



R K COLLEGE OF ENGINEERING

(Accredited by NAAC with 'A' Grade)

Kethanakonda (V), Ibrahimpatnam (M), Vijayawada, AMARAVATI-521456.

Laboratory Maintenance Register

**Coordinator-IQAC
RKCE**

**PRINCIPAL
R K COLLEGE OF ENGINEERING
Kethanakonda (V), Ibrahimpatnam (M),
Vijayawada, AMARAVATI-521 456**

Department of Mechanical Engineering
 Labs : Service/Maintenance Register.
 AY : 2023-2024.

SI NO	NAME OF THE EQUIPMENT	Date & complaint	Sign of Technican	Sign of HOD/In-charge	Sign of HOD
1	JUNKERS GAS CALORIMETER	Replace gas working 10/12/23	VPP	CA	working
2	4-STROKE DIESEL ENGINE	22/12/23 cylinder problem	VPP	CA	working
3	2-STROKE PETROL ENGINE	22/12/23	VPP	CA	working
4	Compression Test	filter problem replace 7/2/24	VPP	CA	working
5	Izoid Test	Board problem 7/2/24	VPP	CA	working
6	machine tools all equipment	4/3/24 marking - small maintenance	VPP	CA	working
7	plefan wheel	12/3/24 not working adjusted at plefan wheel	VPP	CA	working

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20th AY 2023 - 2024 : Lab maintenance Register

Sl no	Date	Complaint	Service Engrg Sign	Lab - I/C Sign	Status
1	9/03/2023	Digital IC timing IC problems.	Rambhadrana	Vijalabali	Working
2	9/03/2023	Half/Full adder IC	Rambhadrana		Working.
3	9/03/2023	Universal logic gate IC's problems.	Rambhadrana	Vijalabali	Working.
4	9/03/2023	8:1 MUX & IC pin problem	Rambhadrana		
5	21/03/2023	Comparator IC Problem	Rambhadrana	Vijalabali	Working
6	21/03/2023	ASK Modulator Timing problems.	Rambhadrana		
7	21/03/2023	BED 7 segment LED problem	Rambhadrana		
8	4/04/2023	AF tuned V.A IC problems.	Rambhadrana		
9	4/04/2023	FET Char - FET not working	Rambhadrana		
10	4/04/2023	class B	Rambhadrana	Working	
11	14/04/2023	class A Biasing problems.			
12	14/04/2023	BJT characteristics power problems	Rambhadrana	Working	
13	18/04/2023	PLL IC 565 IC issue	Rambhadrana		
14	18/04/2023	D to A Converters issues	Rambhadrana	Working	
15	18/04/2023	LCR Meter	Rambhadrana	Working	

Harish A
 Coordinator-IQAC
 RKCE


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Sl.No	Date	Complaint	Service Engg Sing.	Lab - I/c Sign	Status
1.	5/7/2023	4-Bit DAC IC problem	Rankrishna	[Signature]	Working
2.	10/7/2023	Astable Multi Vibrator Pin's problem	Rankrishna	[Signature]	Working
3.	18/7/2023			[Signature]	Working
4.	24/7/2023	Integrator & Differentiator Power supply	Rankrishna	[Signature]	Working
5.	02/8/2023	Convolution codes	Rankrishna	[Signature]	Working
6.	11/8/2023	Pin's		[Signature]	Working
7.	21/8/2023	DM Male & Female Pin's Not working	Rankrishna	[Signature]	Working
8.	28/8/2023				
9.	4/9/2023	SCR Power supply	Rankrishna	[Signature]	Working
10.	12/9/2023	Transistor Biasing (BJT Not working)	Rankrishna	[Signature]	Working
11.	29/9/2023				
12.	10/10/2023	Mod-8 synchronous Counter IC problem	Rankrishna	[Signature]	Working
13.	19/10/2023	3:8 line decoder IC problems	Rankrishna	[Signature]	Working
14.	26/10/2023				
15.	10/11/2023	CRO's	Rankrishna	[Signature]	Working
16.	21/11/2023	FG's	Rankrishna	[Signature]	Working

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S.No	Description of item	quantity
1.	PH Meter ✓	1
2.	Ph/temp Portable Meter	1
3.	TDS /Temperature meter	1
4.	Portable Dissolved Oxygen Meter	1
5.	Turbidity meter EPA KIT	1
	Model - 2020 kit	1
6.	Smart Spectrophotometer	1
7.	COD Heat Block	1
8.	COD Reagent	1
9.	Laboratory Muffle Furnace display	1
10.	Laboratory Hot Air Oven	1
11.	JAR TEST Apparatus with digital display ✓	1
12.	Bob incubator	1
13.	Portable Autoclave	1
14.	Distillation Apparatus	1
15.	Weighing scale.	1

