Templates are used to mark out the voussoirs.
These arches are used where beauty is highly appreciated.

20.2 PAPER 2 (446/2) PRACTICAL

This is a practical/project paper to be carried out in 25 hours. It comprises:-

Test A	Block work and brickwork
Test B	Carpentry

Test A Blockwork and Brickwork

This consisted of the construction of a return angle wall with a door opening fitted with a door frame. Part of the wall was built in standards size bricks using the Flemish bond while the rest was built in concrete blocks. The door opening was bridged over by an arch having a keystone built in block work.

The test measured the candidates ability to interpret the working drawings in terms of material quality and the quantity to produce the model.

Psychomotor skills were also tested ie. ability to produce the model within the given time and to acceptable workmanship.

Weaknesses

Most candidates displayed excellent interpretation of the working drawings but there were isolated cases of some candidates missing some important aspects. This led to getting the wrong dimensions and producing wrong shaped units especially with arch units. This problem could be avoided if students are given practical assignments requiring interpretation of working drawings. Individual attention to the students should be provided by the instructors.

Lack of proper project planning was also noted. This was evidenced by the fact that the candidates seemed to have rushed through the project. A justification to the foresaid is the poor workmanship most candidates displayed. In the block work key joints were very poorly finished. The plaster on the inner surface of the wall was roughly finished as opposed to a smooth float finish. This problem would have been avoided if the candidates prepared and used a work schedule. The instructors should also emphasize on the workmanship as this will judge the quality of produced model.

Inability to use the correct mortar joint sizes for both blockwork and bricks. The joints were either too thick or very thin, this brought about problems in matching three brick courses to block course height. To avoid this weakness, the students should practice building wall models combining both blockwork and brickwork in a manner that both should be matched.