

GCSE



WJEC GCSE in
BUILT ENVIRONMENT

APPROVED BY QUALIFICATIONS WALES

**SAMPLE
ASSESSMENT
MATERIALS**

Teaching from 2021
For award from 2023

This Qualifications Wales regulated qualification is not available to centres in England.

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Candidate Name	Centre Number					Candidate Number				



GCSE BUILT ENVIRONMENT

UNIT 1

INTRODUCTION TO THE BUILT ENVIRONMENT

SAMPLE ASSESSMENT MATERIALS

1 hour 30 minutes

These sample assessment materials, including the mark scheme, are shown in paper-based form.

The live assessments will be provided onscreen only, in compliance with section 12 in the subject-approval criteria for GCSE Built Environment.

INSTRUCTIONS FOR CANDIDATES

Answer **ALL** questions.

Write your name, centre number and candidate number in the spaces provided at the top of this page.

Write your answers in the spaces provided in this booklet.

Use black ink or black ball-point pen.

Do not use pencil or gel pen.

Do not use correction fluid.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets at the end of each question or part question. You are advised to divide your time accordingly.

The total number of marks available is 70.

You are reminded of the need for good English and orderly, clear presentation in your answers. The quality of your written communication, including appropriate use of punctuation and grammar, will be assessed in your answer to question 10.

Answer **all** questions.

1. The built environment contains many different types of buildings, structures and products.

(a) A road is one type of infrastructure product. [2]
State **two** other different types of infrastructure products.

(i)

(ii)

(b) Identify **two** electrical services used within a typical residential building. [2]

(i)

(ii)

(c) Name **two** services used in buildings that support public health. [2]

(i)

(ii)

2. The construction and maintenance of our built environment requires the use of many different resources.

(a) One example of an industry that extracts raw materials is the oil industry. Name **three** other industries that extract raw materials. [3]

(i)

(ii)

(iii)

(b) Mortar is used to bind bricks in a wall. [2]
Name **two** materials that are combined with water to make a mortar mix on site.

(i)

(ii)

(c) Outline **two** types of maintenance that may be carried out on a building. [4]

(i)

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(ii)

.....

3. Our built environment contains many different types of structures that provide a variety of functions.

(a) Identify **two** features of commercial buildings which are not usually features of residential dwellings. [2]

(i)

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(ii)

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(b) A new road is proposed to bypass a town in Wales. [4]

Describe **one** possible benefit and **one** possible drawback that the planning authorities should take into account when deciding whether or not the road should be built.

Benefit:

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Drawback:

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4. Construction of the built environment offers many trade, employment and career opportunities.

(a) Identify the trades from the descriptions below: [2]

(i) A installs floor joists and floorboards.

(ii) A measures existing features of the natural environment.

(b) Describe **two** activities that an architect would undertake in the production of a client's design. [4]

(i)
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(ii)
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5. The image below shows an industrial unit under construction with the portal frames in place.



Credit: M.Sansom https://www.steelconstruction.info/File:L_Fig11.png

Explain, with reference to **two** characteristics of portal frames, why this form of construction is suitable for industrial units such as the one shown above. [4]

- (i)
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- (ii)
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6. Describe the main benefits of using heritage and traditional methods when maintaining the historic built environment. [6]

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7. The construction of a building such as an office block involves several different elements and components.

(a) Identify the parts of a building described below.

(i) This transfers the weight of the building to the soil or rock upon which it is built. [1]

(ii) This is constructed above ground level and usually serves the purpose of the building's intended use. [1]

(b) The entrance of the office block is to have a flat roof. [1]
The client has stated that they do not wish to use rubber-based sheeting as the finish for the flat roof.
Suggest an alternative finish that would be suitable for the flat roof of the office block.

.....

(c) The client wishes to use a heat pump as part of the system to heat the office block. [4]

Name **two** types of heat pump and outline how they provide heat for a building.

(i)
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(ii)
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8. A property developer is considering specifying sustainable construction methods in the development of four new houses.

(a) State **one** financial benefit and **two** social benefits of using sustainable construction methods for new houses. [3]

Financial benefit:

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Social benefits:

(i)

(ii)

(b) Steel is a sustainable material used in the construction of the built environment.

