



**Coimisiún na Scrúduithe Stáit
State Examinations Commission**

LEAVING CERTIFICATE EXAMINATION, 2017

**ENGINEERING – PRACTICAL EXAMINATION
HIGHER AND ORDINARY LEVELS**

Directions to candidates

1. You are required to prepare materials and make components, according to the materials list and drawings shown, prior to the Practical Examination in May, 2017.
2. Prepared materials and finished components **must be your own individual work** and should be clearly identified and stored safely until examination day.
3. **If you use machinery other than that specified in the equipment list in M74A(ML1) to process any part of the examination material, you will lose marks under the relevant headings in the marking scheme.**

Materials per candidate		
Required	Material	Size
1 piece	Clear Polycarbonate	80 × 52 × 6
2 pieces	Brass	70 × 57 × 3
2 pieces	Aluminium	75 × 40 × 4
1 piece	Clear Polycarbonate	104 × 56 × 6
1 piece	Aluminium bar	To make part A
1 piece	Aluminium bar	To make part B
1 piece	Aluminium bar	To make part C
2 pieces	Aluminium	To make part D
1 piece	Aluminium	To make part E
1 piece	M8 Threaded bar	To make part F
1 piece	M5 Threaded bar	To make part G
6 Machine screws, Allen Button Head	Brass or steel	M5 × 12
1 Machine screw, Allen Button Head	Brass or steel	M5 × 16
1 Machine screw, Allen Button Head	Brass or steel	M5 × 30
1 Nut + Washer	Brass or steel	M8

Note: Bold dimensions are finished sizes.

Notes: The following components are to be made prior to the Practical Examination and **must be your own individual work.**

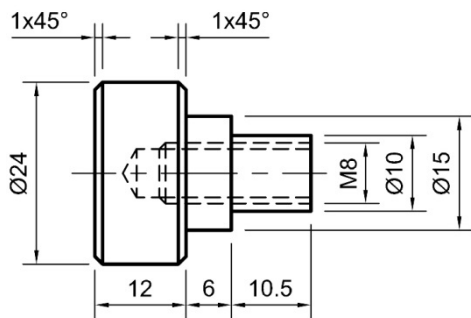
Your own individual work is intended to include all the practical activities of making the components in the school under the supervision of the teacher.

If you use machinery other than that specified in the equipment list in M74A(ML1) to process any part of the examination material, you will lose marks under the relevant headings in the marking scheme.

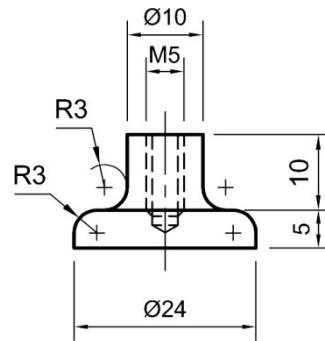
Part A should fit neatly and be free to rotate in Part E.

Part C should be free to rotate in a $\text{Ø}8$ drilled hole.

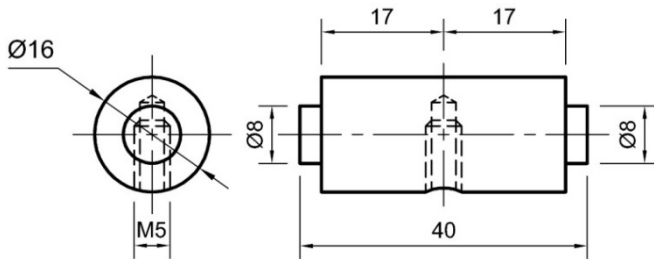
(A)



(B)

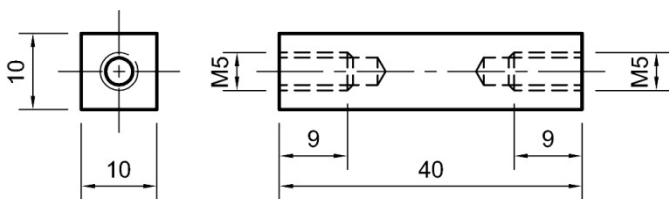


(C)

