

Candidate 4

Section 1

Question 1(a)

The candidate was awarded **6 marks**.

- ◆ 'ABS is used...scratch resistant.'
- ◆ 'It is also strong therefore it can hold a lot of weight.'
- ◆ 'Tubular mild steel...easier to transport.'
- ◆ 'It is easy to clean due to the smooth finish.'
- ◆ 'Stainless steel is also corrosion resistant.'
- ◆ 'Nylon is used...self-lubricating'

Question 1(b)

The candidate was awarded **6 marks**.

- ◆ 'Extrusion could be used for the mild steel frame'
- ◆ 'cross section and has a constant wall thickness.'
- ◆ 'piercing and blanking could be used to create the holes needed'
- ◆ 'accurate way of creating holes.'
- ◆ 'repeatability'

Additional marks could have also been awarded for:

- ◆ 'Injection moulding could be used for the wheels'
- ◆ 'intricate detail.'
- ◆ 'Sewing/stitching could be used for the nylon seat.'

Question 1(c)

The candidate was awarded **4 marks**.

- ◆ 'collapsible and therefore it is easy for public to store'
- ◆ 'padded arm rest for comfort where everyday use is a factor'
- ◆ 'bumpers in order to protect the user from collisions.'
- ◆ 'smaller front wheels to aid the fast paced turning which makes it easier to turn due to smaller surface area'

Question 1(d)

The candidate was awarded **3 marks**.

- ◆ 'production of the chair would also be much faster as there is less parts needed to make.'
- ◆ 'need bought from a sub-contractor which may be more expensive in the long run.'

- ◆ 'may be slow in shipping the parts so production would become late.'

Question 1(e)

The candidate was awarded **4 marks**.

- ◆ 'The width of the gap...in order to turn the wheel'
- ◆ 'wheel must be easy to reach'
- ◆ 'sit at correct posture to maximise comfort.'
- ◆ 'easy to operate with ease of turning the wheel and turning left or right.'

Additional marks could have also been awarded for:

- ◆ 'easy to adjust the footrests with buttons being easy to push.'

Section 2

Question 2(a)

The candidate was awarded **1 mark**.

- ◆ 'repeatable process'

Question 2(b)

The candidate was awarded **1 mark**.

- ◆ 'chemical resistant and can be cleaned easily.'

Question 2(c)

The candidate was awarded **1 mark**.

- ◆ 'Cost also may change... cheap and easy to run'.

Question 3(a)

The candidate was awarded **2 marks**.

- ◆ 'no waste of material.'
- ◆ 'can be sent to the client within seconds to check if they are happy with the design.'

Question 3(b)

The candidate was awarded **2 marks**.

- ◆ 'strong brand image... on past experiences.'
- ◆ 'ensures quality of a product if a brand has a good reputation.'

Additional marks could have also been awarded for:

- ◆ 'self promotion and people are likely to recommend the product to friends and family.'

Question 3(c)

The candidate was awarded **2 marks**.

- ◆ 'trademark'
- ◆ 'protect the use of their logo.'

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 texture of the gillette razor... in texture' (Contrast in texture)
- ◆ 'The gillette logo...in colour' (Contrast in colour)
- ◆ 'blue handle of the razor harmonises with the blue rubber strip across the blades.'

Note: contrast is awarded twice as it deals with two different aspects.

Question 4(b)

The candidate was awarded **2 marks**.

- ◆ 'CAD modelling'
- ◆ 'moved and simulated to see if it would work.'

Question 5(a) (i)

The candidate was awarded **2 marks**.

- ◆ 'what the design must include'
- ◆ 'certain type of texture or colour... move and operate.'

Question 5(a) (ii)

The candidate was awarded **2 marks**.

- ◆ 'how the product would be made'
- ◆ 'what materials and how many parts would be needed.'

Question 5(b)

The candidate was awarded **1 mark**.

- ◆ 'Focus groups... controlled environment'

Question 5(c)

The candidate was awarded **4 marks**.

- ◆ 'could use recycled materials'
- ◆ 'easier to stack... need to transport them.'
- ◆ 'begin production nearer the place of sale to lower the amount of travel between shops.'
- ◆ 'use materials that are recyclable.'

Additional marks could have also been awarded for:

- ◆ 'sustainable source'
- ◆ 'use plastic or material logos to make the recycling process easier.'

Question 6(a)

The candidate was awarded **1 mark**.

- ◆ 'Material logos and numbers could be used to tell what a material is.'

Question 6(b)

The candidate was awarded **0 marks** because they do not attempt to answer the question – no response.

Question 6(c)

The candidate was awarded **2 marks**.

- ◆ 'makes the item easier to re-cycle'
- ◆ 'It lets them know what is being used and therefore if the company is environmentally friendly.'

Additional marks could have also been awarded for:

- ◆ 'allows them to understand the material and what it is capable of such as being heat resistant or not'
- ◆ 'safe to wash and re-use and if it is chemical resistant.'

Question 7

The candidate was awarded **3 marks** because they displayed adequate knowledge and understanding of how graphics can be used during the design process. Some reference was made about different types of graphics and how they are used to support designing.

Total – 52 marks out of 80