



NCFE Level 1/2 Technical Award in Creative Design and Production (603/7003/8)

Examined Assessment

Paper Number: **Sample Assessment**

Date: **Sample 2022**

Mark Scheme

v1.0 Pre-Standardisation

This mark scheme has been written by the assessment writer and refined, alongside the relevant questions, by a panel of subject experts through the external assessment writing process and at standardisation meetings.

The purpose of this mark scheme is to give you:

- examples and criteria of the types of response expected from a learner
- information on how individual marks are to be awarded
- the allocated assessment objective(s) and total mark for each question.

Marking guidelines

General guidelines

You must apply the following marking guidelines to all marking undertaken. This is to ensure fairness to all learners, who must receive the same treatment. You must mark the first learner in exactly the same way as you mark the last.

- The mark scheme must be referred to throughout the marking period and applied consistently. Do not change your approach to marking once you have been standardised.
- Reward learners positively giving credit for what they have shown, rather than what they might have omitted.
- Utilise the whole mark range and always award full marks when the response merits them.
- Be prepared to award zero marks if the learner's response has no creditworthy material.
- Do not credit irrelevant material that does not answer the question, no matter how impressive the response might be.
- The marks awarded for each response should be clearly and legibly recorded in the grid on the front of the question paper.
- If you are in any doubt about the application of the mark scheme, you must consult with your team leader or the chief examiner.

Guidelines for using extended response marking grids

Extended response marking grids have been designed to award a learner's response holistically and should follow a best-fit approach. The grids are broken down into levels, with each level having an associated descriptor indicating the performance at that level. You should determine the level before determining the mark.

When determining a level, you should use a bottom up approach. If the response meets all the descriptors in the lowest level, you should move to the next one, and so on, until the response matches the level descriptor. Remember to look at the overall quality of the response and reward learners positively, rather than focussing on small omissions. If the response covers aspects at different levels, you should use a best-fit approach at this stage, and use the available marks within the level to credit the response appropriately.

When determining a mark, your decision should be based on the quality of the response in relation to the descriptors. You must also consider the relative weightings of the

assessment objectives, so as not to over/under credit a response. Standardisation materials, marked by the chief examiner, will help you with determining a mark. You will be able to use exemplar learner responses to compare to live responses, to decide if it is the same, better or worse.

You are reminded that the indicative content provided under the marking grid is there as a guide, and therefore you must credit any other suitable responses a learner may produce. It is not a requirement either, that learners must cover all of the indicative content to be awarded full marks.

Assessment objectives

This unit requires learners to:

AO1	Recall knowledge and show understanding. The emphasis here is for learners to recall and communicate the fundamental elements of knowledge and understanding.
AO2	Apply knowledge and understanding. The emphasis here is for learners to apply their knowledge and understanding to real-world contexts and novel situations.
AO3	Analyse and evaluate knowledge and understanding. The emphasis here is for learners to develop analytical thinking skills to make reasoned judgements and reach conclusions.

The weightings of each assessment objective can be found in the qualification specification.

Qu	Mark scheme	Total marks
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Section A

Total for this section: 30 marks

1	<p>Which one of the following design principles is best used to describe the relative size and scale of elements within a design?</p> <p>Answer: D (Proportion)</p>	<p>1</p> <p>AO1=1</p>
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2	<p>Which one of the following statements is correct?</p> <p>Answer: C (Strength is a material's ability to withstand stresses and strains)</p>	<p>1</p> <p>AO1=1</p>
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3	<p>Which one of the following is an aesthetic factor of a material?</p> <p>Answer: A (Colour)</p>	<p>1</p> <p>AO1=1</p>
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4	<p style="text-align: center;">Item 1</p> <p>The image below shows an example of a chair which reflects features of the Bauhaus design movement.</p> <div style="text-align: center;">  </div> <p>Explain two key features of the Bauhaus design movement which can be seen in the chair shown in item 1.</p>	<p>4</p> <p>AO1=2</p> <p>AO2=2</p>
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	<p>Award one mark for any of the following fey features up to a maximum of two marks.</p> <p>AO1: Recall knowledge and show understanding:</p> <ul style="list-style-type: none"> • emphasis on function (1) • monochrome (1) • simple, rational, and functional design (1) • inexpensive materials (1) • tubular steel (1) and chrome plated metals (1). <p>Award one mark for any of the following fey features applied to the context up to a maximum of two marks.</p> <p>AO2: Apply knowledge and understanding:</p> <ul style="list-style-type: none"> • one key feature of the Bauhaus movement was the focus on functionality, which can be seen in the chair by the rounded support legs (1) and how objects performed rather than how they looked, for example, the way weight is distributed effectively by the design (1) • one key feature is the colours, for example the chair legs are monochrome (1) • one key feature is the low-cost materials, as the chair uses minimal materials (1), tubular steel or chrome plated frame (1). 	
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<p>5</p>	<p>Tanveer is considering buying Computer Aided Design (CAD) software for his company instead of hand drawing all of his designs.</p> <p>Explain one advantage and one disadvantage of using CAD for Tanveer.</p> <p>Award one mark for each accurate advantage and disadvantage of using CAD up to a maximum of two marks.</p> <p>AO1: Recall knowledge and show understanding</p> <p>Advantages:</p> <ul style="list-style-type: none"> • fast development of ideas (1) • can view designs from all angles (1) • designs can be viewed in many materials (1) • testing and user feedback can be sought before the design is manufactured (1). 	<p>4</p> <p>AO1=2</p> <p>AO2=2</p>
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	<p>Disadvantages:</p> <ul style="list-style-type: none"> • high associated setup costs (1) • technology can date quickly (1) • requires skilled operators (1). <p>Award one further mark for each explanation, relating to each advantage and disadvantage, that is applied to the scenario, up to a maximum of two marks.</p> <p>AO2: Apply knowledge and understanding</p> <p>Advantages:</p> <ul style="list-style-type: none"> • (fast development of ideas) as CAD is much quicker than hand drawing designs Tanveer may be more productive and able to take on more work (1) • (designs can be viewed in many materials) using CAD can show Tanveer how the design looks in different materials before it is made which allows greater testing of ideas (1) • (testing and user feedback can be sought before the design is manufactured) using CAD will allow Tanveer to gather audience feedback at earlier stages of the production process, this will help the development of the design and may help lower costs (1). <p>Disadvantages:</p> <ul style="list-style-type: none"> • (high associated costs) CAD may require regular updates/ internet access which may create additional costs (1) • (technology can date quickly) as CAD requires a high spec computer to function properly, Tanveer may need to upgrade his equipment more often, which may increase costs (1) • (requires skilled operators) Tanveer may need to upskill before he or his staff can use the software which could increase costs (1). <p>Accept any other suitable response.</p>	
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<p>6</p>	<p>You work as a designer for a company who produce lighting.</p> <p>You have been asked to research customer views of a new range of desk lamps.</p> <p>Compare two research techniques you could use to help the lighting company. Justify your response.</p> <p>Award one mark for reference to an of the following research technique provided up to a maximum of two marks.</p>	<p>4</p> <p>AO1=2</p> <p>AO3=2</p>
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AO1: Recall knowledge and show understanding:

