

## 3625-31 Level 3 Advanced Technical Extended Diploma in Health and Care

June 2018

Version 1.1

Version and date	Change detail	Section
1.1 October 2018	Answer removed from 'Acceptable answer' column	Question 9

Question	Acceptable answer(s)	Guidance	Max marks
<p><b>1</b></p> <p>Identify the body systems responsible for <b>each</b> of the following:</p> <p>a) micturition</p> <p>b) circulation.</p>	<p><b>One mark for each answer up to a maximum of two marks.</b></p> <p>a) renal / urinary system</p> <p>b) cardiovascular/circulatory</p>		<b>2</b>
<p><b>2</b></p> <p>Describe <b>four</b> structures of a simple cell.</p>	<p><b>Candidates may achieve a maximum of two marks for only identifying the four structures without description for all the structures.</b></p> <p><b>One mark for each description, up to a maximum of four marks:</b></p> <ul style="list-style-type: none"> <li>• A cell membrane is a semi permeable membrane controlling movement in and out of the cell</li> <li>• A nucleus contains genetic material / controls the activity of the cell</li> <li>• Cytoplasm is fluid containing enzymes and cell organelles</li> </ul>		<b>4</b>

	<ul style="list-style-type: none"> <li>Organelles are-structures which carry out essential cell functions.</li> </ul>		
<p><b>3</b></p> <p>Explain the interaction between the lymphatic and immune system when the body has an infection.</p>	<p><b>One mark for each of the following explanations up to a maximum of two marks:</b></p> <p>The immune system attacks the infection (1) then lymphatic system picks up dead pathogens ready for excretion (1)</p>	<p><b>Do not accept marks for a description of immune/lymphatic system in isolation.</b></p>	<p><b>2</b></p>
<p><b>4</b></p> <p>Explain how an ageing population impacts on the health and wellbeing of individuals and service provision.</p>	<p><b>Candidates must cover both impacts on the individual and the provision of services to gain maximum marks.</b></p> <p><b>One mark for each explanation for each of the following up to a maximum of six marks:</b></p> <ul style="list-style-type: none"> <li>there may be an increase in age related illnesses</li> <li>increase in complex health conditions</li> <li>increase demand for acute services</li> <li>longer waiting times for ambulances / waiting for a bed</li> <li>longer waiting times for discharge assessments/arrangements</li> <li>increased demand for community services/staff</li> <li>individuals may be required to pay for services</li> <li>increased cost to the NHS/social care services</li> <li>elderly people may become isolated / lonely</li> <li>elderly people may suffer from depression and anxiety</li> <li>family members may suffer physical, emotional or financial strain</li> </ul>		<p><b>6</b></p>
<p><b>5</b></p> <p>a) Identify <b>two</b> current public policies that raise awareness of how to reduce</p>	<p><b>a) One mark for each of the following examples up to a maximum of two marks:</b></p> <ul style="list-style-type: none"> <li>stopping smoking</li> <li>reducing obesity</li> </ul>	<p><b>Note to marker: Do not accept marks for stating that they raise awareness.</b></p>	<p><b>6</b></p>

<p>the risk of developing cancer.</p> <p>b) Explain how public policies help to reduce the risk of developing cancer.</p>	<ul style="list-style-type: none"> <li>• improving diet/healthy diet</li> <li>• reducing excessive alcohol intake</li> <li>• being careful in the sun</li> <li>• young women to be vaccinated against the human papillomavirus (HPV)</li> <li>• national screening programs.</li> <li>• Any other appropriate response.</li> </ul> <p><b>b) One mark for each explanation and one mark for relevant expansion up to a maximum of four marks.</b></p> <ul style="list-style-type: none"> <li>• National campaigns provide information on cancer (1) to advise people how to look after their own health (1)</li> <li>• Advises people to attend screening services (1) to detect cancer earlier for early treatment (1)</li> <li>• Educates health care professionals in detecting early signs of cancer (1) so that they can give advice to people /so they can provide useful/informative information / make early referral to health services (1).</li> <li>• Sets prices/age limits/quantities to make products that increase the risk of health problems/cancers less affordable/accessible.</li> <li>• Use various techniques such as use of 'scare tactics' to frighten people into changing their behaviour</li> </ul>		
<p><b>6</b></p> <p>Explain the conflict analysis perspective in relation to health care provision.</p>	<p><b>One mark for each explanation and one mark for relevant expansion point. Answer may include but not be limited to:</b></p> <ul style="list-style-type: none"> <li>• Conflict analysis argues that discrimination causes inequality in health care provision (1) Inequalities may appear due to discrimination based on gender/ income/ education/ heritage etc. (1)</li> </ul>		<p><b>4</b></p>

