

ई-मेल / पंजीकृत

प्रेषक,

प्रधानाचार्य,  
छत्रपति शाहू जी महाराज राजकीय पालीटेक्निक,  
बलरामपुर (रनिंग एट राजकीय पालीटेक्निक, गोण्डा)।

सेवा में,

निदेशक,  
प्राविधिक शिक्षा,  
उत्तर प्रदेश, कानपुर।

पत्रांक S1 / ई-साज-सज्जा / कय / बजट / 2022-23 दिनांक: 20 अप्रैल, 2022  
विषय-अद्यतन बी0टी0ई0 सूची के अनुसार कय हेतु अवशेष साज-सज्जा उपकरण  
संयंत्र मशीने आदि की सूची उपलब्ध कराये जाने विषयक।

महोदय,

कृपया आपके कार्यालय पत्रांक-631-39 / ई-साज-सज्जा / कय / बजट-105-  
26 दिनांक: 08.04.2022 का सन्दर्भ ग्रहण करें।

उपरोक्त के सन्दर्भ में अवगत कराना है कि बी0टी0ई0 की अद्यतन सूची के  
अनुसार उपकरणों / मशीनों की उपलब्धता की स्थिति निर्धारित प्रारूप पर भरकर साफ्ट  
कापी एवं हार्ड कापी इस पत्र के साथ संलग्न कर आपके अग्रेतर कार्यवाही हेतु प्रेषित  
है।

संलग्नक: उपरोक्तानुसार।

  
प्रधानाचार्य  
(प्रमथेश सहाय)  
छत्रपति शाहू जी महाराज  
प्रधानाचार्य  
राजकीय पालीटेक्निक, बलरामपुर

पृ0सं0 / ई-साज-सज्जा / कय / बजट / 2022-23 दिनांक: अप्रैल, 2022  
प्रतिलिपि संयुक्त निदेशक, प्राविधिक शिक्षा (मध्य क्षेत्र), लखनऊ को सूचनार्थ  
प्रेषित।

(प्रमथेश सहाय)  
प्रधानाचार्य

भारत सरकार द्वारा प्रदेश में स्थापित होने वाली नवीन राजकीय पालीटेक्निक संस्थाओं में से जिन-जिन संस्थाओं की धनराशि निदेशालय में बी०टी०ई० सूची के अनुसार अवशेष तैब/शाप उपकरणों की सूची, जिन्हें कय किया जाना शेष है

संस्था का पूरा नाम- छत्रपति शाहू जी महाराज राजकीय पालीटेक्निक, बलरामपुर

पता (पिन कोड सहित) - राजकीय पालीटेक्निक, गोण्डा कैम्प नवीन फल एवं सब्जी

मण्डी उतरौला रोड, गोण्डा-271001

मौ०न०-8299118058

जीन का नाम - (मध्य क्षेत्र) लखनऊ


क०सं०	ब्रांच का नाम	तैब का नाम	बी०टी०ई० सूची के अनुसार उपकरण का नाम	बी०टी०ई० की अद्यतन सूची के अनुसार आवश्यक उपकरणों की संख्या	सम्बन्धित उपकरण की वर्तमान स्थिति / आवश्यकता		अनुमानित कीमत / यूनिट का (बी०टी०ई० की अद्यतन सूची के अनुसार)	वर्तमान में कय किये जाने वाले उपकरणों की कुल कीमत का	अभियुक्त
					संस्था में पूर्व से उपलब्ध / स्थापित	कय हेतु प्रस्तावित उपकरण की संख्या			
A	B	C	D	E	F	G=E-F	H	I=G×H	J
<b>MECHANICAL ENGG (PROD)</b>									
<b>COMMUNICATION LABORATORY</b>									
			Stools	40	0	40	10,000	4,00,000	
			Display Board/Screen	2	0	2	6,000	12,000	
			Sound recording and playing system	1	0	1	6,000	6,000	
			Audio cassettes	60	0	60	2,000	1,20,000	
			Overhead Projector	1	0	1	5,000	5,000	
			Transparencies slides	100	0	100	500	50,000	
			TV, VCR and camera for video recording	1 each	0	1	20,000	20,000	
			English spoken course	1	0	1	2,000	2,000	
			A Quiz room equipped with two way audio system, back projection system and slide projector	1	0	1	30,000	30,000	
			Miscellaneous	LS	0	LS	1,500	1,500	

  
प्रधानाचार्य

छत्रपति शाहू जी महाराज राजकीय पालीटेक्निक बलरामपुर

## LIED PHYSICS LABORATORY

Vernier calipers Working length 160 mm, Internal and external dia	12	0	12	2,000	24000	
Screw Gauges Working length 15 mm, pitch 0.5 mm, least count .005 mm	12	0	12	2,000	24000	
Spherometers Distance between legs 2.5 mm, pitch 0.5 mm, least count .005 mm.	12	0	12	2,000	24000	
Mirrors (convex, concave)	5	0	5	1,500	7500	
Pendulum Setup	02	0	2	4,000	8000	
Gravesand's Apparatus	02	0	2	3,000	6000	
Inclined Plane Setup	02	0	2	2,000	4000	
Flywheel Setup	02	0	2	4,000	8000	
Prism	05	0	5	1,500	7500	
Spectrometer	02	0	2	25,000	50000	
DC Ammeters	10	0	10	3,500	35000	
DC Milliammeters	2	0	2	1,000	2000	
DC Microammeters	2	0	2	700	1400	
DC voltmeters	10	0	10	700	7000	
DC Millivoltmeters	10	0	10	2,000	20000	
Sensitivity Galvanometer	2	0	2	800	1600	
Student Galvanometers	10	0	10	4,000	40000	
Demonstration type DC Ammeters Range: 0 to 1 Amp.	2	0	2	1,000	2000	
D type DC Voltmeter Range : 0 to 1 Volt	2	0	2	1,000	2000	
D type Galvanometers Sensitivity : 20 microampere per scale division.	8	0	8	8,000	64000	

