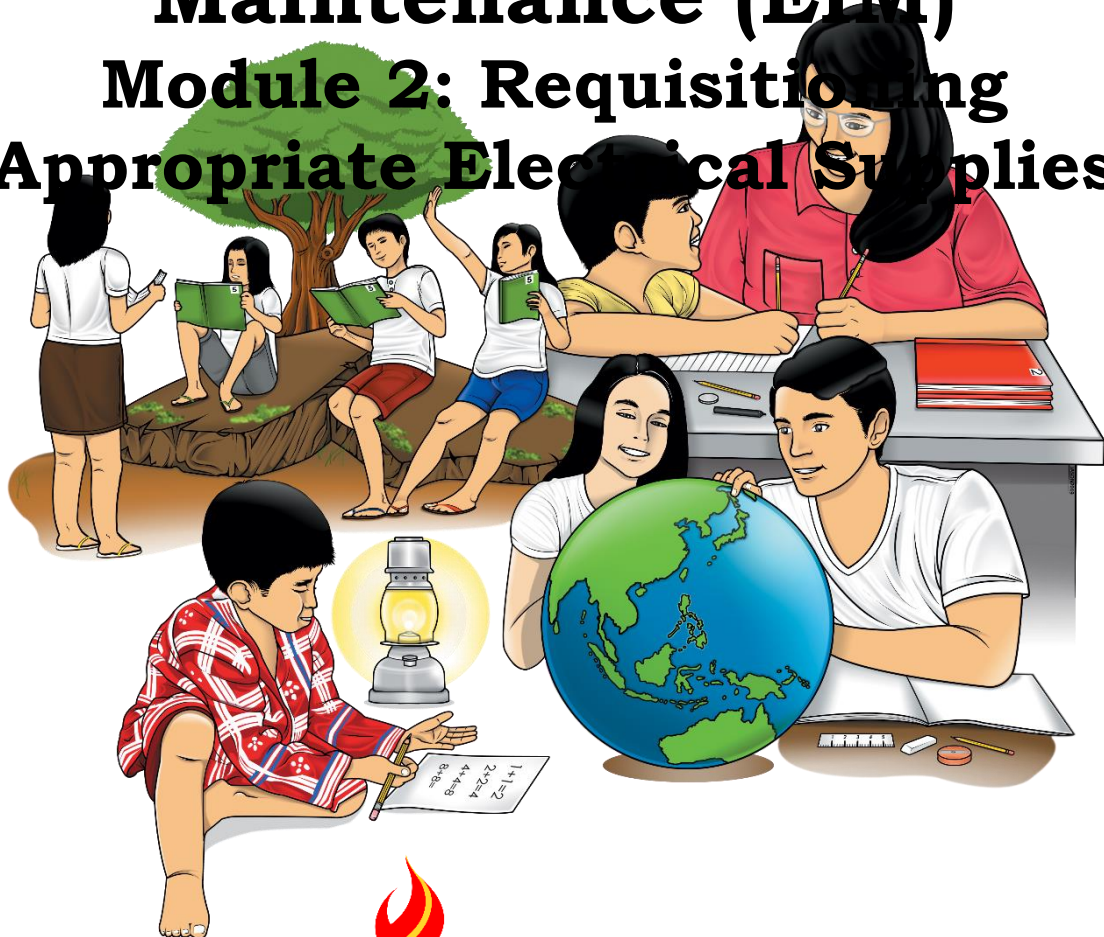


Technology and Livelihood Education

Exploratory Course

Electrical Installation and Maintenance (EIM)

Module 2: Requisitioning Appropriate Electrical Supplies



Technology and Livelihood Education– EIM Grade 7/8
Alternative Delivery Mode
Module 2: Requisitioning Appropriate Electrical Supplies
First Edition, 2020

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7/8

**Technology and
Livelihood Education**

Exploratory Course

**Electrical Installation and
Maintenance (EIM)**

**Module 2: Requisitioning
Appropriate Electrical Supplies**

Introductory Message

This Self-Learning Module (SLM) is prepared so that you, our dear learners, can continue your studies and learn while at home. Activities, questions, directions, exercises, and discussions are carefully stated for you to understand each lesson.

Each SLM is composed of different parts. Each part shall guide you step-by-step as you discover and understand the lesson prepared for you.

Pre-tests are provided to measure your prior knowledge on lessons in each SLM. This will tell you if you need to proceed on completing this module or if you need to ask your facilitator or your teacher's assistance for better understanding of the lesson. At the end of each module, you need to answer the post-test to self-check your learning. Answer keys are provided for each activity and test. We trust that you will be honest in using these.

