



Coimisiún na Scrúduithe Stáit
State Examinations Commission

Leaving Certificate Examination, 2016

Design & Communication Graphics
Ordinary Level

Section A (60 marks)

Wednesday, 22 June
Afternoon, 2:00 - 5:00

This examination is divided into three sections:

- SECTION A (Core - Short Questions)
 SECTION B (Core - Long Questions)
 SECTION C (Applied Graphics - Long Questions)

- SECTION A**
- Four questions are presented.
 - Answer **any three** on the A3 sheet overleaf.
 - All questions in Section A carry **20 marks** each.

- SECTION B**
- Three questions are presented.
 - Answer **any two** on drawing paper.
 - All questions in Section B carry **45 marks** each.

- SECTION C**
- Five questions are presented.
 - Answer **any two** (i.e. the options you have studied) on drawing paper.
 - All questions in Section C carry **45 marks** each.

General Instructions:

- *Construction lines must be shown on all solutions.*
- *Write the question number distinctly on the answer paper in Sections B and C.*
- *Work on one side of the drawing paper only.*
- *All dimensions are given in metres or millimetres.*
- *Write your Examination number in the box below and on all other sheets used.*

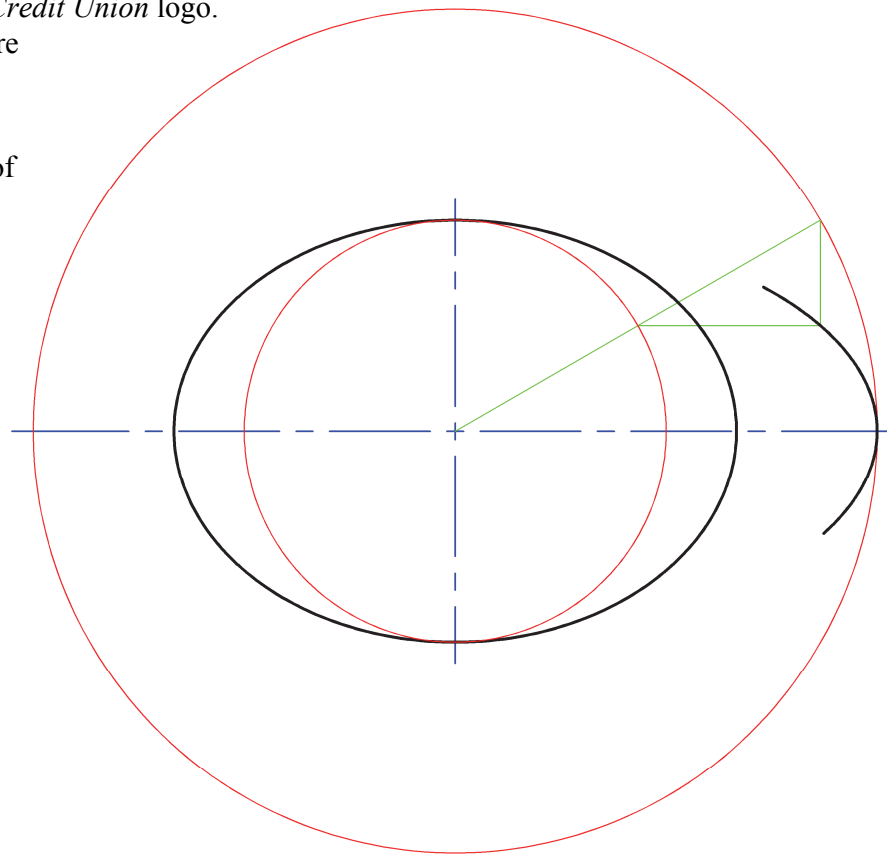
Examination Number:

SECTION A - Core - Answer any three of the questions on this A3 sheet.

A-1. The graphic below shows the *Irish Credit Union* logo. It consists of two ellipses which share the same minor axis.

The drawing on the right shows the completed inner ellipse. A portion of the second ellipse is also drawn.

