in Nickel Titanium Super-elastic Alloys	2.00	Travel budget from TEQIP grant
6.	Mech	Krishnaraja G Nagaraj Ekabote	Characterization of Newly developed Aluminum alloys: An Experimental and Numerical based Approach	1.00	Last year project which was not utilized and is continued
7.	BT	Deepak A. Y Zabin K. B	Microbial Production of Biosurfactants and its Environmental Applications	2.00	Travel budget from TEQIP grant
8.	BT	B. S. Hunugund	Study on bioactive metabolites from endophytes and related medicinal plants	1.00	Use glassware from dept and travel budget from TEQIP grant
9.	BT	Zabin k. B Uday M	Production and Characterization of Microbial Metabolites	0.50	Travel budget from TEQIP grant
10.	E&E	Sachin Angadi A. B. Raju	Investigation of Control Strategies for Renewable Energy Based Water Pumping System.	5.40	
11.	BT	Gururaj T B S Hungund	Studies on industrial applications of halophillic bacterial proteases	1.00	Use glassware from dept and travel grant from TEQIP grant
			Total	**17.05**	

Recommended by:

Dr. P G Tewari   -

Dr. Uma Mudenagudi   -

The above recommended projects are sanctioned through the Research & Development funding.

Registrar

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Research and Development

Sanctioned RC, RG, PDDG and FSSG 2018-19 (25.6.2018)

SN	RG	Area	S/D	Name	Group Title	Amount sanctioned	Remarks
A	**Existing RC, RG PDDG and FSSG**						
1	RG	Transportation	Civil	S.S Quadri	Upgrading the Transportation laboratory with advanced testing equipments	5.00	Travel budget from TEQIP grant
2	RG	Machine Learning	CSE	Meena S M	Intelligent Systems	3.75	HPC facility will be provided centrally
3	RG	Automotive Research	ECE	Nalini Iyer	Centre for Automotive Research	8.00	One RA with 15K and travel and training budget from TEQIP grant
4	RC	Embedded and IOT	ECE	Saroja V. S	ESDM	26.00	Travel and training budget from TEQIP grant, No RA sanctioned
5	RC: MS	CMS	Mech	N R Bana purmath	Development of thin film bad devises for engineering applications	21.32	No additional equipment's are sanctioned
6	RG	Bio-resource	BT	B S Hunagund	Bio resource Development	7.50	Travel budget from TEQIP grant
7	PDDG	CIPD	Mech	Ravi Guttal	Product Innovation, Design, Analysis Virtual Prototyping, Physical Prototyping, Product Development, processes, systems and tools	6.00	Travel budget from TEQIP grant
					Total	**77.57**	
B	**New RC, RG PDDG and FSSG**						
8	RG	HPC, DL	CSE	Satyadhyan Chickerur	High Performance Computing, Deep Learning	120.00	DGX-1 server is sanctioned: Establish central HPC facilty for the use of all RC, RG members, faculty and students, RA is not sanctioned Travel budget from TEQIP grant
9	FSSG	Modelling	CSE	Prakash B Hegade	Semantics & mathematical modelling	0.50	
					Total	**120.50**	
					Grant Total	**198.07**	

Recommended by:

Dr. P G Tewari   -

Dr. Uma Mudenagudi   -

The above recommended projects are sanctioned through the Research & Development funding.

Registrar

Sanctioned Capacity building projects 2017-18, September 2017- Phase2

Sl.No	Name	Project Title	Dept.	Budget (in L) Recommend
1.	P R Patil	Environment monitoring sys: Air quality monitoring of Hubballi city	MCA	2.00L
2.	Yogesh Velnkar	Building National & International Partnerships in Engineering Education	CEER	2.00L Note: prior sanction for each travel according to institute norms
3.	Gurunath Kampli	Application of Building information Modelling to preoject estimates and schedules to minimize errors, decrease estimaye preperation time and increase accuracy	Civil	4.00L
		Total		8.00L

Recommended by review committee:

Dr. P. G. Tewari

Dr. Uma Mudengudi   -

Sanctioned capacity building projects for the year 2017-18, September 2017 – Phase 2

Registrar

Sanctioned RG, RC and PDDG faculty group proposals 2017

(Note: Research group (RG), Research cluster (RC), Product Design and Development Grant (PDDG))

Sl.No	Name	Title of the research group/cluster/PDDG faculty group	Budget Sanctioned in Lakhs (Rs)
1.	P.C.Nissimagoudar	RG: Center for Automotive research	10.00
2.	Uday Muddapur	RG: Bioresource Development	06.00
3.	Ravi Guttal	PDDG faculty group: Platform for Product Innovation, Design and Development	32.00
4.	Meena S M	RG: Intelligent Systems (IntS)	20.00
5.	Saroja V. S	RC: ESDM	32.00
6.	N.R.Banapurmath	RC: Material Science Cluster	40.00

Registrar

Sanctioned Capacity building projects 2017-18

Sl.No	Name	Project Title	Dept.	Budget (in L) Recommended
1.	Sunitha Hiremath, Lalita Madanbhavi, Shankar G	A Framework for Automatic Diagnosis of Psychological Disorders in Adults	ISE CSE	0.50
2.	Karibasappa K G M.K.Gonal	Image Analysis	CSE	0.20
3.	Shrinivas D Desai Mrs Nagaratna Eligar	Optimisation of Low Dose imaging	CSE	0.20
4.	Narayan D G, Somashekar Patil, Pooja Shettar	Software defined cloud data center testbed	ISE	4.50
5.	Shivashankar H Anil V Nandi	Optimization & fabrication of RF-MEMS Switch	E&C	4.00
6.	Shivanand P P	Installation of Simulation Software for management related modelling for reseachers	Mech/ Auto	0.60
7.	Vinayak N Kulkarni	Experemental investigations on Machinability aspect in shape memory alloys	Mech	2.00
8.	Krishnaraja K Nagaraj Ekbote Arun Patil	Effect of thickness on Fracture behaviour of Aluminium based metal matrix composite: An experiment and Numerical based approach	Mech	0.85
9.	Zabin K Bagewadi, Uday Muddapur	Purification and Molecular characteristics of Phytochemical compounds for Biotechnical applications	BT	0.50
10.	P.R.Patil, Srinivasulu R	Drone Development Lab	MCA	4.00
11.	G V Muddapur	Forsters Resonance Energy Transfer (FERT) studies of aryl boronic acids	Physics	1.20
12.	V H Choudapur K.G.KodanchaA.S.Bennal	Design & fabrication of Spray Pyrolysis system for large area thin film deposition	Physics	1.37
		Total		19.92L