  
 प्रमुख, शारीरिक विभाग  
 राजकीय प्रौद्योगिकी विश्वविद्यालय  
 रायचूर, महाराष्ट्र

Miscellaneous items (Spring, Pan, Glycerine, Optic fibre, Ferromagnetic material)	LS	0	LS	2,000	2000	
Fortin's Barometer (Wall type)	2	0	2	20,000	40000	
Stoke's Apparatus	2	0	2	10,000	20000	
Gunther's Apparatus	2	0	2	16,000	32000	
Resonance Tube	2	0	2	14,000	28000	
Apparatus with accessories and Tuning fork set						
Sodium Lamp setup with Biprism	2	0	2	10,000	20000	
Ohmic resistance coil	10	0	10	500	5000	
Slide wire bridge	2	0	2	8,000	16000	
PN Junction diode	2	0	2	10,000	20000	
Laser (as per requirement)	1	0	1	100000	100000	
Numerical aperture setup	1	0	1	25,000	25000	
<b>Miscellaneous</b>	<b>LS</b>	<b>0</b>	<b>LS</b>	<b>3,000</b>	<b>3000</b>	
<b>Digital Balance</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>80,000</b>	<b>80000</b>	
Burette 50ml	30	0	30	3,000	90000	
Pipette 25ml	60	0	60	4,000	240000	
Beakers 100ml	60	0	60	4,000	240000	
Burette stand	30	0	30	30,000	900000	
Glazed tile	30	0	30	1,000	30000	
Conical flask 50ml	<b>60</b>	<b>0</b>	<b>60</b>	<b>4,000</b>	<b>240000</b>	
Standard (Measuring) flask (to prepare standard solution) 250ml/100ml	30	0	30	6,000	180000	
Able's Flash Point apparatus	2	0	2	10,000	20000	
(1/10)°C thermometer	06	0	06	6,000	36000	
Candles	20	0	20	100	2000	
Crucible with lid	06	0	06	2,000	12000	

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प्रधानाचार्य  
 अश्वपति शर्मा जी महाराज  
 संतकीय प्रायोगिक प्रयोगशाला


# IL AND MECHANICAL ENGG (PROD)

# CHEMISTRY I

ENGINEERING DRAWING	CHEMISTRY I	
Muffle furnace	1	0
Decimators	06	0
Pair of tongue (small and big)	24 (small) 2 (big)	0
Chemicals		0
- EDTA-1 kg		
- Eriochrome Black-T (solorochrome black T)-200g		
- Buffer solution (NH <sub>3</sub> -2.5 ltr, NH <sub>4</sub> Cl - 1 kg)		
- Zinc sulphate- 500g		
- H <sub>2</sub> SO <sub>4</sub> - 2.5 ltr		
- Phenolphthalein indicator (as per requirement)	LS	
- Methyl orange indicator (as per requirement)		
- Charcoal (as per requirement)		
- Kerosene- 1 ltr		
Miscellaneous	LS	0
Drawing Boards (700 x	60	0
Draughtsman Tables	60	0
Draughtsman Stools	60	0
Computer Aided Drawing	30	0
Model of different wooder	1	0
Model of different screw	1	0
Model of various locking	1	0
Model of various joints	1	0
Cut section Model of	1	0
Miscellaneous	LS	0
Voltmeter	5	0
Ammeter	5	0
CRO	1	0
	LS	0
	60	0
	60	0
	60	0
	30	0
	1	0
	1	0
	1	0
	1	0
	LS	0
	5	0
	5	0
	1	0
	2000	2000
	417	25020
	3000	180000
	667	40020
	16667	500010
	1,000	1000
	1,000	1000
	1,000	1000
	1,000	1000
	3,000	3000
	5,000	5000
	1500	7500
	2000	10000
	15000	15000

प्रधानाचार्य  
 15/09/2022  
 कल्पवृक्ष शाहू की महाराज  
 प्रयोगशाला, इंदौर

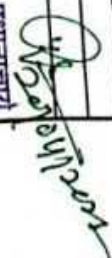
ELECTRICAL ENGINEER LABORTORY		APPLIED MECHANICS LABORATORY		BASICS OF IT LABORATORY/COMPUTER LABORATORY	
Wattmeter	5	0	5	2000	10000
Multimeter	1	0	1	4000	4000
Resistive load	1	0	1	4,000	4000
Regulated supply	1	0	1	8,000	8000
Signal generator	1	0	1	5,000	5000
Rheostat	2	0	2	1250	2500
Lead acid battery	1	0	1	4,000	4000
Cables, Coils, Lamp (as per	LS	0	LS	1,500	1500
Resistance, Inductor, Capacitor (as	LS	0	LS	1,500	1500
Miscellaneous	LS	0	LS	1,500	1500
Polygon law of forces	1	0	1	2,000	2000
Jib crane	1	0	1	4,000	4000
Apparatus for reaction at	1	0	1	5,000	5000
Inclined plane and friction apparatus	1	0	1	2,500	2500
Screw Jack	1	0	1	1,000	1000
Worm and worm wheel	1	0	1	3,500	3500
Single Purchase Winch	1	0	1	4,000	4000
Miscellaneous	LS	0	LS	1,000	1000
Computer System with latest	30	90	NIL	NIL	NIL
Printer (MFP)	1	2	NIL	NIL	NIL
Printer (Laser)	1	2	NIL	NIL	NIL
Plotter	1	0	1	75,000	75000
Digitiser	1	0	1	50,000	50000
Antivirus Software	LS	0	LS	NIL	NIL
Internet Facility on Computers	LS	0	LS	NIL	NIL
LCD Projector	1	0	1	35,000	35000
UPS	1	2	58	2000	116000
Software (latest windows, latest	60	2	1	100000	100000
Scanner	1	4	NIL	NIL	NIL
Auto CAD	LS	0	LS	NA	NA
Auto Civil	LS	0	LS	NA	NA
STAAD Pro	LS	0	LS	NA	NA
Primavera/MS Project	LS	0	LS	NA	NA
Revit	LS	0	LS	NA	NA
BIM	LS	0	LS	NA	NA

