



METALWORK

6040/02

October/November 2009

CONFIDENTIAL INSTRUCTIONS

Great care should be taken to ensure that any confidential information given does not reach the candidates either directly or indirectly.

READ THESE INSTRUCTIONS FIRST

Paper 6040/02 Practical

Please note that all materials required for this test are to be provided locally. They will not be provided by the Syndicate.

Candidates must not be allowed a second supply of material.

No assistance or information, other than that printed in the examination paper, is to be given to any candidate.

No machine other than the drilling machine and a centre-lathe may be used.

All materials cut to length are to be left from the saw, except as otherwise mentioned.

N.B. The reducing of materials to examination requirements and the preparation of special tools or parts is to be undertaken by the candidates before the examination. Failure to prepare materials as specified will seriously handicap candidates.

At the end of the examination the Supervisor is requested to carry out the following.

1. To see that the name and examination number of each candidate are clearly and correctly marked on the tie-on labels and that the labels are securely fastened, one to the candidate's work and any unfinished material and the other to the bag containing the candidate's work.
2. To enter the required details on one of the envelopes intended for scripts (reading 'pieces of work' for 'scripts') and to enclose a completed attendance sheet(s).
3. To pack the work securely and send it with the envelope containing the attendance sheet(s) to University of Cambridge International Examinations.

This document consists of **2** printed pages.



Each candidate is to be supplied with the following materials.

All dimensions are in millimetres.

One piece BDMS $12 \times 12 \times 80$ long. Both ends square.

One piece BDMS $50 \times 5 \times 60$ long. Both ends square.

One piece BDMS $20 \times 3 \times 152$ long. One end square.

One piece BDMS $\text{Ø}6 \times 100$ long. Both ends square and chamfered as shown in Fig. 1.

One piece BDMS $15 \times 5 \times 40$ long. Both ends square.

One piece BDMS $15 \times 5 \times 40$ long. Both ends square.

One piece BDMS $10 \times 1.5 \times 20$ long. Both ends square.

Two $\text{Ø}3 \times 12$ long countersunk head steel rivets.

(3.2 mm or 4.0 mm rivets can be supplied if 3 mm not available but allowance will need to be made for set/snap and drill size.)

Two M6 $\times 12$ long cheese head or round head steel screws. One of the screws must not be plated as it will require silver soldering as part of the examination.

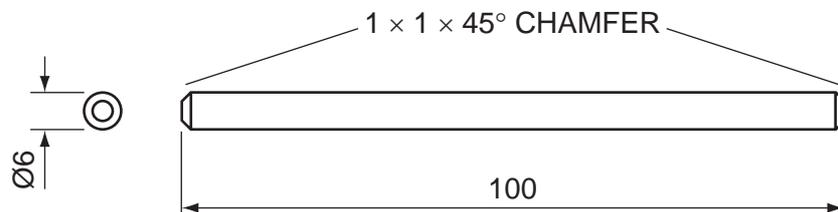


Fig. 1

One bag in which to enclose work.

Two tie-on labels.

Every **two** candidates will require:

200 or 250 second cut hand file or near;

150 or 200 square or three square smooth file (needs to file and finish a 6 square hole).

Every **five** candidates will require:

M6 taper (or second) tap and wrench.

Cutting compound.

Rivet set/snap for $\text{Ø}3$ round head rivet.

A metal former over which the piece of $20 \times 3 \times 152$ BDMS can be held in a vice and bent to 90° . It is suggested that one corner of the former has a 3 radius. The former should be no longer than 45 mm.

Every candidate will require silver solder and appropriate flux to make one joint.

Each drilling machine to be equipped with:

Machine vice;

Drill 3.0 (or to suit rivets supplied)

5.0

6.0

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