Recommended by review committee:

Dr. P. G. Tewari

Dr. Uma Mudengudi

Sanctioned capacity building projects for the year 2017-18

Registrar

Capacity Building Projects for 2016-2017

Sl.No	Name	Title	Dept.	Amount	Budget recommended	Remarks
1	Praveenraj Pattar	Predictive analysis for cardiac arrest based on the medical history	CS	0.5 L (50,000)		
2	Dr.A S Bennal	Investigation of radiation dose effect on Biological samples	Physics	2 L		
3	G V Muddapur	Forsters Resonance Energy Transfer (FERT) studies of aryl boronic acids	Physics	1.6 L (1,60,000)		
4	Dr.S.B.Kapatkar	Synthesis & studies of magnetic nano particles for Biological Applications	Physics	0.5 L (50,000)		
5	Mrs.Varsha V Koppal	Study of Fluorescence Spectroscopic properties of some Heterocyclic Molecules & Effect of Nanopartices on Quenching Mechanisms	Physics	0.8 L (80,000)		
6	Smt V H Choudapur Dr.K.G.Kodancha Dr.A.S.Bennal	Design & fabrication of Spray Pyrolysis system for large area thin film deposition	Physics	1.37 L (1,37,000)		
7	Dr.Yogesh Velnkar	Building National & International Partnerships in Engineering Education	CEER	2 L		
8	Shivashankar H Dr.Anil V Nandi	Optimization & fabrication of RF-MEMS Switch	E&C	5.60 L		
9	P. G. Sunitha Hiremath, Lalita Madanbhavi, Shankar G.	A Framework for Automatic Diagnosis of Psychological Disorders in Adults	ISE and CSE	2,91,445 L		
10	Shivanand P P	Installation of Simulation Software for management related modelling for reseachers	Mech	1.2 L		
11	Vinayak N Kulkarni	Experemental investigations on Machinability aspect in shape memory alloys	Mech	2.2L		
12	Karibasappa K G M.K.Gonal	Image Analysis	CSE	2.37L		
13	Shrinivas D Desai Mrs Nagaratna Eligar	Optimisation of Low Dose imaging	CSE	1L		
14	Krishnaraja K Nagaraj Ekbote Arun Patil	Effect of thickness on Fracture behaviour of Aluminium based metal matrix composite: An experiment and Numerical based approach

Bio degradable reinforced polymer Matrix testing for fatigue and Fracture Behaviour | Mech | 1.05L | | |

15	Zabin K Bagewadi, Uday Muddapur	Purification and Molecular characteristics of Phytochemical compounds for Biotechnical applications	BT	5L		
16	P.R.Patil Srinivasulu Reddy	Drone Development Lab	MCA	8.85L		
17	P.R.Patil Srinivasulu Reddy	Autonomous Charging system for Smart Drones	MCA	20L		
18	Narayan D G Somashekar Patil Pooja Shettar	Software defined cloud data center testbed	ISE	5.6 L		

Capacity building projects 2015-2016
R-REU, M-M.Tech Projects, PhD, P-Papers, FP-Funding Projects

-	Name	Title	Dept.	Sanctioned Amt	Remarks				
					REU	M	Ph.D	Papers	FP
1	Padmashree Desai, Meenaxi Raikar , Vijayalakshmi M	Smart applications to cater the societal issues	Computer Science & Engineering	0.75L	-	-	-	02	-
2	Meena M, Moula Husain	Automated wood stock estimation & quality grading of wood chips.	Computer Science & Engineering	1.0L	01	-	01	-	-
3	Ashok M Sajjan, N R Banapurmath G.M.Hiremath	Development of Proton Exchange Polymer Electrolyte for Battery Applications.	Chem & CMS	0.6 L	01	-	01	01	-
4	Shankar A Hallad, N R Banapurmath	Development of polymer/mental nanocomposites for cardiovascular stent applications	Mechanical Engineering	0.6L	01	-	01	01	-
					0.6 L Utilized				
5	R.P.Tapaskar	Design of IoT Based control & Monitoring system for hybrid power system.	Mechanical Engineering	0.935 L					
6	Yogesh Velankar	Building International Partnerships in Engineering Education	CEER	2.0 L					
	TOTAL			5.885 L					

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SI.NO	Department	Sanctioned Amount
1	Computer Science & Engineering	1.75 L
2	Chem & CMS	0.6 L
3	Mechanical Engineering	1.535 L
4	CEER	2.0 L
	Total	**5.885 L**

Recommended by:

Dr P.G.Tewari -

Dr.Uma Mudenagudi -

The above recommended projects are sanctioned through the RDPC funding.

Registrar

Minutes of

Second Research Council Meeting of
KLE Technological University,
Hubballi, Karnataka
May 6th, 2017

KLE Technological University
(Established under Karnataka Act No.22, 2013)

The following are the minutes of the Second Research Council Meeting of KLE Technological University, Hubballi,which was held on 6ᵗʰ May 2017 at 9.30am, at theSenate Hall of the university.

The following Members were Present.

Sr. No	Name	Designation	Position
1.	Dr Ashok Shettar	Vice Chancellor	Chairman
2.	Dr. Madhusudhan Atre	Consultant & Adjunct Professor KLE Tech, Vegashakthi Consultants	Member
3.	Dr. Manjunath D	Prof IIT, Bombay	Member
4.	Prof B L Desai	Registrar, KLE Technological University	Member
5.	Dr P G Tewari	Principal BVBCET & Dean Academics, KLE Technological University	Member
6.	Dr. Uma K. Mudenagudi	Dean R & D	Member Secretary

The following members were invited members.

