

Heaven's light is our guide



Rajshahi University of Engineering & Technology

Course no: EEE 2100

Course title: Electrical Shop Practice

Project no: 01

Project title: Electrical safety uniform and equipment.

Submitted to:

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Submitted by:

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Section: C

Session: 2018-2019

Dept. Electrical & Electronic Engineering,

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Date of submission: November 24, 2020.

RUET

Project no: 01

Project title: Electrical safety uniform and equipments.

Objectives: The main objectives of this project are,

- ① To ensure worker safety in working place.
- ② To keep the workers upto date with safety tools and practices.
- ③ To educate workers about the proper protection requirement in hazardous work space.

Apparatus:

- ① Safety footwear/boots;
- ② Safety belts;
- ③ Safety glasses;
- ④ Safety helmet;
- ⑤ Protective gloves;
- ⑥ mask

- ⑦ Visibility vest ;
- ⑧ Fire extinguisher;
- ⑨ Saddle clip .

Project Picture:



Equipment details:

① Safety footwear: These provides a secondary source of protection for you from electric shocks/electrocution. They also provide a protective reinforcement in the toe which protects the foot from falling object, burn cuts, punctures and impact.

② Safety belt: It's a device that is worn around to serve as direct connection point to a lifeline on elevated structure. It is worn to arrest a fall and protect a worker from a sudden descent and associated hazards when working at an elevated height.

③ Safety glasses: Safety glasses are intended to shield the wearer's eyes from impact hazards such as flying fragments, objects, large chips and particles.

④ Safety helmet: Safety helmets are personal protective equipments designed to protect the upper part of the workers' head from falling/flying objects, impacts, burn, electrical hazards etc. In the, industries, construction and mining sites workers must be equipped with safety helmets. Helmets are designed to resist penetration, water and fire.

⑤ Protective gloves: Protective gloves are needed to prevent injuries to the hands and to comply with the hazard prevention hierarchy.

⑥ Mask: Masks are used to avoid any direct contact with unknown gas, smog and smokes that may be dangerous in the working process.

⑦ Visibility Vest: High visibility vest is any clothing that is highly luminescent in its natural matt property on a color that is easily discernible from any background. Most industrial employers require it as a type of personal protective equipment (PPE).

⑧ Fire extinguisher: A fire extinguisher is an active fire protection device used to extinguish or control small fires, often in emergency situations. It is not intended for use on an out-of-control fire such as one which has reached the ceiling, endangers users or otherwise requires the expertise of a fire brigade.

They can be organized as, ABC, whereas,

- ① Class A for trash, wood, paper.
- ② Class B for liquids and gas.
- ③ Class C for energized electrical sources.

Result: No physical usage or practical showcase was done with these equipments.

Bill of materials:**Bill of Materials****Date:** March 03,2020.**Title:** Electrical Safety Uniform & Equipment's.

SL. No.	Date	Voucher	Name	Description	Quantity	Rate in BDT	Cost in BDT	Comments
1	15-02-2020		Safety footwear	These footwears provide a secondary source of protection for you from electric shocks or electrocution.	1 no.	600	600	A pair of safety footwear/boots were bought.
2	15-02-2020		Safety belt	A safety harness is a form of protective equipment designed to protect a person, animal, or object from injury or damage. The harness is an attachment between a stationary and non-stationary object and is usually fabricated from rope, cable or webbing and locking hardware.	1 no.	450	430	Taka 20 was discounted due to buying many items.
3	15-02-2020		Safety glasses	These glasses reduce the chances of an accidental electrical discharge and helps to minimize injury during an electrical accident.	1 no.	50	50	DEWALT Clear Anti-Fog Protective Safety Glasses were bought.
4	15-02-2020		Safety helmet	Safety helmets are designed for protection against accidental falls and protection from falling objects and additional protection from overhead live wires while working on live lines.	1 no.	200	200	A Yellow helmet for general laborer's or earth-moving operators were bought.
5	15-02-2020		Protective gloves	These gloves offer personal hand protection for workers against electrical shocks when working near or on live wires, cables and electrical equipment	1 no.	100	100	A pair of black gloves for protection of the hands while performing tasks involving chemicals and electrical was bought.
6	15-02-2020		Mask	This is used to avoid any direct contact with unknown gas, smog's and smokes that may be an impedance in the working process	1 no.	50	50	A safety mask was bought.
7	15-02-2020		Visibility vest	High-visibility vest is any clothing worn that is highly luminescent in its natural matt property or a color that is easily discernible from any background.	1 no.	400	400	A High visibility vest of orange color was brought.
8	17-02-2020		Fire extinguisher	A fire extinguisher is an active fire protection device used to extinguish or control small fires, often in emergency situations.	1 no.	700	700	
9	24-02-2020		Saddle nail clip		50 nos.	1	40	Taka 10 was discounted due to buying many items.
Total cost=							2570	

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