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Impact Analysis of TEQIP-II Project

As per the requirement of SPFU, Following are the key points of Impact of TEQIP-II project:

1. Result Monitoring Report (MIS of all years):-

Over a period of time of the TEQIP II project various activities were carried out for the benefit of the UG, PG and Research students to enhance the quality of research. A table below shows the year wise data related to various activities conducted during the project.

Indicator	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Share of supported programs that are accredited or applied for	84.62%	78.57%	71.43%	66.67%	66.67%	66.67%	66.67%
Percentage Faculty with at least an M. Tech (regular and contract)	63.22%	62.16%	63.64%	76.25%	79.52%	89.29%	91%
Total number of Master and PhD students	182	107	154	187	273	217	150
Number of publications in refereed journals (within the field of Engineering)	46	42	11	32	46	164	18
Percentage of Faculty with or pursuing M. Tech and PhD (regular and contract)	63.22%	62.16%	63.64%	76.25%	79.52%	89.29%	91%
Percentage of externally funded research and development projects and consultancies in total revenue	4.92%	69.6%	39.46%	14.88%	0.2%	0%	0%
Transition rate of all students from the first year to the second year of under graduate study	66.95	60.46	55.05	42.78	37.96	49.82	0
Transition rate of students from disadvantaged backgrounds from the first year to second year of undergraduate study	66.8	58.27	48.29	39.46	35.69	43.81	0
Direct Beneficiaries (number)	2672	2668	2613	2604	2954	2914	2580
of which female (percentage)	28.03%	30.06%	29.85%	30.76%	30.53%	30.75%	31.36%

Whether institutions has academic autonomy (Yes/No)	Yes	Yes	Yes	Yes	Yes	Yes
Whether governance self-review received (Yes/No)	NA	NA	No	Yes	Yes	Yes
Whether Governance Development plan received (Yes/No)	NA	NA	No	Yes	Yes	Yes
Fully functional MIS –Whether institution reporting at least 70% of the indicators (Yes/No)	NA	NA	Yes	Yes	Yes	Yes

2. Information of all purchases made during project:-

The University has acquired World Bank Project grant for the improvement of the PG and Research infrastructure in TEQIP II. The university has benefitted from this project in terms of the research instruments and equipments purchased mainly for the students research and related infrastructure. The complete information about the equipments purchased with outcome in terms of publications, patents, dead stock and log book record is given in table below.

Sr. No.	Name of equipment	Major specification	Publication resulted	Patents obtained	Patents filed	Dead stock entries	Log book record
1	Advanced RF and Microwave Antena Trainer	10.5 GHz ADVANCED RF & MICROWAVE ANTENNA Trainer 10.5 GHz (X Band) DRO stabilized antenna transmitter and receiver, Microwave power meter receiver with 0.1dB resolution and 70 dB dynamic range, Directional Coupler for VSWR/ Return Loss, Stepper motor antenna rotator with 1 degree resolution, RS232 interface with polar/cartesian plotting software, different types of compatible antennas PLL Synthesized Digital RF Transmitter/Receiver compatible with above system: Frequency range: 86 - 860 MHz PLL for Tx and Rx and Step size: 0.05, 0.1,0.25,0.5, 1, 10,100 MHz, digital display, PC interface.	Nil	Nil	Nil	Name of Department- EXTC Engg.Deadstockpg no.32-33	Yes
2	AE Software and system MISTRAS	AE software and stand alone PC with AE card AE software having the extracted hit and time based features includes- Peak Amplitude, Energy, Envelope Strength, Duration, Rise Time, Counts, True Energy, RMS, ASL, Counts to Peak, ASL, RMS, True Energy, Parametrics and Including USB-AE-Waveform Option Two channel Acoustic Emission (AE) Digital Signal Processor - 2 USB Nodes The AE Node compatible with single ended or differential sensors amplified by an internal low noise preamplifier Rugged surface mount (SMT) construction Built-in internal preamplifier and power for external preamplifiers 18 bit resolution, 20MHz sampling frequency With analog and programmable digital filters Waveform and location option AE Input one Channel per USB node Sampling Frequency: up to 20 MHz	4 Papers	Nil	Nil	Name of Department Mechanical Engg Deadstockpg no.37-38	Yes

		AE Digitizing: 18 bits or more Parametric Inputs: CH					
3	All in one Desktop PC	1 All in one desktop computer All-in-one Desktop Computer with preloaded Operating System Dell Optiplex 9030 AIO All-in-one Desktop Computer with preloaded Operating System Configuration: Intel Core i5,Operating System: Microsoft Windows 8 2. Intel core i5 Configuration (For item no. 3 & 4) a. Form Factor : All-in-one, Dimensions in mm (HxWxD) (to be specified by the tenderer). b.Processor : Intel Core i5-4570 , 3.3 GHz, 6 MB Cache or its higher version. c.Chipset : Intel H8 series chipset. d.Memory : 4 GB 1600 MHz upgradable upto 16 GB. e. Hard Disk Drive : 500 GB 7200 rpm SATA or higher with Minimum 2 SATA connectors on Motherboard. f.Display : 58.4 cm (23 inch) Wide LED 16:9 (1920x1080)or better Digital Colour Monitor g. Graphics : Intel HD Graphics h. Keyboard : 104 keys or higher OEM USB Keyboard i. Mouse : Optical Scroll with USB interface. j.Ports : 3 USB Ports, 1 Mic., 1 headphone in side, 1 RJ-45, 1 Display Port/ HDMI/VGA port k. Wireless : Bluetooth 3.0, IEE 802.11 b/g/n Communication l. Optical Drive : 8X or better DVD RW Drive. m.Audio : Integrated Stereo Sound with two internal speakers and Mic. n. Webcam : 1.3 Megapixel HD o. LAN : Integrated Gigabit Ethernet LAN 10/100/1000. p. Operating System : Windows 8 Professional / Linux preloaded, as specified, with Media and Documentation and Certificate of Authenticity. q.Certifications : i) Windows 8 / Linux OS certification. r. Power Supply : Internal/external s. Preloaded Antivirus : Microsoft Security Esssentials Software t. OEM Recovery Tool : Desktop must be supplied with OEM pre-loaded tool for desktop manageability including OEMs own	NA	NA	NA		NA

		data backup and recovery tool.					
4	Analytical balance	Analytical Balance Weighing Capacity: 200 g Readability: 0.0001 g Repeatability: < 0.1 mg Pan Size (mm) : 90	1 paper	Nil	Nil	Name of Department Chemical Engg Deadstockpg no.82 Sr. No. 01	Yes
5	ANSYS Academic Research CFD software	ANSYS FLUENT SoftwareAnsys CFX 15.0 Unlimited Nodes Perpetual Licence 5 users, Ansys FLUENT 15.0 Unlimited Nodes Perpetual Licence 5 users, Ansys ICEM 15.0 Unlimited Nodes Perpetual Licence 5 users, Ansys Workbench 15.0 Unlimited Nodes Perpetual Licence 5 users, Ansys CFD Post 15.0 Unlimited Nodes Perpetual Licence 5 users.	2 papers	Nil	Nil	Name of Department Mechanical Engg Deadstockpg no.45	Yes
6	Baking Oven, Furnace	**Baking Oven** Capacity: 1 Cu.ft. Shelf Position : 16 Chamber Dimension : 12"×12" ×12" Digital Pocket Thermometre Temp. range -400 to 2300c Accuract +- (0.60C) **Furnace** Minimum temperature (º C) - 50 Maximum temperature (º C) – 1200 Temp control accuracy - ±5°C Chamber size minimum (" H) - 9.5 Chamber size minimum (" D) - 9 Thermocouple Thermometre and probs Range:- 2000 to 10900 c Accuracy: 0.750 C For probs-Teflon insulated probe with Teflon coated tip	6 papers	Nil	Nil	Name of Department Mechanical Engg Deadstockpg no.42	users - 12
7	CAM Software	CAM Software with stand alone workstations - 2 users for milling and 2 users for turning with stand alone PC for each It should includes Feature RECOGNITION, plus a unique 3D surface wizard for 3D surface modeling, 3D feature wizard for easy creation of 3D toolpaths, automatic ball-end tool ion, and a variety of advanced 3D gouge-free tool path techniques for supporting traditional and high speed machining. Enable to transfer data in different formats and from other solid modelers in IGES, DXF/DWG, Parasolid& ACIS Must include the following features for part creation Holes,	Nil	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.27	Yes

		Facing Feature, OD Turning Feature, ID Boring Feature, Groove Feature, Thread Feature, Cutoff Feature , Bar feed feature , Sub-spindle Feature , Canned Cycle Support Facilitates to connect any FANUC controllers and with Postprocessor capability					
8	Cascade Refrigeration system	High side and Low side Refrigerant R 404A and R-23 Desuper-heater; required compressor- Emerson hermetically sealed, Emerson compressor oil; standard condenser- air cooled; Cascade condenser- tube type; drier- DM-50; Evaporator- tube-in-tube, forced convection air cooled; Expansion device- thermostatic expansion valve, Capillary Tube; Accumulator- Copper shell suction line accumulator; Provide insulation 65 MM PUF 250 MM, PUF Controls & Indications HP / LP Cut-out; Provide Temperature Digital Indicator; Pressure gauges 2 Nos. for suction and discharge; Electrical System Supply-230 Volts, 50 Hz, 1 phase Construction Outer body -Panel: 1.2 mm thick CRCA ; Powder coating Brine Tank-Stainless steel. Size-2165x800 x1675 mm (L*D*H)	Nil	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.71	Yes
9	CNC simulator	Complete Offline Programming Module should be an independent Standalone unit. It should be compatible to existing HAAS and ACE Micromatic machines Programming Module should have following features: Dual software - selectable for Lathe or Milling. Full function control All machine function simulation Full keyboard Graphic Dry Run Built in machining calculator Built in USB port 2 nos. Built in help menus Fully descriptive alarm generation Upgradeable to future software versions Min 15" size LCD color Monitor with soft keys Speed control potentiometer with 0 - 150% increments preferable Feed control potentiometer with 0 - 150% increments preferable Self Diagnostic function Dry Run MDI mode	Nil	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.66	Users-60 students

		Tapping function Standard cycles as per ISO standards/Back grounding, Editing. Simulations of NC program Display of PLC alarms & message Over travel control Emergency stop on control Panel. Compatible with smart board connectivity Programming Module unit should be capable of Lathe & Milling CNC programming. The stored program should be transferred on data transfer device (Pen drive). The same program must be transferred, stored on and must run on existing HAAS and Micromatic machines					
10	Coating Thickness Guages	Coating Thickness Gauge Measuring range : 0 – 1500 µm Accuracy : ± 0 - 50 µm *Diamond Cutter Machine Maximum rpm : 500 Thickness of the material to be cut : up to 10 mm Vacuum Desiccator, Glass medium Inside diameter-170 mm Sleeve- Dia 65 X 40mm Height	6 papers	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.46	12 users
11	Combined Nitrogen Cum Air Generator	The Nitrogen and Dry Air generator should have robust, field proven technology to produce ultra high purity nitrogen (99.999%) and dry air suitable for Gas Chromatography & other critical applications. ? The Generator should work on Pressure Swing Adsorption (PSA) Technology and must have robust & reliable CMS with minimum 10 years warranty. It should be a single 'plug & play' unit providing continuous stream of nitrogen and dry air and should employ noise reduction technology for whisper quite operation Noise Level < 55DB. ? It should have built-in air compressor having 0.1µ air filter at the inlet. ? The CMS column must be protected by 0.01µ filter for compressed air. ? The system must have in built Mass flow Controller (MFC) for very precise flow control ? The system should be able to operate over a wider range of voltage: 207 - 253V 50/60HZ ? There should be PRV to protect the CMS column from over pressure of air entering into it. ? The generator should have integral oil free compressor, of world renowned make with proven	1 paper	Nil	Nil	Name of Department chemical Engg.Deadstockpg no.98	yes

		performance and reliability. ? It should have the following typical specifications. Operating Principle Pressure Swing Adsorption Compressor Inbuilt Compressor Noise Level <50db Compressor Working Principle WOB-L Compressor Warranty 2 years Nitrogen Purity 99.999% Nitrogen Outlet Pressure 5 bar or 72.5 psi Nitrogen Outlet Flow with MFC & without MFC Dry Air Dew Point Dry Air Flow Rate 0.6 LPM -40.0 deg. C 1.5 LPM Hydrocarbon content <0.1ppm Hydrocarbon Removal Technique Catalytic Heating at560ºC±20ºC CMS Make Takeda OR EQUIVALENT CMS Warranty 7 OR MORE years Internal Pipes & Brass Fittings Swagelok or equivalent Pre CMS Column Filter 0.1u Post Hydrocarbon Removal Filter 0.1u CMS Column Over Pressure Protection Pressure Relief Valve Timing Cycle ON 200 sec Timing Cycle OFF 80 sec Solenoid Valves ShavoNorgren or equivalent Pressure Gauges Wika or equivalent Storage Tanks Inbuilt Air Receiver, Buffer & Nitrogen Storage Tank Compressor Warranty 2 years Display Instrument Running Hours, Password Protection, Service Hours Reminder with Audio & Visual Alarm Error Status Display Type LCD Ambient Temperature Range : 5 – 45°C Port Connections Outlet : 1/8" Compression fitting Weight & Dimension Dimension (H x W x D) (mm) : Maximum 1000X 500X 500 Weight : < 75 kg					
12	COMSOL Multiphysics software	COMSOL Multi physics software Modules list as follows - COMSOL Multi physics, CFD Module, Chemical Reaction Engineering Module, Heat Transfer Module, Optimization Module, and Particle Tracing Module - One License Each	Nil	Nil	Nil	Name of Department chemical Engg.Deadstockpg no.92	yes
13	Conductivity Meter, Digital pH/ORP/Temp. Controller, Multi	Conductivity Range : 0 – 200 ms Temperature Range:10 -100 0C Accuracy : 0.10C Resolution : 0.10C Digital pH/ORP/Temp. Controller pH : 0 – 14 Voltage : 0 – 1000 mV	16 papers	Nil	Nil	Name of Department Mechanical Engg Deadstockpgno.49	12 users

	Magnetic Stirrer with hot plate	Temperature : -200C - 1500C Resolution : pH 0.01, mV : 10C, Temperature : 0.1 Digital Viscometer Viscosity Range : 2 – 20 cP – Glass Tip and 20 – 200 cP – Glass Tip				/52/53 sr no. 01	
14	Constant Temperatur e bath	Constant Temperature bath (Refrigerated/Heating Circulator) 1 Working temperature range -20 ... 200 °C 2 Temperature control PID 3 Temperature stability ±0.02 °C 4 Display LED 5 Display resolution: 0.01 (-9.99…99.99° C) / 0.1 °C 6 Electronically adjustable pump with Flow rate 11-16 l/mi 7 Ambient temperature 5...40 °C 8 Digital Interface facility Bath capacity 2500 cm3 9 Removable venting grid for convenient cleaning Transportation facility Warning safety system Active cooling control Adjustable high temperature cut-out facility Drain facility Compact size, suitable for laboratory 10 An exhaustive training should be inclusive including troubleshooting, operation etc. Warranty Certificate from the company and the supplier as well. With instruction, troubleshooting etc. manual, tool kit etc	Nil	Nil	Nil	Name of Departm ent Mechani cal Engg Deadstoc kpg no.33	yes
15	Control Unit for Dynamome ter	5233A1 Control Unit for Dynamometer with built -in 3-channel charge amplifier Type 9257BA Incl.: 1 x Z16687, 1 x 3.640.568 , 4 x 6.150.010	4 papers	Nil	Nil	Name of Departm ent Mechani cal Engg Deadstoc kpg no.64	yes
16	Copier machines	COPIER Machine Type Desktop Maximum Original Size A3 Developing System Single component dry toner projection development system Fixing System On-demand Fusing Resolution Reading: 600 x 600dpi Printing: 600 x 600dpi Number of Tones Up to 256 Acceptable Paper Stock Paper Drawer: 64 to 90gsm Stack Bypass Tray: 64 to 128gsm Acceptable Paper Size Paper Drawer: A4, A4R, A3, A5, B4, B5, B5R Stack Bypass Tray: 95mm x	NA	NA	NA	Name of Departm ent Mechani cal Pg. 22 /Chemica l Pg. 86 /Registrr ar Office pg. 10 /EXTC Pg 18 /Comput er pg. 05 /Electrica l Engg	YES

