12th MEETING OF
BOARD OF MANAGEMENT

Date: 17th March 2017
Time: 11.00 am
Place: Government College of Engineering, Karad

ANNUAL BUDGET 2017-18

GOVERNMENT COLLEGE OF ENGINEERING, KARAD
(An Autonomous Institute of Govt. of Maharashtra)
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Overall strategies for Budget

1. The institute acquired Autonomy in 2015-16 and the curriculum for 3rd year shall be implemented from coming academic year 2017-18. Hence few additional laboratories (for newly introduced courses) need to be established.

2. All UG programmers, except Electronics, and all PG Programmers have been Accredited. During Accreditations experts have opine to enhance research and development activities. Hence, it is proposed to procure facilities for the same.

3. A new UG & PG Programmers in Computer Science and Engg. Have been proposed from coming academic year. Hence, facilities for IT department are required to be strengthen. The institute has procured equipments for laboratories to a greater extent in last three years under TEQIP, DCA and institute level funds. It was possible due to flexibility given by the Board and Finance Committee by virtue of financial powers and simplified purchase procedure.

4. The focus of the budget for this year is mainly on developing research and development facilities and providing academic ambience to the students and faculty. While improving ambience, creation of new facilities in the form of building and refurbishment has been considered.

5. Improvement in the facelift of the institution includes garden development, road widening, faculty quarters and also quarters not being used due to bad conditions, the entry get and approach etc.

6. The master plan for development of playground and student activity centre has been formulated. The construction of building for student activity centre (Gymkhana) is proposed in three phases.

7. Surveillance and security proposed through CCTV camera's in entire academic area.

8. In order to improve interaction with industry, instead of procuring vehicle rate contract with travelling agencies will be made and the expenditure on visits shall be made through institute development fund for which budgetary provision is made.

9. Campus of the Institute is proposed to be converted in to SMART CAMPUS in phases. To begin with smart card will be issued with RFID facility. Also Environmental protection and Energy conservation mechanisms are proposed.

10. A separate network facility is proposed to be established for hostels by providing three notes in each rooms.

11. An absolute provision of Rs. 49 lakhs is made for research and development facilities for students.

12. Many activities are proposed under twinning programme for Engg. Colleges of backward states.

13. The student clubs have been provided budget of Rs. 38 lakhs for nurturing hobbies of students.

14. New buildings for extension of dean academics, PG building concrete technology and automobile lab and student activity centre are proposed under Corpus fund.

BUDGETED INCOME & EXPENDITURE FOR THE YEAR 2017-2018

Components of Income/ Expenditure	Unrestricted Funds												Restricted Fund			TOTAL	Previous Year Total
		Designated Funds															
	Corpus Fund (F1)	Faculty Development (F2)	Equipment Replacement (F3)	Maintenance (F4)	Institute Development (F5)	Salary (F6)	Gymkhana	Library	Training & Placement	Internet	Hostel	Exam Fee	Technical Education Quality Improvement Programme	State Govt Assistance	Central Assistance		
Income																	
Opening Balance	551.59	259.85	206.13	20.21	141.11	101.5	72	110.76	38.1	90.26	78.18	51.56	-2.23	0	0.07	**1719.09**	1239.9
Academic Receipts	79.03	62.21	247.83	46.26	73.36	218.74	32.77	80.65	20.78	58.72		35.28				**955.64**	570.27
Grants & Donations													200.00	1767.02	229.87	**2196.89**	2364.49
Income from investments	54.00	25.00	20.00	2.00	14.00	10.00							43.46			**168.46**	60.10
Other Incomes		23.96					1.14				62.41	58.23				**145.74**	0.00
TOTAL (A)	**684.62**	**371.02**	**473.96**	**68.47**	**228.47**	**330.24**	**105.91**	**191.41**	**58.88**	**148.98**	**140.59**	**145.07**	**241.23**	**1767.02**	**229.94**	**5185.82**	**4234.76**
Expenditure																	
Staff Payments: Salary		253.95				302.94		5.00					41.23	1309.23		**1912.35**	1264.62
Staff Benefits		23.96													10.00	**33.96**	181.77
Academic Expenses: Recurring				15.00	61.93		29.20	50.00		49.52				101.48		**307.13**	1232.79
Academic Expenses: Non Recurring	251.27		416.56		135.80		87.35	10.00		58.75	166.44		150.00	356.31	219.87	**1852.35**	141.65
Administrative and General Expenses				15.00					52.20				50.00		0.07	**117.27**	0
Repairs & maintenance				34.01				6.10			60.24					**100.35**	151.91
Other Expenses												34.38		0.00		**34.38**	79.41
TOTAL (B)	**251.27**	**277.91**	**416.56**	**64.01**	**197.73**	**302.94**	**116.55**	**71.10**	**52.20**	**108.27**	**226.68**	**34.38**	**241.23**	**1767.02**	**229.94**	**4357.79**	**3052.15**
Balance being excess of	**433.35**	**93.11**	**57.40**	**4.47**	**30.74**	**27.30**	**-10.64**	**120.31**	**6.68**	**40.71**	**-86.09**	**110.69**	**0.00**	**0.00**	**0.00**	**828.03**	**1182.61**

RECEIPTS BUDGET 2017-18							
Sr. No.	Items	Received in 2014-2015	Received in 2015-2016	Balance as on 31.3.2016	Received During 1-4-2016 to 5-3-2017	Total	Budgeted Receipts for 2017-18 in Lakh
1	TUTION FEE	272.12	152.62	294.41	244.25	538.66	242.75
2	GYMKHANA FEE & GATHERING	15.48	15.29	56.00	25.01	81.01	32.77
3	DEVELOPMENT FEE	87.71	138.43	861.14	274.59	1135.73	366.81
4	LABORATORY FEE	37.81	41.65	133.26	71.02	204.28	93.92
5	T.P.O	1.90	8.92	14.10	14.27	28.37	20.78
6	LIBRARY FEE	16.87	27.88	110.24	57.70	167.94	80.65
7	INTERNET FEE	11.99	20.20	40.46	41.93	82.39	58.72
8	TESTING & IRG	40.75	32.15	78.74	43.56	122.30	47.92
9	EXAMINATION FEE	5.39	14.96	14.93	21.32	36.25	35.28
10	HOSTEL	24.03	29.33	33.64	44.54	78.18	62.41
11	ISTE	0.83	1.10	2.30	2.33	4.63	1.14
12	IDENTITY CARD FEE	0.20	0.38	0.38	0.50	0.88	0.55
13	MISC RECEIPTS	17.56	14.21	46.80	52.44	99.24	57.68
	(L.C. / RENT / OTHER)						
	TOTAL	**532.64**	**497.12**	**1686.40**	**893.45**	**2579.85**	**1101.38**

POSITIONS OF DIFFERENT FUNDS 2017-18							
Sr. No.	Items	Expenditure 2015-2016	Balance as on 31-3-2016	Received During 1-4-2016 to 5-3-2017	Expenditure 1-4-2016 to 5-3-2017	Balance	Budgeted Receipts for 2017-18 in Lakh
1	Corpus Fund F1	0.00	476.79	75.29	0.00	552.08	79.03
2	Faculty Development F2	0.09	218.73	41.67	0.55	259.85	62.21
3	Equipment Replacement F3	81.02	117.55	111.12	23.03	205.64	247.83
4	Maintenance F4	56.66	-17.03	100.40	63.16	20.21	46.26
5	Institute Development F5	51.74	99.48	55.56	13.93	141.11	73.36
6	Salary F6	38.02	13.81	224.77	137.08	101.50	218.74
	TOTAL	**227.53**	**909.33**	**608.81**	**237.75**	**1280.39**	**727.44**

EXPENDITURE BUDGET 2015-16

STATE GOVERNMENT

(In lacs)

Sr.No.	Item	Budget 2016-17	Amount Spent	Budget 2017-18
1	STATE GOVERNMENT PLAN	705.22	186.43	356.31
2	STATE GOVERNMENT NON PLAN	1109.27	915	1410.71
	TOTAL	**1814.49**	**1101.43**	**1767.02**

STATE GOVERNMENT PLAN : DETAILS

Sr.No.	Items	Amount Received	Expenditure during 2016-17	Budget 2017 2018
1	Equipment (For details reffer Pg. No. 7 to 11)	4.88	0	15.31
2	Civil Works (For details reffer Pg. No. 12)	186.43	186.43	335
3	Library (For details reffer Pg. No. 12)	0	0	6
	TOTAL	191.31	186.43	356.31

STATE GOVERNMENT NON PLAN : DETAILS

Sr.No.	ITEMS	Budget 2016-17	Amount Received	Expenditure during 16-17	Budget 2017 18
1	Salary	970.12	931.01	848.33	1309.23
2	Non salary (For details reffer Pg. No. 12)	139.15	69.53	66.67	101.48
	TOTAL	1109.27	1000.54	915	1410.71

FUND WISE EXPENDITURE BUDGET

Sr.No.	Items	Budget 16-17	Expenditure during 16-17	Budget 17-18	Justification
1	Corpus Fund F1 (For details refer Pg. No. 13)	0	0.00	251.27	4 New buildings suggested.BWC has given technical sanction.
2	Faculty Development F2 (For details refer Pg. No. 14 to 37)	0	1.04	253.95	Last year such expenditure was accounted in TEQIP
3	Equipment Replacement F3 (For details refer Pg. No. 38 to 59)	154.09	22.54	416.56	Last year major equipment purchase was under TEQIP.
4	Maintenance F4 (For details refer Pg. No. 60 to 71)	51.45	63.16	64.01	
5	Institute Development F5 (For details refer Pg. No.72 to 77)	75.56	13.93	197.73	Refurbishment,CCTV & garden devlopment are proposed
6	Salary F6 (For details refer Pg. No.78 to 79)	111.86	137.08	302.94	Additional Post of technical asst., supervisor, adjunct faculty are proposed also increase in honorarium is proposed.
Total		**392.96**	**237.75**	**1486.46**	

BUDGET FOR OTHER FEES

Sr. No	Item	Budget 2016-17	Expenditure during 2016-17	Balance Amount as on 05.03.2017	Budget 2017-18
1	Library fee	59.26	12.41	110.76	71.1
2	Gymkhana fee	49.41	8.91	72	116.55
3	Internet fee	21	0.57	90.26	108.27
4	TPO fee (Please refer pg.no. 89-90)	2.5	0.16	38.1	52.2
5	ISTE fee	0	1.41	4.63	1.84
6	Examination fee (Please refer pg.no. 92-93)	11.53	0.06	51.56	34.39
TOTAL		**143.7**	**23.52**	**367.31**	**384.35**

LIBRARY FEE

Sr.No.	ITEMS	Budget 2016 2017	Expenditure during 2016-17	Budget 2017-18	Justification
1	Books & Journals (Please refer pg. no. 83 to 86 & 94 to 110)	45.5	12.41	60	Expenditure is less as journal subscription was paid. IEEE subscription increased this year.
2	Equipment	5.36		0	
3	Furniture	0		0	
4	Refurbishment/ Non recurring	0		4.3	
5	Consumable / Maintenance (Please refer pg. no. 87)	2.4		1.8	
6	Salary	6		5	
TOTAL		**59.26**	**12.41**	**71.1**	

GYMKHANA FEE

Sr. No.	Item	Budget 2016 17	Expenditure during 16-17	Budget 2017-18	Justification
1	Gymkhana Activity / Recurring (Please refer Pg. No. 80-81)	29.6	8.91	24.2	
2	Refurbishment (Please refer Pg. No. 82)			7.35	
3	Building	0		80	
4	Furniture / Non Recurring	19.81		5	
TOTAL		**49.41**	**8.91**	**116.55**	

Direct Central Assistance (MODROB / RPS / FIST) Old

Sr. No.	Items	Budgeted Exp. 2016-17	Expenses 2016-17	Balance up to 31.03.2017	Budget 2017-18
1	Civil	Modorob/ RPS Rs 3.81 & Fist Nil	Rs 3.74	Rs 0.06615	Rs 0.06615
2	IT				
3	Electrical Dept				
4	MCA				
5	Science & Physics Dept				
6	Mathematics				
7	Mechanical Dept				
TOTAL		**3.81**	**3.74**	**0.066**	**0.066**

*Balance Rs. 5973/- Modrob and Rs. 642/- RPS = Rs. 6615/- & will be paid to CA as Audit Fee.

AICTE-AQIS 2017-18 PROPOSAL SUBMITTED

Sr. No.	Name of Faculty	AQIS Scheme	Amount (in Lakhs)
1	Dr. S. J. Wagh	MODROB-Network Lab	16.5
2	Dr. S. J. Wagh	FDP	5.5
3	Dr. S. J. Wagh	International Seminar grant	3
4	Dr. R. B. Kulkarni	MODROB-Design Lab	19.6
5	Prof. K. N. Tayade	FDP	5.8
6	Prof. B. S. Yelure	FDP	5.6
7	Prof. P. B. Jawade	Seminar Grant	1
8	Prof. A. B. Chaudhari	MODROB- Software Engineering Lab	13.87
9	Prof S H Pawar	MODROB-Computer Lab	20
10	Prof S K Patil	MODROB-Switch Gear and Protection Lab	20
11	Prof P R Jadhav	MODROB-Power system	21
12	Dr A T Pise	MODROB-Applied Thermal Engineering	20
13	Prof A R Acharya	MODROB-Heat Transfer	20
14	Dr S S Mohite	RPS-Computer Aided Fixture Design	25
15	Prof A R Acharya	RPS-Microchannel Heat Transfer	25
16	Dr A T Pise	FDP-Advanced Computational Fluid Dynamics	7
17	Dr S S Mohite	MODROB-Up-gradation of Metallugy Laboratory and Foundry	18
18	Prof U L Deshpande	Unnat Bharat Abhiyan	5
TOTAL			**229.87**

TEQIP

Sr. No.	Activities	Opening Balance	Amount Received in 16-17	Expenses 2016-17	Balance as on 05.03.2017	Budget 17-18
1	Procurement	Received in F.Y. 15-16 Rs. 1000 Lakh & Expenses Rs. 867 Lakh = 133 Lakh	Rs. 500	343.93	**Rs. -2.23 Lakh**	**200**
2	Assistantships			20.83		
3	R & D			24.97		
4	FSD			102.86		
5	III Cell			12.62		
6	Capacity development			10.46		
7	Reforms			32.96		
8	Student Support			53.54		
9	IOC			33.06		
	TOTAL	**133**	**500**	**635.23**	**-2.23**	**200**

* Rs. 28.17 lakhs has been earned as Interest. Excess expenditure is booked under interest.
Additionally four funds have been established under TEQIP from interest earned & IRG.

GOVERNMENT COLLEGE OF ENGINEERING , KARAD

State Government Plan : Equipment

List of Equipment to be Purchased

Name of Department - Civil Engineering

Sr. No	Proposed Items with specification	Quantity Required	Esti.Unit Rate	Estimated Amount	Justification
1	Brunton Compass	2	0.33	0.65	To teach structural geology and field visits.
2	Laser Distance meter	2	0.12	0.24	To measure inaccessible distances.For demonstration in surveying lab
	TOTAL	**4**	**0.45**	**0.89**	

Name of Department - Mechanical Engineering

Sr. No	Proposed Items with specification	Quantity Required	Esti.Unit Rate	Estimated Amount	Justification
1	Two Stroke Cut Section Model	1	0.05	0.05	Demosration Equipment for I.C. Engine Lab, Teaching aids to enhance learning.
2	Four Stroke Cut Section Model	1	0.05	0.05	Demonstration Equipment for I.C. Engine Lab, Teaching aids to enhance learning.
3	Cut Section model of Mock Layout of a Car wiring	1	0.40	0.40	Demonstration Equipment for Automobile Engineering Lab, Teaching aids to enhance learning.
4	Training platform for Hydraulic Power Steering	1	0.70	0.70	Demonstration Equipment for Automobile Engineering Lab, Teaching aids to enhance learning.
	TOTAL	**4**	**1.20**	**1.20**	

Name of Department - Electrical Engineering

Sr. No	Proposed Items with specification	Quantity Required	Esti.Unit Rate	Estimated Amount	Justification
1	Power guard	5	0.025	0.13	Revision of syllabus under autonomy required for SY & TY(Btech)
2	single phase multifunction appliance meter	10	0.035	0.18	
3	Mili ohmmeter	1	0.7	0.70	
5	Moving coil Educational desk stand meter	10	0.007	0.70	
10	Clamp on AC current transformer	20	0.2	0.40	
11	Single phaseWattmeter	10	0.0247	0.25	
12	AC ammeter(0-5/10A)	10	0.0175	0.18	
13	DC ammeter(0-5/10A)	10	0.0235	0.24	
14	AC voltmeter(0-300/600V)	10	0.019	0.19	
15	DC voltmeter(0-300/600V)	10	0.0215	0.22	
16	Inductive load bank	2	0.24188	0.48	
17	capacitive load bamk	1	0.555	0.56	
18	Digital Clamp meter	2	0.072	0.14	
19	LCR meter	1	0.3	0.30	
20	Digital Lux Meter	1	0.12	0.12	
21	Resistive load bank	2	0.1215	0.24	
	TOTAL	**105**		**5.01**	

Name of Department - Information Technology (IT)

Sr. No	Proposed Items with specification	Quantity Required	Esti.Unit Rate	Estimated Amount	Justification
1	**Wacom Interactive Pen Display** Screen Sixe: 15.6" Screen Resolution: 1366x768 (WXGA) Color Depth : 16.77 million color Contrast Ratioo: 400:1 Video Interface: DVI-I video in/out Accessories: Pen with reaser, two customizable buttons	**2**	**0.49**	**0.98**	To setup digital classroom and enhance teaching learning.
2	**DLP Projector** DLP 1024x768 3000 ANSI Brightness, Contrast ratio: 13000:1, Intellegent auto setup, Auto Control, Lamp Life 6500 hrs, Ready HDMI input, Wire-less dongle option.	**1**	**0.45**	**0.45**	To setup digital classroom and enhance teaching learning.
	TOTAL	**3**	**0.94**	**1.43**	

Name of Department - Electronics & Telecommunication (E&TC)

Sr. No	Proposed Items with specification	Quantity Required	Esti.Unit Rate	Estimated Amount	Justification
1	Business Projector Resolution : XGA (1024X768) , Brightness : 3200 lumens, 3-in-1 USB, HDMI, Contrast Ratio : 15000:1 , Lamp Life : 5000Hr (Normal), 10000Hr (Eco), Wireless Connection, RGB Liquid Crystal Shutter Projection system (3LCD), Warranty: 2 Years onsite service for projector & 1 Year or 1000 hours for Lamp	1	0.35	0.35	For seminar hall and Computer laboratory-I
2	Digital Slate	4	0.06	0.24	For Classroom Teaching
	TOTAL	**5**	**0.41**	**0.59**	

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	0.2	1	for display of graphics, web pages and advertisement creations
2	NVDIA graphic hardware cards	5	0.2	1	For MCA High Performance Laboratory
	TOTAL	**10**	**0.4**	**2**	

Name of Department - Workshop

Sr. No	Proposed Items with specification	Quantity Required	Esti.Unit Rate	Estimated Amount	Justification
1	Air Compressor Power- 1.5 HP Pressure- 115 Psi Tank- 30 Liters Speed - 2850 RPM	1	0.15	0.15	It required for spary painting gun for work orders of equipment & furniture painting. It can also used for pneumatic tools of Mechanical Department
2	40" Shearing Machine Power - 2 HP Cutting capacity- 3mm Cutting length - 40"	1	0.5	0.5	It is required for Tin smithy shop as existing foot operated need to replace
	TOTAL	**2**	**0.65**	**0.65**	

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	0.5	For First year B.Tech. Practicals
	TOTAL	**4**	**0.57**	**1.14**	

Name of Department - Chemistry

Sr. No	Proposed Items with specification	Quantity Required	Esti.Unit Rate	Estimated Amount	Justification
1	Digital pH meter	4	0.15	0.6	For laboratory practicles
2	Single beam spectrophotometer	2	0.5	1	
	TOTAL	**6**	**0.65**	**1.6**	

Name of Department - Office

Sr. No	Proposed Items with specification	Quantity Required	Esti.Unit Rate	Estimated Amount	Justification
1	Xerox machine	1	0.8	0.8	For official work
	TOTAL	**1**	**0.8**	**0.80**	

Grand Total	**15.31**

GOVERNMENT COLLEGE OF ENGINEERING , KARAD

State Government Plan : Civil Works

Sr. No.	Name of Building	Estimated Cost	Amount Received	Expenditure	Proposed Budget 2017-18
1	ENTC Building	869	0	0	50
2	Library	754	0	0	50
3	Repairs of Residential and academic Building	249.74	13.5	3	235
TOTAL		**1872.74**	**13.5**	**3**	**335**

State Government Plan : Library

Sr. No.	Particulars	Budget 2016-17	Amount Received	Expenditure	Proposed Budget 2017-18
1	Development of Library (please refer pg no. 94 to 110)	3	0	0	1
2	Book Bank	2	0	0	1
3	Book Bank (SWBC)	3.75	0	0	4
TOTAL		**8.75**	**0**	**0**	**6**

State Government Non Plan

Sr. No.	Component	Budget 2016-17	Receipts	Expenditure up to 05.03.2017	Proposed Budget 2017-18
1	Salary	970	931.01	848.33	1309.23
2	Travelling Expenses	1.85	2.53	2.02	2.4
3	Office Expenses	6	0	0	0
4	Electric & Telephone & Water, Taxes	53	30.5	41.15	46.27
5	Contractual Services	39	14.1	14.04	42
6	PP & SS	37	22.4	9.46	10.8
7	Material Supplies	2.3	0	0	0
TOTAL		**1109.15**	**1000.54**	**915**	**1410.7**

5. Institute Level Funds:			
a. Corpus Fund			
Sr. No.	**Name of building**	**Details**	**Proposed Budget**
		(Rs. In Lakhs)	**(Rs. In Lakhs)**
1	Extension(First floor) of Dean Academics	BWC has given technical sanction	73.45
2	Extension(Second floor) PG building	BWC has given technical sanction	45.63
3	Concreat technology lab	BWC has given technical sanction	22.19
4	Loan for construction of students sports complex	BWC has given technical sanction	94.00
5	Automobile Lab	BWC has given technical sanction	16.00
TOTAL			**251.27**

Institute Level Fund - Staff Development Fund (F2)

Name of Department - Civil

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

Civil

Sr. No.	Title of Conference/ STTP	Coordinator	Tentative Schedule	No of participants	Total Cost
1	One Week STTP on "New trends in Disaster Management"	Prof. S.S.Yadav and Prof.T.S.Bagwan	Month of May 2017	40	1.5
2	One Week STTP on "Recent trends in Environmental Engineering "	Prof. S.S.Yadav and Prof.A.P. Phadtare.	Month of May/Jun 2017	40	1.5
Total					**3**

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.S. Valunjkar	STTP on Water Resource Engineering	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	0.6
2	Dr. M.N.Hedaoo	STTP on Environmental Engineering			
3	Prof. B.A. Konnur	STTP on Engineering Management			
4	Prof. A.A. Bhondwe	NNRMS-ISRO SPONSORED CERTIFICATE COURSES: FOR FACULTY organized by IIRS, Dehradun Course code :N-GG Course title : RS & GIS in	01-05-2017 to 23-06-2017	Indian Institute of Remote Sensing (IIRS), Dehradun	0.25
5	Prof. A.A. Bhondwe	Open Source GIS	08.05.2017	National Remote Sensing	0.15
6	Prof.S.V.Joshi	STTP on Rehabilitation of Bridges	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	0.2
7	Prof.S.S. Yadav	STTP on Town Planning and solid waste management	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	0.2
8	Prof. A.P.Phadtare	STTP on Environmental Engineering	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	0.2
9	Prof. S.R. Gaikwad	STTP on New Trends in Geo technical Engineering	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	0.2
10	Prof. T.S. Bagwan	STTP on Advance Transportation Engineering	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	0.2
		Total			**2**

Deputation for Qualification up gradation				
Sr No.	**Name of Faculty/ Staff**	**Qualification**	**University/ Institute for deputation**	**Total fees for 2017-18**
1	Prof.S.S. Yadav	Ph.D.	IIT/NIT/Pune University	0.4
2	Prof. T.S. Bagwan	Ph.D.	IIT/NIT/Pune University	0.4
3	Prof. A.P.Phadtare	Ph.D.	IIT/NIT/Pune University	0.4
4	Prof. S.R. Gaikwad	Ph.D.	IIT/NIT/Pune University	0.4
			Total	**1.6**

