

S.no	Package Name	Item Category (Goods/ Works/ Services)	Item Sub Category(Equipment/Books & LRs /Furniture etc..)	Is Proprietary ? (Yes/No)	Through DGS & D? (Yes/No)	Through GEM (Yes/No)	Estimated Financial Sanction Date	Proc. Method	Item Name	Item Description/ Specification	Item Quantity	Item Estimated Cost Per Unit	Total Estimated Cost (In Rs)	Justification
1	SGRE- PRO	Goods	Equipment	Yes	No	No	Oct-17	Shopping	NI Smart Grid and Renewable Energy Lab	1kW Solar PV 1kW Wind Turbine 2kW Solar Charge Controller with Inverter 48V wind Charge Controller with Inverter 1.5kW Grid Tie Inverter NI Data Acquisition System 48V Battery LED TV 10 smart houses 10 Intelligent systems kit 10 Load Analysis Kit Weather Station kit Smart Grid Energy Monitoring Learning Resource Solar Energy Monitoring Learning Resource Wind Energy Monitoring Learning Resource Renewable Energy Monitoring Learning Resource Solar Irradiation Monitoring Learning Resource Wind Speed Monitoring Learning Resource Humidity and Temperature Monitoring Learning Resource 30 hours training	1	3500000	3500000	National Instruments is a leading and pioneering technology company in the field of Renewable Energy. Similar LAB is set up in IISC bangalore which is the number one institute in India as per MHRD. Similar set up has been done in NIT Nagaland and NMIT Bangalore.
2	CNC Lathe Trainer	Goods	Equipment	No	No	No	Oct-17	Shopping	CNC Lathe Trainer	CNC Lathe Trainer: CNC machine suitable for 220 volts single phase AC 50 cycles power supply conforming to the following specification. (Specifications:1 Min. Distance Between Centers 325 mm	1	7.5	7.5	As per the academic requirements of B.Tech.(Mechanical Engg) & B.Tech.(Production & Industrial Engineering), students are having Computer Aided Manufacturing Laboratory. This equipment will be used for research work along with UG and PG course

3	CNC Mill Trainer	Goods	Equipment	No	No	No		Shopping	CNC Mill Trainer	CNC Mill Trainer CNC machine suitable for 220 volts single phase AC 50 cycles power supply conforming to the following specification (Specifications:1 Traverse X,Y,Z 180 /140 /250 mm 2 Min. distance spindle nose - table 77 mm Max. distance spindle nose – table 337mm 3 Clamping surface : Length X Width 400 X 125 mm 4 Maximum table load 10 Kg 5 Tool changer Pick up type Numbers of tool 8 Tool clamping device Automatic Tool dimensions : diameter X length 40 X 75 mm Tool weight maximum 1 Kg 6 Min. Main Drive Motor – power 0.75 KW Spindle Speed range 150 – 3500 RPM 7 Rapid traverse 2 meters per minute 8 Cutting force X/Y/Z 750/750/1000 N 9 Position variation X / Y / Z * 10/10/10 microns 10 Lubrication System Main spindle Life time lubrication Guide ways and other areas Manual oil or grease lubrication 11 Safety devices needed: Fully enclosed working area and limit switches for axis over travel and door and emergency off switch. CONTROL : 12 Type Pc based ; 3 axis path control, interchangeable by change of control specific key panels and Learning Resource to the following controls (change time not more than 5 minutes): Fanuc 21 Milling Sinumerik 840 Milling Siemens Operate Milling Haidenhain 426/430 M	1	9.5	9.5	As per the academic requirements of B.Tech.(Mechanical Engg) & B.Tech.(Production & Industrial Engineering), students are having Computer Aided Manufacturing Laboratory. This equipment will be used for research work along with UG and PG course
4	RPT Lab	Goods	Equipment	No	No	No	Oct-17	Shopping	Rapid Prototyping Machine	Tobe Submitted Later	10	1500000	1500000	Essential requirement of lab related with scheme and syllabus of UG, PG and Research related activities
5	FINITE ELEMENT LAB	Goods	Learning Resource	NO	No	No		NCB	FINITE ELEMENT LAB	Tobe Submitted Later	6	1200000	7000000	Essential requirement of lab related with scheme and syllabus of UG, PG and Research related activities

