**UGANDA CERTIFICATE OF EDUCATION**

**S.4 INTERNAL MOCKS 2019**

**TECHINICAL DRAWING**

**PAPER 1**

**TIME: 3 HRS**

***Instructions***

* This paper consists of two questions A and B
* Attempt **4 (four**) questions at least **2 (two)** from each section
* Unless otherwise stated, all dimensions are millimeters
* Use geometrical methods only
* The given figures are not drawn to scale
* All questions carry equal marks

**SECTION A – PLANE GEOMETRY**

1.a) Construct a diagonal scale of RF 1/4000 to show metres, decimeters and centimeters to read up to 400m.

b) Using the scale in (a) above, draw the locus of point Q for one complete revolution of the lever. The figure illustrates a slotted lever mounted on centre P and carrying a slider Q. The lever makes one revolution clockwise at constant speed about P while the slider travels with constant speed towards R. ( *in one revolution Q travels to R and back thrice*) PR = 285m, PQ = 72m

2.a) Construct a triangle ABC, whose perimeter is 126, and base angels 60⁰, and 45⁰.

b) Using the triangle in (a) above, construct a similar triangle whose perimeter is 113.

c) Reduce the triangle I (b) above to half its area.