

**3625-31-032/532 MARCH 2019 MARK SCHEME**

**Level 3 Advanced Technical Extended Diploma in Health and Care (1080)**

Level 3 Health and Care – Theory Exam (2)

**March 2019**

<b>Q1</b>	Identify <b>four</b> types of bones found in the human skeletal system.		
<b>Q1</b>	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
<b>Q1</b>	<b>1 mark for each of the following up to a maximum of 4 marks:</b> <ul style="list-style-type: none"> <li>• Flat bones (1)</li> <li>• Long bones (1)</li> <li>• Irregular bones (1)</li> <li>• Short bones (1)</li> <li>• Sesamoid bones (1)</li> </ul>		4

<b>Q2</b>	Describe <b>two</b> functions of the renal system.		
<b>Q2</b>	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
<b>Q2</b>	<b>1 mark for each of the following up to a maximum of 2 marks:</b> <ul style="list-style-type: none"> <li>• Removal of waste (1)</li> <li>• Regulation of electrolytes (1)</li> <li>• Blood pressure regulation (1)</li> <li>• Formation of blood cells (1)</li> </ul>		2

<b>Q3</b>	Explain the interaction between the lymphatic and immune systems.		
<b>Q3</b>	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
<b>Q3</b>	<p><b>1 mark each for any of the following explanations up to a maximum of 2 marks:</b></p> <ul style="list-style-type: none"> <li>• The immune system helps the lymphatic system identify potentially dangerous microorganisms. (1)</li> <li>• The lymph nodes act as a filter to infection when fluid is circulated (1) and respond to the immune system by producing lymphocytes to defend the body (1)</li> <li>• When the body comes into contact with infection it is transported to the lymph nodes in order for the B and T cells of the immune system to react (1) resulting in inflammation the swelling of the lymph nodes (1)</li> </ul>		2

<b>Q4</b>	Define the term 'functionalism' used in sociological theory.		
<b>Q4</b>	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
<b>Q4</b>	<b>1 mark for each point up to a maximum of 2 marks:</b> Functionalism explores the functioning of different aspects of society (1) and how they adapt in order to function effectively as a whole (1).		2

Q5	<p>Lloyd is a 69-year-old Afro-Caribbean man who lives in a hostel in a large inner city. He has diabetes and high blood pressure.</p> <p>Explain <b>two</b> demographic factors that may influence Lloyd’s health and wellbeing.</p>		
Q5	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
Q5	<p><b>1 mark for identifying demographic factor and 1 mark for a relevant effect on health and/or wellbeing.</b></p> <ul style="list-style-type: none"> <li>• Due to Lloyd’s ethnicity (1) he may have generally poorer health than the overall population (1)</li> <li>• His low socio-economic status (1) may limit his access to healthcare services (1)</li> <li>• His geographical location (1) may impact positively on availability of services in the area/ ease of travel to the place of service (1)</li> <li>• As he is an older individual with age related health issues (1) this means he may have to wait longer for treatment due to a strain on acute/community healthcare services (1)</li> </ul>		4

Q6	Describe how public policies are helping to make mental health services more effective and accessible.		
Q6	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
Q6	<p><b>1 mark for each description up to maximum of 4 marks:</b></p> <p>Public policies make mental health services more effective and accessible by</p> <ul style="list-style-type: none"> <li>• Developing local mental health services with shorter referral times (1)</li> <li>• Making mental health problems a priority for Public Health England (1)</li> <li>• Making mental health a vital measure of wellbeing for employers/educators (1)</li> <li>• Increasing funding for mental health services for young people with anxiety and depression (1)</li> <li>• Setting up national campaigns against mental health stigma/discrimination (1)</li> <li>• Increasing advertising and media exposure to raise the profile of the accessibility of mental health services (1)</li> <li>• Adding recruitment drives to employ additional staff (1).</li> </ul>		4