6	AIRCRAFT DESIGN LAB	Goods	Learning Resource	No	No	No		Shopping	AIRCRAFT DESIGN LAB	Tobe Submitted Later	1	500000	500000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
7	PLM Lab	Goods	Learning Resource	No	No	No		Shopping	PLM Lab	Tobe Submitted Later	1	4000000	4000000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
8	CAD Lab	Goods	Learning Resource	No	No	No		Shopping	CAD Lab	Tobe Submitted Later	5	2000000	2000000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
9	COMPUTER PROGRAMMING LAB	Goods	Learning Resource	No	No	No		Shopping	COMPUTER PROGRAMMING LAB	Tobe Submitted Later	3	1500000	1500000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
10	Management Tools Lab	Goods	Learning Resource	No	No	No		Shopping	Management Tools Lab	Tobe Submitted Later	5	500000	500000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
11	Simulation and Statistical Tools	Goods	Learning Resource	No	No	No		Shopping	Simulation and Statistical Tools	Tobe Submitted Later	1	600000	600000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities

12	Production Lab	Goods	Equipment	No	No	No		Shopping	Production Lab	Tobe Submitted Later	9	3500000	3500000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
13	MATERIAL SCIENCE LAB	Goods	Equipment	No	No	No		Shopping	MATERIAL SCIENCE LAB	Tobe Submitted Later	11	1500000	1500000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
14	Strength of Materials Lab	Goods	Equipment	No	No	No		Shopping	1)Rockwell Hardness Testing Unit; 2)Fatigue Testing Machine	Tobe Submitted Later	12	2000000	2000000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
15	PROPULSION LAB	Goods	Equipment	No	No	No		Shopping	PROPULSION LAB	Tobe Submitted Later	18	1500000	1500000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
16	AIRCRAFT SYSTEM LAB.	Goods	Equipment	No	No	No		Shopping	AIRCRAFT SYSTEM LAB.	Tobe Submitted Later	11	1500000	1500000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
17	FLUID MECHANICS LAB.	Goods	Equipment	No	No	No		Shopping	FLUID MECHANICS LAB.	Tobe Submitted Later	18	2500000	2500000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities

18	Kinematics and dynamics of Machine Lab	Goods	Equipment	No	No	No		Shopping	Kinematics and dynamics of Machine Lab	Tobe Submitted Later	5	1500000	1500000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
19	INSTRUMENTATION LAB	Goods	Equipment	No	No	No		Shopping	INSTRUMENTATION LAB	Tobe Submitted Later	10	500000	500000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
20	AIRFRAME LAB	Goods	Equipment	No	No	No		NCB	AIRFRAME LAB	Tobe Submitted Later	1	7000000	7000000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
21	CIMS Lab	Goods	Equipment	No	No	No		Shopping	CIMS Lab	Tobe Submitted Later	6	700000	700000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
22	Aircraft Strucute and systems Lab	Goods	Equipment	No	No	No		Shopping	Aircraft Strucute and systems Lab	Tobe Submitted Later	7	5000000	5000000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
23	CIMS Lab	Goods	Equipment	No	No	No		Shopping	CIMS Lab	Tobe Submitted Later	3	500000	500000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities

24	Heat Transfer Lab	Goods	Equipment	No	No	No		Shopping	Heat Transfer Lab	Tobe Submitted Later	10	4000000	4000000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
25	INTRODUCTION TO AERONAUTICS LAB	Goods	Equipment	No	No	No		Shopping	INTRODUCTION TO AERONAUTICS LAB	Tobe Submitted Later	10	2000000	2000000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
26	Robotics Lab	Goods	Equipment	No	No	No		Shopping	Robotics Lab	Tobe Submitted Later	20	3000000	3000000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
27	Mechatronics Lab	Goods	Equipment	No	No	No		Shopping	Mechatronics Lab	Tobe Submitted Later	1	2000000	2000000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
28	THERMAL ENGINEERING LAB	Goods	Equipment	No	No	No		Shopping	THERMAL ENGINEERING LAB	Tobe Submitted Later	10	1500000	1500000	Essentia requirement of lab related with scheme and syllabus of UG, PG and Research related activities
29	Tanner EDA (with MEMS)	Goods	Learning Resource	No	No	No		Shopping	Tanner EDA (with MEMS)	Annexure-1	1	1200000	1200000	Required for labs of EC department of university college of engineering at UG & PG level. Also essential for research work related to PhD

