



EXAMINER'S REPORT

LEVEL 3

**HEALTH AND SOCIAL CARE:
PRINCIPLES AND CONTEXTS**

JANUARY 2024



Grade boundary information for this subject is available on the WJEC public website at:
<https://www.wjecservices.co.uk/MarkToUMS/default.aspx?l=en>

Online Results Analysis

WJEC provides information to examination centres via the WJEC secure website. This is restricted to centre staff only. Access is granted to centre staff by the Examinations Officer at the centre.

Annual Statistical Report

The annual Statistical Report (issued in the second half of the Autumn Term) gives overall outcomes of all examinations administered by WJEC.

HEALTH AND SOCIAL CARE: PRINCIPLES AND CONTEXTS

Level 3

January 2024

UNIT 2: FACTORS AFFECTING INDIVIDUALS' GROWTH AND DEVELOPMENT ACROSS THE LIFESPAN.

General Comments

For the winter 2024 series, it was evident that candidates were able to access all questions across the paper, with fewer questions being left blank than we have seen previously. Furthermore, there was little evidence of candidates not finishing questions. However, on a few occasions some candidates missed out the last two questions. It should be noted that candidates must check each page on their exam paper and ensure that they look out for the 'END OF PAPER' information, as this confirms that the paper has ended.

In some cases, there was evidence of candidates using bullet points to respond to A03 questions, but this does seem to be decreasing from series to series, which is very pleasing. It is important that candidates are aware of the key command words that are used in assessments, for example, for A02 questions using the command word 'explain', some candidates were unable to give reasons or explore their answer in any detail. It would be useful to give a copy of the assessment command words to candidates who are sitting external examinations to enable them to fully prepare.

Where candidates fell into the lower mark bands, this was generally down to questions on psychological models (2.2). Two key questions on Bronfenbrenner and Maslow were not tackled effectively, with many candidates not having an awareness of the **basic concepts** to support them in their answer. When candidates did use basic concepts, some did not spell these correctly.

Questions that focused on assessment criteria 2.1, factors affecting individuals' growth and development, were generally tackled well, however some candidates were unable to differentiate between the different aspects of development such as physical, intellectual, emotional, and social development. It is important that candidates are aware of these differences as this can add depth to their answers and for future years, candidates may be assessed on the specific aspects of development. For example, in the question about how an ACE could affect a child's intellectual, physical, and social development, some candidates were unable give a full answer due to a lack of awareness of one of the aspects of development. Candidates should be encouraged to focus on holistic features of development and additionally on the positive and negative aspects of different life factors.

Questions that focused on 2.3, approaches to promoting and protecting resilience, were answered well with many candidates being able to explore different approaches. Some candidates need to explore approaches to resilience in further detail, but it was pleasing to see candidates discussing key approaches such as therapeutic and recreational activities. It is, however, important for candidates to be able to explain these approaches, for example, explaining what the approach is and giving an example of how the approach could be used to support individuals' resilience.

It is important for centres to consider whether candidates' handwriting is legible, if candidates' handwriting is not legible, these candidates should be encouraged to sit the on-screen version of the examination. This method can be encouraged (and trialled) for all students as it has multiple benefits for the learners.

Comments on individual questions/sections

- Q.1**
- (a) The vast majority of candidates were able to state that divorce is classed as an unpredictable life event. There were some candidates who gave 'predictable' as a life event which was incorrect. A small number of candidates wrote both and identified an unexpected life event; it is important for a 'state' question that candidates give a brief fact **or** select from the question choices, which were 'state whether divorce is classed as a *predictable* or *unpredictable* life event'. Candidates needed to be clear whether divorce was predictable or unpredictable.
 - (b) This question was answered very well with the majority of candidates able to name 'adolescence' as the life stage that Mia would reach after childhood. Some candidates did not name the specific life stage as stated in the specification and therefore were not credited, for example, later childhood. Some candidates spelt 'adolescence' incorrectly; although candidates were not penalised for this, it would be good practice for candidates to familiarise themselves with the spelling of key words, this could be done by creating a glossary of key terms.
 - (c) This question was answered very well with many candidates being able to achieve marks. Some candidates identified other aspects of development affected by the impact of divorce on Mia and were not credited. It was pleasing to read the different ways in which divorce could impact on Mia's emotional health with the majority of candidates focusing on Mia's self-esteem being damaged, leading to anxiety and potential depression.
 - (d) It was pleasing to see candidates could give a wide range of different effects of ACES. Some candidates were able to meet the higher bands for this question by being able to discuss in detail the physical, intellectual, and social effects of ACES. However, some candidates defined the concept of ACES which wasted time and reduced their opportunity for discussion. A good 'discussion' answer examines an issue in detail, considering different viewpoints; candidates who accessed higher marks knew at least two effects of an ACE on the physical, intellectual, and social development. Some candidates identified that children who experienced ACES would be more likely to be diagnosed with health problems, however many failed to give a specific example and the reason why they may be at greater risk, for example, due to the stress caused by the ACE during their childhood. There were some candidates who considered the emotional impact of ACES and therefore were not credited as this was not asked within the question.