SL	Name	Designation	Position
7.	Dr B B Kotturshettar	Dean Planning & Development Head of Mechanical Dept	Invited Member
8.	Dr. Gopal Joshi	Dean CEER, KLE Technological University	Invited Member
9.	Dr. Sanjay Kotabagi	Dean Students, KLE Technological University	Invited Member

The following invited members have sought leave of absence:

SL	Name	Designation	Position
10.	Dr. Venu Gopinathan	Former Director, Kilby Labs, Texas Instruments	Invited Member

Agenda

Item No.	Particulars	Page No
RC 2.1	To read and confirm the minutes of the previous meeting held on 13th May 2016	3
RC 2.2	To confirm the action taken report on the minutes of the previous meeting held on 13th May 2016	4
RC 2.3	To discuss and approve strategic plan of R & D activities	5
RC 2.4	To discuss and approve initiatives to promote R & D activities 1. Budget note 2017 2. Call for Research clusters/groups and Product Design and Development Grants (PDDG) 2017-18 3. Call for capacity building projects 4. Guidelines for attending and conducting Conferences, Faculty Development Programs (FDPs) and Staff Development Programs (SDPs) 5. Guidelines for claiming incentives for R&D activities	5
RC 2.5	To discuss the progress of PhD programs at schools and departments 1. Review of Course work: Results of January 2016 batch of candidates is presented 2. Review of Seminar and MOOC Courses: List of MOOC and Seminar courses offered and completed at schools and departments is presented 3. To consider change of supervisorand change of admission category	6
RC 2.6	(Information agenda) To discuss the progress of research activities at schools, departments and centers (KLETech+BVBCET) 1. Summary of VTU PhD programs 2. Summary of publications 3. Summary of institute funded capacity building projects 4. Summary of REU	9
RC 2.7	Any other subject with the permission of the chair	

3

RC 2.1	**To read and confirm the minutes of the previous meeting held on 13th May 2016**
RC 1.1	To consider and approve objectives of the Research Council **Resolution:** Resolved to approve the objectives of Research Council
RC 1.2	To discuss the present status of PhD admissions **Resolution:** Resolved to confirm the PhD admissions at different schools and departments as given in the following table.
RC 1.3	(Information agenda): To discuss the present status of research activities in BVBCET **Resolution:**Noted
RC 1.4:	To discuss and approve research plans at schools, departments, clusters and centers **Resolution:** Resolved to approve research plan at schools, departments, clusters and centers. The Focused Research Areas (FRAs) were identified based on Application domains and Research domains.
RC 1.5	Any other subject with the permission of the chair

Table within RC 1.2:

Sl. No	School/Dept/Center Name	Code	No. Applicants	Available Seats	Eligible	Seats offered	Seats Admitted
1	Civil and Environmental Engineering	CV	12	10	4	3	3
2	Electrical & Electronics	EE	15	10	14	6	4
3	Mechanical Engineering	ME	15	13	9	9	6
4	Computer Science & Engineering	CS	17	13	15	7	7
5	Dept. of Biotechnology	BT	3	4	3	3	3
6	Management	MS	2	1	2	1	1
7	Dept. of Social Sciences	SS	5	3	5	3	2
8	Centre for Engineering Education Res5earch	EER	5	2	4	2	1
9	Applied Sciences (Physics, Chem, Maths)	AS	8	21	5	5	5
	Total	**8**	**82**	**77**	**61**	**39**	**32**

Action Requested: To confirm the minutes of the previous meeting held on 13th May 2016

Discussion:

Resolution: The minutes of the previous meeting held on 13[th]May 2016 wereread & confirmed

RC 2.2	**To confirm the action taken report on the minutes of the previous meeting held on 13th May 2016**	
ItemNo.	**Description**	**Action Taken**
RC 1.1:	To consider and approve objectives of the Research Council (RC) **Resolution:** Resolved to approve the objectives of research council	Noted
RC 1.2:	To discuss the present status of PhD admissions **Resolution:** Resolved to confirm the PhD admissions at different schools and departments	Selected students were admitted
RC 1.3	(Information agenda): To discuss the present status of research activities in BVBCET	NA
RC 1.4	To discuss and approve research plans at schools, departments, clusters and centers **Resolution:** Resolved to approve research plan at schools, departments, clusters and centers.The Focused Research Areas (FRAs) were identified based on Application domains and Research domains.	Schools, Departments, clusters and centers are working as per the approved research plans
RC 1.5	Any other subject with the permission of the chair	

Table within RC 1.2:

Sl. No!	School/Dept/Center! Name!	Code!	No.! Applicants!	Available! Seats!	Eligible!	Seats! offered!!	Seats! allotted!!!
1$	CivilandEnvironmental$ Engineering$	CV$	12$	10$	4$	3$	3$
2$	Electrical$&$Electronics$	EE$	15$	10$	14$	6$	4$
3$	Mechanical$Engineering$	ME$	15$	13$	9$	9$	6$
4$	Computer$Science$&$ Engineering$	CS$	17$	13$	15$	7$	7$
5$	Dept.ofBiotechnology$	BT$	3$	4$	3$	3$	3$
6$	Management$	MS$	2$	1$	2$	1$	1$
7$	Dept.ofSocial$sciences$	SS$	5$	3$	5$	3$	2$
8$	CentreforEngineering$ Education$Res5earch$	EER$	5$	2$	4$	2$	1$
9$	Applied$sciences$ (Physics,$Chem,$Maths)$	AS$	8$	21$	5$	5$	5$
$$	**Total!!**	8!	82!	77!	61!	39!	32!

Action Requested: The Academic Council is requested to confirm the action taken report on the minutes of the previous meeting held on 13th May 2106

Discussion:

Resolution: Resolvedto confirm the action taken report on the minutes of the previous meeting held on 13th May 2016

RC 2.3	To discuss and approve strategic plan of R & D activities
	The strategic plan of R & D activities is presented (given in Aneexure-1)

Action Requested: The Research Council is requested to discuss and approve the strategic plan of R & D activities of KLE Technological University.

Discussion:

Resolution: Resolved to approve the strategic plan of R & D activities of KLE Technological University

RC 2.4	To discuss and approve initiatives to promote R & D activities
	Initiatives to promote R & D activities for the year 2017-18 is presented (given in Annexure-2): 1. Budget note 2017 2. Call for Research clusters/groups and Product Design and Development Grants (PDDG) 2017-18 3. Call for capacity building projects 2017-18 4. Guidelines for attending and conducting Conferences, Faculty Development Programs (FDPs) and Staff Development Programs (SDPs) 5. Guidelines for claiming incentives for R&D activities

Action Requested: The Research Council is requested to discuss and approve the initiatives to promoteR & D activities for the year 2017-18.