Amount	Remarks	Description	Sl. No.
16,530.00			1
16,530.00			2
16,530.00			3
48,763.00			4
79,344.00			5
1,67,779.50			6
73,558.50			7
3,306.00			8
46,697.25			9
38,019.00			10
37,605.75	Jans are damaged		11
99,130.00			12
23,142.00			13
13,224.00			14
27,274.50			15
			16
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S.NO	Description of Item	Quantity
1.	Buffer Solution	1
2.	KCl Solution (Potassium Chloride)	1
3.	EDTA - 500gm	1
4.	Eriochrome Black T-100gm	1
5.	Methyl Orange	1
6.	Sodium Thiosulphate	1
7.	phenolphthalein indicator	1
8.	Sodium Nitrates	1
9.	Sodium Hydroxide	1
10.	potassium chromate indicator	1
11.	silver Nitrate	1
12.	Starch powder indicator	1
13.	Manganese Sulphate	1
14.	Thermometer	2
15.	Tissue paper	1
16.	Conical flask	5
17.	Burettes	5
18.	BOD Bottle 300ml	1
19.	Pipetes 20ml	6
20.	pipetes 10ml	5
21.	Measuring Jars of 100ml	1
22.	Measuring Jars of 50ml	1
23.	Measuring Jars of 10ml.	1

Sl. No	Description of Item	Remarks	Amount
1	Burettes		20
2	Burettes		20
3	"		20
4	"		20
5	Control flask of		20
6	Measuring cylinder		20
7	"		20
8	"		20
9	Standard solutions		20
10	Miscellaneous		10
11	"		10
12	Glass covers		20
13	Potatoes		10
14	Plastic funnels		20
15	Wash bottles		10
16	Test tube holder (Horns)		110
17	Burette stands		20
CHEMICALS			
1	Potassium Chromate		10
2	Potassium dichromate		10
3	Sodium chloride		10
4	Sodium hydroxide		10
5	Calcium carbonate		10
6	Calcium hydroxide		10
7	Methyl orange		10
8	Glacial acetic acid		10
9	Sulphuric acid (diluted)		10
10	Benzene		10

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Sl. No	Description of item	Quantity
1.	Burettes 50ml	05
2.	Beakers 100ml	05
3.	" 250ml	05
4.	" 600ml	05
5.	Conical flasks 250ml	05
6.	Measuring cylinders 10ml	05
7.	" " 5ml	05
8.	" " 250ml	05
9.	Storage containers 300ml	12
10.	Pipettes 10ml	10
11.	" 2ml	10
12.	Glass stirrers	05
13.	Spatula	16
14.	Plastic funnels	05
15.	Wash bottles	10
16.	Test Tube Holder (plastic)	04
17.	Burette stands.	06

CHEMICALS

1.	Potassium Chromate 500g	01
2.	Potassium dichromate 500g	01
3.	Sodium Chloride 500g	01
4.	Sodium Hydroxide pellets 500g	01
5.	Calcium Carbonate 500g	01
6.	Calcium Hydroxide 500g	01
7.	Methyl Orange 125ml	01
8.	Silver Nitrate 25g	01
9.	Sulphuric Acid (solution) 2500ml	01
10.	Benzene	02

S.NO	Description of items	Quantity
I.	<u>MINERALOGY</u>	1
	A) <u>ECONOMIC MINERALS</u>	1
1.	Hematite	1
2.	Magnetite	1
	B) <u>Rock forming Minerals</u>	
3.	Feldspar	1
4.	Quartz	1
5.	Flint	1
6.	Serpentine	1
7.	Muscovite	1
8.	Biotite	1
9.	Asbestos	1
10.	Garnet	1
11.	Calcite	1
12.	Barites	1
13.	Ochre Yellow	1
14.	Fullers Earth	1
II.	<u>PETROLOGY</u>	
	A. <u>IGNEOUS ROCKS</u>	
15.	GRANITE	1
16.	Dolerite fine Grained	1
17.	Basalt Massive	1
18.	Pegmatite	1
19.	Syenite	1
20.	Gametiferous Granite	1
21.	Basalt Vesicular.	1
	B. <u>SEDIMENTARY ROCKS.</u>	
22	conglomerate	1