(e) On the whole, many candidates were unable to fully meet the demands of this question, and some did not attempt it. Some candidates showed only limited knowledge and understanding of Bronfenbrenner's theory. It was pleasing to see that some candidates were aware of the five key systems from his theory. A small number of candidates identified that there were four stages of the system which was incorrect. Higher achieving candidates could examine the theory in detail and fully apply it to explain the long-term impact of ACES on a child. Many candidates were able to consider the long-term impact of ACES but could not accurately apply Bronfenbrenner's theory.

- Q.2** (a) On the whole candidates were able to give some forms of advice that a health professional may give to Misha, however many lacked the development in explaining how it would improve her physical health and well-being. Some candidates focused on other aspects of her health and well-being, such as her emotional/social well-being which was not being assessed in this question. Some candidates did not apply the assessment command word 'explain' effectively by not providing details or reasons in their answer, for example, in more detailed responses, candidates gave the advice, a specific example and the benefit this would have on improving Mischa's physical health and well-being. Some candidates repeated the question in their answer, for example "therefore this would improve Misha's physical health and well-being."
- (b) Some candidates were able to give clear reasons why Misha may have poor eating habits, however some candidates confused Skinner and Pavlov's theories and were unable to apply Pavlov's theory accurately, some confusing it with the Social Learning Theory. Some candidates applied the behavioural theory in supporting Misha to overcome her poor eating habits, this did not relate to the question being asked. It was pleasing to see some candidates fully apply the term 'classical conditioning' to Misha's poor eating habits. Some candidates were able to give a wide range of key concepts and apply them to Misha's poor eating habits; higher band candidates ably used terms such as the 'unconditioned response', 'conditioned stimuli' and 'neural stimuli. Some candidates used 'operant conditioning,' which is a concept associated with Skinner. The key concept associated with Pavlov is '**classical conditioning.**' It is important that candidates are aware of basic concepts associated with key psychological models.
- (c) There was a mixed response to this question. Some candidates were unable to explain their point and did not make it clear what changes Misha could make that could affect her self-concept and resilience. When candidates are asked to explain, they should provide reasons and give details, addressing the question 'why'. There are a wide range of lifestyle choices in the specification that candidates could have explored which would have developed their responses further. Some candidates failed to show understanding of self-concept and resilience which was key to attaining higher marks. It was pleasing to see some candidates mentioned the use of technology, for example, 'Mia could join an on-line support group in which she can discuss her problems and learn from others, by doing this she will learn strategies to bounce back more effectively in the future and also feel a sense of achievement in participating in these groups'.