		148mm to 297mm x 432mm Warm-Up Time 13 seconds or less First Copy Time 7.9 seconds or less (Using platen glass; A4, direct, paper drawer 1) Copy Speed (A4) Up to 20ppm Magnification 25 - 400% in 1% increments Paper Feeding System Paper Drawer: 250 sheets (80gsm) Stack Bypass Tray: 80 sheets (80gsm) Output Orientation Face down Multiple Copies 1 to 99 sheets Memory Standard 64MB OS Compatibility Windows XP Professional / Home Edition Windows 2000, Windows Server 2003, Windows Vista, Windows Server 2008, Windows 7 Power Source 220 - 240V AC, 50 / 60Hz, 2.7A Max Power Consumption Approx. 1.373kW Toner Yield Approx. 8,300 sheets equivalent (A4, 6% coverage) Drum Yield 55,000 sheets				Deadstoc kpg no.53	
17	Deep Freezer	Deer Freezer Capacity = upto 170 lit., Temperature Range = Ambient to -80 0C No. of trays = 2 or 4 (Custom) Application = Biological Research	1 paper	Nil	Nil	Name of Departm ent Mechani cal Engg Deadstoc kpg no.63	Yes
18	Desktop PC i5	CPU : Intel Core i5-3470, 3.2 GHz, 6 MB Cache or higher. • Chipset : Intel Q77 or better. • Bus Architecture : 4 PCI (PCI/PCI Express) • Memory : 4 GB 1600 MHz DDR3 RAM with 32 GB Expandability • Hard Disk Drive : 500 GB 7200 rpm or higher. • Monitor : 47 cm or larger (18.5 inch or larger) TFT/LED Digital Colour Monitor TCO- 05 Certified. • Keyboard : 104 Keys. • Mouse : Optical with USB interface. • Bays : 3 Nos. or above. • Ports : 6 USB Ports including 2 USB 3.0 Ports (with at least 2 in front), audio ports for microphone and headphone in front. • Cabinet : Mini Tower. • DVD ROM Drive : 8x or better DVD ROM Drive. • Networking facility : 10/100/1000 on board integrated Network Port with remote booting facility remote system installation, remote wake up, TPM enabled 1.2 chip using any	NA	NA	NA	Name of Departm ent Mechani cal Engg Deadstoc kpg no.17-21	yes

		standard management software. • Operating System : Windows 8 OS and Linux certification. • Power Management : Screen Blanking, Hard Disk and System Idle Mode in Power On, Set up Password, Power supply SMPS Surge protected. • Preloaded Software : Norton or McAfee or eTrust or e-scan or Fore front or Trend Micro or PC Tool or Quick heal Antivirus (Latest Version) with 60 days License. (Included in case of Windows 8 only).					
19	Desktop PCs i7	CPU : Intel Core i7-3770, 3.4 GHz, 8 MB Cache or better. • Chipset : Intel Q77 Express or higher. • Bus Architecture : 4 PCI (PCI/PCI Express) • Memory : 4 GB 1333 MHz DDR3 RAM with 32 GB Expandability. • Hard Disk Drive : 500 GB 7200 rpm or higher. • Monitor : 47 cm or larger (18.5 inch or larger) TFT/LED Digital Colour Monitor TCO- 05 Certified. • Keyboard : 104 Keys. • Mouse : Optical with USB interface. • Bays : 2 Nos. or above. • Ports : 6 USB Ports including 2 USB 3.0 Ports (with at least 2 in front), audio ports for microphone and headphone in front. • Cabinet : Small form Factor(Max. 16 Litres). • DVD ROM Drive : 8x or better DVD ROM Drive. • Networking facility : 10/100/1000 on board integrated Network Port with remote booting facility remote system installation, remote wake up, TPM enabled 1.2 chip using any standard management software. • Operating System : Windows 8 OS and Linux certification. • Power Management : Screen Blanking, Hard Disk and System Idle Mode in Power On, Set up Password, Power supply SMPS Surge protected. • Preloaded Software : Norton or McAfee or eTrust or e-scan or Fore front or Trend Micro or PC Tool or Quick heal Antivirus (Latest Version) with 60 days License. (Included in case of Windows 8 only).	NA	NA	NA	Name of Department Mechanical Engg Deadstockpg no.13-16	yes
20	Diffused Microwave Reactor	Diffused Microwave Reactor with temperature control, UV-light and Ultrasonic system Microprocessor controlled magnetron with rotating diffuser capable of providing homogeneous microwave distribution	1 paper	Nil	Nil	Name of Department Chemical Engg.Deadstockpg no.78-	yes

		Microwave power of ~ 1000 Watts Cavity of SS with suitable corrosion resistant coating Temperature of up to 2500C or more should be possible Robust exhaust system for cooling and carrying away fumes, if any Ability to handle spillages should be possible Mechanical and/or magnetic stirring should be also possible Condenser attachment should be there Purging with inert gas like nitrogen should be possible Capacity from 300 to 1000 ml (glass or quartz): 2 in no. minimum Screen display and monitoring and recording facilities should be available UV light set up: of wavelength 365 nm and power of 300 Watts Ultrasonic set up: 600 Watts and 26 to 28 KHz				79	
21	Digital Storage Oscilloscope	Digital Storage Oscilloscope Make -Tektronix, Model-TDS2024C Bandwidth = Upto 200 MHz, No. of Channels = 4, Sampling Rate = 1 GSa/s – 25 GSa/s, Memory = 8 – 12 MB Deep Memory Display = 7" Color LCD Display, Recoding Length = 20 Kpts – 1 Mpts, Interface Connectivity = USB, Parallel & RS232, Laptop, printer & projector connectivity support, Application: Strain gauge data acquisition in high speed dynamic testing, Commercial Version of DSO	Nil	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.62	Yes
22	dSPACE Kit 1104	ACE Kits Advanced Control Education Kit 1104 - consisting of DS1104 PPC 603e / 250 MHz controller board with 32 MB RAM, CLP1104 Connector/LED Panel, CDP Control Development Software Package andMicrotec C Cross Compiler with USB dongle	1 paper	Nil	Nil	Name of Department Electrical Engg.Deadstockpg no.57	Yes
23	E Books	E Books Annual subscription for TMH E books as follows - 1 Chemical 7 2 Chemistry 17 3 Civil 18 4 Computer Science 172 5 Computers 5 6 Core 21 7 Electrical 81 8 Electronics 5 9 Mechanical 49	NA	NA	NA	Library Deadstock Pg. No. 1-12 sr. no. 1-400	Yes

		10 Physics 25 Total 400					
24	EM Simulation software	The software should provide the following utilities IES SINGULA 3D HIGH-FREQUENCY ELECTROMAGNETIC ANALYSIS SOFTWARE • It should have choice of solvers for independent verification, BEM and FEM shall be included • Auto solver facilty • It should have choice of optimization tools: Parametric Analysis for those who need fast and easy optimization with a short learning curve. • It should have Built-in material libraries. Customize and create your own library for easy access to the materials you use. • It should have Intuitive interface that can be easily customized according to user preferences (overall appearance, toolbars, solvers, backgrounds, defaults, etc). • It should support Highly accurate field calculations based on the Method of Moments (MoM) or Finite Element Method (FEM) • It should support Incident plane wave, line, surface, current and voltage source can be the excitation • It should support Permeability, permittivity and conductivity data stored in convenient and rapidly accessible tables • It should support Analysis of H, B, E, D and J field and current density components • It should support Volume and surface current density • It should support Near and far field results • It should support Radar cross-section • It should support Gain, directivity and axial ratio • It should support Input impedance, admittance and scattering parameters • It should support Input power, dielectric and conductivity power loss, radiation power and radiation efficiency • It should support Sweeping technique to solve the mono-static RCS, which saves CPU time • It should support Batch function unattended solution of multiple models	1 paper	Nil	Nil		Yes

		• It should Support Self-adaptive meshing or optional user refinement. • It should support User assigned weighting factors: inform the solver what areas are of special interest so it will produce especially good local results. • It should support Periodic and symmetry features minimize modeling and solution time. • It should have facility to create your own applications: write your own dedicated tools for specific tasks. Users can program and have full control of their custom electromagnetic application, while using INTEGRATED programs in the background. • It should allow a variety of programs such as Matlab, Excel, and Microsoft Visual Studio to work with the software in an interconnected environment. • It should Support Audiovisual (AVI) files to show the results in an animation format. • It should Support A variety of display forms for plotting near field results, including scalar and vector field quantities such as graphs, contour, arrow, streamline, scatter and vector loci plots. • It should Support High quality graphics and text utility for preparation of reports and presentations. • It should Support Data exportable to formatted files for integration with spreadsheets and other software packages. • It should Support A variety of display forms for far field results including contour or arrow plots, color bands, surface representations, polar, rectangular plots and 3D patterns. • It should Support Smith Chart & S Parameter plots • It should Support following Geometry – CAD Features . Inventor - SolidWorks Solution Partner, SolidEdge - Siemens Solution Partner, AutoDesk Authorized Developer,PTC Solver Partner Advantage, Microsoft Partner, Intel Software Partner , Tecplot Partner, Industry standard CAD import/export utilities offering time saving convenience					

		for model design and creation., CAD healing utilities for automatic correction of drafting errors. *.STEP and *.SAT file import options., Geometry tools for healing common 3D CAD problems., Ability to assign name to geometry entities. It should analysis the High Frequency components like - electromagnetic scattering from dielectric/conducting bodies, open surfaces and conducting wires, wire antennas (monopole, dipole, yagi, helix,spiral), surface antennas (planar strip, spiral and reflector), dielectric antennas (resonant and standing wave) on infinite/finite ground planes, various current sources, wire/surface antennas in presence of dielectric/conducting bodies, EMC/EMI interactions, electromagnetic effects on human bodies					
25	Embedded system	A COMPLETE EMEBEDDED DESIGN , ANALYSIS with HARDWARE PROTOTYPING & VERFIFICATION From IAR 1.ARM Cortex™-M3 processor-based or higher MCU in 100-pin LQFP, 100MHz LPC1768, on-chip Memory: 512KB Flash & 64KB RAM, colour QVGA TFT LCD, 10/100 Ethernet Port, Full Speed - USB, USB-OTG, & USB Host, 2 CAN Interfaces, 2 Serial Ports, SD/MMC Card Interface, Analog Voltage Control for ADC Input, Amplifier and Speaker compatible with the ARM, approximately 70 GPIO pins, debug Interface Connectors, 20 pin JTAG (0.1 inch connector), 10 pin Cortex debug (0.05 inch connector), 20-pin Cortex debug + ETM Trace (0.05 inch connector),JTAG clock frequency from 1KHz to 100MHz. ARM RTCK support, multi-core support with full JTAG scan-chain configurability, hot-plug support, automatic detection and configuration for the appropriate target voltage from 0.9V to 3.6V, fast in-target flash Programming, Windows and Linux platform compatibility, ARM11 and THUMB instruction-set debugging, Target-Reset and Test-Port-Reset, indication of status of Target, Debug Probe and USB link,	2 papers	Nil	Nil	Name of Department EXTC Engg Deadstockpg no.64-66	Yes

		Universal Hardware-Debug platform for all popular target architectures and compilers, integrated environment for building and debugging embedded applications, multiple projects facility, integration with IAR visual STATE 2.Compatible debugger software: user friendly text editor with features like auto completion, parameter hint, code folding, block , block indent, bracket matching, tool options configurable on global, group of source files, or individual source files level, multiple level of optimizations on code size and execution speed allowing different transformations, such as function in lining loop unrolling etc., Multi-file compilation support, support for ARM Embedded Application Binary Interface (EABI) and ARM, Cortex Microcontroller Software Interface Standard (CMSIS), CMSIS SVD files, All ARM cores including ARM7, ARM9, ARM11, Cortex-A, Cortex- R and Cortex-M devices, Additionally debugger should be able to support devices from many ARM licensees including: Atmel, Conexant, Freescale, Luminary, Marvell, NEC, NXP, OKI, Qualcomm, Renesas, Samsung, Sharp, Sony, ST, Toshiba, Trident and Texas Instruments.					
26	EMI Analyzer	EMI EMC LAB with LISN, EMI Analyzers, PC interface with necessary supporting software Radiated and conducted emissions measurements, Magnetic field strength measurement with magnetic field probe is to be performed in magnetic field strength measurement mode, Frequency Range : 30MHz- 3GHz, radiated emissions measurement, 150KHz to 30MHz, conducted emission measurement, Standards to be supported : CISPR 1.1 (Class A/B Group 1) CISPR 22 (Class A/B Group-1) , EN 55022 (Class A/B), VCCI (Class A/B), PCC part 15 subpart B, 3GHz Spectrum Analyzer, Supporting compatible PC Software, Magnetic Field Probe Line Impedance Stabilization Network: Frequency Range-150KHz to 30MHz, Circuit Type-50? /50 µH, Impedance Accuracy-	Aim functions (Gain, fields, impedance etc.) -	Time Domain Transform:		Name of Department EXTC Engg Deadstock pg no.34-35	Yes

		Within ± 20%, RF Connector-BNC female, Built-in Transient Limiter Compatible Broad Band Antenna with 30MHz to 3 GHz, : Linear Polarization and 50 ? Impedance EMI Demonstration board with Crystal Frequency-20MHz, Signal Source-100KHz, Including Electric Probe and Magnetic Probe					
27	Encyclopadia of Chemical Technology	Kirk Othmer Encyclopedia of Chemical Technology 5th Edition, 27 Volume Set 9780471484943 ISBN Author- Kirk	NA	NA	NA	Library Deadstock Pg no. 73 Sr. No. 35140 - 35166	Yes
28	FEKO Software suite	Electromagnetic (EM) analysis software suite, FEKO: Comprehensive electromagnetic (EM) analysis software suite, built on state of the art computational EM (CEM) techniques to solve a wide range of electromagnetic problems.	1 PAPER	Nil	Nil	Name of Department EXTC Engg Deadstock kpg no.25-26	Yes
29	Focussed microwave for synthesis	Atmospheric as well as pressureized (20 - 30 bar pressure) reactions Reaction temperature up to 2500C or more should be possible Reaction volumes of up to 60 to 100 ml (this should be working volume and not vessel volume) or more for atmospheric and 30 to 50 ml for pressurized reactions Frequency: 2450 MHz Power output: Variable but 300 watt would be desirable system should be mono-mode System must have a built in operating system with fluorescent Display and for entry of operating parameters system software must automatically adjust the power delivery Pressurized vessels (vials made up of quartz/glass as the case may be) of 30-50 ml volume: 50-100 in no., capable of withstanding the design pressure. Atmospheric pressure vessels up to 30 to 50 ml volume (this should be working volume and not vessel volume) at least 3 to 5 in no. System should have facility to clean cavity in case of spillage.	1 PAPER	Nil	Nil	Name of Department Chemical Engg Deadstock kpg no.88	Yes
30	Function Waveform Generator	Frequency Range 0.1 Hz to1 MHZ Operating Modes: Sine, Square, Triangle and DC 20Vpp Signal Output LCD for Frequency Display	Nil	Nil	Nil	Electrical Engg. Deadstock Pg No. 52 Sr. No. 01	yes

		Low Distortion TTL Output					
31	High speed Camera	Make = Photron, Model= FASTCAM Mini UX100 high speed camera, Recording speed = 4000 fps @ maximum resolution and up to 1,00,000 fps at reduced resolution, Maximum Resolution = 1024 x 1024, Pixel Size = 12 x 12, Internal Memory = up to 16 GB Sensor = 12, Bit CMOS Communication Interface = 1000 Base T Ethernet & USB Software Interface with 32/64 bit Windows OS, Minimum Exposure Time = 1 µS with standard accessories Application: High speed dynamic impact testing of biological soft tissues and high speed image capturing in metal working phenomena.	Nil	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.67	Yes
32	High-resolution PCM Printer	High-resolution PCM Printer Size 24 inch Colour inkjet 1200×2400 dpi resolution Minimum line width= 0.02 mm Network and wifi ready 1GB Ram With four set cartridge	3 PAPERS	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.30	Yes
33	ICT Components	HP 1910-24G Switch, 24 10/100/1000 ports, 4 SFP port, L2/L3 static routes, ACL, 802.1x N/w login, IPv6. HP Lifetime Warranty 1) Audio Mixer - 1 No. AMX-812 : 8 Channel • AC & 24V DC Operation or equivalent Power Requirements AC: 220-240V 50/60Hz DC: 24v (2×12V Car Battery) MIC Input (Impedance/Gain) 2k /62dB LINE Input (Impedance/Gain) 20k Balanced/42dB, 10k Unbalanced/42dB Distortion < 0.08% Frequency Response 30Hz - 20kHz (+0,-1dB) Tone Controls Bass : ± 12dB at 100Hz Treble : ± 12dB at 10kHz Outputs Line Output HI: 0dBm/+17dBm (775mV/5.5V) Echo/Reverb System Digital Signal Processing Signal to Noise Ratio >70dB (0dBm, 0.775V) Dimensions W423 × H93 × D302 mm Weight 5.0kg 2) Microphone - 5 nos. Wireless/Collar/Head worn Microphones 3) Speakers - 4 Nos. Input Power 100W RMS Configuration Two	NA	NA	NA	Insitute. EXTC Engg.Deadstockpg no.36-41	Yes

		Way Frequency Response 55-20,000Hz Low Frequency Speaker 1 x 12", Dia 1.5" Voice Coil High Frequency Unit 1 x Piezo Horn Tweeter 2"×5" SPL at (1W/1m) 97 dB Max. Rated SPL 117 dB Nominal Impedance 8 Port Sealed Enclosure Input Connectors 1/4" Phone Jack + Terminal Strip Dimensions W405 × H515 × D330 mm Weight 16.70kg 4) Camera - 1 Good quality camera with connectivity to computer with live video streaming (HD Handy camera is recommended). It would be better to have a tripod if using Handy Camera The following is applicable only if your camera does not support USB live streaming. Ensure that the cable is long enough to connect your camera to the ComputerezCap and GrabBee converts Composite and S-Video output to USB. Video Capture cards are natives 5) VGA – Outputs - 2 Nos. In addition to on board VGA In addition to on-board VGA which will be used to connect the monitor, we need two VGA outputs. Some graphics cards have dual display outputs, which can support 2 displays in a single card. 6) Amplifier - 1 no. SSA-350 : 350 WATTS • AC & 36V DC Operation Power Output 450W Max., 350W RMS at 10% THD 320W RMS at 5% THD, 300W RMS at 2% THD Output Regulation 2 dB, no load to full load at 1kHz Input Channels 7 × Mic 0.8mV/4.7k , 1 × 100mV/470k 1 × 200mV/470k , 1 × Line 1V/50k Frequency Response 50-15,000Hz ±3dB Signal to Noise Ratio 60dB Tone Controls Bass: ±10dB at 100Hz, Treble: ±10dB at 10kHz Outputs Preamp 200mV/600 , Line 1V/1k Speaker Outputs 4 , 8 , 70V & 100V Power Supply DC: 36V (3 × 12V Car Battery) AC: 220-240V 50/60Hz Power Consumption DC: 6A AC: 660VA Dimensions W480 × H160 × D360 mm Weight 20.5kg Corei3-3220/2GB/500GB/dvdrw, DOS Downgrade/3-3-3/18.5" LED HP ProLiant (or equivalent) ML110 G7 E3-1220 NHP SATA					