Discussion: Participating in the discussion, Prof. Manjunath suggested that, for administrative simplicity and to provide flexibility, it is better to reduce the classification of research groups, clusters and PDDG faculty groups as research project proposals. To this honorable vice chancellor expressed that there are no administrative overloads involved.

Prof. Manjunath had opinion to have an incentive review committee for reviewing and awarding financial incentives for research activities and also suggested to have two meetings in a semester. Further he also suggested that University should discourage publication of papers without impact factor.

Prof. Manjunath suggested the following:

- to put in-place a bench marking process for R & D activities.
- to have adjunct faculty to interact with faculty and research scholars to enhance external research grants and research work relevant to local problems.
- to have adjunct faculty as co-supervisors.
- to make Teaching Assistance (TA) work compulsory for research scholars.
- not to include budget for expenditure distribution for different heads in the call for research proposals.

Resolution: Resolved to approve the following:

1. Initiatives to promote R & D activities for the year 2017-18:
   a. Allocation of budget for R & D activities for the year 2017-18.
   b. Research funding for activities of Research clusters/groups and Product Design and Development Grants (PDDG) 2017-18
   c. Research funding for capacity building projects 2017-18
   d. Guidelines for attending and conducting Conferences, Faculty Development Programs (FDPs) and Staff Development Programs (SDPs)
   e. Guidelines for claiming incentives for R&D activities
2. Resolved to consider the suggestions made by Prof. Manjunath during the call for research proposals in the next phase
3. Also resolved to consider the suggestions made by Prof. Manjunath to constitute the incentive review committee to review and award financial incentives for R & D activities of 2017-18

RC 2.5	To discuss the progress of PhD programs at schools and departments
	Progress of PhD programs for the year 2017-18 is presented and it includes: 1. Review of Course work: Results of January 2016 batch of candidates is presented. 2. Review of Seminar and MOOC Courses: List of MOOC and Seminar courses offered and completed at schools and departments is presented. 3. To consider change of supervisor and change of admission category.

1. Review of course work results January 2016 batch of candidates and eligible list of research scholars for comprehensive examination.

Table 5.1: Consolidated results of Ph.D. Coursework, Sept. 2016 and Feb. 2017 Examinations

Sl. No.	Schools	Total Students appeared	Total Students appeared	Total Courses offered	Appeared student-course combinations	Passed student-course combinations	Elgible students for compre
1	School of Civil and Environmental Engg	3	3	5	9	8	-
2	School of Electrical and Electronics Engg	4	4	4	8	7	-
3	School of Mechanical Engg	6	6	13	21	20	3
4	School of Computer Science Engg	7	7	11	27	21	-
5	Departemnt of BioTechnology	3	2	6	7	7	-
6	School of Management Studies and Research	1	1	6	6	6	1
7	Departemnt of Humanities and Social Sciences	2	2	7	9	9	-
8	Center for Engineering Education and Research	1	1	3	3	3	-
9	Departemnt of Applied sciences	5	5	21	28	26	-
	Chemistry	2	2	8	10	9	-
	Physics	3	3	13	18	17	-
	Total	32	31	76	118	107	4

Table 5.2: List of eligible research scholars for comprehensive examination

Sl.No	School	USN	Candidate Name
1.	School of Mechanical Mechanical Engineering	01PE16RME005	Mr. Sushruth Halewadimath
2.		01PE16RME006	Mr. Vinayak Kulkarni
3.		01PE16RME003	Mr. Nagaraj Ekabote
4.	School of Management Studies and Research	01FM16RBA001	Ms. Anushree Kini

2. Review of Seminar and MOOC Courses.

Table 5.3: Details of MOOC and Seminar courses offered at Schools and Departments

Sl. No.	Schools	MOOC Courses	MOOC Courses Completed	Seminar Courses	Seminar Courses Completed
1	School of Civil and Environmental Engg	-	-	2	0
2	School of Electrical and Electronics Engg	8	2	-	-
3	School of Mechanical Engg	-	-	-	-
4	School of Computer Science Engg	6	2	-	-
5	Departemnt of BioTechnology	-	-	-	-
6	School of Management Studies and Research	-	-	-	-
7	Departemnt of Humanities and Social Sciences	2	0	2	0
8	Center for Engineering Education and Research	-	-	2	2
9	Departemnt of Applied sciences	-	-	5	0
	Chemistry	-	-	2	0
	Physics	-	-	3	0
	Total	16	4	11	2

3. To consider the following:

I. **Change of supervisor:**

- The RPC has received the request for change of supervisor for the Ph.D Scholar Mrs. Leena V. Hublikar, Dept. of Chemistry, since earlier supervisor has put in his resignation.

- The RPC approves **Dr. Sharanabasav Ganachari,** Center of Material Science, KLE Tech, Hubli as new supervisor to the candidate.

II. **Change of admission category: Full Time to Part Time**

- The request for change of admission category of the following candidates from School of Computer Science was discussed. (a)Mr. Kiran Jade : 01FE16RCS003 Supervisor: Dr. P.S. Hiremath (b)Mrs. Archana Sidhanti : 01FE16RCS001 Supervisor : Dr. S.G.Totad.
- The following decisions were taken by the RPC for conversion of admission category from Full time to Part time.
  a. The candidate must take concurrence from the employer and must produce No objection certificate from the employer for carrying out the research at KLETech on part time basis.

  b. The candidate must be situated within the jurisdiction of KLE Technological University.

Action Requested: The Research Council is requested to discuss and approve the progress of Jan 2016 PhD candidates for the year 2017-18.

Discussion:

Resolution: Research council reviewed the progress of PhD programs at schools and departments and approved the following:

1. Results of course work of Jan 2016 batch of research scholars are reviewed and approved.
2. List of MOOC and seminar courses offered is reviewed and approved.
3. List of eligible research scholars for comprehensive examination is reviewed and approved.
4. RPC recommendations for Change of supervisor of Ph.D Scholar Mrs. Leena V. Hublikar, Department of Chemistry, is reviewed and approved.
5. Research Council recommended to seek the following information from the part-time research scholars:
    a. Willingness to spend 2 days/week to contribute towards their research work.
    b. Place of work indicating that it is within 100km from the University.
    c. No Objection Certificate (NOC) from the employer.

