

ANNUAL BUDGET 2020-2021



वार्षिक अंदाज पत्रक २०२०-२०२१

(Approved by Finance Committee meeting in presence of Hon. Member
held on 06th June 2020 vide item no.14.4)

GOVERNMENT COLLEGE OF ENGINEERING, KARAD

(An Autonomous Institute of Govt. of Maharashtra)

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Overall Strategies for Budget

The focus of the budget for this year is mainly on promoting interdisciplinary R & D, Green Campus and providing academic ambience to the students and faculty.

1. Promoting interdisciplinary research by creating interdisciplinary Center of Excellence Laboratory, Robotics, IOT, Virtual Lab, Cloud Computing & cyber security.
2. To promote culture of research in institute, provision is made for funding of Major & minor research projects, Phd projects, faculty research proposals.
3. Improving ambience & smart campus, environmental management plan, waste management, waste water re use, sanitation, e waste, electric & laboratic safety of the campus, creation of new facilities in the form of building and refurbishment & advanced equipment / latest software's have been considered.
4. Enhancement of industry institute interaction through student Internship at all levels, collaborative research, employability enhancement training, HR summit, aluminy meet, pull campus, participation of industry experts.
5. State government has made provision of entire amount in budget for remaining construction of new Library and Electronics & Telecommunication buildings and construction of proposed SC/ST hostel at institute level.
6. To enrich library resources in terms of e learning, e books, e journals etc.
7. To improve the facelift of the institution, garden development, eco-friendly & smart campus.
8. Improve students learning by soft skills training, academic remedial coaching, GATE Classes, career counselling, induction programme, equity action plan.
9. To improve hostel facilities provision has been made for hostel repair & refurbishment, for upliftment of students living standrad garden development,
10. To promote culture of innovation, incubation & start up set up, different competitions, enterprnuership, e summit etc.
11. To promote culture of e-learning, swayam/MOOCs courses, virtual reality, reforms
12. To enhance employability and higher education skills by Gate classes, employability enhancement programs.
13. Heavy Budgetary provision is made of overall development of the students under student clubs, students center activities, computations participation in National/International events.
14. Activities are proposed in twining program for Rajkiya College of Engineering Ajamgarh, U.P. under TEQIP III.
15. National & International seminars / workshops / conferences / FDP / CEP have been proposed.
16. Academic enrichment through services of industry / academicians/ emeritus / adjunct / visiting faculties.
17. Conversion of all class rooms in each department into a smart class room with WIFI, smart board & other facilities & development of flipped classroom & tinkering lab.
18. To develop sophisticated examination control facilities like assessment centre, meeting hall, confedntial room etc.
19. Reforms of governance i.e. BoM, departmental BoS & ICC, AC etc.
20. Solar roof / testing & research lab will be developed through MEDA / MNRE and State Govt. funds or institutes funds.
21. Gymkhana / Student Activity Center / Playground Development through DSO & Institute funds.
22. Surveillance & security for whole campus through CCTV camera.

BUDGETED INCOME & EXPENDITURE FOR THE YEAR 2020-2021

Components of Income/ Expenditure	Unrestricted Funds													TOTAL	Restricted Fund			GRAND TOTAL	Previous Year Total
	Total Corpus Fund (F1)		Designated Funds												Technical Education Quality Improvement Programme	State Govt Assistance	Central Assistance		
	Corpus Fund	Accumulated & AICTE Grant	Faculty Development (F2)	Equipment Replacement (F3)	Maintenance (F4)	Institute Development (F5)	Salary (F6)	Gymkhana	Library	Training & Placement	Internet	Hostel	Exam Fee						
Income																			
Opening Balance	718.02	625.00	186.60	631.94	152.98	214.56	407.66	115.50	187.83	59.87	41.66	42.13	63.23	3447.00	0	0	0	3447.00	2923.65
Academic Receipts	92.24		76.45	335.27	50.97	101.93	251.24	42.65	115.05	29.29	82.15	59.21	39.03	1275.47				1275.47	1198.02
Grants & Donations														0.00	186.00	1798.55	110.80	2095.35	2066.03
Income from investments	87.30		12.13	41.08	9.94	13.95	26.50	7.51	12.21	3.89	2.71	2.74	4.11	224.05				224.05	176.75
Other Incomes			11.44	11.44	15.26									38.15				38.15	75.88
Sub Total	179.54	0.00	100.02	387.79	76.17	115.88	277.73	50.16	127.26	33.18	84.86	61.95	43.14	1537.68	186.00	1798.55	110.80	3633.03	3516.68
TOTAL (A)	897.56	625.00	286.63	1019.74	229.15	330.44	685.39	165.66	315.09	93.05	126.52	104.08	106.38	4984.68	186.00	1798.55	110.80	7080.03	6440.33
Expenditure																			
Staff Payments: Salary							125.40							125.40		1772.51		1897.91	1784.92
Staff Benefits						10.00								10.00			-	10.00	155.45
Academic Expenses: Recurring			118.27			73.58	386.40	47.00	16.10		26.00			667.35	133.00		5.00	805.35	252.12
Academic Expenses: Non Recurring	711.00	275.00		684.11		69.48		15.50	252.88		84.54			2092.51	29.00	26.04	101.80	2249.35	344.17
Administrative and General Expenses							56.40			60.00				116.40	24.00	0.00	4.00	144.40	161.34
Repairs & maintenance					226.25		11.20		1.25				86.41	325.10				325.10	187.14
Other Expenses						19.67		84.86					29.25	133.78				133.78	108.19
TOTAL (B)	711.00	275.00	118.27	684.11	226.25	172.73	579.40	147.36	270.23	60.00	110.54	86.41	29.25	3470.55	186.00	1798.55	110.80	5565.90	2993.33
Balance being excess of	186.56	350.00	168.36	335.62	2.91	157.71	105.99	18.30	44.86	33.05	15.98	17.67	77.13	1514.13	0.00	0.00	0.00	1514.13	3447.00

(Figures in Lakh)

(Figures in Lakh)

BUDGETED RECEIPTS 2020-21											
Sr. No.	Items	Received in 2014-15	Received in 2015-16	Received in 2016-17	Received in 2017-18	Received in 2018-19	Received in 2019-20	Percentage to Receipts %	Budgeted Receipts for 2020-21		
1	TUTION FEE	272.12	152.62	244.25	236.98	245.67	226.48	17.44	267.03		
2	GYMKHANA FEE & GATHERING	15.48	15.29	25.01	33.24	40.84	40.05	2.79	42.65	42.65	
3	DEVELOPMENT FEE	87.71	138.43	274.59	384.86	520.94	547.19	33.29	509.67		
4	LABORATORY FEE	37.81	41.65	71.02	101.49	130.94	131.87	8.58	131.41		
5	T.P.O	1.90	8.92	14.27	24.49	28.26	27.86	1.91	29.29	29.29	
6	LIBRARY FEE	16.87	27.88	57.70	85.73	110.85	110.63	7.41	113.43	113.43	
7	INTERNET FEE	11.99	20.20	41.93	61.98	79.85	79.16	5.37	82.15	82.15	
8	TESTING & IRG	40.75	32.15	43.56	20.96	88.55	72.66	4.98	76.30	50%	
9	EXAMINATION FEE	5.39	14.96	21.32	29.90	37.74	32.55	2.55	39.03	39.03	
10	HOSTEL	24.03	29.33	44.54	52.73	53.82	57.19	3.87	59.21	59.21	
11	ISTE	0.83	1.10	2.33	1.14	1.13	1.10	0.07	1.06	1.06	
12	IDENTITY CARD FEE	0.20	0.38	0.50	0.52	0.51	0.48	0.04	0.56	0.56	
13	MISC RECEIPTS	17.56	14.21	52.44	36.28	9.25	10.17	14.63	224.05	33.16	
	(LC / RENT / OTHER)									50%	
	TOTAL	532.64	497.12	893.45	1070.29	1348.36	1337.39	100.00	1575.83	-38.15 = 1537.68	-1137.14 400.54

267.03 509.67 131.41 76.30

POSITIONS OF DIFFERENT FUNDS 2020-21										
Sr. No.	Items	Expenditure 2015-16	Expenditure 2016-17	Expenditure 2017-18	Expenditure 2018-19	Expenditure 2019-20	Balance as on 31-03-2020	Budgeted Receipts 2020-21	Budgeted Expenditure 2020-21	Balance as on 31-03-2021
1	Corpus Fund F1	0.00	0.49	0.00	0.00	4.38	1343.02	179.54	986.00	536.56
2	Faculty Development F2	0.09	0.55	73.96	91.80	148.67	186.60	100.02	118.27	168.36
3	Equipment Replacement F3	81.02	22.54	21.17	31.97	135.06	631.94	387.79	684.11	335.62
4	Maintenance F4	56.66	63.16	98.57	77.13	118.60	152.98	76.17	226.25	2.91
5	Institute Development F5	51.74	13.93	8.74	39.40	94.27	214.56	115.88	172.73	157.71
6	Salary F6	38.02	137.08	109.24	139.34	184.60	407.66	277.73	579.40	105.99
	TOTAL	227.53	237.75	311.68	379.64	685.58	2936.77	1137.14	2766.76	1307.15

Receipts Allocation			
TUITION FEE	DEVELOPMENT FEE	LABORATORY FEE	TESTING & IRG
25%	5%		
	15%		15%
	40%	100%	15%
	10%		20%
	20%		
75%	10%		
100%	100%	100%	50%
+ Income from investments			

EXPENDITURE BUDGET 2020-21**STATE GOVERNMENT**

(Figures in Lakh)

Sr.No.	Item	Budget 2019-20	Amount Spent	Budget 2020-21
1	STATE GOVERNMENT PLAN	882.20	0.00	26.04
2	STATE GOVERNMENT NON PLAN	1571.01	1624.75	1772.51
	TOTAL	2453.21	1624.75	1798.55

STATE GOVERNMENT PLAN : DETAILS

Sr.No.	Items	Amount Received	Expenditure during 2019-20	Budget 2020-21
1	Equipment & Furniture	-	-	21.04
2	Civil Works	-	-	-
3	Library □	-	-	5.00
	TOTAL	-	-	26.04

STATE GOVERNMENT NON PLAN : DETAILS

Sr.No.	ITEMS	Budget 2019-20	Amount Received	Expenditure during 2019-20	Budget 2020-21
1	Salary	1,500.00	1,620.86	1,620.86	1,772.51
2	Non salary	71.01	3.89	3.89	-
	TOTAL	1,571.01	1,624.75	1,624.75	1,772.51

FUND WISE EXPENDITURE BUDGET

Sr.No.	Items	Budget 2019-20	Expenditure during 2019-20	Budget 2020-21	Justification
1	Corpus Fund F1	509.25	179.54	986.00	
2	Faculty Development F2	266.15	100.02	118.27	
3	Equipment Replacement F3	382.94	387.79	684.11	
4	Maintenance F4	82.16	76.17	226.25	
5	Institute Development F5	357.98	115.88	172.73	
6	Salary F6	529.46	277.73	579.40	
Total		2127.94	1137.14	2766.76	

BUDGET FOR OTHER FEES

Sr. No	Item	Budget 2019-20	Expenditure during 2019-20	Balance Amount as on 31.03.2020	Budget 2020-21
1	Library fee	101.47	62.66	187.83	270.23
2	Gymkhana fee	32.70	17.46	115.50	147.36
3	Internet fee	118.27	28.17	41.66	110.54
4	TPO fee	62.20	16.80	59.87	60.00
5	ISTE fee	1.86	0.00	1.10	0.00
6	Examination fee	38.46	14.21	63.23	29.25
TOTAL		354.96	139.30	469.20	617.38

LIBRARY FEE

Sr.No.	ITEMS	Budget 2019-20	Expenditure during 2019-20	Budget 2020-21	Justification
1	Library Books	10.00	62.66	24.80	
2	e books	15.00		20.00	
3	E-Journals	55.00		77.00	
4	Print Journals	2.71		4.07	
5	Equipment	4.50		17.00	
6	Furniture	1.13		110.00	
7	Maintenance Fund	1.03		1.25	
8	Recurring Expendiure	12.10		16.10	
TOTAL		101.47	62.66	270.23	

GYMKHANA FEE

Sr. No.	Item	Budget 2019-20	Expenditure during 2019-20	Budget 2020-21	Justification
1	Gymkhana Activity / Recurring	27.20	17.46	47.00	
2	Refurbishment / Building	0.00		0.00	
3	All Clubs	0.00		84.86	
4	Furniture / Non Recurring	5.50		15.50	
TOTAL		32.70	17.46	147.36	

Direct Central Assistance (MODROB / RPS / FIST) Old

Sr. No.	Items	Budgeted Expenses 2019-20	Expenses 2019-20	Balance up to 31.03.2020	Budget 2020-21
1	Civil	55.52	21.01	34.51	6.80
2	IT				
3	Electrical Dept				
4	MCA				
5	Science & Physics Dept				
6	Mathematics				
7	Mechanical Dept				
TOTAL		55.52	21.01	34.51	6.80

AICTE-AQIS 2020-21 PROPOSAL SUBMITTED

Sr. No.	Name of Faculty	AQIS Scheme	Amount
1	New Hostel for Girls (SC/ST) - AICTE		100.00
2	Library Development Fund - AICTE		4.00
TOTAL			104.00

TEQIP III

Sr. No.	Activities	Opening Balance	Amount Received in 2019-20	Expenses 2019-20	Balance as on 31.03.2020	Budget 2020-21
1	Procurement	-	368.19	368.19	-	186.00
2	Assistantships					
3	R & D					
4	FSD					
5	III Cell					
6	Capacity development					
7	Reforms					
8	Student Support					
9	IOC					
	TOTAL	-	368.19	368.19	-	186.00

**** TEQIP III Total Expenses Rs. 7,14,20,244/-**

Budget for Interdisciplinary Lab

(Rs. In Lacs)

Nano Technology Lab - (Physics, Mechanical Lab)

Sr. No.	Proposed Item with specification	Qty. Required	Estimated Unit Rate	Estimate Amount	Justification	Purchase by
3	Chemical & consumable (for all dept)			2.00		
4	SEM	1	5	5.00	Mechanical Material chemical composition analysis	Mechanical dept
5	Thermal conductivity measurement	1	6	6.00	For M Tech & Ph.D research work to consultancy work, study experiment for 3rd year students	Mechanical dept
Total				13.00		

IOT Lab (IT & E & TC, Electrical)

Sr. No.	Proposed Item with specification	Qty. Required	Estimated Unit Rate	Estimate Amount	Justification	Purchase by
	IOT Lab Hardware & Software	10 Sets				
1	IDE Eclipse, arduino, spider Ipython note book,IMU library, BLE library & pattern matching engine library advance machine learning, data analysis & data analytics Gateways, nods sencers & actuators for all above software & hardware			15.00	Core Subject at TE, Skill development & Project work	ENTC
2	10 PC			7.00		IT
3	Machine learning system IT-hardware softwares			15.00		IT
4	Integrated IoT Kits (Applications in Medical, Agriculture, Environment, Electrical, Automobiles, Home & Industry Automations)			9.50	As per curriculum needed in IoT Lab of B.Tech. Also use in Final Year BTech and Mini-Project work, sanctioned under DCA AICTE.	IT
5	IOT Platform	6	1.55	9.30	To develop IOT lab for TY students ,research and minor & major project	ENTC
6	Artificial Intelligence Complete hardware & Software	6	1.42	8.52	To develop AI and machine learning lab for TY and Final year student ,research work and minor& major project.	ENTC
Total				64.32		

Incubation Center (IT)

Sr. No.	Proposed Item with specification	Qty. Required	Estimated Unit Rate	Estimate Amount	Justification	Purchase by
1	PCB Manufacutring Tools Set	1		1.50	Oscilloscope	IT
2	Graphic Workstataion	5	1,25,000.00	5.00	for design	
3	Hololens,AR Vr Gear	1		5.00	Training	
4	software related toIndustry 4.0 Etc.	2	2,00,000.00	5.00	Training	
5	Lab equipment	5	2,00,000.00	10.00	Lab infra	
6	PCB lab	1	6,50,000.00	6.50	for PCB	
7	workshop on Robots			1.00	For Conference/ STTP purpose	
8	workshop on agriculture			1.00		
9	workshop on AI and MI			1.00		
10	Meeting with industry sec			0.25		
11	Venture Capitalist meet			1.50		
12	Startup activities			5.00		
13	Entrepreneur meet			2.00		
14	workshop Medical equipments			1.00	For maintenance purpose	
15	3D printer refills	900	50.00	0.45		
16	HP plotter	30000	1.00	0.30		
17	Toners	400	5.00	0.02		
Total				46.52		

Product Development (Mechanical)

1	Center of excellence for product development	Interdisciplinary with IT/ Elex	Assorted software equipment, Seprate prposal sent	7.00	Collabration with IT dept	Mechanical
Total				7.00		

Robotics - (E&TC and Mechanical)

Sr. No.	Proposed Item with specification	Qty Required	Estimated Unit Rate	Estimate Amount	Justification	Purchase by
1	Robotics Hardware lab: Two wheel balancing Robot with Control System board, Torsion Bar, Mechatronics Advance Board, with real time hardware Applications using 20 sim & 4C tool chain S/W. (two experimental setup for each category) (Only Hardware to be purchased software is available in department)	7	3	21.00	Robotics Lab for Final year student.	ENTC
2	Multiple Robotics Application Hardware Platform	2	3.5	7.00	Robotics Lab for Final year student	ENTC
3	Industrial robot 6-10 kg pay load for industrial applications pick & place	1	32	32.00	Robotics Lab	Mechanical
4	Work stations	1	2	2.00	Robotics Lab	Mechanical
Total				62.00		

Grand Total

192.84

Budget for Centre of Excellence

(Rs. In Lacs)

Name of Department - Electrical

Sr. No.	Proposed Item with specification	Qty Required	Estimated Unit Rate	Estimate Amount	Justification
1	<p>RTDS(Real time Digital Simulator)The RTDS Simulator consists of custom hardware and all-in-one software, specifically designed to perform real time ElectroMagnetic Transient (EMT) simulations. It operates continuously in real time while providing accurate results over a frequency range from DC to 3 kHz. This range provides a greater depth of analysis than traditional stability or load flow programs which study phenomenon within a very limited frequency range.</p> <p>The RTDS Simulator's fully digital parallel processing hardware is capable of simulating complex networks using a typical time step of 50 μs. The simulator also allows for small timestep subnetworks that operate with timesteps in the range of 1-4 μs for simulation of fast switching power electronic devices (e.g. VSC bridges with PWM switching). The hardware is bundled into modular units called racks that allow easy expansion of the Simulator's computing capability as required.RTDS Technologies' proprietary software, designed specifically for interfacing to the RTDS Simulator hardware, is called RSCAD®. RSCAD is a user-friendly interface, intended to create a working environment familiar to the power system engineer.</p> <p>RSCAD is an all-in-one package, containing all facilities that the user needs to prepare and run simulations, and to view and analyze results. This eliminates the need for third-party products. RSCAD is provided with a site license, which means that an unlimited number of users can use it at a given site—there is no per-seat fee.</p>	1	50	50.00	For Center of Excellence. Proposed For PhD as well as Mtech Students. (Total costing of CoE is Rs. 200.00 Lac out of which Rs. 50.0 Lac will be spend on procurement of OPEL RT Hardware to make HLL experiments on Power System)
2	1761-L32BWB/E ALLEN-BRADLEY kit	6	0.84	5.04	
3	6ES7511-1CK01-0AB0 SIEMENS SIMATIC S7-1500 COMPACT CPU	2	0.89	1.78	
Total				56.82	

Grand Total

56.82

State Government Plan : Equipment

List of Equipment to be Purchased

Name of Department - Mechanical Engineering

Sr. No	Proposed Items with specification	Quantity Required	Esti.Unit Rate	Estimated Amount	Justification
1	Air conditioning trainer with variuos process and instrementation	1	2.00	2.00	M Tech and B Tech Experiment
TOTAL		1	2.00	2.00	

Name of Department - Information Technology (IT)

Sr. No	Proposed Items with specification	Quantity Required	Esti.Unit Rate	Estimated Amount	Justification
1	Desktop Computers (Inteli5, 8 GB RAM, 1TB HDD, DVD R/W drive, 18 Monitor, Optical mouse, keyboard)	20	0.50	10.00	To perform Practical
TOTAL		20	0.50	10.00	

Name of Department - Master of Computer Application (MCA)

Sr. No	Proposed Items with specification	Quantity Required	Esti.Unit Rate	Estimated Amount	Justification
1	Digital Rolling Display boards	5	0.5	2.50	for display of graphics ,web pages and advertisment creations
TOTAL		5	0.5	2.50	

Name of Department - Physics

Sr. No	Proposed Items with specification	Quantity Required	Esti.Unit Rate	Estimated Amount	Justification
1	Resistivity of Semiconductors by Four Probe Method (Different Temperatures Determination of the Band-gap, (Advance Model, oven arrangement, Ge crystal, Teflon bush, Learning CD)	2	0.32	0.64	For First year B.Tech. Practicals
2	e/m Experimental Kit – Thomson’s Method (microcontroller based power supply instrument for CRT,LCD ,acrylic stand,deflection magnetometer and learning CD)	2	0.25	0.50	For First year B.Tech. Practicals
TOTAL		4	0.57	1.14	

Name of Department - Civil Engineering

Sr. No	Proposed Items with specification	Quantity Required	Esti.Unit Rate	Estimated Amount	Justification
1	Software - Rockworks	1	5	5.00	RockWorks is used by the mining, petroleum, and environmental industry for subsurface visualization, borehole database management as well as the creation of grids, solid models, calculating volumetric analysis, etc.Acdemic Projects, Research Projects, Academic and Commercial Software for Research, Academic and Consultancy Projects
2	Cupboards	5	0.05	0.25	For storage facility
3	Cupboards	5	0.03	0.15	For storage facility
TOTAL		11		5.40	

Grand Total

21.04

State Government Plan : Library

Sr. No.	Particulars	Budget 2019-20	Amount Received	Expenditure	Proposed Budget 2020-21
1	Development of Library	3.00	15.86	15.86	5.00
2	Book Bank	2.00	-	-	0.00
3	Book Bank (SWBC)	-	-	-	0.00
	TOTAL	5.00	15.86	15.86	5.00

State Government Non Plan

Sr. No.	Component	Budget 2019-20	Receipts	Expenditure up to 31.03.2020	Proposed Budget 2020-21
1	Government Staff Salary	1500.00	1620.86	1620.86	1,772.51
2	Travelling Expenses	8.09	2.32	2.32	-
3	Electric & Telephone & Water, Taxes	62.92	1.57	1.57	-
	TOTAL	1571.01	1624.75	1624.75	1,772.51