- primary (1):
 - interviews (1)
 - real world observations (1)
 - questionnaires (1)
 - work of others (1).

Indicative Content

Award **one** mark for each justified, comparative point for the research technique provided, up to a maximum of **two** marks. Please note that learners may choose to compare any of the previously detailed research techniques, the list below serves as an illustration of the types of points and justification they may make though it is not an exhaustive list, credit should be given to any suitable response though they must include justifications of their views.

AO3: Analyse and evaluate knowledge and understanding.

Responses may provide a variety of recommendations, in order to achieve the mark for AO3, they must be supported with a justification, typical responses may include:

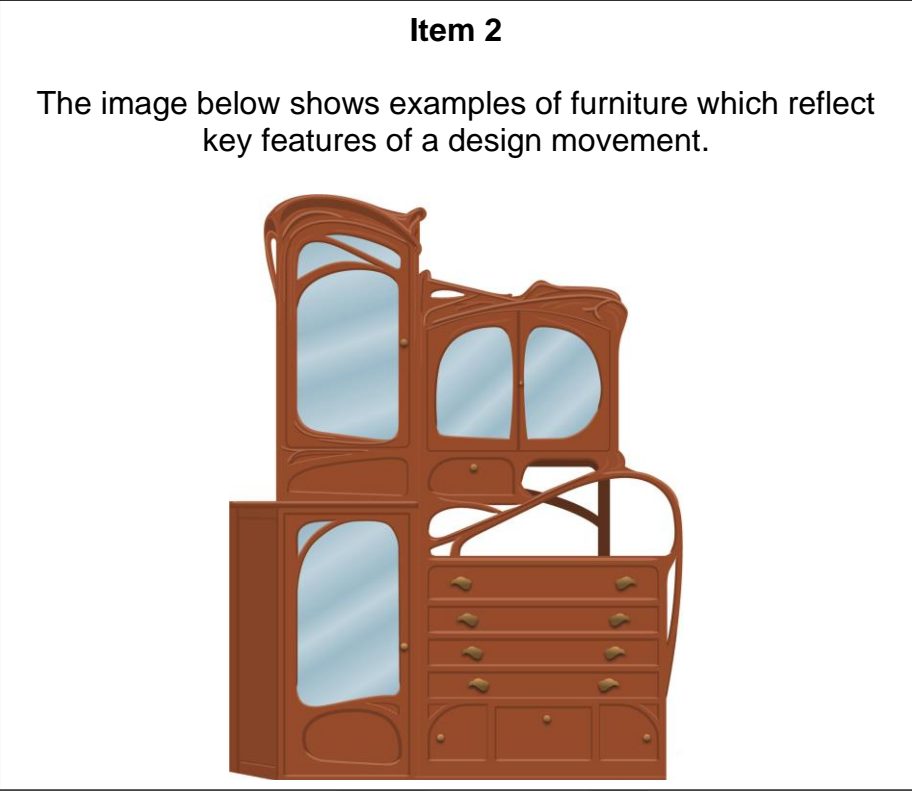
- (interviews) are effective and would allow me to speak to customers face to face to ask questions about the new range of lamps, this is better than just observing as I can ask questions which would help gather more reliable data and make it a good technique to use (1)
- (real world observations) by watching how customers browse in lighting shops would be useful as you could observe what attracts their eye and keeps them looking at a product longer, this is better than a questionnaire as sometimes customers just complete the questions very quickly to get it done without really thinking about their answers, some questionnaires also only allow for a yes or no rather than a valid reason
- (questionnaires) would be better than looking at the work of others as I can focus my questions to help me find out which lamps are liked the most, this is better because customers can complete these at home, which means I can gather more data from a wider range of people compared to just using my own analysis of other work (1)
- (work of others) I like looking at existing products that are on the market as this allows you to see what the competition is and how a new product could provide something different for customers, this is, in a way, better than a talking to customers in an interview as they may not know about the current market trends as they could be just providing their own personal opinion.

Accept any other suitable response.

