

# Commentary on candidate evidence

## Candidate 6

The candidate was awarded a total of **56 marks**.

### Section 1

#### Question 1(a)

The candidate was awarded **4 marks** for the following responses:

- 'stainless steel frame...strength...carry many items without breaking'
- 'stainless steel shelves...corrosion resistant'
- 'ABS...scratch-resistant...will not be marked when heavy/sharp tools are placed onto it'
- 'polypropylene...chemical-resistant...easily cleaned'

#### Question 1(b)

The candidate was awarded **5 marks** for the following responses:

- 'Injection moulding...ABS shelves and handles'
- 'intricate detail'
- 'extrusion...stainless steel frame'
- 'piercing...mild steel panel'
- 'as it is a sheet'

#### Question 1(c)

The candidate was awarded **5 marks** for the following responses:

- 'handles contain pattern/texture to increase grip'
- 'shelves have dookets to store smaller parts'

- 'wire to prevent things falling off'
- 'swivel wheels to allow them to be easily portable'
- 'hooks allow for additional tools to be stored'

### Question 1(d)

The candidate was awarded **1 mark** for the following responses:

- 'Relying on another company...may introduce problems'

### Question 1(e)

The candidate was awarded **3 marks** for the following responses:

- 'allows different features to be tested'
- 'allows designers to get proportions'
- 'allows designers to visualise the final outcome'

## Section 2

### Question 2(a)

The candidate was awarded **3 marks** for the following responses:

- 'ABS'
- 'scratch-resistant...helmet will stay looking new'
- 'chemical-resistant...can be cleaned when necessary'

### Question 2(b)

The candidate was awarded **3 marks** for the following responses:

- 'Fit a variety of people so adjustable straps and support has been added'
- 'primary colours to attract them and catch their eye'
- 'strap / clip needs to be straightforward...need to be able to use it themselves'

**Question 2(c)**

The candidate was awarded **1 mark** for the following responses:

- 'User trial...member of the target market to test and then give feedback'

**Question 3(a)**

The candidate was awarded **1 mark** for the following responses:

- 'designer to have creative freedom'

**Question 3(b)**

The candidate was awarded **2 marks** for the following responses:

- 'needs/wants of the target market' (purpose)
- 'ergonomic sizes' (type of information)

**Question 3(c)**

The candidate was awarded **3 marks** for the following responses:

- 'group activity...designated writer' (linked to get mark) (stage)
- 'none seen as silly and all are written down' (stage)
- 'a number of different ideas in a short amount of time' (help ideas)

**Question 3(d)**

The candidate was awarded **4 marks** for the following responses:

- 'Rough sketches...produce lot of ideas quickly'
- '2D/3D sketches...to add more detail'
- 'CAD...to present ideas to a client'
- 'Orthographic...to create a detailed plan for the manufacturer to follow'

**Question 4(a)**

The candidate was awarded **1 mark** for the following responses:

- 'special deals (Buy one get one free)'

**Question 4(b)**

The candidate was awarded **1 mark** for the following responses:

- 'Put on a sale and introduce deals'

**Question 5(a)**

The candidate was awarded **5 marks** for the following responses:

- 'force needed to open the door...opened without strain'
- 'relatively lightweight...can be moved or stored easily'
- 'grip diameter of human hand...thickness of the handle'
- 'width of fingertip...width of the buttons'
- 'width of the hand...width of the handle gap'

**Question 5(b)**

The candidate was awarded **2 marks** for the following responses:

- 'handheld vacuums...people needed lightweight and easily stored ones'
- 'phone cases...need to stay up-to-date with current trends'

**Question 5(c)**

The candidate was awarded **1 mark** for the following responses:

- 'competitor products will be slightly different as they cannot fully copy your design'

### Question 6(a)

The candidate was awarded **3 marks** for the following responses:

- 'weight – some metals look extremely similar...aluminium is much lighter than steel'
- 'metals have a distinct colour...brass is a yellowy colour and copper is an orangey / brown colour'
- 'Thermoplastic such as polypropylene will melt and change shape when heat is applied however a thermosetting plastic such as Urea Formaldehyde will remain the same shape'

### Question 6(b)

The candidate was awarded **1 mark** for the following responses:

- 'thin walls'

### Question 6(c)

The candidate was awarded **4 marks** for the following responses:

- 'track the progress...throughout the design & manufacture process'
- 'maintain good timekeeping'
- 'prevent overflow in storage'
- 'keeps the process flowing productively'

### Question 7

The candidate was awarded **3 marks**. This question is marked holistically and the marks awarded are for the overall response rather than individual points made. In terms of assessing knowledge of how consideration of the environment impacts products, this candidate has demonstrated adequate knowledge and has given a response which gives some range of environmental aspects with little evidence of depth of knowledge.