5. Institute Level Funds:

a. Corpus Fund

Sr. No.	Name of building	Details	Proposed Budget 2020-21	Justification
1	Extension (First floor) of PG Hostel	205.36 Sqm	10.00	Work up to slab level is completed and finishing work including brick work is in progress
2	Extension Concrete Technology Lab (G+1) (75%)	115.33 Sqm	10.00	Work up to slab level is completed and finishing work including brick work is in progress
3	Extension of Dean Academies	584.00 Sqm	50.00	Work up to slab level is completed and finishing work including brick work is in progress
4	Extension (First floor) of Jijau mess	269.90 Sqm	60.00	Recreation hall for girls students with connecting bridge
5	Extension of Automobile lab	308.50 Sqm	30.00	To accommodate moderation of the lab
6	Extension of B hostel (14 room)	437.94 Sqm	95.00	To increase capacity of Hostel to fulfill requirement of students.
7	Extension of C hostel (14 room)	437.94 Sqm	95.00	To increase capacity of Hostel to fulfill requirement of students.
8	Architect fee	As per decided percentage	30.00	Fee to be paid to the consultants appointed for Library & ENTC buildings and SC/ST hostel
9	Auditorium lift, staircase, Second entrance door etc.	As per plan	19.00	To provision for emergency exit and guest entry
10	Workshop valley gutters, sheets		18.00	Leakage through existing valley gutters and hence needs to be replaced, existing north light sheets have lost transparency hence needs to be replaced
11	Providing and Fixing New Parking Shed near Main Gate at GCE, Karad	439.50 Sqm	33.00	Existing parking facility is insufficient hence additional provision made as per requirement
12	Electrical lab	249.78 Sqm	55.00	Extension of electrical laboratory as per requirement
13	Colouring Mangalore Tiles of Roof at GCE, Karad	7547.94 Sqm	30.00	Colouring of tiles not yet done. Also to maintain Asthetic look of building

14	Mezzanine floor for workshop store	84.00 Sqm	10.00	To accommodate additional material to be store in workshop
	Mezzanine floor for machine & control lab of electrical dept		20.00	To develop new PG labs & study area.
15	Fencing for store of write off material of Institute behind the workshop	lump sum provision	5.00	To store write off material under key and lock
16	Maintenance of black topped roads in campus of the institute	lump sum provision	3.00	Filling of pot holes, painting of road marking providing sign boards
17	Replacing of tiles in ground floor of Civil department corridor, classrooms, laboratories and pasages etc.	1010.00 Sqm	10.00	The flooring in Civil department ground floor is damaged, requires to be replaced
18	Repairs to gutters, roof of main building	lump sum provision	3.00	Existing gutters required cleaning and replacing
19	Providing alluminium partations, sliding windows etc	lump sum provision	5.00	Providing aluminum partitions and sliding windows to various department as per requirement
20	Maintenanace of Toilets like plumbing, leakages, tiles repair etc	lump sum provision	3.00	Toilets maintenance of academic and residential buildings on Campus
21	Construction of BB wall and fitting of existing Gate in-front of Principal quarter	30 Sqm	3.00	To isolate academic campus and to restrict undue entries
22	Fitting of pavers with landscaping in between gap of MCA building and PG building	857	6.00	To provide elegant entry to newly constructed EnTC builing and approach.
23	Lanscaping of large open space in-front of civil/APM department	lump sum provision	10.00	To convert this area in 24 hours study area for students
24	SC/ST Hostel	provision	275.00	Existing girls hostel capacity is less so additional accommodation and SC/ST girls students facility to be provided
25	Refurbishment of Hod cabins with toilets	lump sum provision	6.00	To enhance look of Hod cabins & refurbishment of toilets.
26	Students Activty center - Phase I	As per plan	92.00	Student center activity like Gymkhana, Swimming pool etc.
TOTAL			986.00	

Note :

- AICTE Grant FY 2017-18 Rs100Lakhs for S.C & S.T Hostel
- Accumulation FY 2017-18 Rs275Lakhs for Hostel Building Fund
- Accumulation FY 2018-19 Rs250Lakhs for Building Fund and Furniture, Fixtures, Softwares & Other Assets

Institute Level Fund - Staff Development Fund (F2)

(Figures in Lakh)

Name of Department - Civil

Organizing STTP/ conferences/ qualification up gradation (Rs 1.5 lacs per STTP & Rs 4 lacs per National conference & Rs 6 lacs per International conference)

List of trainings/ conferences/ capacity building for the year 2020-2021

Sr. No.	Conference, Training, STTP, etc.	Brief Details	No of participants	Total Cost lacs
1	All faculty - each 2 training and 2 conference	For attending STTP/FDP/Workshop and presenting/participating in conference		1.50
2	Organization of FDP/STTP/Workshop - 2 (1- institute, 1 - Goa)	For faculty, research scholar conducting programme		2.00
3	Organization of International Conference - 1	For faculty, research scholar conducting programme		5.00
Total				8.50

R & D proposals for the year 2020-2021

Sr. No.	Principal Investigator and project details	Amount of Project in Lacs	Duration	Total Cost lacs
1	A.B. Landage - Geophysical Investigation of Atpadi Tehsil and surrounding area for characterization and modelling (field visits - travel cost/stay cost, assistant payment, bore hole drilling from outside agencies, bore log testing, groundwater quality testing, lithology characterization, groundwater availability study), model development, report writing and publication cost, travel for meeting District and State GSDA office	4	1 year	4.00
Total				4.00

Grand Total of Civil

12.50

Name of Department - Mechanical

Organizing STTP/ conferences/ qualification up gradation (Rs 1.5 lacs per STTP & Rs 4 lacs per National conference & Rs 6 lacs per International conference)

Sr.No.	Title of Conference/ STTP	Coordinator	Tentative Schedule	No of participants	Total Cost
1	Experimental methods in Thermal Engineering	1- Dr. R.K. Srivastava 2- Prof. N.V. Sali	15- 20 Dec 2020	40	2.00
2	Ergonomics in Design	1. Prof V S Jadhav 2. Prof. S. H. Patil	Nov-20	40	2.00
3	Advances in Fluid Power Engineering	1- Prof. N. V. Sali 2- Prof.Mrs. K. S. Gharge	Feb. 2021	40	2.00
4	Computational Fluid Dynamics	1. Dr A T Pise 2. Dr R K Shrivastava		50	2.00
5	ANSYS Static structural training	Dr. R.K. Shrivastava		40	1.30
Total					9.30

Deputation of Faculty/ Staff for Training, workshops and Conferences as per TNA only in accredited colleges/ NIT/ IIT/ reputed Industries (preferably in vacation)

Sr. No.	Name of Faculty/ Staff	Title of Conferences/ STTP	Tentative Schedule	Name of Institute/ Industry	Approximate Expenditure
1	G S Dhende	Advances in Manufacturing & Metrology	Jun-20	NITTTR Chennai	0.20
2	G S Dhende	Trends in Mechatronics & Manufacturing for Industrial Automation (2 weeks)	Sep-20	NITTTR Chennai	0.20
3	Prof. S. S. Jadhav	Turbo machines	Vacation	Any I I T	0.20
4	M. H. Yadav	Condition monitoring	Nov-Dec 2020	IIT/NIT	0.20
5	Prof. S. H. Patil	Design Engineering	Vacation	Institute of national Rrepute	0.20
6	Prof. S. H. Patil	High end designSoftware		Institute of national Rrepute	0.20
Total					1.20

Faculty exchange, twinning/ networking				
Sr. No.	Activity for Faculty exchange, twinning/ networking	Purpose	Expected Outcomes	Proposed expenditure
1	Prof. S. S. Jadhav	Twinning	Enhanced performance of mentee faculty	0.20
Total				0.20

R &D proposals for the year 2019-20			
Consumable/ spares			
Sr No.	Details of consumable/ spare	Quantity	Cost in Lacs
1	POL, Diesel, oil, cotton waste, spung for IC engine Lab & maintenance		0.35
2	AMC of 5 gas Analyser		0.90
Total			1.25

Matching Grants				
Sr No.	Name of Project	Sponsoring Organization	Grants Received in lacs	Expected matching grants from institute in Lacs
1	Experimental investigations on condensor heat transfer enhancement	RPS of AICTE	18.6 sanctioned	5.00
Total				5.00

Deputation for conferences within/ outside the country for paper presentation as per TNA only in accredited colleges/ NIT/ IIT/ reputed Industries					
Sr. No.	Name of Faculty/ Staff	Title of Conferences	Tentative Schedule	Name of Institute/ Industry	Approximate Expenditure
1	M. H. Yadav	yet not fixed	Oct 2020-March2021	IIT/NIT	0.20
2	G S Dhende	INTERNATIONAL CONFERENCE on	Sep-20	Technologic	0.20
3	G S Dhende	International Conference on	Nov-20	MNIT	0.20
Total					0.60

Best project award		
Sr. No.	Year	Estimated Amount
1	TY B.Tech	0.05
2	Final B. Tech	0.05
Total		0.10

Details of teaching assistantships for the year 2020-21					
Sr. No.	Class	No. of students	Activity to be assigned	Assistantship Amount	No. of Months
1	FY M Tech	2	10 hrs per week teaching assistantship	Rs. 8000/- per month	1.92
2	SY M Tech				-
3	Doctoral Research	2	Research and 08 hrs per week teaching assistantship	Rs 25000 per month	6.00
Total					7.92

Grants for UG/PG projects, minor/ major projects etc.				
Sr. No	Name of UG/ PG program	Finance per batch	No. of UG/ PG batches needing finance	Total
				(Rs. in lacs)
1	TY Mech Project	10000	15	1.00
2	BE Mech Project	20000	15	2.00
3	M Tech Project	50000	75	10.00
			Total	13.00

Grand Total of Mechanical 38.57

Name of Department - Electrical

Grants for UG/PG projects, minor/ major projects etc.				
Sr. No	Name of UG/ PG program	Finance per batch	No. of UG/ PG batches needing finance	Total
1	TY B.Tech.(Mini project)	5000	35	1.75
2	Final B.Tech.(Project)	25000	20	5.00
3	M. Tech.	50000	20	10.00
			Total	16.75

Best Project Awards		
Sr. No	Name of UG/ PG program	Finance per batch
1	FY BTech	0.015
2	SY BTech	0.02
3	TY BTech	0.025
4	Final BTech	0.03
Total		0.09

Grand Total of Electrical 16.84

Name of Department - Information Technology

**Organizing STTP/ conferences/ qualification up gradation
(Rs 1.5 lacs per STTP & Rs 4 lacs per National conference & Rs 6 lacs per International conference)**

Sr. No.	Title of Conference/ STTP	Coordinator	Tentative Schedule	No of participants	Total Cost
1	STTP on	Dr. R. B. Kulkarni	Sep-20	40	2.00
2	STTP on	Prof. A. B. Chaudhari	Apr-21	40	2.00
Total					4.00

Deputation of Faculty/ Staff for Training, workshops and Conferences as per TNA only in accredited colleges/ NIT/ IIT/ reputed Industries (preferably in vacation)

Information Technology					
Sr. No.	Name of Faculty/ Staff	Title of Conferences/ STTP	Tentative Schedule	Name of Institute/ Industry	Approximate Expenditure
1	Dr. S J Wagh		May-June 2021, Dec-2020	IIT/NIT/ Govt. Engg College	0.20
2	Dr. R B Kulkarni		May-June 2021, Dec-2020	IIT/NIT/ Govt. Engg College	0.20
3	Prof. N M Mule		May-June 2021, Dec-2020	IIT/NIT/ Govt. Engg College	0.20
4	Prof. Y. D Chavhan		May-June 2021, Dec-2020	IIT/NIT/ Govt. Engg College	0.20
5	Prof. B S Yelure		May-June 2021, Dec-2020	IIT/NIT/ Govt. Engg College	0.20
6	Prof. R. S. Mawale		May-June 2021, Dec-2020	IIT/NIT/ Govt. Engg College	0.20
7	Prof. A B Chaudhari		May-June 2021, Dec-2020	IIT/NIT/ Govt. Engg College	0.20
8	Prof. P B Jawade		May-June 2021, Dec-2020	IIT/NIT/ Govt. Engg College	0.20
9	Prof. N R Shetty		May-June 2021, Dec-2020	IIT/NIT/ Govt. Engg College	0.20
10	Prof. C V Andhare		May-June 2021, Dec-2020	IIT/NIT/ Govt. Engg College	0.20
Total					2.00

Deputation for Qualification up gradation

Sr No.	Name of Faculty/ Staff	Qualification	University/ Institute for deputation	Total fees for 2017-18
1	Prof. Y D Chavhan	PhD	In process	1.00
2	Prof. C. V. Andhare	PhD	In process	1.00
3	Prof. N. M. Mule	PhD	In process	1.00
4	Prof. P B Jawade	PhD	In process	1.00
Total				4.00

Faculty Award		
Information Technology		
Sr. No.	Name of Award	Proposed expenditure in lacs
1	Best Faculty Award	0.10
Total		0.10

R &D proposals for the year 2019-20				
Consumable/ spares				
Sr No.	Details of consumable/ spare	Quantity	Cost in Lacs	Justification
Total			-	

Deputation for conferences within/ outside the country for paper presentation as per TNA only in accredited colleges/ NIT/ IIT/ reputed Industries					
Sr. No.	Name of Faculty/ Staff	Title of Conferences	Tentative Schedule	Name of Institute/ Industry	Approximate Expenditure
1	Dr. S J Wagh	Machine Learning, IoT, Blockchain	As per availability	As per TNA	0.50
2	Dr. R B Kulkarni	Cloud , IoT	As per availability	As per TNA	0.50
3	Prof. N M Mule	Security, Image processing	As per availability	As per TNA	0.50
4	Prof. Y D Chavhan	Image processing	As per availability	As per TNA	0.50
5	Prof. B S Yelure	Wireless Adhoc Network	As per availability	As per TNA	0.50
6	Prof. R. S. Mawale	Machine Learning, IoT, Cloud	As per availability	As per TNA	0.50
7	Prof. A B Chaudhari	Data Analytics	As per availability	As per TNA	0.50
9	Prof. N R Shetty	Cloud, Network Security	As per availability	As per TNA	0.50
10	Prof. C V Andhare	Image processing, Security	As per availability	As per TNA	0.50
Total					4.50

Best Project Award		
Sr. No.	Year	Estimated Amount
1	FY BTech	0.10
2	SY BTech	0.10
3	TY BTech	0.10
4	Final BTech	0.20
Total		0.50

Details of teaching assistantships for the year 2019-20						
Sr. No.	Class	No. of students	Activity to be assigned	Assistantship Amount	No. of Months	Total in Lacs
1	FY Mtech/SY Mtech	10	Academic Load	Rs 8000/-	12	9.60
Total						9.60

Grants for UG/PG projects, minor/ major projects etc.				
Sr. No	Name of UG/ PG program	Finance per batch	No. of UG/ PG batches needing	Total
1	Information Technology UG	0.2	30	6.00
Total				6.00

Grand Total of Information Technology	30.70
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Name of Department - MCA

Organizing STTP/ conferences/ qualification up gradation (Rs 1.5 lacs per STTP & Rs 4 lacs per National conference & Rs 6 lacs per International conference)					
Sr. No.	Title of Conference/ STTP	Coordinator	Tentative Schedule	No of participants	Total Cost
1	STTTP on Computer Vision, Image analysis and Signal Processing	Prof. M. D. Malkauthekar	October - November - 2021	40	2.00
2	National Conference on ICT and E-Governance	Prof. L. L. Kumarwad Prof. B.S. Patil	Dec-20	250	4.00
3	National Conference on ICT and E-Governance	Prof. P.P. Shinde	Jan-21	100	4.00
Total					10.00

Deputation of Faculty/ Staff for Training, workshops and Conferences as per TNA only in accredited colleges/ NIT/ IIT/ reputed Industries (preferably in vacation)					
Sr. No.	Name of Faculty/ Staff	Title of Conferences/ STTP	Tentative Schedule	Name of Institute/ Industry	Approximate Expenditure
1	Prof. B. S. Patil	Conferences/ STTP	April-2020 to March 2021	Reputed Industry/ Institute	0.30
2	Prof. M. D. Malkauthekar	Conferences/ STTP	April-2020 to March 2021	Reputed Industry/ Institute	0.30
3	Prof. L. L. Kumarwad	Conferences/ STTP	April-2020 to March 2021	Reputed Industry/ Institute	0.30
4	Prof. P. P. Shinde	Conferences/ STTP	April-2020 to March 2021	Reputed Industry/ Institute	0.30
Total					1.20

Deputation for Qualification up gradation				
Sr No.	Name of Faculty/ Staff	Qualification	University/ Institute for deputation	Total fees for 2017-18
1	Prof. M. D. Malkauthekar	Ph.D	SRTM University, Nanded	0.25
2	Prof. L. L. Kumarwad	Ph.D	Shivaji University	0.08
3	Prof. P. P. Shinde	Ph.D	Shivaji University	0.18
Total				0.51

Faculty exchange, twinning/ networking				
Sr. No.	Activity for Faculty exchange, twinning/ networking	Purpose	Expected Outcomes	Proposed expenditure
1	ITES/ICT	to study different projects on E-Governance Area	Digitization, projects for students, and service to society	1.00
2	E-Governance	to study different projects on E-Governance Area	Digitization, projects for students, and service to society	1.00
3	Soft Computing	to study different projects on Soft Computing Area	Digitization, projects for students, and service to society	1.00
Total				3.00

Grand Total of MCA	14.71
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Name of Department - Chemistry					
Deputation of Faculty/ Staff for Training, workshops and Conferences as per TNA only in accredited colleges/ NIT/ IIT/					
Sr. No.	Name of Faculty/ Staff	Title of Conferences/ STTP	Tentative Schedule	Name of Institute/ Industry	Approximate Expenditure
1	Mrs. Karadkar	National /International Conferences	Dec-20	University/II T/NIT	0.20
		STTP/FDP/workshop	Dec-20		0.20
2	Dr Alsundkar	National /International Conferences	Dec-20	University/II T/NIT	0.20
		STTP/FDP/workshop	Dec-20		0.20
Total					0.80
Best project Award					
Sr. No.	Year				Total Cost
1	FY B.Tech				0.10
2	Project exhibition				1.00
Total					1.10

Grand Total Chemistry	1.90
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Name of Department - Physics				
Academic support for weak students for the year 2020-21				
(Please consider GATE classes, pre-placement training, additional soft skill training, industry visits, expert lectures and other proficiency for students)				
Sr. No.	Name of the Training Program	Target participants		Total Cost
1	Quiz Competition	300		0.05
2	Expert lecture	300		0.10
3	Expert visit	8		0.50
Total				0.65

Deputation of Faculty/ Staff for Training, workshops and Conferences as per TNA only in accredited colleges/ NIT/ IIT/ reputed Industries (preferably in vacation)					
Sr. No.	Name of Faculty/ Staff	Title of Conferences/ STTP	Tentative Schedule	Name of Institute/ Industry	Approximate Expenditure
1	Dr. S. A. Patil	National /International Conferences	Dec-20	University/II T/NIT	0.20
		STTP/FDP/workshop	Dec-20		0.20
2	Visiting Faculty	National /International Conferences	Dec-20	University/II T/NIT	0.10
		STTP/FDP/workshop	Dec-20		0.10
Total					0.60

Grand Total Physics	1.25
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Name of Department - Mathematics

Organizing STTP/ Conferences/ qualification up gradation (Rs. 1.5 lacs per STTP and Rs. 4 lacs per National conference & Rs. 6 lacs per International conference)					
Sr.No.	Title of Conference/ STTP	Co-ordinator	Tentative schedule	No. of participants	Total cost
1	Mathematical Tools as Research Aids	Dr. V. S. Patil	3rd Week of Dec 20	30	1.50
Total					1.50

Deputation of Faculty / staff for Training, workshops and Conferences as per TNA only in accredited colleges/NIT/IIT/ reputed Industries (preferably in vacation)					
Sr. No.	Name of Faculty / Staff	Title of Conference/ STTP	Tentative schedule	Name of Institute/ industry	Approxim-ate exp.
1	Dr. V. S. Patil			IIT/NIT	0.20
2	Prof. S. M. Shinde			IIT/NIT	0.20
3	Prof. U. V. Kanade			IIT/NIT	0.20
Total					0.60

Deputation for conferences within/ outside the country for paper presentation as per TNA only in accredited colleges / NIT/ IIT/ reputed Industries					
Sr. No.	Name of Faculty / Staff	Title of Conference/ STTP	Tentative schedule	Name of Institute/ industry	Approxim-ate exp.
1	Dr. V. S. Patil	Proposed Two Paper presentations at national conference in the academic year		Any Reputed Institute	0.50
Total					0.50

Grand Total Maths	2.60
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Grand Total Of All Departments	118.27
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Institute Level Fund - Equipment Replacement

(Figures in Lakh)

A.Equipment Replacement Fund : (For Equipment)

Name of Department - Civil Engineering

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
Computer Laboratory					
1	Computer Systems (Desktops) - Processor - Latest Generation Intel® Core™ i7, OS - Windows 10 Pro (64bit) English, Graphics - 2GB GDDR5 Graphics Memory , RAM - 16GB, Storage - 1TB, Display - 27-inch	6	0.6	3.60	Academic Projects, Online Courses and Academic Software and associated Laboratories
2	Computer Systems (Desktops) - Processor - Latest Generation Intel® Core™ i7, OS - Windows 10 Pro (64bit) English, Graphics - 8GB GDDR5 Graphics Memory , RAM - 32GB, Storage - 1TB, Display - 27-inch , advanced version	6	1	6.00	Academic Projects, Research Projects, Academic and Commercial Software for Research, Academic and Consultancy Projects
3	Software - ArcGis latest version licence for 12 users window based support	1	10	10.00	Academic Projects, Research Projects, Academic and Commercial Software for Research, Academic and Consultancy Projects
4	Software - Visual Modflow latest version licence for 12 users window based support	1	8	8.00	Academic Projects, Research Projects, Academic and Commercial Software for Research, Academic and Consultancy Projects
5	Collar mike with PA system standard	1	0.5	0.50	For faculty and students
6	UPS - 1 kva	10	0.05	0.50	For faculty computer power backup
Environmental Engineering Laboratory					
7	pH meter - Control Module: Advanced Microcontroller, Input Impedance: >1012 ohms, Display: 128 x 64 Dots Blue-white Graphic LCD Module, Keyboard: Soft touch membrane type, Power Supply: 230v±10% AC, 50 Hz, Housing: Corrosion resistant fiber body, Parameter Specifications pH range: 0-14pH, pH calibration: 3 point (7pH, 1 acidic, 1 basic), Resolution: 0.01pH, Accuracy: ±0.02 pH, pH sensor: pH electrode, Temperature Compensation: Automatic, mv/ ORP Range: ±2000mV, mv Resolution: 0.1 mV mv Accuracy: ±2 mV, ORP calibration: 2 point (84 mv, 263 mv), Temp. Range: 0-990C, Temp Resolution: 10C, Temp. Sensor: PT 100/ class A, Dimensions: 17 x 12 x 3.5 cms	1	0.265	0.27	To measure hydrogen ion activity

