

General Certificate of Secondary Education 2014

Engineering

Paper 2

Assessment Unit 3

assessing Engineering Technology

[GEE32]

WEDNESDAY 4 JUNE, AFTERNOON





1 hour.

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

Write your answers in the spaces provided in this question paper. Answer **all** parts of the one question in this paper.

The paper should be answered in relation to the Pre-Release Material. You will be provided with a new copy of the Pre-Release Material. You should **not** bring any of the material previously issued, or any notes made into this examination.

INFORMATION FOR CANDIDATES

The total mark for this paper is 40. Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each part question. Quality of written communication is assessed in (g) and (h).

For Examiner's use only				
Question Number	Marks			
(a)				
(b)				
(c)				
(d)				
(e)				
(f)				
(g)				
(h)				
Total Marks				

Centre Number

71

Candidate Number

(a)		Answer all parts of the question.	Examiner Only Marks Remark
	(i)	Name the process used to shape the sides of the Taylor Continental 1100 bin.	
			. [1]
	(ii)	Outline one advantage of this process for the manufacturer.	
			[2]
· · ·		exterior of the Taylor Continental 1100 bin is sprayed using otics. Outline one advantage of using robotics to complete this x.	
-			[2]
(c)	Nan	ne the material that the Taylor Continental 1100 bin is made from	n.
-			[1]
(d) ((i)	The body of the Taylor Continental 1100 bin is hot dipped galvanised. Explain the term galvanise.	
			[2]
	(ii)	Outline one advantage of carrying out this process on the Tayl Continental 1100 bin.	or

(e)	Computer Aided Design (CAD) is used extensively throughout the design process in preparation for the manufacture of the Taylor Continental 1100 bin. Outline two advantages of using CAD during the design process.				
	1.				
			[2]		
	2.				
			[2]		
(f)	(i)	Standard components are used in the fabrication of this Taylor Continental 1100 bin. Give two examples of standard components that are used in its construction.	ents		
		1.	[1]		
		2.	[']		
			[1]		
	(ii)	Outline two advantages of using standard components for the manufacturer.			
		1.			
			[2]		
		2.			
			[2]		

(g) In the box below using annotated sketches and the correct terminology show how the lid of the Taylor Continental 1100 bin is attached and hinged.

Marks will be awarded for

- Detail contained in sketches [4]
- Quality of sketches [3]
- Detailed notes [3]

[10]

Examiner Only

Marks Remark

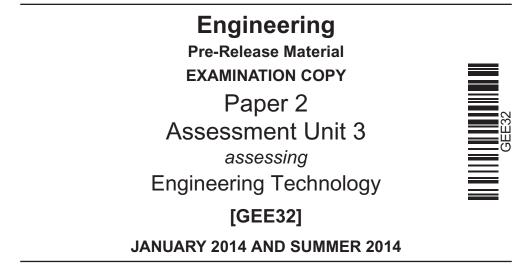
(h) In the box below using annotated sketches and the correct Examiner Only terminology demonstrate how the lid of the Taylor Continental 1100 bin Marks Remark is manufactured. Marks will be awarded for Detail contained in sketches [4] Quality of sketches [3] Detailed notes [3]

THIS IS THE END OF THE QUESTION PAPER

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You must use **this** clean copy of the Pre-Release Material in the examination and **not** your own annotated copy.



Engineering Technology Pre-Release Material

The image below shows a Taylor Continental 1100 bin.



© Copyright Taylor Bins 2010-2012. Reproduced by permission of Egbert H. Taylor & Co Ltd.

Description

Built to EN840 standards the award-winning Continental range is established as the industry standard for waste and recycling containers. This workhorse of the waste industry offers unrivalled size and capacity options, from 500 litres to 1280 litres. The body of the bin ensures robust protection in the harshest of environments, and protects the container from internal corrosion due to residual waste being caught in exposed corners.

Features include:

- Swivel castors.
- Available in different sizes.
- Welded seams.
- Sump base for improved rigidity and stability with drain plug as standard.
- Comb lifting bar.

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