In addition to the material in the main text, Notes to the Teacher are also provided to our facilitators and parents for strategies and reminders on how they can best help you on your home-based learning.

Please use this module with care. Do not put unnecessary marks on any part of this SLM. Use a separate sheet of paper in answering the exercises and tests. And read the instructions carefully before performing each task.

If you have any questions in using this SLM or any difficulty in answering the tasks in this module, do not hesitate to consult your teacher or facilitator.

Thank you.

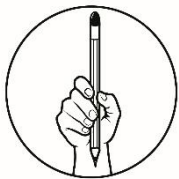


What I Need to Know

This module was designed and written with you in mind. It is here to help you master the topic of preparation of electrical materials in electricity. The scope of this module permits it to be used in many different learning situations. The language used recognizes the diverse vocabulary level of students. The lessons are arranged to follow the standard sequence of the course. But the order in which you read them can be changed to correspond with the textbook you are now using.

The module is divided into learning outcomes. Learners are expected to request appropriate electrical supplies, materials and tools applicable to a specific job. **(TLE_IAEI7/8UT-0a-2).**

After going through this module, you are likely to use the appropriate form in requesting for electrical tools and supplies and materials for a specific job.



What I Know

Let us find out if you have basic knowledge in different types of requisition documents in electrical supplies, materials and tools. Take this test!

Pretest

Directions:

Choose the letter of the correct answer. Write it in your activity notebook.

1. Which of these forms where needed items or contents to be requested are written?
 - A. Borrowers slip form
 - B. Inventory slip form
 - C. Request slip form
 - D. Work order slip form
2. What do you call a form where tools and materials are recorded and monitored?
 - A. Borrowers slip form
 - B. Inventory slip form
 - C. Job order slip form
 - D. Request slip form

3. Which of these includes everything from AC and DC power supplies to electrical connectors, lighting fixtures and wires?
 - A. Electrical materials
 - B. Electrical supplies
 - C. Electrical tools
 - D. Quantity

4. Which is a formal written request for something needed?
 - A. Borrower's slip form
 - B. Inventory slip form
 - C. Requisition
 - D. Tag-out bill

5. Which is a form used to request repairs and other maintenance operation services?
 - A. Maintenance work order slip form
 - B. Request slip form
 - C. RFP form
 - D. Tag-out bill

6. What does RFP mean?
 - A. Request for Preparation
 - B. Request for Production
 - C. Request for Proposal
 - D. Request for Purchase

7. Which is a form hanged outside the panel to inform others that somebody is working inside?
 - A. Borrowers slip form
 - B. Inventory slip form
 - C. Tag-out bill
 - D. Work order slip form

8. Which of these is a form given to somebody who will borrow supplies, materials and tools?
 - A. Borrowers slip form
 - B. Job order slip form
 - C. Request slip form
 - D. Tag-out bill

9. Who among these persons is responsible for safekeeping of school items, receiving of incoming items and inventory of school property?
 - A. Property custodian
 - B. School librarian
 - C. School principal
 - D. Teacher

10. Which of these is a form that contains the description of work to be done within specified time frame and cost estimates?
 - A. Activity completion report
 - B. Borrowers slip form
 - C. Job order slip form
 - D. Request slip form

11. Which report is attached in maintenance work order form stating the condition of the equipment?
 - A. Breakdown repair report
 - B. Inventory form
 - C. Job order form
 - D. Maintenance work order form

12. Which part or element is used in the making of any electrical construction project?
 - A. Description
 - B. Electrical materials
 - C. Electrical supplies
 - D. Electrical tools

13. What do you call the column where the number of materials or items requested written?
 - A. Description
 - B. Quality
 - C. Quantity
 - D. Unit cost

14. Which of these is a column in a Requisition Slip form where all the materials needed are reflected?
 - A. Description
 - B. Number of items
 - C. Quantity
 - D. Unit cost

15. What tools are used to work on an electrical system?
 - A. Carpentry tools
 - B. Electrical tools
 - C. Masonry tools
 - D. Plumbing tools

Lesson

**Requisitioning Appropriate
Electrical Supplies,**

1

Materials and Tools

In dealing with requisition of supplies, materials and tools you need an (RFP) Request for Proposal form documents in line with your proposed project for legal purposes. Government School, private entities and even industries are obliged to have made a request for proposal documents to purchase electrical supplies intended for your project with the approval of your school heads. This different types of forms are essential requirements to follow based on school guidelines.



