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MECHANICAL ENGINEERING DIVISION				CHEMISTRY DIVISION				PHYSICS DIVISION				HUMANITIES DIVISION				MATHEMATICS DIVISION				
Serial No.	List of Instruments	Qty.	Serial No.	List of experimental setup in each Laboratory/Workshop	Serial No.	List of instruments	Qty.	Serial No.	List of experimental setup in each Laboratory/Workshop	Serial No.	List of instruments	Qty.	Serial No.	List of experimental setup in each Laboratory/Workshop	Serial No.	List of Instruments	Qty.	Serial No.	List of experimental setup in each Laboratory/Workshop	
1	Drawing table	32nos	1	Engineering Graphics and Design	1	conductivity me	4 nos	1	Determination of dissolved oxygen present in a given water sample	1	LASER diffraction setup	1	Determination of Band gap of semiconductor	1	Teacher's Console	1 no.	Communication sessions	1	HP PC, Intel Core i3-530, 1GB RAM, SATA-300, 1TB HDD, DVD-RAM, 19" LED MONITOR, USB KEYBOARD, USB MOUSE	Assignments on Newton's laws, Lagrange's interpolation
2	Sealing stool	32nos	1	Engineering Graphics and Design	2	ph meter	5 nos	2	Conductometric titration for determination of the strength of a given HCl	2	Lee and Chaffin's apparatus	2	Determination of dielectric constant of a given dielectric material	2	Students' Console	32 nos.	Communication sessions	2	HP PC, Intel Core i3-530, 1GB RAM, SATA-300, 1TB HDD, DVD-RAM, 19" LED MONITOR, USB KEYBOARD, USB MOUSE	Assignments on numerical integration using Trapezoidal rule, Simpson's 1/3 rule, Runge-Kutta method
3	Drawing Board	32nos	1	Engineering Graphics and Design	3	UV-spectrophotometer	1 nos	3	Determination of the partition coefficient of a substance between two immiscible liquids	3	Meter Bridge	3	Determination of Hall coefficient of a semiconductor by four probe method	3	Headphones	33 nos.	Group Discussions	3	HP PC, Intel Core i3-530, 1GB RAM, SATA-300, 1TB HDD, DVD-RAM, 19" LED MONITOR, USB KEYBOARD, USB MOUSE	Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
4	Lathe	3 nos	2	Making a Round Headed Pin	4	digital thermometer	1 nos	4	Absorption of acetic acid by activated charcoal	4	Newton's ring apparatus	4	Determination of Lande-g factor using Electron spin resonance spectrometer	4	Microphone	1 no.	Public Speech, Debate	4	NETWORKSWITCH 12	Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
5	Shaping Machine	2 nos	3	Making a MS Cube	5	UV-Chamber	1 nos	5	Determination of viscosity coefficient of percentage sugar solution	5	Optical benches	5	Determination of Planck constant using photo cell	5	Podium	1 no.	Public Speech, Debate	5	CENTRAL UPS, 8KVA	Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
6	Drilling Machine	3 nos		Use for Supporting Purpose	6	Thermometer	4 nos	6	pH-metric titration for determination of strength of a given HCl solution	6	Power supply (0-12 v)	6	Determination of resistance of ballistic galvanometer by half deflection method and study of variation of logarithmic decrement with series resistance	6	Projector	1 no.	Powerpoint Presentations, Micro-project			Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
7	Grinding Machine	2 nos		Use for Supporting Purpose	7	Electronic Weighing	2nos	7	Determination of chloride ion concentration present in given water sample	7	Rigidity modulus setup	7	Determination of Rydberg constant by studying Hydrogen spectrum	7	White Screen	1 no.	Presentations			Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
8	Milling Machine	1no	4	Make a slit on MS Plate	8	Air Oven	1 nos	8	Determination of rate constant for the hydrolysis of ethyl acetate catalyzed by HCl	8	Brewer's apparatus	8	Determination of specific charge (e/m) of electron by J.J. Thomson's method	8	White Board	1 no.	Presentations			Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
9	Welding machine	2nos	5	Make a butt joint with MS plate	9	Hot plate	2 nos	9	Analysis of components of given mixture by thin layer chromatography	9	Sodium vapour lamp power supply	9	Determination of Stefan-Boltzmann constant	9	Group Discussions	2 no.	Group Discussions, Mock Interview			Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
10	Welding table	2nos		Supporting Purpose of Welding Lab	10	Mechanical Stirrer	1 nos	10	Determination of cell constant and EMF of cell by potentiometry	10	Sodium vapour lamp with housing	10	Determination of the Thermal conductivity of good conductor by Searle's Method	10						Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
11	Electronics	2 nos	6	Construction of Full wave rectifier	11	Water bath	1 nos	11	Spectrometer	11	Spectrometer	11	Determination of the Thermal conductivity of a bad conductor using Lee and Chaffin's method	11						Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
12	Foundry Sand	2 nos	1	Making a Mold of the Given pattern	12	Magnetic stirrer	1nos	12	Travelling microscope	12	Travelling microscope	12	Determination of thermoelectric power of a given thermocouple	12						Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