	<ul style="list-style-type: none"> <li>• Those in most need of services are often less able to access health care provision (1) due to location of health care provision/attitude of health care staff/lack of facilities for childcare/physical access arrangements/costs of services/financial burden (1)</li> <li>• Clinicians medicalise problems in order to retain a power/income status (1) Medicalisation of problems prevents the underlying causes being identified and managed (1)</li> <li>• Political drivers influence how/where money is spent (1) this tends to favour those with most power/ influence / most topical / media coverage(1)</li> </ul>		
<p><b>7</b></p> <p>Describe how Maslow's theoretical model of The Hierarchy of Human Needs promotes an understanding of health and well-being.</p>	<p><b>One mark for each of the following descriptions up to a maximum of four marks:</b></p> <ul style="list-style-type: none"> <li>• Maslow's model (hierarchy of human needs) provides a humanistic view of the person.</li> <li>• The hierarchy is made up of physiological, safety, belonging and love, esteem, and self-actualisation.</li> <li>• There is an order to achieving each of the needs/ a need cannot be met unless the previous need has been met</li> <li>• In order to achieve self-actualisation all other needs must be met first</li> <li>• Health and care professionals use the model to provide an holistic approach to health and care services</li> </ul>		<b>4</b>
<p><b>8</b></p> <p>a) Define the term 'mitosis'</p>	<p>a) Mitosis is the process by which a cell divides into two identical copies of the original cell (1)</p> <p>Mitosis is the type of cell division used for growth/ repair/asexual reproduction (1)</p>		<b>6</b>



	<ul style="list-style-type: none"> <li>Record/check the number given on the counter.</li> </ul>		
<p><b>11</b></p> <p>a) Describe the purpose of checking an individual's temperature as a physiological measurement.</p> <p>b) Identify <b>two</b> other physiological measurements that may be taken when an individual is unwell.</p>	<p><b>One mark for the following answer up to a maximum of two marks:</b></p> <p>a) To detect possible hypothermia (1) or hyperthermia/fever/infection (1)</p> <p><b>b) One mark for each of the following up to a maximum of two marks:</b></p> <ul style="list-style-type: none"> <li>Pulse rate</li> <li>Heart rate</li> <li>Blood pressure</li> <li>Respiratory rate</li> <li>Oxygen saturation.</li> <li>Urinalysis</li> <li>X-ray</li> <li>Blood test</li> </ul>		<b>4</b>
<p><b>12</b></p> <p>Describe how the body gets energy from fats.</p>	<p><b>One mark for a description of each of the following up to a maximum of four marks:</b></p> <ul style="list-style-type: none"> <li>Fat from food is broken down into fatty acids (1 mark)</li> <li>Fatty acids that are not needed right away for energy are stored. (1 mark)</li> <li>Through a series of metabolic processes stored fats can be broken down into glucose (1 mark)</li> <li>Glucose can then be converted into glycogen (1 mark)</li> <li>The Krebs's cycle describes the series of chemical reactions that occur which releases energy (1 mark)</li> </ul>		<b>4</b>
<p><b>13</b></p> <p>Ruby is 29-years-old and works in a</p>	<p><b>Band 1: 1 – 4 marks</b></p> <p>Basic discussion that includes limited links to factors and their impact on individuals'</p>	<p><b>Indicative content</b></p> <ul style="list-style-type: none"> <li>Description, signs and symptoms of</li> </ul>	<b>12</b>

<p>supermarket as a cashier. She is obese and has been since childhood. Ruby's Doctor has told her she has high blood pressure.</p> <p>Discuss the factors affecting Ruby's health and how her health and well-being could be improved.</p>	<p>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.</p> <p>To access higher marks in the band the response will include some attempt to address a larger range of factors.</p> <p><b>Band 2: 5 – 8 marks</b> Clear and relevant discussion which makes a reasonable attempt to cover most factors affecting Ruby's health and well-being and potential impacts which displaying 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.</p> <p>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 will be made to theory/theorists. The overall discussion will be presented clearly and with some logical structure.</p> <p><b>Band 3: 9 – 12 marks</b> Comprehensive and clear discussion showing breadth of understanding across all the factors 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 reference to</p>	<p>high blood pressure</p> <ul style="list-style-type: none"> <li>• Impact of high blood pressure on physical health</li> <li>• Impact of obesity on physical health</li> <li>• Inequalities in healthcare provision</li> <li>• Diagnostic tests used to identify Ruby's health issues</li> <li>• Relevant health care services and professionals who could support Ruby to improve her lifestyle choices</li> <li>• Types of lifestyle changes that could improve Ruby's health</li> <li>• Relevant psychological perspectives to include different theories/theorists</li> <li>• the effect of self-awareness and self-esteem issues which may be relevant to Ruby's health in the short and long term</li> <li>• Biopsychosocial model / integrated care</li> <li>• Sociological model</li> </ul>	
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	<p>theory/theories to support justifications for recommendations. Relevant use of accurate terminology was evident. The entire discussion was relevant and factually accurate.</p> <p>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.</p>		
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