<p>7 (a)</p>	<p>Lucy is making a bag for children that can be used outdoors in all types of weather conditions. She is using a textile material for the bag.</p> <p>She cannot decide if she needs to apply a surface treatment or finishing technique to the material before she constructs the bag.</p> <p>Explain how one surface treatment and one finishing technique could be applied to the bag.</p> <p>Indicative content</p> <p>Award one mark for an accurate explanation of how a surface treatment and finishing technique could be applied to the bag, up to a maximum of two marks. Please note that the list below is not an exhaustive list and is intended to illustrate the types of applied knowledge a learner may provide. Credit should be given for any suitable response in context to the scenario.</p> <p>AO2: Apply knowledge and understanding:</p> <ul style="list-style-type: none">• surface treatments – chemical additives applied to the fabric/ material to make the bag waterproof and suitable if it rains (1)• surface treatments – chemical additives applied to the fabric/ material to make the bag more resistant to stains which may be more likely to occur whilst children are using it (1)• surface treatments – dyeing the fabric/material may make the bag more appealing to children (1)• finishing techniques – embroidery by hand would allow a decorative feature at the end of production, making it more appealing for children (1)• finishing techniques – embroidery by digital means would allow a decorative feature at the end of production, making it more appealing for children (1)• finishing techniques – printing by traditional techniques may make the bag look more appealing and make the bag look nicer to attract parents to buy it (1)• finishing techniques – printing by digital means may make the bag more appealing to children and/or parents (1). <p>Award one mark for an accurate comparative point of surface treatments and finishing techniques up to a maximum of two marks. Please note that the list provided below is not an exhaustive list and credit should be given for other suitable justified recommendations provided by the learner. Additionally, learners may choose to recommend either a surface treatment or finishing technique, consideration should be given to the strength of their justifications.</p>	<p>4</p> <p>AO2=2</p> <p>AO3=2</p>
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7 (b)	<p>Compare which would be the most effective option for Lucy. Justify your response.</p> <p>AO3: Analyse and evaluate knowledge and understanding</p> <p>Responses may provide a variety of comparative points, in order to achieve the mark for AO3, they must be supported with a justification, typical responses may include:</p> <ul style="list-style-type: none">• (surface treatments – chemical additives...waterproof) surface treatments are important to make sure your materials are prepared for the purpose (for example, the bag fabric could be treated with a waterproof spray for outdoor use). This would make the bag more suitable for its purpose (1) than simply applying a finishing technique which focuses more on the design (1)• (surface treatments – chemical additives...stains) surface treatments are important to make sure your materials are prepared for the purpose (for example, the bag fabric could be treated with a stain resistant substance). This would make the bag more suitable for its purpose (1) than simply applying a finishing technique which focuses more on the design (1)• (surface treatments – dyeing...) this would be better than trying to apply a finishing technique to change the colour (1) as it would be much harder to apply the dye evenly as a finishing technique once the bag has been made (1)• (finishing techniques – embroidery by hand and/or digital) a finishing technique such as embroidery would be better than a surface treatment in terms of creating an appealing design for the bag (1) as it would allow a more decorative pattern to be applied (1)• (finishing techniques – printing by traditional techniques) this would be better to use for decorative design, compared to a surface treatment (1), as Lucy would be able to apply a unique creative design to appeal to children (1)• (finishing techniques – printing by digital) this would be better to use for decorative design, compared to a surface treatment (1), as Lucy could print just one image as a finishing technique such as a stencil of a logo, making any future bags have a consistent design (1). <p>Accept any other suitable responses.</p>	
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8 (a)	<p>Mia has been given a low budget and asked to design a bag that can be worn outside and at night.</p> <p>Identify two materials that Mia could use.</p> <p>Indicative content</p> <p>Award one mark for each appropriate material provided, up to a maximum of two marks.</p> <p>AO1: Recall knowledge and show understanding</p> <ul style="list-style-type: none">• waterproof materials (1)• reinforced and/or strengthened materials (1)• brightly coloured materials (1). <p>Accept any other suitable response.</p>	2 AO1=2
8 (b)	<p>Using one of your materials from 8 (a), explain three reasons why the material is appropriate for Mia to use.</p> <p>Indicative content</p> <p>Award one mark for each explanation of why the material provided for 8 (a) is appropriate up to a maximum of three marks.</p> <p>AO2: Apply knowledge and understanding:</p> <ul style="list-style-type: none">• (waterproof materials) Mia could use PVC (1), these are good materials as they are cheap (1) and easily accessible (1), Mia could choose PVC as this can be bought in different colours for a bag (1)• (reinforced and/or strengthened materials) Mia could use a fabric that is strong (1) such as canvas (1) or felt (1) so it can carry lots of different things overnight that you may need (1), canvas also looks good and comes in different colours (1) and is easy to buy so Mia could choose this material for the bag (1)• (brightly coloured materials) Mia could select a fabric that illuminates (1) in the dark, so the person wearing the bag at night can be seen by cars and others (1), Mia could add reflective elements too (1). <p>Accept any other suitable response.</p>	3 AO2=3