		Server/Intel® Xeon® E3-1220 (3.10GHz/4-core/8MB/80W, 1333, Turbo 1/2/3/4) /8MB Intel® Smart Cache/ 4GB (1x2GB) PC3- 10600E DDR3 UB ECC/ HP NC112i 1-Port Ethernet Server Adapter (x2)/ HP Embedded Smart Array B110i SATA RAID Controller (RAID 0/1/10)/ 350 Watts Non-Hot Plug, Non redundant Power Supply/ Half Hieght SATA DVD Rw Kit /HP Integrated Lights-Out Standard (iLO 3)/ Micro ATX Tower (4U)/3-3- 3 NBD Support HP 4GB (1x4GB) Dual Rank x8 PC3-10600 (DDR3-1333) Unbuffered CAS-9 Memory Kit HP 1TB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive HP 18.5 MONITOR 2800 LUMENS 3000;1 CONTRAST RATIO SVGA RESOLUTION LG Or equivalent Make 3500 VA with battery of standard make with ISI marks for 2 Hours backup or equivalent. With 2 or more years of warranty APC or equivalent make					
34	IEEE e-journal	IEL Growth Plan (Multiple user) More than three million full-text documents with unlimited access to IEEE/IET journals, conference proceedings, and active standards • Peer-reviewed articles from the top-cited journals • Cutting-edge conference papers • Vital IEEE standards to maximize the effectiveness of your R&D, including IEEE Standards Dictionary Online • Complimentary access to papers from VDE conference titles • Backfile to 1872 for titles • Powered by the IEEE Xplore digital library's robust search tools • INSPEC® abstract/citation and bibliographic records • Weekly s—more than 20,000 new documents added monthly	NA	NA	NA	library page no-55	Yes
35	Laser jet printer	Laserjet Pro M1136 Multifunction Printer Printing Method:Laser Type:Multifunction Display:ual Digit Numeric LED Model Name:M1136 Model Series:LaserJet Pro Part Number:CE849A Printing Output:Monochrome Printer Languages:Host Based	NA	NA	NA	Mechanical Engg Deadstock Pg No. 21-23 sr. No. 1/1	

		Functions:Print, Copy, Scan Internal Memory:8 MB Brand:HP Print Max Print Resolution (Mono):600 x 600 dpi Duty cycle (monthly, A4):8000 pages First Print Out Time (Mono):8.5 sec Print Speed Mono:18 ppm Duplex Print:Manual Paper Handling Media types supported:Paper, Envelopes, Transparencies, Labels, Cardstock, Postcards Output tray capacity:100 sheets Output tray type:Face-Down Input tray capacity:150 pages Media size supported:A4, A5, B5, C5, C6, DL Scan Scanning Speed Mono:10 sec Bit depth Mono:24-bit Scan area size:216 x 297 mm Optical scanning resolution:1200 x 1200 dpi Scan Type:Flatbed Copy Copier resize:30 % - 400 % Copy Resolution Mono:600 x 400 dpi Maximum Copies:99 Copy speed Mono:18 cpm Power and Operating Requirements Power consumption (manual-off):0.3 W Operating Temperature range:10DegC - 32.5DegC Operating Humidity range:10 % - 80 % Power requirements:110 to 240 V, 50/60 Hz Power consumption (active):375 W Dimensions and Weight: Height:250 mm, Width:415 mm, Depth:265 mm, Weight:7 kg Operating System :Windows 7, Windows Vista, Windows XP, Windows Server 2003, Windows Server 2008, Mac OS X v10.4, Mac OS X v10.5, Mac OS X v10.6, Linux Memory: Windows 7 - 1 GB RAM, Windows Vista - 1 GB RAM, Windows XP - 1 GB RAM, Windows Server 2003 - 1 GB RAM, Mac OS X v10.4, Mac OS X v10.5, Mac OS X v10.6 - 1 GB RAM Connectivity: USB support:USB 2.0 Compatible Inks/Toners: Compatible Black cartridge:HP 88A LaserJet Toner Cartridges					

		Printer Laserjet M3035 Laser jet multifunction printer with additional cartridge set HP LaserJet Pro M1536 DNF Multifunction Printer Functions-Print, copy, scan, fax,Print speed black (normal, A4)-Up to 25 ppm, Duty cycle (monthly, A4-Up to 8000 pages, Print quality black (best)-Up to 600 x 600 x 2 dpi, Product dimensions (W x D x H)-441 x 343 x 373 mm, Duplex print options - Automatic (standard) Warranty-1-year					
	Microstrip components and Trainer	Microstrip components -Microstrip components compatible with above Microstrip Training System Different types of MIC modules compatible with the above signal generator such as Couplers, filters, amplifiers, power dividers, mixer, VCO, Circulators, Resonators, and antennas. Microstrip Training system - Microstrip Training system Lab 2-4 GHz Supply : 2-4 GHz microwave source with LCD frequency display, 2-4 GHz Directional Coupler with 15dB directivity, 1-4 GHz Slotted Line with low VSWR. Microwave signal Generator- Microwave signal Generator Microwave Source: 2 GHz to 4GHz: Microwave Source: 2 GHz to 4GHz Frequency Display: LCD RF Level: +3 dBm typical Attenuator: 20dB (external SMA-SMA) Output impedance: 50 ohms Connector: Gold plated SMA Modulation: AM/FM/Sweep Modulating Signal: 1KHz Internal/External for AM/FM Frequency Sweep: AC line synchronised Linear Power Supply: 100-240VAC, 47-63 Hz Power meter - 12.4 GHz Power meter: Frequency range : 10MHz to 12.4 Ghz Display : lit LCD Power range : -30dBm to +20dBm Measurement : dBm, dBr, mW, dBW, dBuW Resolution : 0.1, 0.5 and 1dB Ranging : Auto-ranging Sampling : 1,10,100 readings per sec. PC interface : RS232 serial port or USB Power : 100-240VAC, 47-63 Hz Receiver/ Power meter with sensor	Nil	Nil		EXTC Engg deadstock pg 15 sr no. 01	Yes

		- Receiver/ Power meter with sensor Frequency range: 10MHz to 20 GHz: Frequency range: 10MHz to 20GHz Display: LCD with Bar graph Power range: -30dBm to +20dBm Resolution: 0.1, 0.5 and 1dB Measurement: dBm, dBr, mW, dBW, dBuW with Digital Display Power Sensor Frequency Range: 10 MHz to 20 GHz Maximum input +20dBm Return Loss: 10dB at 20GHz					
	MIG Welding Machine	Welding Output Range : 250 Amp Suitable Rod Diameter: 1 mm to 5 mm No-load consumption: up to 80 W Wire feeding speed (m/min): 3-15 m /min Input power : 3 Phase 415±10% Frequency : 50/60 Hz Wire feeding coil: 0.8 X 1.0 X 1.2 With all the standard accessories and operating manual Welding Output Range : 250 Amp Suitable Rod Diameter: 1 mm to 5 mm No-load consumption: up to 80 W Wire feeding speed (m/min): 3-15 m /min Input power : 3 Phase 415±10% Frequency : 50/60 Hz Wire feeding coil: 0.8 X 1.0 X 1.2	1 paper	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.81	Yes
36	NI Data acquisition system	Software : A : LabVIEW Academic Premium Suit Software. (01 User) Hardware : B : a. Chassis and Controller: CRIO-0976 Integrated Controller and Chassis, 4-slot LX 45 FPGA b. Module: NI 9201 8 ch, 12-bit, +/-10VDC,500kS/s, AI module c. System accessories: 1) NI PS 15 power supply, 24VDC, 5 A, 100-120/200-240 VAC input 2) E1 Ethernet Cable, Twisted – pair, 1M d. Sensors & transducers: 1) Pressure transducer & its accessories 2) Thermocouples & its accessories	5 papers	Nil	Nil	Name of Department Mechanical Engg Deadstockpg no.44	Yes
37	Notebook PC	Notebook PC ñ Models and Make (HP EliteBook 8770w or Compatible models from IBM/Lenova//Dell) ñ Processor: Intel® Core™ i5-3320M (2.6 GHz, 3 MB cache, 2 cores) ñ Chipset : Mobile Intel® QM77	6 papers	Nil	Nil	Name of Department Computer Engg Deadstockpg no.6-25	yes

		Express ñ Memory: 16 GB 1600 MHz DDR3 SDRAM ñ Storage : Internal Drive 500 GB SATA II (7200 rpm) ñ Optical Drive: DVD+/-RW Super Multi DL ñ Display 17.3" diagonal LED-backlit HD+ WVA anti-glare (1600 x 900); ñ USB Ports, Smart Card Reader, Audio, WebCam, Pointing Device ñ Communications: Broadcom 802.11a/b/g/n, HP Integrated Module with Bluetooth 4.0+ EDR ñ Power and Operating Environment 230W Slim Smart AC adapter;Battery life 8-cell (83 WHr) Li-Ion battery: Up to 5 hours and 30 minutes ñ Security Management: Finger Print Sensor, Smart card Reader, Security Lock ñ Adding organization specific security credentials to avoid theft of notebook PCs with stickers of DBATU logo. ñ Kensington security lock ñ Vendor has to give theft insurance for all laptops for three years. ñ Operating System: Genuine® Windows 8 Professional					
38	Opti-System Software	OptiSystem Software Tool Design, test, and simulation of optical link in the transmission layer of a broad spectrum of optical networks from LAN, SAN, MAN to ultra-long-haul, Analysis, Design and planning from component to system level, Support from global insight into system performance, Parameter sensitivities assessment, The OptiSystem software tool should be capable of visually presents design options and scenarios to prospective customers, Extensive sets of system characterization, Automatic parameter sweep and optimization, Design, test, and simulation WDM/TDM or CATV network design, Design, test, and simulation SONET/SDH ring design, Design, test, and simulation Transmitter, channel, amplifier, and receiver, Design, test, and simulation Dispersion map design, Design, test, and simulation Estimation of BER and system penalties with different receiver models, Design, test, and	1 paper	Nil	Nil	Name of Department EXTC Engg.Deadstockpg no.29-31	yes

		simulation Amplified System BER and link budget calculations, Inbuilt component Library, facility to add custom designed components, Support with test & measurement equipment from different vendors, Support to mixed signal formats for optical and electrical signals in the Component Library, Measurements of parameters such as BER and Q-Factor using numerical analysis or semi-analytical techniques for systems limited by inter symbol interference and noise, Advanced visualization tools for OSA Spectra, signal chirp, eye diagrams, polarization state, and constellation diagrams. Link Budget, Cost analysis table of the system being designed, arranged by system, layout or component. Cost data can be exported to other applications or spreadsheets, Design of AWG based PONs, Input signal equalization using Viterbi algorithm through a dispersive channel, Estimation of symbol error in user defined regions and targets, S-Parameter Extractor.					
39	PCB Prototyping Machine	Automated Printed Circuit Board Fabrication System, Gerber file export capability from popularly used PCB Layout Design softwares, Drilling, Milling and routing, Fiducially positioning camera for board alignment, quality inspection, and overlay, USB plug-and-Play connection/ RS232, Step Milling and Incremental Milling, Tool depth adjustment facility, The minimum track width is 4 Mils, Maximum drilling cycle (cycles/min.) = 50, Maximum thickness of processed material (mm)=10, Minimum isolation between 2 tracks =4 Mils, Minimum Drill Hole diameter [mm]= 0.2 - 3.175, Working X-Y area=9.0" x 12.6" x 2.24", Board size 229*1999 mm, Control axis : X, Y, Z , Control motor : Stepper Motor, Resolution (µm) : @0.625, Manual tool change facility, Power consumption= (100 - 240 V at 50-60 Hz) 150VA, Resolution of the machine [Um] = 0.625, Milling machine motor speed is 5000-41,000 RPM, Travelling speed of machine along x-y axis= 55mm/sec, Necessary software for PC	2 papers	Nil	Nil	Name of Department EXTC Engg.Deadstockpg no.45-46	yes

		connectivity, Dust extraction unit, Tool bits and accessories for quality circuit board fabrication, Supports for substrates like Teflon, RT/Duroid, Arlon, FR4 etc., Connecting Cable (RS232C/USB), Magnifying glass 10x, Extension hose for Vacuum cleaner, Tools : End mills, Drill bit, Router bit					
40	Photo resist coating machine	Vacuum arrangement for holding substrate. Maximum substrate size up to 100 mm (L) X 100mm (W) X 5mm (T). Rotating substrate up to 6000 rpm with uniform and variable acceleration. Programmable Parameters: Speed, acceleration, dwell time and number of steps. Provision for dispensing liquid photoresist on substrate. Vacuum chucks for handling different substrate materials like ceramic, glass, ferrous and non-ferrous materials. Suitable capacity vacuum pump should be supplied with spin coater	16 papers	Nil	1 patent	Name of Department Mechanical Engg.Deadstockpg no.14-15	yes
41	Power and energy quality analyzer	Color LCD screen for graphic display • 3 structured display modes: observation, diagnosis, monitoring • Complete three-phase analysis: - Voltage, current- Power / energy - Harmonics (up to 50th order), flicker - Measurement of transients - Alarm trigger • Recording of 12 screens • Voltage/current inputs fitted with color	5 papers	Nil	Nil	Name of Department Electrical Engg.Deadstockpg no.	yes
42	Power electronics Drive design software and induction motor control module	Five Level Inverter Stack Each H Bridge Specifications DC link Voltage:- 600 Volt O/P AC Voltage:- 415 Volt O/P AC Current:- 14 Amp Switching Frequency:- 20 kHz Fundamental Frequency:- 50 Hz Type of Cooling:- Forced Air With Xilinx 3SD1800A-FG676 FPGA kit andThree Phase, LC Filter 2) FPGA TRAINING KIT Cyclone IV Based FPGA Controller (VPE – CYIV) ? Based on a family Cyclone IV, Device : EP4CE30 ? 8 user LEDs Switches ? 20 x 4 Alpha numeric LCD display ? One isolated USB to Serial Port ? 2 Limit switches provided for General purpose usage in the software. (Factory configured as Increment, Decrement switches) * PE	3 paper	Nil	Nil	Name of Department Electrical Engg.Deadstockpg no.58-59	yes

		&Drives compactable Signals Terminated at 34 pin FRC connector # 16 motor control PWM with Programmable dead band signals # 8 captures input signals # 1 Quadrature encoder interface * ADC Signals Terminated at 26 pin FRC connector # 8 channel ADC inputs # 1 MSPS sampling rate * 4 channel DAC Outputs terminated at J801					
43	Printer Laserjet	**Laserjet Pro M1136** Multifunction Printer Printing Method:LaserType:MultifunctionDisplay:ual Digit Numeric LED Model ModelSeries:LaserPrinterLanguages:Host Based Printing Output:Monochrome Part Number:CE849A Jet Pro Name:M1136	NA	NA	NA	Name of Department computer Engg Deadstockpg no.4	
44	Pro-V Building Energy Software	VE-Pro & VE-Gaia Academic Non commercial Version VE 2013 Software Highlights • Model Building Model- IT Enables you to create a 3D analysis natively, import CAD data into Model the system in 3D or 2D Sketch Up, Revit, Affinity, gbXML DXF imports supported • Solar Analysis SunCast Control solar gains taking into account the sun's path and solar penetration Assess the shading/right to light impact of surrounding buildings & terrain Test internal and external solar shading devices Generate animated, visual, graphical output • Light RadianceIES, FlucsPro& Light Pro- Detailed 3D visualisation of day light and electric lighting levels.	1 Paper	Nil	Nil	Name of Department Mechanical Engg Deadstockpg no.61	yes
45	Reactor Assembly for Low Temperature Reactions	The following specifications are needed for the Reactor Assembly for Low Temperature Reactions: 1. Glass Reactor with jacket, four neck, 500ml to 1 lit capacity, C 24, Side: 2 X 19, 1 X 14 with syringe system for sample withdrawal (up to 5 ml), Clips of SS for this reactor: (Needed Number of sets: 2) 2. Double walled condenser made up of glass L – 10" and accompanying B -24 Socket and Cone (Needed Number: 2), Silicone tubing 8 X 11: 5- 10 meter, Rubber tubing for condenser: 10-15 meter as per need 3. Overhead stirrer and motor up to	1 paper	Nil	Nil	Name of Department Chemical Engg.Deadstockpg no.81	yes