Describe the characteristics of steel which make it a sustainable material for the construction industry. [2]

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(c) Identify **one** other sustainable material which could be specified by the developer and suggest how it could be used in the construction of new houses. [2]

Material:

Use:

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9. A farmer in Wales wishes to install renewable technologies to generate electricity for their home and business.

(a) Identify **three** ways in which electricity can be generated from renewable sources. [3]

(i)

(ii)

(iii)

(b) Explain, with reference to the benefits and limitations of renewable technologies, why the farmer should consider installing more than one form of renewable technology to generate electricity. [6]

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MARK SCHEME

Guidance for examiners

Positive marking

It should be remembered that candidates are writing under examination conditions and credit should be given for what the candidate writes, rather than adopting the approach of penalising him/her for any omissions. It should be possible for a very good response to achieve full marks and a very poor one to achieve zero marks. Marks should not be deducted for a less than perfect answer if it satisfies the criteria of the mark scheme.

For questions that are objective or points-based, the mark scheme should be applied precisely. Marks should be awarded as indicated and no further subdivision made.

Mark schemes often list points which may be included in candidates' answers. The list is not exhaustive. *The inclusion of 'Credit any other valid response.'* (or similar instruction) within mark schemes allows for the possible variation in candidates' responses. Credit should be given according to the accuracy and relevance of candidates' answers.

Appropriate terminology is reflected in exemplar responses in mark schemes. However, unless there is a specific requirement within a question, candidates may be awarded marks where the answer is accurate but expressed in their own words.

Banded mark schemes

For band marked questions, mark schemes are in two parts, the indicative content and the assessment grid.

The indicative content suggests the range of points and issues which may be included in candidates' answers. It can be used to assess the quality of the candidate's response. As noted above, indicative content is not intended to be exhaustive and candidates do not have to include all the indicative content to reach the highest level of the mark scheme.

However, in order to reach the highest level of the mark scheme a candidate must meet the requirements of the highest mark band. Where a response is not creditworthy, that is, it contains nothing of any significance to the mark scheme, or where no response has been provided, no marks should be awarded.

Candidates' responses to questions are assessed against the relevant assessment objectives. In GCSE Built Environment, each question will address one assessment objective.

The marking of banded mark questions should always be positive. This means that, for each candidate's response, marks are accumulated for the demonstration of relevant skills, knowledge and understanding; they are not deducted from a maximum on the basis of errors or omissions.

Examiners should first read and annotate the candidate's answer to pick out the evidence that is being assessed in that question. The mark scheme can then be applied. This is done as a two stage process.

Stage 1 – Deciding on the band

Beginning at the lowest band, examiners should look at the candidate's answer and check whether it matches the descriptors for that band. If the descriptors at the lowest band are satisfied, examiners should move up to the next band and repeat this process for each band until the descriptors match the answer.

If an answer covers different aspects of different bands within the mark scheme, a 'best fit' approach should be adopted to decide on the band and then the candidate's response should be used to decide on the mark within the band. For instance, if a response is mainly in band 2 but with a limited amount of band 3 content, the answer would be placed in band 2, but the mark awarded would be close to the top of band 2 as a result of the band 3 content.

Examiners should not seek to mark candidates down as a result of small omissions in minor areas of an answer.

Stage 2 – Deciding on the mark

During standardising (the marking conference), detailed advice from the Principal Examiner on the qualities of each mark band will be given. Examiners will then receive examples of answers in each mark band that have been awarded a mark by the Principal Examiner. Examiners should mark the examples and compare their marks with those of the Principal Examiner.

When marking, examiners can use these examples to decide whether a candidate's response is of a superior, inferior or comparable standard to the example. Examiners are reminded of the need to revisit the answer as they apply the mark scheme in order to confirm that the band and the mark allocated is appropriate to the response provided.