  
 प्रबंधन कक्षा की  
 प्रमुख  
 10/11/2021



## WELDING

Item Description	QTY	UNIT	RAT	RAT	RAT	RAT	RAT	RAT	RAT
Projection welding machine	1		0	1	15,000	15000			
Brazing equipment with accessories	1		0	1	10,000	10000			
Soldering irons	3		0	3	333.3	1000			
Pedestal grinder	1		0	1	10,000	10000			
Metal spraying gun	1		0	1	10,000	10000			
Spot welder	1		0	1	25,000	25000			
TIG welding set	1		0	1	100000	100000			
MIG welding set	1		0	1	100000	100000			
Welding Partition Screen	5		0	5	500	2500			
Miscellaneous	LS		0	LS	3,000	3000			
Work benches with vices (4 vices on each bench)	5		0	5	30,000	150000			
Marking tables with scribers	4		0	4	6000	24000			
Surface plates	5		0	5	4000	20000			
Accessories like callipers, V blocks, height, gauges steel rules and scribers	25		0	25	2000	50000			
Tool kits - taps, dies, drills	25		0	25	1600	40000			
Tool kits - chisels, hammers, files, hacksaw	25		0	25	1000	25000			
Drilling machine	2		0	2	6000	12000			
Pipe vice	4		0	4	250	1000			
Chain wrenches	5		0	5	250	1250			
Ring spanner set	5		0	5	120	600			
Pipe die set 2"	2 set		0	2	500	1000			
Pipe bending device	1		0	1	5,000	5000			
Various plumbing fittings	LS		0	LS	2,000	2000			
Miscellaneous	LS		0	LS	1,500	1500			
Hammers	8		0	8	375	3000			
Mallets (Hard & Soft)	5		0	5	400	2000			
Sheet and wire Ganges	LS		0	LS	800	800			
Shearing Machine	1		0	1	20000	20000			
Bar folding Machine	1		0	1	20000	20000			
Burring machine	1		0	1	10,000	10000			
Various sheet (black plain, galvanized iron, corrugated, Aluminium)	1 Each		0	1	1,000	1000			
Hand Shears/Slippers	4		0	4	500	2000			
Nuts, Bolts, Rivets, Screw	LS		0	LS	500	500			

  
 प्रशासक  
 प्रशासनालय  
 भुवनेश्वर शाहू जी नगराज  
 प्रशासनालय  
 भुवनेश्वर शाहू जी नगराज



SHEET METAL S		MACHINE SHOP		VIL ENGINEERING	
Miscellaneous	LS	0	LS	1000	1000
Mason Trowel	10	0	10	100	1000
Concrete Finishing Trowel	10	0	10	100	1000
Gauging Trowel	10	0	10	100	1000
Margin Trowel	10	0	10	100	1000
Pointing Trowel	10	0	10	100	1000
Round Trowel	10	0	10	100	1000
Mason/Brick Hammer	10	0	10	300	3000
Comb hammer	10	0	10	300	3000
Blocking chisel	10	0	10	100	1000
Plumb bob	10	0	10	50	500
Spirit level	10	0	10	100	1000
Straight Edge	10	0	10	100	1000
Jointer	10	0	10	100	1000
Masonry Pan	10	0	10	150	1500
Steel Measuring Tape	10	0	10	50	500
Miscellaneous (bricks, blocks,	10	0	10	300	3000
Centre lathes	10	6	4	500000	2000000
Grinder	1	0	1	10000	10000
Universal milling machine	1	0	1	125000	125000
Shaper	2	0	2	60000	120000
Planer	2	0	2	60000	120000
Work bench	3	0	3	3333.3	10000
Precision instruments	1	0	1	10,000	10000
Hand tools and accessories	2	0	2	4000	8000
Miscellaneous	LS	0	LS	5000	5000
CNC trainer/lathe	1	1	0	400000	0
Compression testing machine (100 T. Capacity)	1	2	0	0	0
Vibration machine	1	0	1	NA	NA
Electrically heated oven (Thermostatically controlled)	1	0	1	NA	NA
Blaine Air permeability Apparatus (for testing)	2	0	2	NA	NA
Vicat's Apparatus	4	0	4	NA	NA