		900 rpm (Needed Number: 1) 4. Pulley of B24 size made of durable PTFE (Needed Number: 2) 5. Glass Baffles (Needed Number: 2) 6. Silicone belt (Needed Number: at least 10) 7. Various clamps and boss head (Needed Number: 03 sets minimum) 8. Temperature Indicators (with 0.00 display and sensor (PT - 100): (Needed Number: 2) 9. Fiber pulley (Needed Number: 2) 10. Low temperature cryostat bath with suitable circulating pump, temperature range: - 150C to + 200C, with accuracy ± 0.50C, capacity between 10 to 15 liter, as per the need and design it may vary. 11. MS stand with wheels for the whole above assembly					
46	Reboiler for controller	1. Re-boiler: capacity: 3 liter. S.S. 316. Fitted in thermic fluid vessel. Bottom drain. Thermometer pocket. S.S. Feed valve fitted with hopper. Air vent with S.S. valve. 2. Thermic fluid vessel: M.S. Filled with thermic fluid. Thermic fluid Heated by thermic fluid heaters. 3. Thermic fluid temp control system: PID controller. 4. Control panel: on-off switches. Controller.	1 paper	Nil	Nil	Name of Department Chemical Engg.Deadstockpg no.07 sr. no. 01	yes
47	Renewable energy Laboratory, Wind	Wind energy training system Artificial wind generator unit for the wind turbine with 200 watts, 10-12 m/s, 24 volts along with suitable DC DC convertor, Inventor, Battery Bank, AC/DC Voltmeters and Ammeters, Energy meter for parameter measurements and records,. The other accessories will be Power analyser, Anemometer for wind speed measurement up to 80 m/s or similar, and necessary connecting cables and manual. Wind Turbine Emulator A programmable DC motor 220/250 Volts, 2 HP (1450/1480 Watts), 150 RPM, suitable for induction generator, 220 volts/1000 VA, AC DC Convertor along with DC-DC Convertor, 3phase Inverter for power conversion mechanism and AC/DC Voltmeter, Ammeter and Energy meter for parameter measurements and records. The	8 papers	Nil	Nil	Name of Department Mechanical Engg Deadstockpg no.37-38	yes

		other accessories include Power analyser, Tachometer and sufficient number of connecting leads					
48	Renewable Solar PV trainer, Emulator	Solar power supply of 300 Watts with maximum open circuit voltage of 50 Volts and short circuit current of 8 amp with the facilities for data logger and plotter, remote programming and variable temperature and radiation control. The system will be provided with suitable LCD Display for parameter observations and recording. PV Modules with 74 Wp with artificial source of radiation at the rate of 900 Watt/m2 and above having radiation intensity regulator and manual tracking provision. System should be associated with automatic/user defined DC DC convertor and Inverter system with suitable AC/DC voltmeters and Ammeter and Adjustable potmeter. Others devices like temperature meter, suitable AC DC load box, and battery bank along with data logger , plotter with PC interface PV Modules for 460 Wp or higher suitable grid tied inverter along with AC/ DC voltmeters and ammeters and power analyser for suitable parameter measurements. Other accessories such as standalone invertors, battery bank, radiation meter, connecting wires	8 papers	Nil	Nil	Electrical Engg. Deadstock Pg No. 56 Sr. No. 1/2/3	yes
49	Sample mounting press, Polishing machine	Automatic hot mounting press Operation: Automatic (Pressure, temperature and time set to suitable cycle) Type of Mould Material: Suitable for all type of molding materials like Bakelite, transparent epoxy etc. Cooling System: Water Cooler Power Pack: Hydraulic Type Mould Size: up to 2" Max. Quantity of Molds prepared: At least 2 Molds Simultaneously With the following accessories and operating manual: 1. Mold assembly 1 ½" 2. Mold assembly 2" 3. Re - circulating water cooling system 30 Lit. capacity	Nil	Nil	Nil	Mechanical Engg Deadstock Pg No. 18-19-20 sr no. 1-2	yes
50	Semi Hermetic CO2 Compressor	Semi-hermetic CO2 compressor with crank case heater and thermistor module Model – CD380H Make - Dorin	5 papers	Nil	Nil	Name of Department Mechanical Engg Deadstoc	yes

						kpgno.43	
51	SIMTEL Software	Simtel Software Including following modules: Digital Electronics (5 User), Analog Electronics (5 User), Analog Communication (5 User), Digital communication (5 User), Fiber Optics (5 User), Wireless Communication (5 User), Telephony & ISDN (5 User), NetSys (5 User), Microwave (5 User), Embedded System (5 User), Digital Signal Processing (DSP (5 User)), RFID, RADAR, Antenna (5 User), Antenna and Wave Propagation (5 User), Power Electronics (1 User), Basic Electrical & Electronics (1 User), Robotics (1 User), Instrumentation & Measurements (1 User), Electronic Devices (1 User), Network Analysis (1 User), Data Communication (1 User), Digital Circuits & Systems (1 User), Electromagnetic Field Theory (1 User), Control System Engineering (1 User), VLSI (1 User), Television and Radar (1 User), Digital Image Processing (1 User)	Nil	Nil	Nil	Name of Department Mechanical Engg Deadstock kpg no.62	yes
52	Software CATIA	A. CATIA V6 PLM Discover Pack: UDK PLM Discover is a single integrated software package combining many capabilities: design software (CAD), market-leading manufacturing (CAM) and robot programming tools, easy-to-use structural analysis (CAE) and collaborative product data management (PDM) in a fully integrated package. CATIA for Integrated Product Design • 3D surface, feature based & solid modeling, 2D drawing, easy assembly modeling, powerful kinematics simulation & space analysis. • Easy capture and replay of design rules, replay of self-designed applications. • Functional & sheet metal modeling functions for rapid design of own on-demand parts. • Intuitive industrial design tools for	1 paper	Nil	Nil	Name of Department Mechanical Engg Deadstock kpg no.62	Yes

		teaching how to bring emotional appeal into product engineering. DELMIA for Digital Manufacturing • Market-leading manufacturing functions. • Machine simulation, lathe and milling NC programming. • Game-like assembly planning, robotic programming. • Native product & process integration for inter-disciplinary courses. SIMULIA for Realistic Simulation • Popular SIMULIA structural analysis including world class ABAQUS technology. • Part validation for non-specialists. • Automated mesh. • Validate a part required for student projects or experimental devices. ENOVIA for Collaborative Innovation • Controlled collaborative environment for classrooms, dispersed students or partners • Teaching actual collaborative industry methods for global collective innovation. • Optimizing educational processes: teach, learn anywhere. • Assembling, modularizing, reusing course material. • Attributing content to respective authors in team projects. • Remotely managing theses and reports with rich 3D content. • Co-designing, remote coaching. B. CATIA V6 Design Master: UMC DESIGN Master • Advance Style & Concept modeling. • Reverse Engineering • 3D functional tolerancing • Automated manufacturing features for plastic & fabricated parts • Structure Design(e.g Shipbuilding), Piping, Tubing • Composite Design • Intuitive no-coding creation of applications for customized teaching.					
53	Software for metal working simulation	ABAQUS 6.13 GUI features: 1. The software should have single integrated environment for preprocessing, analysis, job management, job monitoring and results visualization with no restriction/Limit on degrees of freedom. 2. The software should	1 paper	Nil	Nil	Name of Department Mechanical Engg Deadstockpg no.25 sr.	yes

		have interface with CAD packages to import and export the geometry parameters 3. The software should have the ability to de-feature unwanted geometric entities such as faces, edges and vertices either automatically or manually, and to recover these when necessary 4. The GUI should be able to use part instances and assemble them using absolute and relative positioning methods 5. The GUI should have options to evaluate and calibrate material test data and derive required material coefficients and data for finite element analysis 6. The GUI should support ply-based modeling and results visualization for composites including ply definition, ply orientations, material assignments, ply thickness distributions, ply stack plots, and critical ply plots for post-processing 7. The software should have the ability to define advanced behavior for idealized (two- node) connections including elasticity, plasticity, friction, damage, stops and locks 8. The software should have the ability to				no. 1-2-3	
54	Software LS Dyna	LS Dyna Software (04 Users) LS-DYNA consists of a single executable file and is entirely command line driven. Capabilities must include the following: LS - DYNA's analysis capabilities include: Full 2D & 3D capabilities , Nonlinear dynamics, Rigid body dynamics , Quasi-static simulations . Normal modes , Linear statics , Thermal analysis , Fluid analysis • Eulerian capabilities , • ALE (Arbitrary Lagrangian-Eulerian) , • FSI (Fluid-Structure Interaction) , • Navier-Stokes fluids • Compressible fluid solver, CESE (Conservation Element & Solution Element) FEM-rigid multi-body dynamics coupling (MADYMO, Cal3D) Underwater shock , Failure analysis , Crack propagation , Real-time acoustics , Implicit springback , Multi-physics coupling , Structural-thermal coupling , Adaptive remeshing , SPH (Smoothed Particle Hydrodynamics) , EFG (Element Free Galerkin) ,	Nil	Nil	Nil	Name of Department Mechanical Engg Deadstock kpg no.241 sr. no. 1	Yes

		Radiation transport EM (Electromagnetism) The software should include the following Material Library Metals , Plastics , Glass , Foams , Fabrics , Elastomers , Honeycombs , Concrete & soils , Viscous fluids , User-defined materials It has the Element Library which includes - Beams (standard, trusses, discrete, cables, and welds) (with over 10 beam element formulations) , Discrete Elements (springs and dampers) , Lumped inertias , Lumped masses Accelerometers , Sensors , Seatbelts , • Pretensioners , • Retractors , • Sliprings , Shells (3, 4, 6, and 8-node including 3D shells, membranes, 2D plane stress, plane , strain, and axisymmetric solids) (with over 25 shell element formulations) , Solids (4 and 10-node tetrahedrons, 6-node pentahedrons, and 8-node hexahedrons) , (with over 20 solid element formulations) , SPH Elements , Thick Shells (8-node) Contact algorithms include: Flexible body contact , Flexible body to rigid body contact , Rigid body to rigid body contact , Edge-to-edge contact , Eroding contact , Tied surfaces , CAD surfaces , Rigid walls , Draw beads					
55	Spectrum Analyser	Spectrum Analyzer with Tracking Generator, 9KHz - 3GHz, -138 dBm Displayed Average Noise Level,-80 dBc/Hz @10 kHz offset Phase Noise, Total Amplitude Uncertainty <1.5 dB, 100 Hz Minimum Resolution Bandwidth (RBW), display size 8.5 inch, widescreen, interface options such as LAN\USB Host, USB Device, VGA, Built-in lithium battery that can provide 3 hours continuous operation, Marker Frequency Counter : 1 Hz, 10 Hz, 100 Hz, 1 kHz, Average Noise Level: -125dBm to -115 dBm, RF Input VSWR: 1.5 to 2, Second Harmonic Intercept (SHI): +35 dBm, Third-order Intermodulation: +7 dBm, Sweep Time Range: 10 ms to 3000 s, Trigger Source: 5V TTL level, TG Output Frequency Range: 9 kHz to 3 GHz, Internal Data	1 paper	Nil	Nil	Name of Department EXTC Engg.Deadstockpg no.27-28	Yes

		Storage Space : 1GB, Power Supply: 230V ac, Accessories such as Front Panel Cover, Soft Carrying bag, USB to GPIB Converter, Desk Mount Instrument Arm, RF Demo Kit, DSA Accessories Package-					
56	Steam generation device	Steam generation device Pressure 1.6 bar, supersturated and dry steam delivery through nozzles, Pressure gauge, temperature indicator, controls, safety valve, nozzles, pipes/hoses, valves	6 papers	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.29	5 users
57	Stirred hot-plate (digital-plate) laboratory reactor	Stirrer hot plate (digital plate) laboratory reactor Hel – Stirrer hot plate High end hot plate stirrer with ss PT 100 temperature probe. Reaction Vessel 500 ml complete cylindrical reaction vessel with suspended stirring 50 ml Flat bottom Reaction Flask with suspended and adaptor Single syringe Pump- Single stirrer Low pressure dying pump with auto refill syringe size of 50 ml fully software controlled to allow parallel dosing and / or pH control with multiway valve. Micro note Unit – Serial converter fence with glass win touch operating software 9'/20 touch screen device for logging a control . pH measurement control 1 miniature glass pH probes complete with cables connectors etc. fully monitored on software and also pH control using syringe pumps. Microprocessor controlled magnetron with rotating diffuser capable of providing homogeneous microwave distribution microwave power of 1000 watts cavity of SS with suitable corrosion resistant coating temperature of up 2500 c or more should be possible robust exhaust systems for cooling & carrying away fumes if any ability to handle spillages should be possible Mechanical &ot Magnetic stirring should be also possible condenser attachment should be there Purging with insert gas like nitrogen should be possible capacity from 300 to 1000 ml nitrogen should be possible.2 in no minimum screen display	Nil	Nil	Nil	Name of Department chemical Engg.Deadstockpg no.80	Yes

		&monitoring & recording facilities should be available UV light set up: of wavelength 365nm & power if 300 watts ultrasonic set up 600 watts % 26 to 28 KH z preset reaction methods should be available it should be possible to operates the machine with only one function to multiple function etc. It should be possible to operate the machine witch only one function. Or multiple functions etc. It should be poddible to monitor various parameters like power temperature time stirring etc. An exhaustive training should be inclusive including troubleshooting operation etc.					
58	Submerged Arc Welding Machine	Inverter based submerged arc welding equipment with SMD technology input power – 3 – phase, 415 v ac. frequency – 50hz. Welding current – 1000 amp @ 100% duty cycle. open circuit voltage range – 85 V Insulation class – F. Cooling – forced air. Welding head – max welding current : 1000 amp @ 100% duty cycle. Wire diameter – single wire – 2.5 to 5mm. Twin wire – 2 to 2.5mm. speed range – wire feed: 0.2 to 2.5m/min. Speed range of carriage – 0.1 to 2.5m/min. Range of adjustment: welding head to job adjustment: horizontal distance 100mm & vertical distance 100mm. head right & left cross swivel range e degree+/- 400 head forward & backward swivel range degree+/- 200 Welding flux – hopper capacity: 8 l. Wire spool weight: 30 kg. suitable Welding wire diameter: 2.5 – 5.0mm. with all standard accessories & opening manual. standard scope of supply: submerged arc welding outfit power source tractor mounted welding head fitted with, A) carriage assembly fitted with 1. horizontal slide assembly. 2. pipe assembly 3. shunt assembly. B) welding head assembly duly fitted with 1. wirefeed drive roll (2.0-5.0) 2. nozzle(3.15) 3. vertical assembly. C) flux hopper assembly.	Nil	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.31	yes

		D) controller assembly(feather touch type) E) wire reel assembly(fitted to reel holding arm) F) wire guide eye assembly G) welding cable assembly(1.5mtr) H) along with standard accessories 1. control cable assembly(10 mtr) 2. wire feed drive roll(2-5) 3. nozzle (2.5) 4. nozzle (4.0) 5. nozzle (5.0) 6. track for carriage (2 mtr) 7. flux hose 8. Welding cable – 10 mtr. 9. Earthing cable – 10 mtr.					
59	Biodiesel Production set up	0] Heating Mantle Cap – Suitable for 250 ml to 1.5 Ltr, with Regulator. (please mention the watt if possible it show the digital indication) Flask Kettles, Resin Reaction Borosil Cap -1.5Lit(1 nos) and 250ml (1 nos.). With three interchangeable 24/29 joint, one 34/35 Joint & joints for 250 ml flask. Condenser. Liebig 24/24. 12"jacket. Measuring Cylinder graduated. Cap - 1000 ml. (Least Count= 0.5ml) Measuring Cylinder graduated Cap - 100 ml. (Least Count= 0.05ml) Thermometer Digital with its accuracy Motor with big twisted blade Stirrer Remi/Eltex make with digital Speed indicator & Speed Regulator (high accuracy ±2 to ± 5RPM) and (1 stirrer for 250 ml and 1 stirrer for 1.5 liter) Bends.B-24/B-24 Cone stopper or caps (size 3-24” and 1-29”) Anti Chemical Hand gloves with good quality.(02 per pair) Goggle. (02 sets) pH Meter Pen Type. Portable. (Mention the digital accuracy) Funnel Separating with stop cock. 500 ml (01nos) &1500ml (01nos). Straight Burettes Teflon key. Mask. (Good quality 02 sets) Retort Stand to Hold Condenser with clamp& Boss head. Size: 12"X7", with rod. Methanol 100% per liter Potassium Hydroxide (KOH purity more than 98%) per gram Sodium Hydroxide (NaOH purity more than 98%) – per gram	6 papers	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.38-39	