Question	Answer	AO1	AO2	AO3	Total Mark
1.	<i>The built environment contains many different types of buildings, structures and products.</i>				
(a)	<i>A road is one type of infrastructure product. State two other different types of infrastructure products.</i>	2			2
	Award one mark for each correct infrastructure product, for example: <ul style="list-style-type: none"> • railways • bridges • tunnels • airports • ports • water supply/sewerage systems • electricity generation/electrical grids • telecommunications • canals • dams. Credit any other valid response.				
(b)	<i>Identify two electrical services used within a typical residential building.</i>	2			2
	Award one mark for each correct electrical service (relevant to a residential building), for example: <ul style="list-style-type: none"> • lighting systems • communication lines • telephone lines • IT network • fire detection • security/alarm systems. Credit any other valid response.				
(c)	<i>Name two services used in buildings that support public health.</i>	2			2
	Award one mark for each correct service that supports public health, for example: <ul style="list-style-type: none"> • plumbing for water supply/domestic hot water • drainage of waste water (sewage) • stormwater drainage. Credit any other valid response.				

Question	Answer	AO1	AO2	AO3	Total Mark
2.	<i>The construction and maintenance of our built environment requires the use of many different resources.</i>				
(a)	<i>One example of an industry that extracts raw materials is the oil industry. Name three other industries that extract raw materials.</i>	3			3
	Award one mark for each correct industry, for example: <ul style="list-style-type: none"> • gas • forestry • quarrying • mining. Credit any other valid response.				
(b)	<i>Mortar is used to bind bricks in a wall. Name two materials that are combined with water to make a mortar mix on site.</i>	2			2
	Award one mark for each correct material, for example: <ul style="list-style-type: none"> • cement • sand Credit any other valid response (including additives such as plasticizer).				
(c)	<i>Outline two types of maintenance that may be carried out on a building.</i>	4			4
	Award one mark for identifying a type of maintenance that may be carried out on a building and one mark for providing a brief outline of that type of maintenance, for example: <ul style="list-style-type: none"> • planned/preventive maintenance – carried out on a regular basis, or to keep something in working order/lessen the likelihood of failure or to extend the life of something • corrective maintenance –repairing/replacing something that has broken/returning something to proper function or working order. Credit any other valid response.				

Question	Answer	AO1	AO2	AO3	Total Mark
3.	<i>Our built environment contains many different types of structures that provide a variety of functions.</i>				
(a)	<i>Identify two features of commercial buildings which are not usually features of residential dwellings.</i>	2			2
	<p>Award one mark for correctly identifying a feature of a commercial building which would not be typical of a residential building, for example, commercial buildings:</p> <ul style="list-style-type: none"> • are used to provide services or products to customers • accommodate business activities • are built/adapted to fulfil the purpose of the business • tend to be located in retail centres • may be multi-use, accommodating several forms of business activity. <p>Credit any other valid response.</p>				
(b)	<i>A new road is proposed to bypass a town in Wales. Describe one possible benefit and one possible drawback that the planning authorities should take into account when deciding whether or not the road should be built.</i>	4			4
	<p>Award one mark for a basic description of a possible benefit of the bypass, for example:</p> <ul style="list-style-type: none"> • reduce traffic jams in the town • reduce travelling time/make journeys quicker. <p>Award two marks for a more developed description of a possible benefit of the bypass, for example:</p> <ul style="list-style-type: none"> • people driving past the town, rather than visiting, do not have to drive through it, reducing the volume of traffic and improving road safety/pollution levels/delays for residents • people driving past the town do not have to drive on urban roads which may have lower speed limits and/or be congested, so journey times may be reduced. <p>Award one mark for a basic description of a possible drawback of the bypass, for example:</p> <ul style="list-style-type: none"> • may have to build the bypass on farmland/fields • may have less visitors in the town. <p>Award two marks for a more developed description of a drawback of the bypass, for example:</p> <ul style="list-style-type: none"> • there may be an impact on the natural environment if the proposed route of the bypass takes it over land used for agricultural purposes/forests/inhabited by wildlife • drivers may be encouraged to drive past the town rather than visit it, reducing passing trade for businesses which could have an impact on the local economy. <p>Credit any other valid response.</p>				