- Q.3** (a) On the whole, most candidates were able to score some marks for this question. It was pleasing to see candidates discussing a range of methods including identification of the potential physical, intellectual, emotional, and social impact an accident may have on a child's growth and development. Some candidates misread the question and considered how an accident would affect an adult's development, discussing lack of income due to being off work. Some candidates stated only that it impacts physical, emotional and social development without fully identifying the specific impact on a child's growth and development resulting from an accident.
- (b) Candidates performed well on this question, and many were able to reach the top mark bands. It was really pleasing to see some candidates were aware of specific family structures, for example, if a parent was a single parent, the accident may significantly impact on the parent financially as they only have one income, and they may have to take time off to look after the children. It was important that candidates were able to clearly state the impact of a child having an accident on the parent followed by an explanation of the long-term impact. Some candidates were unable to explain the long-term impact, a minority of candidates misread the question and focused on the impact on the child. Some candidates repeated the same points twice so therefore were not credited twice. Some candidates identified that the parents would be isolated but did not extend their answer with an explanation of why this could result in isolation by parents potentially having to focus on their child's specific needs resulting in them not being able to participate in normal day to day activities. Some candidates used terms such as parents may change their parenting styles to 'authoritarian' or become 'helicopter parents,' emphasising the potential impact on a parent as a result of their child experiencing an accident.
- (c) The majority of candidates were able to score some marks for this question, however some candidates focused on other aspects such as the impact of an accident on an individual's emotional development.
- Q.4** (a) The majority of candidates were able to achieve some marks for this question. In some cases, responses were generalised, stating that life-limiting conditions are a result of being born with them. Although this may be true in some cases, this does not represent *all* life-limiting conditions. It is important that candidates give a **core meaning** of life-limiting conditions such as: 'to die prematurely or reduce life expectancy' in order to achieve marks for this question. Some answers were vague and related to 'individuals dying' or life-limiting conditions 'impacting on their daily lives' which could be applied to any condition so therefore was not credited with marks. It was pleasing to see a number of candidates give a wide range of examples of life-limiting conditions which added detail to their answer, allowing them to achieve higher marks.
- (b) Candidates dealt well with this question. It was evident that they were aware of the practices of certain religions such as weekly worship, praying and providing social activities through specific festivals. For higher band candidates, answers were linked to how practicing a religion may support the family through difficult times. Some candidates were unable to describe their points and were only able to list what happens when you practice a religion, their answers lacking detail.

- (c) This question was answered well; however, some candidates were unable to fully explain their answers. Some answers were vague and simplistic, such as 'by Joe having a life-limiting condition this may impact him doing his homework'. As this could be applied to a range of situations, it is important to be more specific, for example, Joe may not be able to do his homework due to fatigue as a result of the medication he may be on. Many candidates identified that Joe may miss lots of school, but this was not explored further and lacked reasons why and how this could impact on his intellectual development. It is important that candidates are fully aware of the command words, for 'explain' questions there should be detail and some reasoning. Some candidates fully explained their points and focused on Joe's life-limiting condition, explaining how this may affect his intellectual development.

- Q.5** (a) This question had a mixed response, many candidates could define what is meant by nature and nurture, however some confused the terms or wrote a general answer without differentiating between terms. Some good application of knowledge was seen when relating, particularly nurture to Osian's behaviour. It was pleasing to see some key concepts from psychological models being used such as 'role-models', 'imitation' and 'genetics.' Higher band candidates wrote good discussions by bringing in psychological models to add to the debate in explaining Osian's behaviour **or** evaluating the nature and nurture argument and applying this to Osian. Some excellent evaluation of the nature argument applying to the stem was seen, for example, nature may be incorrect as if it was due to genetics, all Osian's family would be criminals whereas it suggested that some are known for criminal activity. When asked to 'discuss' candidates should examine an issue in detail in a structured way, considering different ideas and viewpoints.
- (b) Many candidates accessed this question well. It was pleasing to see analytical answers which considered how Osian's involvement in crime could impact on his long-term growth and development. Some candidates paid lip-service to Osian's involvement in crime, only considering the long-term impact, for example, Osian may miss school and therefore will not do well in his education. This is an example of an answer that is lacking full analysis as it could be applied to a wide range of individuals and is not specific. It was important that Osian's **involvement in crime** was the focus of the candidate's answer this was linked to his long-term development. A small number of candidates focused on how Osian's children could be affected by him being involved in crime, this was not the question as the question was focusing on '**his** long-term growth and development.' It was pleasing answers relating to a diagnosis of PTSD in the future due to potential flashbacks of criminal or gang related, activity and violence which could result in emotional trauma.
- (c) In the majority of responses, candidates were able to provide a brief definition of some different approaches to promote and protect resilience that Osian could adopt. Those who developed their answers were able to identify a wide range of approaches that Osian could use. It was pleasing to see candidates use terms such 'therapeutic' and 'recreational activities' within their responses, however specific examples relating to Osian would have been beneficial. Some candidates listed the approaches without any description and some candidates did not make clear how the approaches they described could support Osian's resilience.