8	Turbidity meter - Range : 0 to 4000 NTU (Overall), 0 to 100 NTU (Ratiometric) 100 to 4000 NTU (Straight Beam), Accuracy : + 1%straight beam ; + 4% Ratiometric, Control Module : Advance Micro controller, Display :128 x 64 Dots Blue, White Colored Graphic LCD Module, Keyboard :Soft touch membrane type, Power Supply : 12V, 1A SMPS Adapter, Battery (Inbuilt) : 8.4V, 2Ah Rechargeable, PC Interface : RS 232, Real Time Clock : Date & Time stamped GLP report, Storage Manual Logging : 40 Reports, Housing : Corrosion resistant fiber body	1	0.453	0.45	To measure the turbidity of water, caused by suspended solids
9	Conductivity/TDS/ Salinity mmeter - Control Module : Advance Microcontroller, Input impedance : > 10 12 ohms, Display : 128 x 64 Dots Blue, White Colored Graphic LCD Module, Keyboard : Soft touch membrane type, Power Supply : 12V, 1A SMPS Adapter, Battery (Inbuilt) : 8.4V, 2Ah Rechargeable, PC Interface : RS 232 Comm., Real Time Clock : Date & Time stamped GLP report, Storage Manual Logging : 40 Reports each with maximum 5 Reading, Storage Auto Logging : 25 Reports each with maximum 25 Reading, Time Interval Auto Logging : 1 to 999 minutes, Housing : Corrosion resistant fiber body, Parameter Specifications : Parameter Range, Resolution Accuracy Calibration, Conductivity 0.02uS - 200m 1 LSD $\hat{A}\pm 2$ % of FSR up to 4 Pts, TDS 10PPB 200PPT 1 LSD $\hat{A}\pm 2$ % of FSR up to 4 Pts, Salinity 0 PPT-120 PPT 1 LSD $\hat{A}\pm 2$ % of FSR up to 4 Pts, Temp. Compensation : 00 1000C, Auto/ Manual Sensor : Conductivity cell, PT100	1	0.53	0.53	Measures the electrical conductivity in a solution
10	Nitrogen distillation unit - Units of test: 3 test, Heater: Mantle type, Flask capacities: 300 ml / 500 ml, Max. temperature: 350 \hat{A} °C, Rating: 200 watts, Construction: MS powder coated, Optional: - Glassware, Clamps, Lead fume duct, Condenser rack, Power supply: 220 Volts 50Hz	1	7	7.00	To perform Nitrogen analysis
11	Hot air oven - Temperature Range : Ambient to 205 \hat{A} °C, Inner size: 18 X 18 x 18, Accuracy $\hat{A}\pm 2$ \hat{A} °C, Operation through digital PID Controller, Three Shelves Inner SS 304 & Outer M.S. Powder Coated., For operation on 230 /50Hz	1	0.293	0.29	Heating purpose
12	Weighing Balance - Capacity: 20g, Accuracy:0.0001g, Calibration: Auto External, Stabilization Time: 2 to 4 sec., Readability: 0.0001g, Voltage: 110 to 230V, Power Source: AC/DC, Frequency: 50 to 60Hz, Display: Backlit LCD Display	1	0.2	0.20	For weighing sample

13	<p>High Volume Sampler - 1. Flow Rate: 0.9 1.4 m³ /min free flow, 2. Particle Size: Particles of 10 microns & below collected on Filter Paper holder. SPM bigger than 10 microns collected in a separate sampling bottle under the cyclone, 3. Sampling Time: 28 hours (maximum), 4. Sampling Time Record: 0 to 9999.99 hrs. recorded on a Time Totalizer, 5. Power requirement: Nominal 220 V, Single Phase, 50Hz AC mains supply., For proper operation and safety a good earth connection is mandatory, 6. Size & Weight: 430 x 320 x 930mm, 45 Kg, 7. Automatic Sampling: 24 hrs programmable timer to automatically shut off the system after pre-Control set time interval.</p>	1	0.7	0.70	Air Monitoring
14	<p>Atomic Absorption Spectrophotometer - Optical System: Instrument type- Single beam reflector achromatic optics system, Dispersion elements- Grating system 1200 line/mm , characterization area- 40mm², wavelength- 250nm, Resolution- Min. 3 lines, HCL Housing- Standard 4 lamps turret, Gas control- Automatic control and Optimization, Atomization System: Flame Characteristic concentration- (Cu)0.025 Âµg/ml max, Detection limit â€“(Cu)0.004 Âµg/ml max Precision-RDS=0.5%, Burner- Air cooled titanium, Nebulizer- High efficient Nebulizer, Spray Chamber- Anti corrosive material Other:, Dimensions and weight- 700x420x550 mm, 100kg approx..., Power- AC 220V+/-10%, 50 Hz, Working Temperature- 10-300C, Working Humidity- 40%-85%</p>	1	8	8.00	For heavy metal detection
15	<p>CHONS Analyzer - Sample weight range- 0.02 to 1000mg, Detection range- 0-100% for all elements (C, H, N, S ,O) with the capability of measuring at least 10 mg, Built with EA Data Manager software, Adopts frontal chromatography for simple reliable and accurate measurements, Multiple modes of operation: CHN or CHNS Mode or Oxygen Mode., Readily/conveniently switches between Oxygen and CHN/CHNS modes, Analysis Times: CHN - 6 mins ; CHNS - 8 mins; Oxygen- 4 mins, Analytical range: C 0.001-3.6 mg; H 0.001-1.0 mg; N 0.001-6.0 mg; S 0.001-2.0 mg; O 0.001-2.0 mg, Sample required for analysis : 1-3 mg, Detector TCD (thermal conductivity detector)., Carrier Gas: Helium or Argon., Combustion gas: Oxygen, Adopts a mixture of two combustion techniques to ensure complete sample combustion, Pneumatic Gas Air, Nitrogen or Argon, Up to 60 samples can be position at a time (60 samples can analyzed in series, unattended), The weight of the samples is automatically fed to the system, Provides permanent record of instrument timing, leak</p>	1	7	7.00	To determine the percentage of carbon, hydrogen, nitrogen, oxygen and sulphur
Geotechnical Engineering Laboratory					

16	Hand Operated Extractor - Hand Operated Extractor for 38mm diameter & 50mm diameter specimen including sample extractor frame screw type with a wire sample trimmer for 38mm diameter & 50mm diameter, Jarring link for driving the sampling tube, Adapter with locking screw for fitting sampling tube to Jarring link, Split mould 38mm diameter x 76mm long with quick release clam, Split mould 50mm diameter x 100mm long with quick release clam Sampling tube 38mm diameter x 200mm long 6Nos, Sampling tube 50mm diameter x 200mm long 6Nos, Pad for 50mm diameter sample.	1	0.2	0.20	Experimentation, Testing & Consultancy
17	Liquid Limit - Consist of a hard rubber base carrying a sliding carriage assembly to which a brass cup is hinged. The cup is raised and allowed to fall through a height of 1cm on to the hard rubber base, with the help of a lead screw provided at the back of the sliding carriage Suitable for operating on 220V, 50Hz, Single phase AC supply Casagrand Grooving tool, ASTM grooving tool, Counter, Bowl.	1	0.09	0.09	Experimentation, Testing & Consultancy
18	Andreasen Pipette Stand - A sliding carriage which is operated without transmitting vibrations to pipette or to sedimentation tube when the pipette is inserted and withdrawn from the liquid. Andreasen Pipette, Glass, 10ml capacity, Sedimentation tube Glass, 500ml capacity.	1	0.21	0.21	Experimentation, Testing & Consultancy
19	High Speed Stirrer - A compact bench-mounted laboratory Stirrer for the pretreatment stage of soils before particle size analysis. The mixer spindle operates within a dispersion cup which can be fitted with an antispashing baffle to improve the efficiency of mixing. Suitable for operation on 220 V, 50 Hz, single phase, AC Supply.	1	0.15	0.15	Experimentation, Testing & Consultancy
Geology Laboratory					
20	Rock Collection Display/ wall Display - Rock/Mineral collection display, Body-metal/ Engineered wood with Glass display	5	0.1	0.50	For showcasing the rocks and mineral specimen already purchased/available.
Transportation Engineering Laboratory					

21	<p>Mild Steel Los Angeles Abrasion Testing Machine, 220 V - Frequency-50/60 Hz, Voltage-220 V, Drum Rotation Speed(mm)- 30~33 rpm, Consists of a hollow steel cylinder, closed at both ends, having an inside diameter of 700mm and inside length of 500mm. The cylinder mounted on a sturdy frame on ball bearings. The opening is closed dust tight with a removable bolted cover in place. A detachable shelf which extends through the drum catches the abrasive charge and does not allow it to fall on the cover. The drum is rotated at a speed of 30-33 RPM by an electric motor through a heavy duty reduction gear. Fitted with revolution counter and push button starter. Supplied complete with a tray for collection of the material. Abrasive charge consists of set of 12 Nos. cast iron spheres or steel spheres (hardened steel balls) approximately 48mm diameter each weigh between 390-445 gram. Complete as above. The Instrument should be equipped with digital counter.</p>	1	0.6	0.60	Lab performance and material testing.
	Fluid Mechanics and Hydraulics Laboratory				
24	<p>Surge & Water Hammer Apparatus - Test section material stainless steel Size 20 mm ID (approx), length 3m (approx.). Surge shift material clear acrylic. Size 40mm ID (approx), Height 800mm (approx) with graduated scale. Water circulation centrifugal pump Flow measurement flow sensor output 4-20 MA. Constant head tank material stainless steel, suitable capacity. Sump tank material stainless steel, suitable capacity. Pressure measurement pressure sensor 0-7 bar, output 4-20 mA (for water hammer) Level measurement level sensor, output 4-20 mA (for pipe surge) Control panel consists of standard make on/off switch, mains indicator, etc. An ENGLISH instruction manual will be provided along with the Apparatus the whole set-up is well designed and arranged on a rigid structure painted with industrial PU Paint. Control Panel Standard make on/off switch, Mains Indicator etc.</p>	1	9.5	9.50	To Find out water hammer pressure in pipe, Research, Testing and Consultancy

25	<p>Basic Hydrology Apparatus - Hydrology Apparatus for the study of permeability, fluvial mechanics, ground water abstraction, flood hydrographs and rainfall/run off values. A small centrifugal circulating pump provides supply water to the overhead spray nozzles and end tanks. Located in the base of the upper tank are two wells and an array of pressure tapings, the latter being connected to a multitube manometer by flexible hoses. Rainwater flow is measured by rotameter and three calibrated low capacity notch weirs are used to measure well water abstraction and groundwater catchment flows. Permeable Medium comprising 800 kg of washed and graded high silica sand containing particle sizes 0.2 mm to 1.5 mm. The apparatus consists of a shallow water tight rectangular tank made up of high grade Stainless Steel, dimensions as specified below, which can be filled with a fine granular medium to form the experimental terrain. The tank is supported on a fabricated steel frame with mountings which allow adjustment of the inclination of the tank. Above the tank is a frame</p>	1	3.5	3.50	Academic (to understand Hydrological cycle from precipitation to runoff induced with various losses in it), Researach, Testing and Consultancy
Surveying Laboratory					
26	<p>Vernier Transit Theodolite - 1. Accuracy: 10 secs, 2. Minimum Focus: 2.2 meters, 3. Effective Aperture: 38 mm, 4. Field of View: 2.6 m at 100 meters, The instrument should be supplied with standard accessories in the teak wood box with aluminum telescopic tripod stand., Body of Theodolite should be made up of high grade aluminium and brass and should be powder coated</p>	6	0.25	1.50	Academic (Laboratory-Practicals) and Consultancy of Surveying related to Angle Measurements
27	<p>Mirror Stereoscope with 4X Binoculars - Binoculars: 4X; Stereoscope Binocular: 70 mm; Field of view: 18x23 cm; Swing in Magnifier: 1.8X; Magnification: 27cm, Instrument should have unmatched precision and ease of use for viewing and interpreting aerial photographs. Elevations should be seen with startling clarity in three dimensions and the instrument should be used for long periods of time without eye strain. The distance between centres of the stereo pairs (optical path) should be 27cm and the field of view should be 18x23cm for viewing 23x23cm photographs. 4X Binoculars, supplied as standard equipment. A convenient feature of Mirror Stereoscope should be the ease of adjustment for varying interpupillary distances; there is no need to reorient photographs. And the instrument should be provided in wooden case with 10 (10 X 2 = 20 Photographs) sets of aerial photographs of above stated sizes, and Manual in English Language.</p>	1	0.25	0.25	Academic (Laboratory-Practicals related to aerial photography)

28	Multiparameter monitoring instrument. * Micro-Controller Based * Multi-point Calibration * Automatic Temp. Compensation * Large Colored Graphic Display * Self Diagnostic Messages * PC connectivity * Inbuilt Battery Back-up * Date/time stamped calibration report	1	5.5	5.50	
Total		54		75.04	

Name of Department - Mechanical Engineering

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Flash and fire point apparatus	1	0.2	0.20	old equipment proposed to be write off
2	Evaporative condenser	1	2.20	2.20	As per syllabus of SY B tech Applied Thermodynamics lab
3	Bomb calorimeter with oxygen cylinder with trolley	1	1.3	1.30	
5	Pin fin Experiment la set up	1	0.6	0.60	
6	Electromagnetic flow meter/ Coriolis flow meter with calibration facility	1	2.80	2.80	For UG & PG Experimental work, Testing & Calibration purpose
7	Pressure Guage/ Sensors Testing & Calibration Unit	1	3	3.00	For UG & PG Experimental work, Testing & Calibration purpose
8	Pelton Wheel Turbine- impulse type	1	1.5	1.50	as per SY B Tech syllabus
9	Coriolis meter	1	4.3	4.30	Used for PG, Research, Projects
10	Computer	3	0.34	1.12	Required for Faculty at MESA
11	Printer, Lan connection	3	0.16	0.48	Library Cabin
12	Higher version of catia +hyperworks software	assorted	rate	7.00	CAD/CAM Lab
13	Laptop	3	70	2.10	Official work, prsentation before NBA , Department has no Laptop
	Air Conditioner	2	0.55	1.10	Split air conditioner(fixed speed, 2 Ton, 230 V, 50 Hz, single phase)for PG production lab and HoD cabin/ PG reseach
Total		19	86.95	27.70	

Name of Department - Electrical Engineering

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	<p>LCR meter</p> <ul style="list-style-type: none"> • DC, 4 Hz to 8 MHz measurement • High-speed measurement of 1 ms (fastest time) • High-precision measurement of $\pm 0.05\%$ rdg. • (representative value) <p>Guaranteed accuracy range from 1 mΩ,</p> <ul style="list-style-type: none"> • Low impedance measurement with unmatched • repeatability • DC bias function: Measure under conditions • simulating actual use or in accordance with • industry standards • Probe LCR-L2000 – Four terminal upto 8 MHz 	1	5	5	<p>New purchase for UG & PG students to increase practical approach for testing.</p> <ul style="list-style-type: none"> • Electronics Component Testing • Motor winding Testing • Transformer winding Testing
2	<p>Thermal imaging camera</p> <p>Specification</p> <ul style="list-style-type: none"> • High Performance Thermal Imager with Touch Screen LCD display • IR Resolution : 320 X 240 (76,800) • Temp Range : -20°C to 550°C • Field of View(FOV): 45°x 34° • Focus: Focus-Free • Spotmeter: Center spot ; box with min./max • Thermal Sensitivity - <0.05 ° C /<50 mK • MSX & Color ALARM function 	1	4.25	4.25	<p>New purchase for UG & PG students to increase practical approach for energy consevation. Energy saving without loss is very important. Thermal imaging camera shows visual picture so temperatures over a large area can be compared.</p>
3	<p>Single Ch Power Meter</p> <p>Basic</p> <p>Accuracy - +/- 0.1 % rdg</p> <p>Freq Bandwidth - DC , 0.1 Hz to 100 KHz</p> <p>Voltage - 600 V AC/DC</p> <p>Direct Current - 30 Amp</p> <p>Extra Clamp Sensor I/P Facility to measure High Amp Current</p> <p>Measurement – V,I,Freq,Kw,Kva,Kvar,Kwh, PF ,Phase angle , THD , Current Integration , Crest Factor (V & I) , Ripple Factor (V & I) & Harmonic Measurement facility</p> <p>Display resolution – 5 Digit</p> <p>PC Interface with PC Software for data logging</p> <p>D to A output Facility required</p> <p>LAN & RS-232 Interface facility required.</p>	1	1.8228	1.8228	<p>This is required for electrical measurement laboratory for UG students, project experimentation for UG, PG students and research scholars. At present such equipment is not available in the department / laboratory.</p>

4	<p>Three Ch Power Meter Basic Accuracy - +/- 0.1 % rdg Freq Bandwidth - DC , 0.1 Hz to 100 KHz Voltage - 1000 V AC/DC & Direct Current - 65 Amp Extra Clamp Sensor I/P Facility to measure High Amp Current Measurement – V,I,Freq,Kw,Kva,Kvar,Kwh, PF ,Phase angle , THD , Current Integration , Crest Factor (V & I) , Ripple Factor (V & I), efficiency & Harmonic Measurement facility Display resolution – 5 Digit PC Interface with PC Software for data logging D to A output Facility required LAN & RS-232 Interface facility required.</p>	1	4	4	<p>These are advanced equipments required for experimentation and laboratory prototype development, testing purpose for UG, PG, and Research Scholars.</p>
5	<p>5 KV Insulation Tester Test Voltage – 250 TO 5000 V Test Insulation resistance Range - upto10 TeraOhm Leakage Current Measurement & display . PI & DAR measurement display Voltage measurement – 750 V AC/DC Backlight function Accuracy – 5 %& Portable Battery Operated Data Memory With PC software Supplied with test lead set & batteries & Hard Case</p>	1	1.8696	1.8696	<p>This is required for testing.</p>

6	Clamp On Earth tester Clamp Type Earth Measurement Earth resistance measurement – 0.02Ohm to1600 Ohm Accuracy - +/- 1.5 %rdg Leakage Current – 1.00 mA to 60.0 Amp Display – 4 Digit & Auto Range Max conductor Diameter - DIA 32 mm AA Batteries with Standard resistance Check loop .	1	0.86	0.86	This is required for testing.
7	Portable Universal Calibrator • Pressure generation capacity -1 bar to 100 Bar Pneumatically • HART Configurator Facility . • Simulation/sourcing of current 0 to 24 mA (internal loop power) • Simulation/sourcing of DC voltage 24V for loop supply. • Portable to handheld type carry in field. • Display: LED/LCD type • Engineering units: Multiple pressure units suitable to measure pressure • Range & Accuracy: Current Source – Range 0 to 24.000mA - Accuracy -0.02% rdg + 2 counts • Current Measurement - Range 0 to 55.000mA - Accuracy – 0.02% rdg + 3 Counts • DC mV – Source & Measurement – Range – 0 to 120.00mV – Accuracy – 0.02%rdg +2 counts	1	11.5	11.5	This is required for testing & calibration. Field Calibration Tool • Pressure Instruments Calibration • Pressure Transmitter • Temp Transmitter • Temp Indicator • Pressure Indicator <input type="checkbox"/>
8	Working kit to study principle of Oil Circuit Breaker and to test the OCB, Specifications :Capacity 11KV,Type Draw out Type Rated Current 400A,Rated Voltage 415V, 3 Phase, 50HZ,Rated Insulated Voltage 690 V,Rated S.C Breaking 36.6 KA,No. of Pole Three Pole,Housing: The OCB housed in M.S. Cubicle box with conduit plugs provided with side entry of cables. Provision for termination of contacts made inside the cable box	1	5.00	5.00	Oil Circuit Breaker is a commonly used instrument in industry. Students will be familiar with working of OCB in laboratory. Hands on practice will boost confidence of students.
9	Working kit to study principle of Air Circuit Breaker and to test the ACB Specifications :Capacity 11KV,Type Non-Draw Type Rated Current 400A,Rated Voltage 415V, 3 Phase, 50HZ,Rated Insulated Voltage 690 V,Rated S.C Breaking 36.6 KA,No. of Pole Three Pole, mRated making Capacity-77KA(peak) Rated (S.T.) Withstand capacity: 0.5 sec : 36.6 KA ; 1.0 sec :25.0KA Make –Standard Housing: The ACB housed in M.S. Cubicle box with conduit plugs provided with side entry of cables. Provision for termination of contacts made inside the cable box	1	4.00	4.00	It is a commonly used breaker in industry. Students will be familiar with working of ACB in laboratory. Hands on practice will help students to boost their confidence.