13	House wiring Model	1 no	8	Study of House Hold Wiring	13	Fume chamber	1nos	13	Viscosity apparatus	13	Viscosity apparatus	13	Determination of volume of the material of a given sample using a Newton's Ring	13						Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
14	Plastic moulding machine	1 no	3	Make a job on Plastic moulding machine	14	Butterfly stand	40 nos	14	Young's modulus setup	14	Young's modulus setup	14	Determination of wavelength of monochromatic light using a diffraction Grating	14						Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
15	Filtering and capacity table-4nos	4 no	10	Making a joint (Capacity)	15	paperie stand	40 nos	15	Ballistic galvanometer	15	Ballistic galvanometer	15	Determination of Young's Modulus of the material of a bar by Newton's Method	15						Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
16	Model of water Tube and Fire Tube Boiler	4 no	17	Model Study of Different Water Tube and Fire Tube Boiler	16	centrifuge	1nos	16	Band gap setup	16	Band gap setup	16	To determine the coefficient of viscosity of liquid by capillary flow method	16						Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
17	Pneumatic Apparatus	1 no	13	To determine Flash point of Petrol	17	colorimeter	1nos	17	Cathode-ray oscilloscope	17	Cathode-ray oscilloscope	17	To determine the coefficient of viscosity of liquid by capillary flow method	17						Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
18	Anal Apparatus	1 no	14	To determine Flash point of kerosene	18	digital voltmeter	1 nos	18	Electric constant setup	18	Electric constant setup	18	To determine the Dispersive Power of the material of a Prism.	18						Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
19	Bomb Calorimeter	1 no	15	Study of Bomb Calorimeter	19	digital multimeter	1 nos	19	Electromagnet	19	Electromagnet	19	To measure the wavelength of light emitted by Sodium source using Fraunhofer's B ₁ line.	19						Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
20	Valve Timing Diagram Model of Petrol and Diesel Engine	1 no	16	To Study of Valve Timing Diagram of Petrol and Diesel Engine	20	dc plate dryer	1nos	20	ESR spectrometer	20	ESR spectrometer	20	To study current voltage characteristics, load response, area characteristics and spectral response of a photoconductive solar cell.	20						Assignments on numerical solution of differential equations, Taylor's and Runge-Kutta methods
										21	Function generator	21	Use of Carey Foster's bridge to determine unknown resistance	21						
										22	Gas discharge tube power supply	22		22						
										23	Gauss meter	23		23						
										24	Half deflection kit	24		24						
										25	Half co-efficient kit	25		25						
										26	Half coefficient setup	26		26						
										27	Helmholtz coil	27		27						
											J.J. Thomson apparatus for charge-to-mass ratio of the electron									
										28		28		28						
										29	Deflect benches	29		29						
										30	Pico-Ammeter	30		30						
										31	Planck constant apparatus	31		31						
										32	Power supply (0-12 v)	32		32						
										33	Power supply (0-12 v)	33		33						
										34	Rigidity constant setup	34		34						
										35	Rotor oil setup	35		35						
										36	Spectrometer	36		36						
										37	Stefan's Boltzmann constant measurement kit	37		37						
										38	Thermocouple setup	38		38						
										39	AMMETER (ANALOG)	39		39						
										40	AMMETER (DIGI)	40		40						
										41	DEFLECTION MAGNETOMETER	41		41						
										42	DIGITAL MULTIMETER	42		42						
										43	ANALYZER & POLARIZER	43		43						
										44	DIGITAL THERMOMETER	44		44						
										45	DIOD CHARACTERISTIC KIT	45		45						
										46	ELECTRIC DRILL	46		46						
										47	ELECTRIC HEATERS	47		47						
										48	ELECTROMAGNET	48		48						
										49	FILTERS (OPTICAL)	49		49						
										50	GALVANOMETER BALLISTIC	50		50						
										51	FUNCTION GENERATOR	51		51						
										52	GALVANOMETER MOVING COIL	52		52						
										53	GALVANOMETER TANGENT	53		53						
										54	GAUSS METER	54		54						
										55	HELMHOLTZ COIL	55		55						
										56	HYSPOMETER	56		56						
										57	IRON STAND	57		57						
										58	MAGNETOMETER STAND	58		58						
										59	MEASURING CYLINDER	59		59						
										60	METER BRIDGE	60		60						
										61	METER SCALE	61		61						
										62	OPTICAL BENCHES	62		62						
										63	PHOTOCELL	63		63						
										64	POTENTIOMETER	64		64						
										65	POST OFFICE BOX	65		65						
										66	POWER SUPPLY (constant current type)	66		66						
										67	POWER SUPPLY (2v)	67		67						
										68	POWER SUPPLY (12v)	68		68						
										69	POWER SUPPLY (0-30v)	69		69						
										70	POWER SUPPLY (constant current constant voltage type)	70		70						
										71	POWER SUPPLY (gas discharge tube)	71		71						

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