RC 2.6	**(Information agenda) To discuss the progress of research activities at schools, departments, clusters and centers (KLETech+BVBCET)**
	Summary of progress of research activities at schools departments, clusters and centers are presented (Information) 1. Summary of VTU PhD programs 2. Summary of publications 3. Summary of institute funded capacity building projects 4. Summary of REU

1. Summary of VTU PhD programs

BVBCET has 13 research centers affiliated to VTU with 50 doctoral faculty guiding 140 registered research scholars. Awarded Doctoral and MS candidates from these research centers are 28 and 2 respectively. The Table 3.1 presents details about the research-centers and summarized details are:

- Research centers:13
- Registered guides:62
- Registered doctoral candidates:121
- Number of Thesis submitted in 2016-17:09
- Total number of doctoral degrees awarded:25 PhD + 2 MSc

Table-6.1: Details of registered and awarded candidates at 13 research centers

SI.NO	Department	No. of Faculty with PhD	No.of PhD/MSc registered	No.of PhD/MSc Submitted	Degree awarded
1	Automobile	2	2	00	00
2	Biotechnology	3	4	00	00
3	Civil	10	15	00	03
4	Computer Science	9	21	05	02
5	Electrical & Electronics	2	3	00	01
6	Electronics & Communication	8	25	00	04+1
7	Instrumentation Technology	2	4	00	00
8	Industrial Production	4	6	01	03
9	Mechanical	8	18	03	11+1
10	Physics	3	12	00	01
11	Chemistry	4	2	00	00
12	Mathematics	6	5	00	00
13	Master of Business Administration	1	4	00	00
	Total	**62**	**121**	**09**	**25+2**

2. Summary of publications

The following table summarizes the number of publications of research work in refereed conferences and journals at national and international level.

Table 6.2: Summary of papers published during 2012-13, 2013-14, 2014-15 & 2015-16

Year	Int Journal		National Journal	Int. Conf.	National Conf.	Total	Impact factor
	Impact Factor (IF)	Without Impact Factor (IF)					
2012-13	20	43	01	29	18	111	Av. IF=1.630 Maximum=5.96
2013-14	40	107	07	154	36	344	Av. IF=1.510 Maximum=4.357
2014-15	50	82	16	120	58	326	Av. IF=1.84 Maximum=5.510
2015-16	23	42	3	103	4	175	Av. IF=1.01 Maximum=5.46
2016-17	24	85	8	86	17	220	Av. IF=0.325 Maximum=6.8
Total	**157**	**359**	**35**	**492**	**133**	**1176**	

Table 6.3: Summary of papers published and indexed in Scopus, Web of Science and Google Scholar

Consolidated list of publications from year 2013-14 to 2016-2017												
	Scopus				Web science				Google scholar			
	Indexed		Citations		Indexed		Citations		Indexed		Citations	
Dept.	2013 2015	2016-2017	2013-2015	2016-2017	2013-2015	2016-2017	2013-2015	2016-2017	2013-2015	2016-2017	2013-2015	2016-2017
AR	2	0	0	0	0	0	0	0	6	0	0	0
Auto	12	10	20	21	13	14	13	0	14	29	37	33
BT	0	05	0	02	3	10	0	0	30	15	48	23
Civil	14	4	0	14	0	0	0	0	62	3	62	7
CSE	29	19	2	26	0	0	0	0	83	14	36	83
E & E	9	1	3	0	0	0	0	0	18	4	13	1
ECE	26	25	64	55	0	0	0	0	61	65	96	29
IP	17	19	454	275	8	9	9	233	22	29	739	505
ISE	19	42	12	39	0	8	0	0	68	60	38	94
IT	0	7	0	8	3	0	0	0	0	5	0	10
Mech	22	21	327	370	5	0	2	0	101	41	743	413
MCA	51	5	98	97	0	0	0	0	43	14	642	363
Phy	20	5	115	63	15	0	25	0	35	4	135	90
Maths	0	1	13	4	0	0	0	0	28	8	44	20
Chem	0	0	0	0	0	0	0	0	0	0	0	0
MBA	0	0	0	0	0	0	0	0	0	11	0	0
Humanities	0	0	0	0	0	0	0	0	0	0	0	0
Total	**221**	**164**	**1108**	**974**	**47**	**41**	**49**	**233**	**571**	**302**	**2633**	**1671**

3. Summary of Institute funded capacity building projects:

- To build research capabilities
- To provide the experience of carrying out the research project
- To facilitate the process of applying to external funding agencies

Table 6.4: Summary of capacity building projects

Year	Sanctioned projects/ total	Sanctioned amount	Utilized amount	REU Student	PhD/ M.Tech	Papers published	Applied for external projects	External sanctioned projects
2011-12	17	9.9L	8.48 L	09	17	08	5 DST +1 NRB +3VGST+8AICTE	1 (10 L)
2012-13	14	12.44 L	8.48 L	06	12	5+4 C	10 AICTE	1 (40 L)
2013-14	14/19	11.6	9.76 L	06	10	5 C	VGST	20.0L
2014-15	22/24	14.07 L	2.29 L	06	05	3IJ +3C	2VGST+ 5 Agri Uni	03 (14.0 L)
2015-16	15/19	13.025 L	-	-	-	-	-	

4.Research Experience for Undergraduates (REU)

Undergraduate research opportunities help the student to experience and learn how to identify and define the problems and solve them, how to find and evaluate evidence, how to consider and assess competing interpretations, how to form and test their own analysis and interpretations and how to communicate their ideas and findings. These learning's enable them to take part in the research missions in their future career inside or outside academia.

Probably our college is the first institution in India to introduce 'Research Experience for Undergraduate (REU)s' in the curriculum as an optional course. The response from the students and faculty mentors has been overwhelmingly positive. The students and faculty mentors have devoted considerable time and effort to make the experience worthwhile and fruitful.

Table 6.5: Summary of REU projects

Year	# REU students	# Guides	# publications	# PGs from REU
2011-12	18	22	25	8
2012-13	31	40	20	8
2013-14	3 0	44	23	5
2014-15	46	48	26	4
2015-16	67	54	55	8
2016-17	68	60	30	-

Discussions:

Prof. Manjunath suggested to present the publications data in graphical form to know the trend

Impactful Research & Development
KLE Tech will actively nurture and organize its research efforts and creative endeavors to enhance regional, national and global impact and reputation as a research, technology and Intellectual Property (IP) intensive university

Improving our performance in research / technology /IP metrics is a necessary step for obtaining credibility and resources needed to elevate KLE Tech in the Indian higher education system.A greater part of our research effort will be aligned / concentrated in the areas of national interest. We need to build on these areas to develop substantial research strengths through selective strategic investments, research leadership and support. This selective strategic investment will need to also comprehend the increasingly important inter-disciplinary areas.

