

Energy Audit for the  
academic year 2020-21  
and 2021-2022 are

CONDUCTED BY

“DEEPAK K. KANCHAR (EA-9077) CERTIFIED  
ENERGY AUDITORS M/s. DESIGN POWER”



ENGINEERING CONSULTANT, ENERGY AUDITOR &  
PROJECTS

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**(Mission Statement---Go Green....Don't Waste (Paper,  
Electricity, Petrol, Water, Food, Time, and Money.... Say  
YES to Energy Efficiency...)**

A REPORT ON

**MEP AUDIT  
OF**

**Karnataka Sangha's  
Manjunatha College of Commerce &  
Jr.College of Commerce**

Thakurli East, Thane 421 201

AUDIT CONDUCTED BY;



DEEPAK K. KANCHAR (EA-9077)  
CERTIFIED ENERGY AUDITORS M/s. DESIGN POWER

ISSUE-P0 Dated 24<sup>th</sup> March 2022

MONTH - March 2022

This Energy Audit is for the year 2020-21



For M/S. DESIGN POWER



Proprietor

Authorized Signatory

DEEPAK K. KANCHAR (EA-9077)

CERTIFIED ENERGY AUDITORS M/s. DESIGN POWER







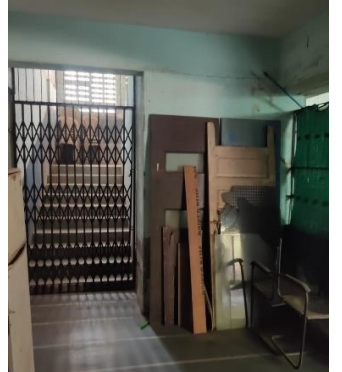

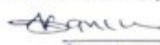
**DESIGN POWER**

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MEP AUDIT REPORT - MANJUNATH COLLEGE OF COMMERCE & JR. COLLEGE OF COMMERCE

Sr. No.			OBSERVATION & RECOMMENDATION
			<p>Blank plate Missing. Restore the same. Provide proper earthing Pits.</p>
			
			
			<p>For M/S. DESIGN POWER</p>  <p><b>Proprietor</b> Authorized Signatory DEEPAK K. KANCHAR (EA-9077) CERTIFIED ENERGY AUDITORS M/s. DESIGN POWER</p>

*Phila*  
**Principal**  
Manjunatha College of Commerce  
Kanchangaon, Khambalpada,  
Thakurli (E) - 421 201.





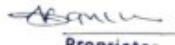
Replace Rusted earthing strips. Use proper cable protection. Test the earthings'



Rewire with FRLS wiring and in new casing capping. DO proper dressing and remove loose wires.



Provide SP MCB 32 Amp for AC. Remove all loses wires, no lose connections are allowed.

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			<p>Celling rose missing, open wire leads to be terminated in ceiling rose. Use proper extension box which is having indication pf phase , neutral and earth. No loose wiring . Only three pin top plug to be used.</p>
			<p>Remove all unnecessary and unwrapped material switch leads to fire hazard. Double Earthling to be provided. Provide double earthing, Rusted DB. Provide ELCB for lighting circuits. Conduct Earth Test .</p>
			<p>Blank plate to be replaced. Replace DP switch by DP MCB not provide RCCBs</p> <p style="text-align: center;"> <b>For M/s. DESIGN POWER</b>    <b>Proprietor</b>      Authorized Signatory      DEEPAK K. KANCHAR (EA-9077)      CERTIFIED ENERGY AUDITORS M/s. DESIGN POWER   </p>



Remove debris. Do proper wiring with dressing. Removed unwanted or abandoned fittings.



Wiring is too old, need to be changed with FRLS wires. Change location of DB at operable height. Rewire DB and provide blank plates.



Remove unwanted wires , insulate properly.



Carom board Light holder cap missing. Loose wiring leads to electric shock and fire hazards.

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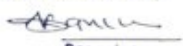


Switch board wiring is not proper.

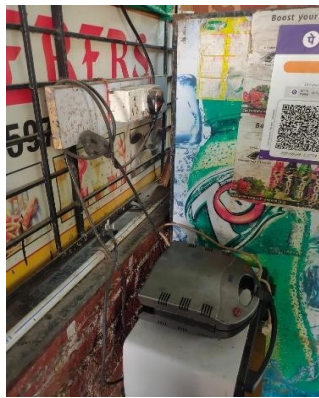


cablе is not properly dressed.  
Hanging in the passage.