S. NO	Description of Items	Quantity
23.	Sandstone Beakar	1
24.	Dolomite	1
25.	Lime Stone	1
26.	Laterite	1
27.	Shale	1
28.	Black sandstone Fine Grained	1
<u>C. METAMORPHIC ROCKS</u>		
29.	Gneiss	1
30.	Quartzite	1
31.	Marble White	1
32.	slate	1
33.	phyllite Iron Stone	1
<u>III. MISCELLANEOUS PRODUCTS</u>		
34.	Streak plate	3 (120X3)
35.	Magnifying lences	9 (120X9)
36.	ladden Speciman Tray	23
37.	structural Geology map for lab	3 (250X3)
38.	Hydrogeological map for Lab	2 (250X2)
39.	Graphs for Ground Water Exploration	2 (250X2)
40.	Semi Log + double log Graphs	2 (250X2)
41.	Wall text Environmental & pollution	1
42.	Wall text Mineral Tourism	1
42.	Erabbru.	

Amount-	Remarks
400	
400	
400	
400	
400	
400	
400	
400	
400	
400	
400	
400	
360	
1080	
750	
500	
500	
500	
699	
699.	

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SL. NO	Description of Test	Description of Item
1.	Apparatus for CBR TEST	Laboratory California Bea Apparatus, Motorised, Three
<u>I. ROAD AGGREGATES</u>		
1.	Aggregate crushing value	Crushing value Apparatus AIM 455
2.	Aggregate Impact test	Aggregate impact AIM 456
3.	Specific Gravity and water	Specific gravity Bottle normal type with narrow Bitumen AIM 464
4.	Absorption	pycnometre AIM 466
5.	Deval's Attrition Test	Deval Attrition Tester AIM 457
6.	Los Angeles Abrasion Test Machine	Los Angeles Abrasion machine with counter AIM 458
7.	Shape Tests	a. Thickness Gauge with ISI certification Mark AIM 450 b. Length Gauge with Mark, IS: 2386 (part-1) AIM 451
<u>II BITUMINOUS MATERIALS</u>		
1.	Bitumen penetration Test	a. Universal Penetrometer AIM 512-1

	Quantity	Amount	Remarks
Engineering Ratio Test Speed ALM 120	1	21391292.100/-	
	1	161189.25/-	
Tester	1	171767.75/-	
50ml capacity mouth for	1	11130.94/-	
	1	529.00/-	
	1	771000.00/-	
testing	1	1113.902/-	
Is. 2386 (part I)	1	21849.00/-	
ISI Certification	1	21714/-	
	1	271446.00/-	

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SL NO	Description of TEST	Description of Item
		b. Penetration cone AIM 512-1 c. Bitumen Penetration AIM 518
2.	Bitumen Ductility Test	Ductility Testing Machine temp. indicator AIM 565-1
3.	Softening point Test	a. Ring and Ball Appa AIM 561-1 b. Thermometre IP 60C AIM 56110 c. Thermometer IP 61C AIM 56111
4.	Flashing and Fire Point Test	a. Flash Point (open) point, pensken Apparatus AIM 511 b. Thermometer IP 15C AIM 50810 c. Thermometer IP 16C 370°C AIM 50811
5.	Viscosity Test	standard Tar visco 10mm cup and ball AIM 531
6.	Marshall stability Test Apparatus	Marshall Apparatus 50kn Near model for 4" dia AIM 550-1


	Quantity	Amount	Remarks
	1	1242.00	
kit	1	1088.00	
with Digital	1	761210.75	
atus	1	141524.00	
	1	204.00	
	1	332.00	
and Fire			
Martens	1	161627.00	
Range 5°C to 110°C	1	312.00/-	
Range 190°C to	1	332.00/-	
metre	1	13,296.94/-	
valve			
Single Speed			
sample	1	1,02,651.00/-	

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Vijayawada, AMARAVATI-521 456.

Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item in Rs.	Total Cost in Rs.
17-May-2023	BCD to 7 Segment Decodes	01	3400/-	3400/-

		39		
M/s. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced Items	Remarks
Micro Technologies	L2		0	afy
			None	


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 Vijayawada, AMAPAVATI-521 456.