What's In

Directions:

List down at least five (5) electrical tools and five (5) electrical supplies in your activity notebook.

Electrical Tools	Electrical Supplies



What's New

Directions:

Below are jumbled letters. Arrange them to make a word found in a requisition form. Write it in your activity notebook

1. TINU
2. SEDCRPITAIN
3. TYTIQAUN
4. NUIT CSTO
5. TATOL CTOS
6. PLRIES
7. SIWTCH
8. PCV PPIE
9. UFES
10. BAETTYR

Name : _____
Project : _____
Location : _____
Classification: _____
Purpose : _____

NO.					
1	1	piece		150.00	
2	2	piece		300.00	
3	1	piece		120.00	
4	3	piece		210.00	
5	1	piece		85.00	



What is It

Unlocking of Technical Terms

Request Slip Form- a document where the requested supplies, materials and tools are written.

Inventory Form- a document where supplies, materials and tools are to be monitored are listed,

Borrower's Slip Form- a form given to somebody who will borrow supplies, materials and tools.

Job Order or Work Order Form- a form contains the description of work to be done within specified timeframe and cost estimates.

RFP- Request For Proposal form

Tag-out Bill- a form hanged outside the panel to inform others that somebody is working inside.

Electrical Supplies- includes everything from AC and DC power supplies to electrical connectors, lighting fixtures and wires.

Electrical Materials- basically the parts or elements used in the making of any electrical construction project.

Electrical Tools- used to work on an electrical system

Breakdown repair- a report attached in maintenance work order form stating the condition of the equipment.

Requisition-a formal written request for something needed.

Different Types of Forms

Request Slip Form

Name : Elmer Deligero
Project : Power Plant Boiler # 4 Rehabilitation
Location : APLAN PLYWOOD CORPORATION
Classification: Electrical Installation and Maintenance
Purpose : Upgrading of electrical Monitoring Devices and Control

NO.	QUANTITY	UNIT	DESCRIPTION	UNIT COST	TOTAL COST
1	1	piece	1 HP Induction motor	Php 5,500.00	Php 5,500.00
2	2	piece	Limit Switch	1,200.00	2,200.00
3	1	roll	THW wire #16	4,800.00	4,800.00
4	3	piece	Relay 220v	600.00	1,800.00
5	1	piece	Control Panel	2,500.00	2,500.00
6	2	piece	Push Button Switch	350.00	700.00
7	1	piece	3 Phase Circuit Breaker	3,300.00	3,300.00
8	3	piece	Magnetic Contactor	2,700.00	8,100.00
9	1	box	Terminal Lugs Y Type	800.00	800.00
10	1	piece	Wire Stripper	550.00	550.00
			Total		Php 24,750.00

INVENTORY FORM

Name : Juan de la Cruz
 Section : Rizal
 School : Buenavista National High School
 Shop Lab : Electrical Laboratory
 Purpose : Annual Inventory

ELECTRICAL SUPPLIES, MATERIALS & TOOLS	QUANTITY	NUMBER OF FUNCTIONAL ITEMS	NUMBER OF NOT FUNCTIONAL ITEMS	NUMBER OF BORROWED ITEMS	NUMBER OF MISSING ITEMS
A. SUPPLIES	5	4	1	5	0
Electrical wire	3	3	0	3	0
Electrical tape	4	2	0	4	2
Staple wire	4	4	0	4	0
Cable tie	2	2	0	1	0
Plastic tox	3	2	1	0	0
B. MATERIALS					
RSC Conduit	14	11	0	6	2
EMT Conduit	12	10	0	5	3
C. TOOLS					
Electrical knife	4	3	0	1	0
Pipe bender	2	0	0	1	0
Heat gun	3	2	1	0	0

PROPERTY CUSTODIAN

TEACHER

Job Order or Work Order form

Name: Gabriel S. Bedrijo
 Company name: SDA Electric
 Street address: Matabao Buenavista
 Zip code: 1217
 Phone or cell #: 09293453214
 W O. No: 1883
 Date: 06/11/2020
 Customer ID: ABC12354
 Job description: Electrical house installation

Quantity	Unit	Description	Unit Price	Total Cost
2	set	1 HP Window type aircon	Php 1000.00	Php 2000.00
1	pc.	Electrical Panel	550.00	550.00
4	pcs	Convenience outlets	300.00	1200.00
3	pcs	Fluorescent lights	250.00	750.00
1	pc	Two pole Circuit Breaker	300.00	300.00
		Total		PHP. 4800.00