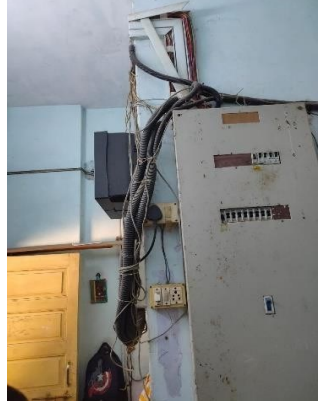


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Loose cables, very dirty area, no proper electrical connections. Replace with proper switch boards having MCB and industrial sockets.



Do the proper dressing, remove unwanted material. Condition is worst. Do proper connection. Provide CO2 Extinguisher in Electrical Rooms.

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*Deepak K. Kanchar*  
Proprietor

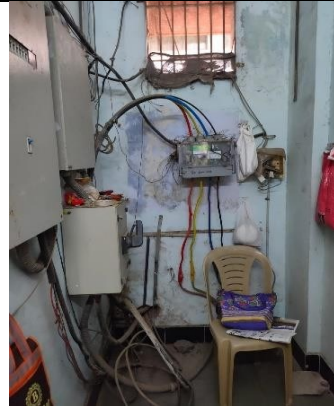
Authorized Signatory  
DEEPAK K. KANCHAR (EA-9077)

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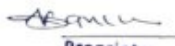


Do the proper dressing, remove unwanted material, provided. Condition is worst do proper connection.



Do the proper dressing remove unwanted materials, provided. Condition is worst do proper connection.



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Open wire leads and very old wiring, needs to be replaced with FRLS wiring.



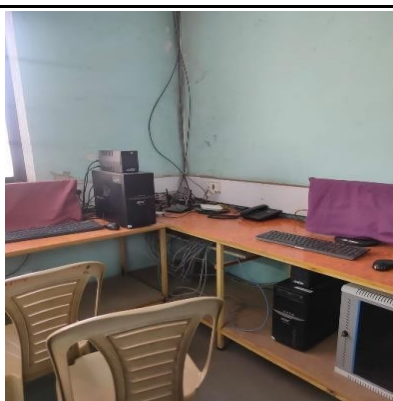
Remove all loose wires. Do proper dressing. Avoid Papers in Electrical room.



Restore DB cover, Use Blank plates, Provide RCCB, Cable sealed are open,

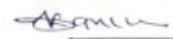


Use proper extension for Computers, no loose wires. Remove papers from Electrical room.



Use proper extension for Computers, no loose wires.

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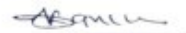


		<p>Adequate extinwishers are used in premises.</p>
		<p>Use proper extension for Computers, no loose wires. Replace wiring with FRLS wiring with proper dressing</p>
		<p>Remove box and use proper DB.</p>

### GENERAL

Entire Old wiring is in worst condition. This will lead to electric shock hazards and electric fire hazard. It is required to rewired properly with FRLS wires and cables and proper distribution with protective devices.

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Principal  
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A REPORT ON  
**ENERGY AUDIT**  
OF  
**Karnataka Sangha's  
Manjunatha College of Commerce &  
Jr.College of Commerce**

Thakurli East, Thane 421 201

AUDIT CONDUCTED BY;



**DESIGN POWER**

Smart by Design

DEEPAK K. KANCHAR (EA-9077) CERTIFIED ENERGY  
AUDITORS M/s. DESIGN POWER

ISSUE-R1 Dated 30<sup>th</sup> March 2022

MONTH - March 2022

*Chila*  
Principal  
Manjunatha College of Commerce  
Kanchangaon, Khambalpada,  
Thakurli (E) - 421 201.



**This energy Audit is for the year 2021-2022**



**DESIGN POWER**

(ENGINEERING CONSULTANT, ENERGY AUDITOR & PROJECT MANAGER)

For M/S. DESIGN POWER

*Asmita*

Proprietor

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## 1. ACKNOWLEDGEMENT

We are sincerely grateful to the **Principal Sir**, for entrusting the work of Energy audit and conservation to us and valuable inputs given for completing the audit, site inspection and report preparation. We express our sincere thanks to Mrs. Nisha Deodhar for extending utmost cooperation and help to make study successful.