10	Working kit to study principle of VCB and to test the VCB Specifications :Capacity 11KV,Type Draw out Type Rated Current 400A,Rated Voltage 415V, 3 Phase, 50HZ,Rated Insulated Voltage 690 V,Rated S.C Breaking 36.6 KA,No. of Pole Three Pole, Housing: The MCB housed in M.S. Cubicle box with conduit plugs provided with side entry of cables. Provision for termination of contacts inside the cable box.	1	5.00	5.00	It is a commonly used breaker in industry. Students will be familiar with working of VCB in laboratory. Hands on practice will help students to boost their confidence.
11	Computer I5, 8GB RAM, 1TB HDD	15	0.5	7.5	<ul style="list-style-type: none"> • 8 courses in the curriculum offer computer based lab work(practicals). • 50% of the computers are more than 7 years old. • More no of teaching & non teaching staff appointed. Computer has to be given to them.
12	Printer Mono B/W 15 to 20 PPM, Laser Jet	10	0.1	1	<ul style="list-style-type: none"> • More printers needed for academic & official work • More no of teaching & non teaching staff appointed. Computer/ printer needs to be given to them.
13	UPS, 5 KVA, single phase	1	1.5	1.5	<ul style="list-style-type: none"> • Computer lab needs to be connected through UPS to safeguard computers.
14	Thevenin theorem verification kit	1	0.09	0.09	

15	Superposition theorem verification kit	1	0.09	0.09	for conduction of experiments as per curriculum
16	capacitor charging / discharging kit	1	0.065	0.065	
17	Multimeter	10	0.007	0.07	
18	connecting wires and miscellenous	LS	LS	0.055	
19	Buck Converter	1	0.2	0.2	For practicals in Power Electronics lab
20	Boost Converter	1	0.2	0.2	For practicals in Power Electronics lab
21	Buck – BoostConverter	1	0.2	0.2	For practicals in Power Electronics lab
22	High-gain DC-DC converter with advanced control schemes in open-loop and closed-loop	1	2	2	For practicals and project work of UG and PG students in Power Electronics lab
23	Multi-stage battery charging converter with control and monitoring	1	2	2	For practicals and project work of UG and PG students in Power Electronics lab
24	1-ph cycloconverter	1	1.5	1.5	For practicals and project work of UG and PG students in Power Electronics lab
25	3-ph cycloconverter	1	2	2	For practicals and project work of UG and PG students in Power Electronics lab
26	1-ph cascade H-bridge inverter	1	1.5	1.5	For practicals and project work of UG and PG students in Power Electronics lab
27	3-ph modular multilevel inverter	1	3.5	3.5	For practicals and project work of UG and PG students in Power Electronics lab

28	Various consumables (components)	LS	LS	2	Required for Power Electronics lab
29	Soldering guns	5	0.005	0.025	Required in Electrical dept labs
30	Welding set	1	0.1	0.1	
31	Grinding machine	1	0.02	0.02	
32	Cutting machine	1	0.035	0.035	
33	Pedestrian fans	3	0.03	0.09	
34	Drilling machine	1	0.04	0.04	
35	Wireman kit	3	0.1	0.3	
36	Hand drill	2	0.07	0.14	
37	Dril bit sets	2	0.005	0.01	
38	Spanner set	1	0.05	0.05	
39	Allen key set	1	0.007	0.007	
40	Screw driver set-regular	2	0.005	0.01	
41	Screw driver set-phillies	2	0.015	0.03	
42	Electric cutter	2	0.05	0.1	
43	Hammer	2	0.012	0.024	
44	Three Wheeler Auto Electric Vehicle using BLDC, P.M.S.M. & S.R.M. motor demo setup model	1	6	6	B.tech final Year , M.Tech Project work and Research work
45	Power Semiconductor Devices		100	2	For project work / R&D
46	Resistor,Inductor,Capacitor,Transformer,Ferr		100	3	
47	Battery,Solder gun,Conumable Electronics		20	1	
48	1.5 tone split AC	2	0.5	1	Seminar Room
49	Providing earthing for various laboratories	10	0.15	1.5	For electrical safety purpose
50	Mouse and KBD			0.25	Requires to be replaced as per necessity
51	Computer head phones	20	0.005	0.1	Required in computer lab
52	Solar Roof top, test rig, (50 kW- RESCO Model & 50kW CAPEX Model)			28.00	To save electricity charges & promot use of green energy & for experiments of FE all, TE (Ele), BE (Mech)
Total		120	285.9534	112.60	

Name of Department - Information Technology

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	New Laboratory for PG: Desktop computers-18 (Inteli5, 8 GB RAM, 1TB HDD, DVD R/W drive, 18 Monitor, Optical mouse, keyboard)	18	0.7	12.60	New PG course is starting in the department from Academic year 2018-19. As per requirments of AICTE to setup PG Lab
	Networking of proposed PG Lab	20	1	1.00	To setup & configure networking infrastructure for proposed PG Lab
2	Laptop- NG Series,Processor:Intel core i7, 2.3 GHz, RAM 16GB DDR4 2133, HDD 1TB, Graphics coprocessor, card reader, display 15.6 inch.	3	0.7	2.10	To faculties for Course preparation & effective Teaching learning process
3	Softwares for BE/ME Project works	1	6	6.00	As per curriculum needed in Cloud computing Lab. Also use in Final Year BTech and Mini-Project work
4	Visual Studio Professional software	1	0.35	0.35	For performing Final Year BTech and Mini-Project work
5	Gaming Lab: Unity software,3 Graphic Workstation	3	2	6.00	As per new syllabus for semester VII elective 3(Gaming Architecture & Design). Job Opportunity in gaming industry
6	NetSim Standard Version(Research) Network Simulation Software: Component 1 - Internetworks, Component 2 – Legacy Networks, Component 3 – BGP Networks, Component 4 – Advanced Wireless Networks (MANET, Wi-Max), Component 5 – Cellular Networks: GSM and CDMA, Component 6 – Internet of Things, Component 7 – Cognitive Radio Networks, Component 8 – LTE and LTE-Advanced Networks, Component 9 – Vehicular Adhoc Networks, Network Emulator (Add On)	1	7.5	7.50	For performing simulation based practicals for Wireless Mobile communication and Computer communication Network subjects of BTech / Mtech. Useful for faculty research work.
8	LCD/LED Projector: Features & Score (view all)Type: XGADevice Chipset: DLPLamp Life : 2000 hrs and BelowBrightness : 2501 – 3000 lmResolution: 1024 x 768 pRemote Control: YesLamp: 190WContrast Ratio: 4,000:1 HzPower Consumption(Active Mode): 218 W	2	0.5	1.00	For teaching learning in classroom, Guest lectures, Presentations
9	AWS subscription: Licence for Amazon web services	1	1.5	1.50	For cloud computing Lab
10	Automatics Xerox Machine	1	0.8	0.80	Departmental Work
	Total	51		38.85	

Name of Department - Electronics & Telecommunication

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Analog Integrated Circuits lab: schmitt trigger , V to I converter, I to V converter , wein bridge, colpitts , hartely oscillator monostable , astable multivibrator using operational amplifier (Five experimental kits for each experiment)	20	0.1	2.00	For Analog Integrated Circuits lab
2	Analog Electronics and circuits: PN Junction Diode Trainer Kit, Zener Diode Characteristics, Two single stage CE Amplifier using NPN transistor BC548/148, Transistor Biasing Techniques, FET Biasing Techniques trainer kit. (Three experimental kits for each experiment)	12	0.1	1.20	For Analog Integrated Circuits lab
3	Microcontroller & Interfacing lab: Raspberry Pi4 Trainer Kit, PIC 18Fxx microcontroller Trainer Kit, ARM LPC214x Development Board (Ten development boards for each category)	30	0.06	1.80	As per new curriculum of microcontroller lab for SY and TY students
4	Microwave lab: Nvis 9000 Microwave Test Bench (Klystron Based) Nvis 9001 Microwave Test Bench (Gunn Based)	2	1	2.00	For study of microwave engineering for BTech students
5	Satellite Communication Uplink Transmitter, Downlink Receiver and Transponder(to develop satellite base station)	1	1.1	1.10	Satellite Base Station for research and project work For study of Satellite communication for BTech
6	Testing and measurement equipment Testing and measurement of interfaced controllers (to develop satellite base station)	1	1.5	1.50	
7	Advanced computer network lab: LAN-T, i- securiT, Netsys- T (benchmark production)	6	3	18.00	For study of different protocols of CN and Data security
8	Wireless Communication Hardware Platforms	4	2.5	10.00	For wireless and satellite communications subjects
9	Dual Wavelength Fiber Optics Laser Source and Detector Module	1	1.5	1.50	To enhance study of FO for B tech student
10	Embedded System Lab: MSP-EXP430F5529LP kit, MSP-EXP432P401R kit, LAUNCHXL2-570LC43 kit (Ten kits for each category)	30	0.012	3.60	For emulation and debugging different application using MSP for TY student
11	5KVA-UPS	2	1.5	3.00	For Power Electronics,Miro-
	Total	109		45.70	

Name of Department - Applied Mechanics

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate Rs	Estimate Amt	Justification
1	Oven 300deg	1	150000	1.50	
2	Torsion Testing M/C	1	700000	7.00	
3	Planimeter	1	45000	0.45	
4	Computer	30	35000	11.00	
5	Zerox Machine	1	85000	0.85	
6	Concrete Compressor	1	80000	0.80	
7	Cube Mould	24	3000	0.72	
8	Vicat Appratus	1	600000	6.00	
9	Beam Mould	12	6000	0.72	
10	Mechanical Sieve Shaker	1	45000	0.45	
11	Digital Rebound Hammer Low Mpa	1	300000	3.00	
12	Thermometer Concrete	1	50000	0.50	
13	UTM-100T	1	1000000	10.00	
14	CTM-40T	1	300000	3.00	
15	Digital Watch Moisture Temp.	1	5000	0.05	
16	Humidity Chamber	1	100000	1.00	
	Total			47.04	

Name of Department - Master of Computer Application

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Desktop Computer	40	0.5	20.00	For New research based Soft computing lab-10 and Computer graphics lab 30 against write off
2	SIM808 GSM+ GPRS+GPS Cellular Module SIM808 5 11000 Cellular Module for Data communication	20	0.033	0.66	For New Laboratory in the area of IOT to be developed under autonomous curriculum of TYMCA
3	Scanner	4	0.05	0.20	For scanning of Documents
4	Statistica Data Miner Tool	1	5	5.00	For Software Development Project Laboratory
5	Laptop	5	0.7	3.50	for department staff use
6	Printer	5	0.2	1.00	For Network Laboratory
	Total	75	6.483	30.36	

Name of Department - Physics

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Air Conditioner (1.5 tonn ,auto restrart, 5 stars rating, 3M microprotection filter, E saver mode, Rotary compressor, noise level indoar 36 DB.)	1	0.5	0.50	For safety of TGDTA and FTIR equipment in Nanotechnology Lab
2	Newton's Ring apparatus (Type- Plano -covex, Diameter 6cm Microscope-Magnification: 30 X , Least count :0.001cm)	2	0.2	0.40	For First Year B.Tech.Practical
3	Michelson Interferometer (Base dimension :290X212X168, mirrors 30mm dia, thickness 10mm , Least count :0.0001 mm, with He - Ne Laser source, Laboratory Jack, Object screen and cylindrical Base)	2	0.5	1.00	For First Year B.Tech.Practical
Total		5	1.2	1.90	

Name of Department - Office

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Laptop	1	0.70	0.70	For Office and Meeting
2	Computer	14	0.45	6.30	For Office Staff
3	Server	1	5.00	5.00	For Office & software's
Total		16	6.15	12.00	

Name of Department - TPO

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Desktop	1	0.50	0.50	Computre memory and speed are inadequate
Total		1	0.5	0.50	

Name of Department - Dean Office

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Laptops / TABs		0.40	0.80	for Dean Academics and Controller of Examinations for meetings- presentations & allied activities
2	Desktop Computers		0.50	3.00	Paper Assessment, Result Processing, Record Maintaining and day to day Office work
3	Heavy Duty Printer		0.60	0.60	
4	Xerox Machine		1.00	1.00	For Exam Printing Section
5	Sheder Machine		1.00	1.00	
6	Air Cooler (Tower Type + small)		0.10	0.80	
	Examination Cell				
7	Smart Board/Projector			4.00	
8	Gestnar Machin (A3 Copier)			1.00	
9	Xerox Machin			1.00	
	Scholarship Section				
10	Desktop Computers			0.50	Scholarship Section
11	Monitor			0.05	Requirements
	Total	0	3.6	13.75	

Grand Total

405.44

Institute Level Fund - Equipment Replacement

B .Equipment Replacement Fund : (For Furniture)

Name of Department - Mechanical Engineering

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Faculty tables	2	0.08	0.16	One in CIM Lab and Other in NC Machining Lab
2	Benches in MQC and Metallurgy Labs	20	0.08	1.60	seating arrangement for practical sessions
3	Faculty Cabin in Control Engineering Lab Size- 12 X 10 feet with 8 feet height in Aluminium section with partially partial board and partial in glass with door	1	0.5	0.50	Seating arrangement for the Faculty
Total		23	0.66	2.26	

Name of Department - Electrical Engineering

S.No.	Proposed Item with specification	Area Detail	Estimated Unit Rate	Estimate Amt	Justification
1	Computer table	Seminar Room (comp lab 2)	2	0.1	Required in electrical seminar room
2	Table Glass	5x3 feet	2	0.04	
3	officer chair revolving		10	0.3	Required in Machine lab staff cabin/Computer lab 2 /Computer lab1/Exam
4	Steel Cupboard	6x3 feet	2	0.2	
5	plain fiber chairs		30	0.15	
6	Wooden table	5x3 feet	3	0.24	
Total			49	1.03	

Name of Department - Information Technology

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Faculty Table	10	0.05	0.50	Faculty Seating arrangement
2	Visitors Chair	6	0.05	0.30	HOD Cabin
3	Faculty Chair	15	0.05	0.75	Faculty Seating arrangement
Total		31	0.15	1.55	

Name of Department - Electronics And Telecommunication Department

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Advanced Communication Laboratory	1	4	4	Computers Tables and Storage
2	Chair with cushion	20	0.05	1	For Visitors and Faculty
	Total	21	4.05	5	

Name of Department - Applied Mechanics

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Chair With Cushion and Handle Make - Supreme	10	0.02	0.20	
2	Steel Cupboard	3	0.06	0.18	
3	Bench(2Seater)	10	0.05	0.50	
	Total	23	0.13	0.88	

Name of Department - Master of Computer Application

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Faculty Cabin Loft Furniture			1.50	For storage purposes in Faculty cabin
2	HOD Cabin Loft Furniture			1.50	For storage purposes in HOD cabin
3	Computer Chair Revolving	40	0.015	0.60	For Lab
4	White Board with stand	1	0.05	0.05	For Lab
	Total	41	0.065	3.65	

Name of Department -Physics

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Staff Chair	2	0.02	0.04	
2	Chair	6	0.02	0.12	For staff Cabin
	Total	8	0.04	0.16	

Name of Department - Office

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	File Storage Floor	...	1.5	1.50	File Storage Floor in Account Section is very Old
2	Office Chairs	20	0.025	0.50	For Office Staff
3	Executive Chair	2	0.05	0.10	For Account & Establish
Total		22		2.10	

Name of Department - TPO

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Coach	2	0.75	1.50	
2	Executive Chair	1	0.1	0.10	
3	GD Chairs	12	0.04	0.48	
Total		15		2.08	

Name of Department - Dean Office

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Notice Board (04 No)		0.03	0.12	Paper Assessment, Result Processing, Record Maintaining and day to day Office work
2	Computer Chairs (06 No)		0.03	0.18	For Exam Printing Section
3	Furniture for new exam centre			10	
Total		0		10.30	

Grand Total

29.01

c. Maintenance Fund

Name of Dept - Civil Engineering

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	Name of Dept - Civil Engineering	Fluid Mechanics lab Maintenance	0.5	-	0.50	tilting flume maintenance, purchase of grease, mercury and maintenance and repairs of instruments
2		Transportation lab Maintenance	0.5	-	0.50	purchase of kerosene, bitumen maintenance of minor instruments
3		Environmental lab Maintenance	0.5	-	0.50	Glass wares, Chemicals, Instrument calibration and Maintenance of Instruments
4		Computer lab Maintenance	0.5	-	0.50	purchase of computer stationary, tonner refilling, cartridge replacement etc.
5		Geology lab Maintenance	0.5	-	0.50	purchase of hammer, Brunton Compass, Streak Plate, pen knife, polishing of table etc.
6		Geotechnical lab Maintenance	0.5	-	0.50	purchase of oil, grease, mercury and consumables of geotechnicals and maintenance of minor instruments etc.
7		Building Services	0.5	-	0.50	Electrical Circuit Components, AC components, Fire Safety Components, Plumbing components, Explanatory charts, working models if any
8		Surveying lab Maintenance	0.6	-	0.60	purchase of staff 4m, Ranging rod 4m, grease, drawing sheet, batteries
9		Portable 5TB Portable USB BACKUP PLUS	2	0.18	0.18	For departmental use
10		Hard disk 1 TB Portable USB BACKUP PLUS □	10	0.05	0.50	For faculty use
		Total		0.23	4.78	

Name of Dept - Mechanical Engineering

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	Name of Dept - Mechanical Engineering	Maintainance of laboratory equipments compressor and computers, Purchase of consumables for CNC lathe, milling, Robot, AGV, CMM, Dynamometer, Surface roughness meter, etc. CNC Lathe and Milling Tools and Cutters, different types holders, Clamping Devices, Spanner set, Allen key set, Tool box with tools, CMM accessories, etc CNC Training Program Material like Certificate printing, files, stationery, consumables for CNC Training programing and fixtures for milling, turning operations. Charger for AGV, Replacement/Refilling of Tonners, antivirus, Mouse, sensor change/repair, spare, toolkit, AMC, Calibration equipments etc			3.00	CIM Lab maintenance and AMC
2		Measuring instrument repair and calibration , purchase of spare part, consumables for 3 D printers, Purchase of oil parafin cotton waste, toolkit, iso-profill alcohol , comparator spares, AMC of equipments, etc.			0.50	MQC lab Repair
3		Maintainance and spares of laboratory equipments and computers, Purchase of consumables, Argon gas, indendors, standard samples etc, Calibration, & AMC of equipments,			0.50	Metallurgy lab
4		Computer Accessories, viz., Mouse, small size pad locks, key board, RAM, Anti-virus, pen drives, Replacement/Refilling of Tonners, Air blower ,spares etc			0.25	PG computer Lab
5		Purchase wire for EDM, Cotton waste, consumables for machineries / equipments , foundation material , spares for repair and maintenance, consumables of ultrasonic Cutting Machine and Plastic Moulding Machine, New moulds and mould repair.			0.75	Non conventional machine lab
6		Supply / maintenance, consumables, spares for Testing and Measurement Lab-Sensors/transducers for parameters like temperature, pressure,flow, force, strain, displacement etc.	0.8	Required at actuals	0.80	Required for conducting UG & PG practicals and testing/calibration purpose
7		Supply / maintenance, consumables, spares for Fluid Power Engineering Lab-Hydraulic & pneumatic circuit components.	0.6	Required at actuals	0.60	Required for conducting UG & PG practicals
8		Electrical and electronic component of pin on disc tester, Keyboards ,Printer Repair Tonner Refill, Mouse, mouse pad, Computer cables			0.20	Tribology Lab
9		Maintanance of gyroscope, balancer, Electromagnetic vibrator (Shaker), Purchase of oil , grease, bearing , spares, other etc			0.70	TOM Lab

10	purchase of oil Refrigerent, replacement, replacement of pressure gauges, drier filter etc. thermocouple Repair Electrolux Refrigeration, Repair of Multy pressure system			3.00	RAC Lab
11	Replacement of Tonners, Refilling of Tonners, Repair of printers, USB cable for printer Xerox Machine Parts, Accessories Repair of LCD Projector; VGA connector, bulb Mouse, SMF Batteries, small size pad locks, keyboard, RAM, SMPS Anti-virus, pen- drives, HDMI cable			0.50	CAD-CAM Lab Regular maintainance
12	Purchase of consumables, spares, wires			0.50	Heat transfer lab
13	Purchase of grease, sponges, ropes, pipes and hose , Tachometer, Mercury, pressure gauges and servicing or repair of equipments spares,PVC pipes, AcrylicPipe, Reducer coupling vanstone flanges Pipe bend pipe bend,Unian, Butter fly valve			0.50	FM/FTM Lab repair and maintenance
14	Oil, Diesel, Petrol, spares, salt and other, Thermocouple and Digital Temperature Indicator,Cotton waste, grease, Foam Board, antivirous, Toner Refill, salt, Boiler Suit, Hand gloves, Measuring tape, measuring Flask, Thermometer, Fix it, Extension board, Refilling of oxygen cylinder, Table glass, name plate, wire, other.			1.20	Applied Thermodynamics Lab
15	Mouse, mouse pad, cables	0.01	1	0.01	P G Computer lab
Total			1	13.01	

Name of Dept - Electrical Engineering

S. No.	Name of Laboratory/ Items / Discription	Details	Qty	Unit cost (Rs.)	Total	Justification
1	Name of Dept - Electrical Engineering	Electrical items required for breakdown and routine maintenance like wires,switches,tubes,fans,motors, cables,rewinding etc	LS	-	7.50	for routine electrical maintainance and replacement in Institute
2		Electrical items required for breakdown and routine maintenance like wires,switches,tubes,fans,motors, cables,rewinding etc	LS	-	5.50	for routine electrical maintainance and replacement in Hostels
3		Repaires of Computer including purchase of mouse, keyboard. SMPS, RAM, Hard disk, Motherboarde etc. Printer Cartridge repaires, tonner repairing, LCD lamp replacement, Batteries, Page rim etc.	LS	-	1.40	Maintenance of computers, Printers
4		Printer AMC	1	20000	0.20	Printer maintenance
5		Copier AMC	1	20000	0.20	Copier maintenance
6		Computer repair	10	2000	0.20	Computer maintenance
7		Electrical Repair and maintenance	150	500	0.75	Switchboards Damaged and not working properly
8		Laptop maintenance	3	5000	0.15	Laptop maintenance
9		Technical posters/ charts in the lab	20	500	0.10	To display technical posters in Lab
10		Misc/others not listed	-	-	1.00	Incidentel maintenance
11		Network tool kit: Crimping Tool, Cable tester, tool kit	5	2000	0.10	Practical
12		External DVD writer	2	2000	0.04	Software installation
13		Extension Board	5	800	0.04	Practical
14		Xerox Toner	2	7500	0.15	Office work
15		Laser Printer Toner	20	350	0.07	Office work
16		Pen Drive	11	500	0.10	To carry data
17		RJ-45 Connector	100	15	0.02	Network maintenance
18		Table cloth	10	1000	0.10	Departmental work
19		Curtains	28	500	0.14	Labouratory
20		Keyboard and Mouse	20	500	0.10	Practical use
21		Misc/others not listed	-	-	1.00	
22		Office stationary material			0.60	Departmental work
Total				63165	19.46	

Name of Dept - Information Technology

S. No.	Name of Laboratory/ Items / Discription	Details	Unit cost (Rs)	Qty	Total	Justification
Repair / Maintenance						
1	Printer AMC	Maintenance	20000	1	0.20	Printer Maintenance
2	Copier AMC	Maintenance	20000	1	0.20	Copier Manintenance
3	Computer Repair	Maintenance	2000	10	0.20	Computer Maintenance
4	Electrical Repair and Maintenance	Repair	500	150	0.75	Switch Boards damaged and not working properly
5	Laptop Maintenance	Maintenance	5000	3	0.15	Laptop Maintenance
6	Technical Posters/Charts in the Lab	Lab Material	500	20	0.10	To display Technical Posters in the Lab
7	UPS Maintenance	Maintenance	30000	1	0.30	UPS Maintenance
8	Misc. / Other non listed	Maintenance and Repair	-	-	1.00	Incidental Maintenance
Consumables						
9	Network Tool Kit : Crimping tool, Cable tester, tool kit	Consumables	2000	5	0.10	Practical
10	Extension Board	Consumables	800	5	0.04	Practical
11	Xerox Toner	Consumables	7500	2	0.15	Office work
12	Laser Printer Toner	Consumables	350	20	0.07	Office work
13	Portable weist band speaker	Consumables	5000	2	0.10	Presentation
14	External HDD 2 TB	Consumables	5000	3	0.15	Storing data
15	Pen Drive	Consumables	500	10	0.05	To Carry data
16	RJ-45 connector	Consumables	15	400	0.06	Network Maintenance
17	Wall Screen	Consumables	8000	2	0.16	Class room
18	Screen With Stand	Consumables	10000	2	0.20	Presentation
19	Slider and Pointer	Consumables	4500	2	0.09	Presentation
20	Table Cloth	Consumables	1000	10	0.10	Departmental Work
21	Curtones	Consumables	500	20	0.10	Laboratory
22	Key board and mouse	Consumables	500	20	0.10	Practical Use
23	Misc./ other non-listed items	Consumables	-	-	1.00	As per Incidental requirments
Stationary Itmes						
24	Office Stationary Material	Stationary			0.60	Departmental Work
Total						
				689	5.97	

Name of Dept - Electronics & Telecommunication

S. No.	Name of Laboratory/ Items / Discription	Details	Unit cost	Qty	Total	Justification
1	Name of Dept - Electronics & Telecommunication	EPABX AMC & Telephones	1	1	1.00	Annual maintenance .
2		Xerox Machine & printer repairing			0.50	Maintenance
3		Electronic components and consumable			12.00	SY ,TY, Final year project
4		Equipment repair			0.50	
5		Rubber mat /Isolation mat	0.002	160sq.m	0.32	For shock protection in lab
6		Green mat			0.20	Laboratories door mats
7		Curtains in laboratory and staff cabin			0.80	For lab and staff room.
8		Electric and LAN network wiring	1	4 labs-4	4.00	Electric fitting and computer connectivity
9		Xerox machine and Printer tonner refilling			0.50	Refilling
10		Battery replacement for existing 5KVA UPS	0.03	32	0.96	Batteries are not working
11		Lifts AMC	2	1	2.00	AMC
	Total			22.78		

