

Candidate 7

Section 1

Question 1(a)

The candidate was awarded **5 marks**.

- ◆ 'ABS is suitable for the footrest as its scratch resistant'
- ◆ 'Aluminium is suitable for the frame as its lightweight so it will be easier to push around'
- ◆ 'Nylon is suitable for... self lubricating'
- ◆ 'Mild steel is suitable... tough so a sudden impact won't damage the product.'
- ◆ 'Nylon is suitable for...durable so it can be used repeatedly without breaking which prolongs the products lifespan.'

Question 1(b)

The candidate was awarded **4 marks**.

- ◆ 'Extrusion moulding could be used for the mild steel frame'
- ◆ 'hollow and is the same shape continuously'
- ◆ 'the Nylon wheels could have been injection moulded'
- ◆ 'intricate shape'

Question 1(c)

The candidate was awarded **4 marks**.

- ◆ 'handels have been added...push it from behind.'
- ◆ 'material for the Paralympic...go stiff mid game.'
- ◆ 'easily collapsed to make it easier to move or store'
- ◆ 'the wheels on the paralympic wheelchair are tilted in, this is to stop it from falling over'

Alternative marks could have also been awarded for:

- ◆ 'A smaller circle...wheelchair to push themselves.'

(No marks would be awarded for the user's legs dragging on the ground. The candidate would have to mention the user's feet to gain a mark).

Question 1(d)

The candidate was awarded **2 marks**.

- ◆ 'using standard components...bought in bulk'
- ◆ 'If the wrong part is delivered or its the wrong size it can completely halt production'

Question 1(e)

The candidate was awarded **3 marks**.

- ◆ 'the width of the seat...for hip width.'
- ◆ 'the size of the hand grips...can use it confirtably.'
- ◆ 'the materials used...as its not heavy'

Section 2**Question 2(a)**

The candidate was awarded **0 marks** because they do not answer the question.
(*No marks would be awarded for mass manufactured*).

Question 2(b)

The candidate was awarded **1 mark**.

- ◆ 'Acrylic could be used as it is transparent'

Question 2(c)

The candidate was awarded **2 marks**.

- ◆ 'What material is going to be used to make the product'
- ◆ 'how much is it going to cost to use the system'

Question 3(a)

The candidate was awarded **1 mark**.

- ◆ 'aspect can be easily changed on the model quickly.'

Question 3(b)

The candidate was awarded **2 marks**.

- ◆ 'Customer loyalty'
- ◆ 'if your company has a good reputation it will attract new customers to the product.'

Question 3(c)

The candidate was awarded **1 mark**.

- ◆ 'copywrited'

Question 3(d)

The candidate was awarded **0 marks** because they do not answer the question.

Question 4(a)

The candidate was awarded **3 marks**.

- ◆ 'the black and blue colour scheme creates a contrast making it stand out'

- ◆ 'there is a pattern...finger should go'
- ◆ 'Unity is created by the use of orange on the logo and orange on the other side of the razor.'

Question 4(b)

The candidate was awarded **5 marks**.

- ◆ 'sketch model'
- ◆ 'made very quickly...product may look like'
- ◆ 'Prototype'
- ◆ 'show to the client how the product will look and how it works.'
- ◆ 'test if there is anything wrong with the design.'

Question 5(a) (i)

The candidate was awarded **1 mark**.

- ◆ 'it will tell them information like target market'

Question 5(a) (ii)

The candidate was awarded **1 mark**.

- ◆ 'what materials, parts, processes will and wont work'

Question 5(b)

The candidate was awarded **1 mark**.

- ◆ 'similar products to see what standard, price etc is suitable'

Question 5(c)

The candidate was awarded **4 marks**.

- ◆ 'they could use recycled materials.'
- ◆ 'they could use bio-degradable packaging.'
- ◆ 'could use theroplastics so the material can be reused.' (using materials than can be recycled)
- ◆ 'Make the product out of more sustainable materials.'

Question 6(a)

The candidate was awarded **1 mark**.

- ◆ 'heat it up to test if its a thermo plastic or a thermo set plastic'

Question 6(b)

The candidate was awarded **2 marks**.

- ◆ 'items can easily be put together and to make sure it's in properly'

- ◆ 'ribs/webs are used to give location pins extra support'

Question 6(c)

The candidate was awarded **2 marks**.

- ◆ 'show the consumer how the product fits together'
- ◆ 'show the consumer who made the product.'

Question 7

The candidate was awarded **6 marks** because they displayed secure knowledge and understanding of how graphics can be used during the design process. Clear reference was made about different types of graphics and how they are used to support designing.

Total – 51 marks out of 80