- Q.6** (a) Only a small number of candidates achieved full marks for this question, and some did not attempt it. A few candidates confused 'physiological needs' with 'psychological needs' related to Maslow; although candidates were not penalised for this, it is important that they are aware of the difference in terms and the basic concepts of each theory. Some candidates showed a basic understanding of the five levels in Maslow's pyramid but struggled to apply it to Patrick's current situation. Candidates could have tackled this question in a number of different ways, they could have applied the different needs to Patrick's current situation or could have considered what the effect of not meeting the needs would have been on Patrick. It was pleasing that some candidates could accurately state that due to Patrick's current living situation, he would struggle to meet his physiological needs and may not be able to eat or drink, therefore failing to meet his nutritional requirements. Likewise, it was good to see that some candidates could apply the correct physiological needs to Patrick whilst in hospital, making it clear that the hospital would meet his nutritional needs by providing food and drink. For any question relating to psychological models, it is always useful to start the answer by giving an overview of the model, for example, stating that there are five levels in Maslow's hierarchy and that individuals must meet each one to self-actualisation.
- (b) This question was attempted by most candidates, although some candidates did not fully understand the command word 'summarise', which is to select and present the main points without additional detail. Some candidates only listed approaches without presenting the main points of how they would support Patrick, for example, encouraging Patrick to go to a community food bank but stating how this would promote or protect his resilience. Adding that this would give him energy through improved nutrition and improve his mood would fully meet the requirements for the A01 (summarise) assessment command word. Some candidates only listed approaches and repeated the question that it would protect his resilience with no further details given to demonstrate understanding.
- Q.7** (a) The majority of candidates who attempted this question were able to identify and explain the impact of depression on Sioned's long-term growth and development. Candidates who scored higher marks for this question could give developed reasons for how depression could impact on long-term growth and development, focusing on her holistic elements.

Some examples of developed responses:

- Physically - could prevent you leaving the house due to lack of motivation which could impact upon Sioned lacking sunlight leading to Vitamin D deficiency.
- Intellectually - impacts on her intellectual and cognitive development as she may be on medication for depression which could affect her concentration levels and affect her long-term job prospects.
- Emotionally – low levels of self-esteem and self-concept as she feels self-conscious about how she looks which may prevent her from applying for jobs or undertaking activities which could broaden her experiences.
- Socially – she may become socially isolated and not motivated to leave the home and therefore not spend time with her family and friends, losing social skills.

Not many candidates considered the positive impact of depression on Sioned's long-term growth and development, even though this was not needed – it is good practice to consider both positive and negative aspects of life events. A minority of candidates discussed Sioned's school days, as she was 35 years-old this was not relevant, it is important that candidates read the question stem fully.

- (b) It was pleasing to see specific examples of how social networks could support Sioned with her depression, for example, Sioned can use a chat forum (technology) in which she could discuss her depression with individuals who have had similar illnesses, this would benefit Sioned by making her feel that she is not alone, learning ways to overcome this. Some candidates could describe how social networks may help, but did not relate their answers specifically to how they could help her cope with her depression, for example, friends could take her out for a walk, but then the candidates did not explain how this could help Sioned cope with her depression.

Summary of key points

- When candidates learn about 'nature and nurture.' within the 2.2. specification, it would be useful for them to define the key terms and apply them to a wide range of situations. They should be able to explain what psychological models are associated with nature and nurture. This could be taught as a useful icebreaker activity when introducing psychological models to distinguish if the theory is more in line with nature or nurture or even both.
- Candidates should be aware of **basic concepts** associated with each key psychological model as this underpins their knowledge and understanding and enables them to build up their marks in questions.
- Use a range of real-life examples of life-limiting conditions for candidates gives candidates a clearer overview of what is meant by life-limiting conditions; what they are; how individuals and their families are supported and the impact on holistic development. Candidates could be referred to soaps or television programmes to support their learning and revision. Ty-Hafan charity is also a useful organisation to look at - <https://www.tyhafan.org/about-us/>
- Candidates should be given the command words to support them during class revision sessions and when revising at home – a useful link to support candidates is - <https://www.healthandcarelearning.wales/en/resources/hscce-command-words>
- Candidates should ensure that they fully complete the exam paper by checking all questions have been answered, they can do this by firstly checking how many questions there are on the front of the exam paper and secondly, look out for the (END OF PAPER) to confirm the paper has finished and there are not more questions.