*Handwritten signature and date: 15/10/2021*

प्रधानाचार्य  
 सत्यप्रदीप शर्मा जी महाराज  
 प्रमुख विल इंजीनियरिंग विभाग

**A. CONCRETE LABORATORY**

Le Chatelier's soundness apparatus (to determine quantity of free lime in cement)	2	0	2	NA	NA
Slump Cone (to determine the workability of concrete)	2	0	2	NA	NA
Compaction factor apparatus	1	0	1	NA	NA
Vec-Bee apparatus (to determine the workability)	1	0	1	NA	NA
Platform weighing machine	1	0	1	NA	NA
Concrete cube moulds	12 each	0	12 each	NA	NA
Concrete mixers	1	0	1	NA	NA
Sieve shaker	1	0	1	NA	NA
Set of sieves	2 Set	0	2 Set	NA	NA
Beam mould	2	0	2	NA	NA
Impact testing machine	2	0	2	NA	NA
Needle vibrator	1 Each	0	1 Each	NA	NA
Flakiness index apparatus	2	0	2	NA	NA
Elongation index apparatus	2	0	2	NA	NA
Bar bending and cutter apparatus	2 Set	0	2 Set	NA	NA
Bulk density apparatus	2	0	2	NA	NA
Wire basket	4	0	4	NA	NA
Rifle sampler	2	0	2	NA	NA
Table vibrator	2	0	2	NA	NA
Concrete test hammer	1	0	1	NA	NA
Ultrasonic pulse velocity apparatus	1	0	1	NA	NA
Ring and Ball apparatus (with heating mantle)	1	0	1	NA	NA

प्रधानाचार्य  
 छात्राधिशाह जी महाराज  
 प्रमुखीय फलितेकिक  
 कलकत्ता

## B. ROADS AND SOILS LABORATORY

CBR apparatus with loading machine	1	0	1	NA	NA	
Flash point and fire point apparatus (Cleaveland type)	1	0	1	NA	NA	
Los angles Abrasion testing machine apparatus	1	0	1	NA	NA	
Water bath (Thermostatically controlled)	1	0	1	NA	NA	
Aggregate impact value testing apparatus with automatic blow counter	2	0	2	NA	NA	
Penetration value apparatus with timer	1	0	1	NA	NA	
Viscometer Capillary type	1	0	1	NA	NA	
Ductility machine	1	0	1	NA	NA	
Direct shear test apparatus	1	0	1	NA	NA	
Drying oven (Thermostatically controlled)	1	0	1	NA	NA	
Electronic balance	1	0	1	NA	NA	
Standard penetration test equipment	1	0	1	NA	NA	
Soil exploration equipment (Augers etc)	1	0	1	NA	NA	
Sand replacement method apparatus	2	0	2	NA	NA	
Liquid limit and plastic limit apparatus	2 Each	0	2 Each	NA	NA	
Compaction apparatus using light compaction (Proctor Test)	2	0	2	NA	NA	

प्रधानाचार्य



 डॉ. भवप्रसाद शर्मा जी  
 प्रमुख, परीक्षा केंद्र  
 कलकत्ता

# CIVIL ENGINEERING

ENGINEERING

## EQUIPMENT AND STORES

Grain size distribution test apparatus (sieve set)	2 Set	0	2 Set	NA	NA	
Sieve shaker	2	0	2	NA	NA	
Permeability apparatus	1	0	1	NA	NA	
Proctor penetrometer	1	0	1	NA	NA	
Core cutter apparatus	2	0	2	NA	NA	
Rapid moisture meter	2	0	2	NA	NA	
Pycnometer with burette	6	0	6	NA	NA	
Liquid limit apparatus (Cone penetrometer method)	2	0	2	NA	NA	
Plane Table with stand and accessories	16	0	16	NA	NA	
Dumpy level, quick setting level and engineers level	17	0	17	NA	NA	
Transit theodolite (Vernier type)	12	0	12	NA	NA	
Prismatic compass	15	0	15	NA	NA	
Planimeter	5	0	5	NA	NA	
Lavelling staves (All aluminium)	5	0	5	NA	NA	
Total Station	2	0	2	NA	NA	
Ranging rods	60	0	60	NA	NA	
Pantagraph	2	0	2	NA	NA	
Optical square	5	0	5	NA	NA	
Abney level	5	0	5	NA	NA	
Tangent clinometer (Indian Pattern)	5	0	5	NA	NA	
Mirror stereoscope	1	0	1	NA	NA	
Telescopic Alidade	2	0	2	NA	NA	
Prismatic binoculars	1	0	1	NA	NA	
Metric chain/non-metrics	10	0	10	NA	NA	
Metallic taps/Fibre glass/Invertape	20	0	20	NA	NA	

*Dr. J. K. Sharma*

Dr. J. K. Sharma  
Head of Department  
Civil Engineering  
G. N. S. Institute of Technology  
Gurgaon

ON LABORATORY

SURVE

Tentage, camp equipment and other misc. items and instruments	L.S	0	L.S	NA	NA	
Modern survey equipment	L.S	0	L.S	NA	NA	
Theodolite (Digital)	1	2	0	0	0	
Distomat						
Electronics Distance Measurement (EDM)	1	0	1	NA	NA	
Total Station	1	2	0	0	0	
GPS Hands Instrument	1	0	1	NA	NA	
Hydraulic Bench	2	0	2	NA	NA	
Impact of Jet apparatus	1	0	1	NA	NA	
Flow measurement apparatus by Venturimeter	1	0	1	NA	NA	
Pipe Friction apparatus	1	0	1	NA	NA	
Orifice and Mouthpiece apparatus	1	0	1	NA	NA	
Bernoulli's Theorem apparatus	1	0	1	NA	NA	
Flow over a notch apparatus	1	0	1	NA	NA	
Losses in pipe bends apparatus	1	0	1	NA	NA	
Reynold's apparatus	1	0	1	NA	NA	
Working models of: Pelton wheel	1 Each	0	1 Each	NA	NA	