30	VHDL processing	Goods	Learning Resource	No	No	No		Shopping	VHDL processing	Annexure-1	1	500000	500000	Required for labs of EC department of university college of engineering at UG & PG level. Also essential for research work related to PhD
31	Microcontroller (Emulator)	Goods	Learning Resource	No	No	No		Shopping	Microcontroller (Emulator)	Annexure-1	1	300000	300000	Required for labs of EC department of university college of engineering at UG & PG level. Also essential for research work related to PhD
32	ORCAD P-Spice	Goods	Learning Resource	No	No	No		Shopping	ORCAD P-Spice	Annexure-1	1	800000	800000	Required for labs of EC department of university college of engineering at UG & PG level. Also essential for research work related to PhD
33	LABVIEW	Goods	Learning Resource	No	No	No		Shopping	LABVIEW	Annexure-1	1	1000000	1000000	Required for labs of EC department of university college of engineering at UG & PG level. Also essential for research work related to PhD
34	Virtual Nanolab (Nanocentre)	Goods	Learning Resource	No	No	No		Shopping	Virtual Nanolab (Nanocentre)	Annexure-1	1	1155000	1155000	Required for labs of EC department (Nanotechnology) at PG level. Also essential for research work related to PhD
35	Upgradation of COMSOL and Intellsuite	Goods	Learning Resource	No	No	No		Shopping	Upgradation of COMSOL and Intellsuite	Annexure-1	1	1000000	1000000	Required for PG level (nano and digital communication). Also essential for research work related to PhD

36		Goods	Equipment	No	No	No	Oct-17	Shopping	Electronics Lab trainer kits 1. BJT (Negative Feedback Trainer) 2. Voltage Regulator ETB-108 Make Omega or equivalent 3. F.E.T Amp. ETB-41 Make Omega or equivalent 4. Push Pull Amp. ETB-22 Make Omega or equivalent 5. Wein Bridge oscillator ETB-25 Make Omega or equivalent 6. R.C. Phase Shift ETB-24 Make Omega or equivalent 7. Oscillator ETB-25 Make Hartley & Colpites 8. OP Amp. ETB-92 Make Omega or equivalent 9. P.N. Diode ETB-51 Make Omega or equivalent 10. Zenor Diode ETB-51 Make Omega or	Annexure-2	Each 2	154000	154000	These kits are required in Electronics lab which is common to 5 branches (EC,EIC, CP,IT & EE). There is an acute shortage of kits (trainers) also sometimes parallel classes are running in the same lab. Total no of student use this lab in a single semester are approximately 330, so more kit required.
37	10 MHz Synthesized Function Generator	Goods	Equipment	No	No	No	Oct-17	Shopping	10 MHz Synthesized Function Generator	Annexure-2	10	10000	10000	

38	PAM, PPM, PWM and Line Coding Techniques , Scientech or equivalent	Goods	Equipment	No	No	No	Oct-17	Shopping	PAM, PPM, PWM and Line Coding Techniques , Scientech or equivalent	Annexure-2	2	20000	20000	These kits are required in communication lab which is common to 4 branches (EC,EIC, CP, &IT). There is an acute shortage of kits (trainers) also sometimes parallel classes are running in the same lab. Total no of student use this lab in a single semester are approximately 200, so more kit required
39	PCM, DPCM, CVSD Encoder & Decoder , Scientech or equivalent	Goods	Equipment	No	No	No	Oct-17	Shopping	PCM, DPCM, CVSD Encoder & Decoder , Scientech or equivalent	Annexure-2	2	20000	20000	
40	Delta, Adaptive Delta, Sigma Delta Modulator & Demodulator , Scientech or equivalent	Goods	Equipment	No	No	No	Oct-17	Shopping	Delta, Adaptive Delta, Sigma Delta Modulator & Demodulator , Scientech or equivalent	Annexure-2	2	20000	20000	
41	4-Channel TDM-PCM Transmitter & Receiver, Scientech or equivalent	Goods	Equipment	No	No	No	Oct-17	Shopping	4-Channel TDM- PCM Transmitter & Receiver, Scientech or equivalent	Annexure-2	2	35000	35000	
42	Understanding Line Coding Techniques, Scientech or equivalent	Goods	Equipment	No	No	No	Oct-17	Shopping	Understanding Line Coding Techniques, Scientech or equivalent	Annexure-2	2	20000	20000	
43	ASK, FSK, BPSK, DBPSK Modulator & Demodulator , Scientech or equivalent	Goods	Equipment	No	No	No	Oct-17	Shopping	ASK, FSK, BPSK, DBPSK Modulator & Demodulator , Scientech or equivalent	Annexure-2	2	20000	20000	
44	QPSK, OQPSK, DQPSK Modulator & Demodulator, Scientech or equivalent	Goods	Equipment	No	No	No	Oct-17	Shopping	QPSK, OQPSK, DQPSK Modulator & Demodulator, Scientech or equivalent	Annexure-2	2	20000	20000	