Signed by:

Romeo Tutor
Master Electrician

Approved by:

Engr. Mark H. Taganas
Electrical engineer

BORROWER'S SLIP FORM

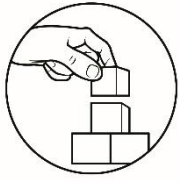
Borrower's Name	Date Borrowed	Quantity	Items	Date Returned	Signature
Ian Ramos	June 5, 2019	2 pieces	Pliers	June 20, 2019	
		2 pcs			
		1 pc	Multi-tester		
		1 pc	Heat gun		

BORROWER'S SIGNATURE

TEACHER

Request form for maintenance breakdown / repair report

Property ID Number:	01436
Property name:	Electric fan
Location:	EIM Lab
Findings:	Grounded
Inspected by:	Reported to: Property Custodian
Date:	06/22/2020
Assigned to:	Received assignment: Grade-11 EIM
Subsequent action taken:	Recommendation: Check and Repair
Learners assigned:	Robert Comahig



What's More

Matching type

Directions:

Match column A with column B. Write your answer in your activity sheet.

Column A	Column B
1. Borrowers slip form	A. Tools and materials are recorded and monitored here.
2. Request slip form	B. a formal written request for something needed.
3. Requisition	C. Form contains the description of work to be done within specified timeframe and cost estimates.
4. Inventory slip form	D. A form given to somebody who will borrow supplies, materials and tools.
5. Electrical tools	E. A document where the requested supplies, materials and tools are written.
6. Job order slip form	F. A form hanged outside the panel to inform others that somebody is working inside.
7. Tag-out bill	G. Used to work on an electrical system
8. RFP	H. A report attached in maintenance work order form stating the condition of the equipment
9. Electrical materials	I. Request for Proposal form
10. Breakdown repair report	J. It is basically the parts or elements used in the making of any electrical construction project

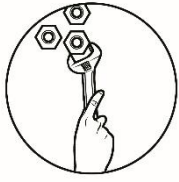


What I Have Learned

Directions:

Supply the correct answer. Write it in your activity notebook

1. _____ is the parts or elements used in the making of any electrical construction project.
2. _____ include everything from AC and DC power supplies to electrical connectors, lighting fixtures and wires.
3. _____ contains the description of work to be done within specified timeframe and cost estimates.
4. _____ is used to work on an electrical system.
5. _____ what do you call a form where tools and materials are recorded and monitored.
6. RFP means _____ .
7. _____ is a form hanged outside the panel to inform others that somebody is working inside.
8. _____ is a report attached in maintenance work order form stating the condition of the equipment.
9. _____ is a document where the requested supplies, materials and tools are written.
10. _____ is a form used to request repairs and other maintenance operation services.



What I Can Do

Activity 1

Directions:

Copy the maintenance work order form and fill in with the required data in your activity notebook.

Request form for maintenance breakdown / repair report

Property ID Number:		
Property name:		
Location:		
Findings:		
Inspected by:	Reported to:	
Date:		
Assigned to:	Received assignment:	
Subsequent action taken:	Recommendation:	
Learners assigned:		

Activity 2

Directions:

Copy the inventory form below. Fill in with the electrical tools and materials given and other needed data. Do it on your activity notebook.

Electrical Tools and Materials to be monitored:

1. Combination pliers-5
2. Screw driver-6
3. Multi tester-2
4. Side cutter-4
5. Heat gun-3
6. Soldering iron
7. Utility box-5
8. Convenience outlet-3
9. Fuse -8
10. Junction box- 2

Name : _____
 Section : _____
 School : _____
 Shop Lab : _____
 Purpose : _____

NAME of TOOLS/ MATERIALS	QUANTITY	NUMBER OF FUNCTIONAL ITEM/S	NUMBER OF NOT FUNCTIONAL ITEM/S	NUMBER OF BORROWED ITEM/S	NUMBER OF MISSING ITEM/S
A. Tools					
1.					
2.					
3.					
4.					
5.					
6.					
B. Materials					
8.					
9.					
10.					

 PROPERTY CUSTODIAN

 TEACHER

Activity 3

Directions:

Copy the Request For Proposal (RFP) form and fill in with the needed data. Do it in your activity notebook.

Name : _____
Project : _____
Location : _____
Classification: _____
Purpose : _____

Department: EIM TLE Section:				Date:	
No.	Quantity	Unit	Item Description	Unit Cost	Total Cost
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					



Assessment

Posttest

Multiple Choice

Directions:

Choose the letter of the correct answer. Write your answer in your activity notebook.

