



EXAMINATIONS COUNCIL OF ESWATINI
Eswatini General Certificate of Secondary Education

DESIGN AND TECHNOLOGY

6902/01

Paper 1 **Design**

October/November 2019

1 hour 15 minutes

Confidential

MARK SCHEME

{6902/01}

MARKS: 50

This document consists of 4 printed pages.

- 1 (a) Accept any four additional suitable points – resists water, hygienic, easy to access, sections labelled, matches kitchen style, stable in use, etc. No repeats of question.
1 x 4 [4]
- (b) Accept sketches of any **two** suitable joints – halving, through/stopped housing, riveting, butt, hard soldering, dowel, plastic adhesives dovetail, etc. 2 x 2 [4]
- (c) Any suitable ideas. At least **three different** ideas for maximum marks. Pro rata if fewer.
- Communication**
- Simple drawings displaying a low standard or limited range of techniques 0 - 2
- Clear drawings displaying a good standard and a range of techniques – shading / colour / annotation etc. 3 - 4
- High quality drawings using a wide range of techniques with clear annotation and detail 5 - 6
- Suitability**
- Simplicity designs showing outlines only 0 - 2
- Rather more detail, sensible solutions that could work 3 - 4
- Accurate solutions, good fitness for purpose, detailed construction 5 - 6 [12]
- (d) Evaluation of each of the ideas. At least 3 evaluations up to 2 marks each 0 - 6
- Selection and justification (1 + 1) 2 [8]
- (e) **Quality of drawing**
- Poor line quality, proportions, little detail 1
- Good line work, use of colour, proportions, some detail 2 - 3
- High standard throughout with a range of techniques that show clearly all detail 4
- Dimensions** 2 or 3 overall dimensions only (1)
- Additional detail dimensions (2) 2
- Construction details**
- A simplistic approach showing little or no detail of construction to be used 0 - 2
- Most constructional detail may be obvious from overall views or with some annotation 3 - 4
- All constructional detail will be clear with good annotation and additional detail drawings as necessary 5 - 6 [12]
- (f) Suitable **specific** materials stated 2
- Appropriate reason for choice 2 [4]
- (g) Suitable method stated 1
- Good detailed description of: processes 3
- tools 2 [6]

[Total: 50]

- 2 (a) Accept any **four** additional suitable points – appeals to pupils, compact, stable on desk, school colours, school name, hold items securely, etc. No repeats of questions. 1 x 4 [4]
- (b) Accept sketches of any **two** suitable joints - glue tabs, slide-in corner sections, slots, Velcro, staples, tape, etc. 2 x 2 [4]
- (c) Any suitable ideas. At least **three different** ideas for maximum marks. Pro rata if fewer.
- Communication**
- Simple drawings displaying a low standard or limited range of techniques 0 - 2
- Clear drawings displaying a good standard and a range of techniques - shading / colour / annotation etc. 3 - 4
- High quality drawings using a wide range of techniques with clear annotation and detail 5 - 6
- Suitability**
- Simplicity designs showing outlines only 0 - 2
- Rather more detail, sensible solutions that could work 3 - 4
- Accurate solutions, good fitness for purpose, detailed construction 5 - 6 [12]
- (d) Evaluation of each of the ideas. At least 3 evaluations up to 2 marks each 0 - 6
- Selection and justification (1 + 1) 2 [8]
- (e) **Quality of drawing**
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- All constructional detail will be clear with good annotation and additional detail drawings as necessary 5 - 6 [12]
- (f) Suitable **specific** materials stated 2
- Appropriate reason for choice 2 [4]
- (g) Suitable method stated 1
- Good detailed description of: processes 3
- tools 2 [6]

[Total: 50]

3 (a)	Accept any four additional suitable points - easy to assembly, lightweight, stable in use, easy to attach net, holds net tightly etc. No repeats of question.	1 x 4	[4]
(b)	Accept any two suitable attachments - eye pins, pulleys, sleeves, nut and set screws, crank, rack and pinion gears, etc.	2 x 2	[4]
(c)	Any suitable ideas. At least three different ideas for maximum marks. Pro rata if fewer.		
	Communication		
	Simple drawings displaying a low standard or limited range of techniques	0 - 2	
	Clear drawings displaying a good standard and a range of techniques - shading / colour / annotation etc.	3 - 4	
	High quality drawings using a wide range of techniques with clear annotation and detail	5 - 6	
	Suitability		
	Simplicity designs showing outlines only	0 - 2	
	Rather more detail, sensible solutions that could work	3 - 4	
	Accurate solutions, good fitness for purpose, detailed construction	5 - 6	[12]
(d)	Evaluation of each of the ideas. At least 3 evaluations up to 2 marks each	0 - 6	
	Selection and justification (1 + 1)	2	[8]
(e)	Quality of drawing		
	Poor line quality, proportions, little detail	1	
	Good line work, use of colour, proportions, some detail	2 - 3	
	High standard throughout with a range of techniques that show clearly all detail	4	
	Dimensions		
	2 or 3 overall dimensions only (1)		
	Additional detail dimensions (2)	2	
	Construction details		
	A simplistic approach showing little or no detail of construction to be used	0 - 2	
	Most constructional detail may be obvious from overall views or with some annotation	3 - 4	
	All constructional detail will be clear with good annotation and additional detail drawings as necessary	5 - 6	[12]
(f)	Suitable specific materials stated	2	
	Appropriate reason for choice	2	[4]
(g)	Suitable method stated	1	
	Good detailed description of: processes	3	
	tools	2	[6]
			[Total: 50]