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.S. Valunjkar	Conference on Water Resource Engineering	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	**0.15**
2	Dr. M.N.Hedaoo	Conference on Environmental Engineering	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	**0.15**
3	Prof. B.A. Konnur	Conference on Engineering Management	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	**0.15**
4	Prof. A.A. Bhondwe	Open Source GIS	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	**0.15**
5	Prof.S.V.Joshi	Conference on Rehabilitation of Bridges	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	**0.15**
6	Prof.S.S. Yadav	Conference on Town Planning and solid waste management	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	**0.15**
7	Prof. A.P.Phadtare	Conference on Environmental Engineering	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	**0.15**
8	Prof. S.R. Gaikwad	Conference on New Trends in Geo technical Engineering	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	**0.15**
9	Prof. T.S. Bagwan	Conference on Advance Transportation Engineering	As per the schedule declared by organising Institute	IIT/NIT and other TEQIP funded Institute	**0.15**
Total					**1.35**

Details of teaching assistantships for the year 2017-18						
Sr. No.	**Class**	**No. of students**	**Activity to be assigned**	**Assistantship Amount**	**No. of Months**	**Total Expenditure Lacs**
1	FY MTech	5	Institute/Departmental work	8000	12	4.8
2	SY MTech	5	Institute/Departmental work	8000	12	4.80
Total						**9.6**

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** (Rs. in lacs)
1	S.Y.B.Tech.	0.1	4	0.4
2	T.Y.B.Tech.	0.15	4	0.6
3	Final year B.E.	0.2	4	0.8
4	FY MTech	0.25	1	0.25
5	SY MTech	0.1	10	1
			Total	**3.05**

Grand Total of Civil	**20.6**

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	One Week STTP on "Analytical & Experimental Methods in Vibration"	Coordinator : Prof. Mrs. M. H. Yadav	July, 2017	40	1.75
2	One Week STTP on "Fundamentals & applications of Fluid Mechanics & CFD "	Coordinator : Prof. I. R. Madane	December, 2017	40	1.75
Total					**3.5**

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. S. Mohite	MEMS, Condition Monitoring, Dynamics & Control, CFD	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.25
2	Dr. A. T. Pise	Enhanced Heat Transfer, Nano-materials, CFD	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.25
3	Prof. V. S. Jadhav	Vibration & dynamics	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
4	Prof. N. V. Sali	Fluid Power & Thermal Engg.	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
5	Prof. A. R. Acharaya	Heat Transfer, CFD	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
6	Prof. G. S. Dhende	Industrial Automoation & Robotics, CAD/CAM	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
7	Prof. Mrs. K. S. Gharge	Renewable energy, I. C. Engine	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
8	Prof. Mrs. M. H. Yadav	Fixture design, Vibration, FEA	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
9	Dr. N. H. Deshpande	Production, Industrial Engg. Management	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
10	Prof. V. B. Raka	CAD, Machine Design	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
11	Prof. Mrs. S. S. Jadhav	Heat Power Engg.	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
12	Prof. S. M. Bhosale	Manufacturing Engg.	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
13	Prof. A. A. Sapkal	Heat Treatments, Material Science	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
14	Prof. I. R. Madane	CAD, I. C. Engines, Vibration, CFD	As per scheduled by IIT/NIT/TEQIP funded institute	IT/NIT/ARA	0.2
15	Prof. V. H. Karande	Vibration & dynamics	As per scheduled by IIT/NIT/TEQIP funded institute	IT/NIT/ARA	0.2
16	Prof. A. A. Dounde	Optimisation, Production	As per scheduled by IIT/NIT/TEQIP funded institute	IT/NIT/ARA	0.2
17	Prof. L. P. Dhale	RAC, Heat Power Engg.	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
18	Prof. S. P. Langade	Production Engg.	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
19	Prof. P. D. Maskar	Design & Dynamics	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
20	Prof. V. G. Pawar	Design & Dynamics	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.2
Total					**4.1**

Faculty exchange, twinning/ networking				
Sr. No.	**Activity for Faculty exchange, twinning/ networking**	**Purpose**	**Expected Outcomes**	**Proposed expenditure**
1	Video Conferencing for Seminar Hall with 1 LED TV and network connectivity etc.	For Webinars of IIT/NIT/ reputed institute faculties	Faculty and students knowledge upgradation	1
2	Smart-Remote class room with 1 Laptop etc.	For Webinars of IIT/NIT/ reputed institute faculties	Faculty and students knowledge upgradation	5
3	2 LED TV's and network connectivity for each PG class rooms etc.	For Seminars of IIT/NIT/ reputed institute faculties	Faculty and students knowledge upgradation	2
Total				**8**

R &D proposals for the year 2017-18			
Consumable/ spares			
Sr No.	**Details of consumable/ spare**	**Quantity**	**Cost in Lacs**
1	Undergraduate Project components		0.25
2	Post Graduate Project components		0.4
Total			**0.65**

Matching Grants				
Sr No.	**Name of Project**	**Sponsoring Organization**	**Grants Received in lacs**	**Expected matching grants from institute in Lacs**
1	RPS-Computer Aided Fixture Design by Dr. S. S. Mohite	AICTE	25	5
2	RPS-Microchannel Heat Transfer by Prof. A. R. Acharya	AICTE	25	1
3	MODROB-Heat Transfer by Prof. A. R. Acharya	AICTE	20	1
4	MODROB-Applied Thermal Engineering by Dr. A. T. Pise	AICTE	20	4
Total				**11**

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. S. Mohite	MEMS, Condition Monitoring, Dynamics & Control, CFD	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
2	Dr. A. T. Pise	Enhanced Heat Transfer, Nano-materials, CFD	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
3	Prof. V. S. Jadhav	Vibration & dynamics	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
4	Prof. N. V. Sali	Fluid Power & Thermal Engg.	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
5	Prof. A. R. Acharaya	Heat Transfer, CFD	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
6	Prof. G. S. Dhende	Industrial Automoation & Robotics, CAD/CAM	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
7	Prof. Mrs. K. S. Gharge	Renewable energy, I. C. Engine	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
8	Prof. Mrs. M. H. Yadav	Fixture design, Vibration, FEA	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
9	Dr. N. H. Deshpande	Production, Industrial Engg. Management	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
10	Prof. V. B. Raka	CAD, Machine Design	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
11	Prof. Mrs. S. S. Jadhav	Heat Power Engg.	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
12	Prof. S. M. Bhosale	Manufacturing Engg.	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
13	Prof. A. A. Sapkal	Heat Treatments, Material Science	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
14	Prof. I. R. Madane	CAD, I. C. Engines, Vibration, CFD	As per scheduled by IIT/NIT/TEQIP funded institute	IT/NIT/ARA	0.15
15	Prof. V. H. Karande	Vibration & dynamics	As per scheduled by IIT/NIT/TEQIP funded institute	IT/NIT/ARA	0.15
16	Prof. A. A. Dounde	Optimisation, Production	As per scheduled by IIT/NIT/TEQIP funded institute	IT/NIT/ARA	0.15
17	Prof. L. P. Dhale	RAC, Heat Power Engg.	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
18	Prof. S. P. Langade	Production Engg.	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
19	Prof. P. D. Maskar	Design & Dynamics	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
20	Prof. V. G. Pawar	Design & Dynamics	As per scheduled by IIT/NIT/TEQIP funded institute	IIT/NIT	0.15
Total					**3**

Details of teaching assistantships for the year 2017-18					
Sr. No.	**Class**	**No. of students**	**Activity to be assigned**	**Assistantship Amount**	**No. of Months**
1	F. Y. M. Tech Heat Power Engineering	5	Conducting Practicals and Assignments	Rs. 8000/- per Month	12
2	F. Y. M. Tech Production Engineering	5	Conducting Practicals and Assignments		12
3	S. Y. M. Tech Heat Power Engineering	5	Conducting Practicals and Assignments		12
4	S. Y. M. Tech Production Engineering	5	Conducting Practicals and Assignments		12
Total				**19.2**	

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** (Rs. in lacs)
1	F. Y. B. Tech	25	25	**0.5**
2	T. Y. B. Tech	15	15	**1.5**
3	BE	15	10	**2**
4	PG Heat Power Engineering	17	9	**4.5**
5	PG Production Engineering	12	7	**3.5**
6	Faculty In-house research	10	10	**3**
			Total	**15**

Grand Total of Mechanical	**64.45**

Name of Department - Electrical

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 (in Lacs)**
1	Engineering scientific computing with MATLAB	Prof.V.B.Waghmare	Two weeks	50	4
2	Engineering scientific computing with SCILAB	Prof.V.B.Waghmare	Two weeks	50	4
3	Ocative,SCILAB and GNU plot	Prof.V.B.Waghmare	Two weeks	50	4
4	National/International Conference	Dr.U.V.Patil	Two days	50	6
5	Power Electronics Application in power system	Prof.U.S.Patil	One Week	50	2
Total					20

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	All faculties from Electrical engg. Department	Industry 4.0	May-June 2017	Bosch-rexroth	10
2	All faculties from Electrical engg. Department	Smart Power grid	Jun-17	CPRI-Banglore	2
Total					12

R &D proposals for the year 2017-18				
Consumable/ spares				
Sr No.	**Details of consumable/ spare**	**Quantity**	**Cost in Lacs**	**Justification**
1	Power Semiconductor Devices (MOSFET,IGBT,SCR,Diode) Resistor,Inductor,Capacitor,Transformer,Ferrite cores,Hall effect (LEM)sensors,litz wires	Each 100	5	For FY(Btech)& SY(Btech) Project competition
2	Battery,Solder gun,Conumable Electronics Components	20	1	
Total			**6**	

Details of teaching assistantships for the year 2017-18						
Sr. No.	**Class**	**No. of students**	**Activity to be assigned**	**Assistantship Amount**	**No. of Months**	**Total Expenditure Lacs**
1	FY MTech	5	Central & departmental Activities.	8000	12	4.8
2	SY MTech	5	Central & departmental Activities.	8000	12	4.8
Total						9.6

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** (Rs. in lacs)
1	UG Projects	20000	7	1.4
2	PG Projects	30000	3	0.9
			Total	**2.3**

Grand Total of Electrical	**49.90**

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	Prof. Y D Chavhan	Jun-17	40	1.5
2	STTP	Prof. K N Tayade	Dec-17	40	1.5
2	STTP	Prof. A B Chaudhari	May-17	40	1.5
Total					**4.5**

Deputation of Faculty/ Staff for Training, workshops and Conferences as per TNA only in accredited colleges/ NIT/ IIT/ reputed Industries (preferably in vacation)					
Name o	**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	WSN, IoT, Internet Technology	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.35
2	Dr. R B Kulkarni	Cloud , IoT	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.35
3	Prof. N M Mule	Security, Image processing	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.1
4	Prof. Y. D Chavhan	Image processing	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.1
5	Prof. B S Yelure	Wireless Adhoc Network	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.1
6	Prof. K N Tayade	Adhoc Network, Cloud security	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.1
7	Prof. A B Chaudhari	Data Analytics	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.1
8	Prof. P B Jawade	DBMS	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.1
9	Prof. N R Shetty	Cloud, Network Security	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.1
10	Prof. C V Andhare	Image processing, Security	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.1
11	Prof. R B Petkar	Image processing	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.1
12	Prof. A A Shelar	Data Mining	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.1
13	Prof. V B Manekar	Networking	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.1
14	Prof. N S Deokule	Image processing	May-June 2017, Dec-2017	IIT/NIT/ Govt. Engg College	0.1
Total					**1.9**

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		0.6
2	Prof. B S Yelure	PhD	Shivaji University	0.6
3	Prof. K N Tayade	PhD		0.6
4	Prof. P B Jawade	PhD		0.6
Total				**2.4**

R &D proposals for the year 2017-18				
Consumable/ spares				
Sr No.	**Details of consumable/ spare**	**Quantity**	**Cost in Lacs**	**Justification**
1	**IoT Center of Excellence:** Ubi-sense-20, Ubi-DAQ-15, Ubimote-25, BLE-mote-20, Wi-Fi mote-20, WINGZ Multiprotocol Gateway-2	1 set	7	To setup state of the art laboratory in the institute to enable research activities at the grass root level in the technology area of IoT.
Total			**7**	

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	WSN, IoT, Internet Technology	As per availability	As per TNA	0.5	
2	Dr. R B Kulkarni	Cloud , IoT	As per availability	As per TNA	0.5	
3	Prof. N M Mule	Security, Image processing	As per availability	As per TNA	0.25	
4	Prof. Y D Chavhan	Image processing	As per availability	As per TNA	0.25	
5	Prof. B S Yelure	Wireless Adhoc Network	As per availability	As per TNA	0.25	
6	Prof. K N Tayade	Adhoc Network, Cloud security	As per availability	As per TNA	0.25	
7	Prof. A B Chaudhari	Data Analytics	As per availability	As per TNA	0.25	
8	Prof. P B Jawade	DBMS	As per availability	As per TNA	0.25	
9	Prof. N R Shetty	Cloud, Network Security	As per availability	As per TNA	0.25	
10	Prof. C V Andhare	Image processing, Security	As per availability	As per TNA	0.25	
11	Prof. R B Petkar	Image processing	As per availability	As per TNA	0.1	
12	Prof. A A Shelar	Data Mining	As per availability	As per TNA	0.1	
13	Prof. V B Manekar	Networking	As per availability	As per TNA	0.1	
14	Prof. N S Deokule	Image processing	As per availability	As per TNA	0.1	
Total					**3.4**	

Details of teaching assistantships for the year 2017-18						
Sr. No.	**Class**	**No. of students**	**Activity to be assigned**	**Assistantship Amount**	**No. of Months**	**Total in Lacs**
1	FY MTech	5	Academic Load	8000	12	**4.8**
Total						

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** (Rs. in lacs)	
1	Information Technology UG	0.2	10	**2**	
Total				**2**	

Grand Total of Information Technology	**26**

Name of Department - Electronics & Telecommunication

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	Networking and System Administration	A.B.Patil	Jun-17	40	1.5
2	Recent trends on DSP and DIP	S.R.Suryavanshi	May-17	40	1.5
Total					**3**

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.A.B.Patil	CCNA	Dec-17	IIT	0.2
2	Prof. M.A.Natu	Microcontroller / IoT workshop	Jun-17	IIT	0.2
3	Prof. R.N.Rathod	Antenna Design and Simulation	Jun-17	IIT Guwahati	0.2
4	Prof.A.S.Khatik	LabView	Dec-17	IISc	0.2
5	Prof. P.H.Zodape	VLSI Workshop	Jun-17	VNIT Nagpur	0.2
6	Prof.A.B.Dahatonde	Electromagnetics	Jun-17	IIT Bombay	0.2
7	Prof.P.S.Tanurkar	VLSI Design and LabView	Jun-17		0.2
8	Prof.S.U.Pawar	DSP and Mathematical modelling	Jun-17	IIT Bombay	0.2
9	Prof.S.R.Suryavanshi	Communication and Embedded System	Jun-17	IISc	0.2
10	Porf.H.P.Pawar	Microcontroller / IoT workshop	Dec-17	IIT	0.2
11	Prof.H.D.Khairnar	Product design and Manufacturing Process	Dec-17	CDAC Hyderabad	0.2
12	Prof.R.R.Kuntawad	Automation and PLC workshop	Dec-17	Rexroth Bosch	0.2
Total					**2.4**

Faculty exchange, twinning/ networking				
Sr. No.	**Activity for Faculty exchange, twinning/ networking**	**Purpose**	**Expected Outcomes**	**Proposed expenditure**
1	Inviting subject expert for Electromagnetic Engineering, Mechatronics, VLSI,Image Processing and Signal processing, Internet of Things, Linear Algebra	Conseptual learning and clearing fundamentals	Students result will get improved and they will be equipped with the necessary fundamentals for experimentation in these fields.	2
2	Deputing Faculty from E&TC department as an Expert for Antenna Designing, Microcontroller & IoT based applications,Signal Processing and Computer Networking	Conseptual learning and clearing fundamentals		1
Total				**3**

R &D proposals for the year 2017-18			
Consumable/ spares			
Sr No.	**Details of consumable/ spare**	**Quantity**	**Cost in Lacs**
1	Undergraduate project components,Development Boards,Sensors, Motors ,Relays		0.4
2	Laboratory Consumables (Resistors,capacitors,diodes,transistors ,IC Regulators,Gate ICs)		0.2
3	Raw material for PCB Prototyping machine		0.3
Total			**0.9**

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	Prof.A.B.Patil		Dec-17		0.2
2	Prof. M.A.Natu		Jun-17		0.2
3	Prof. R.N.Rathod		Jun-17		0.2
4	Prof.A.S.Khatik		Dec-17		0.2
5	Prof. P.H.Zodape		Jun-17		0.2
6	Prof.A.B.Dahatonde		Jun-17		0.2
7	Prof.P.S.Tanurkar		Jun-17		0.2
8	Prof.S.U.Pawar		Jun-17		0.2
9	Prof.S.R.Suryavanshi		Jun-17		0.2
10	Porf.H.P.Pawar		Dec-17		0.2
11	Prof.H.D.Khairnar		Dec-17		0.2
12	Prof.R.R.Kuntawad		Dec-17		0.2
Total					**2.4**

Grants for UG/PG projects, minor/ major projects etc.				
Name of Dept.:	Electronics and Telecommunication Engineering Department			
Sr. No	**Name of UG/ PG program**	**Finance per batch**	**No. of UG/ PG batches needing**	**Total** (Rs. in lacs)
1	UG Projects	0.2	10	2
2	Mini Project	0.02	40	0.8
		Total		**2.8**

Grand Total of ENTC	**14.5**

Name of Department - Applied Mechanic

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	One Week STTP on "Solid Mechanics"	Coordinator : Dr. Y. M. Ghugal, P.K. Deshpande	July, 2017	40	2.00
2	One Week STTP on "Use of NDT in structural audit of civil structures "	Coordinator : U.L. Deshpande	December, 2017	40	2.00
3	One Week STTP on "Structural Health Monitoring"	Coordinator : V. M. Bogar	July, 2017	40	2.00
Total					**6.00**

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	Dr. Y. M. Ghugal	Structural Engg Conferences	May-June / Nov-Dec 2017	IIT	1
2	Dr. S. K. Hirde	Structural Engg Conferences	May-June / Nov-Dec 2017	IIT	1
3	Prof. P. K. Deshpande	Structural Audit by ASCE (Online)	Jan-18	IIT	0.5
4	Prof. U. L. Deshpande	Structural Engg Conferences	May-June / Nov-Dec 2017	IIT/NIT	0.5
5	Prof. V. M. Bogar	Structural Engg Conferences	May-June / Nov-Dec 2017	IIT/NIT	0.5
6	Prof. G. U. Shikhare	Structural Engg Conferences	May-June / Nov-Dec 2017	IIT/NIT	0.5
Total					**4**

Faculty exchange, twinning/ networking				
Sr. No.	**Activity for Faculty exchange, twinning/ networking**	**Purpose**	**Expected Outcomes**	**Proposed expenditure**
1	Providing training for UBA, UMA	To resolve techno-social issues	Awareness and Improvement in sense of Social resposibilities and personality development	2.5
2	Awareness about IRG and Testing/Consultancy	To make self sustainable	Improvement in state-of-art knowledge	1.5
Total				**4**

R &D proposals for the year 2017-18			
Consumable/ spares			
Sr No.	**Details of consumable/ spare**	**Quantity**	**Cost in Lacs**
1	Undergraduate Project components	Two Batches (6 students per batch)	0.50
2	Post Graduate Project components	10 PG Students	3.00
3	Fiber Reinforced Concrete	This project leads to innovative advance concrete composite material	7.00
Total			**10.50**

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. Y. M. Ghugal	Comoposite Structure	March 2018	Polytechnic Detorino(Italy)	2.00
2	Dr. S. K. Hirde	Earthquake Dynamics	December 2017	IIT Madras/Delhi/NIIT	0.50
3	Prof. P. K. Deshpande	Comoposite Structure	March 2018	Polytechnic Detorino(Italy)	2.00
4	Prof. U. L. Deshpande	Structural audit Retrofitting of buildings/structures	December 2017	Lisbon, Portugal, IIT /NIIT	0.50
Total					**5.00**

Details of teaching assistantships for the year 2017-18						
Sr. No.	**Class**	**No. of students**	**Activity to be assigned**	**Assistantship Amount**	**No. of Months**	**Total Expenditure Lacs**
1	FY MTech	5	Lab maintenance, Monitoring etc	8000	12	4.80
2	SY MTech	3	Teaching load/ practical load etc.	8000	12	2.88
Total						**7.68**

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** (Rs. in lacs)
1	Final BTech	0.25	2	0.50
2	SY MTech	0.50	5	2.50
Total				**3.00**

Grand Total of APM	**40.18**

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	STTP on Computer Vision, Image analysis and Signal Processing	Prof. M. D. Malkauthekar Shri. A. D. Homkar	October - November - 2017	40	2
2	National Conference on ICT and E-Goverence	Prof. L. L. Kumarwad Prof. B.S. Patil	Dec-17	300	4
3	National Conference on ICT and E-Goverence	Prof. P. P. Shinde Prof. P. D. Sheth	Jan-18	100	4
Total					**10**

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. P. C. Shetiye	Conferences/ STTP	April-2017 to March 2018	Reputed Industry/ Institute	0.2
2	Prof. B. S. Patil	Conferences/ STTP	April-2017 to March 2018	Reputed Industry/ Institute	0.2
3	Prof. M. D. Malkauthekar	Conferences/ STTP	April-2017 to March 2018	Reputed Industry/ Institute	0.2
4	Prof. L. L. Kumarwad	Conferences/ STTP	April-2017 to March 2018	Reputed Industry/ Institute	0.2
5	Prof. P. P. Shinde	Conferences/ STTP	April-2017 to March 2018	Reputed Industry/ Institute	0.2
6	Prof. P. D. Sheth	Conferences/ STTP	April-2017 to March 2018	Reputed Industry/ Institute	0.2
7	Shri. A. D. Homkar	Conferences/ STTP	April-2017 to March 2018	Reputed Industry/ Institute	0.2
Total					**1.4**

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, Namded	0.5
2	Prof. L. L. Kumarwad	Ph.D	Shivaji University	0.08
3	Prof. P. P. Shinde	Ph.D	Shivaji University	0.16
4	Prof. P. D. Sheth	Ph.D	Pune University	0.38
5	Shri. A. D. Homkar	M.E.	Pune University	0.9
Total				**2.02**

Faculty exchange, twinning/ networking				
Sr. No.	**Activity for Faculty exchange, twinning/ networking**	**Purpose**	**Expected Outcomes**	**Proposed expenditure**
1	Certified Ethical Hacking	Network Security	Identification of Security Threats	1
2	Certification courses for Server and Network Management	Managing Server OS	User, Firewall, Proxy Management	2
3	CCNA	Management of Cisco Active Components	User, Firewall, Proxy Management	2
4	Multicore compilers	Study different architechture and compilers	Study different architechture and compilers	1
5	E-Governance	to study different projects on E-Goverenance Area	Digitization, projects for students, and service to society	2
6	ITES/ICT	to study different projects on E-Goverenance Area	Digitization, projects for students, and service to society	1
Total				**9**

Grand Total of MCA	**22.42**

Name of Department - Workshop

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 (Rs. In Lakhs)**
1	Prof. Niranjan D. Padawale	STTP	Within Vacation Period	IIT/NIT	0.2
2	All Instructors	Relevant Technical & Motivational Training	Within Vacation Period		1.5
Total					**1.7**

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 (Rs. In Lakhs)**
1	Prof. Niranjan D. Padawale	Conference	Nov-17		0.3
Total					**0.3**

Grand Total Workshop	**2.00**

Name of Department - Physics

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	Recent Trends in Nanomaterials for Engineering and Technology	Dr. S. A. Patil and prof.G.A.Kadam	15-19 May 2017	30	1.5
Total					**1.5**

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	May-17	University/IIT/NIT	0.1
		STTP/FDP/workshop	May-17		0.1
2	Prof. G.A.Kadam	National /International Conferences	May-17	University/IIT/NIT	0.1
		STTP/FDP	May-17		0.1
Total					**0.4**

Grand Total Physics	**1.90**

Name of Department - Chemistry

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	Recent tTrends in Basic Bciences in Engg. and Technology	Karadkar/Alasundkar	May / Dec 2017	40	1.5
2	National conference on Recent trends in science and Engg	Karadkar/Alasundkar	May / Dec 2017	40	6
Total					7.5

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	Mrs. Karadkar S. B.	nano materials, synthesis, characterisation, water, advanced energy materials, pedagogy, all related to chemisry	May, June, Nov. December 2017	NIT/IIT or reputed industries	0.3
2	Dr. Alsundkar K. N	nano materials, synthesis, characterisation of various materials, water, advanced energy materials, pedagogy, all related to chemistry	May, June, Nov. December 2017	NIT/IIT or reputed industries	0.3
Total					0.6