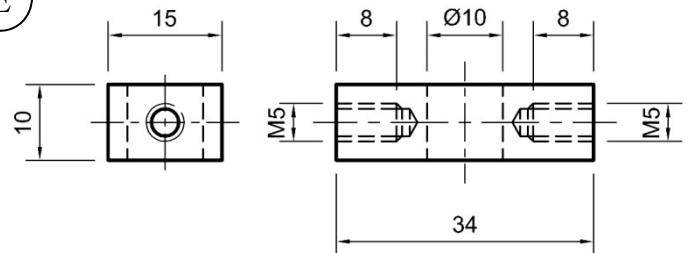


(D)

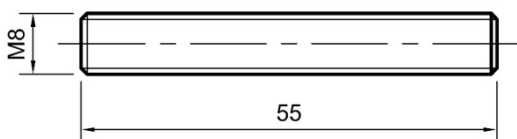
2 OFF



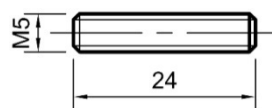
(E)



(F)



(G)





Coimisiún na Scrúduithe Stáit

SCRÚDÚ NA hARDTEISTIMÉIREACHTA, 2017

INNEALTÓIREACHT – SCRÚDÚ PRAITICIÚIL
ARDLEIBÉAL AGUS GNÁTHLEIBÉAL

Treoracha ginearálta d'iarrthóirí

1. Caithfidh tú ábhair a ullmhú agus comhpháirteanna a dhéanamh, de réir liosta na n-ábhar agus na líníochtaí a thaispeántar, roimh an Scrúdú Praiticiúil i mBealtaine 2017.
2. **Saothar dílis de do chuid féin** a chaithfidh a bheith sna hábhair ullmhaithe agus sna comhpháirteanna críochnaithe, agus ba cheart iad a shainaithint go soiléir agus iad a choimeád go sábháilte i dtaisce go dtí lá an scrúdaithe.
3. **Má bhaineann tú úsáid as innealra seachas an t-innealra a luaitear sa liosta trealaimh M74A(ML1) chun páirt ar bith den ábhar scrúdaithe a phróiseáil, caillfidh tú marcanna faoi na ceanteidil chuí sa scéim mharcála.**

Ábhair in aghaidh an iarrthóra		
Ag teastáil	Ábhar	Toisí
1 phíosa amháin	Polacarbónáit thrédhearcach	80 × 52 × 6
2 phíosa	Prás	70 × 57 × 3
2 phíosa	Alúmanam	75 × 40 × 4
1 phíosa amháin	Polacarbónáit thrédhearcach	104 × 56 × 6
1 phíosa amháin	Barra Alúmanaim	Chun páirt A a dhéanamh
1 phíosa amháin	Barra Alúmanaim	Chun páirt B a dhéanamh
1 phíosa amháin	Barra Alúmanaim	Chun páirt C a dhéanamh
2 phíosa	Alúmanam	Chun páirt D a dhéanamh
1 phíosa amháin	Alúmanam	Chun páirt E a dhéanamh
1 phíosa amháin	Barra Snáithithe, M8	Chun páirt F a dhéanamh
1 phíosa amháin	Barra Snáithithe, M5	Chun páirt G a dhéanamh
6 Scriú meaisín, Ceann Cnaipe Allen	Prás nó cruach	M5 × 12
1 Scriú meaisín, Ceann Cnaipe Allen	Prás nó cruach	M5 × 16
1 Scriú meaisín, Ceann Cnaipe Allen	Prás nó cruach	M5 × 30
1 Chnó amháin + Leicneán	Prás nó cruach	M8

Nóta: Is toisí críochnaithe iad na toisí i gcló trom.

Nótaí: Caithfear na compháirteanna seo a leanas a dhéanamh roimh an Scrúdú Praiticiúil agus saothar dílis de do chuid féin a chaithfidh a bheith iontu.

Is é atá i gceist le saothar dílis de do chuid féin ná an saothar praiticiúil go léir a bhaineann leis na compháirteanna a dhéanamh sa scoil faoi mhaoirseacht an mhúinteora.

Má bhaineann tú úsáid as innealra seachas an t-innealra a luaitear sa liosta trealaimh M74A(ML1) chun páirt ar bith den ábhar scrúdaithe a phróiseáil, caillfidh tú marcanna faoi na ceanteidil chuí sa scéim mharcála.

Caithfidh Páirt A gabháil go néata i bPáirt E agus caithfidh sí rothlú go saorálach.

Caithfidh Páirt C rothlú go saorálach i bpoll druileáilte Ø8.

