



Level 3 Advanced Technical Extended Diploma in Health and Care (1080) 3625-032

November 2017 Version 1.0

Guide to the examination

Who is this document for?

This document has been produced for centres who offer **City & Guilds Level 3 Advanced Technical Extended Diploma in Health and Care**. It gives all of the essential details of the qualification's external assessment (exam) arrangements and has been produced to support the preparation of candidates to take the exam/s.

The document comprises four sections:

1. **Details of the exam.** This section gives details of the structure, length and timing of the exam.
2. **Content assessed by the exam.** This section gives a summary of the content that will be covered in each exam and information of how marks are allocated to the content.
3. **Guidance.** This section gives guidance on the language of the exam, the types of questions included and examples of these, and links to further resources to support teaching and exam preparation.
4. **Further information.** This section lists other sources of information about this qualification and City & Guilds Technical Qualifications.

1. Details of the exam

External assessment

City & Guilds Technical qualifications have been developed to meet national policy changes designed to raise the rigour and robustness of vocational qualifications. These changes are being made to ensure our qualifications can meet the needs of employers and Higher Education. One of these changes is for the qualifications to have an increased emphasis on external assessment. This is why you will see an external exam in each of our Technical qualifications.

An external assessment is an assessment that is set and/or marked by the awarding organisation (ie externally). All City and Guilds Technical qualifications include an externally set and marked exam. This must be taken at the same time by all candidates who are registered on a particular qualification. We produce an exam timetable each year. This specifies the date and time of the exam so you can plan your delivery, revision and room bookings/PC allocation in plenty of time.

The purpose of this exam is to provide assurance that all candidates achieving the qualification have gained sufficient knowledge and understanding from their programme of study and that they can independently recall and draw their knowledge and understanding together in an integrated way. Whilst this may not be new to you, it is essential that your learners are well prepared and that they have time to revise, reflect and prepare for these exams. We have produced a Teaching, Learning, and Assessment guide that is you should refer to alongside the present document ([Teaching, Learning and Assessment Guide](#)). If a learner does not pass the exam at their first attempt, there is only one opportunity to resit the exam, so preparation is essential.

Exam requirements of this qualification

- **Level 3 Health and Care (Health)**– Theory Exam (2 hours)

The exam is graded and a candidate must achieve at least a Pass grade in order to be awarded the qualification. (In addition to the exam, a synoptic assignment must also be completed and passed). You can find full details of the synoptic assignment in the *Qualification Handbook* and the *Synoptic Assessment Guide* – please see the link to the qualification page at the end of this document.

When does the exam take place?

The exam is offered on two fixed dates in March or June. The exact dates will be published at the start of the academic year in the *Assessments and Exam Timetable*

<http://www.cityandguilds.com/delivering-our-qualifications/exams-and-admin>.

At the start of the programme of study, in order to effectively plan teaching and exam preparation, centres should know when the exam will be taking place and allocate teaching time accordingly. Section 2 of this document gives a summary of the content that needs to be covered in order to prepare learners for the exam and full details of this are given in the Qualification Handbook.

Form of exam

The exam for this qualification can be taken either on paper (3625-532) or online (3625-032).

Can candidates resit the exam?

Candidates may resit the exam once only. If a candidate fails the exam both on the first attempt and when resitting it, that candidate has failed the qualification and cannot achieve it in that academic year.

How the exam is structured

Each exam has a total of 60 marks and is made up of:

- approximately 10 -12 short answer questions
- 1 extended response question.

Short answer questions are used to confirm **breadth of knowledge and understanding**.

The extended response question is to allow candidates to demonstrate **higher level and integrated understanding** through written discussion, analysis and evaluation. This question also ensures the exam can differentiate between those learners who are 'just able' and those who are higher achieving.

More details about and examples of question types are given in Section 3 of this document.

Assessment Objectives

The exams are based on the following set of assessment objectives (AOs). These are designed to allow the candidate's responses to be assessed across the following three categories of performance:

- **Recollection** of knowledge.
- **Understanding** of concepts, theories and processes.
- **Integrated application** of knowledge and understanding.