<p>9 (a)</p>	<p style="text-align: center;">Item 2</p> <p>The image below shows examples of furniture which reflect key features of a design movement.</p> <div style="text-align: center;"></div> <p>Identify the design movement and era reflected by the furniture in item 2.</p> <p>Award one mark for the correct design movement and one mark for the era provided.</p> <p>AO1: Recall knowledge and show understanding:</p> <ul style="list-style-type: none">• design movement: Art Nouveau (1)• era: 1880–1914 (1).	<p style="text-align: center;">2</p> <p style="text-align: center;">AO1=2</p>
<p>9 (b)</p>	<p>Analyse the furniture in Item 2.</p> <p>Explain how Item 2 reflects the key features and social factors of the design movement. Justify your response.</p> <p>Indicative content</p> <p>Award one mark for each explanation of how Item 2 reflects the key features of the Art Nouveau movement up to a maximum of two marks. Note: Responses must relate to Art Nouveau, if a response provides other design movement features no credit should be given.</p>	<p style="text-align: center;">4</p> <p style="text-align: center;">AO2=2</p> <p style="text-align: center;">AO3=2</p>

	<p>AO2: Apply knowledge and understanding:</p> <ul style="list-style-type: none">• natural, organic shapes can be seen in the furniture such as the shape of the handles, which is very typical of Art Nouveau furniture (1)• use of modern materials with wood can be seen in the furniture such as the large glass panels on the wardrobe, which is very typical of Art Nouveau furniture (1)• asymmetrical or whiplash curved lines can be seen in the shape of the glass panels, which is very typical of Art Nouveau furniture (1)• asymmetrical or whiplash curved lines can be seen in the shape of the wooden decorative features on the top of the drawers and wardrobe, which is very typical of Art Nouveau furniture (1). <p>Award one mark for each analytical point made that explains how item 2 and/or key features reflects the social factors of Art Nouveau, up to a maximum of two marks.</p> <p>AO3: Analyse and evaluate knowledge and understanding</p> <p>Responses may provide a variety of explanations, in order to achieve the mark for AO3, they must be supported with a justification, typical responses may include:</p> <ul style="list-style-type: none">• (natural, organic shapes...) Item 2 reflects the key social factor of the movement to showcase art for everyday life, for example, there is a lot of striking shapes and curves used to decorate a typical object such as furniture (1)• (use of modern materials with wood...) Item 2 reflects the desire to create 'new' or modern designs which was a key social factor of the design movement, for example, the curved lines would have been very striking and new for the time (1)• (asymmetrical or whiplash curved lines...) the unusual curved lines and shapes in item 2 reflect the key social factor of the Art Nouveau movement to create 'new' or modern design for all social classes, these would have been very different to furniture informed by the arts and craft movement that came before the movement (1). <p>Accept any other suitable response.</p>	
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Section B

Total for this section: 14 marks

10	<p>Which one of the following is an appropriate method of presenting design solutions?</p> <p>Answer: (D) Social media</p>	<p>1</p> <p>AO1=1</p>
11	<p>Which one of the following is a key purpose of self-promotion?</p> <p>Answer: (A) To build a brand and image</p>	<p>1</p> <p>AO1=1</p>
12	<p>Which one of the following is a method of physical marketing and promotional?</p> <p>Answer: (D) Pop-up events</p>	<p>1</p> <p>AO1=1</p>
13	<p>State one type of upskilling a designer may complete when working in the design production industry</p> <p>Indicative content</p> <p>Award one mark for any of the following points up to a maximum of one mark.</p> <p>AO1: Recall knowledge and show understanding:</p> <ul style="list-style-type: none"> • industry standard software training (1) • specialist resource (1) and equipment training (1) • continuing professional development (CPD) (1). <p>Accept any other suitable response.</p>	<p>1</p> <p>AO1=1</p>
14	<p>Jacob has been asked to present a series of new packaging designs to a client.</p> <p>Explain one way that Jacob may present his design solution.</p> <p>Indicative content</p> <p>Award one mark for each of the following points up to a maximum of one mark.</p>	<p>2</p> <p>AO1=1</p> <p>AO2=1</p>

	<p>AO1: Recall knowledge and show understanding:</p> <ul style="list-style-type: none"> • physical portfolio (1) • digital slides (1) • social media (1). <p>Award one mark for each of the following points up to a maximum of one mark.</p> <p>AO2: Apply knowledge and understanding:</p> <ul style="list-style-type: none"> • (physical portfolio) of his designs would allow the client to see the product in person (1) and ask questions (1) • (digital slides) will allow the client to see how Jacob’s work looks neatly presented (1) and is more professional (1) • (social media) accounts to present his work would let the client see his gallery page (1), and the client can add comments wherever they are to feedback to him (1). <p>Accept any other suitable response.</p>	
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<p>15 (a)</p>	<p>Sally is 14 and wants to work as a jewellery designer when she leaves school.</p> <p>Identify one design and production industry sector she could work in.</p> <p>Indicative content</p> <p>Award one mark for any of the following points up to a maximum of one mark.</p> <p>AO1: Recall knowledge and show understanding:</p> <ul style="list-style-type: none"> • manufacturing (1) • craft (1) • design (1) • fashion (1) • prop making, set or exhibition display (1). <p>Accept any other suitable response.</p>	<p>1</p> <p>AO1=1</p>
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15 (b)	<p>Explain two types of work Sally may get within the design and production industry sector.</p> <p>Indicative content</p> <p>Award one mark for each of the following points up to a maximum of two marks.</p> <p>AO2: Apply knowledge and understanding:</p> <ul style="list-style-type: none">• work experience, Sally may work for free to gain experience and improve her skills at a jewellery making company (1)• commissioned work, Sally may make bespoke jewellery pieces for clients with specific requirements (1)• freelance, Sally may work as a prop maker, producing jewellery for film and/or television programmes (1)• contracts:<ul style="list-style-type: none">○ full time, Sally may work in a permanent role (1) for a jewellery making company○ part time, Sally may work in occasionally (1) for a jewellery making company. <p>Accept any other suitable response.</p>	2 AO2=2
16 (a)	<p>Charlie is a freelance designer. His CV describes him as being highly motivated and resilient.</p> <p>He is trying to secure a commission for a large furniture design company. The company have a number of important deadlines approaching and want to allocate projects to individual designers.</p> <p>Explain how the skills included on Charlie's CV may be beneficial for the furniture design company.</p> <p>Indicative content</p> <p>Award one mark for an explanation of how Charlie's skills would be beneficial to the furniture design company, up to a maximum of two marks. The two skills that should be discussed are shown below, do not credit a discussion of any other skills for AO2. However, the examples of applied understanding are illustrative, and credit should be given for other suitable points that relate to the two skills.</p> <p>AO2: Apply knowledge and understanding:</p> <ul style="list-style-type: none">• motivation – as the company have a lot of deadlines, they would need a motivated designer to help them achieve their project aims (1)	2 AO2=2