45	16-QAM Transmitter & Receiver Training System Scientech or equivalent	Goods	Equipment	No	No	No	Oct-17	Shopping	16-QAM Transmitter & Receiver Training System Scientech or equivalent	Annexure-2	2	30000	30000	
46	MSK Modulator/ Demodulator Scientech or equivalent	Goods	Equipment	No	No	No	Oct-17	Shopping	MSK Modulator/ Demodulator/ Scientech or equivalent	Annexure-2	2	25000	25000	
47	Antenna Training System , Scientech or equivalent	Goods	Equipment	No	No	No		Shopping	Antenna Training System , Scientech or equivalent	Annexure-2	1	50000	50000	These kits are required in Advance communication lab. Some of the old kits are not working. Due to syllabus revision new kits are required.
48	DSP Starter Kits :TMS320C6748 DSP Development Kit(LCDK)	Goods	Equipment	No	No	No		Shopping	DSP Starter Kits :TMS320C6748 DSP Development Kit(LCDK)	Annexure-2	2	30000	30000	Required for VII Sem. B.Tech. Sig. Proc.Lab & II Sem.M.Tech.M& S Lab
49	Microwave Test Bench	Goods	Equipment	No	No	No		Shopping	Microwave Test Bench	Annexure-2	1	70000	70000	Required for V Sem. B.Tech. Lab
50	Optical Fibre Trainer	Goods	Equipment	No	No	No		Shopping	Optical Fibre Trainer	Annexure-2	1	30000	30000	Required for VIII Sem. B.Tech. Lab
51	10 MHz AM / FM Function-Pulse Generators with 40MHz Frequency Counter, Scientech or equivalent	Goods	Equipment	No	No	No		Shopping	10 MHz AM / FM Function-Pulse Generators with 40MHz Frequency Counter, Scientech or equivalent	Annexure-2	1	10000	10000	To perform the experiments of the EC Comm. Lab I & II, Wireless Comm. lab as per syllabi.
52	Digital Electronics Trainer with all types basic Gates+ F.F. +Halfadder+ Fulladder+(Half + Full) subtractor+ Bread Board+ Mux/ Demux+pulser+(8input+8output)High/ low Model - LTB875 Omega make or equivalent	Goods	Equipment	No	No	No		Shopping	Digital Electronics Trainer with all types basic Gates+ F.F. +Halfadder+ Fulladder+(Half + Full) subtractor+ Bread Board+ Mux/ Demux+pulser+(8input+8output)High/ low Model LTB875 Omega make or equivalent	Annexure-2	3	10000	10000	This lab is common to five branches (EC, EIC, CP, IT & EE) of III Sem. There is shortage of kits (trainers) in this Lab.

53	C. R.O. 60 Mhz dual chanel Scientech 806 or equivalent.	Goods	Equipment	No	No	No		Shopping	C. R.O. 60 Mhz dual chanel Scientech 806 or equivalent.	Annexure-2	1	30000	30000	
54	Digital Multimeter Make- Meco or equivalent	Goods	Equipment	No	No	No		Shopping	Digital Multimeter Make- Meco or equivalent	Annexure-2	2	3000	3000	
55	Electro-encephalograph; Model-Scientech 2355 or equivalent; Make-Scientech or equivalent.	Goods	Equipment	No	No	No		Shopping	Electro-encephalograph; Model-Scientech 2355 or equivalent; Make-Scientech or equivalent.	Annexure-2	2	15000	15000	
56	Electro-myograph; Model-2354A or equivalent; Model-Scientech or equivalent.	Goods	Equipment	No	No	No		Shopping	Electro-myograph; Model-2354A or equivalent; Model-Scientech or equivalent.	Annexure-2	1	15000	15000	
57	ECG cum Heart rate Monitor; Model-Scientech 2351or equivalent; Make- Scientech or equivalent.	Goods	Equipment	No	No	No		Shopping	ECG cum Heart rate Monitor; Model-Scientech 2351or equivalent; Make-Scientech or equivalent.	Annexure-2	1	15000	15000	
58	DSB/SSB AM Transmitter , Scientech or equivalent	Goods	Equipment	No	No	No		Shopping	DSB/SSB AM Transmitter , Scientech or equivalent	Annexure-2	3	6000	6000	The equipments are required to perform the experiments of the EC Comm. Lab I &II, Wireless Comm. lab as per syllabi.
59	DSB/SSB AM Receiver , Scientech or equivalent	Goods	Equipment	No	No	No		Shopping	DSB/SSB AM Receiver , Scientech or equivalent	Annexure-2	3	6000	6000	
60	Frequency Modulation /Demodulation , Scientech or equivalent	Goods	Equipment	No	No	No		Shopping	Frequency Modulation /Demodulation , Scientech or equivalent	Annexure-2	2	15000	15000	
61	Transmission Line Trainer , Scientech or equivalent	Goods	Equipment	No	No	No		Shopping	Transmission Line Trainer , Scientech or equivalent	Annexure-2	1	12000	12000	
62	Sampling & Reconstruction Trainer, Scientech or equivalent	Goods	Equipment	No	No	No		Shopping	Sampling & Reconstruction Trainer, Scientech or equivalent	Annexure-2	2	7000	7000	
63	MATLAB	Goods	Learning Resource	No	No	No		Shopping	MATLAB	Annexure-3				