## 2. Areas of Investigation:

2.1 Have done the survey of the entire college building and campus.

## 3. Energy Audit Team:

M/s DESIGN POWER – Certified Energy Auditor – Mumbai conducted the energy audit. The audit team considered of certified energy auditors from BEE:

1. Mr. Deepak K Kanchar
2. Mr. Parshuram Nade
3. Prajakta Sawant

## 4. Energy Use and Areas:

Refer The Annexure I.

## 5. Conclusion:

Refer annexure -II. Energy saving can be obtained as per below

- a. Priority -I : Average saving 4.7 %
- b. Priority -II : Average Saving 18.5 %
- c. Priority -III : Average Saving 90 %

## 6. Enclosure:

- a. Annexure –I
- b. Annexure -II

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ANNEXURE -I

ENERGY

CONSUMPTION

Date	30.03.2022
Rev	RO

Sr No.	Equipment	Qty	Kw	Total Kw	Running time Hrs	Consumtion Kw/Day	Total Consumption Kw /Month	Percentage Energy Use	Percentage Connected Load Kw	
<b>1</b>	<b>Air Conditioners</b>									
a	Split AC 2.0 TR	0	2.25	0	0	0	0			
b	Split AC 1.0 TR	0	6	0	0	0	0			
c	Split AC 1.5 TR	18	2.25	40.5	4	162	4050			
	<b>Sub Total</b>			<b>40.5</b>			<b>4050</b>	<b>33.07</b>	<b>40.53</b>	
<b>2</b>	<b>Computers</b>									
a	PC	69	0.15	10.35	4	41.4	1035			
b	Printers	16	0.2	3.2	2	6.4	160			
c	SCANNER / Lamination Machine	6	0.15	0.9	2	1.8	45			
	<b>Sub Total</b>			<b>14.45</b>			<b>1240</b>	<b>10.12</b>	<b>14.46</b>	
<b>3</b>	<b>XEROX MACHINE</b>	1	0.5	0.5	1	0.5	3	<b>0.02</b>	<b>0.50</b>	
<b>4</b>	<b>PROJECTOR</b>	9	0.8	7.2	4	28.8	172.8	<b>2.94</b>	<b>1.00</b>	
<b>5</b>	<b>Refrigerators</b>									
a	242 Ltrs	2	0.5	1	12	12	360	<b>2.94</b>	<b>1.00</b>	
<b>6</b>	<b>BIOMETRIC MACHINE</b>	1	0.15	0.15	4	0.6	18	<b>0.15</b>	<b>0.15</b>	
<b>7</b>	<b>WIFI ROUTERS /WEB CAMERA/JIO MACHINE</b>	25	0.05	1.25	18	22.5	675	<b>5.51</b>	<b>1.25</b>	
<b>8</b>	<b>MIXER &amp;</b>									
a	Mircowave Oven	2	1.5	3	2	6	150			
	Mixer and Grinder	2	1	2	2	4	100			
	<b>Sub Total</b>			<b>5</b>			<b>250</b>	<b>2.04</b>	<b>5.00</b>	
<b>9</b>	<b>Water Pumps</b>									
a	1 HP Water Pump	2	1	2	2	4	100			
b										
	<b>Sub Total</b>			<b>2.0</b>			<b>100</b>	<b>0.82</b>	<b>2.00</b>	
<b>10</b>	<b>FANS</b>									
a	Table Fans	3	0.1	0.3	5	1.5	37.5			
b	Ceiling Fans	170	0.1	17	5	85	2125			
	<b>Sub Total</b>			<b>17.3</b>			<b>2162.5</b>	<b>17.66</b>	<b>17.31</b>	
<b>11</b>	<b>Aquaguard (BIG-2 / SMALL -2)</b>	4	0.15	0.6		3	75	<b>0.61</b>	<b>0.60</b>	
<b>12</b>	<b>Lighting</b>									
	Tube Light	248	0.04	9.92	12	119.04	2976			
	LED Light	28	0.02	0.56	12	6.72	168			
	<b>Sub Total</b>			<b>10.48</b>			<b>3144</b>	<b>25.67</b>	<b>10.49</b>	
	<b>TOTAL</b>			<b>99.9</b>			<b>12247.3</b>	<b>101.55</b>		
	<b>Total Consumption KWH ,Per Month Considering Diversity 55 %</b>						<b>6736.02</b>			

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