	<ul style="list-style-type: none"> resilience – as the company want to allocate projects to individual designers, they will need resilient designers to develop their ideas effectively (1). 	
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<p>16 (b)</p>	<p>Recommend three different skills that are important in the design production industry that Charlie could add to his CV to help him secure the commission. Justify your response.</p> <p>Indicative content</p> <p>Award one mark only for each appropriate assessment of a skill that Charlie could add to his CV, up to a maximum of three marks. The list below illustrates a range of different points learners may make for each skill. However, a learner must not be credited twice if they make two points about the same skill. A total of three different skills, with an associated, relevant explanation must be discussed in order to access the full three marks available.</p> <p>AO3: Analyse and evaluate knowledge and understanding</p> <p>Responses may provide a variety of recommendations, in order to achieve the mark for AO3, they must be supported with a justification, typical responses may include:</p> <ul style="list-style-type: none"> Charlie could add the skill of self-reflection to help him secure the commission, as a freelancer Charlie may often work alone and would need the ability to reflect on his own ideas (1) this skill will be vital for the new commission as he will be designing the office furniture alone (1) Charlie could add the skill of time management, this would be very beneficial to the company as they have a lot of deadlines and may help Charlie secure the commission (1) Charlie could add the skill of thinking creatively to help him secure the commission, as these are important skills for the design production industry (1), for example, finding new ways of making products to cut cost may be attractive to the furniture company (1), demonstrating he can create new products would meet the needs of the furniture company (1). <p>Accept any other suitable response.</p>	<p>3</p> <p>AO3=3</p>
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Section C

Total for this section: 18 marks

17	<p>Which one of the following is best describes the method of manufacturing identical or similar items in groups?</p> <p>Answer: A (Batch production)</p>	<p>1</p> <p>AO1=1</p>
18	<p>Which one of the following statements is correct?</p> <p>Answer: D (A risk assessment is used to avoid hazards)</p>	<p>1</p> <p>AO1=1</p>
19	<p>Which one of the following is an example of a quality assurance process?</p> <p>Answer: C (Responding to product defects)</p>	<p>1</p> <p>AO1=1</p>
20	<p>You have been asked to review your design solution to see if it is fit for purpose.</p> <p>State three aspects of the design process you could review.</p> <p>Indicative content</p> <p>Award one mark for any of the following points up to a maximum of three marks.</p> <p>AO1: Recall knowledge and show understanding:</p> <ul style="list-style-type: none"> • defining the need of a product (1) • research (1) • initial ideas (1) • prototyping (1) • testing (1) • redesigning (1). <p>Accept any other suitable response.</p>	<p>1</p> <p>AO1=3</p>

<p>21</p>	<p>You have been asked to meet with a client to discuss your design ideas for a new product.</p> <p>State two communication skills that you may need to use and for each skill provided explain why they are important.</p> <p>Award one mark for any of the following communication skills up to a maximum of two marks.</p> <p>AO1: Recall knowledge and show understanding:</p> <ul style="list-style-type: none">• written (1)• graphical (1)• digital (1)• verbal (1)• online (1)• virtual (1)• face to face (1)• personal presentation (1)• communicate to the client the creative intentions of the product (1)• explain how the target audience will be engaged (1)• agree product timeline and milestones (1). <p>Award one mark for any of the following points, linked to a communication skill provided, up to a maximum of two marks.</p> <p>Indicative content</p> <p>AO2: Apply knowledge and understanding:</p> <ul style="list-style-type: none">• (face to face/ personal presentation/verbal) I would need to be make sure I dress appropriately (1) so the client has a good first impression of me (1) I will also need to make sure I speak clearly (1) about my ideas to show I know what they want (1)• (virtual/online/verbal) I may have to meet with the client online (1) so checking my internet connection (1) before the meeting is important, so I am not late (1). I will then need to make sure I can show good quality images (1) of my design ideas to show I have thought about their needs (1). <p>Accept any other suitable response.</p>	<p>4</p> <p>AO1=2</p> <p>AO2=2</p>
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22	<p>Isaac and his team are making a new chair for a client.</p> <p>He has created the following production plan for the production stages of the project.</p> <p>Production Plan (production stages)</p> <table border="1"> <thead> <tr> <th>Stage</th> <th>Activity</th> <th>Who?</th> <th>Cost?</th> <th>Deadline</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>source materials</td> <td>Team</td> <td>Yes</td> <td>10.01.22</td> </tr> <tr> <td>2</td> <td>select tools</td> <td>Team</td> <td>No</td> <td>17.01.22</td> </tr> <tr> <td>3</td> <td>production techniques and processes to be used</td> <td>Me</td> <td>Yes</td> <td>20.01.22</td> </tr> <tr> <td>4</td> <td>risk assessment</td> <td>Me</td> <td>No</td> <td>22.01.22</td> </tr> <tr> <td>5</td> <td>contingency planning</td> <td>Me</td> <td>Maybe</td> <td>27.01.22</td> </tr> </tbody> </table> <p>Analyse the production plan for the production stages.</p> <p>Recommend two stages that are missing from the production plan that would help Isaac complete the chair more effectively. Justify your recommendations.</p> <p>Indicative content</p> <p>Award one mark for any of the following missing stages of the production plan up to a maximum of two marks.</p> <p>AO2: Apply knowledge and understanding</p> <p>There are 3 stages missing from the production plan in terms of production stages. Learners will apply their knowledge and understanding of production plans in order to recommend any of the stated missing stages. Responses must include any of the following stages that are missing from the production stages plan:</p> <ul style="list-style-type: none"> • select equipment required is missing from the plan and should be included to help the project (1) • testing is missing from the plan and should be included to help the project (1) • quality assurance is missing from the plan and should be included to help the project (1). <p>Award one mark for any of the associated justifications for the missing stages of the production plan. Up to a maximum of two marks in total. The justification must relate to the missing stages provided.</p>	Stage	Activity	Who?	Cost?	Deadline	1	source materials	Team	Yes	10.01.22	2	select tools	Team	No	17.01.22	3	production techniques and processes to be used	Me	Yes	20.01.22	4	risk assessment	Me	No	22.01.22	5	contingency planning	Me	Maybe	27.01.22	<p>4</p> <p>AO2=2</p> <p>AO3=2</p>
Stage	Activity	Who?	Cost?	Deadline																												
1	source materials	Team	Yes	10.01.22																												
2	select tools	Team	No	17.01.22																												
3	production techniques and processes to be used	Me	Yes	20.01.22																												
4	risk assessment	Me	No	22.01.22																												
5	contingency planning	Me	Maybe	27.01.22																												