64	QUBE SERVO 2	Goods	Learning Resource	No	No	No		Shopping	QUBE SERVO 2	Annexure-4	1	395640	395640	
65	ACTIVE SUSPENSION	Goods	Learning Resource	No	No	No		Shopping	ACTIVE SUSPENSION	Annexure-4	1	2499240	2499240	
66	CST studio suit version 2016	Goods	Learning Resource	No	No	No		shopping	CST studio suit version 2016	Annexure-5	3	888000	888000	
67	OptiSuite (multimode edition) -- Single user License + complimentary 4 users license.	Goods	Learning Resource	No	No	No		shopping	OptiSuite (multimode edition) -- Single user License + complimentary 4 users license.	Annexure-6	1+4	2700000	2700000	
68	RF Anechoic Chamber	Goods	Equipment	No	No	No		shopping	RF Anechoic Chamber	Annexure-7	1	2150000	2150000	
69	EMBEDDED SYSTEM LAB	Goods	Equipment	No	No	No		shopping	EMBEDDED SYSTEM LAB	Annexure-8		72000	72000	
70	Substrate cleaning set up consisting of chemicals, DI water set up, Laminar flow bench, different glassware's, etc.	Goods	Equipment	No	No	No		shopping	Substrate cleaning set up consisting of chemicals, DI water set up, Laminar flow bench, different glassware's, etc.	Annexure-1	1	1000000	1000000	
71	Four point probe system for resistivity	Goods	Equipment	No	No	No		shopping	Four point probe system for resistivity	Annexure-2	1	500000	500000	
72	STM (portable)	Goods	Equipment	No	No	No		shopping	STM (portable)	Annexure-3	1	1000000	1000000	
73	UV spectrophotometer	Goods	Equipment	No	No	No		shopping	UV spectrophotometer	Annexure-4	1	1000000	1000000	
74	Synthesis facilities consisting of RF/DC sputtering system	Goods	Equipment	No	No	No		shopping	Synthesis facilities consisting of RF/DC sputtering system	Annexure-5	1	4000000	4000000	
75	Thermal evaporation system for doping and coating	Goods	Equipment	No	No	No		shopping	Thermal evaporation system for doping and coating	Annexure-6	1	1000000	1000000	
76	Photoluminescence spectrophotometer	Goods	Equipment	No	No	No		shopping	Photoluminescence spectrophotometer	Annexure-7	1	2200000	2200000	
77	Shake table	Goods	equipment	No	No	No		shopping	Multi- Axis shake table	to be submitted later	1	40	4000000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD

84	Environment engineering lab. Equipments	Goods	Equipment	No	No	No		shopping	HCL LAMP for AAS - Cobalt (Co)	to be submitted later	1	0.18	18000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
85		Goods	Equipment	No	No	No		shopping	HCL LAMP for AAS - Chromium (Cr)	to be submitted later	1	0.18	18000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
86		Goods	Equipment	No	No	No		shopping	HCL LAMP for AAS - Lead (Pb)	to be submitted later	1	0.18	18000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
87		Goods	Equipment	No	No	No		shopping	DIGITAL FLAME PHOTO METER	to be submitted later	1	0.55	55000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
88		Goods	Equipment	No	No	No		shopping	BOD INCUBATOR	to be submitted later	1	0.7	70000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD

89	Goods	Equipment	No	No	No		shopping	DIGITAL TURBIDITY METER	to be submitted later	1	0.12	12000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
90	Goods	Equipment	No	No	No		shopping	Digital pH Meter With PH electrode & temperature Electrode	to be submitted later	1	0.11	11000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
91	Goods	Equipment	No	No	No		shopping	CONDUCTIVITY METERWITH ELECTRODES	to be submitted later	1	0.18	18000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
92	Goods	Equipment	No	No	No		shopping	JAR TEST APPARATUS	to be submitted later	1	0.13	13000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
93	Goods	Equipment	No	No	No		shopping	Noise Level Analyzer	to be submitted later	1	0.2	20000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD

94	Hot air oven	Goods	Equipment	No	No	No		shopping	HOT AIR OVEN	to be submitted later	1	0.5	50000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
95	digital weighing balance	Goods	Equipment	No	No	No		shopping	Digital weighing balance.	to be submitted later	1	0.1	10000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
96	hot electric plate	Goods	Equipment	No	No	No		shopping	HOT Electric Plate	to be submitted later	2	0.15	15000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
97	Dial gauge	Goods	equipment	No	No	No		shopping	dail gauge (50 mm)	to be submitted later	6	0.025	2500	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
98		Goods	equipment	No	No	No		shopping	dail gauge (25 mm)	to be submitted later	10	0.02	2000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD

102		Goods	equipment	No	No	No		shopping	pycnometer	to be submitted later	6	0.0025	250	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
103		Goods	equipment	No	No	No		shopping	cube mould	to be submitted later	12	0.035	3500	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
104		Goods	equipment	No	No	No		shopping	beam mould (100*100*500)	to be submitted later	12	0.065	6500	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
105		Goods	equipment	No	No	No		shopping	beam mould (150*150*700)	to be submitted later	6	0.11	11000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
106		Goods	equipment	No	No	No		shopping	cylander mould (150*300)	to be submitted later	6	0.08	8000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD

107	Goods	equipment	No	No	No		shopping	J ring apparatus	to be submitted later	1	0.1	10000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
108	Goods	equipment	No	No	No		shopping	U box apparatus	to be submitted later	1	0.1	10000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
109	Goods	equipment	No	No	No		shopping	bulking apparatus	to be submitted later	3	0.018	1800	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
110	Goods	equipment	No	No	No		shopping	steel scales	to be submitted later	10	0.002	200	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
111	Goods	equipment	No	No	No		shopping	slump apparatus	to be submitted later	4	0.025	2500	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD

112	Non destructive test equipments	Goods	equipment	No	No	No		NCB	ultrasonic pulse velocity meter	to be submitted later	1	7	700000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
113		Goods	equipment	No	No	No		NCB	rebound hammer	to be submitted later	1	1.8	180000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
114		Goods	equipment	No	No	No		NCB	rapid chloride penetration test	to be submitted later	1	8	800000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
115													0	
116													0	
117	Material testing lab equipments	Goods	equipment	No	No	No		NCB	horizontal actuator (10 tonnes)	to be submitted later	1	18	1800000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
118		Goods	equipment	No	No	No		NCB	Bump intregrator	to be submitted later	1	11	1100000	Required for labs of CE department of university college of engineering at UG.

119		Goods	equipment	No	No	No		NCB	digital impact testing machine	to be submitted later	1	1.8	180000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
120	Road material testing equipment	Goods	equipment	No	No	No		NCB	float test apparatus	to be submitted later	1	0.08	8000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
121		Goods	equipment	No	No	No		NCB	loss angeles test apparatus	to be submitted later	1	1.5	150000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
122		Goods	equipment	No	No	No		NCB	50cm dia. Seive set	to be submitted later	1	0.05	5000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
123		Goods	equipment	No	No	No	Nov-17	shopping	levelling staff	to be submitted later	10	0.015	1500	Required for labs of CE department of university college of engineering at UG.
124		Goods	equipment	No	No	No	Nov-17	shopping	measuring tape	to be submitted later	10	0.004	400	Required for labs of CE department of university college of engineering at UG.

125	Survey lab equipments	Goods	equipment	No	No	No	Nov-17	shopping	auto level	to be submitted later	3	0.25	25000	Required for labs of CE department of university college of engineering at UG.	
126		Goods	equipment	No	No	No	Nov-17	shopping	tilting level	to be submitted later	2	0.06	6000	Required for labs of CE department of university college of engineering at UG.	
127		Goods	equipment	No	No	No	Nov-17	shopping	digital theodolite	to be submitted later	2	0.9	90000	Required for labs of CE department of university college of engineering at UG.	
128		Goods	equipment	No	No	No			shopping	direct shear apparatus	to be submitted later	1	0.8	80000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
129		Goods	equipment	No	No	No			shopping	proctor test apparatus	to be submitted later	3	0.06	6000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
130		Goods	equipment	No	No	No			shopping	consolidation test apparatus	to be submitted later	1	1	100000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD

131		Goods	equipment	No	No	No		shopping	cone penetrometer	to be submitted later	2	0.04	4000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
132	Soil lab equipments	Goods	equipment	No	No	No		shopping	premeability test apparatus	to be submitted later	1	0.1	10000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
133		Goods	equipment	No	No	No		shopping	sample extractore	to be submitted later	3	0.04	4000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
134		Goods	equipment	No	No	No		shopping	CBR test apparatus	to be submitted later	1	0.8	80000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
135		Goods	equipment	No	No	No		shopping	IS seive set for coarse aggregate	to be submitted later	1	0.15	15000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD

136		Goods	equipment	No	No	No	Nov-17	shopping	IS seive set for fine aggregate	to be submitted later	1	0.2	20000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
137	Load Cells	Goods	equipment	No	No	No	Nov-17	shopping	Digital load cell	to be submitted later	3	0.15	15000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
138	Linear Voltage Displacement Transducer	Goods	equipment	No	No	No		shopping	LVDT	to be submitted later	3	0.11	11000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
139	Servocontrolled Compression Testing Machine	Goods	Equipment	No	No	No		shopping	Digital Servocontrolled compression testing machine (1000 kN)	to be submitted later	1	20	2000000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
140	Digital Weighing Balance	Goods	equipment	No	No	No		shopping	Digital weighing balance.	to be submitted later	4	0.15	15000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD

141	Concrete Mixer	Goods	equipment	No	No	No	Nov-17	shopping	concrete mixer	to be submitted later	1	2	200000	Required for labs of CE department of university college of engineering at UG & PG level. Also essential for research work related to PhD
142	Fluid machanics lab aaparatus	goods	equipment	No	No	No		shopping	Discharge Through Venturimeter&Orificemeter Apparatus	annexure 2	1	0.8	80000	Required for labs of PE & PCE department of university college of engineering at UG.
143		goods	equipment	No	No	No		shopping	Bernoulli's Theorem Apparatus	annexure 2	1	0.65	65000	Required for labs of PE & PCE department of university college of engineering at UG.
144		goods	equipment	No	No	No		shopping	Losses due to Pipe Fittings, Sudden Enlargement & Contraction Apparatus	annexure 2	1	0.7	70000	Required for labs of PE & PCE department of university college of engineering at UG.
145		goods	equipment	No	No	No		shopping	Reynold's Apparatus	annexure 2	1	0.5	50000	Required for labs of PE & PCE department of university college of engineering at UG.
146		goods	equipment	No	No	No		shopping	Pitot Tube Set-up	annexure 2	1	0.75	75000	Required for labs of PE & PCE department of university college of engineering at UG.
147		goods	equipment	No	No	No		shopping	Cavitation Apparatus	annexure 2	1	1.1	110000	Required for labs of PE & PCE department of university college of engineering at UG.

148		goods	equipment	No	No	No		shopping	Darcy's Law Apparatus	annexure 2	1	0.8	80000	Required for labs of PE & PCE department of university college of engineering at UG.
149		goods	equipment	No	No	No		shopping	Centrifugal Pump Test Rig	annexure 2	1	0.9	90000	Required for labs of PE & PCE department of university college of engineering at UG.
150		goods	equipment	No	No	No		NCB	Reciprocating Pump Test Rig	annexure 2	1	1	100000	Required for labs of PE & PCE department of university college of engineering at UG.
151		Goods	Equipments	NO	NO	NO		NCB	API GRAVITY HYDROMETERS	Annexure 2	4	0.015	1500	Required for labs of PE & PCE department of university college of engineering at UG level.
152		Goods	Equipments	NO	NO	NO		NCB	SPECIFIC GRAVITY HADROMETERS	Annexure 2	4	0.015	1500	Required for labs of PE & PCE department of university college of engineering at UG level.
153		Goods	Equipments	NO	NO	NO		NCB	CONDUCTIVITY METER	Annexure 2	2	0.15	15000	Required for labs of PE & PCE department of university college of engineering at UG level.
154		Goods	Equipments	NO	NO	NO		NCB	DEAN AND STARK APPARATUS	Annexure 2	2	0.1	10000	Required for labs of PE & PCE department of university college of engineering at UG level.