R &D proposals for the year 2017-18			
Consumable/ spares			
Sr No.	**Details of consumable/ spare**	**Quantity**	**Cost in Lacs**
1	Anthocynin	500 ml	0.3
2	Salicylaldehyde	500 ml	
3	Vanilin	500 gm	
4	p-Chloro Benzaldehyde	500 gm	
5	o-chloro Benzaldehyde	500 gm	
6	Benzaldehyde	500 ml	
7	1,2 diamino benzene	500 gm	
8	Ethyl Acetoacetate	500 ml	
9	Acetyl acetone	500 ml	
10	Urea	500 gm	
11	Thiourea	500 gm	
12	Thiophenol	500 ml	
13	Glacial acetic Acid	1000 ml	
14	Ethyl Alcohol	1000ml	
15	p-hydroxy benzaldehyde	500 gm	
16	Catechol	500 gm	
17	2-amino thiophenol	500 ml	
18	4-amino phenol	500 gm	
19	beta napthol	500 gm	
20	Alpha Napthol	500 gm	
Total			**0.3**

Grand Total Chemistry	**8.40**

Name of Department - Maths

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	Contemporary Approaches of Applied Mathematics in Science and Engineering	Dr. V. S. Patil	22-26 December 2017	30	1.5
Total					**1.5**

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. V. S. Patil	Proposed to attend Two STTP/ workshops			0.15
Total					**0.15**

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. V. S. Patil	Proposed Two Paper presentations at national conference in the academic year			0.15
Total					**0.15**

Grand Total Maths	**1.80**

Name of Department - Office

Sr. No.	**Particulars**	**Expenditure per month**	**Expenditure for 2016 17**	**Budget For 2017-18**
1	TA Bill	0.15	1.35	1.8
	Total			**1.8**

Grand Total Of All Departments	**253.95**

Best Project Award Institute Level		
Sr. No.	**Year**	**Estimated Amount in lacs**
1	FY BTech	0.10
2	SY BTech	0.25
3	TY BTech	0.25
4	Final BTech	0.25
Total		**0.85**

Best Faculty Award Institute Level		
Sr. No.	**Description**	**Estimated Amount in lacs**
1	Best Faculty Awards innovation in Teaching, Learning process	0.25
2	Best Supporting staff for proactiveness and Contributioning (Beyond daily work) development	0.20
3	Awards from Class 4 employee for upkeep of labouratary and cleaniness (Beyond daily work)	0.10
Total		**0.55**

Budget for Different Clubs		
Sr. No.	**Name of Clubs**	**Budgeted Amount in lacs**
1	Robo Club	5.00
2	Startup Club	5.00
3	Divine Club	2.04
4	Quest Club, Adventure, Treading & Wild Life photography Club	5.53
5	Dais Club	15.00
6	Aerobic Club (W)	0.50
7	Yoga Club	2.00
8	Dhruva Club	1.00
9	Open Source	2.00
10	Electro Chaser	1.97
11	The Contriver	1.70
12	Words Worth	1.14
13	GCEK Harold	2.50
14	Web site	0.15
Total		**45.53**

Grand Total	46.93

Institute Level Fund - Equipment Replacement

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
1	Mirror Stereroscope with Aerial Photographs	1	0.3	0.3	For demonstration in Surveying lab
2	Dumpy Level	4	0.07	0.28	It is used for levelling and for practical use
3	Trough Compass for Plane Table	4	0.01	0.04	It is used for plate table survey
4	Pythagoras Software	1	0.23	0.23	Pythagoras software is designed to provide solutions for Surveying, Infrastructure, Construction.
5	20" Theodolite	2	0.2	0.4	Theodolite is used for horizontal ,vertical angle measurement and for tacheometric survey.
6	Plane Table with accessories - wooden with stand,75 x 60 cm	2	0.03	0.06	It is used for plate table survey
7	Plumbing fixtures (Traps,w.c,wash basin etc.)	1	1	1	For Open Elective- Building Services
8	Core cutter set	1	0.04	0.04	For determination of field density of soil
9	Sand Replacement Apparatus	1	0.1	0.1	
10	Oven	1	0.25	0.25	For dermination of the moisture content of soil
11	Plate Load Test Apparatus	1	5.7	5.7	Determination of Bearing capacity of soil
12	Balance Capacity 25Kg.	1	0.2	0.2	For weighing the soil and aggregate specimens
13	Balance (High precision) Capacity 1Kg with L.C. 0.01gm	1	0.2	0.2	For weighing the soil and aggregate specimens
14	Casagrande's Apparatus	1	0.06	0.06	For determination of the liquid limit of soil
15	Sieve shaker (motrorised)	1	0.25	0.25	For sieve analysis

16	Flash and fire point apparatus Specification The apparatus consists of a cup, heating plate, thermometer clip and test flame attachment with swivel joint for passing over liquid surface in the prescribed manner, heater is controlled by means of Energy Regulator for operation on 230 volts, 50Hz, AC single phase.	1	0.11	0.11	Academic experiments and testing (Determination of flash and fire point of bitumen)
17	Softening point apparatus Specification The apparatus consist of Glass beaker of heat resistant glass of internal dia 8.5 cm X 12 cm depth (approx.), Two steel balls each of 9.5mm dia. (Weighing 3.50 + 0.05gm). Two tapered brass moulds, Two ball guides, ring stand. Supplied with a heating unit designed to give temp. rise at 50C per minute as required under standard. The temperature is controlled with an energy regulator. In addition, there is an electrically operated stirrer mounted on a stand with chuck and glass rod or aluminum rod and for stirring the water in the water bath. Operation on 230 Volts. single phase, 50 Cycles, AC.	1	0.1	0.1	Academic experiments and testing (Determination of softening point of bitumen)
18	Viscometer Specification The apparatus consist of bath with cup of 10 mm or 4 mm orifice and sleeve stirrer with ball lifting clip and ball .The bath is fitted with an immersion heater to take the water to the required temperature and a drain valve. The temperature is controlled by energy regulator or voltage varrier. (Extra cost) The assembly is kept on suitable stand with leveling screws. Suitable to operate on 220 V. 50 Hz, AC single phase	1	0.1	0.1	Academic experiments and testing (Determination of viscosity of bitumen)
19	Digital Penetrometer Specification Programmable reference position for holder assembly:8 Penetration time: 0 – 9999 sec Delay time 0 – 999 sec Penetration range 0 – 50 mm Penetration resolutions 0.01 mm Tests simultaneously displayed up to 6 Language English connections USB port for test database and lan port for PC connection Overall dimensions(WxDxH) 360x410x680 Weight approx.. 18 kg	1	0.2	0.2	Academic experiments and testing (For performing pentration test on bitumen)

20	High Volume Sampler - Flow Rate: 0.2 to 2 LPM, accuracy 2% of span, least count 0.05 LPM Flow Control: Four inlet, one outlet with needle valves for flow control of each unit Sampling Train: 4 Nos. of 35ml Borosilicate glass impingers Size: 240 x 125 x 350 mm	1	1	1	High volume sampler is used for determination of particulate matter in given volume of air.It is designed to collect gaseous pollutant samples (for monitoring SO2, NOx, NH3, Ozone, etc) as well as dust samples simultaneously. It used for experimentation in case of air sampling and air pollution monitoring.With this equipment the students can carry out experimental project work regarding air pollution.this equipment shall be helpful to carry out consultancy work in association with Maharashtra Pollution Control Board
21	Jar test apparatus with 6 jar assembly High speed jar test apparatus 10-200 R.P.M Special arrangements: Digital timer & R.P.M counter.	1	0.5	0.5	Turbidity is one of the common characterisitics of raw water.In the water treatment process the turbidity is removed by the process of coagulation and flocculation.Various coagulants are used to remove the turnidity. Jar test apparatus is used for determining the optimum coagulant dose in the water treatment process. Jar test experiment is in the curriculum of laboratory course of Environmental engineering. The present Jar Test apparatus(with 4 jars) is old one which requires frequent maintenance.The jar test apparatus with 6 jars gives precise optimum coagulant dose. So,the new Jar test apparatus(6 jars) is proposed
22	Sterlizer (for disnfection of glasswares)	1	0.17	0.17	Sterlizer is equipment used to sterlize the glassware used for MPN test.Most Probable No.(MPN) is test used to determine amount of E-coli bacteria in water.
23	Hand Held GPS	2	0.9	1.8	For demonstration in Surveying lab
24	Total station (touch screen,windows based reflectorless)	2	6	12	A total station is an electronic/optical instrument used in modern surveying and building construction. The total station is an electronic theodolite (transit) integrated with an electronic distance meter (EDM) to read slope distances from the instrument to a particular point. It is used for surveying academic practicals
	Total	**34**	**17.72**	**25.09**	

Name of Department - Mechanical Engineering

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Printers (Preferably having duplex printing facility)	3	0.15	0.45	Upgradation of CAD/CAM lab and department
2	Printer 3 in 1	2	0.20	0.40	Upgradation of CAD/CAM lab and department
3	Scanner	5	0.07	0.35	Upgradation of CAD/CAM lab and department
4	Desktop Computer	10	0.45	4.5	Upgradation of CAD/CAM lab and department
5	Thermocouple and Digital Temperature indicator	6	0.01	0.06	Original instruments lack this extra requirement
6	Split AC test rig	1	0.40	0.40	Required for BE syllabus
7	SEPARATING & THROTTLING CALORIMETER	1	1.1	1.1	Experimentation as per syllabus
8	Steam power plant	1	15	15	Experimentation as per syllabus
9	Pour and cloud point	1	0.12	0.12	Experimentation as per syllabus
10	Demonstration models of condenser and cooling tower	1	0.3	0.3	Experimentation as per syllabus
11	Bomb calorimeter	1	1.4	1.4	Experimentation as per syllabus
12	5 kVA UPS: Online UPS with Tubular battery 5.0 KVA, 1 Ph. i/p 1 Ph. o/p, Indicative Back-uptime: 120 Minutes; On-Line UPS Latest Technology Dual-Micro Controller, PFC based LCD IGBT and built in Isolation Transformer UPS system, Floor Mounted Type with rack and battery connection link.	1	1.3	1.3	Power supply backup for 5 HP Z440 Workstations at PG Computer Lab.
13	Computerized Universal Testing Machine (Panel & PC controlled) i. Capacity: 200kN to 400kN ii. Load resolution: 10-20 iii. Ram stroke: 200mm, iv. Straining/piston speedmm/min: 0-150 v. Capability for tension, vi. Compression andtransversetest. vii. Interface with PC & gives real time graph, stress-strain curve. viii. Electronic extensometer ix. Printer	1	4	4	S. Y. B. Tech Mechanical Lab. Syllabus with less capacity
14	Spark Spectometer Argon consumption 2.5 l/min. during measurement Argon quality 4.8 (or better) Electrical data: 100 to 240 V (50/60 Hz) 200 W during measurement, 25 W standby 16 A (240 V) slow blow fuse or 25 A (100 V) slow blow fuse	1	10	10	F. Y. M. Tech Mechanical Production Engineering lab. syllabus, UG & PG Research projects

15	Computerized Brinell Hardness Testing Machine • Load: Standard 500 kg and 3000 kg. • Maximum test Height xThroat (mm)-380 x 200 • Maximum depth of elevating screw below base (mm) approx.-180 • Indentation Measurement: Direct reading through CCD Camera with 60X magnification on inbuilt Industrial PC.	1	2	2	S. Y. B. Tech Mechanical Lab. Syllabus
16	Coriolis Component of Acceleration Specifications: • Rotating Arms: 9 mm/ 6 mm orifice dia, 300 mm long • Rota meter OR Water meter: 250 to 2500 LPH • Electric Motor: D.C. Swinging field, 0.5 H.P. 50 RPM • Mono block Pump: Single phase, pump with Motor 2400 LPH discharge • Power: Single phase A.C. Electric Supply 230 V A.C. 50 Hz	1	0.85	0.85	Theory of Machines Laboratory Equipment for S. Y. B. Tech Student
17	Generation of gear tooth profile Specification : • The acrylic model • Suitable rack cutter and the motion of rack and gear blank should be coupled to each other instead of independent movements. • Arrangement to trace an involute gear tooth profile • Arrangement to demonstrate path of contact between two involute profiles while gear rotates. • Arrangement to demonstrate interference between gear teeth	1	0.25	0.25	Theory of Machines Laboratory Equipment for T. Y. B. Tech Student
18	2 kVA offgrid solar panel or Invertor with Batteries for 3D Printer	1	1	1	3D Printer does not get resumed after power interuption
19	Parkinsons Gear Tester	1	4	4	For Metrology Lab as per curriculum
20	Precision Level	1	0.25	0.25	For Metrology Lab as per curriculum
21	Injection molding machine (Semi automatic)	1	4	4	In Manufacturing engineering
22	Stereolithography(SLA) Type 3D printer	1	4	4	Advancement in Laboratory
23	Fire extinguisher	1	0.1	0.1	For Safety with 3D Printer
24	Demonstration board of fuel supply system of Diesel Engine- Four Cylinder	1	0.18	0.18	T. Y. B. Tech Mechanical I.C. Engine Lab. Syllabus
25	Cut section working model of Cooling System (Motorised)	1	0.23	0.23	T. Y. B. Tech Mechanical I.C. Engine Lab. Syllabus
26	I. C. injectors (4 types)	1	0.035	0.035	T. Y. B. Tech Mechanical I.C. Engine Lab. Syllabus
27	SIMULIA ABAQUS Academic Teaching Suite 2.5 Lakh Nodes, (includes Abaqus, fe-safe, Tosca & lsight) (One year upgrades are included) 160 tokens	20 User	4.5	4.5	Upgradation of CAD/CAM lab
28	Grantry cranes	1	0.25	0.25	For loading /unloading and handling Jigs and Fixtures
29	Digital Vernier Caliper 0-200mm	2	0.05	0.1	For CNC lathe and milling machine

30	Micrometer 0-25, 25-50, 50-75	Each 1	0.15	0.15	For CNC lathe and milling machine
31	Plunger type dial gauge LC 0.001mm	2	0.05	0.1	For CNC lathe and milling machine
32	Plunger type dial gauge LC 0.01mm	2	0.05	0.1	For CNC lathe and milling machine
33	ERP software	25 user licenses	3	3	For BE Mech syllabus
34	Model of Drilling jig & fixtures, Clamps, Bushes, Indexing Mechanism (Metallic models)	1 Set	1	1	For Manufacturing Engg. Practicals
35	Set up for Thermal conductivity of Insulating Powder	1	0.5	0.5	Old equipment rightoff
36	Set up for Thermal conductivity of Compsite Wall	1	0.5	0.5	Old equipment rightoff
37	Computerised Air Conditioning test rig	1	3.5	3.5	For BE Mech laboratory syllabus
38	Set up for Critical Heat Flux	1	0.5	0.5	Old equipment rightoff
39	Metallurgical Image analysis system: Inverted microscope: Image Analyzer (Hardware + Software) a.1) Digital Color Camera (5 M pixel) a.3) Desktop Computer:	1	6	6	Budgeted in 2016-17, but, couldn't purchase, Laboratory equipment used for practicals at SE level in Metallurgy Lab & M. Tech (Mech - Production) Courses/ Disseration. More emphasis on metallurgy as recommended in academic council
40	Microhardness Tester: Test load 10,25,50,100, 200, 300, 500, 1000 Gms (10gf to 1000gf)	1	6	6	Budgeted in 2016-17, but, couldn't purchase, Laboratory equipment used for practicals at SE level in Metallurgy Lab & M. Tech (Mech - Production) Courses/ Disseration. More emphasis on metallurgy as recommended in academic council
41	Induction melting furnace (5 kg) • Capable of delivering full power (15 kW) • AC Line, Voltage: 380/480 V, 3 – phase, 50-60 Hz • Crucible Capacity: 5kg SS* • Max melting T^0: 2000^0C, • Auto Tuning facility • Temperature probe(external) • Power regulation with power indicator • Advanced digital controls with service and diagnostics features. • Temperature regulator • External water cooling** • IR sensor • Transformer for 230 V requirements	1	3	3	Budgeted in 2016-17, but, couldn't purchase, Laboratory equipment used for practicals at SE level in Foundry laboratory
	Total	**61**	**80.445**	**85.475**	

Name of Department - Electrical Engineering

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	**Texas instruments** TMS320F28xx (2812, 28335, 28033 etc.) laboratory trainer kits with Code Composer Studio compatible with windows 7.0 onwards and USB interface	02 nos	0.40	0.80	These kits are reqired for experimentation and laboratory prototype development, testing purpose for UG, PG, and Research Scholars. At present there are no such kits available in the department / laboratory.
2	IGBT based diode-clamped inverter with separate controllable DC source for each (1-ph/3-ph AC to DC) of the following (b) 3-level inverter **Requirements :** (i) All the terminals shall be accessible to the user to observe the gate control pulses on digital storage oscilloscope. (ii) Each shall have at least 5 kW loading capacity. (iii) FPGA / DSP laboratory trainer control interface with computer using MATLAB / Code Composer Studio.	01 nos each	b)5.00	5.00	These are advanced equipments required for experimentation and laboratory prototype development, testing purpose for UG, PG, and Research Scholars. At present there are no such equipments available in the department / laboratory.
3	Interface kits for sr. no. 2 above (a) FPGA laboratory trainer with MATLAB interface (b) AC / DC current sensor kits (0-50A). (c) AC / DC voltage sensor kits (0-1000V) (all sensor kits shall have hall effect LEM sensors)	02 nos each	a) 0.70 b)0.15 c) 0.15	2.00	These are required as interface, measurement and feedback kits with sr. no. 2 above. At present threre are no such kits available in the department / laboratory.
4	4-channel digital storage colour oscilloscope with touch screen option, 200-500 Mhz bandwidth, sampling rate 2-5 GS/sec, signal shall be stored in the oscilloscope memory on line (no external memory) in different forms, off-line recall and editing, inbuilt maths operation / software tools, etc. (comparable with LeCroy make WaveRunner 8000 / 6 Zi series oscilloscopes or higher)	01 nos	5.00	5.00	This is required to observe and store the variouspower frequency-power experimental waveforms, project testing etc. for UG, PG students and research scholars. At present such equipment is not available in the department / laboratory.
5	Differential Probes : AC / DC, 0-1000 V, 200 500 Mhz bandwidth compatible with sr. no. 4 above	03 nos	0.60	1.80	This is required with sr. no. 4 above for measurement, and observation of high voltages and isolation purpose. At present such equipment is not available in the department / laboratory.
6	Current Probes : AC / DC, 0-50 Amp, 200-500 Mhz bandwidth compatible with sr. no. 4 above	01 nos	1.00	1.00	This is required with sr. no. 4 above for measurement, and observation of high current and isolation purpose. At present such equipment is not available in the department / laboratory.

7	Brushless DC motor with mechanical loading arrangement, additional arrangement to connect torque measuring unit, with tachogenerator and encoder for measurement and feedback to operate in closed-loop. Terminals accesible to the user. 250 V DC, 2.5 kW capacity.	02 nos	0.75	1.50	This is required for electrical drive laboratory for UG students, project experimentation for UG, PG students and research scholars. At present such equipment is not available in the department / laboratory.
8	3-phase induction motor slip ring type with mechanical loading arrangement, additional arrangement to connect torque measuring unit, with tachogenerator and encoder for measurement and feedback to operate in closed-loop. Terminals accesible to user for connections in star or delta, 415 V, 50Hz, 4-pole, 2.5 kW, star/delta, cage-rotor motor.	01 nos	0.80	0.80	
9	Computer I5, 8GB RAM, 1TB HDD	35	0.5	**17.5**	• 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.
10	Printer Mono B/W 15 to 20 PPM, Laser Jet	10	0.1	1	• More printers needed for academic & official work • More no of teaching &non teaching staff appointed. Computer/ printer needs to be given to them.
11	LCD Projector Resolution :XGA, 1024 × 768, 4:3 Lens:1.58-1.72, Projection Ratio:1.48-1.77:1	3	0.4	1.2	• Projector required for PG class room. • Additional projectors required for presentation at HOD cabin and computer lab for seminar/ M.Tech Via-va
12	All in one printer	4	0.5	2	For printing autonomous paper(CT-1 & CT-2)
13	UPS, 5 KVA, single phase	1	1.5	1.5	• Computer lab needs to be connected through UPS to safeguard computers.
	Total	**53**	**11.55**	**41.1**	

Name of Department - Information Technology

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	**Digital Trainer Kit** (20 Pin socket-4, 40 pin socket-2, Clock(Auto & Manual)-8 input & Output, 7-segment display, Ground & Vcc,	10	0.08	0.8	For performing Practicals of Digital Ele ctronics at SE IT as per Autonomy curriculam
2	**Windows 2012 server OS:** Full OEM Version of Windows Server 2012 Standard Edition, 64-bit Simplified management console and clustering included Deduplication: Reduce wasted storage automatically Virtualization: Run up to two virtual machines on up to two CPUs	1	0.7	0.7	For performing Practicals of TE IT as per new Autonomy curriculum for subject Computer Network
3	**D**esktop computers-18 (Inteli5, 8 GB RAM, 1TB HDD, DVD R/W drive, 18 Monitor, Optical mouse, keyboard)	18	0.5	9	New PG course is starting in the department from Academic year 2017-18. So as per requirments of AICTE to setup PG Lab
4	Networking of proposed PG Lab	18	1	18	To setup & configure networking infrastructure for proposed PG Lab
5	**Blade Server:** Intel 6C XEON E5 2609 v3 1.9GhHz/16 GB RAM/Open Bay / RAID 5 / DVI	3	2	6	To set up Cloud Center which can be used to generate IRG by connecting it to the data center. It will enhance the server capability
6	**Laptop**- Processor:Intel core i5, 2.3 GHz, RAM 8GB DDR4 2133, HDD 1TB, Graphics coprocessor, card reader, display 15.6 inch.	2	0.6	1.2	To faculties for Course preparation & effective Teaching learning process
7	**Altova XMLSpy Professional Edition - 2016 software**	1	0.5	0.5	For performing BE IT course Practicals and project work
8	Visual Studio Professional 2015 software	1	0.35	0.35	For performing TE IT Practical and Mini-Project work
9	Data Recovery Software	1	0.06	0.06	To recover lost data in case of System Crash
10	**Scanner:**Flatbed with transparent materials adapter (TMA), 303 x 5088 x 108 mm, Scanning element:Charged-coupled device, USB 2.0 Hi-Speed, 4800 x 9600 dpi hardware resolution	1	0.08	0.08	Departmental office work
11	**Wireless Speaker Amplifier**	2	0.25	0.5	Classroom / Presentation
12	**Wall Fan/ Pedestal Fan**	5	0.03	0.15	Proper air circulation in Faculty cabin.

13	**IoT Kit**: Broadcom BCM2837 64bit Quad Core Processor powered Single Board Computer running at 1.2GHz, 1GB RAM, BCM43143 WiFi on board Bluetooth Low Energy (BLE) on board 40pin extended GPIO, 4 x USB 2 ports 4 pole Stereo output and Composite video port, Full size HDMI	20	0.03	0.6	New subject IoT is introduced in BTech Third year so to perform Practical in IoT subject.
14	**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	1	0.5	0.5	For teaching learning in classroom, Guest lectures, Presentations
15	**Multifunction Laser Printer:** Duplex Print auto, Print Speed Mono 20ppm, Duty cycle (monthly, A4) 8000 pages,Max Print Resolution (Mono)-1200 x 1200 dpi, Optical scanning resolution-1200dpi	3	0.15	0.45	Departmental Work
Total		**87**	**6.83**	**38.89**	

Name of Department - Electronics & Telecommunication

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Antenna Lab Set up (with 25 different antenna) which includes : a) PLL synthesized microwave network analyzer : transmitter and receiver frequency range :0.04 to 4 .4Ghz ,PLL sysnthesized step size : 1K to 500M , modulation ASK ,FM , Accurancy :0.001% ,Memory :1000 individual frequencies be stored RF level :+5dbm , typical attenuator :20db (external SMA -SMA) , Digital Power meter measurements : RF level measurements in dbm , Resolution :0.1db,Dynamic range :60db , serial interface : to PC for plotting software output : 50ohms , stepper motor controller unit rotation :0-359 degrees , resoltuion :1degree b) coaxial slotted line :s11:>15db ,S12<1.5db resolution 0.05mm /0.15degree at 1.5Ghz , coupling factor 20db residual VSWR <1.2 c) software : USB interface with polar plotting with log linear catersian and polar plots , VI , Vr and return loss plots d) different antennas expected : microstrip yagi , log spiral , patch trasnformer feb , microstrip dipole , microstrip log , periodic dipole array , microstrip dipole , microstrip log periodic dipole array ,	1	5	5	1. Existing system works only for 850 Mhz and 1.25 Ghz 2. Requires upgradation for higher frequencies up to 4.4 Ghz , 3. Less number of existing setups available 4. This system is useful for Research and Development in Antenna and Wave Propagation.
2	Vector network analyzer Frequency range : 0.4 GHz to 6 GHz Frequency accuracy : 1 × 10-7 (Warm-up time 1 minute) Frequency resolution : ≤1MHz (1Hz with VSM or VSD modules) Number of channels : Scalable from 1 to 1000 IQ resolution : 16 bits Bandwidth : 40MHZ/(More bandwidth is achievable through channel aggregation) Bus speed : 700 Mbps (Per single chassis) Number of slot /chassis : 5, 8, 16 or 32 Reference signals : 10 MHz IN, 10 MHZ OUT Internal oscillator : OCXO System clock : 50 MHz System controller : USB2, Embedded AVR Standard FPGA Chips : Cyclone III, Cyclone IV ,and more available RF Specs (Generator/Transmitter modules) Phase noise : <-107 dBc/Hz @ 10 KHz from 1 GHz carrier Amplitude accuracy : <0.5 dB (Typical 0.2 dB) Switching time : <10 us (Within ± 160 MHz	1	12	12	1. Useful for consultancy work 2. For testing Antenna parameters 3. For reflection and transmission line measurement 4. This system is useful for Research and Development in Antenna and Wave Propagation.