	<p>AO3: Analyse and evaluate knowledge and understanding</p> <p>Responses may provide a variety of recommendations, in order to achieve the mark for AO3, they must be supported with a justification, typical responses may include:</p> <ul style="list-style-type: none"> • (select equipment required...) this is important to Isaac as there may be additional/unplanned costs to developing the response to the brief, knowing this will help him keep control of costs (1) • (testing...) he might want to create a prototype in a cheaper material so he can see the size and shape before cutting the real materials this is important as it may help avoid waste of materials (1) • (quality assurance...) this is important as it is likely the end product will be of a higher quality which would keep his client happy (1). <p>Accept any other suitable responses that relate to the specified missing stages of the production plan.</p>	
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<p>23</p>	<p>George has been given a design brief by a commercial client to design a new product.</p> <p>However, the brief does not include all of the typical elements of a design brief that are needed to develop a suitable design.</p> <div data-bbox="397 1281 1117 1505" style="border: 1px solid black; padding: 10px; margin: 10px auto; width: fit-content;"> <p><u>Client Brief</u></p> <p>Type of client: <i>Vintage Furniture</i> (Commercial) Product required: Kitchen table and chair set</p> </div> <p>Recommend two additional elements, missing from the brief, that would help George develop a suitable design. Justify your recommendations.</p> <p>Indicative content</p> <p>Award one mark for any of the following points up to a maximum of two marks.</p> <p>AO2: Apply knowledge and understanding</p>	<p>4</p> <p>AO2=2</p> <p>AO3=2</p>
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Responses may include one or more references to the following missing requirements of a client design brief. Please note, students may refer in a number of different ways to client needs (as shown below), however, they may only be credited once for this element of the response:

- product purpose (1)
- audience (1)
- resources required (1)
- constraints (1)
- budget (1)
- timescales (1)
- copyright issues (1)
- client needs:
 - solve a problem (1)
 - increase sales (1)
 - increase online presence (1)
 - increase product or brand awareness (1)
 - influence behaviour (1).

Award **one** mark for any of the recommendations of elements of a client design brief requirement up to a maximum of **one** mark for each. Up to a maximum of **two** marks in total.

AO3: Analyse and evaluate knowledge and understanding

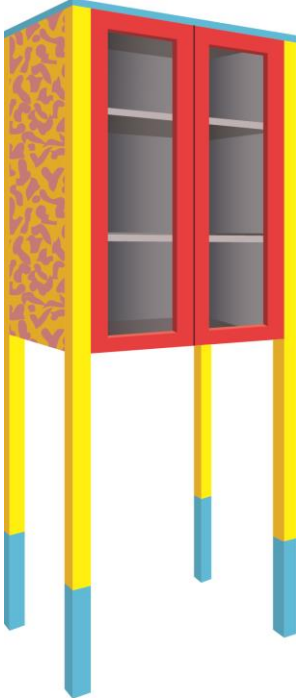
Responses may provide a variety of recommendations, in order to achieve the mark for AO3, they must be supported with a justification, typical responses may include:

- (product purpose) having more information may help George know if the client has any specific aims such as environmental (1), style over function (1)
- (audience) having more information on the intended audience may shape the design approach (1) and help George focus his research more appropriately (1)
- (budget) having more information on the client's budget is essential for George as it relates to a range of design decisions such as resources (1), materials (1)
- (timescale) this is essential for George to know as he may have other project commitments (1) and will need to know when the project is due so that he doesn't suffer a loss of reputation for failing to meet the deadline (1).

Accept any other suitable response.