Name of Dept - Applied Mechanic

S. No.	Name of Laboratory/ Items / Discription	Details	Unit cost	Qty	Total	Justification
1	Name of Dept - Applied Mechanic	Printer e.g. Drum,Tonner ,Vibration Blade,ink	10000	1	0.01	
2		CTM Repairing	20000	1	0.02	
3		Zerox Machine Maintance	5000	1	0.05	
4		UTM Repairing60T	50000	1	0.5	
5		UTM Repairing100T	50000	1	0.5	
6		Computer Manintance	30000	1	0.3	
7		Stationary Paint Marker, Consultancey Pages	10000	1	0.01	
8		Spare Parts	30000	1	0.3	
9		Hand Blower	15000.00	1.00	0.15	
10		Computer Table Repair	5000	1	0.05	
11		Anti Virus	1500	2	0.03	
12		Calibration of Proving Ring	46000	1	0.46	
13		Internet Dongle	5000	1	0.05	
	Total			2.43		

Name of Dept - Master of Computer Application

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	Laboratories of MCA department				1.50	Maintenance of All laboratories lumpsum
2	MCA	UPS AMC	0.2	2	0.40	For maintaining UPS
3	MCA	Printer Servicing	0.015	6	0.09	Required for Printing maintenance
4	MCA	Xerox Machine Toner Refilling	0.05	4	0.20	Xerox Machine maintenance
5	MCA	Leserjet Printer Towner Refilling	0.017	6	0.10	Required for Printing of official work, proposals etc.
6	MCA	Maintenance	--	--	0.70	Maintenance
7	MCA	stationary & consumables		40 Rim, Stappler, Stappler pins, Pencil, Rubber, whiteboard marker pen	0.10	Documentation
		Total		18	3.09	

Name of Dept - Workshop

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1		Repairs & Maintance Lathe Machine, shaping machine, hacksaw, drilling & Other Machine and Tools used in workshop repairing etc.		Limpsum	2.00	Most of the machine/tools in work shop are old and requires maintance
2		Practical materials- M.S. Round Bar, Ms flat, ms angle, GI sheet, Teak Wood, ply wood, sunmica, Moulding patti, steamcoal etc.		Limpsum	4.00	Material required for practical purpose
3		Workshop Consumables- Safety glass/helmet, hand glows, all size Cutting Wheel, cirxullar saw blade All size HSS drills & bits, Hack Saw Blade, circular Blade, Machine & cutting Oil, gace, Cotton waste, Wooden/PVC Handle, Paint, Touch wood, Bruch, welding glass, etc..		Limpsum	3.00	required Consumables day to day practical work
4		Hardware Material & Workshop Tools- Fevicol, Abro Tape, Locks, hinges, stopper, Heck frame, hammer, spanner, welding rod, nut bolt, wire nails, wood screw, ss screw V belt, sand paper Screw Driver set, Center punch, Drill M/c., Trolley, Magnet level, measuring Tape, abrasive cutter, grinder, Tin cutter, All sizefiles, 12 ' Tong plumbing material etc..		Limpsum	4.00	Hardware Material and tools required in workshoop practical work as well as institute work order
5		Labour payment, cleaning material-Brooms, Washing Powder, coconut brooms, life boy, Match box, first Aid, Phynel, Cloth duster & other clening material etc.		Limpsum	2.00	
6		Diseal, Transporation & maintenance work of DG set		Limpsum	2.00	Genretator required when ever electricity goes off
7		Work order Material - Door closer, Drawing Boards, Table Glass, Table Cloth etc.		Limpsum	3.50	All department works order material as per required
8		Stationery, Tonner for printer & Xerox machine, Paint marker etc		Limpsum	0.50	Office work
9		Other Workshoop Expences		Limpsum	1.00	
		Total	0	0	22.00	

Name of Dept - Physics

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	Department of Physics	Chemicals			1.00	Different chemical required for different practical's and preparation of Nanomaterials
2		Laurent'z Tube	0.012	10	0.12	For Laurent'z Polarimeter Practical
3		Mercury Lamp	0.010	4	0.04	For Spectrometer Practical
4		Sodium Lamp	0.010	6	0.06	For Resolving Power Practical
5		Diffraction Grating	0.005	4	0.02	For LASER practical
6		Prism	0.002	2	0.04	For LASER practical
7		Printer tonner/refilling/cartilage	0.100	3	0.30	Refill /replace printer tonner in lab.
8		Laboratory Tool kit	0.050	1	0.05	Required for handle all the instruments
9		Scientists Frame with photo	0.005	9	0.05	In Laboratory
10		Lab. Manual	50.000	10	0.01	Autonomy Syllabus for lab and Different committees.
11		Stationary items	0.100		0.10	Including all item required for lecture and practical like stamps, chalk, marker pen, duster etc.Paint
12		Lab. Name plate and instruction boards, Equipment Name Plates	0.005	30	0.15	Required for new equipment in Lab.
13		Pen drives	0.005	4	0.02	For Departmental data
14		Refilling of Nitrogen cylinder	0.010	5	0.05	For Practical
15		Equipment repair	0.010	10	0.10	Laboratory equipment repair
16		Hard Disc	0.050	2	0.10	For departmental data storage
Total			50.37	100	2.20	

Name of Dept - Chemistry

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	CHEMISTRY	Chemicals & glassware for practical			0.50	
2		stationary & digital watch, other.			0.25	
		Chemicals & glasswares			0.50	
Total			0	0	1.25	

Name of Dept - Mathematics

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	MATHS	Repair: Xerox / Computer			0.1	
2		Consumable: Cartridge/Toner Refilling , Xerox Drum			0.1	
Total			0	0	0.2	

Name of Dept - Office

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	OFFICE	Printer and Copiers Refilling, Repairing, AMC			3.00	Maintenance
2		Computer related Material			2.40	Maintenance
3		Software			0.60	For Tally solution and TDL for Accounting
4		Miscellaneous			4.00	Other Expenses
5		Refreshment			3.60	For Auditors, Visitors, Staff etc
6		BoM, FC, Other Meetings			6.00	
7		Stationary and Printing			8.00	For Whole Institute
8		Legal Expenses			5.00	
9		Outdoor Training for Office Staff for 2 Days			6.00	Developing Knowledge and for Refreshment
10		Training for Class 4 Staff for 2 Days			4.00	Developing Knowlwdge
11		Water Expenses			7.00	
12		Electricity Expenses			66.00	
13		Telephone Expenses			1.20	
		Total	0	0	116.80	

Name of Dept - Dean Office

S. No.	Name of Laboratory/ Items / Discription	Quantity	Total	Justification
1	ERP-MIS AMC		10.000	
	1] Annual Technical Support Services			
	2] Hosting charges			
	3] DSS services facility			
2	Xerox Papers Rim (A4 Size)	150	0.300	Day to day consumables
3	Xerox Papers Rim (A3 Size)	15	0.050	
4	Tonner(Refill+ New)	New: 05 Refill: 20	0.200	
5	Pen Drive 64 GB (exam & students section)	10	0.060	Office work / back-up tool
6	Calculator	5	0.010	Office tool
7	Other consumable stationary items Including Pen, Pencil, Stepler, Pins, F	LS	1.000	Exam. Work and Day to day consumables
8	Wall Clock	3	0.020	For newly constructed exam section and students section
9	UPS Maintenance	LS	0.100	AMC
10	Curtains	4	0.100	For Office use - day to day activities
11	Dustbin	6	0.012	
12	Tea Cups+Tray	1 Dz	0.005	
13	Cool Water Jar Metall	6	0.050	
14	Paper weight	12	0.012	
15	Mouse	6	0.020	
16	Wireless Bell	3	0.012	For Cabins
17	Door Mat (Big)	2	0.020	For Office entrance
	Scholarship Section			
18	Xerox Papers Rim (A4 Size)	20 Rims	0.040	Day to day consumables
19	Xerox Papers Rim (A3 Size)	2 rims	0.006	
20	Tonner (Refill)	5	0.030	
21	Pen Drive 64 GB	2	0.012	Office work
22	Calculator	2	0.004	Office tool
23	Other consumable stationary items Including Pen, Pencil, Stepler, Pins, Files, Ink Pad, Envelope, Rubber, marker,	LS	0.200	Scholarship Work and Day to day consumables
24	Mouse pad	2	0.020	
	Total		12.28	

Grand Total

226.25

Institute Level Fund - Institute Development Fund

A) Refurbishment

Name of Department - Civil Engineering

Sr. No.	Proposed Item	Area Details	Estimate Amount (Rs. In Lacs)	Justification
2	Wash basins for faculty cabin (9 lab)		0.75	
6	Katta covering with granite and doors to compartments (Geology, Geotech, Transportation, Environment, Surveying)		5.00	
7	False ceiling for staff cabins in geology lab, environmental engg lab, HOD office		3.00	
Total			8.75	

Name of Department - Mechanical				
Sr. No.	Title	Brief Specification	Quantity	Esti. Cost
1	Cupboard	Cupboard for keeping equipment in Thermodynamics lab.(under Kadappa table)	10.00	0.5
3	Transperant door (PG production lab)	Transperant door (3"*7")	1.00	0.08
7	Phd reseach Lab	Clean room for COVID-19 and for PhD research in Heat transfer lab 15'*15' x 10', with HEPA filter and blower; double wall partition with 6" interspace for Ph D Work	1.00	3
8	Cabin in Control Engg Lab	Glass and MDP board , one glass door	1.00	0.5
10	Partitions in Metallurgy Lab	To isolate teaching area		0.75
Total			13.00	4.83

Name of Department - IT (Information Technology)

Sr. No.	Proposed Item	Area Details	Estimate Amount	Justification
1	Furniture in newly constructed building	Lumpsum	5.00	To improve ambience
Total			5.00	

Name of Department - Electrical

Sr. No.	Proposed Item	Area Details	Estimate Amount	Justification
1	Wash-basin arrangement	1)Control system lab, 2) S&P lab, 3) Measurement lab	0.15	Wash Basin required.
2	Insulating Carpet	All labs in the department	5.00	For electrical safety purpose
3	Sliding window provision	Computer lab2 and seminar room	0.25	Old windows doesn't get closed properly.
Total			5.40	

Name of Department - Workshop

Sr. No.	Proposed Item	Area Details	Estimate Amount	Justification
1	Partation of central Store		1.50	it"s necessary
2	Flooring replacement of foundry		3.00	
Total			4.50	

Name of Department - Physics

Sr. No.	Proposed Item	Area Details	Estimate Amount	Justification
1	Physics Lab.	Maintenance	0.5	
2	Nanotech Lab.	Maintenance	0.5	
Total			1.00	

Name of Dept - Office

Sr. No.	Proposed Item	Expenditure per month	Estimate Amount	Budget
1	Partition cabins and Sliding windows in Establishment department		5.00	5.00
2	Partition cabins and Sliding windows in Accounts department		8.00	8.00
3	L Shape Mazzenine floor in steel structure & strengthening of exisiting mazenine		7.00	7.00
Sub Total				20.00

Name of Dept - Dean Office (Examination Cell)

Sr. No.	Proposed Item	Justification	Budget
1	New Building all Furniture & Furnishing	Officers Cabin, Table, chairs, Storage Cupboards, (Strong Room - Relling Cupboards)	20.00
Sub Total			20.00

Grand Total

69.48

Institute Level Fund - Institute Development Fund

B) Student Activity

Name of Department - Information Technology

Academic support for weak students for the year 2020-21				
(Please consider GATE classes, pre-placement training, additional soft skill training, industry visits, expert lectures and other proficiency for students Training)				
Sr. No.	Name of the Training Program	Target participants	Training Agency	Estimated Amount in lacs
1	GATE Classes	60		9
2	Pre Placement training	85		1.5
3	Soft-Skill Training	85		1.2
Total				11.70

Industry visits				
(Min 2 visits per class for each UG classes; max Rs 20,000/- per visit)				
Sr. No.	Name of the Industry	Target participants	Tentative Schedule	Estimated Amount in lacs
1	Startup/NC/MNC SY Visit	50	Sept, 2020	0.4
2	Startup/NC/MNC TY Visit	50	Sept, 2020	0.4
3	Startup/NC/MNC BE Visit	50	Nov, 2020	0.4
Total				1.20

Expert (Industry/ Academics) lectures				
(Min 3 per class for each UG classes)				
Sr. No.	Name of the Expert	Target participants	Tentative Schedule	Estimated Amount in lacs
1	Expert Lecture(SY BTech)	85	Sept,2020	0.3*3=0.9
2	Expert Lecture(TY BTech)	85	Sept,2020	0.3*3=0.9
3	Expert Lecture(Final Year BTech)	85	Jan, 2021	0.3*3=0.9
Total				2.70

Details of reforms for the year 2020-21				
(please include expenses on meeting, hospitality and other reforms)				
Sr. No.	Details of reforms (BoM/ FC/ BWC/ AC/ APEC/ BoS meetings etc.)	Expenses per meeting	Number of Meetings	Total Cost lacs
1	BOS Meeting	0.5	2	1
2	IEB Meeting	0.5	2	1
Total				2.00

Grand Total of IT

17.60

Name of Department - Mathematics

Details of reforms for the year 2020-21 (please include expenses on meeting, hospitality and other reforms)

Sr. No	Details of reforms (BoM/ FC/ BWC/AC/ APEC/ BoS meetings etc	Exp. Per meeting	No. Of meeting	Total cost
1	BOS Meetings	0.2	1	0.2
Total				0.20

Grand Total of Mathematics

0.20

Name of Department - Mechanical

Academic support for weak students for the year 2020-21

(Please consider GATE classes, pre-placement training, additional soft skill training, industry visits, expert lectures and other proficiency for students)

Name of Dept. : Mechanical Engineering

Training

Sr. No.	Name of the Training Program	Target participants	Training Agency	Estimated Amount in lacs
1	C Programming	75	Selected on Quality cost basis	2.00
2	ANSYS Software	30	Selected on Quality cost basis	5.00
3	Mock interview	200	Selected on Quality cost basis	0.35
4	Solid works software training	60	Selected on Quality cost basis	1.00
Total				8.35

Industry visits (Min 2 visits per class for each UG classes; max Rs 20,000/- per visit)

Sr. No.	Name of the Industry	Target participants	Tentative Schedule	Estimated Amount in lacs
1	Domain related	50	Sep-20	0.20
2	Domain related	50	Mar-21	0.20
3	Industrial Visit for TY B.Tech.	50	Feb-21	0.20
4	Oracle Press tools	75	Nov-20	0.20
5	Casting & welding Technology	70	Feb-21	0.20
6	Cyclo transmission Pvt. Ltd.	TY	Sep-20	0.10
7	Public building for air condtioning	70	20-Oct	0.40
8	Domain related	70	21-Feb	0.20
9	FTM lab visit	70	20-Sep	0.20
Total				1.90

Expert (Industry/ Academics) lectures (Min 3 per class for each UG classes)				
Sr. No.	Name of the Expert	Target participants	Tentative Schedule	Estimated Amount in lacs
1	IndiaSoft Private Ltd, Mumbai	75	Jan-21	0.1
2	Presicion technologies	75	Aug-20	0.4
3	Kirloskar Oil Engine	75	Jan-20	0.4
4	Domain related	70	Sep-20	0.2
5	Domain related	70	Oct-20	0.2
6	Domain related	70	Feb-21	0.2
7	Expert lecture for UG classes	60 to 70	Feb-21	0.1
8	Domain related	B Tech Mechanical	Oct-20	0.2
9	Domain related	B Tech Mechanical	Jan-21	0.20
10	Domain related	B Tech Mechanical	Feb-21	0.20
11	Domain related	B Tech Mechanical	Mar-21	0.20
12	TATA Mtors Pvt. Ltd. Pune	TY Mechanical	Sep-20	0.05
13	Cummins India Pvt. Ltd. Pune	TY Mechanical	Oct-20	0.05
Total				2.50

Details of reforms for the year 2020-21 (please include expenses on meeting, hospitality and other reforms)				
Name of Dept. : Mechanical Engineering				
Sr. No.	Details of reforms (BoM/ FC/ BWC/ AC/ APEC/ BoS meetings etc.)	Expenses per meeting	Number of Meetings	Total Cost lacs
1	Industry advisory board	0.5	1	0.3
2	Bos meeting	0.5	3	1.5
Total				1.8

Total of Mechanical	14.55
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Name of Department - Electronics & Telecommunication

Academic support for weak students for the year 2020-21 (please consider GATE classes, pre-placement training, additional soft skill training, industry visits, expert lectures)

Sr. No.	Name of the Training programme	Target Participants	Training Agency	Estimated amount (In lacs)
1	One week workshop on VLSI Design to Final year student	60	SpartaSoft technology	3.80
2	One week workshop on Antenna Design to Third year student	50	SpartaSoft technology	4.50
3	Training to SY Students	70	8 assorted trainings	4.00
4	Training to TY Students	70	4 assorted trainings	2.00
5	Training to Final Year Students	70	2 assorted trainings	1.00
TOTAL				15.3

Industry visits (Min 2 visits per class for each UG classes: Max Rs. 20000/- per visit)

Sr. No.	Name of the industry	Target Participants	Tentative Schedule	Estimated amount in lacs
1	4 visits for SY	70	Aug,Oct,jan,march	2.00
2	4 visits for TY	70	Aug,Oct,jan,march	2.00
3	4 visits for Final year	70	Aug,Oct,jan,march	2.00
TOTAL				6.00

Expert (Industry/ Academics) lectures (Min 3 per class for each UG classes)

Sr. No.	Name of the industry	Target Participants	Tentative Schedule	Estimated amount in lacs
1	4-related to SY curriculum	70	Aug 20 to Mar 21	0.20
2	4-related to TY curriculum	70	Aug 20 to Mar 21	0.20
3	4-related to B.Tech curriculum	70	Aug 20 to Mar 21	0.20
TOTAL				0.60

Details of reforms for the year 2020-21

(Please include expenses on meeting, hospitality and other reforms)

Sr. No.	Details of reforms (BoM/ FC/ BWC/AC/ APEC/ BoS meetings etc.)	Exp. Per meeting	No. Of meeting	Total cost
1	BoS meetings	0.5	2	1.00
2	industry Advisory board meetings	0.5	2	1.00
TOTAL				2.00

Total of Electronics & Telecommunication

23.90

Name of Department - Dean Office

Details of reforms for the year 2020-21 (please include expenses on meeting, hospitality and other reforms)

Sr. No	Details of reforms (BoM/ FC/ BWC/AC/ APEC/ BoS meetings etc	Exp. Per meeting	No. Of meeting	Total cost
1	Teaching Provision for General Proficiency (For weaker students)			12.000
2	Graduation Ceremony Expences			3.000
3	Expenditure for conduct of APEC Meetings			0.060
4	Expenditure for Dean Office meeting and hospitality			0.070
5	Expenditure for conduct of Academic Council Meetings			2.000
6	Expenditure for conduct of Examination Committee Meetings			0.200
Total				17.33

Grand Total of Dean Office

17.33

GRAND TOTAL

73.58

e. Salary Fund:

Honorarium to Visiting Faculty, visiting fellows, Professor emeritus, Adjunct faculty etc.

Sr. No.	Post	No. of Posts	Honorarium per month	Budget for 2020-21
1	Visiting Faculty - Lecturer Remuneration	60		144.00
2	Visiting Faculty - Activity Remuneration			144.00
3	Visiting Faculty - Local Conveyance			12.00
4	Adjunct Faculty	12		86.40
TOTAL		72	-	386.40

Outsource Services (Salary)

Sr. No.	Post	Expenditure per month	Expenditure for 2019-20	Budget for 2020-21
1	Security (MESCO)	4.70	49.84	56.40
2	Cleaning expenses (ShriRam)	0.81	9.76	9.76
3	Electrician (Global)	0.12	1.32	1.44
4	Non Teaching staff (ShriRam)	10.45	114.00	125.40
TOTAL		16.08	174.92	193.00

Grand total

579.40

Institute Level Fund : Gymkhana

Name of The Department: Gymkhana (Recurring)			
Sr.No.	Proposed Item with specification	Estimated Amount	Justification
1	Annual Collaage Day	4.00	Celebration of Annual College Day/ Students cultural activities
2	College Magazine	3.00	Publication of College Magazine
3	Sports Material	9.50	Purchase of sports material required for different Games.
4	Sports Kits(T Shirt, Pant) Track Suits	2.50	To provide Colors (T shirt, Pant) to players
5	Ground Maintanence material, Labour etc.	2.00	Repaire and Maintenance of Play Ground, clay, Labour charges etc.
6	Sports TA/DA	2.00	TA DA to the students and accompaning staff when they go to play outstation for Zonal/ Int. Zonal/ ZEST Games
7	Culturatial Activities / Youth Festival	3.00	To conduct cultural programme during academic year
8	Gymnasium Equipments	3.50	Equipments for Gymnasium
9	Ladies Activities	1.00	To conduct lady student activities/ programme during academic year
10	Blazers to Student Council	0.50	To provide Blazers to student council members
11	Ground Fencing with Gates	10.00	Fencing to the Ground
12	Computer, Printer, allied accessaries	2.00	Computer, printers and other materials
13	Musical Instruments, Camera purchase (Octapad, Dholaki, Mridangam, Electric Guitar, Flutes, Camera , etc.) and Maintenance of Instruments	1.50	To purchase Musical Instruments to use of Cultural Events team
14	Compensation to student caussing Accident during Playing	1.00	Compensation to student causing Accident during Playing
15	Miscellaneous	1.50	For hospatilities, Stationary, Cartridge, Photographs, repairs other minor purchases etc.
Total Rs. Lacs		47.00	

Name of The Department: Gymkhana (Non Recurring)

Sr.No.	Proposed Item with specification	Estimate Amount	Justification
1	Water Supply on Ground	0.50	To provide water connection on ground(Pipeline etc.)
2	Ground Fencing with Gates	15.00	Fencing to the Ground
TOTAL		15.50	

GRAND TOTAL**62.50**

Budget for Different Clubs

Sr. No.	Name of Clubs	Budgeted Amount in lacs
1	Divine Club	1.36
2	AI, Computer vision and Robotics Club	2.20
3	Open Source	2.59
4	Agri Mitra Club	2.81
5	Dais Club	9.90
6	Electro Chaser	12.10
7	Robo Club	5.39
8	Herald Club	8.25
9	Aerobic Club (W)	0.50
10	Spicn Macay	1.32
11	Idea Club	6.05
12	Words Worth	2.07
13	Quest Club	2.48
14	Yoga Club	1.10
15	Contriver	2.78
16	Defence Club	1.65
17	House of Arts Club	2.83
18	Innovation Club	5.50
19	SAE/ Baja Club	10.00
20	Baha, Go kart, TIFAN,	3.00
21	ISHRAE Club	1.00
Total		84.86
Grand Total		84.86

Training & Placement: to be submitted by TPO dept.