THURSDAY, 11 JANUARY 2024 – MORNING

HEALTH AND SOCIAL CARE: PRINCIPLES AND CONTEXTS

UNIT 2: Factors affecting individuals' growth and development across the lifespan and how this impacts on outcomes, care and support needs

1 hour 45 minutes

For Examiner's use only		
Question	Maximum Mark	Mark Awarded
1.	19	
2.	20	
3.	11	
4.	11	
5.	18	
6.	10	
7.	11	
Total	100	

NS TO CANDIDATES

***candidates should check that they have answered all questions on the paper.**

END OF PAPER

***Candidates should look out for the END OF PAPER sign**

Level 3 HEALTH AND SOCIAL CARE: PRINCIPLES AND CONTEXTS

January 2024

UNIT 5: SUPPORTING INDIVIDUALS AT RISK TO ACHIEVE THEIR DESIRED OUTCOMES.

General Comments

This series was the last opportunity for this Unit to be assessed through an external examination. The unit has moved to an internal assessment (Non-Examination Assessment) as part of the new Level 3 Extended Diploma in Health and Social Care, first teaching from September 2023 and first assessment Summer 2024.

The majority of candidates attempted most questions. There was a mixture of well-prepared candidates and those that needed further revision to fully meet the assessment command words.

A03 questions were a challenge for many, and some candidates were not able to fully express their ideas, showing understanding and reasoned argument, which is a key requirement for A03.

Candidates had some grasp of the terms 'abuse' and 'neglect' but were not confident in giving specific examples. Some candidates gave vague responses lacking technical accuracy such as 'taking on someone' and 'pick on'. This was particularly apparent in the question which asked why Hamza's race may contribute to him being at greater risk of physical and psychological abuse.

Candidates studying the new assessment for Unit 5 should have clear knowledge and understanding of the different types of abuse and neglect individuals may be at risk of.

Candidates did show some knowledge of potential signs of neglect that social workers may observe, but further knowledge of what could have caused this neglect or the potential impact of neglect on individuals would have been enhanced their marks.

Some responses, in particular to question 3 (c) and question 5 (a), were not addressed effectively. For question 3 (c) candidates were asked to advise Jack on the requirements of regulation and inspection in social care and how these requirements could support individuals' outcomes.

The majority of candidates were unable to state what was meant by regulation; a simple point on the regulation of organisations and why individuals have to register would have given candidates some limited knowledge. A useful website to consider when investigating this topic is: - <https://socialcare.wales/registration/why-we-register>

Some candidates demonstrated little knowledge in relation to the inspection of organisations within social care or were not aware of organisations such as the Care Inspectorate Wales and Social Care Wales. This is a key part of section 5.4.

For question 5 (a) candidates did not read the rider effectively, the question for this section asked candidates to describe how the availability of resources may affect Helen in achieving her desired outcome, Helen was diagnosed with PTSD and had injured herself when she served in the Army, requiring crutches due to her injuries. Helen's desired outcome was to gain full time employment. Some candidates made no attempt to give any explanation of how the availability of resources may affect Helen in achieving her desired outcome, therefore, showing little or no awareness of this section of Unit 5

Time management did not appear to affect performance which was pleasing as this showed progression from last year's series.

Written communication, punctuation and spelling was reasonable throughout this series, however there was evidence of poor spelling, grammar and poor handwriting seen on some scripts.

HEALTH AND SOCIAL CARE: PRINCIPLES AND CONTEXTS

Level 3

January 2024

UNIT 7: ANATOMY AND PHYSIOLOGY

General Comments

This is the first series of the Anatomy and Physiology unit for health and social care. It was pleasing to note the level of detail some candidates gave in their papers. Some candidates chose to provide answers on the electronic portal and many others chose the paper variation.

In this winter 2024 series, it was evident that candidates were able to access all questions across the paper, with fewer questions being left blank. The length of the paper was accessible, with little evidence of candidates not finishing questions.

It is important that candidates are fully made aware of the key command words that they could be assessed on, for example, in questions for A02 on 'explain', some candidates were unable to give reasons or explore their answer in any detail. It would be useful to give a copy of the assessment command words to candidates who are sitting external examinations to enable them to fully prepare better. Many candidates were brief in the questions that required fuller answers, for examples, 'explain' and 'describe'. Candidates should be encouraged to write full answers where the command verb requires it.