Section D

Total for this section: 18 marks

<p>24</p>	<p>Item 3</p> <p>The image below shows an example of a furniture design.</p> 	<p>9</p> <p>AO1=3</p> <p>AO2=3</p> <p>AO3=3</p>
<p>Contemporary Crafts is a company who specialise in making bespoke products.</p> <p>They have been approached by a customer with the image shown in Item 3 and would like a design developing which is similar.</p> <p>They do not know which materials would be best use.</p> <p>Analyse the design movement reflected by the furniture design in item 3 and recommend the best materials to use to develop a similar design. Justify your recommendations.</p>		

Marks	Description
7–9	<p>A03 - Excellent analysis and evaluation of design movement that is comprehensive and highly relevant. Supported with excellent justifications for the suggested design materials that are comprehensive and highly detailed.</p> <p>A02 - Excellent application of knowledge and understanding of design movement and design materials that is comprehensive and highly detailed and highly relevant to the question.</p> <p>A01 - Excellent recall of knowledge and understanding of design movement and design materials that is comprehensive. Subject specific terminology is used consistently throughout.</p>
4–6	<p>A03 - Good analysis and evaluation of design movement that is detailed and mostly relevant. Supported with good justifications for the suggested design materials that are detailed.</p> <p>A02 - Good application of knowledge and understanding of design movement and design materials that is detailed and mostly relevant to the question.</p> <p>A01 - Good recall of knowledge and understanding of design movement and design materials that is mostly detailed. Subject specific terminology is used, but not always consistently.</p>
1–3	<p>A03 - Limited analysis and evaluation of design movement. Supported with limited justifications for the suggested design materials that have minimal detail and are mostly superficial.</p> <p>A02 - Limited application of knowledge and understanding of design movement and design materials that has minimal detail and are mostly superficial. With minimal relevance to the question.</p> <p>A01 - Limited recall of knowledge and understanding of design movement and design materials that has minimal detail. Subject specific terminology is often inappropriate, and a lack of understanding is evident</p>
0	No relevant material

Examiners are reminded that indicative content reflects content-related points that a learner may make but is not an exhaustive list, nor is it a model answer. Learners may make

	<p>all, some or none of the points included in the indicative content. It is not a requirement that the learner formulate a response specifically against each assessment objective as laid out in the indicative content (IC). A learners demonstration of recall (AO1) and application (AO2) of knowledge and understanding can be implied through the learner's ability to analyse and evaluate the question topic required of AO3.</p> <p>Learners must be credited for any other appropriate response.</p> <p>Indicative content</p> <p>AO1: Recall knowledge and show understanding</p> <p>The correct design movement reflected by the furniture is: Memphis (c. 1981–1988):</p> <ul style="list-style-type: none">• key social factors:<ul style="list-style-type: none">○ Italian design group described as kitsch, garish and retro○ reaction to the design of the 1970s and dominated the 1980s• key features:<ul style="list-style-type: none">○ bold, colourful, unusual pieces○ block use of colour and white space○ distinctive black lines and repetitive geometric patterns• key designers:<ul style="list-style-type: none">○ Ettore Sottsass○ Nathalie du Pasquier. <p>Learners may make different decisions on materials; however, the more appropriate materials include:</p> <ul style="list-style-type: none">• wood• plastic• shiny surface materials. <p>AO2: Apply knowledge and understanding</p> <p>Responses may offer a range of analytical points for how the furniture is reflective of the Memphis design movement:</p> <ul style="list-style-type: none">• the furniture has unusual dimensions and form• it has a range of bright, block colours which are complement each other tonally• the surface finish is shiny giving it a bold look.	
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	<p>Responses may show how the properties of the selected materials are appropriate to create the design in a variety of ways. Learner responses may include reference to:</p> <ul style="list-style-type: none"> • key principles of design – balance, contrast, repetition • function – purpose of the design • aesthetics – finish, colour, form • surface treatments – on plastic such as printing to recreate colourful design • surface treatments – on wood such as varnishing and lacquering to create a shiny surface and/or enhance colour. <p>AO3: Analyse and evaluate knowledge and understanding</p> <p>Responses may provide justifications for any material, though the more likely ones would include wood or plastic. When considering placement within the bands consideration should be given to the appropriateness of the material suggested and the strength of the justification:</p> <ul style="list-style-type: none"> • wood and/or or plastic would be effective as they are strong materials which would allow the design to be used as a piece of furniture, rather than just a decorative piece • wood and/or or plastic would be effective as they can be cut very straight to create the bold lines of Memphis influences • plastic would also be effective as it can be coloured to replicate the Memphis bright colours • Wood may also be effective as a surface treatment and/or finishing technique could be applied to colour the material. <p>Accept other appropriate response</p>	
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<p>25</p>	<p>A new, UK based company is developing a range of home office furniture.</p> <p>They have asked a design agency to come up with a stylish, comfortable design which considers the impact of the product on the environment.</p> <p>The final design solution is for an office chair. The chair would be produced from wood only available outside of the UK and requires complex manufacturing processes. The chair looks stylish, but its comfort levels are unknown as some stages of the design process have been missed.</p>	<p>9</p> <p>AO1=3</p> <p>AO2=3</p> <p>AO3=3</p>
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Evaluate how well the design solution meets the requirements of the brief set by the furniture company. Justify your response.