Budget of T&P Cell for 2020-21

Placement

Sr.no	Item	Category	Proposed exp. Lakh	Remark
1	Students Training	IIIC	6.00	If not TEQIP
2	Students Workshop	IIIC	6.00	
3	Students Visist	IIIC	12.00	
4	IEB, Ind Visit of staff	IIIC	3.00	
5	Placement	IIIC	3.00	
6	Internship	IIIC	16.00	
7	TPO Staff Salary	IIIC	6.00	
8	Expert Session	IIIC	3.00	
9	Other expenses	IIIC	5.00	
Grand Total			60.00	

EXAMINATION CELL

Expenditure			
11. Examination Cell (COE)			
Budget provision for various activities to be conducted during 2020-21			
Sr. No	Events	Details	Expected Budget
1	Remuneration to Paper setters	Total subjects for B.Tech, M.Tech and MCA of two sem	7.00
2	Assessment work	Tot.Ans book for S-20, ST-20 & W-20= 20000 @ Rs. 9/-	5.00
3	Honorarium for practical Exam.	2 Ext. Exam per programs, total=	6.00
4	Honorarium to Exam cell functionaries and Dean Acad.	Dean acad, CoE, Printring Cord, Setting Cord. Assessment Cord .. Rs-34500 per exam.	1.10
5	Honorarium for Theory Exam. (Ext. Exam) at dept. level	Rs-7000/- Per Exam per dept- S-20= 35000, ST-20=15000, W-20= 35000	0.85
a) SubTotal			19.95
Consumable			
6	Stationary : Xerox papers, ESE/ Class test- Answer book, supplements and other exam stationary	As per requirement	6.00
7	Xerox m/c & Printer Catridges and refilling for Printing of Q.P and other laser printers	Catridges: Xerox m/c : 01 no, Printers: 02	0.30
8	Cartiage (RICO) 6 No.		0.20
9	Stensil Roll (RICO) 6 No.		0.25
10	Samsung Xerox Machine toner - 4 No.		0.25
11	Samsung Xerox Machine maintainance		0.30
12	Pre-Printer Grade Card (For Grade Card Printing)		2.00
b) Sub Total			9.30
TOTAL			29.25

Grand Total

29.25

Central Library

Proposed Budget for 2020-21

1. State Government Plan Library :

Sr. No.	Component	Budget	Remark
1	Development of Library	5.00	List Enclosed (Annexure A)
2	Book Bank	-	
TOTAL		5.00	

2. Institute Level Funds: to be submitted by concern departments

2.1 Library Books

Sr. No.	Author	Title	Publisher, Cost,Copies	Total Cost
1	Development of Library	Separate list attached		19.37
2	Book Bank			5.43
TOTAL				24.80

2.2 e books

Sr. No.	Component	Type (Online / Hard Copy)	Quantity	Subscription
1	e_books	online	1500 +	20.00
TOTAL				20.00

2.3 E-Journals

Sr. No.	Name of Journal	Type (Online / Hard Copy)	Quantity	Subscription
1	IEEE-IEL	Online	184+	42.00
2	ASCE	Online	35	3.50
3	ASME	Online	28	2.50
4	Springer	Online	740	5.00
5	Elsevier-Science Direct	Online	275	7.00
6	Taylor & Francis	Online	371	6.50
7	IET Complete Journal	Online	38	2.00
8	Plagiarism Software (Turnitin)	Online	150	6.00
9	Typeset Research Studio Software	Online	50 No of User	2.50
TOTAL				77.00

2.4 Print Journals

Sr. No.	Name of Journal	Type (Hard Copy)	Quantity	Subscription
1	NICMAR Journal of Construction management	Jan to Dec 2021	4	2,000
2	IEJ-Civil,Architectural Engg,Environmental Engg.agricultural (Series A)	Jan to Dec 2021	4	6,847
3	TERI Information Digest on Energy & Environment	Jan to Dec 2021	4	2,300
4	Indian Geotechnical Journal	Jan to Dec 2021	6	4,309
5	Indian Road Congress Journal	Jan to Dec 2021	4	2,100
6	Journal of Indian Water Works Association	Jan to Dec 2021	4	200
7	ICJ Indian Concrete Journal	Jan to Dec 2021	12	1,800
8	Journal Of Structural Engineering	Jan to Dec 2021	6	2,200
9	ACI Structural Journals	Jan to Dec 2021	6	13,893
10	ACI Material Journal	Jan to Dec 2021	6	13,893
11	ACI Concret International	Jan to Dec 2021	12	13,893
12	Journal of Geological Society of Indian	Jan to Dec 2021	2	9,204
13	New Building Materials & Construction World	Jan to Dec 2021	12	2,400
14	Indian Journals of Engineering & Materials Science	Jan to Dec 2021	6	1,600
15	Construction World	Jan to Dec 2021	12	3,000
16	International Journal of Civil Engg.& Construction Technology	Jan to Dec 2021	2	3,000
17	International journal of Mechanics Structural	Jan to Dec 2021	2	3,000
18	IEJ: Electrical,Electronics & Telecommunication, Computer,(Series B)	Jan to Dec 2021	4	7,276
19	Journal of Energy Storage & Conversion	Jan to Dec 2021	2	3,000
20	Electrical India	Jan to Dec 2021	12	1,600
21	Power line	Jan to Dec 2021	12	1,200
22	JI of Inc'l Asso.on Electricity Generation Transmission & Distribution	Jan to Dec 2021	2	900
23	Power Engineering Journal	Jan to Dec 2021	2	900
24	International journal of electric power system Research	Jan to Dec 2021	2	3,500
25	Journal of Central Power Research Institute	Jan to Dec 2021	4	2,000
26	International Journal of Electronics & Telecommunications	Jan to Dec 2021	2	3,000
27	The IUPJournal of Electrical & Electronics Engineering	Jan to Dec 2021	4	1,000
28	Electronics For You	Jan to Dec 2021	12	1,200
29	Telnet	Jan to Dec 2021	12	1,200
30	IUP Telecommunication	Jan to Dec 2021	4	1,000

31	International Journal of Electrical Systems and Control	Jan to Dec 2021	2	3,000
32	International Journal of Electronics, Computing and Engineering Education	Jan to Dec 2021	2	3,000
33	Indian J. of Advances in Power Electronics	Jan to Dec 2021	2	3,500
34	International journal of computer Science and Information Technology	Jan to Dec 2021	2	3,000
35	International journal of Information Technology and Database Systems	Jan to Dec 2021	2	3,000
36	International journal of Intelligent Information Processing	Jan to Dec 2021	2	3,000
37	International journal of information Analysis and Processing	Jan to Dec 2021	2	3,000
38	International journal of Applied Artificial Intelligence in Engineering System	Jan to Dec 2021	2	3,000
39	International journal of Computational Intelligence Research and Applications	Jan to Dec 2021	2	3,000
40	International journal of Computer Engineering and Software Technology	Jan to Dec 2021	2	3,000
41	International journal of Computer Science and Communication	Jan to Dec 2021	2	3,000
42	International journal of Soft Computing and Bioinformatics	Jan to Dec 2021	2	3,000
43	International journal of Image Processing and Applications	Jan to Dec 2021	2	3,000
44	Linux for You (Now:Open Source For You)	Jan to Dec 2021	6	1,440
45	Digit	Jan to Dec 2021	12	2,600
46	Data Quest	Jan to Dec 2021	12	1,700
47	International jl. Of Applied Research on Info.Techgy.& Comput	Jan to Dec 2021	3	3,600
48	i-manager's Journal of Information Techonology	Jan to Dec 2021	4	2,700
49	International Journal of Computer Science & Engineering	Jan to Dec 2021	2	3,500
50	Indian Journal of Networks and Applications	Jan to Dec 2021	2	3,500
51	Indian Journal of Advances in Computer Science and Technology	Jan to Dec 2021	2	3,000
52	Indian Journal of Information Security and Computer	Jan to Dec 2021	2	3,000
53	Indian Journal of Wireless and Mobile Communication	Jan to Dec 2021	2	3,000
54	Indian Journal of Computing and High Speed Networks	Jan to Dec 2021	2	3,000
55	Indian Journal in Computer Simulation	Jan to Dec 2021	2	3,000
56	CSI Communications	Jan to Dec 2021	12	1,000
57	IEJ: Mechanical, Production, Aerospace, Marine Engg .(Series C)	Jan to Dec 2021	4	7,276
58	Manufacturing Technology Today (CMTI)	Jan to Dec 2021	12	1,180
59	Journal of Scientific & Industrial Research	Jan to Dec 2021	12	3,600

60	Journal of Entrepreneurship	Jan to Dec 2021	2	3,800
61	Overdrive	Jan to Dec 2021	12	2,460
62	Journal of Space Craft Technology	Jan to Dec 2021	2	1,000
63	IEJ-Metallurgical & Material / Mining -(Series-D)	Jan to Dec 2021	2	3,457
64	Industrial Product Finder	Jan to Dec 2021	12	2,400
65	Indian Journal of Mechanical Engineering and Research	Jan to Dec 2021	2	3,000
66	Indian Journal of Mechatronics	Jan to Dec 2021	2	3,000
67	International Journal of Advanced Manufacturing Systems	Jan to Dec 2021	2	3,000
68	Resonance Journal of Science Education	Jan to Dec 2021	12	1,000
69	Advances in Fuzzy Mathematics	Jan to Dec 2021	3	3,000
70	Indian Journal of Physics	Jan to Dec 2021	12	7,112
71	Indian Journal of Mathematics	Jan to Dec 2021	3	4,950
72	Bulletin of the Allahabad Mathematical Society	Jan to Dec 2021	1	3,300
73	Journal of Indian Mathematical Society	Jan to Dec 2021	2	2,500
74	International Journal of Advances in Civil Engineering	Jan to Dec 2021	2	3,000
75	International Journal of Building Construction & Architecture Planning	Jan to Dec 2021	2	3,000
76	International Journal of Modern Development in Civil Engineering	Jan to Dec 2021	2	3,000
77	International Journal of Materials in Civil Engineering	Jan to Dec 2021	2	3,500
78	International Journal of Civil Constructed Engineering	Jan to Dec 2021	2	3,500
79	International Journal of Civil Engineering and Technology Research	Jan to Dec 2021	2	3,500
80	International Journal of Construction Engineering and Technology	Jan to Dec 2021	2	3,500
81	Indian Journal of Construction Engineering and Technology	Jan to Dec 2021	2	3,000
82	Indian Journal of Structural Design and Construction	Jan to Dec 2021	2	3,000
83	Journal of Public Transportation System	Jan to Dec 2021	2	6,000
84	Indian Journal of Information Sciences and Computer Application	Jan to Dec 2021	2	3,000
85	Indian Journal of Information Technology and Library Science	Jan to Dec 2021	2	3,000
86	International Journal of Computers, Information Technology and Engineering	Jan to Dec 2021	2	3,000
87	International Journal of Computing & Information Technology	Jan to Dec 2021	2	3,000
88	International Journal of Data Analysis and Information System	Jan to Dec 2021	2	3,000
89	Indian Journal of Knowledge Management and Information Technology	Jan to Dec 2021	2	3,000
90	Indian Journal of Operations Management and Information Technology	Jan to Dec 2021	2	3,000
91	Indian Journal of Information Sciences and Computer Application	Jan to Dec 2021	2	3,000
92	Indian Journal of Advances in Knowledge Engineering & Computer Science	Jan to Dec 2021	2	3,000
93	Indian journal of Computer Engineering & Technology(IJCET)	Jan to Dec 2021	2	3,000

94	Indian Journal of Information and Communication Engineering	Jan to Dec 2021	2	3,000
95	Indian Journal of Software and Information Engineering	Jan to Dec 2021	2	3,000
96	Indian Journal of Software Engineering research	Jan to Dec 2021	2	3,000
97	International Journal of Computer and Information	Jan to Dec 2021	2	3,000
98	International Journal of Information & Knowledge Management	Jan to Dec 2021	2	3,000
99	Indian Journal of Advances in Electrical Engineering	Jan to Dec 2021	2	3,000
100	Indian Journal of Electrical Engineering and Modern Technology	Jan to Dec 2021	2	3,000
101	Indian Journal of Embedded System in Engineering Research	Jan to Dec 2021	2	3,000
102	Indian Journal of Electrical and Computer Engineering	Jan to Dec 2021	2	3,500
103	Indian Journal of Electrical Engineering and Research	Jan to Dec 2021	2	3,500
104	International Journal of Power Generation	Jan to Dec 2021	2	3,500
105	Indian Journal of Electrical Engineering and Modern Technology	Jan to Dec 2021	2	3,000
106	Indian Journal of Energy and Environmental Engineering	Jan to Dec 2021	2	3,000
107	Indian Journal of Electronics Engineering and Communication Engg	Jan to Dec 2021	2	3,000
108	Indian Journal of Electronic Circuits, Devices and Systems	Jan to Dec 2021	2	3,000
109	Advances in Wireless and Mobile Communications	Jan to Dec 2021	2	3,000
110	International Journal of Microelectronic & VLSI Design	Jan to Dec 2021	2	3,000
111	Indian Journal of Advances in Electronic and Electric Engineering	Jan to Dec 2021	2	3,500
112	International Journal of Industrial Electronics and Electrical Engineering	Jan to Dec 2021	2	3,500
113	Advance Development in Indian Electronic Engineering	Jan to Dec 2021	2	3,000
114	Indian Journal of Advance Mechatronics & Robotics	Jan to Dec 2021	2	3,000
115	Indian Journal of Electronic and Video Engineering	Jan to Dec 2021	2	3,000
116	Indian Journal of Engineering and Manufacturing Science Technology	Jan to Dec 2021	2	3,500
117	Indian Journal of Instrumentation Science and Engineering	Jan to Dec 2021	2	3,500
118	Indian Journal of Mechanical Engineering and Materials Sciences	Jan to Dec 2021	2	3,500
119	Indian Journal of Semiconductors Science and Research	Jan to Dec 2021	2	3,500
120	Indian Journal of Nanotechnology	Jan to Dec 2021	2	3,500
121	International Journal of Design Engineering and Technology	Jan to Dec 2021	2	3,500

122	Advances in Indian Fluid Engineering	Jan to Dec 2021	2	3,000
123	Indian Journal of Mechanics and Thermodynamics	Jan to Dec 2021	2	3,000
124	Indian Journal of Modern Production Engineering	Jan to Dec 2021	2	3,000
Total in Rupees				4,07,490.00
TOTAL				4.07

2.5 Equipment

Sr. No.	Proposed Item	Qty. Required	Unit Cost	Total
1	CCTV Camera/DVR (New Bulding Library)	32	0.125	4.00
2	Camputer HP (Desk800Gl)	10	0.500	5.00
3	Camputer (All in One)	2	0.500	1.00
4	Laptop	1	0.500	0.50
5	UPS 10 KV	1	3.500	3.50
6	Ricoh Digital Copier IM 2702,Copier Printer	1	3.000	3.00
TOTAL				17.00

2.6 Furniture

Sr. No.	Proposed Item	Qty. Required	Unit Cost	Total
1	New Bulding Library- Modular		90	90.00
2	Book Stack-Dublefaced and Single Faced	30	0.07	20.00
TOTAL				110.00

2.7 Maintenance Fund

Sr. No.	Details of Repairs/ Material & Supply/ Maintenance, AMC, lab consumables, spares,	Unit Cost	Qty	Total
1	Slim21 AMC (Slim S/W Support & Upgradation)	0.40	1	0.40
2	Xerox M/C AMC (Maintenance)	0.10	1	0.10
3	Computer (Maintenance)	0.01	50	0.50
4	CCTV AMC (Maintenance)	0.02	16	0.25
TOTAL				1.25

2.8 Recurring Expendiure

Sr No	Particulars	Estimated Unit Rate
1	Newspapers, Periodicals and Magazines	2.00
2	Binding: Books & Journals, Library Stationary	3.00
3	Manpower (Skilled 2 & Unskilled 4)	8.00
4	Renumeration for Earn & Learn Scheme	2.00
5	Identity Cards (PVC Card,Cleaning Kit,Ribbon,identity card less & Folder)	0.60
6	Sharp AR 5623N,Samsung & Zebra Printer Toner	0.50
TOTAL		16.10

Summary

	Particulars	Expenditure	Total
1	1. State Government Plan Library :		5.00
2	2. Institute Level Funds: to be submitted by concern departments		
	2.1 Library Books		24.80
	2.2 e books		20.00
	2.3 E-Journals		77.00
	2.4 Print Journals		4.07
	2.5 Equipment		17.00
	2.6 Furniture		110.00
	2.7 Maintenance Fund		1.25
	2.8 Recurring Expendiure		16.10
Total			275.23

**Recommended Book List FY 2020-21
for Development of Library**

Sr. No.	Title	Author	Publisher	ISBN	Qty	PRICE	Amount	Dept.
1	COMPUTER COMMUNICATION NETWORKS	MURALI C	CENGAGE LEARNING	9789387511149	3	299	897	ENTC
2	MECHATRONICS / 2ND EDN	HEGDE GANESH S	UNIVERSITY SCIENCE PRESS	9788131803516	3	235	705	ENTC
3	REAL-TIME SYSTEMS: DESIGN PRINCIPLES FOR DISTRIBUTED EMBEDDED APPLICATIONS (REAL-TIME SYSTEMS SERIES)	HERMANN KOPETZ	SPRINGER	9781461428664	1	75	6,052	ENTC
4	CLIENT-SERVER PROGRAMMING AND APPLICATIONS	DOUGLAS E. COMER	PEARSON INDIA	9789332550261	2	739	1,478	ENTC
5	SPEECH AND AUDIO SIGNAL PROCESSING : PROCESSING AND PERCEPTION OF SPEECH & MUSIC	GOLD BEN & MORGAN NELSON	WILEY INDIA PVT LTD	9788126508228	2	789	1,578	ENTC
6	SATELLITE COMMUNICATIONS SYSTEMS: SYSTEMS TECHNIQUES AND TECHNOLOGY / 5TH EDN.	MARAL, GERARD & BOUSQUET, MICHEL	WILEY INDIA PVT. LTD.	9788126549269	5	729	3,645	ENTC
7	SATELLITE COMMUNICATION SYSTEMS: DESIGN PRINCIPLES/ 2ND EDN.	RICHHARIA M.	BSP BOOSK / MACMILLAN PRESS LTD.	9780333987766	2	650	1,300	ENTC
8	WIRELESS DIGITAL COMMUNICATIONS: MODULATION AND SPREAD SPECTRUM APPLICATIONS	FEHER, KAMILO	PEARSON INDIA	9789332549401	5	705	3,525	ENTC
9	FIBER OPTICS: PHYSICS AND TECHNOLOGY/ 2ND EDN	FEDOR MITSCHKE	SPRINGER	9783662527627	1	85	6,058	ENTC
10	MECHATRONICS 2ND ED	HEGDE GANESH S	LAXMI PUBLICATIONS	9788131803516	5	235	1,175	ENTC
11	REAL-TIME SYSTEMS: DESIGN PRINCIPLES FOR DISTRIBUTED EMBEDDED APPLICATIONS (REAL-TIME SYSTEMS SERIES)	HERMANN KOPETZ	SPRINGER	9781461428664	1	75	6,052	ENTC
12	FUNDAMENTALS OF INDUSTRIAL DRIVES	SARKAR B N	PHI INDIA	9788120344334	10	350	3,500	ENTC
13	DRIVES AND CONTROL FOR INDUSTRIAL AUTOMATION	TAN, KOK KIONG	SPRINGER	9781447126065	1	112	9,050	ENTC
14	CLIENT-SERVER PROGRAMMING AND APPLICATIONS	DOUGLAS E. COMER	PEARSON INDIA	9789332550261	5	739	3,695	ENTC
15	GUIDE TO COMPUTER NETWORK SECURITY	KIZZA,	SPRINGER	9783319556055	1	60	4,841	ENTC

16	MICROWAVE ENGINEERING /3RD EDN.	DAS ANNAPURNA & DAS SISIR K.	MCGRAW HILL INDIA	9789332902879	5	595	2,975	ENTC
17	SPEECH AND AUDIO SIGNAL PROCESSING : PROCESSING AND PERCEPTION OF SPEECH & MUSIC	GOLD BEN & MORGAN NELSON	WILEY INDIA PVT LTD	9788126508228	5	789	3,945	ENTC
18	OPERATING SYSTEMS/ 9TH EDN	STALLINGS, WILLIAM	PEARSON INDIA	9789352866717	2	869	1,738	ENTC
19	SATELLITE COMMUNICATIONS	GAGLIARDI M.ROBERT	CBS PUBLISHERS & DISTRIBUTORS	9788123909196	5	320	1,600	ENTC
20	HANDBOOK OF DATA COMPRESSION /5TH EDN	D. SALOMON	SPRINGER	9781848829022	1	140	11,297	ENTC
21	WIRELESS COMMUNICATIONS: PRINCIPLES AND PRACTICE/ 2ND EDN.	RAPPAPORT THEODORE S.	PEARSON INDIA	9788131731864	5	829	4,145	ENTC
22	MOBILE CELLULAR TELECOMMUNICATIONS: ANALOG AND DIGITAL SYSTEMS/ 2ND EDN	LEE WILLIAM C.Y.	MCGRAW HILL INDIA	9780070635999	5	710	3,550	ENTC
23	WIRELESS DIGITAL COMMUNICATIONS: MODULATION AND SPREAD SPECTRUM APPLICATIONS	FEHER, KAMILO	PEARSON INDIA	9789332549401	10	705	7,050	ENTC
24	DIGITAL DESIGN:PRINCIPLES AND PRACTICES/ 4TH EDN.	WAKERLRY JOHN F.	PEARSON INDIA	9788131713662	10	829	8,290	ENTC
25	VERILOG HDL : A GUIDE TO DIGITAL DESIGN AND SYNTHESIS (WITH CD) / 2ND EDN	PALNITKAR SAMIR	PEARSON INDIA	9788177589184	10	640	6,400	ENTC
26	VERILOG DIGITAL SYSTEM DESIGN /2ND EDN WITH CD	NAVABI ZAINALABEDIN	MCGRAW HILL INDIA	9780070252219	10	650	6,500	ENTC

27	DESIGN THROUGH VERILOG HDL	PADMANABHAN T.R & SUNDARI B.B.T.	WILEY INDIA PVT LTD	9788126519316	10	649	6,490	ENTC
28	VLSI DESIGN: BLACK BOOK	PRASAD K. V. K. K. & SHYAMALA KATTULA	WILEY INDIA / DREAMTECH PRESS	9788177227444	10	699	6,990	ENTC
29	OPTICAL FIBER COMMUNICATIONS/ 5TH EDN	KEISER GERD	MCGRAW HILL INDIA	9781259006876	10	799	7,990	ENTC
30	OPTICAL FIBER COMMUNICATIONS: PRINCIPLES AND PRACTICE/3RD EDN.	SENIOR JOHN M.	PEARSON INDIA	9788131732663	10	899	8,990	ENTC
31	FIBER OPTIC COMMUNICATION SYSTEMS/ 4TH EDN	AGRAWAL G.	WILEY INDIA	9788126571345	10	839	8,390	ENTC
32	DATA AND COMPUTER COMMUNICATIONS/ 10TH EDN	STALLINGS WILLIAM	PEARSON INDIA	9789332586932	10	869	8,690	ENTC
33	ENGINEERING APPROACH ON COMPUTER NETWORKING	KESHAV.S	PEARSON EDUCATION LIMITED	9788131711453	10	959	9,590	ENTC
34	INTRODUCTION TO DATA COMMUNICATIONS AND NETWORKING	TOMASI WAYNE	PEARSON INDIA	9788131709306	10	959	9,590	ENTC
35	COMPUTER NETWORKS/ 5TH EDN.	TANENBAUM ANDREW S & WETHERALL DAVID J.	PEARSON INDIA	9789332518742	10	789	7,890	ENTC
36	MECHATRONICS: ELECTRONIC CONTROL SYSTEMS IN MECHANICAL AND ELECTRICAL ENGINEERING, 6E	BOLTON	PEARSON	9789353065881	5	799	3,995	ENTC
37	PROGRAMMABLE LOGIC CONTROLLERS /5TH EDN	WEBB, JOHN W. & REIS RONALD A.	PEARSON INDIA	9789332555129	5	729	3,645	ENTC
38	MECHATRONICS 2ND ED	HEGDE GANESH S	LAXMI PUBLICATONS	9788131803516	10	235	2,350	ENTC
39	REAL-TIME SYSTEMS: DESIGN PRINCIPLES FOR DISTRIBUTED EMBEDDED APPLICATIONS (REAL-TIME SYSTEMS SERIES)	HERMANN KOPETZ	SPRINGER	9781461428664	1	75	6,051	ENTC
40	FUNDAMENTALS OF INDUSTRIAL DRIVES	SARKAR B N	PHI INDIA	9788120344334	30	350	10,500	ENTC
41	DRIVES AND CONTROL FOR INDUSTRIAL AUTOMATION	TAN, KOK KIONG	SPRINGER	9781447126065	1	112	9,094	ENTC
42	MODERN POWER ELECTRONICS AND AC DRIVES	BOSE, B.K.	PEARSON INDIA	9789332557550	5	790	3,950	ENTC