1. Focus
Develop substantial research strengths by aligning the areas of university strengths with those of national interest and local societal development - by selective strategic investments, leadership and support

a. Evolve strategic research roadmap for each school by identifying Focused Research Areas (FRAs) that build on present strengths and future opportunities
b. Ensure the alignment of FRAs with areas of national strategic, as well as local societal, importance and priority.
c. Implement an integrated and coherent university-wide approach to planning, delivering, managing and funding research across all the schools.

2. Interdisciplinary Research Centers

Build strategic aggregations of people and programs to strengthen inter-disciplinary areas of research & development that will allow us to compete successfully, and provide the ability to create innovative technology and solutions to societal needs.

a. Promote and support interdisciplinary research and development centers that leverage depth and breadth of our expertise to address the complex problems faced by our nation and the world.
b. Ensure that these centers give priority to problems/opportunity-focused projects/products that demonstrate successful interdisciplinary collaboration and address the market needs through innovation, intellectual property, and technology translation.

3. Funding

Foster a supportive environment for research by facilitating access to internal grants, and providing strategic expertise to maximize external grants.

    a. Build and grow university research funds, for providing internal support to schools and research centers to enhance their research and development profile.
    b. Establish appropriate processes to provide seed funding for research projects that can be leveraged in obtaining external grants.
    c. Seek funding from governments, research agencies and industry to sustain the research initiatives and enable specific research projects
    d. Drive the commercialization of research and technology transfer, through mechanisms such as licensing, patents, creating spin-off companies and incubating / supporting external entrepreneurs.

4. Programs

Enhance quality and relevance of doctoral research programs to emerge as an institution of choice for researchers.

    a. Continue to invest in research capacity development to attract and support more doctoral / post-doctoral students in disciplinary and interdisciplinary FRAs
    b. Strengthen the interconnectivity between research, technology development / translation, and teaching/learning, including the participation of undergraduate and postgraduate students in university research programs.
    c. Evolve innovative enrollment strategies to recruit and support researchers and personnel from industry.

Budget Note-2017

1. **R&D PLATFORMS:** To promote research in emerging and high impact areas, the institute has undertaken initiative to identify and nurture research clusters/research groups (RC/RGs) and fund for **Product Design and Development initiatives.** Our aim is to develop these clusters/groups to a level of competency that, they can further emerge as Centers of Excellence (CoE).

   - **Definitions**
   - **Research Center:** Encompass the research activities at the department level. There can be multiple areas of research pertaining to the disciplines based on the faculty expertise available in the department. These centers will also focus on offering of formal degree like MS and PhD. They will also contribute towards imparting research experience for UG and PG students via programs like Research Experience for Undergraduates (REU).
   - **Research Cluster (RC):** Research Cluster is theme centered, e.g. energy, material science, ESDM etc. These centers synergize the efforts and expertise of faculty across the departments and create a platform towards building higher levels of inter-disciplinary research/development/technology-translation/productivity. The aim is to get recognition and visibility in a chosen theme.
   - **Research Group (RG):** This is similar to RC, however collaborating faculty can be from the same department or across departments. Research group leads to initiation of research clusters in the collaborating area over a period of time.
   - **Centre of Excellence (CoE):** The identification of RC/RGs will be based upon need of the institution, talent, passion and the ecosystem, which will sustain to evolve into CoEs. This will help to identify the clusters of competence, which then go through 2 phases before emerging as CoEs. In Phase-1, RCs define roadmap, orient research and build capacity. In Phase-2, RCs contribute towards publications, funded research and consultancy projects, patents etc. before elevating to CoE. CoEs willcollaboratively work with CTiE, CIPD.
   - **Product Design and Development Grant (PDDG):** This grant is given to a faculty or group of faculty who involve in product innovation, design and development activity of the institute and supports start-ups and industry. These faculty groups bring together the skill set and expertise of multidisciplinary group of researchers from schools, departments, RCs/RGs and industry towards technology translation, design and development activity of a product.
   - **Capacity Building:** Capacity Building is development of faculty qualifications and orientation, and hard and soft infrastructure to initiate and grow the research activity in an area aligned with school/department focus areas.
   - The objectives of RC/RGsor PDDG are to enable focused research, attract funding, IP generation, productizations, start-up support, and synergize the efforts of faculty and students to gain greater recognition for the institution at National and International level.
   - The identification of RC/RGs or PDDG faculty groups will be based upon need of the institution, talent, passion and the ecosystem, which will sustain them, and then eventually lead to recognition as CoEs.
   - Human resources: Each RC/RG may recruit Research Associates (junior or senior) to carry out the research activities of the cluster/group.
   - Each RC/RG needs to provide roadmap for 3 years, fund release for the first year is subject to the acceptance of the roadmap, and however subsequent fund release depends on the success of the roadmap.
   - Faculty or group of faculty applying for PDDG can recruit research associates and the group needs to provide roadmap for 3 years,fund release for the first year is subject to

the acceptance of the roadmap, and however subsequent fund release depends on the success of the roadmap.
- 3 to 4 RC/RGs and PDDG need to be identified in 2017 by sending the call for proposals.
- The budget for each RC/RG or PDDGfaculty group is 30 to 50L.
- Details of heads for each RC/RG or PDDG faculty group and the total budget are:

Sl.No	Head	Budget
1	CapEx-Equipment, facility	12.50L
2	4 to 6 RAs with an average salary of 25,000/PM (25,000/PMx6=1.5Lx12)	18.00L
3	Others Travel 3.00L Training 1.00L Patenting 3.00L	7.00L
	Total budget for each RC/RG or PDDG faculty group	**37.50L**

(The above expenditure distribution are suggestive, based upon the need of RC/RG or PDDG there can be variations)