प्रधानाचार्य  
 अक्षय शर्मा की महाराज  
 महाराज की महाराज  
 महाराज की महाराज

# FLUID MECHANICS AND IRRIGATION


Manometers of different types and pressure gauges like: - Piezometer - 6 - Differential Manometers (Double column type manometer) - 10 - Universal manometers (Single column type manometer) - 2 - Inclined tube manometer - 2 - Bourden pressure gauges - 2 - Compound Gauges (Vacuum and pressure gauge combined) - 2	24	0	24	NA	NA	
These apparatus should be purchased alongwith hydraulic bench as the design of these apparatus depend upon the design of Hydraulic	1	0	1	NA	NA	
Current meter	1	0	1	NA	NA	
Centrifugal pump test Rig.	1	0	1	NA	NA	
Submergible pump set apparatus	1	0	1	NA	NA	
Misc. tools etc.	L.S	0	L.S	NA	NA	
Masonry erection tools, such as iron pans, trowels, plumb bobs, showels, sets pick axes, corner squares etc.	10	0	10	NA	NA	

प्रमाणित शाह जी  
महाशय

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13/11/2020

# L ENGINEERING FABRICATION AND ERECTION SHOP

Carpenter's tool such as tenonsaw, planes screw drivers, chisel sets, sets marking gauges, pliers, hammers, augers, bevel squares, files, drills etc.	10	0	10	NA	NA	
Plumber tools, plumbing vice, die and tap sets, pipe wrenches of different sets sizes, pipe cutters, spanner sets, hammer plier.	5	0	5	NA	NA	
Centering, shuttering and scaffolding (for an ordinary residential building)	1 Set	0	1 Set	NA	NA	
Pipes and pipe fittings, valves, gully traps, GI grating, manhole, covertraps, WC pan with foot rest, flushing cistern, urinal pan with cistern, taps, wash basin, water meter etc.	L.S	0	L.S	NA	NA	
Hoisting and conveying equipment tripod, hoist, pulleys, ladders, ballis etc. Compressed air equipment with accessories - 1	L.S	0	L.S	NA	NA	

  
 प्रधानाचार्य  
 छत्रपति शाहू जी महाराज  
 शाहूजी प्रौद्योगिक, इंदूरमण्डल

(1) (2)

**CIVIL**

**ENVIRONMENTAL ENGINEERING LABORATORY**

Steel fabrication equipment with fabricating small trusses, reinforcement cages, small girder, column beam connections, column truss connection	1 Set	0	1 Set	NA	NA	
Floor grinding/polishing machine, spray guns etc	L.S	0	L.S	NA	NA	
Lowbond comparator (for colour determination)	1	0	1	NA	NA	
Colorimeter (for colour determination)	1	0	1	NA	NA	
Centrifuge	1	0	1	NA	NA	
Turbidimeter	1	0	1	NA	NA	
pH meter	1	0	1	NA	NA	
Jar test apparatus (Flocculator)	1	0	1	NA	NA	
Dissolved oxygen meter	1	0	1	NA	NA	
B.O.D incubator	1	0	1	NA	NA	
Water bath with digital controller	1	0	1	NA	NA	
Hot air oven	1	0	1	NA	NA	
Hot plate	2	0	2	NA	NA	
Bacteriological incubator	1	0	1	NA	NA	
Colony counter	1	0	1	NA	NA	
Water sampler	1	0	1	NA	NA	
Water analysis kit	1	0	1	NA	NA	
Water distill	1	0	1	NA	NA	
Conductivity meter	1	0	1	NA	NA	
Electronic balance	1	0	1	NA	NA	
Chemical Balance	1	0	1	NA	NA	
Inverted microscope	1	0	1	NA	NA	
Model of oxidation ditch	1	0	1	NA	NA	

Dr. H. K. Jaiswal  
 Head of Department  
 Environmental Engineering  
 J. J. S. Institute of Technology  
 Jabalpur



EN

RATORY

Working model of Trickling Filter	1	0	1	NA	NA	
Misc. items like noise measurement apparatus etc.	LS	0	LS	NA	NA	
Clamp meter	02	0	02	2500	5000	
Multimeter	02	0	02	1000	2000	
Power Analyser	01	0	01	20000	20000	
Different types of lamps (LS)		0				
- 60 W lamp, 230 V, 100 V	10		10	50	500	
- 200 W lamp						
- 500 W lamp						
- 100 W lamp, 110 V, 150 V						
Lux meter	02	0	02	2500	5000	
Centrifugal pump, 1 kW	1	0	1	15000	15000	
Standard window A.C.	01	0	01	20000	20000	
Anemometer	02	0	02	2500	5000	
Thermometer	03	0	03	666.67	2000	
Flow meter	02	0	02	5000	10000	
Pumping set with at least two pumps of different capacity.	1 set	0	1	100000	100000	
Pressure gauge fitted on discharge lines	1 set	0	1	2000	2000	
Variable Frequency Drive	02	0	02	25000	50000	

डनपति शाह जी मन्डारज  
 प्रशासकीय पारिवर्तिक, कनकपुर

प्रधानाचार्य  
 17/10/2024

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MECHANICAL ENGINEERING  
MECHANICAL ENGINEERING

ENERGY CONSERVATION LABO

Stop watch	A small compressor with a small network of pipe line fitted with suitable pipeline, pressure gauge, safety valve and loading / unloading pressure switch.	1	0	1	3000	3000	
		2	0	2	500	1000	