Q7	Explain how humanist theories contribute to the promotion of health and wellbeing.		
Q7	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
Q7	<p><b>Maximum 1 mark available for a description of humanist theory (optional):</b> Humanist theory is concerned with empathy and considers the good in human behaviour / the humanist approach supports the idea that individuals inherently want to improve (1).</p> <p><b>1 mark for each of the following explanations that link to humanist theory to health promotion:</b></p> <p>Humanist theories promote health and wellbeing by</p> <ul style="list-style-type: none"> <li>• promoting the belief that information can help to change lifestyle/ individuals are motivated to achieve their full potential so seek information to support positive change (1)</li> <li>• identifying the importance of effective communication in changing behaviours/lifestyle so they are fully informed of the impact of behaviour change (1)</li> <li>• focusing on ways to help improve an individual's self-image or sense of self-esteem (1)</li> <li>• recognising individual's ability to make choices/self-motivate/take responsibility for their own health/ all individuals have different motivational reasons for change (1)</li> <li>• supporting understanding/building of resistance strategies (1)</li> <li>• any other appropriate response.</li> </ul>	Candidates may achieve maximum marks by explaining four points that link humanists' theories to health, or providing a description of humanist theory for 1 mark and 3 marks explaining the link to health.	4



Q8	<p>Staff at a local health centre offer advice and activities to promote healthy living.</p> <p>Explain <b>two</b> factors that they should consider in the type of advice and choice of activities offered.</p>		
Q8	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
Q8	<p><b>1 mark for each description up to a maximum of 4 marks:</b></p> <ul style="list-style-type: none"> <li>• Personal values/culture/ beliefs are likely to influence an individual’s health choices and decisions, (1) so staff should tailor choices and advice that reflect this (1)</li> <li>• Having emotional intelligence allows an individual to recognise and control impulsive feelings and behaviours / know their own strengths and weaknesses, (1) so staff should offer advice on recognising and controlling behaviours (1)</li> <li>• Human abilities/ intelligence affect an individual’s ability to understand health information, (1) so staff need to offer advice in an appropriate format (1)</li> <li>• Personality and behaviour can affect health behaviour choices, (1) so staff, being aware of an individual’s personality, can assess the likelihood of them being involved in risky practices (1)</li> <li>• Economic/financial circumstances can affect an individual’s nutritional choices (as organic or fresh produce can be more expensive), or ability to participate in certain activities (such as expensive gym memberships),(1) so staff should be aware of an individual’s economic/financial challenges (1)</li> <li>• Staff need to be aware of a person’s physical ability and challenges (1) so staff can offer activities that are age/ability appropriate to ensure they are accessible for individuals (1)</li> <li>• Staff should consider a person’s work or family commitments when offering potential choices (1) so individuals can access advice and participate in activities at a time that is convenient for them (1)</li> <li>• Personal factors such as age and gender may affect choices that are suitable (1) so staff need to offer advice in a range of formats/ mobile technology and offer a choice of individualised /group activities (1)</li> </ul>	Accept other suitable answers given without repetition.	4

<b>Q9</b>	Explain the relationship between health and wellbeing.		
<b>Q9</b>	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max mark</b>
<b>Q9</b>	<b>1 mark for each of the following up to a maximum of 2 marks:</b> <ul style="list-style-type: none"> <li>• There is a two way relationship between wellbeing and health/ health influences wellbeing and wellbeing itself influences health (1)</li> <li>• Health is one of the key factors identified for wellbeing /both physical and mental health influence wellbeing (1)</li> <li>• Mental health and wellbeing are independent dimensions, mental health is not simply the opposite of mental illness (1)</li> </ul>		2

<b>Q10</b>	a) Define the term 'genetics'.		
	b) Identify <b>one</b> genetic health problem for <b>each</b> of the human body systems below:  i. Cardiovascular ii. Respiratory iii. Digestive iv. Urinary v. Musculoskeletal		
<b>Q10</b>	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
<b>Q10a</b>	<b>1 mark for correct definition:</b> Genetics is the scientific study of heredity in humans and all other organisms.		1
<b>Q10b</b>	<b>1 mark for each genetic health problem identified</b>  <ul style="list-style-type: none"> <li>• Cardiovascular - progressive cardiac conduction defect (1)</li> <li>• Respiratory – asthma (1)</li> <li>• Digestive – Crohn's (1)/IBS</li> <li>• Urinary – autosomal dominant polycystic kidney disease (1) bladder cancer</li> <li>• Musculoskeletal – osteoarthritis or muscular dystrophy (1)</li> </ul>		5

<b>Q11</b>	a) State the structure of a ligament.		
	b) Describe the function of a ligament during movement.		
<b>Q11</b>	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
<b>Q11a</b>	Ligaments are short bands of fibrous connective tissue.		1
<b>Q11b</b>	Ligaments help to stabilize joints during movement.		1