Marks	Description
7–9	<p>A03 - Excellent analysis and evaluation of the design solution (provided in the scenario) that is comprehensive and highly relevant. Supported with excellent justifications for the environmental impact of the product that are comprehensive and highly detailed.</p> <p>A02 - Excellent application of knowledge and understanding of review processes for a final design solution (provided in the scenario) and environmental impact of a product that is comprehensive and highly detailed and highly relevant to the question.</p> <p>A01 - Excellent recall of knowledge and understanding of design principles and environmental impact of the product that is comprehensive. Subject specific terminology is used consistently throughout.</p>
4–6	<p>A03 - Good analysis and evaluation of the design solution (provided in the scenario) that is detailed and mostly relevant. Supported with good justifications for the environmental impact of the product that are detailed.</p> <p>A02 - Good application of knowledge and understanding of review processes for a final design solution (provided in the scenario) and environmental impact of a product that is detailed and mostly relevant to the question.</p> <p>A01 - Good recall of knowledge and understanding of design principles and environmental impact of the product that is mostly detailed. Subject specific terminology is used, but not always consistently.</p>
1–3	<p>A03 - Limited analysis and evaluation of the design solution (provided in the scenario). Supported with limited justifications for the environmental impact of the product that have minimal detail and are mostly superficial.</p> <p>A02 - Limited application of knowledge and understanding of review processes for a final design solution (provided in the scenario) and environmental impact of a product that has minimal detail and is</p>

	<p>mostly superficial, with minimal relevance to the question.</p> <p>AO1 - Limited recall of knowledge and understanding of design principles and environmental impact of the product that has minimal detail. Subject specific terminology is often inappropriate, and a lack of understanding is evident</p>	
	<p>0 No relevant material</p> <p>Examiners are reminded that indicative content reflects content-related points that a learner may make but is not an exhaustive list, nor is it a model answer. Learners may make all, some or none of the points included in the indicative content. It is not a requirement that the learner formulate a response specifically against each assessment objective as laid out in the indicative content (IC). A learners demonstration of recall (AO1) and application (AO2) of knowledge and understanding can be implied through the learner’s ability to analyse and evaluate the question topic required of AO3.</p> <p>Learners must be credited for any other appropriate response.</p> <p>Indicative content</p> <p>AO1: Recall knowledge and show understanding</p> <p>Responses may include references to how the design solution provided in the scenario reflects poor design principles and environmental factors:</p> <ul style="list-style-type: none"> • Dieter Rams’ 10 Principles of Good Design: <ul style="list-style-type: none"> ○ makes a product useful ○ is long-lasting ○ is environmentally friendly • sustainable design • unsustainable design <ul style="list-style-type: none"> ○ removal of trees for use in raw materials ○ pollution from manufacturing processes ○ damage to the environment in resource obtainment ○ transportation of resources/ecological footprint. <p>AO2: Apply knowledge and understanding</p> <ul style="list-style-type: none"> • design principles: <ul style="list-style-type: none"> ○ the company’s use of wood may explain why the chair is uncomfortable and hasn’t applied Rams’ idea of the product being usable ○ the high manufacturing processes suggest it may not be environmentally friendly 	

	<ul style="list-style-type: none">• design process:<ul style="list-style-type: none">○ as the chair is large and may be less practical for its intended use, it suggests that the design company missed stages of the design process such as testing, redesigning• meeting the needs of the brief:<ul style="list-style-type: none">○ functionality of product/usability/performance:<ul style="list-style-type: none">▪ as the chair is made from wood it may not be the most practical for home office use as wood can be heavy to move• redesigning:<ul style="list-style-type: none">○ the chair may need to be redesigned as it hasn't met the key aims of the client. <p>AO3: Analyse and evaluate knowledge and understanding</p> <p>Responses may form any judgement in terms of their evaluation of how well the product met the client's needs, it is the strength of their justifications that should be rewarded. However, typical points may include:</p> <ul style="list-style-type: none">• the design solution is not effective:<ul style="list-style-type: none">○ the chair requires a large desk/ space and is therefore unlikely to be usable for the intended audience - people with a smaller home office, this is less effective as it may mean the company doesn't sell as many units○ the chair uses wood sourced from outside the UK and is therefore likely to have negative impacts on the environment due to the ecological footprint of transportation/removal of trees for raw materials/loss of habitat for wildlife/damage to the environment obtaining resources/pollution of manufacturing○ the design company hasn't met the needs of the client fully as the comfort levels of the chair are unknown, which was a requirement of the client. This suggests that they haven't carried out sufficient testing and redesigns (if required)• the design solution is effective:<ul style="list-style-type: none">○ using wood allows for smooth surface finish, though sanding which may make it aesthetically pleasing/ stylish○ using wood for an office chair is less common and may help make the design stand out. <p>Accept other appropriate response</p>	
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Assessment Objective Grid

Question	AO1	AO2	AO3	Total	Q type
1	1			1	MCQ
2	1			1	MCQ
3	1			1	MCQ
4	2	2		4	SAQ
5	2	2		4	SAQ
6	2		2	4	SAQ
7 (a)		2		2	SAQ
7 (b)			2	2	SAQ
8 (a)	2			2	SAQ
8 (b)		3		3	SAQ
9 (a)	2			2	SAQ
9 (b)		2	2	4	SAQ
10	1			1	MCQ
11	1			1	MCQ
12	1			1	MCQ
13	1			1	SAQ
14	1	1		2	SAQ
15 (a)	1			1	SAQ
15 (b)		2		2	SAQ
16 (a)		2		2	SAQ
16 (b)			3	3	SAQ
17	1			1	MCQ
18	1			1	MCQ
19	1			1	MCQ
20	3			3	SAQ
21	2	2		4	SAQ
22		2	2	4	SAQ
23		2	2	4	SAQ
24	3	3	3	9	ERQ
25	3	3	3	9	ERQ
Total:	33	28	19	80	

Overall AO weightings

AO1 – 40 to 45%, 32 to 36 marks
AO2 – 35 to 40%, 28 to 32 marks
AO3 – 20 to 25%, 16 to 20 marks