प्रधानाचार्य  
उत्तमपति शाहू जी सरकारज  
राजकीय पॉलिटेक्निक, मन्तरामपरा

01/11/2023

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MECHANICAL ENGINEERING  
MECHANICAL ENGINEERING

SMITHY SHOP		FOUNDRY SHOP		LAB	
Small blower (1.5 kW motor) with inlet and outlet ducts of approximately one meter length on both sides	1	0	1	10000	10000
Black Box (for checking lamp efficacy including stand and luxmeter)	1	0	1	25000	25000
Black smithy forge (with open hearths, accessories to match the forge)	20	0	20	40,000	800000
Wrought iron anvils	20	0	20	20,000	400000
Swage blocks	4	0	4	8,000	32000
Blower with accessories, motor switch etc	1	0	1	6,000	6000
Work benches with vices	2	0	2	6,000	12000
Power hammer	1	0	1	20,000	20000
Tools and accessories - hammers, swages, tongs, pokers, pullers etc	20	0	20	10,000	200000
Miscellaneous	LS	0	LS	1,500	1500
Moulding boxes	40	0	40	8,000	320000
Ladles	5	0	5	2,000	10000
Tool Kits	10 set	0	10	5,000	50000
Quenching tanks	2	0	2	5,000	10000
Portable grinder	1	0	1	3,000	3000
Pit furnace with blower	1	0	1	10,000	10000
Miscellaneous	LS	0	LS	1,000	1000
Electric furnace muffle type	1	0	1	60,000	60000
Forced circulation tempering furnace	1	0	1	30,000	30000
Quenching tank	2	0	2	5,000	10000

Pravin K. Holkar

प्रधानाचार्य  
श्री. प्रभाकर शिंदे जी  
मुख्यालय  
राजकीय प्रौद्योगिकी  
कलेज  
वाराणसी

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# MECHANICAL ENGINEERING

ENGINEERING MATERIAL		MECHANICAL ENGINEERING DRAWING		STRENGTH OF MATERIALS LABORATORY	
Grinder	2	0	2	4,000	8000
Pyrometers	1	0	1	10,000	10000
Specimen Kit (Ferrous and Non-ferrous Metals (25 Nos))	1	0	1	5,000	5000
Metallurgical microscope	3	1	2	35,000	70000
Abrasive cut off machine	1	0	1	50,000	50000
Specimen Polishing Machine (Double Disk type)	1	0	1	50,000	50000
Thermocouples	2	0	2	5,000	10000
Set of Specimen of different alloys	1	0	1	5,000	5000
Brinell Hardness Tester	1	0	1	80,000	80000
Working Model of Oldham's Coupling	1	0	1	3,000	3000
Working Model of Universal Coupling	1	0	1	3,000	3000
Pulmer Block	1	0	1	2,000	2000
Screw Jack	1	0	1	3,000	3000
Connecting Rod	1	0	1	3,000	3000
Set of Ball and Roller bearing	01 set	0	1	1,000	1000
Brinell and Rockwell hardness tester	1	0	1	60,000	60000
Impact testing machine (Izod and Charpy)	1	0	1	50,000	50000
Microprocessor based universal testing machine	1	0	1	400000	400000
Torsion testing machine (fully computerized)	1	0	1	200000	200000
Spring Stiffness Tester	1	0	1	50,000	50000
SFD & BMD apparatus	2	0	2	5,000	10000
Centre lathes	10	0	10	500000	5000000
Tool room lathe	1	0	1	100000	100000

प्रधानाचार्य  
 प्रमुख प्रो. शाह जी  
 प्रमुख प्रो. शर्मा जी  
 प्रमुख प्रो. शर्मा जी

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MECHANICAL WORKSHOP

Lathe with copy turning attachment and other attachments	1	0	1	150000	150000	
Universal milling machine	1	0	1	125000	125000	
Vertical milling machine	1	0	1	75,000	75000	
Shapers	2	0	2	100000	200000	
Radial drilling machine	1	0	1	25,000	25000	
Upright drilling machine	1	0	1	20,000	20000	
Gear Shaper	1	0	1	75,000	75000	
Centreless grinder	1	0	1	80,000	80000	
Universal cylindrical grinder	1	0	1	75,000	75000	
Hydraulic surface grinder	1	0	1	50,000	50000	
Tool and Cutter grinder	1	0	1	50,000	50000	
Power hacksaw	1	0	1	25,000	25000	
Pedestal grinder	1	0	1	5,000	5000	
Electro discharge machine	1	0	1	400000	400000	
Work bench	3	0	3	6,000	18000	
Precision instruments	1	0	1	5,000	5000	
Surface plates	2	0	2	15,000	30000	
Hand tools and accessories	2	0	2	6,000	12000	
CNC trainer lathe	1	0	1	300000	300000	
CNC trainer milling machine	1	0	1	400000	400000	
PC Computer	2	0	2	100000	200000	
Computer based NC	1	0	1	150000	150000	
Programming Software	1	0	1	100000	100000	
CNC Simulation software	1	0	1	100000	100000	
CNC Milling machine accessories and holding devices	LS	0	LS	100000	100000	
Piezometer tube	2	0	2	100	200	
U tube differential manometer	2	0	2	2,000	4000	

प्रधानाचार्य  
 03/05/2020  
 डॉ. विपिन शर्मा, जी. मन्सूरज  
 महाविद्यालय, पारसोदी, इंदूर