<b>Q12</b>	Describe how capillary blood glucose monitoring is carried out.		
<b>Q12</b>	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
<b>Q12</b>	<b>1 mark for each of the following:</b> <ul style="list-style-type: none"> <li>• Clean the skin, use a lancet to pierce skin on the side of the finger. Insert test strip into the glucose monitoring machine, then drop blood onto the strip.(1)</li> <li>• Check/record reading. (1)</li> </ul>		2

<b>Q13</b>	a) State what is measured when taking an individual's heart rate.		
	b) Describe how the heart rate can be measured manually.		
<b>Q13</b>	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
<b>Q13a</b>	<b>1 mark for each point up to a maximum of 2 marks:</b> The heart rate is measured to check <ul style="list-style-type: none"> <li>• the number of beats per minute (1 mark)</li> <li>• the rhythm, strength and regularity of the rate (1 mark).</li> </ul>		2
<b>Q13b</b>	<b>1 mark for each point:</b> <ul style="list-style-type: none"> <li>• Use the tips of first two fingers to press over the pulse point in the wrist/neck.</li> <li>• Count the pulse for 60 seconds to find your beats per minute.</li> </ul>		2

<b>Q14</b>	Describe the health benefits of safer sex initiatives.		
<b>Q14</b>	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
<b>Q14</b>	<p><b>1 mark for an explanation for each of the following up to a maximum of 4 marks:</b></p> <ul style="list-style-type: none"> <li>• Helps to reduce the chance of unwanted pregnancies</li> <li>• Helps to prevent sexually transmitted diseases</li> <li>• Sexually active individuals are provided with information to manage own behaviour choices</li> <li>• Reduces overall costs to the NHS/provision of services for unwanted pregnancies</li> <li>• Reduces overall costs to the NHS/provision of services for sexually transmitted diseases</li> <li>• Supports emotional health and wellbeing/positive sexual health</li> </ul>		4

<b>Q15</b>	State a difference between viruses and parasites.		
<b>Q15</b>	<b>Acceptable answer(s)</b>	<b>Guidance</b>	<b>Max marks</b>
<b>Q15</b>	<b>1 mark for each of the following:</b> <ul style="list-style-type: none"> <li>• A virus can live outside of the human body (1) but a parasite needs a living host to survive (1)</li> <li>• A parasite can usually be destroyed with antibiotics (1) but antibiotics can't kill a virus (1)</li> </ul>		2



<p><b>Q16</b></p>	<p>Talib is 43 years old. He has been experiencing blurred vision and feeling constantly thirsty. He is very conscious that he is overweight and finds it difficult to make friends. He subsequently spends much of his spare time playing video games at home. The doctor has arranged some tests and confirmed that Talib has developed Type 2 diabetes.</p> <p>Discuss the factors that will help Talib to understand, manage and improve his health and wellbeing.</p>		
<p><b>Q16</b></p>	<p><b>Acceptable answer(s)</b></p>	<p><b>Guidance</b></p>	<p><b>Max marks</b></p>
<p><b>Q16</b></p>	<p><b><i>For no awardable content, award 0 marks.</i></b></p> <p><b>Indicative content</b></p> <ul style="list-style-type: none"> <li>• The body systems that are likely to be affected by diabetes</li> <li>• Relationship between health and wellbeing and care services and provision</li> <li>• Biomedical model used in promotion of health and wellbeing</li> <li>• Impact of a sedentary lifestyle on health</li> <li>• Demographic factors impacting on diabetes</li> <li>• Diagnostic tests used to identify health issues related to symptoms (urine and blood sugar check HbA1C test)</li> <li>• Relevant health care services and professionals who could support Talib to improve his lifestyle choices</li> <li>• Relevant psychological/sociological perspectives to include different theories/theorists</li> <li>• The effect of social isolation relevant to Talib’s health in the short and long term</li> <li>• Health promotion initiatives</li> <li>• Biopsychosocial model / integrated care</li> </ul>		
<p><b>Band 1 (1-4 marks)</b></p> <p>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 in-correct.</p> <p>To access higher marks in the band the response will include some attempt to address a larger range of considerations.</p>			<p>12</p>
<p><b>Band 2 (5-8 marks)</b></p> <p>Clear and relevant discussion which makes a reasonable attempt to cover the main considerations affecting Talib’s health and well-being and potential impacts which display 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</p>			

		<p>good links to health and care services and some reference to theory/theories. The overall discussion will be presented clearly and with some logical structure.</p> <p><b>Band 3 (9-12 marks)</b></p> <p>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 possibly reference to theory/theories. 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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