		Sulfuric Acid (H2SO4) per liter. Air Motor Storage Can (200 ml (10 nos) & 5000ml (06 nos)) Aluminum Foil (wrapping the joints leak proof) Cotton Wool per kg Distilled Water per liter Methyl Ester 100% Pure (Biodiesel) per Liter 50Watt and 15Watt Water Heater (Coffee Heater) Weighing Balance Digital with high Accuracy Sample Bottles 10 ml 10nos. Glycerol 100% per liter Stands or Supports					
60	BLDC and Induction motor control Module	Closed loop BLDC motor control module BLDC machine with inbuilt position sensors of 1 HP rating with mechanical loading arrangement. Double conversion power module AC-DC-AC. Input AC Voltage =415 V, DC Voltage Vdc = 600 V, Output AC Voltage Vac = 415 V 3-F, Output Current Iac = 30 A max at 2 kHz Switching frequency, Output Frequency Fac = 50 Hz, Switching Frequency Fsw = 25 kHz max at output current of 15A, Ambient Temperature Tamb = 40 deg C., Cooling Method Forced Air Cooled.FPGA based controller for closed loop controller of BLDC motor, along with three phase inverter module with 1HP three phase BLDC motor with mechanical loading. The inverter module should be Semikron IGBT based packed in acrylic box.The controller should be capable of implementing all the standard control algorithms including PWM, SPWM, vector control etc. The package should include current, voltage and speed sensors. This should also contain FPGA board with touch screen, USB, Ethernet, daughter card with 6 PWM outputs and software for the same. The software for the FPGA board also should be included in the module. Induction machine with inbuilt position sensors of 2 HP rating with mechanical loading arrangement. Double conversion power module AC-DC-AC. Input AC Voltage =415 V, DC Voltage Vdc = 600 V, Output AC Voltage Vac = 415 V 3-F, Output Current Iac = 30 A max	Nil	Nil	Nil	Electrical Engg Deadstock Pg No. 69 sr no. 01	yes

		at 2 kHz Switching frequency, Output Frequency Fac = 50 Hz, Switching Frequency Fsw = 25 kHz max at output current of 15A, Ambient Temperature Tamb = 40 deg C., Cooling Method Forced Air Cooled. FPGA based controller for closed loop controller of BLDC motor, along with three phase inverter module with 2HP three phase Induction motor with mechanical loading. The inverter module should be Semikron IGBT based packed in acrylic box.The controller should be capable of implementing all the standard control algorithms including PWM, SPWM, vector control etc. The package should include current, voltage and speed sensors. This should also contain FPGA board with touch screen, USB, Ethernet, daughter card with 6 PWM outputs and software for the same. The software for the FPGA board also should be included in the module.					
61	CAD Workstations with network interface and audio	Intel® Xeon® E3¬1245 with Intel HD Graphics P3000 (3.30 GHz, 8 MB cache, 4 cores) Chipset: Intel® C206 Form factor: All ¬in ¬One Memory 32 GB 1600 MHz DDR3 Unbuffered SDRAM Memory slots: 4 DIMM Internal drive SATA (10000 rpm) From:300 GB Optical drive, Slim slot¬ load SATA Blu¬ray writer; Slim Slot load SATA DVD+/¬RW, Display: 27" diagonal IPS LED Backlit HP Widescreen Monitor (2560 x 1440) with up to 1.07 billion colors supported (through A¬FRC technology) and 2 MP 1080p webcam Graphics Intel® HD Graphics 2000 or P3000 Ports: 2 USB 3.0, 7 USB 2.0,1 4¬in¬1 media card reader, 1 headphone,1 microphone, 1 IEEE 1394a,1 Display Port, 1 RJ¬45, 1 subwoofer 1 optical S/PIF, 1 audio line in,1 audio line out, Expansion slots 1 MXM; 3 mini PCIe (full¬length) (MXM dedicated for graphics) Network interface Integrated Intel 802.11 a/g/n	6 papers	Nil	Nil	Name of Department Computer Engg.Deadstockpg no.26	Yes

		Wireless LAN & Bluetooth Combo Card (Card is factory installed into miniPCIe slot 1.) Audio: Integrated High Definition IDT 92HD91, SRS Premium Sound, HP Digital Mic Array HP Wireless Keyboard and Mouse					
62	Ultrasonic cleaner	Digital Control of time and temperature and with standard accessories like Tank cover, beaker positioning cover, basket, insert basket for beaker. Main Voltage 230 Volts Current consumption1.2 Amp Maximum Ultrasonic output 150 to 300 Watt Heating power up to 150 Watt Heating system for rapid heating of the liquid - thermostatically continuously variable between 20 and up to 90°C Continuous type Timer operation from 1-99 min Ultrasonic frequency near about 30 kHz Tank size up to 4 liter	Nil	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.36	Yes
63	Ultrasonic reactor vessel and assembly	Ultrasonic reactor vessel and assembly for small and medium volume applications Power output: 500 to 750 Watts Frequency: 20 – 40 KHz, Possibility of dual frequency desirable Processing volume capacity of up to 250 or 300 ml Power output variable control should be possible Energy set point that should be capable of continuously monitoring the amount of energy given to the probe and also terminating the supply of energy when done. Detrimental overheating should be avoided so as to safeguard it with guaranteed reproducibility. Microprocessor based operation with reproducibility, repeatability and capability of handling varying loads Digital display of the process variables with elapsed time indication Sealed converter with sufficient length and diameter Probe Specs, dimension: diameter ½ inch or more, length 5 inches or more, replaceable tip as well	1 Paper	Nil	Nil	Name of Department chemical Engg.Deadstockpg no.81 sr. no. 01	yes

		as non-replaceable tip. Temperature probe of metal (SS) up to 1000C Tool Kit with wench and spanner sets					
64	UPS System	Smart UPS for the existing system with available batteries (under buy - back scheme) with following specifications: Number needed: 03 Their time-in-operation-needs will also be different as indicated below.) Make: APC Rating: 6 KVA, 230 V, 4800 Watts Capacity to run for different times (from 1 hr to 5 hrs.) Input Frequency: 40 – 70 Hz Efficiency at full Load: 90% Suitable interface port, Smart-slot, extended runtime model With rack mounting brackets, smart UPS signaling cable and user manual Input voltage range for main operations: 160 - 280V Input voltage adjustable range for mains operation: 100 - 280V Other Input Voltages: 220, 240 Maximum Input Current: 37A Input Breaker Capacity: 40.0 A With sufficient surge protection and filtering available Operating conditions: 0 – 50 Deg C, and Humidity of close to 100% B2. Stabilizer for the above Capacity : 7.5KVa Input : 170V to 270 V, 1 Phase Output : 230 V + 1%, 1Phase, 50Hz, Balance Cooling : A.N. O/P Voltage Adjustment : + 10 V by means of Potentio Meter. Controls : Auto / Manual. Specification : Overvoltage & Under-voltage Trip. Overload & Short circuit Protection by MCB Voltmeter to see I/P & O/P Voltages Ammeter to see the Load Current Built in Generator Compatible Circuit. Indication: Mains ON, O/P ON, O/V, U/V Single Phasing Trip. B3. Charger (suitable for use with the above) Warranty for at least two years on the UPS and at least one year on the stabilizer and charger	NA	NA	NA	Name of Department Mechanical Engg.Deadstockpg no.36	NA
65	Variable	1. Study of Performance with 3	Nil	Nil	Nil	Name of	Yes

	speed air blower Test Rig	types Rotors. 2. Motors with VFD (variable frequency drive) to perform fan laws verification expts. 3. 3 H.P. AC motor, 1500 rpm, 3 phases Kirloskar or standard make. 4. Digital speed indicator. 5. 2 HP blower with AC motor 6. Digital air flow indicator. 7. 3 different types of interchangeable rotors. 8. Pressure distribution in volute casing. 9. Provision for head and flow rate change. 10. Separate control panel for all instrumentation. 11. Rectangular M.S. duct of 2 m length.				Department Mechanical Engg.Deadstockpg no.65	
66	Vernier height Gauge	Dial Height Gauge for surface roughness tester series 192-130 - 1 No. Easy and error free reading both up and down, Digital counters as well as dial, with a feed wheel for easy coarse feeding, carbide tipped scriber Height gauge adopter - 12AAA222 for the above - 1 No.	13 papers	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.48	20 users
67	Wireless Sensor Motes	Wireless Sensor Network kit:- 2.4 GHz IRIS XM2110CB IEEE 802.15.4/ZigBee Compliant IRIS (2.4GHz) – 19 Numbers MTS400CC Sensor Board (light, temp, humidity, barometric pressure, seismic) -4 Numbers MDA300CA Data Acquisition Board with temp, humidity – 4 Numbers MDA100CB Prototype/Data Acquisition board with light, temperature – 7 Numbers MIB520CB USB PC Interface Board – 4 Numbers MEMSIC software tools CD – 1 Number	2 papers	Nil	Nil	Name of Department Computer Engg.Deadstockpg no.27	Yes
68	Workstations	• HP Workstation, HPZ420 Workstation, HPZ420 Country Kit, HPZ420 600 Watt, 90% Efficient Chasis, Operating System: 64 Bit Windows 7 Professional (English) HP Single unit packaging, Intel Xeon Processor E5 1607 3 10 M 1066 4 C CPU, 1 TB HDD, HP USB Keyboard, HP USB Optical Mouse, 16x Supermulti DVDRW SATA Ist ODD HP Processor, Air Cooling Kit, HP	NA	NA	NA	Name of Department Mechanical Engg.Deadstockpg no.24	Yes

		3/3/3 Warranty, Singapore, 8GB DDR3-1600 RAM NVIDA 1GB Graphics Card, 22" LED Monitor 10/100/1000 Integrated Ethernet, USB Full keyboard (English),					
69	8- bit embedded Microcontroller Trainer	Experimental board for 40 pin MCS51 and AVR family of microcontrollers. Core 8051 MCU clocked at 11.0592 MHz, Support to standard microcontrollers such as AT89C51/52/55, AT89S51/ 52/53 , AT89S8252 etc On-board modules like LCD, ADC, RS232 interface, keypad	1 paper	Nil	Nil	Name of Department EXTC Engg Deadstock kpg no.77	yes
70	32 bit Embedded System Trainer	32- bit Embedded ARM7 or higher Processor Trainer Kit, RTOS support, Wireless module adapter, 2.4GHz ZigBee (Xbee)/ Bluetooth/Wi-Fi connectivity, On-board On board USB programmer, ADC, DAC, RAM , ROM, Graphic LCD, RS232 interface	Nil	Nil	Nil	Name of Department EXTC Engg Deadstock kpg no.75	yes
71	Digital LCR meter	Large LCD to make the reading clearly. Metallic screen board with stronger antimagnetic and anti-interferential function. Buzzer alarm, data hold, Diode and Transistor test function. Inductance: Range Accuracy Resolution Measuring Freq. 2mH ±(2.0%+5d) 1 µH Approx. 200Hz 20mH 10 µH 200mH 100 µH 2H ±(5.0%+5d) 1mH 20H ±(5.0%+15d) 10 mH Capacitance: Range Accuracy Resolution Measuring Freq. 2nF ±(1.0%+5d) 1pF Approx. : 200Hz 20 nF 10 pF Approx. : 200Hz 200 nF 100 pF Approx. : 200Hz 2uF ±(2.0%+5d) 1 pF Approx. : 200Hz 20 uF 10 pF Approx. : 16Hz 200 uF ±(5.0%+5d) 100 pF Approx. : 16Hz 1000 uF ±(5.0%+25d) 1 pF Approx. : 8Hz Resistance Range Accuracy Resolution 200Ω ±(8.0%+5d) 1.0Ω 2kΩ ±(8.0%+3d)	Nil	Nil	Nil	Name of Department Electrical Engg Deadstock kpg no.71	yes

		1Ω 20kΩ 10Ω 200kΩ 100Ω 2MΩ 1kΩ 20MΩ ±(1.0%+15d) 10kΩ					
72	Distillation Column Control Unit	The process set up consists of a reboiler tank fitted with RTD, Level Transmitter & Fed Tank, reflux tank, feed tank & feed pump and it is connected to the steel column condenser cooling water tank, reflux water tank, pneumatic valve, I to P Converter, centrifugal pumps. The unit is also having necessary piping and valve arrangement Sr. No. Materials Quantity 1.Column Specifications 1. Auto tuning feature (for PID Controller) MOC: Glass/ SS/ MS Column Diameter: 100 mm Column Length: 1000 mm No. of plates 8 01 2.Temperature Transmitter Type: RTD Pt-100 Range: 0-100 Deg C Make: TSPL 07 3.Level Transmitter Range: 0-300 mm, Output: 4-20mA, Power Supply: 230V dc, Indication: 3 ½ Digit Display, Housing: SS 316, 02 4 Pressure Transmitter Range: 0-5 Bar, Output: 4-20mA, 2 wire Power Supply: 24V dc, Housing: SS 316, 01	Nil	Nil	Nil	Name of Department Chemical Engg Deadstockpg no.09	Yes
73	FPGA trainer Kit	Universal development platform • Xilinx FPGA Daughter Card • Xilinx CPLD Daughter Card • a cyclone II FPGA card • ARM7 Daughter Card 16 bit logic input • 16 bit logic output • ADC interface	Nil	Nil	Nil	Name of Department Electrical Engg Deadstockpg no.	Yes
74	Function generator	Frequency Range 0.1 Hz to1 MHZ • Operating Modes: Sine, Square, Triangle and DC • 20Vpp Signal Output • LCD for Frequency Display • Low Distortion • TTL Output	Nil	Nil	Nil	Name of Department Electrical Engg Deadstockpg no.72	Yes
75	Copier machine	COPIER Machine Specification : A3 Size Multifunction Printer •Speed : 20 PPM •Memory : 256MB •Original / Copying Area : A5-A3 Size •Paper Tray Capacity : Maximum-350 Sheets •Zoom : 50% - 200%, •Print Resolution : 600 X 600 Dpi Print /Scan Features :USB Printer / USB color Scanner.	NA	NA	NA	Account section Deadstock Pg No. 36 sr no. 01 MechnicalTeqip Procurement Deadstock Pg No. 73 sr no. 01	Yes
76	PSIM	PSIM basic module	1 PAPER	Nil	Nil	Name of	Yes

	software	Motordrive module Digital control module Sim coupler module HEV Design Suite RENEWABLE Energy Module				Department Electrical Engg Deadstockpg no.70	
77	Shaker Incubator	Shaker Incubator 1) Shaking Speed: 25 to 400rpm with ± 1 rpm control. Should have the flexibility of having the shaking orbit to be either ¾" (1.9cm) or 1"(2.54cm). 2) Temperature Range: 20°C below ambient to 80°C. Temperature accuracy should be within ± 0.1°C with a uniformity of ± 0.25°C. 3) Drive Mechanism: Triple-eccentric counterbalanced drive with 9 permanently lubricated ball bearings. Solid state brushless D.C. motor. 4) Should have an adjustable-height shelf for added incubating or storing capability. 5) Alarm should indicate when speed deviates more than 5 rpm or temperature deviates more than 1°C from set point, and when timer operation has expired. 6) Shaker should have a programmable controller offering up to 4 modes of Timer and Parameter Control for reduced user intervention. 7) Steps per program -15 8) System should be capable of remote monitoring through software in addition to other lab equipments of the same brand 9) Memory- Non volatile with automatic power failure reestart. 10) Shaker should have a Multi-function reservoir for chamber humidification; reduced sample evaporation and unit protection from spills. 11) Platform: Should be 46cm X 46cm or higher. Universal platform should be able to hold at	Nil	Nil	Nil	Name of Department Mechanical Engg Deadstockpg no.8	Yes
78	Smart Classroom with web streaming and video capturing facility	Design, Installation and Commissioning of the facility to record and Web-cast Class Room Instruction • Pan Tilt Zoom Camera Make Axis P5414=E Qty: 2/R Pan, tilt, zoom network camera with built-in 18x optical zoom, auto focus lens + 18x digital zoom which operates under all light Price: conditions,	NA	NA	NA	Name of Department Mechanical Engg Deadstockpg no.38	Yes

		indoors as well as outdoors It provides wide coverage INR with its ability to pan 270 (+/-135) degrees, tilt 90 degrees and zoom in on specific details. Encoding: Simultaneous Motion JPEG INR 3.2L and MPEG-4 (We use MJPEG) Resolutions up to 720x1280 at up to 25 fps (PAL)or30 fps (NTSC)350 Deg/Sec speed. Power-Over-Ethernet Mixing Console Make Behringer Model Xenyx 1202 Channel Mixing Console With 4 Mic Inputs; An FX Send Control For Each Channel; 4 State-of-the-art XENYX Mic Preamps Comparable To Standalone Boutique Preamps; 1 Post Fader FX Send Per Channel For External FX Devices Wireless hand-held dual vocal set. Make AKG Each of the two included hand-held set should have transmitters featuring a dynamic cardioid capsule for maximum gain before feedback. . The receiver should offer two balanced outputs via 1/4" jack connectors. Microphones Make AKG Model C555L High Performance Head-worn Condenser Microphon e System; Lightweight And Adjustable-headband Construction For Maximum Comfort And Freedom Of Movement, Cardioid polar pattern For Problem-free Use With High Ambient Noise Rejection. Micro-phones Make AKG Model WMS 45 Wireless Lapel Microphone. The IncludedLavalier Microphone INR Clips On Quickly And Easily And Provides Optimum Intelligibility For Theater Performances, Presentations Or Talk shows. Head Phones AKG/ K44 Professional Stereo Headphon e; Self Adjusting Headband ; Closed Back Circumaural; Leatherette Ear Pads And Gimbal Suspension;18Hz - 20Khz; 32 Ohms Cabels and Connectors XLR To XLR Cable From Head-worn Microphone Receiver To Mixing of 2 MTRs Console Custom 1/4"Unbalanced					