Question	Answer	AO1	AO2	AO3	Total Mark
4.	<i>Construction of the built environment offers many trade, employment and career opportunities.</i>				
(a)	<i>Identify the trades from the descriptions below:</i> <i>(i) installs floor joists and floorboards</i> <i>(ii) measures existing features of the natural environment.</i>	2			2
	(i) Award one mark for carpenter. (ii) Award one mark for surveyor.				
(b)	<i>Describe two activities that an architect would undertake in the production of a client's design.</i>	4			4
	Award one mark for a basic description of an activity an architect would undertake, for example: <ul style="list-style-type: none"> • create/produce designs for a building • create/produce drawings which show a building's details • identify client needs and produce design proposals. Award two marks for a more developed description of an activity an architect would undertake, for example: <ul style="list-style-type: none"> • create/produce designs for a new building/renovation/change of use which meet the requirements of the client along with all relevant regulations and legislation • create/produce drawings which show a building's details to enable a contractor to construct the building to the required specification • identify client needs and produce design proposals which address the client's needs, the use the building will be put to and environmental requirements. Credit any other valid response.				

Question	Answer	AO1	AO2	AO3	Total Mark
5.	<i>The image below shows an industrial unit under construction with the portal frames in place.</i>				
	<i>Explain, with reference to two characteristics of portal frames, why this form of construction is suitable for industrial units such as the one shown above.</i>		4		4
	<p>Award one mark for a basic explanation of why portal frames are a suitable form of construction for industrial units such as the one shown in the question, for example:</p> <ul style="list-style-type: none"> • portal frames give a lightweight structure • portal frames can span large distances • large buildings can be constructed quickly. <p>Award two marks for a more developed explanation of why portal frames are a suitable form of construction for industrial units such as the one shown in the question, for example:</p> <ul style="list-style-type: none"> • portal frames have rigid joints so can span large distances without wide beams or additional supports which could get in the way when the unit is in use • portal frames allow the use of smaller section beams, than those used in other designs, so are lightweight in comparison and cost effective for an industrial unit • portal frames do not have to be manufactured onsite, so the industrial unit can be constructed quickly once they are delivered. <p>Credit any other valid response.</p>				

Question	Answer	AO1	AO2	AO3	Total Mark
6.	Describe the main benefits of using heritage and traditional methods when maintaining the historic built environment.	6			6
	<p>Answers may refer to the following points in relation to the main benefits of using heritage and traditional methods when maintaining the historic built environment:</p> <ul style="list-style-type: none"> these methods help: <ul style="list-style-type: none"> maintain the history/character/intrinsic value of an old building preserve our heritage reduce the need for new materials/preserve existing materials in older buildings, which may be of high quality preserve the original craftsmanship evident in older buildings retaining the original character of the building can make it more valuable/attractive, for residential or business use an old building properly maintained may outlast newer buildings it can cost less to maintain an old building than to demolish it and replace it with a new building. <p>Credit any other valid response.</p>				

Band	AO1
3	<p>5-6 marks</p> <p>A very good description, which shows:</p> <ul style="list-style-type: none"> thorough knowledge and understanding of the benefits of using traditional and heritage methods when maintaining the built environment a confident grasp of relevant concepts related to the historic built environment.
2	<p>3-4 marks</p> <p>A good description, which shows:</p> <ul style="list-style-type: none"> generally secure knowledge and understanding of the benefits of using traditional and heritage methods when maintaining the built environment generally secure grasp of concepts related to the historic built environment.
1	<p>1-2 marks</p> <p>A basic description, which shows:</p> <ul style="list-style-type: none"> some knowledge and understanding of the benefits of using traditional and heritage methods when maintaining the built environment some grasp of basic concepts related to the historic built environment.
	<p>0 marks</p> <p>Response not creditworthy or not attempted.</p>