1. What do you call a form where tools and materials are recorded and monitored?
 - A. borrowers slip form
 - B. Inventory slip form
 - C. Job order slip for
 - D. Request slip form
2. Which form is used to request repairs and other maintenance operation services?
 - A. Maintenance work order slip form
 - B. request slip form
 - C. RFP form
 - D. Tag-out bill
3. Which is a formal written request for something needed?
 - A. Borrower's slip form
 - B. Inventory slip form
 - C. Requisition
 - D. Tag-out bill
4. Which is a column in a Requisition Slip form that all the materials needed are reflected?
 - A. Description
 - B. Number of items
 - C. Quantity
 - D. Unit cost
5. Which of these forms where needed items or contents to be requested are written?
 - A. Borrowers slip form
 - B. Inventory slip form
 - C. request slip form
 - D Work order slip form

6. It includes everything from AC and DC power supplies to electrical connectors, lighting fixtures and wires.
 - A. Electrical Materials
 - B. Electrical Supplies
 - C. Electrical Tools
 - D. Quantity

7. What does RFP mean?
 - A. Request For Preparation
 - B. Request For Production
 - C. Request For Proposal
 - D. Request For Purchase

8. It is a form hanged outside the panel to inform others that somebody is working inside.
 - A. Borrowers slip form
 - B. Inventory slip form
 - C. Tag-out bill
 - D. Work order slip form

9. A form given to somebody who will borrow supplies, materials and tools.
 - A. Borrowers slip form
 - B. Job order slip form
 - C. Request slip form
 - D. Tag-out bill

10. A person responsible for safekeeping of school items, receiving of incoming items and inventory of school property.
 - A. Property custodian
 - B. School librarian
 - C. School principal
 - D. Teacher

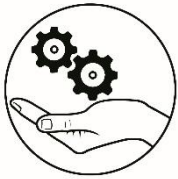
11. What do you call the column where the number of materials or items requested are written?
 - A. Description
 - B. Quality
 - C. Quantity
 - D. Unit cost

12. It is basically the parts or elements used in the making of any electrical construction project.
 - A. Description
 - B. Electrical Materials
 - C. Electrical Supplies
 - D. Electrical Tools

13. What tools are used to work on an electrical system?
 - A. Carpentry tools
 - B. Electrical tools
 - C. Masonry tools
 - D. Plumbing tools

14. It is a report attached in maintenance work order form stating the condition of the equipment.
 - A. Breakdown repair report
 - B. Inventory form
 - C. Job order form
 - D. Maintenance work order form

15. This form contains the description of work to be done within specified time frame and cost estimates.
 - A. Activity completion report
 - B. Borrowers slip form
 - C. Job order slip form
 - D. Request slip form



Additional Activities

Directions:

Copy the table below. Write the description of the following forms in your activity notebook.

Types of Forms	Description
1. RFP form document	
2. Inventory form	
3. Borrowers slip form	
4. Work order slip form	
5. Tag-out bill	
6. Maintenance breakdown repair report	
7. Requisition slip form	
8. Job order slip form	
9. Maintenance work order slip form	

Directions:

Copy the job order form below and fill in with the required tools and materials for electrical wiring board installation in your activity notebook.

Job order or work order form

Name : _____
Company name : _____
Street address : _____
Zip code : _____
Phone or cell # : _____
W O. No : _____
Date : _____
Customer ID : _____
Job description : _____

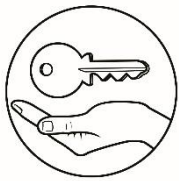
Quantity	Unit	Description	Unit Price	Total Cost

Prepared by:

Student

Approved by:

EIM Teacher



Answers Key

<p>Assessment</p> <p>1. B 2. A 3. C 4. C 5. C 6. B 7. C 8. C 9. A 10. A 11. A 12. B 13. B 14. A 15. C</p>	<p>What's More</p> <p>1. D 2. E 3. B 4. A 5. G 6. C 7. F 8. I 9. J 10. H</p>	<p>What I KNOW</p> <p>1. C 2. B 3. B 4. C 5. A 6. C 7. C 8. A 9. A 10. C 11. A 12. B 13. A 14. C 15. B</p>
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References

Ramantin, Michael Jones Edward C. *Trainers Methodology Level I*. Agusan del Norte: TESDA. 2019.

Aplan, Samuel D. *Portfolio in Trainers Methodology I*. Agusan del Norte: TESDA. 2018.

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