3	Study of 3G Mobile Trainer 1. Network 2G Network GSM 850 / 900 / 1800 / 1900 3G NetworkUMTS 850 / 2100 UMTS 850 / 1900 2. Display TFT, 16M colors 3. Display Size 240 x 320 pixels, 2.0 inches 4. Sound Alert types, Vibration; Downloadable polyphonic, MP3 ring tones Speaker phone Yes 5. Memory 2000 entries 6. Call records 20 dialed, 20 received, 20 missed calls 7. Internal 24 MB Card slot microSD, up to 8GB (verified), Hotswap 8. Data GPRS Class 32, EDGE Class 32, 3G 384 kbps, Bluetooth V2.0 USB V2.0 microUSB 9. Camera VGA Video call Camera 10. Features MessagingSMS, MMS 1.2, Email, Push Email, IM Radio Stereo FM radio; Visual radio 11. Player MP3/MP4/AAC/AAC+/eAAC+ player 12. Battery Standard battery, Li-Ion 1000 mAh (BL-4U)	1	0.5	0.5	For performing experiments based on wireless mobile communication

4	VOIP Trainer Kit : Specification : 1. VOIP Phone : 1 No. 2. VOIP Subscription with Skypee 3. VOIP Software : 1 No. 3. A Training Manual. 4. USB Cable	2	0.3	0.6	For practical understanding of Voice over IP concept
5	NETSIM – Network Simulator (Academic version 9.1 or higher) Protocols : Aloha, Slotted Aloha,Token Bus, Token Ring, CSMA / CD, Fast and Gigabit Ethernet, Switching, Wireless LAN - 802.11 a / b / g, Routing - RIP, OSPF, BGP, Mobile Adhoc Networks (MANET), Wi-Max ,GSM, CDMA,Wireless Sensor Network (WSN), Zigbee,Internet of things (IOT) , Cognitive Radio, Long Term Evolution (LTE),Network Programming Exercises in "C"	1(20 users)	5.5	5.5	For performimg simulation based praticals for Wireless Mobile Communication and Computer Communication Network subject of final year.
6	Analog Oscilloscope:CRT based, Accelerating Voltage 2000V, Stabilized Power supply,Operating Temperature 0-40 C. Opearting Modes CH.I, CH.II,alternate,chopped,X-Y,Vertical Deflection 1mV-20V/Div. Horizontal Deflecton:BW:3MHz.Timebase:18 calibrated steps 0.5microseconds/div-0.2s/div, Digital frequency readout:10Hz-40MHz	5	0.2	1	For Practicals in Subjects like Electronic devices and Circuits,Analog Integrated Circuits,Analog Communication
7	Universal IC tester	2	0.15	0.3	For Digital Electronics Laboratory practicals
8	Digital Circuits Development Platform Self contained & easy to operate Functional blocks indicated on board mimic Solder less breadboard On Board DC Power Supply Onboard pulse generator with TTL/CMOS mode Pulser switches, 8 bit data switches Bicolor LED display, logic probe, BCD to seven segment display CMOS/ TTL output Technical Specifications Size of Breadboard : 172.5 mm x 128.5mm Connections on Breadboard : 1685 DC Power Supply on board : 5 V, lA; -5 V, 500 mA, +3 V to +15 V 500 mA (variable) –3 V to –15 V 500 mA (variable) Pulse Generator on Board : Frequency range : 1 Hz to 1 MHz in 6 steps. Variable in between the steps. Amplitude : 3V-15V (CMOS), 5V (TTL) Duty cycle : 50 %, TTL/CMOS output Pulser Switches : 2 nos (Push to 'On') Data switches : 8 nos (Toggle switches for both TTL & CMOS	5	0.15	0.75	For Digital Electronics Laboratory practicals

9	Analog Circuits Development Platform Self Contained and Easy to Operate. Functional Blocks indicated on board Mimic. On board DC and AC Power Supply. On board Function and Modulation Generator. On board Continuity Tester. On board Toggle Switches and Potentiometers. Solder less Breadboard. Technical Specifications DC Power Supplies : + 5V, 1 A (Fixed) + 12V, 500 mA (Fixed) -12V, 500 mA (Fixed) + 12V, 500 mA (Variable) -12V, 500 mA (Variable) AC Supply : 9V-0V-9V, 500mA Breadboard : Breadboard for making various circuits and testing them. External components/IC can be fitted conveniently. Function generator : Operating modes Sine, Square and Triangular. Frequency	5	0.15	0.75	For Analog Electronics Laboratory practicals
10	EPABX phone sets with caller-id	50	0.01	0.5	For distributing to Faculty members on demand
	Total	**72**	**23.96**	**26.9**	

Name of Department - Applied Mechanics

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Printers (Preferably having duplex printing facility)	2	0.15	0.3	Upgradation of Computer lab
2	External Hard Disk	1	0.06	0.06	Upgradation of Computer lab
3	Compression Testing Machine 300 T	1	8.00	8	Existing instrument outdated
4	Split AC for computer lab	1	0.40	0.4	Upgradation of Computer lab
5	Data Acquasition system (for beams cubes cylinders) with LVDT's and computer interface	1	10.00	10	UG PG research
6	Torsion testing machine	1	7.00	7	Experimentation as per syllabus
7	Mini loading frame (100T)	1	10.00	10	Experimentation as per syllabus
8	5 kVA UPS: Online UPS with Tubular battery 5.0 KVA, 1 Ph. i/p 1 Ph. o/p, Indicative Back-uptime: 120 Minutes; On-Line UPS Latest Technology Dual-Micro Controller, PFC based LCD IGBT and built in Isolation Transformer UPS system, Floor Mounted Type with rack and battery connection link.	1	1.50	1.5	Power supply backup for 5 HP Z440 Workstations at PG Computer Lab.
9	Computerized Brinell Hardness Testing Machine • Load: Standard 500 kg and 3000 kg. • Maximum test Height xThroat (mm)-380 x 200 • Maximum depth of elevating screw below base (mm) approx.-180 • Indentation Measurement: Direct reading through CCD Camera with 60X magnification on inbuilt Industrial PC.	1	0.00	0	S. Y. B. Tech Civil Lab. Syllabus. The equipment purchased by Mechanical shall be use.
10	Hot Air Oven (300 deg centigrade) Digital display	1	3.00	3	T. Y. B. Tech Civil Syllabus
11	NDT Rebound Hammer	1	3.00	3	SY Civil and research/Consultancy
	Total	**12**	**43.11**	**43.26**	

Name of Department - Master of Computer Application

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	OSOYOO Raspberry Pi 3 DIY Starter learning Lab Kit 22 in 1	5	0.048	0.24	For New laboratory in the area of IOT to be devloped under Autonomous curriculm of TYMCA.
2	Raspberry Pi 3 Computer V 3.0 15 45000 Computing and development	15	0.03	0.45	
3	45 in 1 Sensor kit for Raspberry pi and more - 2 12800 Sensor kit for applications development	2	0.065	0.13	
4	SIM808 GSM + GPRS + GPS Cellular Module SIM808 5 11000 Cellular Module for data communication	5	0.022	0.11	
5	Wireless Sensor Network (WSN) Starter Kit	2	1.55	3.1	
6	Pulse Sensor, Heart Rate Sensor for Arduino and other MCU KitsGuru - KG011	2	0.075	0.15	
7	Scanner	1	0.05	0.05	For Scanning of Documents
8	Fluke Network Connectivity Tester	1	5	5	For Testing Lan connection and Wireless Connection under CN laboratory
9	Fiber Splicing with OTDR	1	10	10	For Splicing and Testing of FOC under CN laboratory
10	Rational Rose and Robot	1	8	8	For Project devlopment in Software Development Project Laboratory
11	Orcale Database Software	1	5	5	For DBMS and Project devlopemnt in Software Development Project and Database Laboratory
12	Network Simulator	1	2	2	For Comuter Network Laboratory to provide simulated envoronment for testing of netowrk
13	Statistica Data Miner Tool	1	5	5	For New laboratory to be devloped under Autonomous
14	IBM-SPSS	1	3	3	
	Total	**39**	**39.84**	**42.23**	

Name of Department - Workshop

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Hand Grinder	1	0.06	0.06	Required for work order & Practical at welding shop
2	Fitting Vice	6	0.06	0.36	Existing fitting vice are to be chaged
3	Height Guage 1 feet	1	0.07	0.07	Required for first year pracical at fitting shop
4	Tool & Cutter Grinding Machine Centre height : 130 mm Swing : 280 mm Clamping area : 980 mm x140 mm	1	0.8	0.8	Required for practical of SY and TY Mechanical students
5	Surface Grinding Machine Working Surface: 175x350 mm	1	1.15	1.15	Machine not available at workshop and usefull for work order
6	9 Inch Vertical Wood Cutting Bandsaw Machine Table Size : 9 X 12 Inch Speed : For Wood: 850/1520 RPM	1	0.35	0.35	Existing Bandsaw need to replace as it is not working
7	Blade Grinder of Thickness Planner Machine Blade Size : 13 inch Grinding wheel size : 6" X 0.5" Coolant attachment	1	0.22	0.22	Machine not available at workshop and blades of thickness planner need to sharpen often.
8	Carpentary Router with Bits No Load Speed : 11000-28000 RPM Power Input : 1400 W Voltage : 220-240 V Frequency : 50 Hz	1	0.07	0.07	It can be used for work orders & execution of Carpentry practical with advanced machine
9	Heavy duty CNC vertical milling machine Table surface area 1520 mm x 430 mm XYZ- axis travel 1000 x 550 x 500 Spindle motor power 7-8 kW (10 HP) XYZ-axis Motor 1 kw	1	25	25	Required for TY B. Tech & M. TECH First Year practical as per new sylllaus. It can be used for work order & research work of M. Tech & PHD scholar
10	Jig & Fixture tool , accessories as per requirement	1	1	1	Required for TY B. Tech for demo purpos of Jig Design syllabus and usefull for research
11	Combinded Surfacer & Thickness Circular Saw with Blade Grinder (12 Inch) with attachments	1	1.5	1.5	It can be used for work orders & execution of Carpentry practical with advanced machine
12	Desktop Computer	2	0.45	0.9	Office use
13	Printer cum scanner	1	0.2	0.2	Office use
	Total	**19**	**30.93**	**31.68**	

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.)	2	0.4	0.8	For safety of TGDTA and FTIR equipment in Nanotechnology Lab
2	**Solar Energy Trainer** (complete training system, ammeter and voltmeter on board, portable and light weight, Learning CD)	2	0.23	0.46	For First Year B.Tech.Practical
3	**Energy Band Gap Kit** (On board voltage and current measurement, portable and light weight, Learning CD)	2	0.1	0.2	For First Year B.Tech.Practical
4	**UPS** (5KVA, Dual Microcontroller, PFC base LCD IGBT and built in association transformer UPS system, backup with tubular Batteries)	1	1.25	1.25	For backup and safety of TGDTA and FTIR equipment in Nanotechnology Lab
5	**Furnace** (6" x 6" x 6", 3.6L approx with swing aside door at the front. Temp range - 1200 0CThe temperature controller should be a PID automatic control power control and. programmable with necessary safety features.Al2O3 Sample Plate 1 pcs Al2O3 Furnace Door Block 1 pcs Protection Glove 2 pairs Crucible Clip 1 pair Crucibles 6 pcs	1	1	1	Use to sinter or anniling the metal oxide thin film of allumina substrate, Glass substrate, Quartz substrate, FTO substrate at different temperature for different characterizatio
	Total	**8**	**2.98**	**3.71**	

Name of Department - Chemistry

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Desktop computers - 18'' monitor, optical mouse, key board, Lisence windowns 10 operating system, antivirus, DVD writer, card reader, 1 TB hard disk, 8 GB Ram DDR4, I-5 processor, warranty 5 years	2	0.5	1	For laborotary development
	Total	**2**	**0.5**	**1**	

Name of Department - Office

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	All in one printer	2	0.3	0.6	For office work (scan , print & xerox)
2	Note Checking Machine	1	0.3	0.3	For cashier
3	Note Counting Machine	1	0.4	0.4	
4	Mini Bus 40 Seater	1	20	20	For Industrial Visit of Students
5	Four Wheeler Innova	1	18	18	For Faculty Visit to Industry & Consultancy
6	Fan / Cooler	6	0.05	0.3	For office
	Total	**12**	**39.05**	**39.6**	

Grand Total	**378.94**

Institute Level Fund - Equipment Replacement

B .Equipment Replacement Fund : (For Furniture)

Name of Department - Civil Engineering

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Steel cupboards with lock and key arrangement	10	0.06	0.6	for custody of used answerbooks of examinees
2	Faculty chairs	5	0.03	0.15	For faculty cabins since old wooden chairs are irrepairable
3	Pedestral fan	2	0.03	0.06	For Geology lab
4	P.G. Classroom Chairs with writing pad/Benches	25	0.03	0.75	For PG students
	Total	**42**	**0.15**	**1.56**	

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	0.5	Faculty Seating arrangement
2	HOD Table	1	0.4	0.4	HOD Cabin
4	Faculty Chair	15	0.03	0.45	Faculty Seating arrangement
	Total	**26**	**0.48**	**1.35**	

Name of Department - Electronics & Tele Communication

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Advanced communication Lab			4	Practical tables with latch
	Total	**0**	**0**	**4**	

Name of Department - Applied Mechanics

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Green Board 8'X 4'	1	0.20	0.20	For Seminar Hall
2	Computer Table (single computer) for Faculty	2	0.025	0.05	For PC in the faculty cabin
	Total	**3**	**0.225**	**0.25**	

Name of Department - Master of Computer Application

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Teacher Table	3	0.1	0.3	for teachers
2	Small Cupboard	3	0.15	0.45	for teachers
	Total	**6**	**0.25**	**0.75**	

Name of Department - Workshop

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Office Chairs	5	0.05	0.25	For Staff
2	Wall Fan	2	0.02	0.04	Required at Workshop Superintendent & Foreman Cabin
3	Pedestal Fan	6	0.05	0.3	For Laboratory staff
	Total	**13**	**0.12**	**0.59**	

Name of Department -Physics

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	chair	6	0.02	0.12	For staff Cabin
	Total	**6**	**0.02**	**0.12**	

Name of Department - Chemistry

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	visitors chair	6	0.05	0.3	For laborotary development
	Total	**6**	**0.05**	**0.3**	

Name of Department -Maths

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	Computer Table	7	0.067	0.469	Language Lab
2	Computer Chair	20	0.027	0.54	Language Lab
3	Mat for 500 Sq. Feet Area	500	0.0003	0.15	Language Lab
4	White Board 4 by 6 Size	1	0.04	0.04	Language Lab
5	Curtain 5 by 7 and 3 by 7 Size	8	0.012	0.096	Language Lab
6	Staff Chair	1	0.05	0.05	Language Lab
7	Staff Table	1	0.03	0.03	Language Lab
	Total	**538**	**0.2263**	**1.38**	

Name of Department - Office

S.No.	Proposed Item with specification	Qty. required	Estimated Unit Rate	Estimate Amt	Justification
1	File rack	2	0.15	0.3	For office
2	Table	6	0.1	0.6	
3	Waiting chairs	70	0.03	2.1	
4	Auditorium Chairs	450	0.05	22.5	
5	Faculty chairs	30	0.045	1.35	
6	Chair (wood)	12	0.04	0.48	
	Total	**570**	**0.415**	**27.33**	

Grand Total	**37.63**

c. Maintenance Fund

Name of Dept - Civil Engineering

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	Surveying Lab	Maintenance & Repairs of Survey Instruments	—	—	0.4	Repair of survey instruments,Other Consumable etc.
3	Transportation Engineering Lab	Maintenance & Repairs, Kerosene & Grease	—	—	0.8	Repair of Bump Indicator, Marshal Stability appartus, Benkelman Beam, Oven. Other consumables,LPG connection.
4	Geotechnical Engineering	Maintenance & Repairs	—	—	0.5	Consumables of geotechnicals and maintenace of minor instruments, calibration and repair of equipments
5	Fluid Mechanics Lab	Maintenance & Repairs	—	—	0.8	strengthning of current pipe network, purchase of consumables like grease, mercury and maintenance and repairs of instruments
6	Computer Lab	Maintenance & Repairs	—	—	0.8	maintenance of printers,CPU,Mounting LCD to PG room,Monitor,printer cartridge,HDMI,USB cables etc.
7	Geology Lab	Maintenance & Repairs	—	—	0.3	purchase of plastic trays, Streak Plate,pen knife etc.
7	Environmental Engineering Lab	Maintenance & Repairs	—	—	0.5	purchase of chemicals,glasswares etc., maintenace of minor instruments,
9	Building Services Lab	Maintenance & Repairs	—	—	0.9	Purchase of plumbing fixtures,electrical fitting,Models and Charts etc.
	Total		**0**	**0**	**5**	

Name of Dept - Mechanical Engineering

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	Mechanical	Air Blower, Screw driver set, plier, brush etc			0.3	For cleaning purpose of computer and peripherals
	Mechanical	Replacement of Tonners, Refilling of Tonners, Pepair of printers, USB cable for printer				CAD -CAM lab regular Maintenance
	Mechanical	Mouse, SMF battries, small size pad locks, key board, RAM, SMPS, anti-virus, pen drives,				CAD -CAM lab regular Maintenance
	Mechanical	Repair of LCD Projectors: VGA connector, bulb				
	Mechanical	PL tube light				
	Mechanical	Sound system 2.1				
2	Mechanical	Purchase of Consumables, spares etc.			0.05	Heat Transfer Lab
3	Mechanical	Oil, Diesel, spares etc		As per requirement	0.15	Thermodynamics consumable Experimentation as per syllabus
4	Mechanical	Diesel, pertol, oil spares etc			0.08	Consumable Automobile and I.C engine
5	Mechanical	AMC of 4 cylinder petrol engine, sensor change/repair etc.			0.5	Experimentation as per syllabus and consultancy work
6	Mechanical	Spares for 4 cylinder petrol engine, smoke meter and VCR engine, sensor change/repair etc.			0.2	Experimentation as per syllabus and consultancy work
7	Mechanical	Calibration of 5 gas analyser, sensor change/repair, spares etc.			0.25	Experimentation as per syllabus and consultancy work
8	Mechanical	2 Ammeter, 2 Voltmeter, 2 Multimeter, 2 Rheostat Multimeter Cables, spares etc			0.23	Experimentation as per syllabus for Renewable energy engineering Lab
9	Mechanical	Maintenance of Gyroscope, Balancer etc. puchase of oil, grease, bearing & other small maintainence , spares, etc			0.5	TOM lab repair
10	Mechanical	Parts and Consumables purchase, repair & maintainance, spares etc.			0.4	Measurement & control Lab
11	Mechanical	Maintenance of laboratory equipments compressor & computers . Purchase of consumables, CNC lathe, Milling, Robot, AGV, CMM etc. maintenance, tools cutters for milling, turning operations, Batteries for AGV,Replacement / Refilling of Tonners, anti-virus, Mouse, sensor change/repair, spares etc.			1.5	CIM Lab Maintenance,AMC
12	Mechanical	Maintenance of laboratory equipments & purchase of consumables, microprocessor, microcontroller & other electronics kits & PLC & its applications, spares etc.			0.5	Mechatronics Lab maintenance
13	Mechanical	Purchase of oil, refrigerant , replacement of pressure guages, drier filter etc.Thermocouple Repair, Electrolux Refrigeration system Repair(Refilling of refrigerent and absorber), spares etc.			0.25	Lab consumable & repairs RAC Lab

14	Mechanical	Purchase of Grease, spunges, ropes, pipes & hose, Mercury, pressure guages & servicing or repair of equipments, spares etc.			0.3	FM/FTM Lab repair and maintenance
15	Mechanical	Maintenance of laboratory equipments Fatigue testing machine, Jominy Hardenabilty set up,Foundry Testing Equipments, & purchase of consumables, oil.calibration of microscope, & other machines, Showcase items: Forging specimen, Rolling Specimen, Extruded specimen, spares etc.			0.3	Metallurgy Lab repair and maintenance, calibration
16	Mechanical	Maintenance of laboratory equipments & purchase of consumables e.g.oil, grease, rebet, spares etc			0.3	IFP Lab maintenance
17	Mechanical	Measuring Instrument repair, Purchase of spare part, consumables, Purchase of oil, paraffin, cotton waste, toolkit, comparator, spares etc.			0.1	MQC Lab repair and maintenance, calibration
18	Mechanical	Inserts and tool holder, Rack/Plastic Bins, spares etc.			0.5	Machine Tools Lab
19	Mechanical	Mouse, Small size pad locks, key board, RAM, Anti-virus, pen drives, Replacement / Refilling of Toners, spares etc.			0.2	PG Computer Lab
	Total		**0**	**0**	**6.61**	

Name of Dept - Electrical Engineering

S. No.	Laboratory/ Items / Discription	Details	Qty	Unit cost (Rs.)	Total	Justification
1	Computer lab1 &2, Electrical Dept	Repairs of computer including purchase of mouse , keyboard, SMPS, RAM, Hard disc,Mother board etc . Printer cartridge repais, Toner refilling, Printer repairing, LCD lamp replacement etc			1.4	Maintenance of computers, printers
2		Polycab multistrad cable 1.00 Sq.mm	15	600	0.09	
3		Polycab multistrad cable 1.5 Sq.mm	2	900	0.02	
4		Polycab multistrad cable 2.5 Sq.mm	10	1450	0.15	
5		Polycab 4 core multistrad cable 4.0 Sq.mm	1	9146	0.09	
6		Polycab 4 core multistrad cable 6.0 Sq.mm	1	13727	0.14	
7		MCB single pole 6 A	15	101.75	0.02	
8		MCB single pole 32 A	10	101.75	0.01	
9		MCB 2 pole 32 A	10	408	0.04	
10		MCB 3 pole 32 A	15	850	0.13	
11		MCB 4 pole 32 A	10	900	0.09	
12		MCB 4 pole 63 A	5	1298	0.06	
13		MCB Mounting Plastic Box 2-Pole	10	45	0.00	
14		MCB Mounting Plastic Box 4-Pole	10	65	0.01	
15		Service wire 2.5 Sq.mm	1	4500	0.05	
16		Lug's 2.5 Sq. mm	10	5	0.00	
17		Lug's 4.0 Sq. mm	10	7	0.00	
18		Lug's 6.0 Sq. mm	10	10	0.00	
19		Lug's 10.0 Sq. mm	10	12	0.00	
20		Lug's 25.0 Sq. mm	10	15	0.00	
21		Crimping tool (Upto 25 sqmm Lug)	1	2500	0.03	
22		Rawal plug Box (Wooden & Plastic Type)	100	6	0.01	
23		PVC Board (Various Size)	20	70	0.01	
24		16 A Power point	25	135	0.03	
25		Power Plate wooden Board	25	50	0.01	
26		Insulation tape in R,Y,B,G colour also black	100	10	0.01	
27		36 watt florosent tube Electronic Fixture	200	310	0.62	
28		36 watt florosent tube Rod	200	40	0.08	
29		36 watt electronic chowk (1x36)compact	50	160	0.08	
30		36 watt electronic chowk (1x36)slim	50	180	0.09	
31		Drill Bit Concrete 5 mm	5	50	0.00	
32		M S Drill Bit 5 mm	2	90	0.00	
33		Bypass Drill Bit 12 mm	5	250	0.01	
34		Drill Machine 12 mm	1	4500	0.05	
35		All Ring Spanner Set (Box Spanner with Rache	1	2500	0.03	
36		Safty Belt & Helmet	2	4000	0.08	
37		Casing Caping patti (Double Lock)	50	45	0.02	
38		Dol Starter 3Ph	10	1500	0.15	
39		Dol Starter 1Ph	5	500	0.03	
40		Dol Starter Relay 4 to 6 A	10	550	0.06	
41		Dol Starter NVC (415v)	10	550	0.06	
42		1.5 V pencil cell	50	12	0.01	
43		Three pin top 6A Anchor	35	25	0.01	
44		Three pin top 16A Anchor	35	40	0.01	
45		9 V Nickel iron Battery (Small)	20	35	0.01	
46		500 W Hallojan Tube	10	35	0.00	
47		1000 W Hallojan Tube	5	55	0.00	
48		25 W Lamp	50	12	0.01	
49		1" & 1.5 " PVC Pipe Saddles Each Check Type	500	1.75	0.01	
50		LED Spot Light 50W	10	1500	0.15	