Question	Answer	AO1	AO2	AO3	Total Mark
7.	<i>The construction of a building such as an office block involves several different elements and components.</i>				
(a)	<i>Identify the parts of a building described below.</i> <i>(i) This transfers the weight of the building to the soil or rock upon which it is built.</i> <i>(ii) This is constructed above ground level and usually serves the purpose of the building's intended use.</i>	2			2
	Award one mark for correctly identifying the following: <i>(i) foundations</i> <i>(ii) superstructure.</i>				
(b)	<i>The entrance of the office block is to have a flat roof. The client has stated that they do not wish to use rubber-based sheeting as the finish for the flat roof. Suggest an alternative finish that would be suitable for the flat roof of the office block.</i>	1			1
	Award one mark for a suitable finish for the flat roof (other than rubber-based sheeting or membrane), for example fibreglass/glass fibre/glass reinforced plastic/GRP. Credit any other valid response, including green roof (systems) as this could be an appropriate finish, even though it would need a waterproof material underneath.				
(c)	<i>The client wishes to use a heat pump as part of the system to heat the office block.</i> <i>Name two types of heat pump and outline how they provide heat for a building.</i>	4			4
	Award one mark for the type of heat pump and one mark for an outline of how it works, for example: <ul style="list-style-type: none"> • ground source: <ul style="list-style-type: none"> • pipes are buried underground and the pump transfers heat from the ground into a building • air source: <ul style="list-style-type: none"> • the pump transfers heat from the air outside of a building into the building • water source: <ul style="list-style-type: none"> • pipes are placed in a river/lake and the pump transfers heat from the water into a building. 				

Question	Answer	AO1	AO2	AO3	Total Mark
8.	<i>A property developer is considering specifying sustainable construction methods in the development of four new houses.</i>				
(a)	<i>State one financial benefit and two social benefits of using sustainable construction methods for new houses.</i>	3			3
	<p>Award one mark for a relevant financial benefit and one mark for each of two social benefits of using sustainable construction methods:</p> <p>Financial benefits:</p> <ul style="list-style-type: none"> • minimising waste • using sustainable materials • reducing energy consumption • improving water efficiency • reducing operating costs • optimising the life cycle of the building. <p>Social benefits:</p> <ul style="list-style-type: none"> • improving householders' comfort • creating an aesthetically pleasing development • reducing pressure on local infrastructure • improving quality of life/health and well-being. <p>Credit any other valid response.</p>				
(b)	<i>Steel is a sustainable material used in the construction of the built environment. Describe the characteristics of steel which make it a sustainable material for the construction industry.</i>	2			2
	<p>Award one mark for a basic description of what makes steel a sustainable material, for example:</p> <ul style="list-style-type: none"> • girders/beams/frames can be made from recycled steel • girders/beams/frames can be recycled when buildings are demolished. <p>Award two marks mark for a more developed description of what makes steel a sustainable material, for example:</p> <ul style="list-style-type: none"> • girders/beams/frames may be produced from steel with some recycled content and when the building/structure is demolished the steel components can be recovered, melted and reprocessed into new products. <p>Credit any other valid response.</p>				

Question		Answer	AO1	AO2	AO3	Total Mark
	(c)	<i>Identify one other sustainable material which could be specified by the developer and suggest how it could be used in the construction of new houses.</i>	2			2
		<p>Award one mark for identifying a suitable material and one mark for an appropriate use in house construction, for example:</p> <ul style="list-style-type: none"> • wood – for timber framed construction of the houses • recycled bricks – used to construct the walls of the houses/perimeter walls • wool – used as insulation material within walls • reclaimed slates/tiles – to be used on the rooves of the houses. <p>Credit any other valid response.</p>				

Question	Answer	AO1	AO2	AO3	Total Mark
9.	<i>A farmer in Wales wishes to install renewable technologies to generate electricity for their home and business.</i>				
(a)	<i>Identify three ways in which electricity can be generated from renewable sources.</i>	3			3
	Award one mark for each form of electricity generation: <ul style="list-style-type: none"> • solar • wind • hydro/water. 				
(b)	<i>Explain, with reference to the benefits and limitations of renewable technologies, why the farmer should consider installing more than one form of renewable technology to generate electricity.</i>		6		6
	<p>Answers may refer to the following points in relation to why the farmer should consider installing more than one form of renewable technology:</p> <ul style="list-style-type: none"> • the farmer wishes to generate electricity for their home and their business, so it is important that there is a fairly consistent supply of electricity at all times • supplying their home and business will result in greater electricity consumption than if only one of these was being supplied by renewable technologies • the farmer should not rely on only one form of renewable technology, because all forms of renewable technologies are dependent on the weather • the more electricity the farmer is able to generate using renewable technologies, the cheaper their energy costs will be • all forms of renewable technologies used to generate electricity are affected by the weather: <ul style="list-style-type: none"> • solar panels are most effective in the summer • wind turbines and hydro generation are most effective in the winter • installing solar panels and wind turbines/solar panels and hydro generation will give the best chance of a consistent supply in all weather conditions/throughout the year. <p>Credit any other valid response.</p>				

