DSF UACE BIOLOGY PRACTICAL CONFIDENTIAL JUNE 2023

Provide each student with the following:

Specimen **Z** (Freshly killed, mature toad/ frog).
Solution **X** (Hydrogen peroxide 3%) 100 ml.
Solution **Y** (fresh Irish potato extract prepared as provided hereunder) - 20 ml.
Distilled water - 250 ml.
5 Test tubes of equal size.
2 Beakers 100 ml.
10 cm ruler.
Sticky label paper.
Measuring cylinder - 50-100 ml.
Sieve with fine pores/ cloth.
20 small discs from a filter paper, made using a clean hole punch.
Stopwatch or digital timing device.
Specimen **R_1** (Mature tuber of Irish potato with shoots).
Specimen **R_2** (Mature tuber of Irish potato without shoots).
Specimen **S** (A few mature leaves of Bryophyllum with young adventitious buds).
Specimen **T** (Aquatic offset e.g., *Eichhornia*/ *Pistia* OR terrestrial stolon e.g., paspalum/ spear grass) having at least two shoots: one new, another older).
Hand lens (magnifying glass).
Dissection tray or dissecting pan.
Dissection tools (scalpel, scissors, forceps, and probe)
Paper towels or cotton wool.
Pins or T-pins.

How to prepare solution Y for 5 students:

Peel fresh Irish potatoes and wash them thoroughly.
Use a blender to crush 50g of Irish potato mixed with 50 ml distilled water.
Filter the potato extract through a sieve with fine pores, into a measuring cylinder.
Add distilled water into the filtrate to make a total volume of 100 ml.