In full, the assessment objectives covered by the exam for this qualification are:

Assessment objective	Mark allocation (approx %)
<i>The candidate..</i>	
AO1 Recalls knowledge from across the breadth of the qualification	30%
AO2 Demonstrates understanding of concepts, theories and processes from a range of learning outcomes.	50%
AO4 Applies knowledge, understanding and skills from across the breadth of the qualification in an integrated and holistic way to achieve specified purposes.	20%

Booking and taking the exam

All assessments for City & Guilds Technical Exams must be booked through Walled Garden. There is a deadline for booking exams, synoptic assessments and any other centre marked assessments, please refer to the time line to check these dates.

The exam must be taken under the supervision of an invigilator who is responsible for ensuring that it is conducted under controlled conditions. Full details of the conditions under which the exam must be taken can be found in the Joint Council for Qualifications (JCQ) document, [Instructions for Conducting Examinations \(ICE\)](#).

Special consideration

Candidates who are unable to sit the exam owing to temporary injury, illness or other indisposition at the scheduled time may qualify for special consideration. This is a post-examination adjustment that can, in certain circumstances, be made to a candidate's final grade. The Joint Council for Qualifications' guide to the special consideration process can be found at www.jcq.org.uk.

To make a request for special consideration, please contact: policy@cityandguilds.com

Access arrangements

Access arrangements are arrangements that allow candidates with particular requirements, disabilities or temporary illness to take assessments, where appropriate, using their normal way of working. The Joint Council for Qualifications document, *Access Arrangements and Reasonable Adjustments* gives full details and can be downloaded [here](#).

For further information and to apply for access arrangements please see:

[Access arrangements - When and how applications need to be made to City & Guilds](#)
[Applying for access arrangements on the Walled Garden](#)

2. Content assessed by the exam

Health and Care (Health)

The exam assesses:

- **Unit 316: Structure, organisation and function of the human body**
- **Unit 317: Principles and models of healthcare**
- **Unit 318: Science in health and care**

Each exam assesses a sample of the content of these units. This means that a single exam will **not** cover 100% of the unit content. The full range of content will be assessed over a number of examination series. Details of the coverage of a particular exam paper will **not** be released in advance of the exam itself. Centres should **not** make assumptions about what will be assessed by a particular exam based on what has been covered on previous occasions. In order to be fully prepared for the exam, learners **must** be ready to answer questions on **any** of the content outlined below.

The table below provides an overview of how the qualification's Learning Outcomes are covered by each exam and the number of **marks** available per Learning Outcome (ie **not** the number of *questions* per Learning Outcome). In preparing candidates for the exam, we recommend that centres take note of the number of marks allocated to Learning Outcomes and to assign teaching and preparation time accordingly.

In preparing candidates for the exam, centres should refer to the Qualification Handbook which gives full details of each Learning Outcome.

The following is a summary of only that qualification content which is assessed by the exam and **not** a summary of the full content of the qualification.

Unit	Learning outcome	Topics	Number of marks per section
316 Structure, organisation and function of the human body	LO1 Understand the organisation of the human living cell, from its simplest level to the most complex level found in the human body	1.1 Single and complex cells 1.2 Relationship between cells and systems	8
	LO2 Understand the structure, functions and interdependency of the human body systems	2.1 Structure of body systems 2.2 Function of body systems 2.3 How the body maintains balance between systems	

317 Principles and models of healthcare	LO1 Understand the relationship between health and wellbeing	1.1 The concept of health and wellbeing 1.2 The relationship between health and wellbeing in health and care	20
	LO2 Understand the principles of the biomedical model	2.1 Defining the biomedical model 2.2 Biomedical approach	
	LO3 Understand the principles of the sociological model	3.1 Sociology in relation to health care 3.2 Factors impacting on health and wellbeing 3.3 Current trends in public policies	
	LO4 Understand the principles of the psychological model	4.1 Psychological perspectives 4.2 Individualism and diversity 4.3 Self-awareness and self-esteem	
	LO5 Understand the holistic approach and impact of the biopsychosocial model	5.1 Defining the biopsychosocial model 5.2 Benefits and impact of the biopsychosocial model	
318 Science in health and care	LO1 Understand basic science in health and care	1.1 Cell division 1.2 Micro-organisms and their impact 1.3 Body movement 1.4 How the body gets energy	20
	LO2 Understand the impact of genetics on health and wellbeing	2.1 Defining genetics 2.2 Genetic links to systems 2.3 Genetic evidence	

