

Design and Technology

Sixth Form Examination 2015

Mark Scheme

Q1a	Meeting the Requirements		
QIA	Show consideration for the following points:	1 mark for each point	
	It must be able to support a range of different	1 mark for each point	
	types of bicycle;		
	It must be unobtrusive when not in use;		
	It must be secure when bicycles are locked to it;		
	It must be safe;		
	It must be suit the environment where it is being		
	used;		
	It must be robust;		
	It must be easy to maintain;		
	It must be aesthetically pleasing;		
	It must be suitable for batch production	5 x 1 marks	Max 5 marks
Q1a	A range of ideas		
	A repeat idea	0 marks	
	A simple idea	1 mark	
	An idea style displaying creativity or with	2 marks	
	additional design features		
		Up to 5 x 2 marks	Max 10 marks
Q1a	Quality of Drawings		
	Simple 2D line drawings only	0-2 marks	
	Detailed 2D Drawings only	3-4 marks	
	Isometric drawings only	5-6 marks	
	Detailed, rendered isometric drawings		
	demonstrating well balanced proportions and	7-8 marks	
	sensitive line work.		
	A sophisticated combination of different types of	9-10 marks	
	drawings with appropriate layout and		
	presentation techniques.		Max 10 marks
Q1a	Annotation	T	1
	Simple labels of features apparent in the drawing.	0-1 mark	
	Descriptive terms indicating features not		
	immediately apparent.	2-3 marks	
	Pertinent evaluative comments addressing the	4.5	
	success of the proposals against the brief.	4-5 marks	Max 5 marks Sub-total 30 marks
			Sub-total 50 marks
Q1b	Selection of processes	T	
	Simple feasible process	Up to 2 marks	
	Outline of process(es) for manufacture reflecting		
	materials chosen and scale of production.	3-4 marks	
	Detailed explanation of construction and finishing		
	processes reflecting materials chosen and scale of	E	NA - 5
	production.	5 marks	Max 5 marks
Q1b	Selection of materials		

	Simple generic terminology (eg. wood metal,	0			
	Plastic).	0 marks			
	Specific named materials and finishes.	1-3 marks			
	Specific named materials and finishes				
	sympathetically selected and justifications given				
	for their use.	4- 5 marks	Max 5 marks		
Q1b	1b Dimensioning				
	Basic dimensions given for length, width and thickness. Consideration of detailed dimensioning including material thicknesses and stock materials.	3 x 1 mark			
01h	Ovality of drawing	4-5 marks	Max 5 marks		
Q1b	Quality of drawing	T	T		
	Detailed 2D Drawings only	0-2 marks			
	Isometric drawings only	3-4 marks			
	Rendered isometric drawings indicating				
	constructional details.	5-6 marks			
	A sophisticated combination of different types of				
	drawings showing hidden detail and exploded	7.40			
	views.	7-10 marks	Max 10 marks		
Q1b	Use of appropriate components		_		
	Use of generic terms	0-1 mark			
	Specific named components				
	Specific named components with details of	2-3 marks			
	materials appropriate to use		Max 5 marks		
		4-5 marks			
			Sub-total 30 marks		
			Total 60 marks		