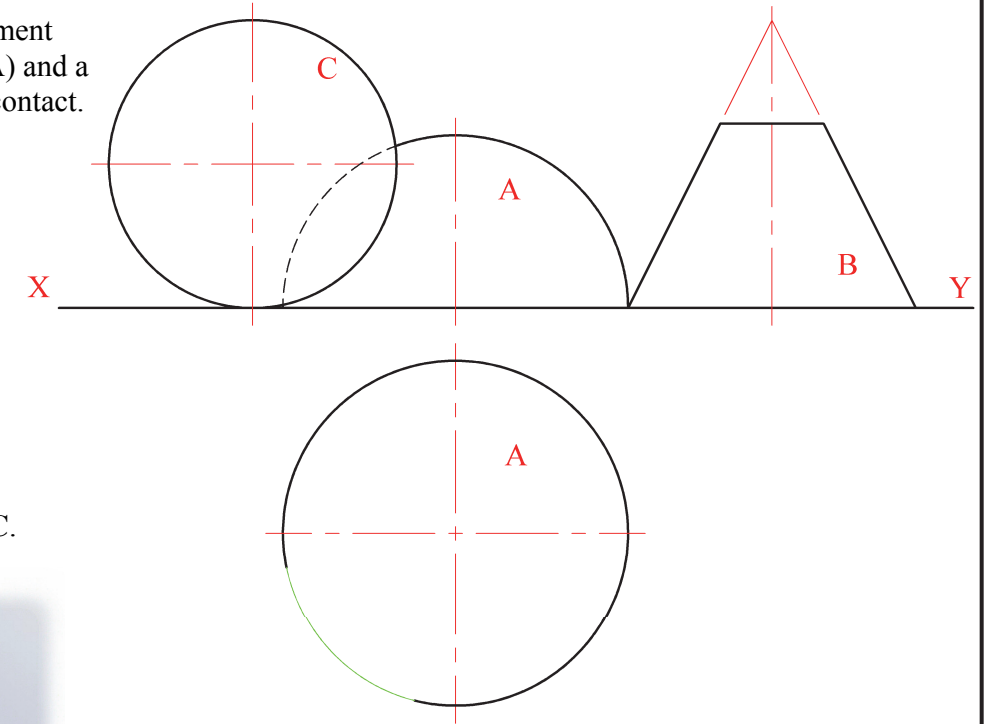
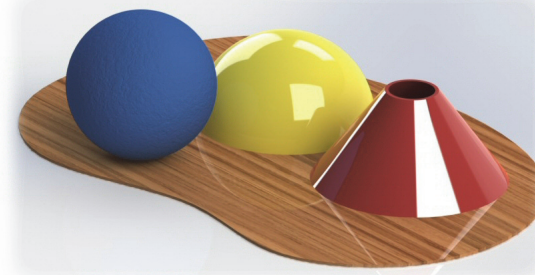
- (a) Locate additional points on the curve and draw the second ellipse.
- (b) Locate the focal points of the second ellipse.



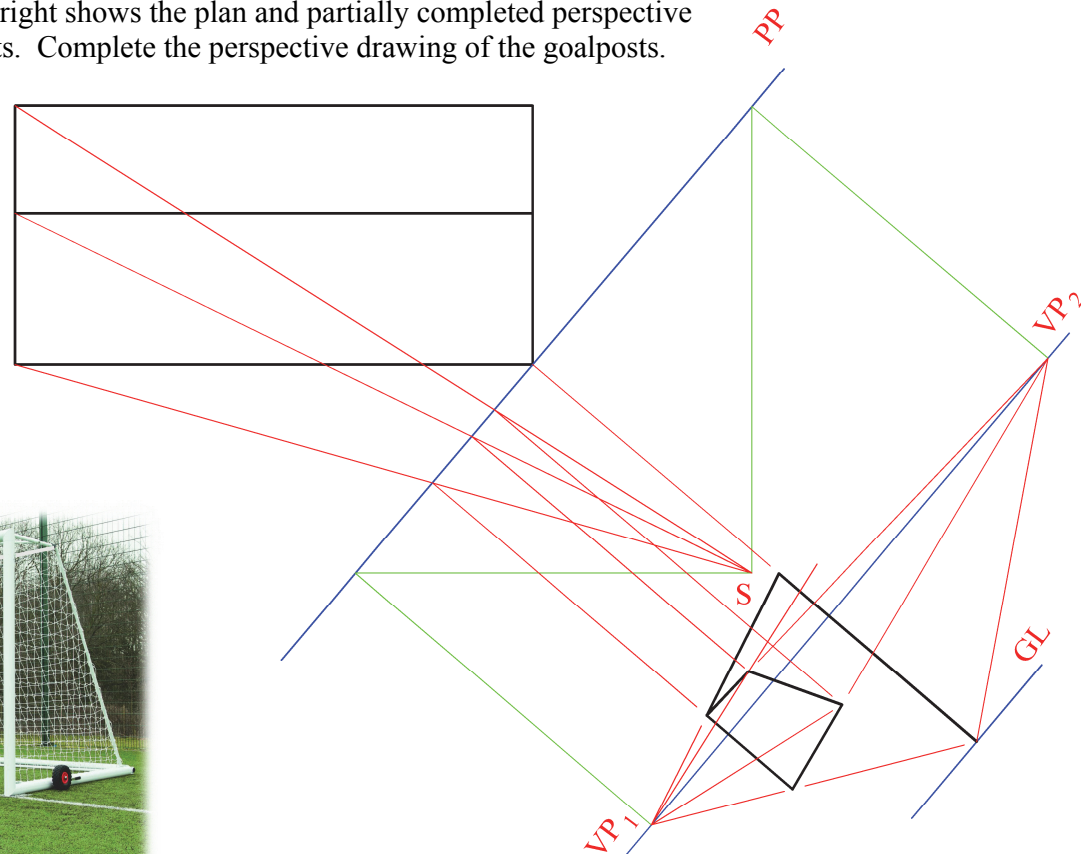
A-3. The 3D graphic of gym equipment below, shows a hemisphere (A) and a truncated cone (B) in mutual contact. A sphere (C) is also shown in contact with the hemisphere. All three rest on the floor.