51		LED Street Light 30W	15	2000	0.30	
52		CFL LAMP 65 W	15	525	0.08	
53		CFL Holder 65 Watt	20	10	0.00	
54	Electrical Dept	Rubber Handglose 500 v - 1000 v (Pair)	2	900	0.02	Electrical Maintenance
55		Ding dong Bell Cordless	5	400	0.02	
56		Hack saw blade small & Large	10	25	0.00	
57		Tool Bag	3	550	0.02	
58		Files flat	2	150	0.00	
59		Chissels	1	150	0.00	
60		CFL 18 Watt	10	145	0.01	
61		CFL 15/10/5 Watt	20	130	0.03	
62		LED 1/2 Watt Lamp in R,Y,B Colour Each 3	10	75	0.01	
63		120W Induction Lamp for High-Mast	3	5000	0.15	
64		120W Induction Lamp Choke/Card	3	6000	0.18	
65		Fuse Wire 6A	1	225	0.00	
66		Cable Tai 150 mm Medium Size	10	55	0.01	
67		Raw Rubber	10	850	0.09	
68		Polish Paper Soft	10	10	0.00	
69		Polish Paper Hard	10	10	0.00	
70		Air Blower	2	2500	0.05	
71		Motor Protection cover for 5 HP	5	250	0.01	
72		Tong Tester 500A - 03 Nos & 1000A - 02 Nos	3	3500	0.11	
73		Meggar 750V	1	4500	0.05	
74		Square Box	50	10	0.01	
75		One Way Square Box	25	10	0.00	
76		Two Way Square Box	25	10	0.00	
77		MCCB 50A	10	5500	0.55	
78		MCCB 100A	10	6500	0.65	
79		MCCB 200A	5	10000	0.50	
80		Energy meter Electronics 1Ph.	15	550	0.08	
81		Energy meter Electronics 3Ph.	5	5000	0.25	
82		Torch LED(Charging type)	3	1400	0.04	
83		1.5 V normal cell	10	12	0.00	
84		36W/856 PII Tube Rod	50	145	0.07	
85		36W Electronic Blasst (TLD) Chok	50	175	0.09	
86		Cotton Tape 50 mtr & 100 mtr each one	1	1000	0.01	
87		Metalic Measurement Tape 10 meter	5	150	0.01	
88		HRC Fuse 50A	10	550	0.06	
89		HRC Fuse 100A	10	750	0.08	
90		HRC Fuse 200A	5	900	0.05	
91		HRC Fuse 20A for LBS	2	2500	0.05	
92		HRC Fuse Puller	2	1150	0.02	
93		Wall mount fan	5	2250	0.11	
94		1 / 1.5 HP Motor open well 1Phase	3	4500	0.14	
95		2 HP Motor open well 1Phase	1	7000	0.07	
96		3 HP Motor (open/deep well) 3Phase	1	15000	0.15	
97		6Amp Modular Switch	100	35	0.04	
98		6Amp Modualr Socket	100	60	0.06	
99		Fan Regulator Modular	50	225	0.11	
100		16Amp Modualr Combine Switch-Socket	50	375	0.19	
101		Hole Cutter	3	120	0.00	
102		14W Tube Set Fixture Electronics	50	275	0.14	
103		14W Tube Rod	50	100	0.05	
104		Copper Plate 1ft X 1ft	2	1200	0.02	
105		Nut Bolt copper	2	75	0.00	
106		Copper bare conductor 10 sqmm	1	7500	0.08	
107		MOTOR REPAIR AND REWINDING	1	40000	0.40	
	Total		**2635**	**196840.3**	**9.14**	

Name of Dept - Information Technology

S. No.	Name of Laboratory/ Items / Discription	Details	Unit cost (Rs)	Qty	Total	Justification
1	Printer AMC	Maintenance	25000	1	0.25	Printer Maintenance
2	Copier AMC	Maintenance	20000	1	0.2	Copier Manitenance
3	Computer Repair	Maintenance	2000	10	0.2	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	Misc. / Other non listed		_	_	0.2	Incidental Maintenance
7	**Network Tool Kit :** Crimping tool, Cable tester, tool kit	Consumables	2000	5	0.1	Practical
8	Externl DVD writer	Consumables	2000	2	0.04	Software Installation
9	Digital IC	Consumables	50	100	0.05	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	0.1	Presentation
14	External DVD writer	Consumables	2000	2	0.04	Writing CD/DVD
15	External HDD 1 TB	Consumables	5000	3	0.15	Storing data
16	Pen Drive	Consumables	500	10	0.05	To Carry data
17	RJ-45 connector	Consumables	15	100	0.015	Network Maintenance
18	Screen Hanging	Consumables	8000	2	0.16	Class room
19	Screen With Stand	Consumables	10000	2	0.2	Presentation
20	Slider and Pointer	Consumables	4000	2	0.08	Presentation
21	Table Cloth	Consumables	300	5	0.015	Departmental Work
22	Curtones	Consumables	500	20	0.1	Laboratory
23	Key board and mouse	Consumables	500	20	0.1	Practical Use
24	Misc./ other non-listed items	Consumables	_	_	0.2	as per Incidental requirments
25	Office Stationary Material	Stationary			0.5	Departmental Work
	Total		**76015**	**466**	**3.91**	

Name of Dept - Electronics & Telecommunication

S. No.	Name of Laboratory/ Items / Discription	Details	Unit cost	Qty	Total	Justification
1	E&TC	EPABX (AMC)			0.4	Maintenance
2	E&TC	Xerox machine(AMC)			0.1	
3	E&TC	Printers Refilling			0.1	
4	E&TC	UPS Batteries			0.1	
5	E&TC	Equipment Repairing			0.1	
6	E&TC	Projector lens maintainance	0.25	2	0.5	
7	Electronic Store	Electronics consumables purchase			5	
8	Epson Business Projector Wireless Compliant with 802.11 b/g/n standards, Uses USB type A connector, compatible with PC or Mac, able to transmit audio and video		0.05	1	0.05	
9	PCB Prototype machine drill, routing and milling bits	PCB Prototype machine maintenance	0.25	2	0.5	Maintenance
	Total		**0.55**	**5**	**6.85**	

Name of Dept - Applied Mechanic

S. No.	Name of Laboratory/ Items / Discription	Details	Unit cost	Qty	Total	Justification
1	Applied Mechanics Department	Computer and periferal Repairs	0.02	15.00	**0.30**	Due to heavy use for central and departmental activities, students disertation, projects, testing and consultancy
2		UTM/ CTM / NDT Repairs and calibration	lump sum	lump sum	**2.00**	
3		Printers / Photo Copier	lump sum	lump sum	**0.30**	
4		Stationary for departmental corospondance, documentation and testing/consultancy reports	lump sum	lump sum	**0.25**	
	Total		**0**	**0**	**2.85**	

Name of Dept - Master of Computer Application

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	MCA	UPS AMC	0.13	2	0.26	For maintaining UPS
2	MCA	Printer Servicing	0.015	6	0.03	Required for Printing maintanance
3	MCA	Xerox Machine Towner Refilling	0.032	4	0.128	Xerox Machine maintanance
4	MCA	Leserjet Printer Towner Refilling	0.017	6	0.102	Required for Printing of official work, proposals etc.
5	MCA	General Maintenance	--	--	0.7	Maintenance
6	MCA	Stationary & consumables		35 Rim, Stappler, Stappler pins, Pencil, Rubber, whiteboard marker pen	0.1	Documentation
	Total		**0.194**	**18**	**1.32**	

Name of Dept - Workshop

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	Repair & Maintenance, servicing etc.	Drill M/c., Lathe M/c. , cutting M/c., Grinder, & other tools etc.	--	--	2	Most of the machines in workshop are old and requires maintenance
2	Workshop Consumables	Welding, rods, safety glass, hand glows, cutting & grinding wheels, HSS Drills, Drill bits, Hacksaw blade, machine oils, grease, cutting oil, white bit, cobalt tools, V belt, circular blade etc.	--	--	2	Material required for practical purpose and work orders
3	Workshop Tools	All types spanner set, pliers, screw drawer set, all files, hacksaw frames, carpentry chisels & tools, hammers, tin cutter, etc.	--	--	1.5	Material required for practical purpose
4	Practical Material	MS Flat, angle, square bar, round bar, teak wood, GI Sheets, etc.	--	--	2.5	Material required for practical purpose
5	Hardware Material	Wooden & PVC Handles, Sand polish paper, Emery papers, Paint, wood polish, brush, plywood, sun mica, moulding Patti, fevicol, Ebro tape, nut bolt, wire nails, screw, rivets etc. , hinges, stopper, door closer, hand-drop , locks etc.	--	--	1	Hardware material required in workshop/Institute work orders
6	Cleaning Material & Person payment	Soap, Washing powder, broom, coconut broom, finial, table cloth, match box, first aid box, & other cleaning material	--	--	1.3	Cleaning material required for all institute & cleaning of workshop
7	Diesel	For DG Set			2.5	Generator required during weekly power off and whenever electricity goes off
8	Stationary	Toner for printer & Xerox machine, marker pens etc.	--	--	0.2	Office work
9	Work Order Material	All Department work order material as per requirement			0.5	Material required for work orders
	Total		**0**	**0**	**13.5**	

Name of Dept - Physics

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	Department of Physics	Chemicals			0.4	Different chemical required for different practical's
2		Laurent'z Tube	0.012	10	0.12	For Laurent'z Polarimeter Practical
3		Mercury Lamp	0.01	4	0.04	For Spectrometer Practical
4		Sodium Lamp	0.01	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	0.1	3	0.3	Refill /replace printer tonner in lab.
8		Laboratory Tool kit	0.05	1	0.05	Required for handle all the instruments
9		Scientists Frame with photo	0.005	9	0.045	In Laboratory
10		Lab. Manual	50	10	0.005	Autonomy Syllabus for lab and Different committees.
11		Stationary items	0.1		0.1	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	20	0.1	Required for new equipment in Nanotech Lab.
13		Regulator	0.03	1	0.03	For nitrogen cylinder
14		Refilling of Nitrogen cylinder	0.01	5	0.05	For Practical
15		Equipment repair	0.01	10	0.1	Laboratory equipment repair
16		Hard Disc	0.05	2	0.1	For departmental data storage
	Total		**50.399**	**87**	**1.56**	

Name of Dept - Chemistry

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	Chemistry department	Burette 25 ml	500	10	0.05	Laborotary practicles
2		Conical flask (250 ml)	400	10	0.04	
3		EDTA (500 gm)	500	2	0.01	
4		Ammonia solution (500 ml)	500	04 bottles	0.02	
5		Phenolphthalein indicator	100	02 bottles	0.002	
6		Muroxide indicator (25 gm)	200	1	0.002	
7		Eriochrome black T (25 gm)	500	2	0.0025	
8		Silver nitrate (25 gm)	10000	1	0.1	
9		Formaldehyde	500	2	0.005	
10		Measuring cylinder (1 lit.)	1000	1	0.02	
11		Beaker (250)	500	10	0.05	
12		Beaker (500)	250	10	0.025	
13		Phenol Solution	500	02 bottles	0.01	
14		Methyl orange indicator	150	02 bottles	0.003	
16		Pipette	400	10	0.04	
17		Formaldehyde solution	400	4	0.016	
18		Urea 500 gram	500	500 grm	0.005	
19		Stationary	10000	Separate sheet is attached	0.1	
20		Universal indicator	100 ml	01 bottle	0.005	
21		Universal pH papers		1 box of 50 strips	0.0025	
22		Hardness paper		1 box of 50 strips	0.005	
23		Water analysis kit		Full kit	0.25	
24		Soil testing kit		Full kit	0.25	
25		Presenter	2		0.03	for classes presentation
	Total		**26902**	**63**	**1.043**	

Name of Dept - Mathematics

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	Mathematics	Repair: Xerox / Computer	-		**0.1**	Stationery
2		Consumable: Cartridge/Toner Refilling , Xerox Drum			**0.15**	
3		Stationary			**0.05**	
	Total		**0**	**0**	**0.3**	

Name of Dept - Office

S. No.	Name of Laboratory/	Details	Unit cost	Qty	Total	Justification
1	OFFICE	Xerox machine	....	....	0.7	Maintenance
2		Printer Refilling	....	....	0.2	
3		Computer related material	....	....	0.2	
4		Harddisk 2 TB	0.02	2	0.04	
5		Stationary	....	....	4.5	Stationary & Printing material
6		Table cloth		10	0	For office
7		Table glass		10	0	
8		Flower pot	0.005	10	0.05	
9		Soft Bord	0.05	2	0.1	
10		Cleaning of glass	....	....		Removing 'Student Section' on glass & add 'Account Section'
11		Software	----	....	0.45	For Tally Solution & TDL For accounting
12		Miscellanious			4	
13		Refreshment	....	....	0.85	For Auditors, visitors, staff etc
14		Phone Expenses	....	....	0.84	For office
	Total		**0.075**	**34**	**11.93**	

Grand Total	**64.01**

Institute Level Fund - Institute Development Fund

A) Refurbishment

Name of Department - Institute

Sr. No.	Proposed Item	Area Details	Estimate Amount (Rs. In Lacs)	Justification
1	RAILING on GF of main building with stainless steel pipes and teak wood hand rail	84.4 RMT	4.11	To discourage students from sitting in passage.
2	Chain link fencing from fluid mechanics lab upto compound wall near masur road with gate	75 RMT	1.86	To maintain dicipline in campus
3	DEAN R & D (CABIN & TOILET BLOCK) - fixing of mat, sliding windows, renoation of toilet block like tiles, plumbing, fixtures etc, colouring, pantry and partition with door	25.25 Sqm	1.65	Building is too old, since constructed in 1960. Refurbishment is essential.
4	Refurbishment of chemistry lab - including experiment tables, otte, plumbing, granite top, furniture for cubboards, water tanks etc	205.11 Sqm	5.75	Demand from chemistry department to cater need of new equipments and renoation. It was budgeted last year but was not done as academics going on .
5	Extension of platform (katta) with canopy for entrance near chemistry laboratory	10.85 Sqm	1.05	To provide entrance for new laboratory in science dept.
6	Robotics arena - Roof shed for between chemistry lab and MCA building - providing steel columnsincluding foundation, truss and with pre coated or poly carbonated sheet	130.50 Sqm	4.55	At present it is open to sky. So to provide working environment all over the year.
7	Roof top water harvesting - for all existing buildings in the campus water harvesting including repair and proving new gutters, downtake pipes, horzontal pipeline upto tank, construction of sumps or tanks or farm tanks etc	4210.57 Sqm	15.75	To make our premises a smart campus

8	Canopy for pathway between main building and MCA building - proving steel columns. Truss covered with precoated or polycarbonated sheet (3 m height)	149.46 Sqm	3.87	To povide connectivity covered passage in two building
9	Roof cover for Open Theater - providing columns in steel structure with pre coated sheets supported on truss including foundation etc.	1031.32 Sqm	10.75	To conduct college level events for the mob to thge tune of 2000 plus audience.
10	Class room no-4 - Providing brick work and plaster to two sides including teak wood door, flooring and alluminium partition alongwith ceiling in soundproof roof	45	2.17	To seperate language lab and cabin for 1 faculty from class room.
11	Fall ceiling & acousty of auditorium	250Sqm	10	
12	Alluminium windows to wxisting 3 windows of 1m x 2.1 m and 3 windows 2 m x 2.1 m.	18.9 Sqm	0.95	Most of the are having sliding windows and to maintain dust free environment to students.
Total			**62.46**	

Name of Department - Applied Mechanical

Sr. No.	Proposed Item	Area Details	Estimate Amount (Rs. In Lacs)	Justification
2	Concrete Technology and SM lab - Flooring in natural stone like Tandoor - Providing new flooring by replacing old one to concrete Technology and tutotial room	192.82 Sqm	1.97	To maintain clean and neat flooring in instructional area for students, since existing flooring is in broken condition. Moreover in-spite earning highest IRG in the institure this lab remained ignored for repair.
3	False ceiling and sliding windows to Applied Mechanics Lab - providing new false ceiling in 2'x2' gypsum sheet by removing old plywood ceiling, since in dangerous condition and also new sliding windows.	151.25 Sqm	3.87	Since existing false ceiling is very old and is in dangerous conditions making risky environment to work for students.
Total			**5.84**	

Name of Department - Applied Mechanical

Sr. No.	Proposed Item	Area Details	Estimate Amount (Rs. In Lacs)	Justification
1	Refrigration and air conditioning lab - removing of old tiles, providing new natural stone tiles (tandoor), partion and faculty cabins	100.00 Sqm	1.21	Old Flooring with lots off repair
2	Heat Transfer lab - removing of old tiles, providing new natural stone tiles (tandoor), partion and faculty cabins. Also sliding windows, removal of kattas and providing new platform in kadappa/marble.	136.00 Sqm	3.56	Old type flooring tiles For PG students For providing extra work space Old windows not working properly
3	Mesa Library - Providing alluminium partition with 2 doors of 8'height for departmental library	29.89 Sqm	0.82	Since existing false ceiling is very old and is in dangerous conditions making risky environment to work for students.
4	IHP Lab - providing alluminium partion with sound proof roof	23.22 Sqm	0.63	Partition for dynamic shaker
5	Design and Dynamics Lab - Alluminium partition, doors, faculty cabins in alluminium parttion and false ceiling of total laboratory	163.87 Sqm	5.05	Beautification of ToM and Mechatronics lab
6	PG building room - alluminium partition with one dooe of 3.1 m height	8.17 Sqm	0.22	for PG students
8	IC Engine Lab - removing old flooring tiles and providing new vetrified tiles	70.00 Sqm	0.57	Old Flooring with lots off repair
9	Path way from Mechanical to Workshop	125 m	5	
10	CIM Lab - removing old window panels, fitting broken glass to window panels, repair false ceiling and		0.15	regular maintainance
Total			**17.21**	

Name of Department - Mathematics

Sr. No.	Proposed Item	Area Details	Estimate Amount (Rs. In Lacs)	Justification
1	Providing alluminium partion with one door with door closure	11.43 Sqm	0.31	To seperate out two faculty cabins and to maintain privacy
Total			**0.31**	

Name of Department - Mathematics

Sr. No.	Proposed Item	Area Details	Estimate Amount (Rs. In Lacs)	Justification
1	Refurbishment of HoD cabin Removing wall mounted cuboard and providing cuboards in plywood and glass etc	16.85 Sqm	0.56	For providing extra work space
2	ITSA - Alluminium partition to seperate library and one faculty cabin of 8' height partition with one door	36.11 Sqm	1.02	No space is available for library and shortage of faculty cabins.
3	Toilet plumbing and drainage pipe to be made concealed and leakage problem	30.27 Sqm	0.5	To maintain cleanliness and elegence in the department
4	Sliding windows for whole department all windows for 30 windows including removal of old MS window panels	60.00 Sqm	2.97	To maintain cleanliness and dust free environment in the department
Total			**5.05**	

Name of Department - Electrical

Sr. No.	Proposed Item	Area Details	Estimate Amount (Rs. In Lacs)	Justification
1	Machine Lab - Shifting 2 faculty cabins to south side wall	27.00 Sqm	0.56	For providing extra work space and to fulfill demand of students of fitting blackboard
Total			**0.56**	

Name of Department - Civil

Sr. No.	Proposed Item	Area Details	Estimate Amount (Rs. In Lacs)	Justification
1	Faculty cabins (Geology lab=02 new and 01 refurbish ,Geotech.lab=02 refurbish,Fluid mech. Lab =01 refurbish Environmental=01 new,01 refurbish) Total =08	89.22 Sqm (each of 12 x10 feet)	2.5	Cabins required for new staff
3	Wash basins for faculty cabin (8 nos.)	-	0.4	For Laboratory and faculty cabins
4	Fluid mechanics lab-Elevated platform	6.5'x 1'x 2.5'	0.2	Elevated platform for tilting flume experiment set up for observation
5	Transportation Engineering lab-Shuttering	125 sq feet	0.3	Shuttering of underneath platform for equipments and accessories
Total			**3.4**	

Name of Department - Office

Sr. No.	Proposed Item	Area Details	Estimate Amount (Rs. In Lacs)	Justification
1	Storage floor (all old documents)	Account	1	Racks for storing Accounts documents
2	Vehicle maintenance	Institute	18.5	
Total			**19.5**	

Grand Total	**114.33**

B) Maintenance (office)

Sr. No.	Proposed Item	Expenditure per month	Expenditure for 2016-17	Budget For 2017-18 (In lakhs)
1	Water Expenses (Quarterly)	2.35	7.55	9.4
2	Electricity Expenses	3	28.37	36
3	Garden Development	Lumsum	0.8	4
4	Tab for Smart classroom	Rs. 2Lakhs per department		14
5	CC TV in class rooms & other buildings, like MCA, ENTC, PG & Workshops.	Lumsum	0	20
Total		**5.35**	**36.72**	**83.4**

Grand Total	**83.4**

e. Salary Fund:

Sr. No.	Post	No. of Posts	Honorarium per month	Expenditure 2016-17 (monthly)	Expenditure for 2016-17	Budget for 2017-18
1	Assistant Professor	18	0.21	3.78	45.36	45.36
2	Assistant Professor	2	0.11	0.22	2.64	2.64
3	Assistant Professor	3	0.16	0.48	5.76	5.76
4	Assistant Professor (Institute)	15	0.45	6.75	81	81
5	Assistant Professor (Institute)	1	0.35	0.35	4.2	4.2
6	Assistant Professor (Institute)	2	0.4	0.8	9.6	9.6
7	Adjunct Professor (Institute)	2	0.5	1	12	12
8	Adjunct Professor (Institute)	2	0.4	0.8	9.6	9.6
9	Adjunct Professor (Institute)	1	0.7	0.7	8.4	8.4
10	Account Manager	1	0.5	0.5	4.5	6
11	Account officer	1	0.27	0.27	2.43	3.24
12	Accountant	1	0.2	0.2	1.8	0
13	Account clerk	1	0.1	0.1	0.9	1.2
14	Administrative officer	1	0.36	0.36	1.08	4.32
15	Technical Asst	16	0.16	2.56	30.72	30.72
16	Tally operator	2	0.08	0.16	2.56	0.96
17	CNC programmer	1	0.095	0.095	1.14	1.14
18	Peon	2	0.19	0.38	4.56	4.56
19	Moodle co-ordinator	1	0.35	0.35	1.4	4.2
20	TPO Assistant	1	0.1	0.1	0.9	1.2
21	Workshop supri	1	0.21	0.21	2.52	2.52
22	PRA	1	0.15	0.15	1.8	1.8
23	System analysit	1	0.11	0.11	1.32	1.32
						0
	TOTAL	**77**	**6.155**	**20.425**	**236.19**	**241.74**

Outsources Services (salary)

Sr. No.	Post	Expenditure per month	Expenditure for 2016-17	Budget For 2017-18
1	Security (MESCO)	2.7	24	32.4
2	Cleaning expenses	0.79	8	9.48
3	Worker supplyers	1.25	1.15	15
4	Gardening worker	0.25	2.01	3
5	Global Engg & contr. (Electrician)	0.11	0.97	1.32
TOTAL		**5.1**	**36.13**	**61.2**

Grand total **302.94**

Institute Level Fund : Gymkhana

Details of Expinditure(Furniture)				
Branch/ Intake	**Proposed Furniture with specifications**	**Quantity Required**	**Estimated Unit Rate (Rs.in Lacs)**	**Estimated Amount (Rs.in Lacs)**
1	2	3	4	5
Dean Student Affairs Office	Office Table With four drawers	01	0.5	0.5
	Table Glass wih green table cloth	01	0.04	0.04
	Revolving Chair	01	0.15	0.15
	Plastic Chairs with cusion	10	0.035	0.35
	Computer Table	01	0.04	0.04
	Steell Cupboard (Full Size) or Wardrob	4	0.07	0.35
	Steell Cupboard (Small Size)	01	0.05	0.05
	Mirror (Big Size) 2X5	01	0.02	0.02
			Total in Lacs	**1.5**

Name of The Department: Gymkhana (Nonrecurring)			
Sr.No.	**Proposed Item with specification**	**Estimated Amount (Rs. In Lacs)**	**Justification**
1	Dean Office Furniture (Details attached sheet attached)	1.5	Dean Office Furniture
2	Water Supply on Ground	0.5	To provide water connection on ground(Pipeline etc.)
3	Fencing to ground	1.5	To construct fencing to ground to avoide transpassenger vehicles.
	Total Rs. Lacs	**3.5**	