Sl. No.	Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item in Rs.	Total Cost in Rs.	M/s. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced Items	Remarks
2.	17-May-2023	ASK Trainers	01	5,600/-	5,600/-	Micro Technologies	LG	1	0	<p>Handwritten signature</p> <p>Handwritten signature</p> <p>PRINCIPAL R K COLLEGE OF ENGINEERING Kethanakonda (V), Ibrahimpatnam (M) Vijayawada, AMARAVATI-521 45</p>

Sl. No.	Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item in Rs.	Total Cost in Rs.
3	17-May-2023	Digital IC Trainers	02	7,500/-	15,000/-


M/s. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced Items	Remarks
Micro Technologies	LB	2	0	<p>40</p> <p>✓</p> <p>PRINCIPAL R K COLLEGE OF ENGINEERING Kethanskonda (V), Ibrahimpatnam (M), Vijayawada, AMAPAVATI-521 456.</p>

Sl. No.	Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item in Rs.	Total Cost in Rs.	M's. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced Items	Remarks
	17-May-2023	4 Variable Logic function Verification using 8 to 1 Multiplexer	01	3,500/-	3,500/-	Micro Technologies	L3	1	0 Rmp	<p>Principal R K COLLEGE OF ENGINEERING Kethanakonda (M), Bahupatnam (M), Vijayawada, AMARAVATI-521 456.</p>

Sl. No.	Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item in Rs.	Total Cost in Rs.	M/s. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced Items	Remarks
5.	17-May-2023	Design Full Adder Circuit and verify its functional Table	01	3,500/-	3,500/-	Micro Technologies	L3	1	0 None	[Signature]

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Sl. No.	Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item In Rs.	Total Cost In Rs.	M/s. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced Items	Remarks
6	17-May-2023	Realization of Logic Gates	01	3,900/-	3,900/-	Micro Technologies	L3	01	0	✓


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Sl. No.	Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item in Rs.	Total Cost in Rs.
7.	17-May-2023	Digital Comparator Trained	01	2,900/-	2,900/-

M/s. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced Items	Remarks
SHRY TECH (Micro Technologies)	L3		0	<i>[Signature]</i>


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 Vijayawada, AMARAVATI-521 450.

Sl. No.	Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item In Rs.	Total Cost In Rs.
8.	17-May-2023	LCR meter	01	9,800/-	9,800/-

M/s. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced Items	Remarks
SHRY TECH (Micro Technologies)	L2	137	0	45 PRINCIPAL R K COLLEGE OF ENGINEERING Kethanakonda (V), Brahmapatnam (M), Vijayawada, AMARAVATI-521 450.

Sl. No.	Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item in Rs.	Total Cost in Rs.	M/s. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced Items	Remarks
9.	17-May-2023	FET characteristics [CS Configuration] Drain characteristics & Transfer characteristics	1	4,500/-	4,500/-	SHRY TECH (Micro Technologies)	L1	1	0	[Signature]

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Vijayawada, AMARAVATI-521 456.

Sl. No.	Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item in Rs.	Total Cost in Rs.	M/s. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced Items	Remarks
b.	17-May-2023	UJT characteristics	1	4,500/-	4,500/-	SHRY TECH (Micro Technologies)	L.I.		0	 PRINCIPAL R K COLLEGE OF ENGINEERING Kethanakonda (V), Bahampalnam (M), Vijayawada. AMAPAVATI-521 456

Sl. No.	Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item in Rs.	Total Cost in Rs.	M/s. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced Items	Remarks
11.	17-May-2023	Transformer Coupled Class A Power Amplifier	01	3,800/-	3,800/-	SHRY TECH (Micro Technologies)	L2		0	


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Sl. No	Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item in Rs.	Total Cost in Rs.
12.	17-May-2023	Complementary Symmetry class-B Push Pull Amplifier	01	3,000/-	3,000/-

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M/s. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced Items	Remarks
SHRY TECH (MILYO Technologies)	L2	1/17	0	Ly Principal RK COLLEGE OF ENGINEERING Kethanakonda (V), Ibrahimpatnam (M) Vijayawada, AMARAVATI-521 45

Sl. No.	Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item in Rs.	Total Cost in Rs.	M/s. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced 5] Items	Remarks
13	DAC Converter 17-May-2023	DAC Converter	01	3,500/-	3,500/-	SHRY TECH (Micro Technologies)	L2	01	0	10/2


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Sl. No.	Date of Receipt & Invoice No.	Description of Items & Specification	No. of Items received	Price per Item in Rs.	Total Cost in Rs.
14	17-May-2023	AC Tuned Amplifiers	01	3,900/-	3,900/-

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M/s. Maker/ Supplier Name & Address	Location	No of Items disposed & Method of disposal	Balanced Items	Remarks
SHRY TECH (Micro Technologies)	L 2	1	0	<i>[Signature]</i>

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