		PhonoPlug To XLR Cable From Hand-held per room Microphone Receiver To Mixing Console Plus labor 5 Port Ethernet Switch Make DLink					
79	Wire EDM	A) SPECIAL FEATURES: 1. Integrated Construction for machine tool and generator. 2. Compact footprint. 1800 X 1825 mm. 3. Open loop DC step servo system (X, Y, U and V axis). 4. 'e' pulse technology. 5. USB 2.0 for data input 6. Low maintenance single cartridge filtration system. 7. Mineral filtration system (optional) 8. Prejog B) MACHINE TOOL 1. MODEL: ECOCUT 1. Work table : 600 X 370 mm 2. Maximum work piece weight : 300 Kg 3. Main table travel : 250 X 350 mm 4. Aux. table travel : 30 X 30 mm 5. Maximum dry run speed : 80 mm/min 6. Resolution : 0.001 mm 7. Job admit : 200 mm 8. Max wire spool capacity : 6 Kg 9. Wire spool size : DIN 125, DIN 160, P-3-R, P-5-R 10. Wire electrode diameter : 0.25 mm(Standard), 0.2(Optional) 11. Wire guide type : Dimond close type 12. Wire feed rate : 0-10 m/min 13. Overall dimensions (W x D X H) : 1800 X 1825 X 1950 mm 14. Max taper angle : +/- 5°/100 mm 15. Net weight : 2000 Kg C) GENERATOR (INTEGRAL WITH MACHINE TOOL) 1. MODEL: ELPULS 15 1. Pulse Generator : MOSFET 2. Pulse Peak voltage : 1 Step	Nil	Nil	Nil	Name of Department Mechanical Engg Deadstockpg no.74	Yes

		3. Max Machining Current : 8 ampere 4. Pulse ON time : 32 Steps 5. Pulse OFF time : 64 Steps 6. Trim-Cut mode(Multi-pass cutting) : Standard 7. Abnormal Discharge Control : 2 Stage 8. Line Filter: Built in 9. Input Power Supply : 3 phase, AC 415V, 50 Hz (Alternate voltage ratings available on request) 10. Connected load : 3 KVA 11. Average load : 1.5- 2.5 KVA Note: For optional accessories Load will change accordingly 2. TECHNOLOGY: 1. Constant/Proportional Mode. 2. Multi-pass cutting (max. two cuts) 3. Max. cutting speed: 70 mm sq./min (0.25 mm f ELEKTRADURACUT wire at 50 mm HCHC work piece) 4. Technology charts for steel. 5. Best surface finish: 1.2 µRa on HCHC Steel 6. Job accuracies: +/- 0.015 mm 3. GEOMETRY, POSITION MEASURING SYSTEM: 1. Controlled Axes : X,Y,U,V Simultaneous/Independent 2. Main Table Servo System : DC Stepper 3. Auxiliary Table Servo System : DC Stepper 4. Position measuring system – X,Y,U,V : Open loop 5. Interpolation : Linear & Circular 6. Least Input Increment : 0.001 mm 7. Least Command Increment : 0.001 mm 8. Max. Programmable Dimension : +/- 999.999 9. Position Command : Incremental 10. Main table positioning accuracy : 0.020/300 mm 11. Main table positioning scatter : 0.015 mm					

		12. U-V positioning accuracy : 0.020/30 mm 13. U-V positioning scatter : 0.030 mm 14. Square ness X to Y axis : 0.020/300 mm 15. Square ness U to V axis : 0.020 mm 16. Square ness Z to job stand surface : 0.020/100 mm 4. CNC CONTROL: TYPE OF CONTROL: Controller EMT 90W. 5. DATA INPUT AND OUTPUT: 1. Keyboard – Special Function Sealed Keyboard 2. RS-232C Serial Interface 3. USB 2.0 6. DISPLAY: a. Display Type: 15" Colour LCD Display b. Text in English. (Other language display available on request) c. Information displayed in various screen - Large character actual value display for X, Y, U, V (only in MDI Mode) - Cutting rate - 2D Graphic simulation of Wire path - Error messages - Different screen for MDI programming, STBLK, ENDBLK, GRAPHIC. 7. OPERATING AIDS: A. 1. Mirror Image: On X, Y, XY axes 2. X, Y Axes Rotation: +/-90° 3. Dry Run 4. Single step 5. Liner Positioning					
80	Servers for the Computer Center	Servers for the Computer Center HP ML 350T09 LFF CTO Server HPE ML 350 GEN9 E5-2620 v 4 Kit HPE 16 GB 1 R*4 PC4-200t- R Kit- Qty-8 HP 2 TB 6 G SAS 7.2 k3.5 in SC MDL HDD-Qty-3 HP 9.5 mm SATA DVD- RW Jb Gen 9 Kit HP Ml 350Gen9 AROC cable kit HP Smart Array P440ar/2G FLO Controller HP500W FS Plat HtPlg PWR Supply Kit Qty-2 HP ML 350 Gen9 Redundant Fan	5 papers	Nil	Nil	(Insitute) Name of Department Mechanical Engg.& Compute r engg Deadstoc kpg no.78,28	Yes

		Kit HPE Install Ml350(p) SVC					
81	Mini Smart Classrooms Multimedia Podium /i Touch-lectern	Mini smart classrooms - Body - Steel body complete with 23’ Interactive Touch Monitor Visual Presenter Amplifier & Gooseneck microphone on the top 1 wireless Handheld microphone 1 collar microphone 1 circulating fan.MCB for overload and shock protection. Storage - Side Drawer Keyboard drawer with lock multipurpose storage for CPU & UPS slider to cover 23’ Interactive touch screen and PA system controls and G microphone compatible with P4 CPU system laptop Interface. Ports - 4 USB VGA out laptop interface ports for additional speakers 4 Wheels with locking facility . Induction - Infrared 6 point Touch 23’ Diagonal touch sensitivity as finger Dummy pen any opaque object HD LED IPS screen. PA Systems - 120 watts amplifier 40 watt one speaker One Gooseneck Mic length 23’ One Wireless Mic VHF One collar Mic VHF one head Mic LG IPS panel with 3 years manufacturing warranty finger / Dummy / Pen/ any opaque object. HD LED IPS screen guard on touch screen . 120 Watts 20 watt. One Gooseneck Mic – Length 23’ One wireless Mic- VHF , One collar Mic VHF One Head Mic Visual Presenter Sensor 3.2 Mega Pixel Zoom 22 * optical 10 * digital focus Auto Manual output signal xGA SXGA 720 p ,WXGA 1080P Resolution ->850 TV Lines Image Freeze –Yes positive/ Negative yes Black & white/ color Yes Image Storage 32 pcs Input – video X1 Audio X1 RGB X2 Out put - Video X1 Audio X3 Mic X1,RGB *2 USB X1 Remote Control –Yes Lighting Arm light *2 A4 size light box (LED) Interactive Whiteboard – size – Digonal 97’, induction Infrared, Touch Sensitivity – 6 points Touch , Touch object – Finger/ Dummy Pen/ Any Opaque object Surface – ceramic, Accessories Wall mount Bracket, Dummy pens	NA	NA	NA		Yes

		USB cable software Short Throw Projector – Model – Benq MX 806ST Specification- Brochure Attached VGA Cable Power Cable					
82	CATIA Software	CATIA V6 PLM Discover Pack: UDK PLM Discover is a single integrated software package combining many capabilities: design software (CAD), market-leading manufacturing (CAM) and robot programming tools, easy-to-use structural analysis (CAE) and collaborative product data management (PDM) in a fully integrated package. CATIA for Integrated Product Design 3D surface, feature based & solid modeling, 2D drawing, easy assembly modeling, powerful kinematics simulation & space analysis. Easy capture and replay of design rules, replay of self-designed applications. Functional & sheet metal modeling functions for rapid design of own on-demand parts. Intuitive industrial design tools for teaching how to bring emotional appeal into product engineering. DELMIA for Digital Manufacturing Market-leading manufacturing functions. Machine simulation, lathe and milling NC programming. Game-like assembly planning, robotic programming. Native product & process integration for inter-disciplinary courses. SIMULIA for Realistic Simulation Popular SIMULIA structural analysis including world class ABAQUS technology. Part validation for non-specialists. Automated mesh. Validate a part required for student projects or experimental devices. ENOVIA for Collaborative Innovation Controlled collaborative environment for classrooms, dispersed students or partners Teaching actual collaborative industry methods for global collective innovation. Optimizing educational processes: teach, learn anywhere. Assembling, modularizing, reusing course material.	Nil	Nil	Nil	Name of Department Mechanical Engg.Deadstockpg no.25	yes

		Attributing content to respective authors in team projects. Remotely managing theses and reports with rich 3D content. Co-designing, remote coaching. CATIA V6 Design Master: UMC DESIGN Master Advance Style & Concept modeling. Reverse Engineering 3D functional tolerancing Automated manufacturing features for plastic & fabricated parts Structure Design(e.g Shipbuilding), Piping, Tubing Composite Design Intuitive no-coding creation of applications for customized teaching.					
83	Micropprocessortriner 8085 &8086	8085 Trainer kit with on-board RAM, ROM, 8253, 8255, ADC, DAC, Serial Interface. 8086 Trainer kit with on-board RAM, ROM, 8253, 8255, ADC, DAC, Serial Interface. Three channel Timer/Counter using 8253, HEX key pad mode and Serial mode, Facility of downloading and uploading the files from PC.	Nil	Nil	Nil	Name of Department EXTC Engg.Deadstockpg no.79	yes
84	Universal programmer	Universal Programmer Compatible with PIC, AVR, 8051 controllers, USB interface to PC/Laptop for programming, MPLAB IDE compatible, PC based programming software support	Nil	Nil	Nil	Name of Department EXTC Engg.Deadstockpg no 73	yes

- Under the TEQIP-II, EXTC department developed microwave, embedded system and signal processing laboratories for PG and research students. Presently students are using these laboratories for their research work. The research carried out in this area fetched good number of research publications.
- Under the TEQIP-II, Chemical Engineering department procured following equipments in the reaction engineering laboratory which was strengthened:

1. Focused Microwave Reactor
2. Diffused Microwave Reactor
3. Ultrasonic reactor
4. Hot plate (digi-plate) reactor
5. Low temperature reactor system

In addition to this software Multiphysics COMSOL was also purchased which is presently being used. Presently students are using these laboratories for their research work. The research carried out in this area is presented as number of publications.

Photographs of Equipments:-

Renewable energy laboratory PV system Trainer

Renewable energy laboratory PV system Trainer

Renewable energy laboratory wind emulator

Renewable energy laboratory wind trainer

Renewable Energy Laboratory PV Emulator

PCB Prototyping MACHINE

Spectrum Analyser

Microwave receiver with sensor

Microwave Generator

Stirred Hot Plate

Diffused Microwave Reactor

Ultrasonic Reactor and Assembly

Analytical Balance

Air and Nitrogen Generator

Focussed Microwave for Synthesis

Deep Freezer

Automatic Polishing Machine

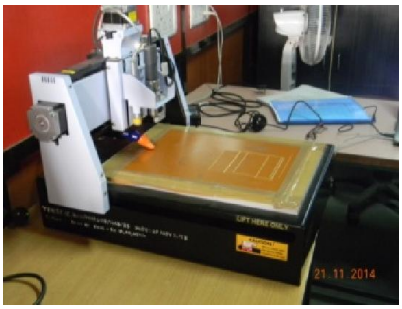
Hydraulic sample Mounting Press

Constant Temeprature Bath

Semi Hermetic Compressor

Steam Generation Unit

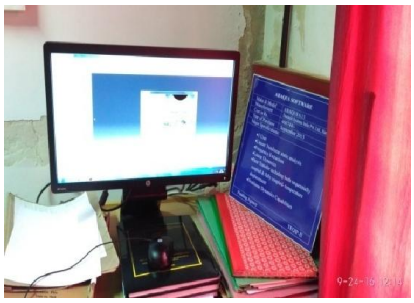
Coriolis Mass Flow Meter



PCB Prototyping Machine

High Speed Camera

Advanced RF and Microwave Trainer



Abaqus Software

Wireless Sensor Mote 1

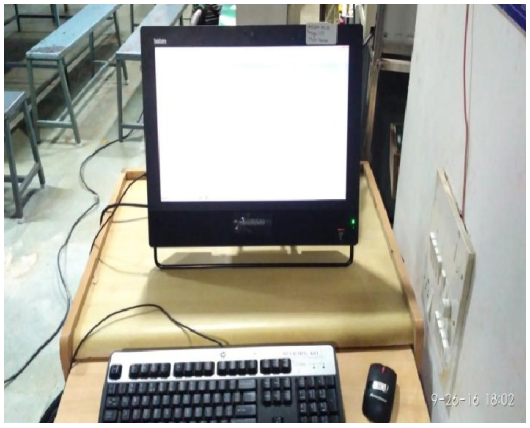
Wireless Sensor Mote 2

Tool Makers Microscope

SIMTEL Software

SAW Welding Machine

Power Drive Design Software

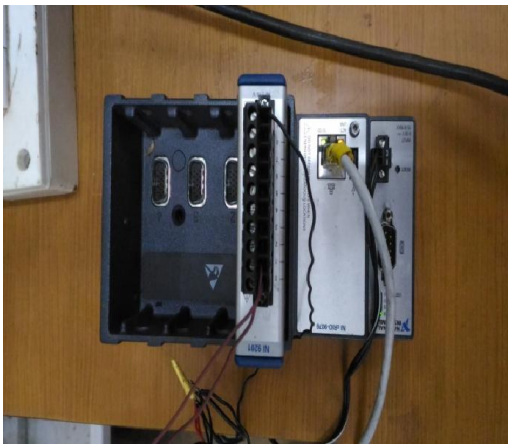


ANSYS CFD

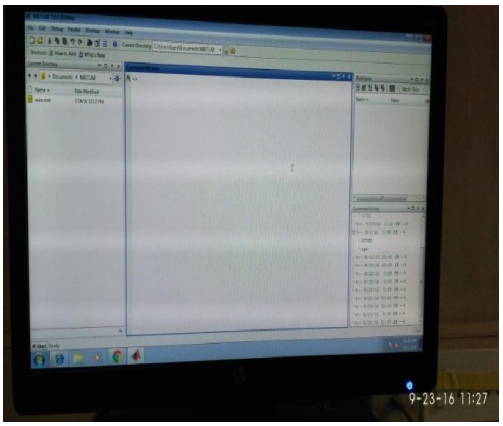
Cascade Refrigeration System

D-Space KIT

FEKO Software



NI Labview Software



Matlab Software

Power Electronics Drive and Design Software

SIMTEL Software

3. All Published Leaflets, Reports, Achievements by Research Scholars, PG Students, UG Students & Faculties:-

During the project all students including UG, PG and PhD were participated in various activities like academic symposiums, workshops, conferences, training programs, etc. A list of all such activities is given below.

- **Motivational Workshop**

TEDxDBATU (Technology Entertainment and Design) event was organized in the University. We invited eminent speakers from the various areas. Padma Shree Dr. Anil Joshi Founder of Himalayan Environmental Studies and Conservation Organization (HESCO), Padma Shree Dr. S P Kale, Head, Technology Transfer Division, BARC, Dr. Dhananjay Sharma FRCS (Glasgow, Ireland, England, Edinburgh), Head, Department of Surgery Government Medical College and Allied Hospital, SachinShende, General Manager, Reserve Bank of India, Nikhil Sharma, Youtuber- Mumbaiker, Having more than 1.3 lakh subscribers, AakashLonkar, Director, Animal Angels Therapy Centre, Mumbai have delivered talks in this event.Expert talks were really informative and inspiring one for students as well as faculty. These talks were live streamed on you-tube.

Facilities created through TEQIP for Embedded System, Microwave laboratories and Signal Processing Laboratories are heavily used by Research Scholars and PG students. Theseare also used for carryout research activities and development projects. Due to these facilities department could admit nearly 19 research scholar in the area of laboratory developed under this project.

- **Publications**

Research scholars from the University have published 15 papers in the various conferences and M Tech students published 30 papers in the conference proceedings.

- **B. Tech. Projects**

During the period of TEQIP II B. Tech. students have undertaken about 100 projects during their final year. With the support from TEQIP II these projects have been successfully completed.

- **Fellowships**

The University has given fellowships to the students to boost the student's morale and to support them to inculcate the research culture in the university. Over a period of TEQIP II project 68 Fellowships has been awarded to PhD students and 186 Fellowships for the M. Tech. students.

- **Conferences**

Over the period of time University has organised 79 National Level Conferences/Symposia/Workshops and 3 International Level Conferences.

During the year 2016-17 two international Conferences and one National Conference have been organized by the University.

Department of Mechanical Engineering has organised International Conference on Materials, Manufacturing and Design Engineering 2016 (iCMMD 2016) in December 2016. About 120 participants including research scholars, Faculty throughout the country were attended the conference. Three keynote lectures from the eminent professor from National University of Singapore, IIT Bombay and University of Texas A and M, USA were invited during the conference. University B. Tech. and M. Tech. students worked in various committees in organizing the event successfully.

Some Photographs from iCMMD 2016:

Our Honorable Vice Chancellor welcomes the key note speaker from Singapore

The dignitaries publishing the Souvenir of iCMMD 2016

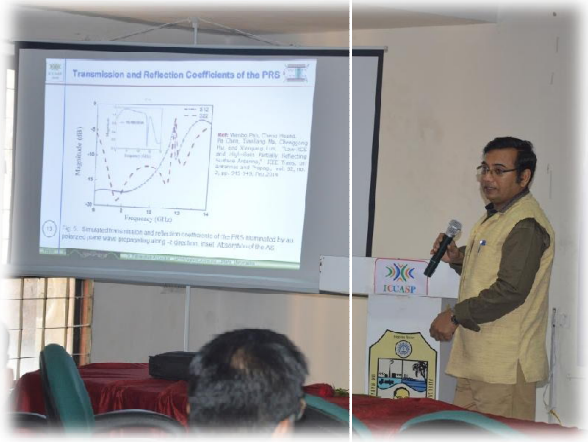
The key note speaker presenting his note at iCMMD 2016

Department of EXTC Engineering has organised International Conference on International Conference on Communication and Signal Processing 2016 (ICCASP 2016) in December 2016. About 100 participants including research scholars, Faculty throughout the country were attended the conference. Three keynote lectures from the eminent professor from University of New Brunswick, Fredericton, Canada, IIT Bombayand IIT Delhi were invited during the conference. University B. Tech. and M. Tech. students worked in various committees in organizing the event successfully.