Name of The Department: Gymkhana (Recurring)			
Annual Budget for the year 2017-18			
Sr.No.	**Proposed Item with specification**	**Estimate Amount (Rs. In Lacs)**	**Justification**
1	Annual Collaege Day	**3**	Celebration of Annual College Day/ Students cultural activities
2	College Magazine	**3**	Publication of College Magazine
3	Sports Material	**3.5**	Purchase of sports material reqiuired for different Games.
4	Sports Kits(T Shirt, Pant) Track Suits	**1**	To provide Colors (T shirt, Pant) to players
5	Ground Maintanence material, Labour etc.	**1.5**	Repaire and Maintenance of Play Ground, clay, Labour charges etc.
6	Sports TA/DA	**2.5**	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	**2**	To conduct cultural programme during academic year
8	Ladies Activities	**0.5**	To conduct lady student activities/ programme during academic year
9	Blazers to Student Council	**0.4**	To provide Blazers to student council members
10	Remuneration of supporting staff	**2**	Remuneration to Physical Instructor & Gymkhana Peon
11	P. A. System	**1**	To purchase Public Adress System to install in Auditorium (Presently there is no any such arrengement)
12	Musical Instruments, Camera purchase (Octapad, Dholaki, Mridangam, Electric Guitar, Flutes, etc.) and Maintenance of Instruments	**3**	To purchase Musical Instruments to use of Cultural Events team
13	Miscellaneous	**0.8**	For hospatilities, Stationary, Cartridge, Photographs, repairs other minor purchases etc.
Total Rs. Lacs		**24.2**	

GRAND TOTAL A	**29.2**

List of Refurbishment for 2017-18

Sr. No.	Proposed Item	Area Details	Estimate Amount (Rs. In Lacs)	Justification
1	New Basket Ball ground - excavation, concrete flooring, posts, colouring etc	45.64 Sqm	7.35	Demand from students since last 2 years
2	Student Activity Centre (50% of total estimated cost of Rs. 163.35 Lakhs.)	Possible to quote after BWC meeting (likely to held on 27 or 28 Feb 2017)	80	Students need space for indoor games & for conducting different activities. Total cost of centre and devlopment of play ground is 20 cr.out of which cost of centre is 850 lakhs which will be done in phases.first phases of 150 lakhs. A loan of Rs-70 Lakhs in corpus is proposed
GRAND TOTAL B			**87.35**	

TOTAL (A+B)	**116.55**

Central Library

Proposed Budget for 2017-18

3. State Government Plan Library :

Sr. No.	Component	Budget (Rs. In Lakhs)	Remark
1	Development of Library	1	List Enclosed (Annexure A)
2	Book Bank	1	List Enclosed (Annexure B)
Total		2	

4. Development of Library/ Book Bank: to be demanded from Social Welfare

Sr. No.	Component		Budget (Rs. In Lakhs)	Remark
1	Book Bank :SWBC		4	List Enclosed (Annexure C)
Total			**4**	

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

8. Library Fee : to be submitted by library dept.

(Books/Furniture, Journals, Software & equipments, refurbishment)

Library Books :

Sr. No.	Author	Title	Publisher, Cost,Copies	Total Cost
1	Development of Library	Separate list attached		5
2	Book Bank			2.5
Total				7.5

Journals

Sr. No.	Name of Journal	Type (Online / Hard Copy)	Quantity	Subscription (Rs. In Lakh)
1	IEEE-IEL Growth Plan	Online	180+	32
2	ASCE	Online	37	3
3	ASME	Online	28	2.5
4	Springer	Online	586	6
5	Elsevier-Science Direct	Online	275	6.5
Total				50

Print Journals				
Sr. No.	**Name of Journal**	**Type (Hard Copy)**	**Quantity**	**Subscription (Rs. In Lakh)**
	CIVIL			
1	NICMAR Journal of construction Management	Jan To Dec 2017	4	0.02
2	Environmental Pollution control Journal	Jan To Dec 2017	6	0.01
3	IEJ: Civil, Architectural Engg., Environmental Engg.,agricultural Engg.,(Series A)	Jan To Dec 2017	4	0.6
4	TERI Information Digest on Energy & Environment	Jan To Dec 2017	4	0.02
5	Indian Geotechnical Journal	Jan To Dec 2017	4	0.03
6	Indian Road Congress	Jan To Dec 2017	4	0.01
7	Indian of Water Works Association Journal	Jan To Dec 2017	4	0.01
8	Indian Concrete Journal	Jan To Dec 2017	12	0.02
9	Journal of Structural Engineering	Jan To Dec 2017	6	0.02
10	ACI Structural Journal	Jan To Dec 2017	24	0
11	ACI Material Journal	Jan To Dec 2017		
12	ACI Concrete Journal	Jan To Dec 2017		
13	New Building Materials & Construction World	Jun17 To May 18	12	0.02
14	Bulletin of Material Science	Jan To Dec 2017	6	0.01
15	Indian Journal of Engineering & Materials Sciences	Jan To Dec 2017	6	0.02
16	Journal of Environmental Science & Engineering	Jan To Dec 2017	4	0.02
17	Journal of Geological Society of India	Jan To Dec 2017	12	0.06
	Electrical			
18	IEJ: Electrical, Electronics & TC, Computer, (Series B)	Jan To Dec 2017	4	0.06
19	Journal o Energy Storage & Conversion	Jan To Dec 2017	2	0.03
20	Electrical India	Jun17 To May 18	12	0.02
21	Power line	Jan To Dec 2017	12	0.02
22	JI of Inc'l Asso.on Electricity Generation Transmission & Distribution	Jan To Dec 2017	2	0.01
23	Power Engineering Journal	Jan To Dec 2017	2	0.01
	ELECTRONICS & TELECOMMUNICATION			
24	International Journal of Electronics & Telecommunications	Jan To Dec 2017	2	0.03
25	IUP Electrical & Electronics Engineering	Jun17 To May 18	4	0.01
26	Electronics For You	Jun17 To May 18	12	0.01
27	Telnet	Jun17 To May 18	12	0.02
28	IUP Telecommunication	Jun17 To May 18	4	0.01

	MCA			
29	International journal of computer Science and Information Technology	Jan To Dec 2017	2	0.03
30	International journal of Information Technology and Database Systems	Jan To Dec 2017	2	0.03
31	International journal of Intelligent Information Processing	Jan To Dec 2017	2	0.03
32	International journal of information Analysis and Processing	Jan To Dec 2017	2	0.03
33	International journal of Applied Artificial Intelligence in Engineering System	Jan To Dec 2017	2	0.03
34	International journal of Computational Intelligence Research and Applications	Jan To Dec 2017	2	0.03
35	International journal of Computer Engineering and Software Technology	Jan To Dec 2017	2	0.03
36	International journal of Computer Science and Communication	Jan To Dec 2017	2	0.03
37	International journal of Soft Computing and Bioinformatics	Jan To Dec 2017	2	0.03
38	International journal of Image Processing and Applications	Jan To Dec 2017	2	0.03
39	Linux for You (Now:Open Source For You)	Jun17 To May 18	6	0.02
40	Digit	Jun17 To May 18	12	0.03
41	Data Quest	Jun17 To May 18	24	0.03
42	Developer IQ	Jun17 To May 18	12	0.03
	I.T			
43	Indian Journal of Networks and Applications	Jan To Dec 2017	2	0.03
44	Indian Journal of Advances in Computer Science and Technology	Jan To Dec 2017	2	0.03
45	Indian Journal of Information Security and Computer	Jan To Dec 2017	2	0.03
46	Indian Journal of Wireless and Mobile Communication	Jan To Dec 2017	2	0.03
47	Indian Journal of Computing and High Speed Networks	Jan To Dec 2017	2	0.03
48	Indian Journal in Computer Simulation	Jan To Dec 2017	2	0.03
49	CSI Communications	Jan To Dec 2017	12	0.01
	Mechanical			
50	IEJ: Mechanical, Production, Aerospace, Marine Engg.(Series C)	Jan To Dec 2017	4	0.06
51	Manufacturing Technology Today (CMTI)	Jan To Dec 2017	12	0.01
52	Journal of Scientific & Industrial Research	Jan To Dec 2017	12	0.04
53	Journal of Entrepreneurship	Jan To Dec 2017	2	0.03
54	Overdrive	Jun17 To May 18	12	0.02
55	Journal of Space Craft Technology	Jan To Dec 2017	2	0.01
56	IEJ-Metallurgical & Material / Mining Series	Jan To Dec 2017	2	0.03

	Science			
57	Pramana Journal of Physics	Jan To Dec 2017	12	0.01
58	Resonance (Journal of Science)	Jan To Dec 2017	12	0.01
59	Advances in Fuzzy Mathematics	Jan To Dec 2017	3	0.03
60	Indian Journal of Physics	Jan To Dec 2017	12	0.06
	Interdisciplinary			
61	Indian Journal of Technical Education (ISTE)	Jan To Dec 2017	4	0.01
62	University News	Jun17 To May 18	52	0.01
63	Frontline	Jun17 To May 18	26	0.01
64	Outlook	Jun17 To May 18	52	0.02
65	Readers Digests	Jun17 To May 18	12	0.01
			Total Rs-	2.37
		Proposed Amount- Rs.		**2.5**

c. Maintenance Fund

Name of Dept.: Central Library

Sr. No.	Details of Repairs/ Material & Supply/ Maintenance, AMC, lab consumables, spares,	Unit Cost	Qty	Total (Rs. in lacs)
1	**Slim21 AMC (Slim S/W Support & Upgradation)**	**0.25**	**1**	**0.25**
2	**Xerox M/C AMC (Maintenance)**	**0.05**	**1**	**0.05**
3	**Computer AMC**	**0.025**	**50**	**1.25**
4	**CCTV AMC**		1	**0.25**
Total				**1.8**

Recurring Expendiure

Sr No	Particulars	Estimated Unit Rate (Rs. In Lakh)
1	Newspapers, Periodicals and Magazines	1
2	Binding: Books & Journals, Lib. Stationary	1
3	Manpower (Skilled 2 & Unskilled 4)	5
4	Renumeration for Earn & Learn Scheme	2
5	Identity Cards	0.3
	Total	**9.3**

Summary

Sr.No	Particulars	Expenditure (Rs. In Lakh)	Total (Rs. In Lakh)
1	**3.State Government Plan Library**	2	**2**
2	**4.Development of Library/Book Bank: to be demanded from Social Welfare**	4	**4**
	Total	**6**	**6**
3	**8.Library Fee : to be submitted by library dept.**		
	Library Books :	7.5	**7.5**
	Journals		**52.5**
	Journals Online	50	
	Print Journals	2.5	
	Maintenance Fund	1.8	**1.8**
	Recurring Expendiure	9.3	**9.3**
	Newspapers, Periodicals and Magazines		
	Binding: Books & Journals, Lib. Stationary		
	Manpower (Skilled 2 & Unskilled 4)		
	Renumeration for Earn & Learn Scheme		
	Total	**77.1**	**77.1**

ISTE

Expected Income in 2017-18			
Student Admitted to	**No. of Student**	**Fee Collection**	**Total Fee (in Rs)**
F. Y. B.Tech	300	250	0.75
DSE	72	200	0.144
MCA	30	200	0.06
M. Tech	125	150	0.1875
Total Expected Income in Rs.			**1.1415**

Expected Expenditure in 2017-18			
Sr. No.	**Department**	**Activity**	**Budget (in Rs)**
A. Central Activity			
1	Avishkar	Sponsorship for Technical Event	25000
2	Common Program	Lecture on Preparation of Competative Exams, Higher Study Exams, Stress Managemenet, Persnolity Devolopment etc.	25000
B. Department wise Activity			
3	Civil	Lectures on Selection of project/dessertstion topic, preparation of Project/dessertation report, industrial and subject oriented Expert Lecture.	7 X 7500
4	Mechanical		
5	Electrical		
6	Information Technology		
7	Electronic & Telecommunication		
8	Master of Computer Application		
9	M. Tech. (All Specialization)		
C. Institute Level Students/Faculty Assistance			
10	ISTE Students Convention	Participation Reg. Fee, TA/DA, Boarding	20000
11	Students Participation in Outside Competition		
12	Student ISTE Membership	Registration Fee	61470
Total Expenditure			**1.84**

Training & Placement: to be submitted by TPO dept.

Budget of T&P Cell for 2017-2018				
Sr. No.	**Item**	**Category**	**Proposed Expenditure** (Rs. in lacs)	**Remark**
Employability Enhancement Training				
1	Corporate Training	Aptitude / GD / Mock interview	4.2	70% of 400 students training with Rs1500 per student
2	Psychometric Test	To know students strengths and weaknesses	3.2	Rs 800/- per student remaining amount from students contribution of 400 students
3	Add on courses / Online certification courses / Finishing Courses	Particular programming skill / specialised training to boost employability in particular area of demand	7.5	1.5 lakh will be allotted to each department. Department according to need of skill and available certification will decide the course. It will be monitored by department TPO coordinator
4	Leadership Lectures	Eminent persons from Industries / Corporate Sector / Govt.	1.8	3 expert sessions per semester for all branches 3*2*.3
5	Students Finishing Workshop	Hands on skill	4.8	2 workshop per class per semester for 6 branches with 0.20 per session 1*2*6*0.2
6	GATE Coaching	Boost for career to deserving students	5	For total 100 students. **20 meritorious students** from each class training with Rs 5000 per student
7	Career Counselling Program	Career in Other than core companies	1.2	2 programs per semester for Competitive exams, Opportunities in Research, Banks and Agriculture 4*.3

Industry Institute Interaction				
8	Industrial Visits,	Field Knowledge	6	2 visits per class per semester for 6 branches with .20 per session 2*2*6*0.2 and for 1 for PG students 6*.1*2
9	IEB Meeting	Outside Interaction	2.4	one meeting in each semester for 6 branches 2*6*.2
10	Expert Lectures	Eminent persons from Industries / Corporate Sector / Govt.	3.6	2 expert sessions per class per semester for 6 branches with .05 per session 6*3*4*0.05
11	Faculty visit to industry	To know current status of technology use	3.6	Each department will arrange 3 Faculty Industrial Visit in a semester. Group of 5 faculty will visit industry on Saturday / Sunday 3*2*6*.1
Placement				
12	Phone	Office Expenses	0.1	
13	Membership Fees (CII, MACCIA etc.)	CII, MACCIA etc.	0.5	
14	Tea, Break fast for Guests	For Guests	0.5	
15	Lunch and Hospitality for placement	Placement	2	
16	TA DA for TPO staff to attend placement drives, CII. MCAIA, NASSCOM meetings		1.2	
17	Latest LED TV, Camera, Mic system, TAB	Arrange for interview through Video Conferencing	1.6	Some companies are taking demanding such interviews
18	Misc. (TPO Brochure, paper, books Xerox, cartridges etc.)	Office Expenses	1	
19	TPO- assistant Staff Salary	Office Expenses	2	
Total			**52.2**	

TEQIP Budget 2017-18

Sr.No	Key activities	Total Allocation	Expected Receipt during 2017-18	Budget for 2017-18
1	Procurement of Goods (equipment, furniture, books LRs, software and minor items) and civil works for improvement in teaching, training and learning facilities	350	100	100
2	Improvement in Teaching, Learning and Research competence'			
	Improve student learning	70	20	20
	Student employability	70	20	20
	Increasing faculty productivity and motivation	70	20	20
	Establishing a twinning system, Twining arrangements with institutions under Sub-component 1.1 to build capacity and improved performance. Individual institutional mentors	70	20	20
3	Incremental Operating Cost	70	20	20
	Total	**700**	**200**	**200**

EXAMINATION CELL

Expenditure			
11. Examination Cell (COE)			
Budget provision for various activities to be conducted during 2017-18			
Sr. No	**Events**	**Details**	**Expected Budget (Rs. in lacs)**
1	Remuneration to Paper setters	Total subjects for I Yr B.Tech, M.Tech and MCA of two sem = 248@ Rs 1000/	5.1
2	Assessment work	Tot.Ans book for S-17, ST-17 &W-17= 11100 @ Rs. 9/-	0.999
3	Hanorarium for practical Exam. (Ext. Exam) at dept. level	2 Ext. Exam per programs, total= 52 @ Rs-1500	0.78
4	Hanorarium to Exam cell functionaries and Dean Acd.	Dean acad, CoE, Printring Cord, Setting Cord. Assessment Cord .. Rs-31500 per exam.	0.945
5	Hanorarium for Theory Exam. (Ext. Exam) at dept. level	Rs-7000/- Per Exam per dept- S-17= 35000, ST-17=15000, W-17= 35000	0.85
		a) SubTotal	8.674
	Consumable		
5	**Stationary :** Xerox papers**,** ESE/ Class test-Answer book, supplements and other exam stationary	As per requirement	3.2
6	Xerox m/c & Printer Catridges and refiiling for Printing of Q.P and other laser printers	Catridges: Xerox m/c : 01 no, Printers: 02	0.2
		b) Sub Total	3.4
	Procurement (Dead stock items)		
7	Procurement of Ext. Hard disc		0.1
8	Procuremenet of Printer (Laser Jet 02 nos) @ Rs. 15000/-		0.3
		c) SubTotal	0.4
		Total (a+b+c)	**12.474**

Outsource services

Sr. No	Type of Services	Expenditure per month	No. of Months	Budget for 2017-18
1	**MIS Operator**	**Rs. 15000.00**	**12**	**1.8**
Total				**1.8**

Details of reforms for the year 2017-18 (please include expenses on meeting, hospitality and other reforms)				
Name of Dept.				
Sr. No.	**Details of reforms (BoM/ FC/ BWC/ AC/ APEC/ BoS meetings etc.)**	**Expenses per meeting**	**Number of Meetings**	**Total Cost lacs**
1				
2	Graduation Ceremony Expences		1	2
3	Conduct of APEC Meetings	500	5	0.025
Total				**2.025**

Exam						
d. Maintenance Fund : (Maintenance, Semi consumables and Consumables)						
Name of Dept.: Dean Academics						
Sr. No	**Name of Dept**	**Details of Repairs/ Material & Supply/ Maintenance, AMC, lab consumables, spares,**	**Unit Cost**	**Quantity**	**Total(Rs. in lacs)**	**Justification**
1	Xerox Papers	A-4,125 rim	0.0016	125	0.2	Day to day consumables
2	Tonner(Refill+ New)	4 New, 15 refill			0	Day to day consumables
3	Pen Drive		0.005	4	0.02	For Every Staff
4	USB Hard Disk		0.05	2	0.1	Storing Info
5	Calculater		0.003	10	0.03	Office tool
6	Other consumable stationary items Including Pen, Pencil, Stepler, Pins, Files, Ink Pad etc	LS	2	1	2	Day to day consumables
7	UPS Maintenance	LS	0.015	1	0.015	AMC
8	Table cloths		0.005	6	0.03	On Cleark Tables
9	Wall Clock		0.0025	2	0.005	For Office and Dean Cabin
10	Wireless Bell		0.002	3	0.006	For Cabins
11	Curtains		0.03	8	0.24	For Office
12	Dustbin		0.0025	6	0.015	For Office
13	Tea Cups+Tray		0.025	1	0.025	For Office
14	Coll Water Jar		0.002	2	0.004	For Office
Total					**2.69**	

Examination Fees (Fund)					
c. Equipment Replacement Fund : (For equipments, Furniture, minor refurbishment)					
Dean Academics					
List of Equipment for the year 2017-2018					
Sr. No.	**Proposed Item with specification**	**Qty. Required**	**Estimated Unit Rate (Rs. In Lacs)**	**Estimate Amount (Rs. In Lacs)**	**Justification**
1	LCD Projector	1	0.5	0.5	For Meetings
2	Shriding machine	1	0.6	0.6	Paper cutting
3	Punching Machine	5	0.008	0.04	Heavy Duty for Big size Punch
4	Desktop computers	5	0.4	2	Office work
5	Heavy Duty Scanner	2	0.4	0.8	Office work
6	Coppier Machine	1	2.5	2.5	For Examination Work
7	Dedicated Server for Academic use	1	3	3	Dediated server for Academic Section
Total				**9.44**	

List of Furniture for the year 2017-18					
1	Notice boards	2	0.03	0.06	
2	Documment Storage for Dean Office and Examination	2	2	4	
3	Water Cooler	1	0.15	0.15	
4	Chairs and Cussions	15	0.04	0.6	
5	Cupboards	10	0.1	1	
6	White Board	3	0.05	0.15	
Total				**5.96**	

GOVERNMENT COLLEGE OF ENGINEERING KARAD-415124.

Recommended Book List for 2017-18

Sr. No.	Title	Author	Publisher	ISBN	Qty	PRICE	Amount
	Civil						
1	Concrete Technology	M. S. Shetty			5	450	2,250
2	Concrete Technology	M. L. Gambhir			5	550	2,750
3	Concrete Technology	A. M. Neville			5	650	3,250
4	Concrete Technology	Orchard Asia			5	750	3,750
5	Limit State Design of reinforced concrete	P.C.Varghese			5	475	2,375
6	Concrete Technology	Handoo, Puri& Kaila			5	400	2,000
7	Concrete Technology	R. S. Varshnay			5	650	3,250
8	Concrete Technology	K. T. Krishnaswamy			5	750	3,750
9	Concrete Technology	V. N. Vazirani			5	800	4,000
10	Surveying and Levelling Vol. I and II	T.P Kanetkar and S.V. Kulkarni			5	500	2,500
11	Surveying Vol., I, II and III	Dr. B.C. Punmia			5	550	2,750
12	Surveying Vol., I&II	S. K. Duggal			5	650	3,250
13	Surveying and Levelling	R. Agor,			2	500	1,000
14	Surveying and Levelling	N.N. Basak			2	450	900
15	Surveying Vol., I, II and III	Dr. K.R. Arora			2	575	1,150
16	Text Book of Soil Mechanics in Theory and Practice	Alam Singh			5	650	3,250
17	Soil Mechanics and Foundation Engineering	V. N. S. Murthy			5	750	3,750
18	Geotechnical Engineering	P. Purushottam Raj			5	475	2,375
19	Soil Mechanics and Foundations	B. C. Punmia			2	650	1,300
20	Soil mechanics	Terzaghi and Peak			2	1,000	2,000
21	Soil Mechanics and Foundation Engineering	K.R. Arora			2	600	1,200
22	Geotechnical Engineering	B. J. Kasamalkar			5	600	3,000
23	Geology of India Vol.-I&II	M. Ramakrishnan and R. Vaidyanathan			1	600	600
24	Fluid Mechanics	A.K. Jain			2	400	800
25	Fluid Mechanics	S. Nagrathanam			5	450	2,250
26	Elementary Fluid Mechanics	H. Rouse			2	100	200
27	Fluid Mechanics	Shames			2	450	900
28	Fluid Mechanics	S. Ranmamurtham			5	650	3,250
29	Fluid Mechanics and Hydraulic Machines	Dr. R.K.Bansal			2	500	1,000
30	Fluid Mechanics	Streeter and Wylie			1	1,000	1,000
31	Fluid Mechanics	John F. Douglas			2	1,000	2,000
32	Flow in open channel	V. T. Chow			1	1,000	1,000
33	Flow in open channel	K. Subramanyam			1	1,200	1,200
34	Fluid Mechanics (SI Version)	Fox, Mc Donald and Pritchard			1	1,000	1,000
35	Fluid Mechanics (SI Version)	Munson, Okiishi, Huebsch and Rothmayer			1	1,000	1,000
	Applied Mechanics						
36	Fundaments of Airodynamics(SES)	Anderson	Mc Graw Hill Education	9780070700123	5	795	3,975
37	Aircraft Performance & Design	Anderson	--do--	9780070702455	5	895	4,475
38	Aircraft Basic Science	Kroes	--do--	9780070701274	5	960	4,800
39	Finite Element Analysis (SIE)	Buchanan	--do--	9780070601727	5	450	2,250
40	An Introduction To Finite Element Methods	Reddy ,J.N.	--do--	9780070607415	5	525	2,625
41	Intermediate Structural Analysis	Wang	--do--	9780070702493	5	525	2,625