HYDRAULICS & PNEUMATIC LABORATORY

Bourdon's Tube pressure gauge	1	0	1	1,000	1000	
Hydraulic jack	1	0	1	4,000	4000	
Hydraulic press Working Model	1	0	1	5,000	5000	
Bernoulli's apparatus	1	0	1	15,000	15000	
Venturimeter apparatus with differential manometer	1	0	1	10,000	10000	
Pipe friction apparatus	1	0	1	15,000	15000	
Reciprocating pump- single and Double Acting	1	0	1	50,000	50000	
Centrifugal pump	1	0	1	25,000	25000	
Working Model of Pelton Wheel Turbine	1	0	1	20,000	20000	
Working Model of Francis Turbine	1	0	1	20,000	20000	
Working Model of Kaplan Turbine	1	0	1	20,000	20000	
Hydraulic Circuit Trainer Kit	1	1	0	50,000	0	
Pneumatic Circuit Trainer Kit	1	1	0	50,000	0	
Working Model of Hydraulic Brake system	1	0	1	50,000	50000	
Working Model of Hydraulic Ram	1	0	1	5,000	5000	
Throttling Calorimeter	2	0	2	10,000	20000	
Testing for Determination of Dryness fraction of steam	1	0	1	50,000	50000	
Cut section model of 4- stroke single cylinder Petrol and Diesel engine	1	0	1	30,000	30000	
Gravimetric Analysis	1	0	1	20000	20000	

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प्रधानाचार्य  
 १६/११/२०२२  
 छात्रपति शाहु जी  
 मंत्रालय  
 अखिल भारतीय पाठ्यपुस्तिका वलरामपुर

## THERMAL ENGINEERING LABORATORY

Model of Various Boiler Mounting and Accessories - Steam Stop Valve, Safety Valves, Blow off Cock, Water Level Indicator, Low Water High Pressure Safety Valve, Pressure Gauge, Economiser, Pre Heater (Air), Super Heater Model only.	1 each	0	1 each	10,000	10000	
Exhaust Analyser for Petrol and Diesel engine	1 each	0	1 each	25,000 each	25000	
Single Stage Reciprocating Air Compressor	1	0	1	50,000	50000	
Rotary Compressor, Air Compressor	1	0	1	25,000	25000	
Flash Point Apparatus	1	0	1	10,000	10000	
Pyrometer, Infrared, Thermocouple	2	0	2	5,000	10000	
Lancashire boiler model,	1 each	0	1	10,000	10000	
Nestler Boiler Model	1	0	1	5,000	5000	
Model of impulse turbine	1	0	1	5,000	5000	
Model of reaction turbine	1	0	1	5,000	5000	
Model of surface condenser	1	0	1	10,000	10000	
Bab Cox & Wilcox Boiler Model	1 set	0	1	45,000	45000	
Heat Transfer apparatus for conduction, convection and Radiation	01 set	0	1	6000	6000	
Model of 2 stroke, 4 stroke engines						

प्रधानाचार्य  
 डॉ. राजेश कुमार  
 मंत्रालय  
 नई दिल्ली

## METROLOGY LABORATORY

Steam Separating & Throttling calorimeter fully instrumented to determine quality of steam of 10-15 kg/cm <sup>2</sup> . Pressure with steam condensing arrangement	01	0	01	30,000	30000	
Single cylinder 2 stroke petrol engine test rig	1	0	1	45,000	45000	
Single cylinder 4 stroke petrol engine test rig	1	0	1	50,000	50000	
Multicylinder petrol engine test rig (Morse test rig)	1	0	1	200000	200000	
Digital vernier calliper / Vernier calliper	4	0	4	8,000	32000	
Digital micrometer / micrometer	4	0	4	10,000	40000	
Height gauge	2	0	2	1,500	3000	
Depth gauge	2	0	2	1,000	2000	
Combination set	1	0	1	1,000	1000	
Bevel protractor	1	0	1	1,000	1000	
Sine bar	1	0	1	500	500	
Precision balls and rollers	1	0	1	15,000	30000	
Surface plate	2	0	2	10,000	10000	
Slip gauges set	1	0	1	40,000	80000	
Comparator - Mechanical, Pneumatic	2	0	2	40,000	80000	
Gear tooth vernier	1	0	1	2,000	2000	
Snap and ring gauges, Plug gauge, Thread gauge	2 each	0	2	1,500	3000	
Feeler gauge, radius gauge	1	0	1	1,000	1000	
Angle plate	1	0	1	1,000	1000	
Tool makers microscope	1	0	1	40,000	40000	
Optical Profile projector	1	0	1	75,000	75000	
Surface roughness tester	1	0	1	60,000	60000	

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प्रजापति शाहू जी  
प्रजापति शाहू जी  
महाराज  
दत्तगणपत



# MECHANICAL ENGINEERING

## REFRIGERATION AND AIR CONDITIONING LABORATORY

Dial Bore Gauge with Accessories	1	0	1	10,000	10000	
Autocollimator	1	0	1	50,000	50000	
Thermocouple, Pyrometer apparatus	1	0	1	10,000	10000	
Refrigeration trainer to determine C.O.P.	1	0	1	6,000	6000	
Air conditioner trainer / Test rig window type and split	1	0	1	100000	100000	
type air conditioner						
Water cooler	1	0	1	6,000	6000	
Refrigeration compressor	1	0	1	3,000	3000	
Safety controls (HP, LP Cut outs, oil pressure controls), solenoid valve, expansion valves, thermostats, charging board	1 set	0	1	3,000	3000	
Gas charging equipment kit	1	0	1	15,000	15000	
Vacuum pump	1	0	1	3,000	3000	
Cut-Section model of thermally sealed compressor	1	0	1	6,000	6000	
Hand tools for cutting, flaring, swaging and brazing of tubes	1 set	0	1	5,000	5000	
Battery Charger 0-12 V, 0-1 6 Amp.	1	0	1	2,000	2000	
Batteries 6 V & 12 V	leach	0	1	4,000	4000	
Hydrometer	1	0	1	1,000	1000	
Cell Tester	1	0	1	1,000	1000	
Working Model of Battery Ignition System, Magneto Ignition System Fitted on board	1	0	1	2,000	2000	
Fuel Injection Pump	1	0	1	15,000	15000	