43	POWER ELECTRONICS: DEVICES, CIRCUITS AND APPLICATIONS /4TH EDN	RASHID, MUHAMMAD H.	PEARSON INDIA	9789332584587	5	789	3,945	ENTC
44	ELECTRIC MOTOR DRIVES: MODELING, ANALYSIS AND CONTROL	KRISHNAN R.	PEARSON INDIA	9789332549715	5	809	4,045	ENTC
45	LINEAR ALGEBRA: A GEOMETRIC APPROACH	KUMARESAN S.	PHI INDIA	9788120316287	10	250	2,500	ENTC
46	LINEAR ALGEBRA /2ND EDN.	HOFFMAN KENNETH & KUNZE RAY	PEARSON INDIA	9789332550070	10	429	4,290	ENTC
47	LINEAR ALGEBRA AND ITS APPLICATIONS/ 4TH EDN.	STRANG GILBERT	CENGAGE LEARNING	9788131501726	10	525	5,250	ENTC
48	MATRIX AND LINEAR ALGEBRA : AIDED WITH MATLAB / 3RD EDN	DATTA KANTI BHUSHAN	PHI INDIA PVT. LTD	9788120352865	10	625	6,250	ENTC
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50	ALGEBRA/ 2ND EDN	ARTIN, MICHAEL	PEARSON INDIA	9789332549838	10	539	5,390	ENTC
51	TCP/IP PROTOCOL SUITE/ 4TH EDN	FOROUZAN BEHROUZ A.	MCGRAW HILL INDIA	9780070706521	10	825	8,250	ENTC
52	COMPUTER NETWORKS/ 5TH EDN.	TANENBAUM ANDREW S & WETHERALL DAVID J.	PEARSON INDIA	9789332518742	10	789	7,890	ENTC
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54	INTERNETWORKING WITH TCP/IP/ 6TH END (Vol 1)	COMER D.E.	PEARSON INDIA	9789332550100	10	749	7,490	ENTC
55	CLIENT-SERVER PROGRAMMING ANDAPPLICATIONS	DOUGLAS E. COMER	PEARSON INDIA	9789332550261	10	739	7,390	ENTC
56	COMPUTER NETWORK SECURITY	KIZZA	SPRINGER	9780387204734	1	80	6,452	ENTC
57	GUIDE TO COMPUTER NETWORK SECURITY	KIZZA,	SPRINGER	9783319556055	10	60	4,841	ENTC
58	MICROWAVE ENGINEERING/ 4TH EDN	POZAR DAVID M	WILEY INDIA PRIVATE LIMITED	9788126541904	10	729	7,290	ENTC
59	FOUNDATIONS FOR MICROWAVE ENGINEERING/ 2ND EDN.	COLLIN ROBERT E.	WILEY INDIA	9788126515288	10	999	9,990	ENTC
60	MICROWAVE ENGINEERING /3RD EDN.	DAS ANNAPURNA & DAS SISIR K.	MCGRAW HILL INDIA	9789332902879	10	595	5,950	ENTC
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65	SPEECH AND AUDIO SIGNAL PROCESSING : PROCESSING AND PERCEPTION OF SPEECH & MUSIC	GOLD BEN & MORGAN NELSON	WILEY INDIA PVT LTD	9788126508228	10	789	7,890	ENTC
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67	OPERATING SYSTEMS/ 9TH EDN	STALLINGS, WILLIAM	PEARSON INDIA	9789352866717	10	869	8,690	ENTC
68	MODERN OPERATING SYSTEMS /4TH EDN	TANENBAUM, ANDREW S.	PEARSON INDIA	9789332575776	10	849	8,490	ENTC
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87	MODERN TELEVISION PRACTICE/ 5TH EDN	GULATI, R.R.	NEW AGE INTERNATIONAL PUBLISHERS	9788122437843	10	599	5,990	ENTC
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94	8051 MICROCONTROLLER AND EMBEDDED SYSTEMS : (USING ASSEMBLY AND C) / 2ND EDN.	MAZIDI MUHAMMAD ALI ET. AL	PEARSON INDIA	9788131710265	10	789	7,890	ENTC
95	HIGHER ENGINEERING MATHEMATICS/ 44TH EDN	GREWAL B S	KHANNA PUBLISHERS	9788193328491	5	899	4,495	ENTC
96	DIGITAL COMMUNICATIONS: FUNDAMENTALS AND APPLICATIONS/ 2ND EDN.	SKLAR BERNARD & RAY PABITRA KUMAR	PEARSON INDIA	9788131720929	10	1,029	10,290	ENTC
97	CONTROL SYSTEMS ENGINEERING/ 5TH EDN	ANANDANATARAJ AN R & BABAU P RAMESH	SCITECH PUBLICATIONS	9789385983573	10	610	6,100	ENTC
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103	SOFTWARE TESTING	SINGH YOGESH	CAMBRIDGE UNIVERSITY PRESS	9781107652781	2	895	1,790	MCA/IT
104	SOFTWARE METRICS: A RIGOROUS AND PRACTICAL APPROACH/ 3RD EDN	FENTON, NORMAN	CRC PRESS	9781439838228	1	58	5,100	MCA/IT

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106	INTRODUCTION TO INFORMATION RETRIEVAL	MANNING CHRISTOPHER D ET. AL.	CAMBRIDGE UNIVERSITY PRESS INDIA	9781107666399	3	795	2,385	MCA/IT
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110	HUMAN COMPUTER INTERACTION/ 3RD EDN.	DIX ALAN ET. AL.	PEARSON INDIA	9788131717035	2	959	1,918	MCA/IT
111	INTERACTION DESIGN : BEYOND HUMAN - COMPUTER INTERACTION / 3RD EDN	ROGERS YVONNE ET.AL	JOHN WILEY & SONS	9788126544912	2	859	1,718	MCA/IT
112	COMPLETE REFERENCE STORAGE NETWORKS	SPALDING ROBERT	MCGRAW HILL INDIA	9780070532922	2	930	1,860	MCA/IT
113	ENTERPRISE CLOUD COMPUTING: TECHNOLOGY ACCHITECTURE APPLICATIONS	SHROFF GAUTAM	CAMBRIDGE UNIVERSITY PRESS INDIA	9781107648890	5	675	3,375	MCA/IT
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115	NEURAL NETWORK DESIGN (WITH CD)	HAGAN MARTIN T ET.AL	CENGAGE INDIA	9788131503959	3	650	1,950	MCA/IT
116	SUPPLY CHAIN MANAGEMENT THEORIES & PRACTICES	MOHANTY & DESHMUKH	WILEY INDIA / DREAMTECH PRESS	9788177221916	5	399	1,995	MCA/IT
117	DESIGNING THE INTERNET OF THINGS	MCEWEN, ADRIAN & CASSIMALLY, HAKIN	WILEY INDIA	9788126556861	2	599	1,198	MCA/IT
118	GUIDE TO COMPUTER FORENSICS AND INVESTIGATIONS/ 4TH EDN	NELSON BILL ET.AL	CENGAGE LEARNING	9788131519462	2	650	1,300	MCA/IT

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120	SOFTWARE METRICS: A	FENTON, NORMAN	CRC PRESS	9781439838228	1	58	5,900	MCA/IT
121	INTRODUCTION TO SEARCH ENGINES AND WEB NAVIGATION/2ND EDN	LEVENE MARK	WILEY	9780470526842	1	101	7,000	MCA/IT
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127	NEURAL NETWORK DESIGN (WITH CD)	HAGAN MARTIN T ET.AL	CENGAGE LEARNING	9788131503959	5	650	3,250	MCA/IT
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137	SOFTWARE TESTING	SINGH YOGESH	CAMBRIDGE UNIVERSITY PRESS	9781107652781	15	895	13,425	MCA/IT
138	INTERNET OF THINGS: A HANDS-ON APPROACH	BAHGA, ARSHDEEP & MADISETTI, VIJAY	UNIVERSITIES PRESS	9788173719547	20	725	14,500	MCA/IT
139	8051 MICROCONTROLLER AND EMBEDDED SYSTEMS : (USING ASSEMBLY AND C) / 2ND EDN.	MAZIDI MUHAMMAD ALI ET. AL	PEARSON	9788131710265	20	789	15,780	MCA/IT
140	PRACTICAL SOFTWARE TESTING	IENE BURNSTEIN	SPRINGER	9781441928856	1	90	7,000	MCA/IT
141	SOFTWARE TESTING: PRINCIPLES AND PRACTICES	DESIKAN SRINIVASAN & RAMESH GOPALASWAMY	PEARSON INDIA	9788177581218	20	590	11,800	MCA/IT
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284	INTEGRATION OF DISTRIBUTED GENERATION IN THE POWER SYSTEM	MATH H.BOLLEN, FAINAN HASSAN	WILEY INDIA	9788126573264	5	839	4,195	Elect
285	DISTRIBUTED GENERATION : INTDUCTION AND PERMANENT MAGNET GENERATORS	LAI LOI LEI & CHAN T	WILEY - INTERSCIENCE	9780470062081	1	156	12,000	Elect
286	PHOTOVOLTAIC SYSTEMS ENGINEERING/ 4TH EDN	MESSENGER ROGER A.	CRC PRESS	9781498772778	1	91	8,000	Elect
287	WIND ENERGY EXPLAINED: THEORY, DESIGN AND APPLICATION/ 2ND EDN	MANWELL JAMES F.ET. AL.	WILEY - BLACKWELL	9780470015001	1	118	9,000	Elect
288	DESIGN OF SMART POWER GRID RENEWABLE ENERGY SYSTEMS/ 3RD EDN	ALI KEYHANI,	WILEY IEEE	9781119573326	1	155	11,000	Elect
289	SMART GRID: ENABLING ENERGY EFFICIENCY AND DEMAND RESPONSE	GELLINGS CLARK W.	CRC PRESS	9781439815748	2	695	1,390	Elect
290	SMART GRID: TECHNOLOGY AND APPLICATIONS	EKANAYAKE JANAKA ET AL	WILEY INDIA	9788126557356	5	649	3,245	Elect
291	SMART GRID: ADVANCED TECHNOLOGIES AND SOLUTIONS/ 2ND EDN	BORLASE STUART	CRC PRESS	9781498799553	1	120	12,000	Elect
292	SYNCHRONIZED PHASOR MEASUREMENT AND THEIR APPLICATIONS	A.G.PHADKE,	SPRINGER	9783319505824	1	140	10,000	Elect
293	POWER ELECTRONICS: CONVERTERS APPLICATIONS AND DESIGN (WITH CD)/ 3RD EDN (Vol 2)	MOHAN NED ET.AL	WILEY INDIA PVT LTD	9788126510900	10	849	8,490	Elect
294	POWER ELECTRONICS: DEVICES, CIRCUITS AND APPLICATIONS /4TH EDN	RASHID, MUHAMMAD H.	PEARSON INDIA	9789332584587	5	789	3,945	Elect
295	MODERN POWER ELECTRONICS AND AC DRIVES	BOSE, B.K.	PEARSON INDIA	9789332557550	5	790	3,950	Elect
296	HIGH POWER CONVERTERS & AC DRIVES /2ND EDN	BIN WU	WILEY - BLACKWELL	9781119156031	1	146	11,000	Elect
297	WIND POWER IN POWER SYSTEMS/2ND EDN.	ACKERMANN THOMAS	WILEY	9780470974162	1	183	13,500	Elect

298	GRID INTEGRATION OF WIND ENERGY ONSHORE AND OFFSHORE CONVERSION SYSTEMS /3RD EDN	HEIER SIEGFRIED	WILEY	9781119962946	1	134	10,000	Elect
299	SOLAR ENERGY /4TH EDN	SUKHATME S P & NAYAK J.K	MCGRAW HILL INDIA	9789352607112	5	610	3,050	Elect
300	ELECTRIC POWER DISTRIBUTION/ 6TH EDN	PABLA A S	MCGRAW HILL INDIA	9780070144552	5	895	4,475	Elect
301	TEXTBOOK OF ELECTRIC POWER DISTRIBUTION AUTOMATION	KHEDKAR M.K. & DHOLE G.M.	UNIVERSITY SCIENCE PRESS	9789380386218	5	195	975	Elect
302	ELECTRICAL DISTRIBUTION ENGINEERING / 3RD EDN	PANSINI ANTHONY J.	CRC PRESS	9780849382499	1	96	9,000	Elect
303	ELECTRIC POWER DISTRIBUTION AUTOMATION PROTECTION AND CONTROL	MOMOH JAMES A.	CRC PRESS	9780849368356	1	105	10,000	Elect
304	LINEAR ALGEBRA /2ND EDN.	HOFFMAN KENNETH & KUNZE RAY	PEARSON INDIA	9789332550070	5	429	2,145	Elect
305	KREYSZIG: INTRODUCTORY FUNCTIONAL ANALYSIS WITH APPLICATIONS	KREYSZIG ERWIN	WILEY INDIA PVT LTD	9788126511914	5	709	3,545	Elect
306	MATHEMATICAL STATISTICS WITH APPLICATIONS/ 8TH EDN	FREUNDS JOHN E ET.AL	PEARSON INDIA	9789332519053	5	999	4,995	Elect
307	STOCHASTIC PROCESSES/ 4TH EDN	MEDHI J	NEW AGE INTERNATIONAL	9789386286482	5	475	2,375	Elect
308	PROBABILITY RANDOM VARIABLES AND STOCHASTIC PROCESSES/ 4TH EDN.	PAPOULIS ATHANASIOS & PILLAI S.UNNIKRISHNA	MCGRAW HILL INDIA	9780070486584	5	810	4,050	Elect
309	INTRODUCTION TO OPERATIONS RESEARCH (WITH CD)/10TH EDN	HILLIER FREDERICK S ET.AL	MCGRAW HILL INDIA	9789339221850	5	845	4,225	Elect
310	PULSE WIDTH MODULATION FOR POWER CONVERTERS: PRINCIPLES AND PRACTICE	HOLMES, D. GRAHAME & LIPO, THOMAS A.	WILEY	9788126547470	3	4,195	12,585	Elect
311	HIGH POWER CONVERTERS & AC DRIVES /2ND EDN	BIN WU	WILEY - BLACKWELL	9781119156031	1	146	11,000	Elect
312	CONTROL DESIGN TECHNIQUES IN POWER ELECTRONICS DEVICES	SIRA -RAMIREZ, R. SILVA ORTIGOZA	SPRINGER	9781849966054	1	168	14,000	Elect

313	SLIDING MODE CONTROL OF SWITCHING POWER CONVERTERS	SIEW-CHONG TAN, YUK-MING LAI, CHI KONG TSE	CRC PRESS	9781138075498	1	62	6,000	Elect
314	BUSINESS ANALYTICS /2ND EDN	JAMES R.,CARL H.	PEARSON INDIA	9789332582095	5	689	3,445	Elect
315	INDUSTRIAL MAINTENANCE	GARG H P	S. CHAND & COMPANY LTD.	9788121901680	2	425	850	Elect
316	FOUNDATION ENGINEERING HANDBOOK/ 2ND EDN.	FANG HSAI-YANG	CBS PUBLISHERS & DISTRIBUTORS	9788123905457	2	1,495	2,990	Elect
317	OPERATIONS RESEARCH: AN INTRODUCTION/ 10TH EDN	TAHA HAMDY A.	PEARSON INDIA	9789352865277	5	879	4,395	Elect
318	OPERATIONS RESEARCH: INTRODUCTION TO OPTIMISATION 7TH ED	J.C. PANT	JAIN BROTHERS		5	395	1,975	Elect
319	INTRODUCTION TO OPERATIONS RESEARCH (WITH CD)/10TH EDN	HILLIER FREDERICK S ET.AL	MCGRAW HILL INDIA	9789339221850	5	845	4,225	Elect
320	PRINCIPLES AND PRACTICE OF COST ACCOUNTING/3RD EDN	BHATTACHARYYA ASISH K	PHI INDIA	9788120325555	5	795	3,975	Elect
321	QUANTITATIVE TECHNIQUES IN MANAGEMENT /5TH EDN	VOHRA N D	MCGRAW HILL INDIA	9789352606269	5	710	3,550	Elect
322	CALLISTERS MATERIAL SCIENCE AND ENGINEERING (WITH CD)/ 2ND EDN	CALLISTER WILLIAM D ET.AL	WILEY	9788126541607	5	889	4,445	Elect
323	COMPOSITE MATERIALS: SCIENCE AND ENGINEERING /3RD EDN	CHAWLA, KRISHAN K.	SPRINGER	9780387743646	1	90	8,540	Elect
324	COMPOSITE MATERIALS SCIENCE AND APPLICATIONS	DEBORAH D.L. CHUNG	SPRINGER	9781447125471	1	150	12,000	Elect
325	COMPOSITE MATERIALS: DESIGN AND APPLICATIONS/ 3RD EDN	DANIEL GAY	CRC /TAYLOR & FRANCIS	9781466584877	1	100	10,000	Elect
326	NONCONVENTIONAL ENERGY	DESAI ASHOK V	NEW AGE INTERNATIONAL (P) LTD.	9788122402070	10	185	1,850	Elect
327	RESISTING INTELLECTUAL PROPERTY	HALBERT DEBORA J.	ROUTELEDGE	9780415429641	1	2,195	6,000	Elect
328	ELECTRICAL POWER SYSTEM/ 15TH EDN	UPPAL S.L & RAO.S	KHANNA PUBLISHERS	9788174092380	10	599	5,990	Elect
329	POWER SYSTEM DYNAMICS: STABILITY AND CONTROL/ 2ND EDN.	PADIYAR K.R	BSP PUBLICATIONS	9788178000244	5	625	3,125	Elect

330	ELECTRIC ENERGY SYSTEMS THEORY: AN INTRODUCTION /2ND EDN (INDIAN EDITION)	ELGERD OLLE L	MCGRAW HILL INDIA	9780070992863	5	780	3,900	Elect
331	COMPUTER-AIDED DESIGN OF ELECTRICAL MACHINES	MURTHY VISHNU K M	BS PUBLICATION	9788178001456	5	350	1,750	Elect
332	SOLAR ENGINEERING OF THERMAL PROCESSES/ 4TH EDN	DUFFIE JOHN A.& BECKMAN WILLIAM A	JOHN WILEY & SONS	9780470873663	1	167	12,000	Elect
333	SOLAR ENERGY ENGINEERING : PROCESSES AND SYSTEMS/ 2ND EDN	KALOGIROU SOTERIS A.	ACADEMIC PRESS	9780123972705	1	120	9,000	Elect
334	POWER SYSTEM ECONOMICS : DESIGNING MARKETS FOR ELECTRICITY	STOFT STEVEN	MEHUL BOOK SALES	9788126553914	1	3,795	3,795	Elect
335	RESTRUCTURED ELECTRICAL POWER SYSTEMS: OPERATION TRADING AND VOLATILITY	SHAHIDEHPOUR MOHAMMAD & ALOMOUSH MUWAFFAQ	CRC PRESS INDIA	9781138582330	2	3,495	6,990	Elect
336	OPERATION OF RESTRUCTURED POWER SYSTEMS	BHATTACHARYA, BOLLEN, DAALDER	SPRINGER	9781461355670	1	150	12,000	Elect
337	FUNDAMENTALS OF ARTIFICIAL NEURAL NETWORKS	HASSOUN MOHAMD H	MIT PRESS	9780262514675	1	45	3,249	Elect
338	ELECTRONIC COMMUNICATION SYSTEMS/ 2ND EDN.	BLAKE ROY	CENGAGE LEARNING	9788131518410	5	750	3,750	Elect
339	ELECTRICAL DESIGN: ESTIMATING AND COSTING/ 2ND EDN	RAINA K.B & BHATTACHARYA,S. K	NEW AGE INTERNATIONAL PUBLISHERS	9788122443585	5	399	1,995	Elect
340	ENGINEERING & SCIENTIFIC COMPUTING WITH SCILAB	CLAUDE GOMEZ	SPRINGER	9781461272045	1	120	10,000	Elect
341	SCILAB (A FREE SOFTWARE TO MATLAB)	RAMCHANDRAN, H. & NAIR, A.S.	S. CHAND & COMPANY LTD.	9788121939706	2	250	500	Elect
342	SLIDING MODES IN CONTROL AND OPTIMIZATION	UTKIN ,VADIM	SPRINGER	9783642843815	1	120	9,683	Elect
343	DISCRETE TIME SLIDING MODE CONTROL: A MULTIRATE OUTPUT FEEDBACK APPROACH	BANDYOPADHYAY B & JANARDHANAN S	SPRINGER	9783540281405	1	140	11,297	Elect
344	UNDERSTANDING DIGITAL SIGNAL PROCESSING/ 3RD EDN.	LYONS RICHARD G.	PEARSON INDIA	9788131764367	3	1,090	3,270	Elect

345	DIGITAL SIGNAL PROCESSING: PRINCIPLES ALGORITHMS AND APPLICATIONS/ 4TH EDN	PROAKIS JOHN G & MANOLAKIS DIMITRIS. G	PEARSON INDIA	9788131710005	3	879	2,637	Elect
346	COURSE IN ELECTRICAL MACHINE DESIGN/ 6TH EDN	SAWHNEY A.K	DHANPAT RAI & CO (P) LTD	9788177001013	5	695	3,475	Elect
347	NISE'S CONTROL SYSTEMS ENGINEERING	NISE NORMAN	WILEY INDIA	9788126571833	10	929	9,290	Elect
348	FUNDAMENTALS OF ELECTRIC CIRCUITS/ 6TH EDN	CHARLES K ALEXANDER, MATTHEW SADIKU	MCGRAW HILL INDIA	9789353165505	15	775	11,625	Elect
Total in Rupees							19,36,772	
TOTAL							19.37	