42	Mechanical Vibrations	Gowda	--do--	9781259006173	5	295	1,475
43	Mechanical Vibrations(Schaum's Outline Series)	Kelly	--do--	9780070616790	5	540	2,700
44	Vibrations & Acoustics	Sujata	--do--	9780070748789	5	695	3,475
45	Energy & Finite Element Methods in Structural Mechanics	Shames,Irving, H.	New AGE International(P) ltd	81-224-0749-5	5	295	1,475
46	Thin Shell Structural Classical & Modern Analysis	Bandopadhyay J.N.	--do--	81-224-0639-9	5	550	2,750
47	Elementary Mechanics Of Solids	Singh P.N.	--do--	0-85226-819-3	5	1,980	9,900
48	Mechanics Of Materials	Swarup , Adarsh	--do--	81-224-3225-1	5	495	2,475
49	Vibrations & Stability	Thomson,Jon J.	--do--	81-8128-559-1	5	995	4,975
50	Finite Element Methods (for Structural Engineers)	Wail N.Al-Rifaie	--do--	81-224-2410-2	5	160	800
51	Applied Elasticity	Xu,Zhilum	--do--	81-224-0059-5	5	300	1,500
52	Engineering Mechanics(WBUT)	Bhavikatti S.S	--do--	81-224-3507-8	5	195	975
53	Theory Of Plates & Shells	Bhavikatti S.S	--do--	81-224-3423-1	5	499	2,495
54	Analysis Of Thin Concrete Shells	Chandreshekhara,K.	--do--	81-224-0797-6	5	650	3,250
55	Textbook of Engineering Geology	N CHenna Kesavulu	Macmillan	0230-63870-8	10	275	2,750
56	Advances In Structural Engineering, Vol.I	V. Matsagar (Ed)	Springer	978813222189-0	1	24,430	24,430
57	Advances In Structural Engineering, Vol.II	V. Matsagar (Ed)	Springer	978813222192-0	1	27,930	27,930
58	Advances In Structural Engineering, Vol.III	V. Matsagar (Ed)	Springer	978813222186-0	1	27,930	27,930
59	Plates, Laminates and Shells Vol 52	Lewinski T and Telega J J	World Scientific	97881023206-1	1	15,680	15,680
60	An Introduction To Mathematical Theory of Vibrations of Elastic Plates	Mindlin R D	World Scientific	9789812703811	1	5,810	5,810
61	Asymptotic Theory of Anistotropic Plates and Shells	Lenser Aghalovyan, D Prikazchikov	World Scientific	9789814579025	1	8,750	8,750
62	The Calculus of Vibrations and Functional analysis, Vol 12	Lionid P Lebedev, Michael J Cloud	World Scientific	9789812385819	1	13,020	13,020
63	The Mechanics of Piezoelectric Structures	Jiyashi Yang	World Scientific	9789812567017	1	9,520	9,520
64	Fundamentals of Engineering Geology	F. G. Bell	Butterworth & Co	978-0-408-01169-3	5	467	2,335
65	PHYSICAL GEOGRAPHY	savindra singh	Prayag Pustak Bhavan	9788186539293	5	450	2,250
66	Groundwater Hydrology	D.K.Todd	John Wiley & Sons, Inc., USA	0 471 87616 X	5	675	3,375
67	Structral Geology logy	Marland Pratt Billings	PHICollege Div; 3 ed	138538468	1	5,281	5,281
68	Rutley's Elements Of Mineralogy	H. H. Read	CBS Publishers	45490066	5	600	3,000
69	The Principles of PETROLOGY	Tyrrell, G.W.	Science Paperbacks	978-0-412-21500-1	5	617	3,085
70	Geology of India : Vol: I	M Ramakrishnan and R Vaidyanadhan	Geological society of India	978-81-85867-98-4	2	1,500	3,000
71	Geology of India : Vol: II	M Ramakrishnan and R Vaidyanadhan	Geological society of India	978-81-85867-98-4	5	1,500	7,500
72	Surveying & Levelling (Part-I, II)	T.P.Kanetkar & S.V.Kulkarni			5	500	2,500
73	Surveying (Vol-I,II)	Dr.B.C.Punmia,Ashok K. Jain, Arun K. Jain			5	600	3,000
74	Basic Civil Engineering	G.K.Hiraskar			10	500	5,000

75	Mechnics of Engineers : Statics and Dynamics	Ferdinand P. Beer E. Russell Johnston	MacGraw Hill Education		2	3000	6,000
76	Engineering Mechnics : Statics and Dynamics	Irving H. Shames	Prentice Hall India	978-0133569247	2	2500	5,000
77	Egineering Mechanics: Dynamics	J. L. Mariam & L. G. Kraige	John Willey and Sons		2	3500	7,000
78	Engineering Mechanics	Ferdinand L. Singer	Jooanna Cotler Books	10-0063564750	2	2000	4,000
79	Engineering Mechanics	Archie Higdon & William B. Stiles in collaboration with A. W. Davis & H. O. Ostrud	Prentice Hall Civil Engg & Engineering Mechanics Series		2	950	1,900
80	Schum's Outline of Engineering Mechanics Statics	E. W. Nelson C. L. Best W. G. MacLean M. C. Potter	MacGraw Hill Education		1	5000	5,000
81	Engineering Mechanics (In SI Units)	S. P. Timoshenko , D. H. Young , J. V. Rao , Sukumar Pati	MacGraw Hill Education		2	508	1,016
82	Engineering Mechanics:Statics and Dynamics (In SI Units)	R. C. Hibbeler	Pearson Education India		2	555	1,110
83	Engineering Mechanics:Statics and Dynamics	Irving H. Shames G. Krishna M. Rao	Pearson Education India		2	750	1,500
84	Solid Mechanics	Dym Clive L. , Shames , Irving H.	Springer Variage New York		1	3575	3,575
85	800 Solved Problems in Vector Mechanics for Engineers i)vol I	Joseph F. Shelley	MacGraw Hill Education		2	1675	3,350
86	800 Solved Problems in Vector Mechanics for Engineers Vol II	Joseph F. Shelley	MacGraw Hill Education		2	1675	3,350
87	Concrete Bridge Practice	Dr. V. K. Raina	Tata MacGraw Hill		2	450	900
88	Essentials of Bridge Engineeri	D. Johnson Victor	Oxford and IHB Publication		2	750	1,500
89	Design of Bridge Structures	Jgadish J. R. , Jayaram	Prentice Hall India		2	450	900
90	Advanced Reinforced Concret	N. Krishnaraju	CBS Publication		2	575	1,150
91	Concrete Bridge Design	R. E. Rowe , John Will	Applied Science Publishers Ltd		2	675	1,350
92	Bridge Engineering	S. Ponnuswamy	MacGraw Hill Publication		2	550	1,100
93	Introductory finite element method.	Desai, C. S.	CRC Press		1	4500	4,500
94	Finite Element Method (Fourth Edition)	O. C. Zienkiwicz & R. L. Taylor	MacGraw Hill Publication		1	5500	5,500
95	Concept and applications of finite element analysis	R. D. Cook	John Willey and Sons		1	2475	2,475
96	Introduction to finite element in engineering	T. R. Chandrupatla, Belegundu	Prentice Hall Publication		2	675	1,350
97	Finite Element Method Basic Techniques & Implementation	John N. Rossetos			1	3375	3,375
98	Matrix and finite element ana	Mukhopadhyay, M., & Sheikh, A. H.	New Delhi: Ane Books.		2	750	1,500
99	Solid Mechanics : A variational approach	Clive L. Dym & Irving H. Shames	Springer	978-1-4614-6033-6	2	1250	2,500
100	Theory of Elasticity	Sadhu Sing	Khanna Publications, Delhi		2	450	900
101	Theory of Elasticity	Timoshenko & Goodier	Tata McGraw Hill		2	350	700
102	Applied Elasticity	Sadhu Sing	-		2	375	750
103	Theory of Plasticity	J. Chakraborty	Tata McGraw Hill		2	400	800
104	Theory of Plates and shells	Timoshenko & W. Kreiger	Tata McGraw Hill Publication		2	420	840
105	Applied Elasticity (2nd edition)	John Prescott	Dover Publication		2	950	1,900

106	Stress in Plates and shells	Ansel C. Urugal	Tata McGraw Hill		2	350	700
107	Matrix Analysis of Framed Structures	William Weaver And James M. Gere	Van Nostrand Reinhold Company Inc.		2	650	1,300
108	Theory and Applications of plate analysis	Rudoulph Szilard	John Willey & sons, Inc.		2	275	550
109	Thin Plates and shells	E. Vensel & T. Krauthammer	Marcel Dekker, Inc.	0-8247-0575-0	1	3600	3,600
110	Theory and analysis of Elastic Plates	J.N.Reddy	-		2	650	1,300
111	Mechanics of laminated composite Plates and shells (Theory and Analysis) 2nd edition	J.N.Reddy	C.R.C.Press		1	4980	4,980
112	Advanced Strength of materials	Enrico Voltera & J.H.Gaines	Prentice Hall Publication		2	675	1,350
113	Theory of anisotropic Plates : Strength, Stability and vibrations (2nd Edition)	S.A.Ambartsumyan	C.R.C.Press		1	5500	5,500
114	Theory of Plates	Chandrashekhara	Universities Press		2	729	1,458
115	Plates : Theories and Applications	K. Bhaskar	Ane Books Pvt. Ltd.		2	650	1,300
116	Theory of Plates and shells	S.S.Bhavikatti	New Age International Pvt. Ltd.		2	750	1,500
117	Structural Dynamics : Vibration and Systems	Mukhopadhyay	Ane Books Pvt. Ltd.		2	410	820
118	Basic Principles of Plates Theory	P.G.Lowe	Springer		2	950	1,900
119	Elements of Easrthquake Engineering	Chandrashekhara	Sarita Prakashan		2	7500	15,000
120	Earthquake Resistant Design of Structures	Pankaj Agarwal & Manish Shrikhande	Prentice Hall India Learning Private Limited		2	450	900
	B Tech II Mechanical Engineering 2017-18						
121	Numerical Methods	Dr. B. S.Grewal			10	225	1,125
122	Numerical Methods	E. Balguruswamy			5	395	1,975
123	Applied Numerical Methods with MATLAB for Engineers and Scientists	S.C. Chapra			5	500	2,500
124	Numerical Analysis Theory and Applications	R. L. Burden and J. D. Faires			5	520	2,600
125	Applied Numerical Methods Using MATLAB	W. Y. Yang, W. Cao and J. Morris			5	675	3,375
126	Mechanics of Materials	Pytel and Kiusalaas			5	1,065	1,065
127	Mechanics of Materials	Gere and Timoshenko			1	500	2,500
128	Strength of Materials	G. H. Ryder			5	310	1,550
129	Strength of Materials	Ramamurtham			5	350	3,500
130	Strength of Materials	Dr. R. K. Bansal			10	375	1,875
131	Elements of Strength of Materials	S.P. Timoshenko and D.H. Young			5	275	1,375
132	Strength of Materials	Pytel and Singer			5	625	3,125
133	Turbomachines	B. U. Pai			5	550	2,750
134	Thermal Turbomachines	Dr. Onkar Singh			5	1,050	1,050
135	Fluid Mechanics	Streeter, Wylie, Bedford			1	750	3,750
136	Hydraulics, Fluid Mechanics and Machinery	Modi P N & Seth S N			5	275	1,375
137	Theory of Hydraulic Machinary	V.P. Vasandani			5	650	1,300
138	Turbines, Compressors & Fans	S.M. Yahya			2	700	700

139	Fundamentals of Turbomachinery	William W. Perg			1	475	2,375
140	Hydraulic Machines	Dr. J. Lal			5	325	1,625
141	Theory of Machines	Ratan S.S.			5	375	1,875
142	Theory of Machines	P. L. Ballany			5	350	1,750
143	Theory of Machines	Thomas Bevan			5	350	1,750
144	Theory of Machines	Shah and Jadhawani			5	525	2,625
145	Theory of Machines	Sadhu Singh			5	550	2,750
146	Mechanism and Machine Theory	G.S. Rao and R.V. Dukipatti			5	625	3,125
147	Theory of Machines and Mechanism	Shigley			5	1,000	1,000
148	Kinematic analysis and synthesis of mechanisms	Mallik, A. K, Ghosh			1	400	4,000
149	Introduction to physical metallurgy	S.H. Avner			10	600	3,000
150	Physical metallurgy	Vijendrasingh			5	2,000	4,000
151	Material science and engineering	W. D Callister			2	350	3,500
152	Material science and metallurgy for engineers	V.D. Kodgire			10	625	3,125
153	Heat Treatments Principles and Practices	T.V. Rajan / C.P. Sharma			5	675	3,375
154	Material Science and Engineering	V Raghwan			5	500	1,000
155	Surface Engineering for wear resistance	Kenneth G. Budinski			2	1,000	2,000
156	Engineering Metallurgy	R.A. Higgins			2	1,000	1,000
157	Physical Metallurgy for Engineers	D. S. Clark, W. R. Varney			1	700	700
158	Heat Treatment of Metals	J L Smith and SC Bhatia			1	600	3,000
159	Machine drawing	N.D. Bhatt and V.M. Panchal			5	500	2,500
160	Machine drawing	Basudeb Bhattacharyya			5	600	3,000
161	C Graphics and Projects	B. M. Havaldar			5	700	700
162	Mastering CAD-CAM	Ibrahim Zeid			1	1,000	1,000
163	Catia V5R10: For Engineers and Designers	Michele Chambers			1	700	14,000
164	Basic & Applied soil Mechanics	Gopal Ranjan	SciTech , 2nd Ed		20	500	2,500
165	Engineering Drawing	Jolhe Dhananjay	TMH		5	475	2,375
166	Engineering Graphics	Agrawal & Agrwal	TMH		5	350	1,750
167	Engineering Graphics	Arunoday Kumar	Tmx		5	500	2,500
168	Engineering Graphics Vol I	Dabhade M L	Vision		5	400	2,000
169	Engineering Graphics Vol II	Dabhade M L	Vision		5	400	2,000
	B Tech II Sem-IV Mechanical Engineering 2017-18						
170	Control Systems	A. Anand Kumar	PHI		15	475	4,750
171	Automatic Control Engineering	D. Roy and Choudhari	Orient Longman		20	625	6,250
172	Control System Analysis and Design	A. K. Tripathi, Dinesh Chandra	New Age, 1st Edition.		10	450	9,000
173	Analysis and Design of Control Systems using MATLAB	Rao V. Dukkipati	New Age		10	575	5,750
174	Fluid Power with Applications	Anthony Esposito	PHI 6th Edition.		20	575	5,750
175	Pneumatic Controls	Joji P.	Wiley India. , 1st Edition, 2009.		10	550	5,500
176	Fluid Power	Jagadeesha T.	Wiley Publications.		10	600	6,000
177	Introduction to Hydraulic and Pneumatics	S. Ilango and V Soundararajan	PHI, 2nd Edition.		10	875	8,750

178	Instrumentation Measurement and Analysis	B. C. Nakra, K. K. Chaudhry	MGH, 3rd Edition,2012.		10	500	20,000
179	Industrial Instrumentation and Control	S. K. Singh	TMH, Second Edition, 2005.		10	495	19,800
180	Mechanical Vibration, second edition	Austin Church	Wiely Eastern.		40	760	7,600
181	"Schaumm's Outline series in Mechanical Vibration"	Graham Kelly	6th Edition.		40	600	18,000
182	"Kinematics, Dynamics and Design of Machinery",	Waldron	Willey India, 2nd Edition.		10	5,000	5,000
183	"Mechanical Vibrations",	Singiresu S.Rao	Pearson Education -(2004).	81-297-0179-0	30	4,000	4,000
184	Applied Heat Transfer	V. Ganapathy	Penn Well Publishing Company, Tulsa, Oklahoma.		1	5,000	5,000
185	Process Heat Transfer	Sarit Kumar Das	Alpha Science International, 2005		1	6,500	6,500
186	Fundamentals of Heat and Mass Transfer	Incropera Dewitt	McGraw Hills Co.		1	5,500	5,500
187	Heat Transfer Equipment Design	R. K. Shah, Eleswarapu Chinna Subbarao, R. A. Mashelkar	CRC Press		1	6,700	6,700
188	THERMAL DESIGN OF HEAT-TRANSFER EQUIPMENT	Don W. Green; Robert H. Perry	McGraw Hills Co.		1	500	2,500
189	"Introduction to Work Study"	ILO, Geneva	IBH Pub. (2nd ed)		1	475	2,375
190	"Industrial Engineering"	L. C. Jhamb	Everest Publication		5	3,000	3,000
191	"Work Study"	O.P. Khanna	Dhanpat Rai,17th ed		5		
192	"Industrial Engineering Handbook"	H. B. Maynard	Tata McGraw Hill		1	1,000	1,000
	B Tech II Sem-IV Electrical Engineering 2017-18					550	5,500
193	Probability and Random Processes with Applications to Signal Processing	Stark and Woods			1	350	1,750
194	Instrumentation	Nakra and Chaudhari			10	250	500
195	Electronic Instrumentation	H. S. Kalsi			5	850	4,250
196	Electrical Measurement and Measuring Instruments	E. W.Golding and Widdies			2	650	3,250
197	Electronic measurements and Instrumentation	A. K. Sawhney			5	550	2,750
198	Modern Digital Electronics	R. P. Jain			5	450	2,250
199	Fundamentals of Digital Circuits	Anand Kumar			5	650	1,300
200	Digital Principles and Applications	Donald P Leach, Albert Paul			5	450	2,250
201	Digital Design	Morris Mano			2	900	4,500
202	Power System Analysis	Grainger John J			5	750	1,500
203	Modern Power System Analysis	I. J. Nagrath, D. P. Kothari			5	1,000	2,000
204	Power System Analysis and Design	J. D. Glover and M. Sarma			2	750	3,750
205	Electric Power Systems	Weedy B M, Cory B J			2	850	4,250

206	Power System Analysis	Hadi Sadat			5	1,200	2,400
207	Engineering and Scientific Computing with Scilab	Claude Gomez			5	1,000	2,000
208	Scilab	Philippe Roux			2	1,000	2,000
209	A Free Software to Matlab	H. Ramchandran			2	750	0
210	Scilab, Introduction, License, Applications	Gaby Alez			2	475	2,375
211	Objectives of Electrical Engg.	Mehta V K			5	500	2,500
212	Objectives of Electrical Engg.	Handa			5	550	1,100
	B Tech II Sem-IV INFORMATION TECHNOLOGY 2017-18					575	2,875
213	Compilers principles, techniques, & tools	Alfred V. Aho			5	500	1,000
214	Advanced Compiler Design Implementation	Steven S. Muchnick			5	1,000	1,000
215	Introduction to Systems Software	Dhamdhere, D.M			2	700	700
216	System Programming	Srimanta Pal			1	1,000	1,000
217	System Programming and operating systems	D.M. Dhamdhere			1	875	4,375
218	Lex & Yacc	Doug Brown, John Levine			1	750	3,750
219	Database System Concept	Henry F. Korth			5	625	3,125
220	Fundamentals of Database System	Elmasri & Navathe			5	500	2,500
221	Database Management System	RamKrishnan, Gehrke			5	1,000	1,000
222	Principles of DataBase Systems	J.D. Ullman			5	1,100	1,100
223	Database Design	Wiederhold			1	560	2,800
224	A first course in Database System	Jeffrey D Ullman			1	570	2,850
225	An Introduction to Database System	C. J. Date			5	725	3,625
226	Data communications and Networking	Behrouz A. Forouzan			5	350	1,750
227	Data and computer communication	William Stallings			5	400	2,000
228	Computer Networks	Andrew S.Tanenbaum			5	1,000	1,000
229	Digital and Analog Communication Systems	Shanmugam K			5	1,000	1,000
230	Data Communications	Gupta P			1	1,000	1,000
231	Introduction to Data Communications and Networking	Wayne Tomasi			1	650	3,250
232	Data Communications and Networks	Godbole			1	500	1,000
233	Introduction to Automata Theory, Languages, and Computation	Hopcroft, Motwani, Ullman			5	1,000	1,000
234	Introduction to the Languages and the Theory of Computation	John.C.martin			2	1,000	1,000
235	An Introduction to Formal Language and Automata	Peter Linz			1	500	1,000
236	Introduction to the Theory of Computation	Michael Sipser			1	645	3,225
237	Theory of Computer Science	K.L.P.Mishra			2	600	3,000
238	Computer Architecture & Organization	J. P. Hayes			5	750	3,750
239	Computer Organization and Architecture	W. Stallings			5	1,000	2,000
240	Computer Architecture and Parallel Processing	Kai Hwang			5	1,000	2,000

241	Computer Organization	Hamacher Zaky			2	1,000	2,000
242	Computer Architecture & Organization An IntegAmountd Approach	Miles Murdocca			2	1,000	2,000
243	Computer Architecture and organization	Murdacca			2	1,000	2,000
244	Structured Computer Organization	A. Tanenbaum			2	1,200	2,400
245	IBM PC and Clones	B. Govindrajalu			2	650	3,250
246	Core Java- Volume I Fundamentals	Cay Horstmann			2	750	1,500
247	JAVA-The Complete REF.	Herbert Schildt			5	800	1,600
248	Core Java- Volume II Advanced Features	Cay Horstmann and Gary Cornell			2	900	1,800
249	JAVA - HOW TO PROGRAM	DeitelPaul, Deitel Harvey			2	700	3,500
250	A Programmer's guide to JAVA SCJP Certification	Khaleed Mughal and Rolf W.Rasmussen			2	850	1,700
251	Programming with Java A Primer	E. Balagurusamy			5	450	2,250
252	Java2 Programming Black Book	Steven Holzner			2	1,000	2,000
253	Data Structures & Algorithums For Gate Solutions To All Previous Gate Questionss Science 1991	Narsimha Karumanchi	9781468152975		5	850	4,250
254	Information Technology Project Management	Kathly Sehwalbe	-		5	925	4,625
255	Building Iot With Ipv6 & Mipv6	Daniel Minoli	-		5	1,800	9,000
256	Connecting To The Web	Hakima Chaouchi	-		5	2,000	10,000
257	Mastering Enterprise Java Beans	Ed Roman	John Wiley & Sons (2Nd Edition) [9 January 2002]	978-0471417118	5	995	19,900
258	Struts 2 In Action	Don Brown	Manning Publications,1St Ed.2008	978-1933988078	5	3,397	6,794
259	Software Testing	Yogesh Singh	Cambridge University Press,2011	978-1107012967	20	600	12,000
260	Information Storage & Management	Somasundaram	Wiley India Edition	978-0-470-61833-2	2	850	8,500
261	Mastering Cloud Coumputing	Buyya Rajkumar	TMH	9781259029950	10	550	5,500
	B Tech II Sem-IV E&TC ENGINEERING – 2017-18					650	3,250
262	Integrated Electronics	Jacob Millman			10	750	3,750
263	Op-Amp and Linear IntegAmountd Circuits	Ramakant A. Gayakwad			5	800	4,000
264	Electronic devices & circuit theory	Robert L. Boylsted			5	650	3,250
265	Microelectronics Circuits	Sedra smith			5	750	3,750
266	Operational Amplifiers and Linear IntegAmountd	Robert Coughlin			5	550	1,100
267	Linear IntegAmountd Circuits	D. Roy Choudhury			5	450	2,250
268	Circuit & Network – Analysis & Synthesis	A. Sudhakar			2	550	2,750
269	Circuit Theory (Analysis & Synthesis)	A.Chakrabarti			5	2,000	4,000
270	Electrical Circuit Analysis"	Soni Gupta			5	2,000	4,000
271	Circuit Analysis Theory and Practice	Allan Robbins			2	450	2,250
272	Basic Engineering Circuit Analysis	J. David Irwin,			2	350	1,750

273	Engineering Circuit Analysis	William H Hayt			5	450	2,250
274	Network Analysis	M.E.Van Valkenburg			5	650	3,250
275	Electronic Communication Systems	D. Kennedy			5	475	2,375
276	Principles of Communication Systems	Taub, Schilling and G.Saha			5	675	3,375
277	Communication Systems	B.P. Lathi			5	750	3,750
278	Communication Systems	A. Bruce Carlson			5	750	1,500
279	Communication Systems	S. Haykin			5	675	3,375
280	Electronic Communication	Roddy and Coolen			2	675	6,750
281	Signals & system	Hsu			5	475	2,375
282	Signals & system	Ramesh Babu			10	350	1,750
283	Signals & system	Simon Haykin			5	550	1,100
284	Fundamentals of signals & systems	Michael J. Roberts			5	600	1,200
285	Continuous and Discrete Time Signals and Systems	Mandal and Asif			2	680	3,400
286	Signals and Systems	Dr. D. D. Shaha			2	450	2,250
287	Signals Systems and Communication	B. P. Lathi			5	900	4,500
288	Engineering Electromagnetics	W.H Hayt. and J.A. Buck			5	850	4,250
289	Electromagnetic Field Theory and Transmission Lines	G. S. N. Raju			5	600	3,000
290	Electromagnetic Waves and Radiating System	E.C. Jordan			5	1,000	2,000
291	Elements of Engineering Electromagnetics	Rao, Edward C. Jordan			5	1,000	2,000
292	Electromagnetics"	J. D. Krauss			2	1,000	2,000
293	Fields and Waves in Communication Electronics	S. Ramo			2	1,000	2,000
294	Fundamental of Electromagnetic with MATLAB	K. E.Lonngren			2	650	3,250
295	HDL Programming	Nazeih M. Botros			2	750	3,750
296	Fundamentals of Digital Logic with VHDL design	Stephen Brown			5	1,000	2,000
297	Circuit Design with VHDL	Velnoi A. Pedroni			5	1,000	2,000
298	VHDL Programming by Examples	Douglas L. Perry			2	1,000	2,000
299	Principals of Digital System Design using VHDL	Charles S. Roth			2	2,500	12,500
300	A VHDL Primer	Jayram Bhaskar			2	650	1,300
301	Digital logic and microprocessor design	Enoch O. Hwang			5	650	3,250
302	Operations Research	S. D. Sharma			5	700	3,500
303	Mathematical Methods of Science and Engineering (Aided with MATLAB)	Kanti B. Datta			1	1,000	1,000
304	The 8051 Microcontroller & Embedded Systems using Assembly and C"	K. J. Ayala, D. V. Gadre			5	500	2,500
305	"8051 Microcontrollers: MCS51 family and its variants"	Satish Shah			2	1,000	2,000
306	8051 Microcontroller: Internals, Instructions, Programming and Interfacing	Subrata Ghoshal			2	1,000	2,000