LO3 Know diagnostic tests used in healthcare environments	3.1 Diagnostic tests 3.2 Physiological measurements
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LO4 Understand the science behind health promotion used to support health and wellbeing	4.1 Health initiatives 4.2 Researching initiatives
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Total marks for sections: 48 marks

Integration across units*: 12 marks

Total marks for exam: 60 Marks

* *Integration across units*. These marks relate to Assessment Objective 4. These marks are awarded to differentiate between levels of performance by candidates taking the exam. The marks are given for how well a candidate has applied their knowledge, understanding and skills from across the units that make up the qualification in an integrated way to meet the requirements of the exam questions.

3. Guidance

Vocabulary of the exam: use of 'command' verbs

The exam questions are written using 'command' verbs. These are used to communicate to the candidate the type of answer required. Candidates should be familiarised with these as part of their exam preparation.

The following guidance has been produced on the main command verbs used in City & Guilds Technicals exams.

A more detailed version of this table, which also includes the command verbs used in the assignments is published in *City & Guilds Technical Qualifications Teaching, Learning and Assessment* guide.

Command verb	Explanation and guidance
Analyse	Study or examine a complex issue, subject, event, etc in detail to explain and interpret, elements, causes, characteristics etc
Calculate	Work out the answer to a problem using mathematical operations
Compare (... and contrast) (or describe the similarities/differences)	Consider and describe the similarities (and differences) between two or more features, systems, ideas, etc
Define	Give the meaning of, technical vocabulary, terms, etc.
Describe	Give a detailed written account of a system, feature, etc (..the effect of...on...) the impact, change that has resulted from a cause, event, etc (..the process..) give the steps, stages, etc
Differentiate between	Establish and relate the characteristic differences between two or more things, concepts, etc
Discuss	Talk/write about a topic in detail, considering the different issues, ideas, opinions related to it
Distinguish between	Recognise and describe the characteristic differences between two things, or make one thing seem different from another
Evaluate	Analyse and describe the success, quality, benefits, value, etc (of an end product, outcome, etc)
Explain	Make (a situation, idea, process, etc) clear or easier to understand by giving details (..how..) Give the stages or steps, etc in a process, including relationships, connections, etc between these and causes and effects.
Give example(s) illustrate/	Use examples or images to support, clarify or demonstrate, an explanation, argument, theory, etc

Give a rationale	Provide a reason/reasons/basis for actions, decisions, beliefs, etc
Identify	Recognise a feature, usually from a document, image, etc and state what it is
Justify	Give reasons for, make a case for, account for, etc decisions, actions, conclusions, etc, in order to demonstrate why they suitable for or correct or meet the particular circumstances, context
Label	Add names or descriptions, indicating their positions, on an image, drawing, diagram, etc
List	Give as many answers, examples, etc as the question indicates (candidates are not required to write in full sentences)
Name	Give the (technical) name of something
Propose	Present a plan, strategy, etc (for consideration, discussion, acceptance, action, etc).
Select	Choose the best, most suitable, etc, by making careful decisions
State	Give the answer, clearly and definitely
Summarise	Give a brief statement of the main points (of something)

Question types

The following explains, and gives examples of, types of questions used in City & Guilds Technical exams. In preparing candidates to take the exam, it is recommended that you familiarise them with the requirements of each question type so that they can be effective and make best use of the time available when sitting the exam.

- An effective candidate will gauge the type and length of response required from the question and the number of marks available (which is given for each question on the exam paper).
- Short answer questions may not require candidates to write in complete sentences. Extended response questions will require a more developed response.
- Candidates should read the exam paper before attempting to answer the questions and should allocate time proportionate to the number of marks available for each question or section.