Band	AO2
3	<p style="text-align: center;">5-6 marks</p> <p>A very good explanation, which shows:</p> <ul style="list-style-type: none"> • thorough knowledge and understanding of the main principles of electricity generation by renewable technologies, and the benefits and limitations of their use in the given context • a confident grasp of why the farmer should not rely on a single form of renewable technology to generate electricity for their home and business.
2	<p style="text-align: center;">3-4 marks</p> <p>A good explanation, which shows:</p> <ul style="list-style-type: none"> • generally secure knowledge and understanding of the main principles of electricity generation by renewable technologies, and the benefits and/or limitations of their use in the given context • a generally secure grasp of why the farmer should not rely on a single form of renewable technology to generate electricity for their home and business.
1	<p style="text-align: center;">1-2 marks</p> <p>A basic explanation, which shows:</p> <ul style="list-style-type: none"> • some knowledge and understanding of electricity generation by renewable technologies, and some benefits or limitations of their use in the given context • some grasp of why the farmer should not rely on a single form of renewable technology to generate electricity for their home and business.
	<p style="text-align: center;">0 marks</p> <p style="text-align: center;">Response not creditworthy or not attempted.</p>

Question	Answer	AO1	AO2	AO3	Total Mark
<p>10</p>	<p><i>The roof covering on a warehouse needs to be replaced. The warehouse was built in 1960 and is in a location which is exposed to high winds and heavy rain. The existing roof covering is fragile and is made of asbestos sheets, which is a hazardous substance. The roof covering is damaged in places. The warehouse is 30 metres long and 20 metres wide. The height of the roof is 6 metres above ground level at the side walls, and 7 metres above ground level at its highest point along the central ridge. There are no obstructions inside of the building, which has a solid concrete floor.</i></p> <p><i>You have been asked by the site manager to analyse the above situation to identify the risks associated with this project and to recommend measures that should be put in place to reduce these risks to an acceptable level.</i></p>			10	10
	<p>Answers may refer to the following risks associated with this project:</p> <ul style="list-style-type: none"> • there is a risk of workers falling from height for a number of reasons: <ul style="list-style-type: none"> • the roof is at least 6 metres above ground level • the roof is fragile so may not support the weight of workers (may be noted in the context of a building with a large span) • the roof has a shallow pitch which may encourage workers to walk on the fragile surface • the roof is damaged, and the damaged sections may be weakened • the warehouse is approximately 60 years old, so there may be deterioration in the roof/its supports/its fixings which are not obvious • the location is subject to poor weather conditions • the asbestos roof covering presents risks to workers on the roof as well as workers subsequently disposing of it because it is a hazardous substance/material • visitors to the site and/or the general public could be at risk of being struck by falling debris while the roof is being removed/ the new roof installed because: <ul style="list-style-type: none"> • workers could drop items • high winds could cause parts of the roof to fall in an uncontrolled way/at an unexpected time while it is being removed • visitors to the site and/or the general public could be at risk of exposure to hazardous substances because fragments of asbestos/asbestos dust could be released when the roof is being dismantled. <p>Answers may refer to the following measures that should be put in place to reduce the risks associated with this project to an acceptable level:</p> <ul style="list-style-type: none"> • carrying out risk assessments, both general assessments of 				

