

ST. WILLIAM'S SS RWENGIRI
P.O.BOX 12 RUKUNGIRI
S.3 PHYSICS END OF TERM 1 ASSESSEMENT

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Instructions

1-Attempt ~~4~~ the questions in this paper

2-Multippractice is prohibited.

Time Allowed 2HRS

Qn1. On one weekend it rained heavily and as a result lighting struck and destroyed one of the transformer supplying power in your community. Due to the blackout created in your community in absence of electricity in the surrounding area you were left with no light at home however inside your home you found an empty tin, paraffin, a cotton cloth and a razorblade for cutting the cloth and a box of match sticks

(a) Develop the guidelines you should follow to use the available materials to solve the problem of darkness in your home. (Include Illustration)

(b) Explain the process through which your light source works

QN2. Regan wants to set up a modern salon in a room measuring length of 3m by 3m. He has a simple wooden chair, 3 large mirrors and one bulb

TASK

(a) Using the knowledge of shadows and reflection, advise Regan on how to arrange a good saloon using the only items he has?

(b) Without adding more sources of light, how can he enhance the lighting in his salon?

QN3. Ascertain maize milling company called DENZ MILLERS COMPANY produce flour from many cereals crops. People suspects and complain that most of their products contain metallic pieces of grinding machines because they assume that their machines are too old to process the products. Investigations were carried out by the authorities of the district to check whether these allegations are true by obtaining a sample of about 1kg of each of the product.

TASK.

Assuming that you were on the authority team make a simple machine you could use to prove whether allegations are right or wrong

QN4. Sonko a great business man in Rukungiri district wanted to construct a storied building of seven floors from his savings. However due to limited funds he decided to construct the ground and first floor as he saves more to add on other floors with time . He then installed an overhead tank to supply water to the people in the rooms. After some time, Sonko constructed the remaining floors, However the occupants of the newly constructed rooms complained that water could not reach their kitchens and toilets

TASK

Assuming your the District engineer, what do you think as the cause of the problem and how would you solve it.

QN5. Residents of Kyomera community rely on selling agricultural produce such as beans, Coffee, Ground nuts and maize, among other for their domestic needs. The community has a challenge of measuring the exact amounts of the agriculture produce between 1kg to 10kg to be sold to each other as it does not have access to a weighing scale. The community does a lot of estimation in measuring the products for sale

TASK

As a S.3 student, discuss how you would help such community measure their agricultural produce without a weighing scale

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