Question type:	Example question	Example question:
<p>Short answer questions (restricted response) These are questions which require candidates to give a brief and concise written response. The number of marks available will correspond to the number of pieces of information/examples and the length of response required by the question.</p>	<p>State two locations of the receptor cells responsible for tissue stimulation. (2 marks)</p>	<p>One mark for each of the following up to a maximum of two marks:</p> <ul style="list-style-type: none"> • Skin • Eyes • Ears • Tongue • Nose/nasal.
<p>Structured Response Questions These are questions that have more than one part (eg a), b), etc.). The overall question is made up of linked, short answer questions which move the candidate through the topic in a structured way. For example, the question will usually start with a 'recall'/'state'/'describe' question followed by an 'explain' to draw out understanding of the</p>	<p>a) Identify one genetic disease associated with each of the following systems: i) cardiovascular (1 mark) ii) respiratory. (1 mark)</p> <p>b) Explain the interaction between the cardiovascular and respiratory system. (2marks)</p>	<p>a) i) Progressive cardiac conduction deficit. ii) Asthma. Accept any other relevant response.</p> <p>b) One mark for each of the following explanations up to a maximum of two marks:</p>

topic. They usually have a shared introductory 'stem', and the number of marks may increase through the question.

- The respiratory system filters air to provide oxygen to the circulatory system
 - The circulatory system filters carbon dioxide into the lungs to enable it to be removed from the body as waste.
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Extended response questions

Extended response questions are those that require the candidate to write a longer written response using sentences and paragraphs. These usually require candidates to discuss, explain, etc. a topic in some detail. The question is often based on a short case study, scenario or other prompt. The level of detail should be gauged from the question and the number of marks available.

Example question

Valerie is 56 and becomes extremely breathless when walking. She is unemployed and explains that she is a heavy smoker and rarely leaves her flat, which makes her feel isolated. The doctor has diagnosed Valerie with a respiratory disease.

Discuss how Valerie's health and well-being could be improved. (12 marks)

Mark scheme

- The body systems that may be involved in causing Valerie's breathlessness
 - Impact of smoking on physical health
 - Demographic factors impacting on smoking habits
 - Diagnostic tests used to identify health issues related to breathlessness
 - Relevant health care services and professionals who could support Valerie to improve her lifestyle choices
 - Relevant psychological perspectives to include different theories/theorists
 - The effect of self-esteem issues relevant to Valerie's health in the short and long term
 - Health promotion initiatives
 - Biopsychosocial model / integrated care
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Band 1 (1 - 4 marks)

Basic discussion with limited considerations taken into account on the individuals' health. Made little reference to the individual's wellbeing and health and care support available with little or no justifications. Limited explanations for recommendations made to improve health and wellbeing. The response lacked structure and coherency. Where facts were provided, these were sometimes incorrect.

To access higher marks in the band the response will include some attempt to address a larger range of considerations.

Example band 1 response

Because Valerie is a heavy smoker her lungs will be affected as the smoke damages the bronchi, so it is making her breathless when she moves. She is a heavy smoker, so this probably will affect her circulatory system and her blood won't have enough oxygen to keep her healthy. Smoking will cause her to be at risk of heart disease because the tobacco harms blood cells and blood vessels and the blood won't carry oxygen to her organs. Quitting smoking will reduce Valerie's risk of getting heart disease or even dying of a heart attack.

Valerie needs to quit smoking to improve her health, she might be able to breathe and move more when she stops smoking. She might be less breathless so will go out more often to see her friends, so she won't be as isolated.

She might need help to quit smoking, so her doctor might ask her to try a replacement or send her to a stop smoking group. She might have to get a peak flow test done and her blood pressure taken and go for an ECG if the doctor thinks her heart is affected.

Valerie is unemployed, so she won't have much money, so she might smoke because she is bored and that makes her worse, so she can't get out of the flat. She might have been smoking for a long time and started because she copied her friends and now it is a habit and she is addicted. She might be embarrassed when she gets out of breath, so she doesn't want to go out.

Valerie's health could be improved by the doctor finding out if she has tried to quit smoking before and what she tried. To plan a way to help her stop smoking the doctor needs to look at her situation of feeling isolated as well as her being addicted and work with her to agree what she can do. There is information on the internet that she could look at to help her to stop smoking.

Band 2 (5 - 8 marks)

Clear and relevant discussion which makes a reasonable attempt to cover the main considerations affecting Valerie's health and well-being and potential impacts which displays good breadth of knowledge and understanding. The discussion includes recommendations for improvement and the support available which may be detailed in some areas. There may be use of some examples to support the discussion. The overall discussion is presented in a clear format and the use of terminology is mostly appropriate. Content is factually accurate.

