

**CAMBRIDGE INTERNATIONAL EXAMINATIONS**

**Joint Examination for the Higher School Certificate  
and General Certificate of Education Ordinary Level**

**METALWORK  
INSTRUCTIONS**

**6040/1, 6040/2**

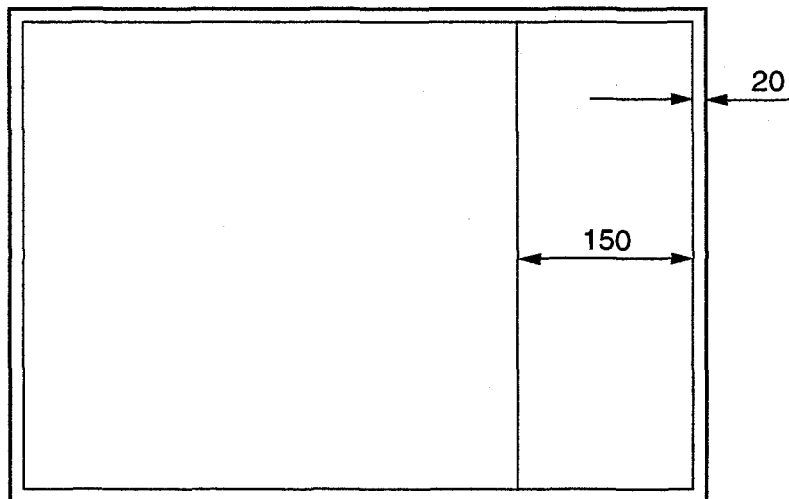
**OCTOBER/NOVEMBER SESSION 2002**

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

**INSTRUCTIONS TO SUPERVISORS**

Paper 6040/1 Drawing and Design.

Each candidate will require drawing instruments and one piece of good quality A2 drawing paper. This should be ruled out as shown below before the examination.



Paper 6040/2 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.

---

**These instructions consist of 3 printed pages and 1 blank page.**

Each candidate is to be supplied with the following materials.

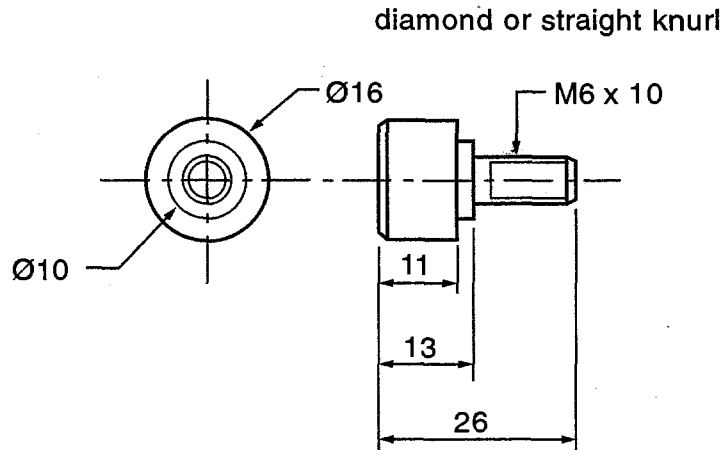
All dimensions are in millimetres.

One piece bright drawn mild steel 16 diameter x 15 long. Both sides faced and lightly chamfered.

One piece bright drawn mild steel 16 x 12 x 36 long. Both ends squared.

One piece bright drawn mild steel 6 diameter x 60 long. Both ends lightly chamfered.

One piece bright drawn mild steel 16 diameter x 26 long, prepared as Fig 1 prior to the examination.



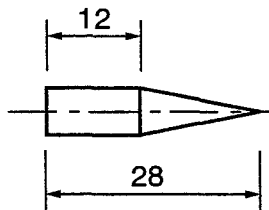
**Fig. 1**

One piece bright drawn mild steel 16 x 3 x 92 long. One end squared.

One piece bright drawn mild steel 20 x 10 x 32 long. Both ends squared.

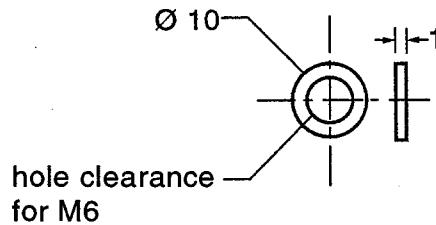
One piece bright drawn mild steel 6 diameter x 14 long. Both ends lightly chamfered.

One piece bright drawn mild steel 6 diameter x 28 long prepared as Fig. 2 prior to examination.



**Fig. 2**

Two x M6 x 12 cheese head or round head screws.  
One Ø10 washer prepared as Fig. 3



**Fig. 3**

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 smooth cut hand file or near;  
three square needle file (or similar).

Every **five** candidates will require:

M6 x 1 taps and wrench;  
M6 x 1 die and holder;  
Cutting compound.  
Each drilling machine to be equipped with the following:

Drills 5.0  
6.0  
Machine vice

Centre lathe to be equipped with the following:

Centre drill;  
Drill 5.0

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

1. To see that candidates do **not** oil or grease their finished piece of work before packing.  
(Candidates in Singapore may slightly oil their work)
2. 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.
3. 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).
4. To pack the work securely and send it with the envelope containing the attendance sheet(s) to UCLES.