Where candidates fell into the lower mark bands, this was generally down to questions on smoking, endocrine systems, and pulse oximeters. Many candidates were unclear in their answers and lacked application of knowledge of the physiology and/or / the effects of these on wellbeing.

Overall, the last question posed a challenge to candidates with many candidates not making the link between the lack of physical activity and the development of type 2 diabetes.

It is important for centres to consider whether candidate handwriting is legible, if candidates handwriting is not legible, these candidates should be encouraged to be entered for the on-line version of the examination.

Comments on individual questions/sections

Q.1 On the whole the vast majority of the candidates were unable to identify the muscle tissue types and a small minority were able to state their functions within the body. There were some candidates who identified correctly cardiac, skeletal and smooth muscle tissue types and very few who continued to state their functions. Candidates need to be clear on the muscle tissue types and their functions.

- Q.2** (a) This question required candidates to identify two other types of cells, apart from stem and bone. Candidates, on the whole, were able to identify a wide variety of cells and it was pleasing to note the understanding demonstrated in this question.
- (b) Many candidates attempted to give a basic description of the role of bone cells within the musculoskeletal system and showed a good understanding of the fact that bone cells formed new bone and stimulated bone growth. Some candidates explored the different type of bone cells e.g. osteocytes, osteoclasts and osteoblasts. The more able candidates could expand on their basic descriptions and achieved a good level of detail in their answers making clear links between the function of bone cells and growth.
- Q.3** (a) Overall, candidates were able to score marks for this question, it was pleasing to see candidates using a range of methods including identification of the different types of joints. A range of answers were given for this question; however a minority of candidates incorrectly named the location of joints and their function. Some candidates also gave the name of muscles which was incorrect for this question. Candidates need to be encouraged to grasp the correct anatomical name for joints e.g. fibrous, synovial etc to achieve.
- (b) Overall, candidates did well for this question, and many were able to reach the top bands. It was really pleasing to see some candidates being aware of specific functions of the musculoskeletal system. Many candidates identified posture and support as a feature alongside movement. Very few candidates identified blood cell production and storage of minerals. The more able candidates were able to achieve full marks for this question by providing a good explanation showing a secure grasp of the function of the musculoskeletal system and function of the system.
- Q.4** (a) The majority of candidates were able to achieve some marks for this question. Many candidates were able to correctly identify the diaphragm and bronchi but were then unsure of the location of the pharynx and thorax. Many candidates incorrectly identified nasal cavity on the diagram.
- (b) On the whole candidates were able to score marks for this question. It was evident that candidates were secure in their knowledge of the main organs of the respiratory system and were able to describe the journey of a single breath. Where candidates scored higher marks, they could further expand on the gaseous exchange process and where it happens within the thin walls of the alveoli. Further development is needed by candidates in terms of the gaseous exchange process with the exchange of carbon dioxide and oxygen.
- Q.5** This question allowed the candidates to examine the function of the endocrine system. The higher ability candidates were able to fully examine the function of the endocrine system giving a variety of descriptions of the different parts and organs within the endocrine system. Many candidates discussed the role of pituitary gland, thyroids, adrenals and parathyroids. A few candidates successfully tackled the hypothalamus and its role. The majority of candidates discussed hormone production and the way in which it is needed for mood regulation including how hormones are released into the blood stream.

