# **Candidate 2**

The candidate was awarded a total of 23 marks.

# Section 1

#### Question 1(a)

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

◆ 'rubber handles ... comfort and grip strength'

#### Question 1(b)

The candidate was awarded 2 marks for the following responses:

- 'injection moulding with the polypropylene and ABS seatings.'
- 'allowing it to also feature a textured pattern.'

### Question 1(c)

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

♦ 'The physiology of the Playground sand digger ... not be uncomfortably close to the controls.'

#### Question 1(d)

The candidate was awarded 2 marks for the following responses:

- the playground sand digger ... crash while using it.
- 'two handles both operate different parts ... releasing the substances.'

#### Question 1(e)

The candidate was awarded **0 marks** because they did not attempt the question.

# Section 2

#### Question 2(a)

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

- 'thermo plastic is heat resistant'
- 'can easily be washed'

#### Question 2(b)

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

• 'allows the products to achieve the unique shapes'

### Question 2(c)

The candidate was awarded **0 marks** because they did not refer to any idea generation techniques in their response.

#### Question 3(a)

The candidate was awarded 1 mark for the following response:

the consumer can obtain the components easily'

## Question 3(b)

The candidate was awarded **0 marks** because their response is vague and doesn't demonstrate the required knowledge and understanding.

#### Question 3(c)

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

'labour workers won't receive any work'

#### Question 4(a)

The candidate was awarded 1 mark for the following response:

'3D printing is much quicker than the traditional processes'

#### Question 4(b)

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

 'checking the users measurements to make sure that the product fits their body well.'

#### Question 4(c)(i)

The candidate was awarded 1 mark for the following response:

'colour scheme and target market the product they're designing for needs.'

#### Question 4(c)(ii)

The candidate was awarded 1 mark for the following response:

 'materials and methods the designer should use in the production of the product.'

#### Question 5(a)

The candidate was awarded 3 marks for the following responses:

- 'Involving some nice yellow and silver contrast.'
- ♦ 'The overall design ... hints of modernisation'
- 'The use of curves and triangular shapes also creates nice contrast'

#### Question 5(b)

The candidate was awarded **0 marks** because they did not attempt the question.

#### **Question 6**

The candidate was awarded 2 marks for the following responses:

- 'Ergonomists ... used comfortably and make sure all the products are fit for purpose.'
- 'Market researchers ... research the new trending things in the world to put them into future products'

#### Question 7(a)(i)

The candidate was awarded 1 mark for the following response:

'A burn test is a good method ... what material it is.'

# Question 7(a)(ii)

The candidate was awarded **0 marks** as their response is vague and does not demonstrate knowledge and understanding of manufacturing features used to aid accurate and efficient assembly.

#### Question 7(b)

The candidate was awarded **0 marks** because they're response is vague and doesn't fully describe how manufacturers can reduce their impact on the environment.

#### **Question 8**

The candidate was awarded **1 mark**, which falls in the limited marks range for this question. The candidate refers to sketch models and CAD models in their response. However, their descriptions of both model types are limited with very few points made. They have not demonstrated the required knowledge and understanding of the types of models used at certain stages of the design process and the information that can be gained.