307	The 8051 Microcontrollers: Architecture, Programming and Applications	K Uma Rao			2	1,000	2,000
308	An Engineering Approach to Digital Design	William I. Fletcher			1	1,000	1,000
309	Digital Electronics principles and IntegAmountd Circuits	Anil K. Maini			5	450	2,250
310	Electronic Instrumentation and Measurement	Rohit Khurana			1	1,000	1,000
311	Electronic Instrumentation and Measurement Techniques	Welfrick Cooper			2	1,000	2,000
312	Instrumentation for Engineers And Scientists	John Turner			2	1,000	2,000
313	Instrumentation for Engineering Measurements	James W Dally			1	1,000	1,000
314	Let us C	V. Kanetkar			5	550	2,750
315	C51 compiler user guide	Keil software			1	1,000	1,000
316	Data structure & algorithm analysis in C	Mark Allen Weiss			2	650	1,300
	MCA				2	550	1,100
317	E-Government From Vision To Implementation	Shubham Bhatnagar	Sage		2	550	1,100
318	Programing In C#	E Balguruswamy			2	550	1,100
319	Professional C#	Simon Robinson	Wrox		2	550	1,100
320	Principles Of Management	P.C.Tripati			2	550	1,100
321	Database Management System	Ramkrushan& Gehrke			5	550	2,750
	M Tech Elect				1	500	500
322	Neural Network design	Martin Hegan			1	500	500
323	Fuzzy Logic	T.T.Ross			1	500	500
324	Power system Operation and Control	P.S. Murthy			1	500	500
325	Power system Deregulation	Bhattachary			1	500	500
326	Fundamental Neural Network	Hekin			1	500	500
	Dean Academic Office						
327	Ms.World				1	500	500
328	Ms.Excel				1	500	500
329	Ms.Office				1	500	500
330	Ms.Powerpoint				1	500	500
331	Tally Erp				1	500	500
332	Web Design				1	675	675
	Student recommended books						
333	Ek Dishecha Shodh	Sandip Vasalekar	-		1	450	450
334	Navya Yugacha Aarambh	Sandip Vasalekar	-		1	600	600
335	Shodh Navya Bharatacha	Raghunath Mashelkar	-		1	375	375
336	Reinventing India	Raghunath Mashelkar	-		1	425	425
337	Timeless Inspirator	Raghunath Mashelkar		9380571713	1	400	400
TOTAL							**10,91,199**

GOVERNMENT COLLEGE OF ENGINEERING KARAD-415124

Recommended Book List for 2017-18 Book Bank

Sr. No.	Title	Author	Publisher	ISBN	Qty	PRICE	Amount
	Civil						
1	Concrete Technology	M. S. Shetty			5	450	2,250
2	Concrete Technology	M. L. Gambhir			5	550	2,750
3	Concrete Technology	V. N. Vazirani			5	800	4,000
4	Surveying and Levelling Vol. I and II	T.P Kanetkar and S.V. Kulkarni			5	500	2,500
5	Surveying Vol., I, II and III	Dr. B.C. Punmia			5	550	2,750
6	Surveying Vol., I&II	S. K. Duggal			5	650	3,250
7	Surveying and Levelling	N.N. Basak			5	450	2,250
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
	Applied Mechanics						
12	Engineering Mechanics(WBUT)	Bhavikatti S.S	--do--	81-224-3507-8	5	195	975
13	Textbook of Engineering Geology	N CHenna Kesavulu	Macmillan	0230-63870-8	10	275	2,750
14	Basic Civil Engineering	G.K.Hiraskar			10	500	5,000

GOVERNMENT COLLEGE OF ENGINEERING KARAD-415124

Recommended Book List for 2017-18 Book Bank

Sr. No.	Title	Author	Publisher	ISBN	Qty	PRICE	Amount
	B Tech II Mechanical Engineering 2017-18						
15	Numerical Methods	Dr. B. S.Grewal			10	225	2,250
16	Numerical Methods	E. Balguruswamy			5	395	1,975
17	Applied Numerical Methods with MATLAB for Engineers and Scientists	S.C. Chapra			5	500	2,500
18	Strength of Materials	Ramamurtham			5	350	1,750
19	Strength of Materials	Dr. R. K. Bansal			10	375	3,750
20	Hydraulics, Fluid Mechanics and Machinery	Modi P N & Seth S N			5	275	1,375
21	Theory of Hydraulic Machinary	V.P. Vasandani			5	650	3,250
22	Theory of Machines	Ratan S.S.			5	375	1,875
23	Theory of Machines	P. L. Ballany			5	350	1,750
24	Theory of Machines	Thomas Bevan			5	350	1,750
25	Material science and metallurgy for engineers	V.D. Kodgire			10	625	6,250
26	Machine drawing	N.D. Bhatt and V.M. Panchal			5	500	2,500
27	Instrumentation Measurement and Analysis	B. C. Nakra, K. K. Chaudhry	MGH, 3rd Edition,2012.		10	500	5,000
	B Tech II Sem-IV Electrical Engineering 2017-18						
28	Instrumentation	Nakra and Chaudhari			10	250	2,500
29	Electronic Instrumentation	H. S. Kalsi			5	850	4,250
30	Electronic measurements and Instrumentation	A. K. Sawhney			5	550	2,750
31	Modern Digital Electronics	R. P. Jain			5	450	2,250
32	Fundamentals of Digital Circuits	Anand Kumar			5	650	3,250
33	Modern Power System Analysis	I. J. Nagrath, D. P. Kothari			5	1,000	5,000
34	Power System Analysis	Hadi Sadat			5	1,200	6,000

GOVERNMENT COLLEGE OF ENGINEERING KARAD-415124							
Recommended Book List for 2017-18 Book Bank							
Sr. No.	**Title**	**Author**	**Publisher**	**ISBN**	**Qty**	**PRICE**	**Amount**
	B Tech II Sem-IV INFORMATION TECHNOLOGY 2017-18						
35	Compilers principles, techniques, & tools	Alfred V. Aho			5	500	2,500
36	Principles of DataBase Systems	J.D. Ullman			5	1,100	5,500
37	Computer Architecture & Organization	J. P. Hayes			5	750	3,750
38	Computer Organization and Architecture	W. Stallings			5	1,000	5,000
39	Software Testing	Yogesh Singh	Cambridge University Press,2011	978-1107012967	20	650	13,000

GOVERNMENT COLLEGE OF ENGINEERING KARAD-415124

Recommended Book List for 2017-18 Book Bank

Sr. No.	Title	Author	Publisher	ISBN	Qty	PRICE	Amount
	B Tech II Sem-IV E&TC ENGINEERING – 2017-18						
40	Op-Amp and Linear IntegAmountd Circuits	Ramakant A. Gayakwad			5	800	4,000
41	Circuit & Network – Analysis & Synthesis	A. Sudhakar			5	550	2,750
42	Electrical Circuit Analysis"	Soni Gupta			5	2,000	10,000
43	Engineering Circuit Analysis	William H Hayt			5	450	2,250
44	Network Analysis	M.E.Van Valkenburg			5	650	3,250
45	Signals & system	Hsu			5	475	2,375
46	Signals & system	Ramesh Babu			5	350	1,750
47	Signals & system	Simon Haykin			5	550	2,750
48	Let us C	V. Kanetkar			5	550	2,750
49	Cloud Computing	Anthoney Velte			10	550	5,500
50	Storage Network	Willey			10	750	7,500
51	Electrical Generation	Gupta			25	850	21,250
52	Electrical Machine Design	A.K.Swaney			15	500	7,500
53	Electrical Drives	Dubey			15	400	6,000
62	Non -Conventional Energy	Rai G.D.			20	350	7,000
63	Mechatronics	Mahale/Bolton			20	350	7,000
64	Extra High Voltage(Ac Transmission Engineering)	Begamudre			10	400	4,000
65	Basic Civil	Hiraskar			10	300	3,000
66	Engineering Drawing	N.D.Bhatt			10	325	3,250
67	Engineering Mechanics	Bhavikatti			20	500	10,000
68	Principles Of Electronics	V.K.Mehta			10	550	5,500
69	Physics	Avdhanalu			10	550	5,500
70	Principles Of Management	Tripati/Reddy			20	500	10,000
71	C++ Sharp	Balgurusomy			10	250	2,500
72	Town Planning	Hiraskar			10	875	8,750
73	Database System 6th ed	Silbershulz/korth			20	750	15,000
74	E-Government	Bhatnagr			10	600	6,000
75	Communication	B.P.Lati			10	650	6,500
76	Geology	Parbin Sing			10	300	3,000
77	Cryptography	Stalling			20	675	13,500
78	Fluid Mechanics	Bansal			10	750	7,500
79	Fluid Mechanics	Modi/Seth			10	850	8,500
80	Mastering Cloud Coumputing	Buyya Rajkumar	TMH	9781259029950	10	550	5,500
	TOTAL						3,43,450

GOVERNMENT COLLEGE OF ENGINEERING KARAD-415124

Recommended Book List for 2017-18 Book Bank

Sr. No	Title	Author	Publisher	ISBN	Qty	PRICE	Amount
	Civil						
1	Concrete Technology	M. S. Shetty			5	450	2,250
2	Concrete Technology	M. L. Gambhir			5	550	2,750
3	Concrete Technology	V. N. Vazirani			5	800	4,000
4	Surveying and Levelling Vol. I and II	T.P Kanetkar and S.V. Kulkarni			5	500	2,500
5	Surveying Vol., I, II and III	Dr. B.C. Punmia			5	550	2,750
6	Surveying Vol., I&II	S. K. Duggal			5	650	3,250
7	Surveying and Levelling	N.N. Basak			5	450	2,250
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
	Applied Mechanics						
12	Engineering Mechanics(WBUT)	Bhavikatti S.S	--do--	81-224-3507-8	5	195	975
13	Textbook of Engineering Geology	N CHenna Kesavulu	Macmillan	0230-63870-8	10	275	2,750
14	Basic Civil Engineering	G.K.Hiraskar			10	500	5,000
	B Tech II Mechanical Engineering 2017-18						
15	Numerical Methods	Dr. B. S.Grewal			10	225	2,250
16	Numerical Methods	E. Balguruswamy			5	395	1,975
17	Applied Numerical Methods with MATLAB for Engineers and Scientists	S.C. Chapra			5	500	2,500
18	Strength of Materials	Ramamurtham			5	350	1,750
19	Strength of Materials	Dr. R. K. Bansal			10	375	3,750
20	Hydraulics, Fluid Mechanics and Machinery	Modi P N & Seth S N			5	275	1,375
21	Theory of Hydraulic Machinary	V.P. Vasandani			5	650	3,250
22	Theory of Machines	Ratan S.S.			5	375	1,875
23	Theory of Machines	P. L. Ballany			5	350	1,750
24	Theory of Machines	Thomas Bevan			5	350	1,750
25	Material science and metallurgy for engineers	V.D. Kodgire			10	625	6,250
26	Machine drawing	N.D. Bhatt and V.M. Panchal			5	500	2,500
27	Instrumentation Measurement and Analysis	B. C. Nakra, K. K. Chaudhry	MGH, 3rd Edition,2012.		10	500	5,000

GOVERNMENT COLLEGE OF ENGINEERING KARAD-415124

Recommended Book List for 2017-18 Book Bank

Sr. No	Title	Author	Publisher	ISBN	Qty	PRICE	Amount
	B Tech II Sem-IV Electrical Engineering 2017-18						
28	Instrumentation	Nakra and Chaudhari			10	250	2,500
29	Electronic Instrumentation	H. S. Kalsi			5	850	4,250
30	Electronic measurements and Instrumentation	A. K. Sawhney			5	550	2,750
31	Modern Digital Electronics	R. P. Jain			5	450	2,250
32	Fundamentals of Digital Circuits	Anand Kumar			5	650	3,250
33	Modern Power System Analysis	I. J. Nagrath, D. P. Kothari			5	1,000	5,000
34	Power System Analysis	Hadi Sadat			5	1,200	6,000
	B Tech II Sem-IV INFORMATION TECHNOLOGY 2017-18						
35	Compilers principles, techniques, & tools	Alfred V. Aho			5	500	2,500
36	Principles of DataBase Systems	J.D. Ullman			5	1,100	5,500
37	Computer Architecture & Organization	J. P. Hayes			5	750	3,750
38	Computer Organization and Architecture	W. Stallings			5	1,000	5,000
39	Software Testing	Yogesh Singh	Cambridge University Press,2011	978-1107012967	20	650	13,000

GOVERNMENT COLLEGE OF ENGINEERING KARAD-415124

Recommended Book List for 2017-18 Book Bank

Sr. No	Title	Author	Publisher	ISBN	Qty	PRICE	Amount
	B Tech II Sem-IV E&TC ENGINEERING – 2017-18						
40	Op-Amp and Linear IntegAmountd Circuits	Ramakant A. Gayakwad			5	800	4,000
41	Circuit & Network – Analysis & Synthesis	A. Sudhakar			5	550	2,750
42	Electrical Circuit Analysis"	Soni Gupta			5	2,000	10,000
43	Engineering Circuit Analysis	William H Hayt			5	450	2,250
44	Network Analysis	M.E.Van Valkenburg			5	650	3,250
45	Signals & system	Hsu			5	475	2,375
46	Signals & system	Ramesh Babu			10	350	3,500
47	Signals & system	Simon Haykin			5	550	2,750
48	Let us C	V. Kanetkar			5	550	2,750
49	Cloud Computing	Anthoney Velte			15	550	8,250
50	Storage Network	Willey			15	750	11,250
51	Electrical Generation	Gupta			20	850	17,000
52	Electrical Machine Design	A.K.Swaney			15	500	7,500
53	Electrical Drives	Dubey			15	400	6,000
62	Non -Conventional Energy	Rai G.D.			20	350	7,000
63	Mechatronics	Mahale/Bolton			20	350	7,000
64	Extra High Voltage(Ac Transmission Engineering)	Begamudre			15	400	6,000
65	Basic Civil	Hiraskar			15	300	4,500
66	Engineering Drawing	N.D.Bhatt			15	325	4,875
67	Engineering Mechanics	Bhavikatti			20	500	10,000
68	Principles Of Electronics	V.K.Mehta			15	550	8,250
69	Physics	Avdhanalu			15	550	8,250
70	Principles Of Management	Tripati/Reddy			20	500	10,000
71	C++ Sharp	Balgurusomy			15	250	3,750
72	Town Planning	Hiraskar			15	875	13,125
73	Database System 6th ed	Silbershulz/korth			20	750	15,000
74	E-Government	Bhatnagr			15	600	9,000
75	Communication	B.P.Lati			15	650	9,750
76	Geology	Parbin Sing			15	300	4,500
77	Cryptography	Stalling			20	675	13,500
78	Fluid Mechanics	Bansal			10	750	7,500
79	Fluid Mechanics	Modi/Seth			10	850	8,500
80	Mastering Cloud Coumputing	Buyya Rajkumar	TMH	9781259029950	10	550	5,500
TOTAL							**3,65,950**

Hostel Fees Fund

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

List of Equipment to be purchase for the year 2017-2018

Sr. No.	Proposed Item with specification	Qty. Required	Estimated Unit Rate (Rs. In Lacs)	Estimate Amount (Rs. In Lacs)	Justification
1	Hostel Cot Size 2.5*6"	200	0.025	5	To provide students at hostel
2	Hostel Study Table 2.5*2"	150	0.015	2.25	To provide students at hostel
3	Study Chairs (Powder Coated)	150	0.005	0.75	To provide students at hostel
4	**Desktop Computer** (Inteli5, 8 GB RAM, 1TB HDD, DVD R/W drive, 18 Monitor, Optical mouse, keyboard)	1	0.5	0.5	Hostel Documentation
5	Printer(Laser Hp 1020)	1	0.008	0.008	Hostel Documentation
6	External HardDisk 1 Tb	5	0.005	0.025	Hostel Documentation and Record keeping
7	Xerox Machine	1	0.7	0.7	Hostel Documentation
8	Printer Toner Refill	3	0.004	0.012	Hostel Documentation
9	Plumbing Material	All Hostel	Lumsum	2.5	For the Plumbing Matainance
10	New Solour Water System	2	8	16	For the Jijau & B Hostel Students
11	Mobile Phones along with Sim Cards	8	0.003	0.024	For the Communication Purpose of Watchman & Warden
12	Hostel Network 240 rooms, router , firewall , switches -12, leaseline	4 hostels	12	48	
13	Sintex Water Tank 2000 lit.	5	0.20	1	Old Tank Damage Hence Required new Purchase all 5 Hostel
TOTAL				**76.8**	

Sr. No.	Proposed Item with specification	Qty. Required	Estimated Unit Rate (Rs. In Lacs)	Estimate Amount (Rs. In Lacs)	Justification
13	CC TV Camera System 1 & P.A. System For Jijau Hostel	1	4	4	For Sequrity Purpose of Girls Hostel & Alaram to Hostel Student
14	New Electrical material (Tube, Choke,Wire, MCB.etc	5 Hostel	Lumsum	4.0	For the Electrical Matainance of All Hostel
15	Leave book printing (Jijau)	240	0.0005	0.1	
TOTAL				**8.1**	

Hostel Fees Fund					
Name of Dept.: Hostel (B,C,D , M & Jijau					
List of Hostel Maintenance work for the year 2017-2018					
Sr. No.	**Name of Item**	**Details of Repair**	**Approximate Unit Rate (Rs. In Lacs)**	**Estimate Amount (Rs. In Lacs)**	**Justification**
1	Coloring of Hostel Rooms B	40 Rooms	0.01	0.4	To improve ambience at hostel
2	Coloring of Hostel Rooms C	60 Rooms	0.01	0.6	To improve ambience at hostel
3	Coloring of Hostel Rooms D	40 Rooms	0.01	0.4	To improve ambience at hostel
4	Coloring of Hostel Rooms M	20 Rooms	0.01	0.2	To improve ambience at hostel
5	Pest Control	5 Hostel	0.10	0.5	For Student safety
6	Water Tank cleaning	5 Hostel	0.25	1.25	To maintain Hygen
7	Hostel cleaning	5 Hostel	0	3.12	To maintain Cleanliness
8	Electrician Honorarium	5 Hostel	Lumsum	1.32	Electrician Honorarium
9	Plumber Honorarium	5 Hostel	Lumsum	0.6	Plumber Honorarium
10	Carpainter Material & Honorarium	5 Hostel	Lumsum	1.75	To repair Door, window etc.
11	Solar Maintenance	3 Hostel	0.5	1.5	To maintain Solar system
12	Grass Cuttimg	5 Hostel	0.05	0.25	Front and around Hostel
13	Mobile Recharge	All Hostel	Lumsum	0.10	To Recharge Watchman & Warden Mobiles
14	Parking Stands	4 Hostel	2	8.0	For Vehical Parking of Hostel Students (B, C, D. P.G.)
15	Mosquito Net (Ground Floor of each Hostel	All Hostel	Lumsum	4.00	For Student safety
16	Dish T.V. Recharge With HD & Eklavya Channel	5 Hostel	0.07	0.35	For Education & Entertainment Of Student
17	Gardening	3 Hostel	Lumsum	1.0	For Beautification & Ambience at Hostel (C, D, Jijau)
18	Hostel Ganesh Festival	5 Hostel	0.10	0.5	For Student Tradition
19	Guest Room Jijau Hostel	1 Hostel	6.0	6.0	It Required For Guest & Parents of Student
20	Honorarium For Warden & Rector	6	0.25 per anum	1.5	Honorarium For Warden & Rector
21	Honorarium Of Doctor	1	Lumsum	0.6	Honorarium Of Doctor per anum
22	Cot / Table repairing	400	0.00	1.6	
23	News papers / Magazines	500	Lumsum	0.5	All hostel
	Security Charges (Mesco) 3*3*12	108	0.15	16.2	
	Electricity charges 50% of bills	4	1.20	4.8	Remaining bill is paid by Institute.
24	Sliding windows B & C	80	0.04	3.2	
TOTAL				**60.24**	

Budget for Hostel Internet

Sr. No.	Name of Equipment	Quantity	Unit Cost In lacs	Total Cost	Justification
1	Structured Cabling Networking consisting of cable (305m box), I/O box, Patch Cord, including cassing capping, testing of nodes, OTDR and fluke meter	720	0.015	10.8	for 720 nodes (per room 3 wired connections), for four hostels having capacity C and D 60 each, girls hostel-80 and B Hostel-40, including cassing capping, testing of nodes, OTDR and fluke meter
2	LeaseLine for 100 Mbps Subscription	1	10	10	
3	Server	1	3	3	
4	UPS	35	0.05	1.75	
5	Managable Switches	35	1.5	52.5	
6	Racks	35	0.05	1.75	
7	Jack Panel	35	0.05	1.75	
TOTAL				**81.55**	

GRAND TOTAL	**226.7**

9. Internet Fee : Budget for the year 2017-18

EQUIPMENT						
Name of Dept.:		**Computer Center and Data Center**				
Sr. No	**Name of Dept**	**Details of Repairs/ Material & Supply/ Maintenance, AMC, lab consumables, spares,**	**Unit Cost**	**Quantity**	**Total (Rs. in lacs)**	**Justification**
1	Computer Center	Keyboards, Mouse, Switches, Patch cord other network related tools or parts	--	--	1	Maintenance and consumables
2	Computer Center	Link Load Balancer	13	1	13	For Load balancing of Internet leased line for Establishing sapret
3	Data Center	NMS with Display	15	1	15	For Network Management System
4	Data Center	RFID based Monitoring System using hardware and software	for digitization of campus	1	20	Digitization of Campus using RFID
5	Computer Center	Air Conditioner for Computer Centre	1.5 tonne	15	6.75	
6	Hostel Network	Hostel Network 240 rooms, router , firewall , switches -12, leaseline	0	0	0	Budgeted in Hostel separately Rs 48Lakhs
7	Computer Center	Wireless Routers	0.1	30	3	For widening Wireless infrastructure in campus
Total					**58.75**	

MAINTAINANCE						
Name of Dept.:		**Computer Center and Data Center**				
Sr. No	**Name of Dept**	**Details of Repairs/ Material & Supply/ Maintenance, AMC, lab consumables, spares,**	**Unit Cost**	**Quantity**	**Total (Rs. in lacs)**	**Justification**
1	Data Center	Man Power (Maintenance Engineer for CWN)	1	1	5	Maintenance of newly established CWN for three years as per terms and conditions of PO. One year already paid
2	Data Center	Antivirus New Purchase or renewal	Rs 2.75 lakh for 500 users per year	For 500 Users till '1 year	2.75	For Computer Safety and security from malious data
3	Computer Center	AMC for Computer	0.025 for two year (per year 2500/- for one computer)	150	3.75	As the machinesa are 3 year old hence need to have AMC. For Hardware support of 150 computers in Computer Center
4	Data Center	AMC for Biometric, Fire Alarm/ Water leak Detecttion System/ Fire Suppression kit etc.	for one year lumpsum		1.5	Safety, Security and survilance at Data Center
5	Data Center	Websence renewal of liscence	Rs 4.15 lakh for 500 users per year	For 500 Users till '1 year	4.15	For Computer Safety and security from malious data
6	Data Center	Internet Leased Line Subscription for upgradtion	300 Mbps BSNL leased line	1	20	For Internet Speed and bandwidth
7	Data Center	Website Hosting and Domain Renewal Subscription	Renewal of website space and domain	1	0.5	For Website Management
8	Computer Center	UPS AMC	0.19	4	0.38	For maintaining UPS
9	Computer Center	Printer Servicing	0.015	6	0.03	Required for Printing maintanance
10	Computer Center	Leserjet Printer Towner Refilling	0.017	6	0.102	Required for Printing of official work, proposals etc.
11	Computer Center	General Maintenance,	--	--	0.7	General Maintenance,
12	Computer Center	Stationary & consumables	--	5 Rim, Stappler, Stappler pins, Pencil, Rubber, whiteboard marker pen	0.06	For Documentation and official purpose
13	Computer Center	Carpet at CCF	200 per Sqft	70 X 40 feet	0.6	For Healthy and dust proof Enviroment

14	Data Center	Insurance For data center and computer center and components in entire campus for used for campus wide network including digital library	lumsump for one year	1	10	For insuruing components of campus wide network
Total					49.522	

TOTAL	**108.272**