Kendriya Vidyalaya Chero salempur

Winter vacation holiday homework

Subject- Work Education (WE) **Date:- 20.12.2022**

Class- VI

Objective- To develop the practical and productive skills along with theoretical knowledge.

Q.1) make a list for electrical components used in your home?
Q.2) make a list of electrical appliances working on batteries or dc supply in your home?
Q.3) make a list of appliances working on AC mains power supply in your home?
Q.4) Discuss safety rules with your parents that we need to follow during rainy season while working on electricity?
Q.5) collect electrical components as battery, motor etc. from e-waste at home and list out with their names and diagrams?
Q.6) is a graphite pencil good conductor or an insulator, justify your answer?
Q.7) Make any project out of these- Best out of waste theme like pan stand, Flower vase, File cover design, Art & Craft work.

OR

Q.7) Make a simple electrical project virtually on website www.dcaclab.com
Q.8) why do we use a line tester and why don't we get shock while checking electricity by it?
Q.9) which bulb will be using less energy an old incandescent bulb or a led light, why?

Class- VII

Objective- To develop the practical and productive skill along with theoretical knowledge.

Q.1) How to identify Phase, Neutral and Earth wire in your house wiring via their color codes & via their thickness or via presence of electricity?
Q.2) Define about an open, close and short circuit with diagrams and what is the effect of short circuit and how to avoid it?
Q.3) Identify the electrical appliances working on AC current and DC current at your home and note it down separately?
Q.4) Why we use Earth wire in our house wiring and discuss its importance with your parents?
Q.5) What is the use of phase, neutral and earth wire, define how earth wire save us from accidents?
Q.6) define Heating, Lighting and chemical effect of electricity?
Q.7) Make any project out of these- Best out of waste theme like pan stand, Flower vase, File cover design, Art & Craft work.

OR

Q.7) Make a simple electrical project virtually on website www.dcaclab.com
Q.8) Make a block diagram of a PA system and also define its working?
Q.09) Why a good electrical wire joint is required, define its types along with importance?

Class- VIII

Objective- To develop the practical and productive skills along with theoretical knowledge.

Q. 1)What is the relation between work, power and energy, define each term and also mention law of conservation of energy?

Q.2) make a layout diagram for wiring at your home from energy meter to switch board?

Q.3) Identify the safety devices used in house wiring and draw the diagram and write their importance? Q.4) Are available traditional energy resources (non renewable sources) not sufficient to fulfill our present and future needs, if yes then do we have any alternative option for this?

Q.4 draw block diagram of pa system and write down its working.

Q.5) Make any project out of these- Best out of waste theme like pan stand, Flower vase, File cover design, Art & Craft work. OR Make a scrap book on locally available plants.

OR

Q.6) Make a simple electrical project virtually on website www.dcaclab.com

Q.7) Why a hanging magnet always remains in N-S direction only, explain?

Q.8) Make block diagram for three bulbs when connected in series and parallel and also justify why we prefer parallel connection over series connection?

Class- IX

Objective- To develop the practical and productive skills along with theoretical knowledge.

Q.1) How to check whether earthing is provided at your home or not, discuss its importance with your parents?

Q.2) Where do we use Fleming's left and right hand rule practically, also define thumb rule of Flemings along with suitable example?

Q.3) why we use a switch and why it is always connected in phase wire but never in neutral wire in an electrical circuit, explain?

Q.4) identify the electrical components and objects needed in house wiring?

Q.5) Define working principle of an ammeter, voltmeter and a multi meter?

Q.6) What is a soldering machine and why we need it, explain with suitable diagram and also mention safety precautions we need to follow while using it? Q.7) What is Ohms law, explain it with suitable definitions?

Q.8) Write a short note on evolution of tube/bulbs and differentiate between domestic and industrial bulbs?

Q.9) Make a simple electrical project virtually on website www.dcaclab.com Q.10) Write a short notes on semiconductor devices such as transistor and diode?

Class- X

Objective- To develop the practical and productive skills along with theoretical knowledge.

Q.1) what are the alternative sources of power generation in place of non renewable energy sources?

Q.2) understand the practical incorporation of fuse, indicator and regulator in a switchboard?

Q.3) Make a simple electrical project virtually on website www.dcaclab.com

OR

Q.3) Make a battery eliminator by stepping down 230V AC to 6/9/12V DC or a simple quiz game board?
Q.4) what is magnetic effect of electric current, also define Flemings and faradays laws along with practical examples?
Q.5) what is Lenz law, define?
Q.6) Define 3R in terms of conservation of energy resources?

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