- Q.6** (a) Many candidates achieved full marks for this question, with a good proportion of candidates achieving within the lower section of the band mark. Many candidates chose to describe the red and white blood cells of the blood. They were correctly able to identify that red blood cells carry oxygen to the blood from the lungs and that they are small and flexible. The candidates who described white blood cells were able to describe their infection fighting ability and the way in which they circulate within the bloodstream doing so. Fewer candidates continued to describe the many types of blood cells. Some candidates described plasma and the way in which it carries blood around the body. Very few referred to its main function which is that it is the liquid part of the blood.
- (b) This question was attempted by nearly all candidates, the majority of candidates were able to score some marks for this question, however some candidates did not fully address the command word 'discuss'. Candidates are to be encouraged to give sufficient level of detail for the top marks of a discussion. Some candidates did not attempt this question. Many candidates who attempted the question were able to discuss the main function of the kidneys which is to filter the blood and act as a filtration system. They were also able to successfully discuss the role of the kidneys in linking with the bladder for the removal of waste in the form of urine. Many candidates discussed kidneys as plural and omitted to mention that the body has two kidneys.
- Q.7** (a) The majority of candidates who attempted this question did not fully explore the purpose of a pulse oximeter in monitoring an individual's health. Many explained the way in which the device measures the pulse of an individual and were able to explain what the pulse is, however, not all candidates could explain how the device is used to monitor an individual's health. The most common answer given was to measure pulse, with a few expanding on the main function of the device which is to measure the oxygen levels in the blood. A few candidates gave very detailed explanations linking the device with the practitioner and the way in which an individual can use the device to detect problems and monitor these/existing conditions.
- (b) This question required candidates to explain how taking physical measurements can help an individual to monitor their own health. The majority of candidates answered this question by suggesting apps and mobile phone technology, with a few suggesting blood pressure monitors. Another well utilised answer was the use of physical measurements, for example, height, weight, peak flow and in some cases, heart rate. The more successful candidates used the second half of the question to explain how this would help to identify problems and monitor them. Many candidates explained how this would help health professionals.

- Q.8** (a) The majority of candidates were able to confidently discuss how smoking contributes to the development of diseases, using the respiratory system to explore this. Some candidates discussed the damaging effects of smoking on intricate parts of the respiratory systems, for example, the alveoli. Many candidates further discussed how this led to an effect on the cardiovascular system, correctly discussing how this would affect the blood supply, arteries, veins and the heart. It was pleasing to note that some candidates discussed the effects of vaping and had made the link between smoking and vaping. A few candidates did discuss non creditworthy details such as the history of smoking, and smoking prevention schemes. Whilst this is relevant wider information, it is not creditworthy for a scientific examination paper that requires the discussion of the effects of smoking on the body systems. A minority of candidates discussed the effects of smoking on the reproductive and digestive system. Very few discussed the effects of smoking on long term health conditions such as asthma and COPD.
- (b) Candidates were required to explain how nutrition and hydration may benefit human physiology. The majority of candidates who attempted this question discussed the effects of nutrition on the body systems, with a minority linking this to hydration. The answers were disproportioned on the whole with an imbalance of answers given by the candidates in favour of nutrition. Some candidates explained the benefits of a healthy diet, some also explained the five a day principle and how this would benefit the digestive system. Many candidates discussed weight management and BMI levels, with a very few discussing within this, the merits of body fat percentage versus BMI as a far more effective weight management tool. Some candidates explained energy balance and made the link with obesity levels if the energy intake was not balanced for the individual. Very few candidates explained life limiting conditions such as cardiovascular diseases for this answer. Similarly, many candidates failed to fully explain the effects of poor/good hydration on the body. Very few candidates explained the way in which hydration aids the circulatory system and the removal of waste products from the body. Many candidates omitted to explain the role of hydration in maintaining the body's temperature.
- Q9.** This question was the most poorly answered question with many candidates not making effective links between the effects of a lack of physical activity and the physiological systems. The majority of candidates attempted to describe the effects of a lack of physical activity and how this may contribute to an individual becoming obese. The latter half of the question required candidates to then assess how this would impact on and contribute to type 2 diabetes. Very few candidates fully attempted this part of the question; candidates and centres need to ensure that full attention is given to the command verb within the stem of the question. Very few candidates assessed the way in which an individual could reduce the effects of type 2 diabetes therefore making the link that it can be reversed. Very few candidates did not make any assessments or develop judgements in terms of how a lack of physical activity may contribute to the development of type 2 diabetes through not having enough physical movement. Many candidates displayed some understanding of how type 2 diabetes develops and the body's response to insulin.

Summary of key points

- Candidates should ensure that they have a grasp of the physiological systems and the way in which they connect with each other within the human body.
- Candidates should be given the command words to support them during class revision sessions and when revising at home – a useful link to support candidates is - <https://www.healthandcarelearning.wales/en/resources/hsgcc-command-words>



WJEC
245 Western Avenue
Cardiff CF5 2YX
Tel No 029 2026 5000
Fax 029 2057 5994
E-mail: exams@wjec.co.uk
website: www.wjec.co.uk