155	Production Engineering Lab Apparatus	Goods	Equipments	NO	NO	NO		NCB	BENCH TOP CENTRIFUGE	Annexure 2	1	2.5	250000	Required for labs of PE & PCE department of university college of engineering at UG level.
156		Goods	Equipments	NO	NO	NO		NCB	REID VAPOUR PRESSURE TEST APPARATUS	Annexure 2	1	0.75	75000	Required for labs of PE & PCE department of university college of engineering at UG level.
157		Goods	Equipments	NO	NO	NO		NCB	HIGH PRECISION BALANCE	Annexure 2	1	1.2	120000	Required for labs of PE & PCE department of university college of engineering at UG level.
158		Goods	Equipments	NO	NO	NO		NCB	PRECISION BALANCE	Annexure 2	1	1	100000	Required for labs of PE & PCE department of university college of engineering at UG level.
159		Goods	Equipments	NO	NO	NO		NCB	U TUBE VISCOMETER	Annexure 2	3	0.03	3000	Required for labs of PE & PCE department of university college of engineering at UG level.
160		Goods	Equipments	NO	NO	NO		NCB	STEFAN BOLTZMANN'S APPARATUS	Annexure 3	1	0.65	65000	Required for labs of PE & PCE department of university college of engineering at UG level.
161		Goods	Equipments	NO	NO	NO		NCB	EMISSIVITY MEASUREMENT APPARATUS	Annexure 3	1	0.6	60000	Required for labs of PE & PCE department of university college of engineering at UG level.

162	Heat Transfer Lab Equipment	Goods	Equipments	NO	NO	NO		NCB	FREE AND FORCED CONVECTION APPARATUS	Annexure 3	1	1	100000	Required for labs of PE & PCE department of university college of engineering at UG level.
163		Goods	Equipments	NO	NO	NO		NCB	SINGLE EFFECT EVAPORATOR APPARATUS	Annexure 3	1	1.5	150000	Required for labs of PE & PCE department of university college of engineering at UG level.
164		Goods	Equipments	NO	NO	NO		NCB	HEAT PIPE APPARATUS	Annexure 3	1	1.3	130000	Required for labs of PE & PCE department of university college of engineering at UG level.
165		Goods	Equipments	NO	NO	NO		NCB	Mechanical Stirrer	Annexure 3	1	0.1	10000	Required for labs of PE & PCE department of university college of engineering at UG level.
166	Geology lab Equipment	Goods	Equipments	NO	NO	NO		NCB	Microscope	Annexure 4	1	5	500000	Required for labs of PE & PCE department of university college of engineering at UG level.
167	Books	Goods	Books & LRS	YES	NO	NO		Order by Dean FA	Books				5000000	Research Books
168	E-Books	Goods	Books & LRS	YES	NO	NO		Order by Dean FA	E-Books				3000000	Book Bank
169	E-resources	e-journals	e-journals	YES	NO	NO		Order by Dean FA	Science direct				6000000	PG and Researc
170									Emerald				2000000	PG and Researc
171									IEL				4000000	PG and Researc
172									ASME				500000	PG and Researc
173									ASCE				400000	PG and Researc
174									Macgraw Hill Digital Library				200000	PG and Researc
175	RFID system	Goods	Equipments	NO	May be	May be		Order by Dean FA	RFID system				5000000	Modernisation

178	Desktop Computer	Goods	Equipment	May be	May be	May be	Nov-17	shopping	Desktop Computer	i7 level	10	65000	650000	Office work
179	Photocopier Machine	Goods	Equipment	May be	May be	May be	Nov-17	shopping	Photocopier Machine	RICOH mp2501L	2	100000	200000	Office work
180	Video Handycam Camera	Goods	Equipment	May be	May be	May be	Nov-17	shopping	Video Handycam Camera	sony	1	80000	80000	Office work
181	Multimedia Projector	Goods	Equipment	May be	May be	May be	Nov-17	shopping	Multimedia Projector		2	60000	120000	Office work
182	False Ceiling & Acoustics Improvement	Services	NO	NO	NO	NO	Nov-17		False Ceiling & Acoustics Improvement	Through Estate Deptt.	1	300000	300000	Office work
183	Carpeting	Services	NO	NO	NO	NO	Nov-17		Carpeting (All Interview Room, GD Room, Confrence Hall, Presentation Hall, PTP Room, etc.	Through Estate Deptt.	1	300000	300000	Office work
184	New Construction	Building	NO	NO	NO	NO	Nov-17		Auditorium (Capacity 1000 Sitting)	Through Estate Deptt.	1	90000000	90000000	for University & College work
185	Laser Printer	Goods	Equipment	May be	May be	May be	Nov-17	shopping	Laser Printer	Good Quality Machine	4	15000	60000	Office work
186	Computer Table	Goods	Furniture	May be	May be	May be	Nov-17	shopping	Computer Table	Good Quality	10	10000	100000	Office work
187	Office Chair	Goods	Furniture	May be	May be	May be	Nov-17	shopping	Office Chair	GoodQuality	20	5000	100000	Office work
188	Almirah	Goods	Furniture	May be	May be	May be	Nov-17	shopping	Almirah	Good Quality	10	15000	150000	Office work