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 60^{o}, and 45^{o}.

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.