Some Photographs from ICCASP 2016:

The Honorable Vice Chancellor with Guests at ICCASP 2016

The team of ICCASP 2016 with Guest



Speakers presenting their presentation at ICCASP 2016

4. Record of All Training Programs Conducted for Supporting & Teaching Staff:-

A Report on activities performed and planed by Institute Training Cell

I. Activities undertook for Administrative and supporting staff:

Different training activities are planned and executed on Attitudinal and mindset change, motivation Peer institute visit at ICT Mumbai, IIT Mumbai, NMU Jalgaon, CoE Pune, WCoE Sangli, SRTMU Nanded, SGGS Nanded, YASHADA , NITTTR Pune, and in house.

Tittles of few in house programs are as follows: Life skills for happy life at CoE Pune, BATU and WCoE Sangli.

II. Activities undertook for Technical supporting staff:

Most of the activities are planned in line with NITTTR Bhopal and Pune. Tittles of few activities in 2014-15 are:

Personality Development through positive thinking, W/s on Electrical Safety in India

III. Activities Planned for Faculty:

The institution has liberal policy to depute faculty for different workshops, FDP and conferences in core area and pedagogy.

Few tittles where faculty had participated in different institution are: Quality Initiatives in Tech & Higher educational Institutions, ICMPC2014 Induction Program -phase-2 Seismic Analysis and design of buildings

Smart Grid, Application& Technology, DSP, Structural Engg, Effective English for Engineering Experts, Measurement techniques in thermal engg, recent advances piping engg course, Pedagogy, Research methodology

Apart from this the institution has supported for conduct of good number of in-house training programs and workshops for both faculty as well as students. Smart Grid DSP Pedagogy NICE, MATLAB.

IV. Activities Planned for Administrative and supporting staff:

Attitudinal and mind-set change, Communication skills. Motivation, Institutional Development Management, Disaster management, Quality Management, Management Budgeting and Financial Management, Systems Automation, Management Capacity Development, Human Resource Management , NITTR Pune, NITTR Bhopal, ASCI Hydrabad and in-house program with internal and external experts. Field visits to premier technical institutions.

V. Activities Planned for Technical, non-teaching staff:

Managing laboratory and enhancing effectiveness of industry Institute Interaction, PC maintenance and trouble shooting, Maintenance of Electrical & Electronics equipment for supporting staff. Electrical and fire safety management, Disaster management, Maintenance & servicing & Overhauling of automobile petrol engine, Bearing and Lubrication, Metrology and Engineering Inspection, High Pressure Pipe Welding, Programming & Machining (Milling- FANUC-OM) ,Safety precautions

VI. Activities Planned for Faculty:

The institution is planning to conduct few FDP in collaboration with IITB: Optimisation in design and engineering Linear algebra some other methods for electrical engineers.

In-house courses on Pedagogy, Research Methodology

At least one Conference in core area in Electrical + Electronics, Mechanical+ Civil, Chemical+ Petro, Computer+ IT in 2015-16.

All together we have spent around 80 Lakhs out of 120 Lakh budgeted, with a plan of spending around 40 lakhs by 2016

University conducted various training programs for the Faculty, Teaching supporting staff, office staff and students during the project. A comprehensive list of the programs is given below in table.

➢ A report on training activities in the academic from year 2010-12

Various training programs are planned and executed in academic year 2010-12 are as follows:

Individual Faculty:-

Sr. No.	Name of the Faculty Member	Areas of training/development	Duration (Days)	When (Date)
1	S. V. Khobragade	Mission 10X	One week	2011, DBATU
2	N. S. Jadhav	Device Modeling High Impact Teaching Skills	03 days 03 days	2012, DBATU 2012, DBATU
3	M. D. Laddha	Mission 10X	One week	2011, DBATU
4	V. T. Lokare	DBMS C Programming	2 weeks 2 weeks	2010 2010
5	Jhetam I. R. A.	DBMS High Impact Teaching Skills	2 weeks 03 days	2010 2012, DBATU
6	G. S. Mahamunkar	High Impact Teaching Skills C Programming	03 days 2 weeks	2012, DBATU 2011
7	H. M. Gite	Linux Programming and Security System	02 days	2010
8	Dr. Y. S. Mahajan	Mission 1O X Machine Tools	One week One week	2011, DBATU 2011, DBATU
9	Dr. A. R. Chavan	Mission 1O X Machine Tools	One week One week	2011, DBATU 2011, DBATU
10	Dr. V. S. Sathe	Mission 1O X	One week	2011, DBATU
11	S. T. Khelkar	High Impact Teaching Skills Sustainable Technology SDP	03 days Two weeks Two weeks	2012, DBATU 2011 2011
12	V. P. Jawanjal	Mission 10X Simulation and Modeling in Process Industries	One week One week	2011, DBATU 2010, HPTM, Pune,
13	S. S. Metkar	High Impact Teaching Skills ACERT	03 days One week	2012, DBATU 2012, DBATU
14	P. K. Sane	High Impact Teaching Skills	03 days	2012, DBATU
15	S. R. Sutar	Advances in WMC Certified Embedded Systems Developer	03 days One week	2010 2010
16	S. M. Jadhav	Workshop in Bioinformatics	03 days	2012
17	A. R. Babhulgaonkar	FDP DBMS	03 days 2 Weeks	2012 2010
18	V. J. Kadam	Workshop on DBMS	2 weeks	2012
19	S. S. Barphe	IND Warehousing & Mining	2 weeks	2010
20	D. K. Thakur	Java Developer	30 days	2011
21	Dr. K. Vadirajacharya	Mission 1O X BIPT	One week 2 weeks	2011, DBATU 2011

➢ A report on training activities in the academic during year 2012-13

Various training programs are planned and executed in academic year 2012-13 are as follows:

1. Faculty:-

Sr. No.	Dept. / Section	Title of Training Program	Name of staff member	Duration (Days)	Period	Trainer Organization	Expenditure of the program
01	Mechanical	Advances in Robotics	Dr.M.Sadaiah	One week	July 12	CoE Nagapattanam	
02	Mechanical	Advances in Robotics	Dr.S.S.Naik	One week	July 12	CoE Nagapattanam	
03	Mechanical	Recent trends in HVAC & R	Dr.Neeraj Agrawal	One week	14-18 Nov 12	ISHRAE Mumbai	30000.00
04	Chemistry	Comprehensive training program on essence oil fragrance	P.B.Lokhande	15 days	20 Nov to 5 dec 12	FFTC Kanpur	34000.00
05	Electrical	Power System Protection	Dr.K.Vadirajacharya	One week	December 03-07	ESCI Hyderabad	30000.00
06	Electrical	Power System Protection	Dr.P.K.Katti	One week	December 03-07	ESCI Hyderabad	30000.00
07	Mechanical	Piping Engg	Dr.H.N.Warahatkar	Two week	04-15 Dec 12	IIT Bombay	65000.00
08	Mechanical	Piping Engg	Dr.S.S.Naik	Two week	04-15 Dec 12	IIT Bombay	65000.00
09	W/s	Conference on PFAM 2012	Dr.R.S.pawade	Three days	13-15 Dec 12	IIT Guwahati	
10	Mech	Conference on AIMTON	S.S.Sakpal	Three days	16-18 Dec 12	Jadavpur	
11	Petrochem	Accreditation and academic audit	V.P.jawanjal	One week	17-21 Dec 12	NITTR Bhopal	Nil
12	Electrical	Recent trends in power electronics and power quality	Dr.K.Vadirajacharya	One Week	17-21, Dec 2012	WCE Sangli	7500.00
13	Electrical	Recent trends in power electronics and power quality	Dr.P.K.Katti	One Week	17-21, Dec 2012	WCE Sangli	7500.00
14	W/s	VMC Programming	Dr.R.S.pawade	One week	25-31 Dec 12	Nashik Engg cluster Nashik	24000.00
15	Chemical	Asphen hysis process modeling	Dr.Y.S.Mahajan	Three days	Dec 12	Asphen	41000.00
16	Chemical	Asphen hysis process modeling	Dr.V.S.Sathe	Three days	Dec 12	Asphen	41000.00

17	Mechanical	Micro manufacturing	Dr.M.Sadaiah	One week	Jan 13	IIT Kanpur	
18	Electrical	leadership course on power optimization	Dr.K.Vadirajacharya	One Week	17-20 March 2013.	IIM Ahmadabad	70000.00
19	Electrical	leadership course on power optimization	Dr.P.K.Katti	One Week	17-20 March 2013.	IIM Ahmadabad	70000.00
20	Workshop	3D printing	Dr.R.S.pawade	One week	20-22 May 2013	IIT Bombay	17000.00

2. Non-Teaching staff :-

Sr. No.	Department / Section	Title of Training Program	Name of staff member	Duration (Days)	Period	Trainer Organization	Expenditure of the program
1	Mech	Maintenance ,servicing & overhauling of automobile petrol engine	A.B.Choudary	Two Week	29 Oct to 9 Nov 12	ATI Mumbai	6000.00
2	Workshop	Bearing and lubrication	S.B.Sonavane	One week	5-9 Nov 12	ATI Hyderabad	4000.00
3	Workshop	High press welding	A.L. Mokalkar	Two week	12-24 Nov 12	ATI Hyderabad	6000.00
4	Comp	PC Maintenance & trouble shooting	More .S.S.	One week	10-14 Dec 2012	NITTR Pune	Nil
5	IT	PC Maintenance & trouble shooting	M.A.Shinde	One week	10-14 Dec 2012	NITTR Pune	Nil
6	Workshop	Metallurgy&Engg inspection	C.V.Jaitpal	One week	10-14 Dec 12	ATI Hyderabad	6000.00
7	Workshop	Metallurgy&Engg inspection	P.B.Patil	One week	10-14 Dec 12	ATI Hyderabad	6000.00
8	Workshop	CNC machining & programming	M.D.Patil	Two week	16-28 Dec 12	IGTR Aurangabad	16000.00
9	Workshop	CNC machining & programming	P.S.Shriwardhanakar	Two week	16-28 Dec 12	IGTR Aurangabad	16000.00
10	Electrical	Nanotechnology	P.S.Padval	One week	11-15 Mar 2013	NITTR Pune	Nil
11	Computer	Linux Server Administration	S.S.More	One week	18-22 Mar	NITTR Pune	Nil
12	IT	Linux Server Administration	M.A.Shinde	One week	18-22 Mar	NITTR Pune	Nil

13	Workshop	TOT Program on welding & fabrication	A.L.Mokalkar	One week	25 Fb to 1 Mar 13	NITTR Bhopal	Nil
14	Store	Mind Stress	A.R.pawar	Three Days	15-17 May 2013	CoE Pune	3000.00
15	Exam	Mind Stress	M.L.Koli	Three Days	15-17 May 2013	CoE Pune	3000.00
16	Mech Engg	Mind Stress	A.B.Choudary	Three Days	15-17 May 2013	CoE Pune	3000.00
17	Electrical	Mind Stress	H.R.Washikar	Three Days	15-17 May 2013	CoE Pune	3000.00
18	Workshop	Certified welding inspector	A.L.mokalkar	Two week	4-15 June 13	BHEL school of welding	50675.00

3. Supporting staff:-

Sr. No.	Department / Section	Title of Training Program	Name of staff member	Duration (Days)	Period	Trainer Organization	Expenditure of the program
01	University Level	Motivation	M.B. Korpe	Two		BVU CoE	1500.00
02	University Level	Motivation	P.B. Paste	Two		BVU,CoE Pune	1500.00

4. Non-teaching supporting staff:-

1	Shri. Panavkar	Exam section	Navi dhrusti Navi shrusti	BVCOE Pune	Three days	19-21,Dec-12	450
2	Shri. G. B. Paste	Mechanical Engg	Navi dhrusti Navi shrusti	BV COE Pune	Three days	19-21,Dec-12	450

5. In-house training programs conducted at DBATU:-

Sr. No.	Dept. / Section	Title of Training Program	Number of participants IntOth		Duration (Days)	Period	Expenditure of the program
01	Mechanical	Advances & Practices in Heating Ventilation air conditioning and refrigeration	02	35	One week	8-12 Jan 2013	
02	Mechanical	Research Methodology	26	05	One week	26-30 Nov 2012	101937

03	Chemical	Advances in Chemical Engineering: Recent trends			One week	26-30 Mar 2012	
04	Electrical	High Impact Teaching skills	27	03	Three Days	27-29 Feb 2012	
05	Mechanical	Nanotechnology	24	07	Five days	10-14 Dec 12	56000

➢ A report on training activities in the academic during year 2013-14

Various training programs are planned and executed in academic year 2013-14 are as follows:

1. **Faculty:-**

Sr. No.	Name of faculty	Dept.	Course/ Conference/WS Attended	Period	Duration	Place	Total Expenses
1	Prof H.A.Akarte	Compute r	Cloud Computing	29/7 - 2/8/13	One week	WCE Sangli	4000/-
2	Dr.Nalbalwar	ExTC	Cyber Security	2-5 Sept13	One week	ESCI Hydrabad	38540/-
3	Dr. P.K. Brahmankar	Mech	Management Development Program	2-5 Sept 2013	One week	IIT Mumbai	537000/-
4	Dr.Nalbalwar	ExTC	Information Security	21-25 Oct 13	One week	VJTI Mumbai	28450/-
5	Dr.Neeraj Agrawal	Mech	Society of Refrigeration Air-conditioning	25-Oct-13	One day	Mangaon	1000/-
6	Dr.S.U.Sapkal	Mech	Rapid manufacturing	25-30 Nov 13	One week	VJTI Mumbai	30000/-
7	Dr. S.U. Sapkal	Mech	ICIE 2013	20-22 Nov 2013	Three days	SVNIT Surat	7000/-
8	Dr. Neeraj Agrawal	Mech	ISHMT	28-31 Dec 2013	Three days	IIT Kharagpur	12000/-
9	Dr.M.S.Tandale	Mech	IC Engines		One week	ARATI Pune	
10	Dr.M.S.Tandale	Mech	Engg Projects in community services		3 days	ESCI Hydrabad	
11	Dr.Neeraj Agrawal	Mech	National Conference	12-14 Dec13	Two days	IIT Madras	5000/-
12	Dr. Neeraj Agrawal	Mech	NCMPE	20-21 dec2013	Two Days	SATE Videsha	6000/-
13	R.S.Pawade	Mech	IntConf on Precision Engg	12-14 Dec13	Three days	NIT Calicut	8000/-
14	Dr.P.K.Brahman kar	Mech	IntConf on Precision Engg	12-14 Dec 13	Three days	NIT Calicut	20000/-
15	Dr. Lokhande	Chemistr y	Mathematical	2-13 Dec 13	Two weeks	COE Karad	5000/-

16	Dr.H.N. Warhatkar	Mech	International Conference on Transformation in Engg	16-18 jan 14	Three days	BVB College of Engg Hubli	13000/-
17	Dr.S.S.Naik	Mech	International Conference on Transformation in Engg	16-18 jan 14	Three days	BVB College of Engg Hubli	13000/-
18	Dr. S.S.Naik	Mech/ Chem	piping engg course	Off Line15July – 15 Oct	Fifteen days	IIT Mumbai	650000/-
19	Dr. K.Vadirajachary a	Electrical	National Education Summit	10-11 Jan 2014	Two Days	Govt of Gujrat, Gandhinag ar	3000/-
20	Prof Y.N.Patil	Exam section	ATP on SHODGANGH	29-31 Jan 2014	Three days	INFlibNET Gandhinagr a	26000/-
21	A.M.Ghugal	Chemical	Transform Teaching Education	27 Jan -2 Feb	One week	NITTR Bhopal	Nil
22	Prof. H.A. Akarte	Comp	Research Methodlogy	3-7 Feb 2014	One week	VJTI Mumbai	2000/-
23	Dr. L.N.Singh	Physics	Research Methodlogy	3-7 Feb 2014	One week	VJTI Mumbai	3000/-
24	Prof V.J.Kadam	Comp	ICST 2K14	21-22 Feb 2014	Two days	SB Patil CoE Indapur	4000/-
25	Dr. H.N.Warthak	Mech	Quality Intiatives in Tech & Higher educational Inst	11-13 Feb 14	Three days	ESCI Hyd	26000/-
26	Dr.S.S.Naik	Mech	Quality Intiatives in Tech & Higher educational Inst	11-13 Feb 14	Three days	ESCI Hyd	26000/-
37	Dr. B.F.Jogi	Mech	ICMPC2014	8-9 Mar 2014	Two Days	GRIET Hydrabad	10000/-
28	Prof.Sangeeta. M	Petroche m	Induction Program -phase-2	10-21 March 20-14	Two week	NITTTR Pune	Nil
29	Prof S.R.Bhagat	Civil	Sesmic Analysis and design of buildings	5-9 March 2014	One week	VNIT Nagpur	5000/-
30	Dr. S.L.Nalbalwa	ExTc	DSP	3-9 March 2014	One week	IIT Mumbai	700000/-
31	Dr. K.Vadirajach	Elect	Smart Grid, Application& Technology	10-14 Mar 2014	One week	CPRI Bangalore	23000/-
32	Dr. S.M.Pore	Civil	Structural Engg	Three days	28-30 April 14	YASHAD A Pune	1000/-
33	Prof Shesh+3	English	Effective English for Engineering Expert	One week	12-16 May 14	COEP Pune	4500/-