To access higher marks in the band, the discussion will cover all health related factors and be mostly detailed and contain some justifications with good links to health and care services. Reference to theory/theorist may be included. The overall discussion will be presented clearly and with some logical structure.

Example band 2 response

Smoking causes damage to the respiratory system and the main airways called the bronchi. When the airflow is blocked it can cause COPD which is progressive so if this happened to Valerie she would get steadily worse in her breathing and might have a cough and get flu in the winter. Smoking will affect Valerie's respiratory system and the rate at which oxygen is taken in. Because smoking has damaged cells she won't have as much oxygen in her blood so she is at risk of disease to other parts of her body. Smoking affects nearly all organs in the body like the heart, lungs, reproductive organs, bones, and digestive organs. Valerie is at risk of getting coronary heart disease which can lead to high blood pressure, high cholesterol levels and heart attack. If Valerie could give up smoking she might not deteriorate and be able to move about and get out of her flat without getting breathless.

To find out how much her health is affected the doctor would do tests like taking her blood pressure, checking her temperature and checking her respiratory rate because people who are unhealthy breathe more often when they are not exercising.

Valerie is isolated affecting her mental health and so she might get depressed. As she is unemployed she might have financial worries and she doesn't have a structure to her day which might mean she smokes more. She doesn't go out so she is not seeing many people, so her social needs are not met. According to Maslow's hierarchy of needs she is not getting her psychological needs met and this will be a cause of stress.

Valerie needs to improve her lifestyle to become more COPD healthy but she might need help as giving up smoking is difficult. She could try Nicotine patches to help her overcome the addiction to the nicotine in her body and her doctor could arrange a one-to-one appointment with an advisor who could be at her surgery or pharmacy. There is also a free NHS Stop Smoking Helpline that Valerie could ring if she really wants to stop smoking who say that you are four times more likely to stop smoking for good if you get help from them.

If Valerie did stop smoking she would be able to breathe better and then get out of her flat more so she would not be as isolated. This will help to improve her mental and social health. The other body systems will also be healthier, for example, she will not be in as much risk of heart disease. Patient Centred Care means that the professionals who help her will find out about her lifestyle and preferences and what she has tried before. They will discuss with her the ways that will help her the most.

Band 3 (9 - 12 marks)

Comprehensive and clear discussion showing breadth of understanding across a range of considerations which were supported by effective justification that displayed depth of understanding. Sound knowledge and understanding of the potential impact on individual's health and wellbeing. A well-reasoned discussion with accurate links to health and wellbeing support services considered. Throughout the discussion coherent opinions were offered with clearly defined examples and clear reference to theory/theories. Relevant use of accurate terminology was evident. The entire discussion was relevant and factually accurate.

To access higher marks in the band the response will be coherent, balanced and structured in a logical way. Clear and strong reference to theory/theories to support discussion. All recommendations will be fully justified.

Example band 3 response

Smoking can cause lung disease by damaging the bronchi and causing tar to build up in the lungs and is the biggest cause of lung cancer. Smoking also damages blood vessels and can make them thicken and grow narrower. This makes your heart beat faster and your blood pressure go up. Blood clots can also form which affect the flow of blood to an organ or body part. If Valerie was to stop smoking after just one year her risk of having a heart attack would drop sharply and after about 5 years the risk of her getting cancer of the throat, and bladder would also drop. Most of her body systems will be affected by the smoking as there is not enough oxygen being carried in her blood to all her organs so they will not function as they should.

To determine what her health is like the GP will conduct some tests such as a blood pressure reading and respiratory rate. Usually people who have a lung disease have their respirations counted and the breath is counted for 60 seconds. Less than 1 or more than 25 would be a sign of illness.

The effect of smoking on her day to day life is significant because she gets breathless which makes mobility difficult and adds to her isolation. Isolation is likely to affect her emotionally and can lead to depression and also affect her memory and intellectual ability because she is not getting stimulation from others. According to Abraham Maslow's hierarchy of needs, Valerie is not having her needs met so it is important that when she receives help more of her basic needs are met to promote improved health. She is not meeting others and this will affect her self-esteem as according to Carl Rogers people need positive regard to stay healthy.