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प्रधानाचार्य  
 सहायक शीट्ट की मञ्जराज  
 प्राञ्जलीय प्राञ्जलीय  
 कञ्जराज

# MECHANICAL ENGINEERING

## AUTOMOBILE ENGINEERING LAB.

Calibration Machine with Fuel Injection Pump & Coupling	1	0	1		25,000	25000	
Electrical Testing Bench	1	0	1		2,000	2000	
Condemned petrol engine of light petrol vehicle	1	0	1		5,000	5000	
Condemned Diesel engine of medium and heavy vehicles	1	0	1		5,000	5000	
Tyre inflator with twin hose assembly and small hose assembly	1	0	1		2,500	2500	
Spark plug cleaning machine and Testing machine	1	0	1		5,000	5000	
Condemned chassis frame of any light motor vehicle	1	0	1		5,000	5000	
Sectioned working model of a single cylinder two stroke petrol engine	1	0	1		1,000	1000	
Sectioned working model of a single cylinder two stroke diesel engine	1	0	1		1,000	1000	
Sectioned working model of a single cylinder four stroke diesel engine	1	0	1		1,000	1000	
Sectioned working model of a single cylinder four stroke petrol engine fitted with ignition system	1	1	1		4,000	10000	
Hand Operated Motor Operated	1		1		6,000		
Work bench	2	0	2		2,500	5000	
Mechanical Jack	2	0	2		3,000	6000	
Tool Kit (Spanner, socket set, screw driver, plier, file, wrench, drill, tap set, hammer etc.)	4 sets	0	4		2,000	8000	
Miscellaneous	LS	0	LS		4,000	4000	

प्रधानाचार्य  
 सत्यजीव शर्मा जी  
 महाराज  
 वरकरभार

प्रधानाचार्य  
 सत्यजीव शर्मा जी  
 महाराज  
 वरकरभार

# MECHANICAL ENGINEERING

## REFRIGERATION AND AIRCONDITIONING LAB (for RAC)

Study and sketch of models of rear axle and differential	1	0	1	10,000	10000		
Refrigeration Cycle Demonstration Unit-With Condenser & Evaporator Made of toughened glass & Instrumented to measure Temperature & Pressure, Refrigerant flow at All Suitable Locations. Arrangement for Using Different Expansion Devices.	2	0	2	75000	150000		
Experimental Air Conditioner Window Type- 1 Ton Capacity With Proper Instrumentation For Studying its performance.	2	0	2	45000	90000		
<b>PSYCHROMETERS</b>		0			0		
Sling Psychrometer.	2	0	4	36000			
Aspirator Psychrometer.	2				144000		
Hygrometer							
Dry & Wet bulb wall hygrometer. Dial type hygrometer							
Fortin's barometer							
Manometers							
Anemometer Hand Hold	2	0	2	4000	8000		
Misc.	1s	0	1s	20000	20000		
1. Above items are for 2 batches of 30 students each.		0			0		
	pH Meter	01	0	01	500	500	
	Turbidity Meter	01	0	01	5000	5000	

  
 प्रवीण कुमार  
 प्राचार्य

प्रभात शाह की संभारण  
 प्रकाश प्रकाशिका  
 कलकत्ता

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RVATION LABORATORY

ENVIRONMENT ENGINEER  
LABORATORY

Oven with Temperature Controller and Forced Air Circulation Type	01	0	01	20000	20000	
B.O.D. Incubator	01	0	01	25000	25000	
Water Analysis Kit	01	0	01	5000	5000	
High Volume Sampler	01	0	01	40000	40000	
Electrical Balance for weighing upto 1/10 of milligram (capacity)	01	0	01	1000	1000	
Clamp meter	02	0	02	5000	10000	
Power Analyser	01	0	01	20000	20000	
Different types of lamps (LS)		0				
- 60 W lamp, 230 V, 100 V	10		10	500	5000	
- 200 W lamp						
- 500 W lamp						
- 100 W lamp, 110 V, 150 V						
Lux meter	02	0	02	5000	10000	
Centrifugal pump, 1 kW	1	0	1	15,000	15000	
Standard window A.C.	01	0	01	20000	20000	
Anemometer	02	0	02	5000	10000	
Thermometer	03	0	03	2000	6000	
Flow meter	02	0	02	10000	20000	
Pumping set with at least two pumps of different capacity.	1 set	0	1 set	10000	10000	
Pressure gauge fitted on discharge lines	1 set	0	1 set	2000	2000	
Variable Frequency Drive	02	0	02	50000	100000	

प्रधानाचार्य  
 उपपति, शाह जी महाराज  
 पर्यवेक्षण पालीटेक्निकल कलेज, रायपुर

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# MECHANICAL ENGINEERING

## ENERGY CONSERVATION

A small compressor with a small network of pipe line fitted with suitable pipeline, pressure gauge, safety valve and loading / unloading pressure switch.	1	0	1	3000	3000	
Stop watch	2	0	2	1000	2000	
Small blower (1.5 kW motor) with inlet and outlet ducts	1	0	1	10000	10000	
of approximately one meter length on both sides		0			0	
Black Box (for checking lamp efficacy including stand and luxmeter)	1	0	1	25000	25000	

प्रधानाचार्य  
 उपपदि शाहु जी मशरान  
 राजकीय पालीटेक्निक कलकत्ता

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