

Cambridge National in Engineering

OCR Engineering Design Unit R106

Unit Recording Sheet

Please read the instructions printed at the end of this form. One of these sheets, suitably completed, should be attached to the assessed work of each candidate.

Unit Title Product	analysis ar	nd re	search		Unit Code	R106	Series Jan / June	Year	2	0		
Centre Name							Centre Number					
Candidate Name						Candidate Numbe	r					
Marking Criteria – Total Marks for this unit is 60												
Mark Band 1			Mark Band 2 Mark Band 3			Teacher Comment				Page		
LO1: Know how commercial production methods, quality and legislation impact on the design of products and components									lark			
Demonstrates limited knowledge of how commercial production methods and manufacturing processes impact on product/component design. Basic description of how product end of life considerations can influence product/component design. Demonstrates a limited knowledge of the importance of conformity to legislation and standards 1 – 4 marks		ods pact end e ge	Demonstrates some knowledge of how commercial production methods and manufacturing processes impact on product/component design. Describes in some detail how product end of life considerations can influence product/component design. Demonstrates a sound knowledge of the importance of conformity to legislation and standards 5 – 8 marks	Demonstrates det how commercial p and manufacturing product/componer Comprehensively product end of life influence product/o Demonstrates det the importance of and standards	roduction metho processes imp at design. describes how considerations component desi ailed knowledg conformity legis	ods pact on / can ign. e of	n					
LO2: Be able to research existing products												
Provides a basic des strengths and weakne products.		sting	Provides an adequate description of strengths and weaknesses of existing products.	Provides a compr of strengths and w products.			- Mark					
Uses few appropriate methods to provide a brief summary of research of existing products.			Uses some appropriate methods to provide a detailed summary of research of existing products.	Uses appropriate methods to provide a comprehensive and detailed summary of research of existing products.								
	1 – 6 ma	arks	7 – 12 marks		13 –18	marks						

LO3: Be abl	Teacher Commen	t Page		
Requires regular assistance to follow manufacturer's instructions/manual /disassembly procedure. Requires prompting to follow special instructions.	Works competently with occasional assistance to follow manufacturer's instructions/manual/disassembly procedure, mostly adhering to special instructions.	Works independently and competently to follow manufacturer's instructions/manual /disassembly procedure, adhering to special instructions.	Ν	/ark
With guidance uses tools and equipment safely and shows limited awareness of potential hazards and safety considerations.	Uses tools and equipment effectively and shows some understanding of potential hazards and safety considerations.	Uses tools and equipment effectively and shows a well-developed understanding of potential hazards and safety considerations.		
Draws upon limited skills/knowledge/ understanding from other units in the specification (Unit R105).	Draws upon some relevant skills/knowledge/ understanding from other units in the specification (Unit R105).	Clearly draws upon relevant skills/knowledge/ understanding from other units in the specification (Unit R105).		
1 – 6 marks	7 – 12 mark	s 13 – 18 marks		
Carries out a limited analysis of an existing product showing a basic understanding of some components, assembly methods, materials, production methods and maintenance. 1 – 4 marks	Carries out a detailed analysis of an existing product showing an adequate understanding of components, assembl methods, materials, production methods and maintenance. 5 – 8 mark	s components, assembly methods, materials, production methods and maintenance.	Ν	Nark
			Total/60	
If this work is a re-sit, please tick Sess	on and Year of previous submission Jan / Ja	une 2 0 Please tick to indicate this work h	as been standardised internally	y

Guidance on Completion of this Form

Please note: This form may be updated on an annual basis. The current version of this form will be available on the OCR website (www.ocr.org.uk).

Guidance on Completion of this Form

- 1 **One** sheet should be used for each candidate.
- 2 Please ensure that the appropriate boxes at the top of the form are completed.
- 3 Please enter *specific* page numbers where evidence can be found in the portfolio, and where possible, indicate to which part of the text in the mark band the evidence relates.
- 4 Circle the mark awarded for each strand of the marking criteria in the appropriate box and enter the circled mark in the final column.
- 5 Add the marks for the strands together to give a total out of 60 Enter this total in the relevant box.

R106/URS