34	Prof. S. R. Sutar	IT	Effective English for Engineering Expert	One week	12-16 May 14	COEP Pune	5000/-
35	Dr. K.Vadirajach	Elect	Effective English for Engineering Expert	One week	12-16 May 14	COEP Pune	7000/-
36	Prof Aghe	English	Effective English for Engineering Expert	One week	12-16 May 14	COEP Pune	4000/-
37	Dr. Neeraj Agrawal	Mech	Measurement techniques in thermal engg: recent advances	Two days	30-31 May 14	IITIndore	13500
38	Dr. R.S Pawade	Mech	8th ASME Manufacturing Science & Engg Conf	One week	9-14 June 14	DetotMici gan State USA	261757

2. Administrator:-

1	S.U.Waikar	Computer	Numerical Methods in engineering	8-12 July 2013	One week	NITTR Pune	Nil
2	Dr. RajuMankar	VC	High Impact learning skill: blue print for success	One week	23-25 July 14	Shivkhera mumbai	5500 0

3. Administrator (Group):-

Sr.No.	Title of program	Venue	Organized by	No of participants	Date & Period	Total expenses
01	MDP	IIT Mumbai	TEQIP	25	2-5 Sept 2013	37000/-
02	MDP	IIT Mumbai	TEQIP	30	2-6 Oct 2013	700000/-

4. Supporting staff:-

Sr.No.	Title of program	Organized by	Venue	Date & Period	Total Expenses	No of participants
01	Enhancement managerial capacity through appreciative mind set	TEQIP Unit	IITB/DBATUL	2-5 Sept 2013 (5d)	37000/-	27
02	Improving working efficiency through team working	TEQIP Unit	DBATUL	20-21 Sep 2013(2d)	41000/-	30
03	Navi drushti Navi shrusti	TEQIP	DBATU	18-20 Oct	50000/-	30

		Unit	Lonere	2013		
04	Field Visit to NMU Jalgaon	TEQIP	NMU Jalgaon		25000/-	25

5. In-house training programs:-

Sr. No.	Title of program	Organised by	Venue	Date & Period	Total expense	No of participant
1	Wavelet	ExTC	IIT Mumbai	31/7-4/8 13(5d)	150000/-	21(i), 6(Ex)
2	Smart grid	EED	DBATUL	16-17 Aug2013(2d)	43610/-	30(I)
3	Smart Grid	EED	DBATUL	16-20 Dec 13(5d)	125000/-	29(i),16(Ex)
4	DSP	ExTC	IIUT Mumbai	3-9 March 2014	913000/-	24(i)

➢ A report on training activities in the academic during year 2014-15

We are proud to state that we have planned and executed different training activities from **Peonto Professor** (P-P Training) to enhance working capability of individual through various in house and off campus training programs. To quote few of them include:

1. For Supporting Staff:

Off Campus Programs: Visit to North Maharashtra University Jalgaon, ICT Mumbai, WCE Sangli, Shivaji University Kolhapur College of Engg Karad.

In-house Programs – Improving working efficiency through team work, Navi Drushuti Navi Shrusti, and Life skill for happy life.

2. For Teaching Faculty And Laboratory Support Staff:

Off Campus Programs: Many faculty has attended training programs on their field of study at institutions of repute like IIT Mumbai, IIT Roorkee, IIT Indore, IIM Ahamadabad, IIM Udiapur, Engineering Staff College of India Hydrabad, YASHADA Pune, VNIT Nagapur, NITTR Bhopal , NITTR Pune, College of Engg Pune, BVB College of Engg Hubali, Karnataka, VNIT Surat Gujarat, Shivkhera Mumbai etc.

List of training programs attended by Individual Staff and Faculty :-

1. Faculty member (Individual):-

Sr.No.	Name of faculty	Dept.	Course/ conference / WS attended	Period	Duration	Place	Total Expenses
1	Dr. M.Sadaiah	Mech	High Impact learning skill: blue print for success	23-25 July 14	One week	Shivekhera mumbai	55000

2	Dr. M.Sadaiah	Mech	PCMIC	18-22 Oct 14	One week	SAN Jose	272900
3	Dr. P.K.Katti	Elect	W/s on Electrical Safety in India	19-21 Nov 14	Three days	IES Pune	5000
4	Dr. K. Vadiraj	Elect	W/s on Electrical Safety in India	19-21 Nov 14	Three days	IES Pune	5000
5	R.H. Madavi	Elect	W/s on Electrical Safety in India	19-21 Nov 14	Three days	IES Pune	5000
6	Dr. B.B.Singh	Math	Indian Science Congress	3-7 Jan 2015	One week	University of Mumbai	2000
11	Prof M.S. Tandale	Mech	Quality Initiative in Tech & Higher Education institutes	23-25 Feb 2015	3 days	ESCI Hyderabad	27175
12	Prof. M.Sadaiah	Mech	Quality Initiative in Tech & Higher Education institutes	23-25 Feb 2015	3 days	ESCI Hyderabad	27175
13	Prof. U.V.Patil	Elect	Quality Initiative in Tech & Higher Education institutes	23-25 Feb 2015	3 days	ESCI Hyderabad	27175
7	Dr. B.F.Jogi	Mech	Advances in manufacturing engineering	April 9-11, 2015	03 days	NIT Tirachy	9300
8	Dhale. S.R.	Mech	Optimization Techniques	1-5 June 2015	One week	SRES CoE Kopergaon	
9	Dr. M.Sadaiah	Mech	MSEC2015	June 8-12, 2015	Five days	University of North Carilona, USA	1.25 Lakh

2. Supporting Staff (Technical):-

1	P.B. Patil	W/s	Personality Development through positive thinking	21-25 July14	One week	NITTTR Nashik	Nil
2	H.Washikar	Elect	W/s on Electrical Safety in India	19-21 Nov 14	Three days	IES Pune	Nil

3. Supporting staff:-

Sr.No.	Title of program	Organised by	Venue	Date & Period	Total expenses	No of participants
01	Field visit to Kolhapur	TEQIP	SUK Kolhapur	10-04 2014	24277	21
02	Field visit to ICT Mumbai	TEQIP	ICT Mumbai	4 July 2014	11173	26
03	Field visit to Technical institution	TEQIP	WCES	23-25 Dec 2014	54900	32
04	Life skills for Happy life	TEQIPU	DBATUL	2-3 Jan 2015	64000/-	40(I), 21(Ex)
05	Life skills for Happy life	TEQIP DBATU & DTEM	DBATU	27 and 28 Feb 2015	37161	26(Ex),11 (Int)
06	Life skill for Happy life	TEQIP	WCES	23-25 April 2015	92518	19

4. Students:-

Sr. No.	Title of program	Organised by	Venue	Date & Period	Total expenses	No of participants
01	Matlab W/s	EED	DBATUL	02-04 Sept 13(2d)	7000/-	60
02	Soft & Leadership skills	EED	DBATUL	26-Oct-13(1d)	4000/-	70
03	Soft & Leadership skills	Petro	DBATUL	12-Dec-13(1d)	4000/-	70
04	Soft skill development	IIIC	DBATUL			125
05	Professional Skill development	IIIC	DBATUL	Sept -2014 to Aug 2015	7.5 lakh	510
06	Expert coaching on Maths and aptitude test in GATE 2015	IIIC	DBATUL	21-12-2014 to 6-1-2015 (100 hrs)	350000/-	220

5. List of training programs organised in house:-

Sr.No.	Title of program	Organised by	Venue	Date & Period	Total expenses	No of participants
02	Pedagogy	TEQIP	DBATUL	29-30 Dec 2014(2)	60000/-	60(I)

03	NICE	EED	DBATUL	02-07 May 2015	85000/-	40

➢ A report on training activities in the academic during year 2015-16

In this academic year, the interdisciplinary one week faculty development program on 'Recent trends in Energy research at DATU during 07 – 11 December 2015, jointly organised by Department of Mechanical & Chemical Engineering under TEQIP-II.

Various training programs are planned and executed in academic year 2015-16 are as follows:

1. **Individual Faculty:**

Sr.No.	Name of faculty	Dept.	Course/ conference / WS attended	Period	Duration	Place	Total expense
1	Dr. AW. Kiwlekar	Comp	ECSA 20125	Debrovink Croatia	September 7-11,2015	Five days	1.3 lakh
2	Dr. Neeraj Agrawal	Mech	ICR 2015	Yokohama Japan	August 16-22, 2015	7 days	1.5 lakh
3	P.K.Katti	Elect	IEEE Smart Tech work shop	IEEE Bangalore	25 - 26Sept-15	2 days	14000
4	K.Vadirajacharya	Elect	IEEE Smart Tech work shop	IEEE Bangalore	25-26 sept-15	2 days	14000
5	A.R.Babulgaonkar	IT	Big Data	Hyderabad	15-19 Dec 2015	One week	6537
6	Dr. S.G. Dahotre	Physics	IntConf on Nanaostructruced material	Kottaym Kerala	13-15 Nov 2015	Three days	11816
7	Dr. P.K. Brahmankar + 9 Faculty		Outcome Based Education	DY Patil CoE Pune	Jan 9-10, 16	Two days	73012
8	Prof Awale A.S	Mech	Advance engg optimization	SVNIT Surat	21-25 march 16	One week	8000
9	Prof. Roopalishet	Mech	Advance engg optimization	SVNIT Surat	21-25 march 16	One week	8000

10	7 Faculty		WOSA	NBA New Delhi	18-20 March 2016	Three days	237684
11	Dr. R. S. Pawade	Mech	MSCE ASME	Detroit USA	6-11 June	Five Days	1.69 Lakhs

2. Supporting staff:-

Sr.No.	Title of program	Organized by	Venue	Date & Period	Total expenses	No of participants
01	Study tour to SGGS Nanded	TEQIP	SGGS Nanded	29-30 Sept 2015	36960	08
02	Migration to open source-1	TEQIP	DBATU	5-6 Jan 2016	39500	32 (int)
03	Safety Measures in Laboratories	TEQIP	DBATU Lonere	25-29 February 2016	51075	33 (27 Ext+ 6int)
04	Migration to open source-2	TEQIP	DBATU	29-30 March 2016	39500	33 (int)
05	Tally	TEQIP	YASHADA	10 June 2016	10000	15 int)

3. Students:-

Sr.No.	**Title of program**	**Organised by**	**Venue**	**Date & Period**	**Total expenses**	**No of participants**
01	Modern soft skill development for enhancement of employability	IIIC& EED	DBATU	One Day, Oct 31, 2015	14000	26

4. Administrator:-

Sr.No.	**Title of program**	**Venue**	**Organised by**	**No of participants**	Date & Period	Total expenses
01	MDP	SRTMN & SGGSN	TEQIP	09	28-09 to 01-10 2015	36960/-

5. List of training programs organised in house:-

Sr.No.	**Title of program**	**Organized by**	**Venue**	**Date & Period**	**Total expenses**	**No of participants**
1	Pedagogy	ExTC	DBATUL	03 Oct 2015	20000/-	25

2	Optimization in design and engineering	TEQIP	IITB	02-06 Nov2015	100000/-	30
3	Linear algebra some other methods for electrical engineers	ExTC	IITB	Dec 2015	100000/-	25
4	OBE	TEQIP	DBATUL	23-28 June 2016	73122.00	50

➢ A report on training activities in the academic during year 2016-17

Various training programs are planned and executed in academic year 2016-17 are as follows:

1. **Faculty:-**

Sr. No.	Name of faculty	Dept.	Course/ conference / WS attended	Period	Duration	Place	Total expenses (Appx.)
1	1.Mr. S. S. Singh 2. Mr.UmeshBharate	Elect	Next generation distribution network to empower future carbon	IIT Mandi	12-14 August 2016		8542
2	Arun V. S.	Petro	Zero discharge: Recent Advancement & sustainability	NIT Durgapur	30-Sept to 04 Oct, 2016	One week	8500
3	Ramesh Singh Thakur	Chem	Zero discharge: Recent Advancement & sustainability	NIT Durgapur	30-Sept to 04 Oct, 2016	One week	8500
4	Shenal. P. Karade	Chem	Zero discharge: Recent Advancement & sustainability	NIT Durgapur	30-Sept to 04 Oct, 2016	One week	8500
5	SwatiLamature	Chem	Zero discharge: Recent Advancement & sustainability	NIT Durgapur	30-Sept to 04 Oct, 2016	One week	8500

6	1. Dr. S.L Nalbalwar 2Mr. KadamShrish 3. Mr.Bavkar 4.Mr Sandeep	ExTC	IPR training W/s	RGNIT Nagpur	26-30 Sept 2016	One week	35000
7	Dr. S.M. Pore	Civil	IPR training W/s	RGNIT Nagpur	26-30 Sept 2016	One week	12000
8	Dr. S. M. Jadhav	IT	Web development using php&mysql	ESCI Hyderabad	26-30 Sept 16	One week	28000
9	S. B.D, A. B. N V. S. S, L. D. N K.V., P. K. K. U.V. P, P. K. B M.S, RPK,NA, HNW, RSP, BFJ, HSJ		Automation workshop	BOSCH Mysore	16-23 October	One week	6.5 Lakh
10	Dr. S.R. Bhagat	Civil		IIT Hydrabad			5000
11	Dr. A.W. Kiwlekar	Comp	Certified information security Auditor	IIQM Jaipur	28-30 November 16	Three days	20350
12	Dr. R.P. Kate	Mech	GAIN course, Mamaging the Transformation towards low carbon Socity	NIT Durgapur	21-28 Nov 2016	Nine days	25000
13	Washikar + 10		Automation Training	BOSCH Mysore	16-23 September 16		5 LaC
14	1.S. G. Lad 2. P.D. Pendhari		PC Hardware and networking maintenance	NITTTR Chandigarh	24-28 October 16	One week	15750
15	1. H. N.Washikar 2. Y.N.Kambale 3. B.D. Bauiragi 4. P.D. Pendhari 5. S.G. Lad 6. S.M. Borse	Elect	Managing yourself	NITTTR Chandigarh	3-7 October 2016	One week	5750+TADA
16	Rudreshvari	Petro	Process design and intensification	UICT Jalgaon	26 Dec 2016 to 4 Jan 2017	Two week	4000

2. Training programs organised in-house :-

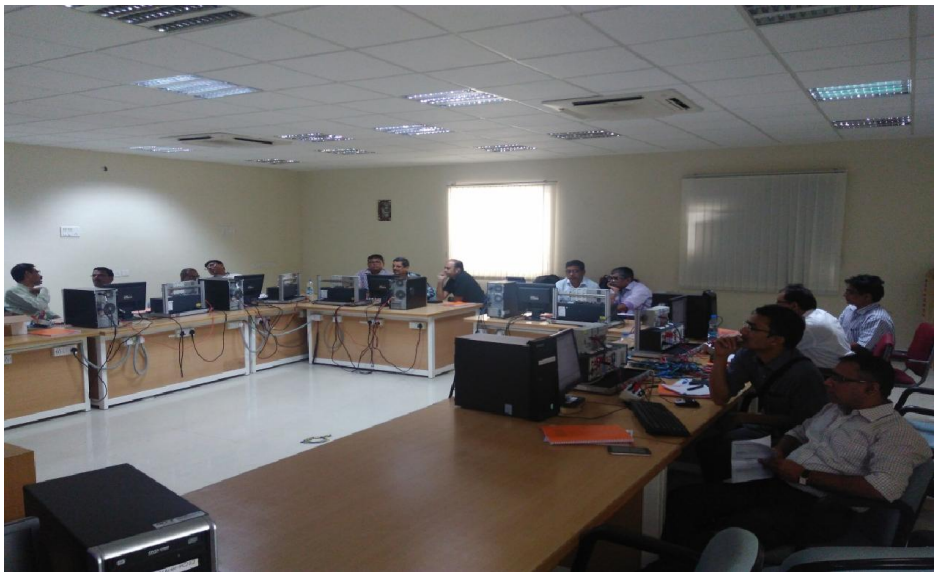
Sr.No.	Title of program	Organised	Venue	Date &	Total	No of

		by		Period	Expenses	Participants
1	Advances in Control Systems	Elect	BATU	7-11 Nov 2016	7.5 Lakh	25

- **Some Photographs from Bosch Training program 2015-16:**

The training instructor explaining the program

University Faculty members were taking hands on Machine



University Faculty members were taking software practical's during program

5 TEQIP-II Reforms:-

The University has now become affiliated from the year 2016-17. In view of the above, the university has undertaken modifying the existing systems for the smooth operations of the university functioning reforms in examination system such as online attendance, E-finance & Governance etc.

6 All Reports of Mentors, Performance Auditors & Data Auditors:-

The progress of TEQIP-II project has been monitored effectively by external auditors for MIS Data Management and Performance Audits. Further the overall progress in terms of improvement in quality of academics, research and infrastructure has been monitored under the suggestion and guidance of external mentors. The report of all years for Performance Data, MIS Data and Mentor Visits are given below and attached herewith.