Total budget for RC/RGs and PDDGs = 37.50*4= 150.00 L

2. **Capacity building:***Capacity building projects are initiated and funded by the institute to enhance the research activity.*
   - *Objectives*
      I. To enhance the research capability of the faculty and research center/cluster/group.
      II. To provide experience of carrying out the research project.
      III. To facilitate the process of applying to external funding agencies.
   - The budget for capacity building is increased to 50L.
   - Maximum funding for each project: Maximum funding for each project has been increased from 1L to 5L, higher than 5L can be considered based on the merit of the proposal.
   - Funding includes Capital expenditure like equipment, lab facilities and recurring expenditure like manpower (research project assistants with around 5K to 10K per month salary), travel and consumables.
3. Others: Other head includes the following.
   - Attending Conferences:
      o Outside India: Registration + Max of Rs.15,000(Faculty are encouraged to apply for external funding for travel).
      o Within India: Registration + Travel (II A/C train or A/C sleeper bus).
   - Conducting Conferences: National and/or International level.
   - Faculty Development Programs (FPDs) and Staff Development Programs (SDPs) to attend and to conduct.
      o Maximum of Rs.50,000/ to conducting FDP.
      o Registration, travel (II A/C) and accommodation is provided to attend FDPs.
   - Patenting: Depending on the merit of the application, patent fee and other related fees are permitted.
   - Incentives for guiding PhDs, quality paper publications, book chapters and external research funding
      a. Faculty guiding internal Ph. D candidates: KLE Tech University Research

supervisors can claim the following:

    i. Rs. 40,000/- per candidate after the successful completion of the degree of the candidate within stipulated period of the university (6 years).

    ii. Rs. 60,000/- per candidate after the successful completion of the degree of the candidate one year prior to the stipulated period of the university (5 years).

b. External funded project: PI of KLETech university shall claim 5% of the sanctioned amount of the external funded project after the submission of Utilization Certificate (UC).

c. Authors of International Journal paper, book, book chapters shall claim according to the following table after the paper/chapter/book is been published.

S.No	Publication type (Only non-paid journals and Thomson Reuters Impact factor is considered)	Incentive Amount
1	Non paid Journals with Impact factor up to 0.5	Rs. 3,000/-
2	Non paid Journals with Impact factor 0.5 to 1.0	Rs. 5,000/-
3	Non paid Journals with Impact factor 1.01 to 1.5	Rs. 7,000/-
4	Non paid Journals with Impact factor 1.5 and above	Rs.10,000/-
5	Following Journals irrespective of impact factors: ASME, ASCE, ACM, IEEE, Springer, Elsevier, SAE, ASEE	Rs.10,000/-
6	Book/ Book chapters with Springer, MGH, Person, CRC press, Oxford University Press, international publishers	Rs.10,000/-

d. All request letters for the incentives of R & D activities shall be submitted to Dean R & D, forwarded by school heads/HODs in the prescribed format with necessary documents for further processing. The school head/HOD should ensure all criteria are satisfied before forwarding to Dean R&D.

4. **Total Budget:** Research clusters and groups(150L) +Capacity building (50L) +Others(50L) = 250L

SL No.	Head planned	Amount in L
1	Research clusters and groups	150.00L
2	Capacity building	50.00L
3	Others	50.00L
	1. Conferences to conduct : 10.00	
	2. Conference to attend : 15.00	
	3. Training (FDPs) : 10.00	
	4. Patenting : 10.00	
	5. Incentives : 5.00L	
		250.00L

Call for

Research Clusters/Groups (RCs/RGs) or Product Design and Development Grants (PDDG) 2017-18

The KLETechnological University **invites the proposals from Research Clusters or groups (RCs/RGs) and Product Design and Development Grants (PDDG)**

- Last date to submit the proposal: 20.04.2017
- Why: To promote research in emerging and high impact areas, the institute has undertaken initiative to identify/establish research clusters and PDDG faculty groups. Our aim is to develop these clusters/groups or PDDG faculty groups to a level of competency that, they can further emerge as centers of excellence(CoE).
- **Guidelines for applying**
  - **Definitions**
    - **Research Center:** Encompass the research activities at the department level. There can be multiple areas of research pertaining to the disciplines based on the faculty expertise available in the department. These centers will also focus on offering of formal degree like MS and PhD. They will also contribute towards imparting research experience for UG and PG students via programs like Research Experience for Undergraduates (REU).
    - **Research Cluster (RC):** Research Cluster is theme centered, e.g. energy, material science, ESDM etc. These centers synergize the efforts and expertise of faculty across the departments and create a platform towards building higher levels of inter-disciplinary research/development/technology-translation/productivity. The aim is to get recognition and visibility in a chosen theme.
    - **Research Group (RG):** This is similar to RC, however collaborating faculty can be from the same department or across departments. Research group leads to initiation of research clusters in the collaborating area over a period of time.
    - **Centre of Excellence (CoE):** The identification of RC/RGs will be based upon need of the institution, talent, passion and the ecosystem, which will sustain to evolve into CoEs. This will help to identify the clusters of competence, which then go through 2 phases before emerging as CoEs. In Phase-1, RCs define roadmap, orient research and build capacity. In Phase-2, RCs contribute towards publications, funded research and consultancy projects, patents etc. before elevating to CoE. CoEs will collaboratively work with CTiE, CIPD.
    - **Product Design and Development Grant (PDDG):** This grant is given to a faculty or group of faculty who involve in product innovation, design and development activity of the institute and supports start-ups and industry. These faculty groups bring together the skill set and expertise of multidisciplinary group of researchers from schools, departments, RCs/RGs and industry towards technology translation, design and development activity of a product.
  - Formation of Research group/cluster: The Research Cluster need to satisfy the following points.
    - Minimum of Two doctoral faculty collaboratively working together in a research area.
    - The research area needs to be in alignment with the focused research areas of school/s or departments/university.
    - The research area needs to connect to the thrust areas of external funding agencies and/or already existing external funded projects.
  - Proposal under PDDG: Faculty or group of faculty wish to apply for PDDG need to satisfy the following points.
    - Minimum of One doctoral faculty preferably with industry experience with the background of product development, collaboratively working with start-up or industry towards a product, or technology translation.
    - The area of product needs to be in alignment with the start-ups or industry

- The objectives of RCs/RGs are to enable focused research, attract funding, IP generation and synergize the efforts of faculty and students to gain greater recognition for the institution at National and International level.
- The objectives of PDDG faculty group are to enable product validation, development, productization, collaboration with start-ups, support to the student projects for commercialization and synergize the efforts of faculty and students to gain greater recognition for the institution at National and International level.
- Human resources: Each research cluster/research group/PDDG faculty group may recruit Research Associates (junior or senior) to carry out the research/productization activities.
- Each research cluster/research group/PDDG faculty group needs to have roadmap for 3 years, fund release for the first year is subject to the acceptance of the roadmap, and however subsequent fund release depends on the success of the roadmap.
- Details of heads and the total budget for the year 2017 are:

Sl.No	Head	Budget
1	CapEx-Equipment, facility	12.50L
2	4 to 6 RAs with an average salary of 25,000/PM (25,000/PMx6=1.5Lx12)	18.00L
3	Others • Travel 3.00L • Training 1.00L • Patenting 3.00L	7.00L
	Total budget for each RC/RG or PDDG faculty group	**37.50L**

(The above expenditure distribution are suggestive, based upon the need of RC/RG or PDDG there can be variations)

- Format for the submission of RC/RG or PDDG faculty group:
    i. Name of the RC/RG or PDDG faculty group:
    ii. Research focus area and field:
        (In alignment with the school focus areas/start-ups/Industry)
    iii. List of Faculty in RC/RG or PDDG faculty group:
    iv. Total budget required in 2017:
    v. Details of RC/RG or PDDG faculty group: (to include objectives, key differentiation, collaborative efforts, utilization of national resources, specific outcomes wrt papers, patents, technologies, prototypes/products, students/degrees, etc
    vi. Biodata of Faculty:

Name and Signature of Faculty coordinator

Date

Call for capacity building projects: 2017-18

The KLETechnological University invites the proposals from the faculty for institute funded capacity building projects

- **Last date to submit the proposals:** 20.04.2017
- **Guidelines for capacity building projects**
    1. Capacity Building is development of faculty qualifications and orientation, and hard and soft infrastructure to initiate and grow the research activity in an area aligned with school/department focus areas.
    2. Capacity building projects are initiated and funded by the institute to enhance the research activity. Objectives are:
        - To enhance the research capability of the faculty and research center/cluster/group.
        - To provide experience of carrying out the research project.
        - To facilitate the process of applying to external funding agencies.
    3. Maximum funding for each project is 5L, higher than 5L shall be considered based on the merit of the proposal.
    4. Funding includes; (i) capital expenditure like equipment, lab facilities, (ii) recurring expenditure like manpower, travel and consumables.
        - Note: Research project assistants with salary around 5K to 10K per month shall be recruited under capacity building projects up to max period of 11 months. (Look for BE students who are planning to do MS/MTech and have not joined the jobs.)
    5. Format for the submission of capacity building projects:
        i. Project title:
        ii. Research focus area and field:
           (In alignment with the school focus areas)
        iii. Duration (in months) :
        iv. Total cost:
        v. Name of Investigator/s (PI and Co-PI/s):
        vi. School/Department/Research cluster(RC)/group:
        vii. Collaborating departments/RCs if any:
        viii. Project summary :
            (needs to include, what, why and **specific outcomes wrt papers, patents, technologies, prototypes/products, students/degrees, etc)**
        ix. Budget estimates :
        x. Bio-data of investigator/s:

Name and Signature of PI   Name and Signature of School Head/HOD
           Date:

Guidelines for attending and conducting, conferences, FDPs and SDPs

1. Attending Conferences: All the faculty can avail the following facility for presenting a paper at national/international conference.
   a. Only one registration per paper is permitted.
      - Outside India: Registration + Max of Rs.15,000 for travel (Faculty are encouraged to apply for external funding for travel).
      - Within India: Registration + Travel (II A/C) + Accommodation.
   b. Faculty are permitted to attend maximum of two conferences in a year.
   c. Sharing of experience by the faculty with the school/department is necessary.
2. Conducting conferences: The following facility is provided to conduct conferences
   a. Each school/department can conduct one national / international conference
   b. Maximum of 4L is provided to conduct National conferences.
   c. Maximum of 10L is provided to conduct International conferences.
3. Attending Faculty Development Programs (FDPs) and Staff Development Programs (SDPs)
   a. Each faculty/staff can attend maximum of 2 FDPs/SDPs.
   b. Registration, travel (II A/C) and accommodation is provided.
4. Conducting Faculty Development Programs (FDPs) and Staff Development Programs (SDPs)
   a. Each school can conduct maximum of 4 FDPs and 2 SDPs, and department can conduct maximum of 2 FDPs and 1 SDP.
   b. Maximum of Rs.50,000/ is provided to conduct FDPs/SDPs.
5. Patenting: Depending on the merit of the applications, patent fee and other related fees are permitted.
6. All request letters shall be submitted to Dean R & D, forwarded by school heads/HODs with necessary documents for further processing. The school head/HOD should ensure all criteria are satisfied before forwarding to Dean R&D.

Guidelinesfor claiming incentives for R&D activities

Faculty can claim incentives for guiding PhDs, quality paperpublications and external research funding

1. Faculty guiding internal Ph. D candidates: KLE Tech University Research supervisors can claim the following:
    a. Rs. 60,000/- per candidate after the successful completion of the degree of the candidate one year prior to the stipulated period of the university (5 years).
    b. Rs. 40,000/- per candidate after the successful completion of the degree of the candidate within stipulated period of the university (6 years).
2. External funded project: PI of KLETech university shall claim 5% of the sanctioned amount of the external funded project after the submission of Utilization Certificate (UC).
3. Authors of International Journal paper or book or book chapter shall claim according to the following table after the paper is been published. Also provide the document for impact factor.

S.No	Publication type (Only non-paid journals and Thomson Reuters Impact factor is considered)	Incentive Amount
1	Non paid Journals with Impact factor up to 0.5	Rs. 3,000/-
2	Non paid Journals with Impact factor 0.5 to 1.0	Rs. 5,000/-
3	Non paid Journals with Impact factor 1.01 to 1.5	Rs. 7,000/-
4	Non paid Journals with Impact factor 1.5 and above	Rs.10,000/-
5	Following Journals irrespective of impact factors: ASME, ASCE, ACM, IEEE, Springer, Elsevier, SAE, ASEE	Rs.10,000/-
6	Book/Book chapters with Springer, MGH, Person, CRC press, Oxford University Press, international publishers	Rs.10,000/-

4. All request letters for the incentives of R & D activities shall be submitted to Dean R & D, forwarded by school heads/HODs in the prescribed format with necessary documents for further processing. The school head/HOD should ensure all criteria are satisfied before forwarding to Dean R&D.