**Recommended Book List FY 2020-21
for Book Bank/SWBC**

Department :Electrical/ENTC Engineering

SN	Title	Author	Publisher	ISBN	Qty	PRICE	Amount
1	Power System Operation and Control, 1e	Sreenivasan G	Pearson Education India	8131726622	5	695	3,475
2	Power System Harmonic Analysis	Arrillaga J.	Wiley India Exclusive	812654788X	5	850	4,250
3	Power System Stability, Vol - II,	Kimbark	Wiley	8126512571	5	949	4,745
5	Electric Power Systems, 5ed (WSE)	Weedy B.M.	Wiley	8126540729	5	584	2,920
6	Principles of Power System	Mehta V.K. & Others	S Chand	9788121924962	5	595	2,975
7	Electrical Power Systems	Uppal S.L.	Khanna	8174092382	5	205	1,025
8	Principles of Power System	Mehta V.K. & Others	S Chand	9788121924962	5	615	3,075
9	Principles of Power System	Mehta V.K. & Others	S Chand	9788121924962	10	615	6,150
10	Operation of Restructured Power Systems (Power Electronics and Power Systems)	Bhattacharya Kankar	Springer	1461355672	5	13277	66,385
11	Microwave Engineering	Pozar D.M.	Wiley	8126541903	10	729	7,290
12	Power System Protection and Switchgear	Ram Badri & Others	McGraw Hill Education	9780071077743	5	565	2,825
13	Power System Analysis	John Grainger & Other	McGraw Hill Education	9780070585157	10	725	7,250
14	Op-Amp and Linear IntegAmountd Circuits	Ramakant A. Gayakwad			5	800	4,000
15	Circuit & Network – Analysis & Synthesis	A. Sudhakar			5	550	2,750
16	Electrical Circuit Analysis”	Soni Gupta			5	2000	10,000
17	Engineering Circuit Analysis	William H Hayt			5	450	2,250
18	Network Analysis	M.E.Van Valkenburg			5	650	3,250
19	Signals & system	Hsu			5	475	2,375
20	Signals & system	Ramesh Babu			10	350	3,500

Department : Mechanical Engineering

SN	Title	Author	Publisher	ISBN	Qty	PRICE	Amount
1	Internal Combustion Engines	Ganesan V	McGraw Hill Education	9781259006197	5	650	3,250
2	Renewable Energy Systems: Advanced Conversion Technologies and Applications (Industrial Electronics)	Luo Fang Lin & Others	CRC Press	1138077585	5	475	2,375
3	Non-Conventional Energy Resources	Khan B.H.	McGraw Hill Education India Private Limited	9789352601882	5	350	1,750
4	Solar Energy	Sukhatme S.P. & Others	McGraw Hill Education	9352607112	5	550	2,750
5	Non - Connventional Energy Sources.	RAI G D	KHANNA PUBLISHWRS	9788174090738	5	550	2,750
6	Non - Connventional Energy Sources.	RAI G D	KHANNA PUBLISHWRS	9788174090738	5	550	2,750
7	Solar Energy : Fundamentals and Applications	Garg H	McGraw Hill Education	0074636316	5	750	3,750

8	Pneumatic Controls (WIND)	Joji P.	Wiley	8126515422	5	850	4,250
9	Textbook of Refrigeration and Air-conditioning (M.E.)	KHURMI R.S.	S. Chand & Co,	9788121927819	10	500	5,000
10	Basic Refrigeration and Air Conditioning	Ananthanarayanan P.N	McGraw Hill Education	1259062708	5	800	4,000
11	Refrigeration and Air Conditioning	Prasad Manohar	New Age International Pvt Ltd	9788122436945	10	550	5,500
12	Principles of Refrigeration,	DOSSAT R.J.	Pearson Education India	9788177588811	5	2,000	10,000
13	Refrigeration & Air Conditioning (A Course in)	ARORA C.P. & Others	DHANPAT RAI & SONS	9789351340164	15	380	5,700
14	Hydraulics and Fluid Mechanics including hydraulics machines	Dr. P. N. Modi and Dr. S. M. Seth	Rajsons Publications Pvt. Ltd	Budgeted	50	789	39,450

Department :Civil Engineering

SN	Title	Author	Publisher	ISBN	Qty	PRICE	Amount
1	Surveying Vol., I, II and III	Dr. B.C. Punmia			5	550	2,750
2	Surveying Vol., I&II	S. K. Duggal			5	650	3,250
3	Surveying and Levelling	N.N. Basak			5	450	2,250
4	Surveying Vol., I, II and III	Dr. K.R. Arora			5	575	2,875
5	Soil Mechanics and Foundations	B. C. Punmia			5	650	3,250
6	Soil Mechanics and Foundation Engineering	K.R. Arora			5	600	3,000
7	Fluid Mechanics and Hydraulic Machines	Dr. R.K.Bansal			5	500	2,500
8	Surveying Vol., I, II and III	Dr. K.R. Arora			5	575	2,875
9	Soil Mechanics and Foundations	B. C. Punmia			5	650	3,250
10	Soil Mechanics and Foundation Engineering	K.R. Arora			5	600	3,000
11	Fluid Mechanics and Hydraulic Machines	Dr. R.K.Bansal			5	500	2,500
12	Construction Planning, Equipment and Methods	t Peurifoy & Other	McGraw Hill Education	9780070706996	10	799	7,990
13	Construction Planning Equipment & Methods	Peurifoy Robert & Others	McGraw Hill	0070706999	5	825	4,125
14	Construction Planning, Equipment and Methods	t Peurifoy & Other	McGraw Hill Education	9780070706996	15	825	12,375
15	Estimating And Costing in Civil Engineering (Theory & Practice)	Dutta B.N.	UBS Publishers' Distributors Pvt Ltd	8174767703	5	645	3,225
16	Estimating And Costing in Civil Engineering (Theory & Practice)	Dutta B.N.	UBS Publishers' Distributors Pvt Ltd	8174767703	10	645	6,450
17	Building Materials	S.K. Duggal	NEW AGE	8122433790	5	350	1,750
18	Building Materials	S.K. Duggal	NEW AGE	8122433790	10	350	3,500
19	Estimating And Costing in Civil Engineering (Theory & Practice)	Dutta B.N.	UBS Publishers' Distributors Pvt Ltd	8174767703	5	695	3,475
20	Estimating And Costing in Civil Engineering (Theory & Practice)	Dutta B.N.	UBS Publishers' Distributors Pvt Ltd	8174767703	10	695	6,950

21	Limit State Design in Structural Steel	Shiyekar M R	PHI Learning	8120353501	10	943	9,430
22	A Text-Book of Building Construction	Arora S.P. & Others	Dhanpat Rai Publications	9788189928803	5	510	2,550
23	Building Construction	Punmia P.C.	Laxmi Publications	9788131804285	5	550	2,750

Department :MCA/IT

SN	Title	Author	Publisher	ISBN	Qty	PRICE	Amount
1	Computer Organization	HAMACHER C & Others	McGraw Hill Education	1259005275	10	765	7,650
2	Human-Computer Interaction, 3e	Dix A. & Other	Pearson Education India	8131717038	15	929	13,935
3	Cyber Security	Nina Godbole Nina	Wiley	8126521791	5	809	4,045
4	Compilers : Principles Techniques & Tools	AHO A V	Person	97893325186660	15	899	13,485
5	Digital Signal Processing Using MATLAB: A Problem Solving Companion	Ingle V.K.	Cengage Learning India Pvt. Ltd.	9386668114	5	599	2,995
6	Fundamentals of Game Design, 3e	Adams	Pearson Education India	9332540241	5	769	3,845
7	Testing in 30+ Open Source Tools With CD	Shende R	Shroff Publisher	9350237121	5	975	4,875
8	Make: Getting Started with Raspberry Pi	Richardson M & Other	Shroff Publishers	9352134508	15	375	5,625
9	Embedded C	PONT	Pearson Education India	9788131715895	5	589	2,945
10	Enterprise Resource Planning: Concepts and Practice	Garg V.K.	Prentice Hall India Learning Private Limited	9788120322547	5	175	875
11	Embedded C	PONT	Pearson Education India	9788131715895	5	619	3,095
12	Embedded Systems	Kamal Raj	McGraw Hill Education	9789332901490	5	699	3,495
13	ERP	Leon.Alexis	McGraw Hill Education	9383286644	5	575	2,875
14	ERP	Leon.Alexis	McGraw Hill Education	9383286644	5	575	2,875
15	Spring & Hibernate	Kumar Santosh K	MGH	9781259063725	5	685	3,425
16	Data Mining: Concepts and Techniques	Han J	Elsevier	9380931913	15	565	8,475
17	Fundamentals of Computer Algorithms(second edition)	Horowitz S	Universities Press	9788173716126	10	495	4,950
18	Fundamentals of Computer Algorithms(second edition)	Horowitz S	Universities Press	9788173716126	5	495	2,475
19	Fundamentals of Computer Algorithms(second edition)	Horowitz S	Universities Press	9788173716126	10	495	4,950
20	Database Management Systems	Ramakrishnan R & Others	McGraw Hill Education	9339213114	5	799	3,995
21	Data Mining	Tan Pang-Ning	Person	9789332571402	5	749	3,745
22	Fundamentals of Database System	Elmasri Ramez	Person	9789332582705	4	849	3,396
23	Database System Concepts	Silberschatz	McGraw Hill Education	9332901384	5	860	4,300

24	Introduction to Database Systems	Date C J	PERSON	9788177585568	4	879	3,516
25	Developing Web Applications	Savaliya M.T.	Wiley	8126538678	5	379	1,895
26	Data Communications and Computer Networks	Gupta P.C	Prentice Hall India Learning Private Limited	8120348648	5	495	2,475
27	Data Mining	Dunhma M.H.	Person	9788177587852	12	669	8,028
28	Mastering Cloud Computing	Buyya R & Others	McGraw Hill Education	1259029956	5	675	3,375
29	TCP/IP Protocol Suite e/4	Forouzan B.A.	McGraw Hill Education	9780070706521	15	775	11,625
30	Business Intelligence and Analytics: Systems for Decision Support	Turban E & Others	Pearson Education	9352866487	5	799	3,995

Department : Science

SN	Title	Author	Publisher	ISBN	Qty	PRICE	Amount
1	Engineering Physics	Rajendran V	McGraw Hill Education	0071070141	15	585	8,775
2	Engineering Physics	Rajendran V	Wiley	9788126552566	10	585	5,850
4	Principles of Physics, 10ed, ISV	Walker J & Others	New Age International	9789386070920	5	899	4,495
5	Solid State Physics (Multi Colour Edition)	Pillai S.O	New Age International	9789386070920	10	699	6,990
6	Higher engineering mathematics	Grewal B.S.	Khanna Publication	9788193328491	10	799	7,990
7	Numerical Methods for Engineers	Chapra S.N.	McGraw Hill Education India Private Limited	9352602137	10	875	8,750
8	Numerical Methods in Engineering & Science: with Programs in C and C++	Grewal B.S.	Khanna	817409248X	10	590	5,900
9	Introductory Methods of Numerical Analysis	Sastry S.S	Prentice Hall India Learning Private Limited	8120345924	10	295	2,950
10	Matrix and Linear Algebra Aided with MATLAB	Bhushan Datta	PHI	8120352866	10	625	6,250
11	Linear Algebra: A Geometric Approach	Kumaresan S.	Prentice Hall India Learning Private Limited	8120316282	10	250	2,500
12	Fuzzy Sets and Fuzzy Logic: Theory and Applications	Klir G.J. & Others	Pearson Education India	9332549427	10	569	5,690

Total in Rupees **5,43,210**

TOTAL

5.43

Hostel Fees Fund

Name of Dept.: Hostel (B,C,D , M & Jijau)

List of Equipment to be purchase for the year 2020-21

Hostel Fees Fund

Name of Dept.: Hostel (B,C,D , M & Jijau)

List of Hostel Maintenance work for the year 2020-21

Sr. No.	Name of Item	Details of Repair	Approximate Unit Rate	Estimate Amount	Justification
1	Colouring Hostel Rooms Block B	62	Lumsum	3.00	To improve ambience at hostel
2	Coloring of Hostel Rooms M (P.G.)	24	0.02	5.00	To improve ambience at hostel
3	Providing PCC concrete & pavers in front of Jijau hostel with seating arrangements		Lumsum	5.00	To improve ambience at hostel
4	Providing of pavers as per requirement of students		Lumsum	3.00	To improve ambience at hostel
5	Providing PCC & pavers in front of PG hostel			3.00	To improve ambience at hostel
6	Pest Control	7 Hostel	0.3	2.10	For Student safety
7	Water Tank cleaning	7 Hostel	Lumsum	2.00	To maintain Hygen
8	Hostel cleaning	7 Hostel	Lumsum	3.12	To maintain Cleanliness
9	Electrician Honorarium	5 Hostel	Lumsum	2.00	Electrician Honorarium
10	Plumber Honorarium	7 Hostel	Lumsum	1.00	Plumber Honorarium
11	Solar Maintenance	25 System	0.1	2.50	To maintain Solar system
12	Grass Cutting	7 Hostel	0.05	0.35	Front and around Hostel
13	Mobile Recharge	All Hostel	Lumsum	0.20	To Recharge Watchman & Warden Mobiles
14	Mosquito Net (Ground Floor of each Hostel)	All Hostel	Lumsum	5.00	For Student safety
15	Dish T.V. Recharge With HD & Eklavya Channel	5 Hostel	0.1	0.50	For Education & Entertainment Of Student
16	Gardening	7 Hostel	Lumsum	5.00	For Beautification & Ambience at Hostel (C, D, J, H, Jijau)
17	Hostel Ganesh Festival	5 Hostel	0.10	0.50	For Student Tradition
18	Guest Room G Block	1	0.08 per month	0.96	Cleaning and Housekeeping
19	Hostel Clark	1	0.20	2.40	Payment and other expenses
20	Honorarium Of Doctor	1	Lumsum	1.00	Honorarium Of Doctor per anum
21	Carpenting Material	7 Hostels	Lumsum	1.20	
22	New Electrical material (Tube, Choke, Wire, MCB.etc	7 Hostel	Lumsum	1.40	For the Electrical Matainance of All Hostel
23	Plumbing Material	All Hostel	Lumsum	2.00	For the Plumbing Matainance
24	Printer Toner Refill	5	0.02	0.10	Hostel Documentation
25	All mess Colouring Inner & Outer Side	3	Three Mess	3.00	To improve ambience at mess
26	Sefty tank, Dranage Line & /cgenbers Cleaning (1 Year)	For 7 Hostel	1.0 Per Hostel	2.00	For Environment Purpose
27	Maintenance of Waste Water Treatment Plant 1	1	Lumsum	1.50	Plumbing & Other Repairing Work
28	Washing Machine	12	0.3	3.60	Student Demand for Cleaningless

29	Sintex Water Tank 2000 lit.	8	0.04	0.32	Old Tank Damage Hence Required new Purchase all 5 Hostel
30	Guest Room Development	4	3	12.00	Furniture, Sofsets, TV sets, Other Facillies
31	Installation of sewage treatment plant	1	7.5	7.50	To Make Environmental Hygine in the campus
32	Android mobiles	4	0.06	0.24	Hostel suvilliance
33	Services to Rent free quarters	6	0.12	0.72	
34	Mess Table Stainess Still Top With performed Sheet Sitting Bakda in M.S.	8	0.15	1.20	In Dinnin Hall of the Mess
35	Sevage water sepration pipes etc			2.00	
36	Quarters				
TOTAL				86.41	

GRAND TOTAL

86.41

9. Internet Fee : Budget for the year 2020-21

MAINTENANCE

Name of Dept.: Computer Center and Data Center

Computer Center

Sr. No	Details of Repairs/ Material & Supply/ Maintenance, AMC, lab consumables, spares.	Unit Cost	Quantity	Total(Rs. in lacs)	Justification
1	Keyboards, Mouse, Switches, Patch cord other network related tools or parts			1.50	Maintenance and consumables
2	AMC for Computer	0.05 for two year (per year 2500/- for one computer)	150	7.50	For Hardware support of 150 computers in Computer Center
3	UPS AMC	0.25	1	0.25	for mantaning UPS
4	Printer Servicing	0.015	6	0.03	Required for Printing maintenance
5	Leserjet Printer Towner Refilling	0.017	6	0.10	Required for Printing of official work, proposals etc.
6	General Maintenance,	--	--	0.70	Maintenance,
7	Carpet at Computer Center Lab	400 Sq ft	70*40 feet	1.60	For healthy and dust proof enviroment
8	Website plugging & hosting	1	1	1.00	for mantaning website
Total				12.68	

Data Center

Sr. No.	Item	Unit Cost	Quantity	Amount (Rs.in lacs)	Description
1	Link load balancer	5	1	5.00	For load balancing of Internet leased line.
2	Oracle 10g and Server or any Database mgt system	5.5	1	5.50	Database server
3	Access Points	0.35	10	3.50	For wireless access
4	Wireless Routers	0,60	10	6.00	To manage network
5	Laptop	0.5	1	0.50	Network Testing
6	Mail Server	2.5	1	2.50	To deploy institute mailing system
7	NAS Server	3.5	1	3.50	To maintain network
8	RFID based monitoring system	10	1	10.00	For digitization of the campus
9	BSNL Broadbad Internet charges	25	1	25.00	Internet connectivity for the GCE karad campus 300 mbps and more
10	Printer	0.16	1	0.16	for record keeping
11	Moodle Server	3	1	3.00	To maintain online access of data and e-learning platform.
12	AMC for UPS	1.5	2 units	3.00	and battery
13	AMC for Acs	0.05	4	0.20	maitainence for Acs
14	Server and Router AMC	0.2	20	4.00	maitaeance of routers warranty completed
15	Networking software Vmware	10	1	10.00	server Consolidaiation
16	Cables network devices	5	1	5.00	maiatence of network
17	HPC sofwatre	4	1	4.00	HPC configuration
18	Networking Software Vmware	10	1	10.00	Virtualisation
Total				97.86	

GRAND TOTAL

110.54

MODROB**Master of Computer Application**

Sr. No	Particulars	Qty	Amount	Justification
1	Laptop	3	1.50	for Staff use
2	Printers latest laser printer with scanner 3 in one	2	0.30	for Department use
	Total	5	1.80	

Mechanical Department

Sr. No	Particulars	Qty	Amount	Justification
1	RPS on Condensation project	1	5.00	As per Budget 2020-21
	Total	1	5.00	

GRAND TOTAL**6.80**

TEQIP-III

Activities	Sub Component	Budget 2020-21
1.3.1 - Procurement of goods	1.3.1.1 - Equipments	29
	1.3.1.2 - Learning resources	
	1.3.1.3 - Furniture	
	1.3.1.4 - Minor civil works	
1.3.2 - Academic processes	1.3.2.1 - Improve students learning	130
	1.3.2.10 - Services	
	1.3.2.11 - Industry-Institute Interaction	
	1.3.2.2 - Assistantships	
	1.3.2.3 - Graduates employability	
	1.3.2.4 - Faculty/staff development and motivation	
	1.3.2.5 - Research and development	
	1.3.2.6 - MOOCs and digital learning	
	1.3.2.7 - Mentoring/Twinning system	
1.3.2.8 - Reforms and governance		
1.3.3 - Operating costs	1.3.2.9 - Management capacity development	27
	1.3.3.1 - Consumables	
	1.3.3.2 - Operation & maintenance of equipments	
	1.3.3.3 - Office expenses	
	1.3.3.4 - Meetings	
	1.3.3.5 - Hiring of vehicles	
	1.3.3.6 - Travel cost	
1.3.3.7 - Salary		
GRAND TOTAL		186.00

TEQIP-III Budget details

Sr.No.	Activity	Purpose	Expected Outcomes	Proposed Expe. (in lacs)
1	Procurement	Purchase for Equipments and Softwares	For moderazation for laboratories	29
2	Faculty and Staff Development (FSD), Management Capacity Developmant.	Various training conducted (STTP/Seminar/Conference/FDP) for Faculty and Staff, Faculty deputed for various training programs, confernece & seminars.	Fou upgradation subject knowledge, Faculty qualification upgradation.	45
3	Twinning with Mentee Institute.	Faculty and Student Exchange with Mentee institute For Twinning Activities	Joint R & D ,Placement, GATE, NBA and other Twinning Activities.	5
4	Research and Developmant (R&D)	Patents, R&D Research Projects, Faculty and Students publications.	Motivate to R&D Research, Patents and Publications.	25
5	Improve Students Learning (ISL)	Various training for Students	Various training for Students for improving Soft skill, Internship/ Enhancement Training program. GATE Classes,	30
6	Industry-Institute Interaction (III-C)	Various program under Training and Placement cell	For Students, Placement, Internship, Industrial Training Program, Hackthon. pre-placement training, additional soft skill training, industry visits, expert lectures	25
7	IOC-Operating costs	Office Expense, Consumables, Meeting, TEQIP Staff Salary etc.	TEQIP Office Expenses	24
8	Teaching assistantships	PhD Students		3
Total				186

GARDENING

Sr. No.	Particulars	Budget 2020-21
1	To Prepare & Design total Project Master Landscape Layout, Landscape Theme & Presentation	0.50
2	Purchase of grass cutting and Lawn cutting equipment purchase	1.00
3	Lawn Plantation, Tree Plantation & Fountain in Circle in Front Main Building of GCE, KARAD	8.00
4	Maintenance of Garden Two Professional Gardener (माळी) and Six Worker (तीन स्त्रिया आणि तीन पुरुष)	5.00
5	Plumbing of Gardening & Landscaping , Purchasing (Pipe & Other Items)	1.50
6	Curvature & fitting	2.00
TOTAL		18.00

राष्ट्रीय सेवा योजना - N.S.S.

Sr. No.	Particulars	Budget 2020-21
1	साधन-सामुग्री खरेदी करणे (उदा - फावडे,कुदळ,घमले,झारी,खुरपे ई.)	0.40
2	झाडे लावणे, बी-बीयाणे, रोपे, कलमे ई.	0.50
3	स्वच्छता भारत अभियान	0.05
4	ग्रामीण भागातील स्वच्छता	0.05
5	अंध, अपंग, मुकबधीर, कर्णबधीर मुलांसाठी शालोपयोगी मदत	0.15
6	श्रमदान	0.02
7	प्लास्टिक समस्या विषयक	0.04
8	पाणी समस्या विषयक (Water pollution)	0.02
9	हवा व वीज बचत विषयक (Air pollution)	0.04
10	प्रदूषण मुक्त रेली	0.05
11	पाहुणे अधिव्याख्यातांचे (TA, DA & Honorarium)	0.15
12	रक्तदान शिबिर आयोजन	0.20
TOTAL		1.67

GOVT QUARTERS

Name of Dept.: Govt Quarters

Proposed Recurring & Non Recurring Expenditure for FY 2020-21

Institute Fund

Name of Dept.: Govt Quarters

List of Govt Quarter's Expenditure for the year 2020-21

Sr. No.	Name of Item	Details of Repair	Approximate Unit Rate	Estimate Amount	Justification
1	Renovation & maintenance	Renovation & maintenance	Lumsum	2.00	To improve ambience at quarters
2	Green Campus- Solar water heating system	Solar water heating system	Lumsum	8.00	To utilize renewable energy under green campus.
TOTAL				10.00	

GRAND TOTAL

10.00