The GP could prescribe medication to help her to breathe and recommend that she uses the NHS Smokefree support service. She can access this by an app, email, SMS or going to see someone face-to-face. The sessions usually start 1-2 weeks before someone decides to stop smoking so Valerie could use this chance to meet new people. The combination of support to overcome the physical cravings like using nicotine patches and social support would be the most effective way of helping. Valerie could also use e-cigarettes and the NHS helpline says that these used with the NHS stop smoking service helped 2 out of 3 people to stop smoking. They are not available on prescription, so Valerie would need to buy these instead of normal cigarettes. All the options would be discussed with her so she agrees to try what is best for her.

If Valerie did give up smoking she would improve her physical and mental health so she would live longer. Smokers in all the social class groups are more at risk of dying early but she would potentially not live her life with the effects of a long-term chronic health condition which affected her quality of life such as emphysema, arteriosclerosis or COPD.

Examination technique

Candidates with a good understanding of the subject being assessed can often lose marks in exams because they lack experience or confidence in exams or awareness of how to maximise the time available to get the most out of the exam. Here is some suggested guidance for areas that could be covered in advance to help learners improve exam performance.

Before the exam

Although candidates cannot plan the answers they will give in advance, exams for Technical qualifications do follow a common structure and format. In advance of taking the exam, candidates should:

- be familiar with the structure of the exam (ie number and type of questions).
- be aware of the amount of time they have in total to complete the exam.
- have a plan, based on the exam start and finish time for how long to spend on each question/section of the exam.
- be aware of how many marks are available for each question, how much they should expect to write for each question and allow most time for those questions which have the most marks available.

At the start of the exam session

At the start of the exam, candidates:

- should carefully read through the instructions before answering any questions.
- may find it helpful, where possible, to mark or highlight key information such as command words and number of marks available on the question paper.
- identify questions which require an extended written answer and those questions where all or part of the question may be answered by giving bullets, lists etc rather than full sentences.

Answering the questions

Candidates do not have to answer exam questions in any particular order. They may find it helpful to consider, for example:

- tackling first those questions which they find easiest. This should help them get into the 'flow' of the exam and help confidence by building up marks quickly and at the start of the exam.
- tackling the extended answer question at an early stage of the exam to make sure they spend sufficient time on it and do not run out of time at the end of the exam.

Candidates should avoid wasting time by repeating the question either in full or in part in their answer.

Candidates should **always** attempt every question, even questions where they may be less confident about the answer they are giving. Candidates should be discouraged however, from spending too long on any answer they are less sure about and providing answers that are longer and give more detail than should be necessary in the hope of picking up marks. This may mean they have less time to answer questions that they are better prepared to answer.

Extended answer questions

Before writing out in full their answer to extended questions, candidates may find it helpful to identify the key requirements of the question and jot down a brief plan or outline of how they will answer it. This will help clarify their thinking and make sure that they don't get 'bogged down' or provide too much detail for one part of the question at the expense of others.

Towards the end of the exam

Candidates should always set aside time at the end of the exam to read back through and review what they have written in order to make sure this is legible, makes sense and answers the question in full.

If a candidate finds they are running out of time to finish an answer towards the end of the exam, they should attempt to complete the answer in abbreviated or note form. Provided the content is clear and relevant, examiners will consider such answers and award marks where merited.

Further guidance on preparing candidates to take the exam is given in the City & Guilds publication, [Technical Qualifications, Teaching, Learning and Assessment](#) which can be downloaded free of charge from City & Guilds website.

4. Further information

For further information to support delivery and exam preparation for this qualification, centres should see:

City & Guilds

Qualification homepage: www.cityandguilds.com/qualifications-and-apprenticeships/health-and-social-care/care/3625-technical-qualifications-in-health-and-care which includes:

- Qualification handbook
- Synoptic Assignment
- Sample assessments

Technical Qualifications, Resources and Support: www.cityandguilds.com/techbac/technical-qualifications/resources-and-support

Joint Council for Qualifications

Instructions for Conducting Examinations: <http://www.jcq.org.uk/exams-office/ice---instructions-for-conducting-examinations>