The drawing on the right shows the elevation and partially completed plan of the gym equipment.

- (a) Draw the plan of the truncated cone B.
- (b) Draw the plan of sphere C.

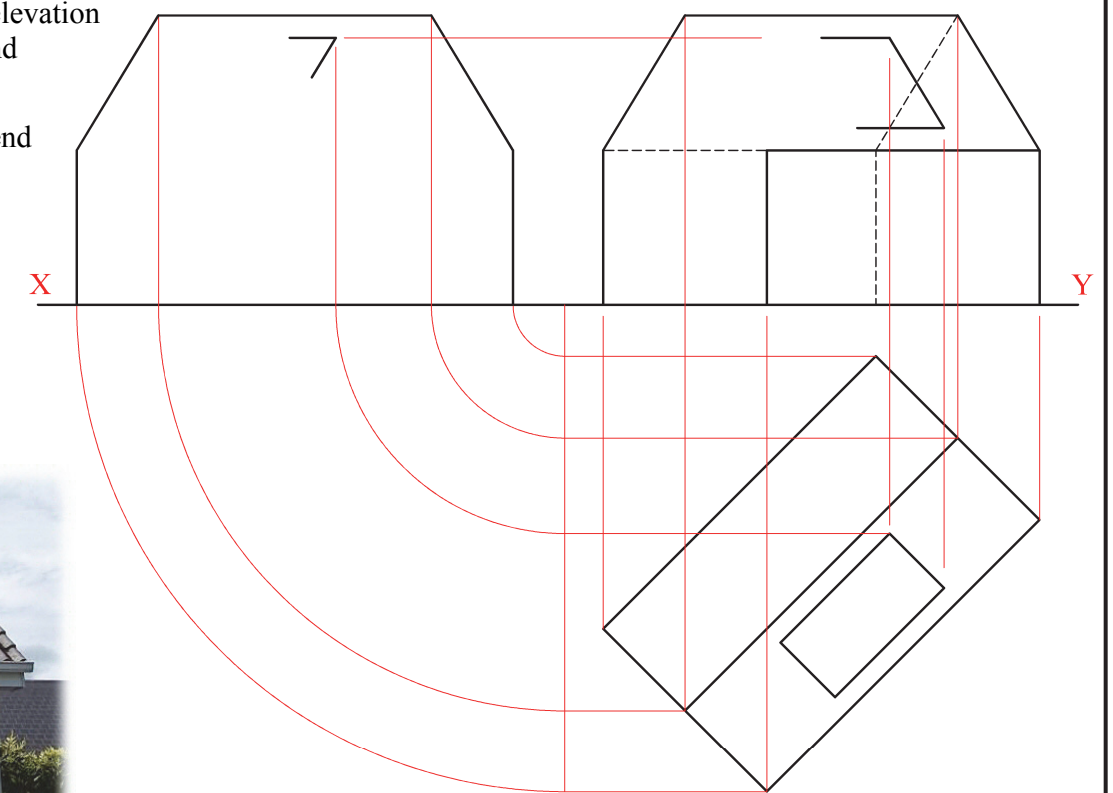


A-2. The 3D graphic below shows a set of goalposts similar to those used in the *UEFA* championship. The drawing on the right shows the plan and partially completed perspective view of the goalposts. Complete the perspective drawing of the goalposts.



A-4. The image below shows a house with a solar panel located on its roof. The plan, the partially completed elevation and partially completed end view of the house and solar panel are also shown.

- (a) Complete the elevation of the house and solar panel.
- (b) Complete the end view.



This Contour Map is part of Section C and should only be used for the answering of the Geologic Geometry Option (Question C-1).

(Scale 1:1000)