	<p>health and safety risks on the construction site and specific assessments for particular hazards related to this project</p> <ul style="list-style-type: none"> • carefully controlling and supervising access to the site when the roof is being removed/replaced, so that visitors and the general public are not at risk of injury/exposure to harmful substances • properly planning the project, ensuring workers have had appropriate training before undertaking the work, including consideration of: <ul style="list-style-type: none"> • workers operating at height being provided with the correct equipment/not placing their weight on the fragile roof • workers being clear about when work must be stopped in adverse weather conditions • lifting equipment/scaffolding which may be used within the building to enable workers to operate safely at the required height (because of the solid concrete floor and lack of obstructions inside the building) • the fact that asbestos is a hazardous material means that only suitably qualified workers wearing appropriate personal protective equipment (PPE) should remove, handle and dispose of the material • ensuring everyone on site (workers and visitors) follows the correct procedures and uses appropriate PPE • adhering to relevant legislation • preparing procedures to deal with accidents. <p>Credit any other valid response.</p>				
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Band	AO3
4	<p style="text-align: center;">9-10 marks</p> <p>An excellent analysis which includes strong evidence of thoroughly examining the scenario to:</p> <ul style="list-style-type: none"> • identify a range of relevant risks, taking account of the location of the warehouse, the age, structure and fragility of the roof, the hazardous material used and the height of the roof above ground level • recommend detailed and appropriate measures that should be put in place to reduce the identified risks, including carrying out general and specific risk assessments, controlling exposure to risks associated with working at height and with hazardous substances, in accordance with relevant legislation. • Writing is very well structured and organised, using accurate grammar, punctuation and spelling. • A range of specialist terminology is used with accuracy.
3	<p style="text-align: center;">6-8 marks</p> <p>A good analysis which includes secure evidence of examining the scenario to:</p> <ul style="list-style-type: none"> • identify relevant risks, taking account of the location of the warehouse, the fragility of the roof, the hazardous material used and the height of the roof above ground level • recommend generally sound measures that should be put in place to reduce the identified risks, including carrying out general and/or specific risk assessments, controlling exposure to risks associated with working at height and with hazardous substances. • Writing is generally well structured and organised, using mainly accurate grammar, punctuation and spelling. • Specialist terminology is used with accuracy.
2	<p style="text-align: center;">3-5 marks</p> <p>A basic analysis which includes some evidence of examining the scenario to:</p> <ul style="list-style-type: none"> • identify some risks, taking account of some of the following: the location of the warehouse, the fragility of the roof, the hazardous material used and the height of the roof above ground level • recommend basic measures that should be put in place to reduce these risks, including carrying out risk assessments. • Writing shows some evidence of structure though some errors in grammar, punctuation and spelling affect meaning. • Basic use of specialist terminology.
1	<p style="text-align: center;">1-2 marks</p> <p>A limited analysis which includes little evidence of examining the scenario to:</p> <ul style="list-style-type: none"> • identify any risks related to the project • recommend any measures that should be put in place to reduce risks. • Some errors in grammar, punctuation and spelling, which affect clarity of communication. • Writing shows limited use of specialist terminology.
	<p style="text-align: center;">0 marks</p> <p style="text-align: center;">Response not creditworthy or not attempted.</p>

Mapping of questions to specification content and assessment objectives

Unit 1

Question		Specification content (main focus)									Mark allocation				
		Section								Part	Total Marks	AO1 Marks	AO2 Marks	AO3 Marks	
		2.1.1	2.1.2	2.1.3	2.1.4	2.1.5	2.1.6	2.1.7	2.1.8						
1	(a)		2							(b)	2	2	0	0	
	(b)		2							(c)	2	2	0	0	
	(c)		2							(c)	2	2	0	0	
2	(a)			3						(a)	3	3	0	0	
	(b)			2						(b)	2	2	0	0	
	(c)			4						(d)	4	4	0	0	
3	(a)				2					(a)(b)	2	2	0	0	
	(b)				4					(h)	4	4	0	0	
4	(a)							2		(g)(d)	2	2	0	0	
	(b)							4		(a)	4	4	0	0	
5						4				(c)	4	0	4	0	
6						6				(d)	6	6	0	0	
7	(a)	(i)			1					(a)	1	1	0	0	
		(ii)			1					(a)	1	1	0	0	
	(b)				1					(b)	1	1	0	0	
	(c)				4					(c)	4	4	0	0	
8	(a)						3			(a)	3	3	0	0	
	(b)						2			(c)	2	2	0	0	
	(c)						2			(c)	2	2	0	0	
9	(a)				3					(c)	3	3	0	0	
	(b)				6					(c)	6	0	6	0	
10								10		(a)(b) (c)(d) (f)	10	0	0	10	
Total marks			6	9	6	16	10	7	6	10		70	50	10	10