
GCSE

Health and Social Care

Unit 3 The Nature of Health and Well-Being

Mark scheme

4820

June 2016

Version: 1.0 Final

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this mark scheme are available from aqa.org.uk

1	(a)	Negative (1)	[1 mark]
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1	(b)	Positive (1)	[1 mark]
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1	(c)	Holistic (1)	[1 mark]
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1	(d)	Reference to:	[3 marks]
		<ul style="list-style-type: none"> the holistic/c definition as being the result of a combination/ all/ every AW of (1) physical, intellectual, emotional and social factors (1) Must have all P.I.E.S for second marking point. whereas either one or both other definitions AW cover just physical and mental-intellectual features OR Holistic also covers emotional and social (1) Allow negative definition/ part a definition/ Alice’s definition is an absence/ not having AW features AW rather than a combination/ having features (1) The positive definition/ part b definition/ Misha’s definition is an achievement and maintenance of features AW rather than a combination of features (1) 	

2	(a)	Accept:	[4 marks]
		<ul style="list-style-type: none"> Sugar(1) Starch (1) Accept Carbohydrate as an alternative, but not with either sugar or starch. Fat (1) Protein (1) <p style="text-align: right;">max 2</p> <p>If macronutrients incorrect, cannot gain need marks.</p> <ul style="list-style-type: none"> Carbohydrate / Sugar/ Starch –(needed for) energy (1) Fat needed for energy/energy storage/ heat insulation AW/ organ protection (1) Protein needed for growth/ repair/ maintenance (of cells-tissues)/ hormones/ enzymes (1) <p style="text-align: right;">max 2</p>	

2	(b)	Likely answers:	[2 marks]
		<ul style="list-style-type: none"> Vitamin A (1) Vitamin C (1) Calcium (1) Iron (1) <p>Allow any named vitamin or mineral – 1 mark each Allow vitamins(1) and/or minerals (1) if no specific type named</p>	

3	(a)	<p>Likely answers: [4 marks]</p> <ul style="list-style-type: none"> • Leo will have high (self)-confidence (1) • his self-concept/ self-esteem will be high AW (1) • Leo will “feel good” about himself AW (1) IGNORE feel secure/ content AW • benefitting his emotional health and well-being(1) • ALLOW idea that high income may give Leo choice of health care/private services rather than just the NHS – reducing his waiting time for treatment AW (1) <p>Emotional point must be qualified correctly to gain the mark.</p> <p>Not will get Leo better treatment/ examples of social activities/ activities Not playing chess effects</p>
3	(b)	<p>Likely answers: [4 marks]</p> <ul style="list-style-type: none"> • chess will stimulate Leo’s mind/ prevent boredom/ improve problem solving skills (1) • help to develop his memory/ thinking skills/ better concentration (1) • benefitting his intellectual health and well-being(1) IGNORE learns new skills/ • help Leo “feel good” (1) • reduce stress he may feel (1) • benefitting his emotional health and well-being(1) • interacts with his playing partner/ meets people/ makes new friends/ widens his social circle(1) • develops social skills AW (1) • benefitting his social health and well- being (1) <p>Intellectual, Emotional and/ or Social points must be qualified correctly to gain the marks.</p>
4	(a)	<p>Reference to: [7 marks]</p> <ul style="list-style-type: none"> • Kira will sit still/sit down/ wait a few minutes if she has been exercising AW (1) • sit with her arm resting on a table/ being supported AW (1) • wrap/ fasten the cuff /strap AW around (1) NOT just put/ place/ apply/ strap the monitor/ tie monitor to • her wrist/upper arm/ bicep/ above elbow (1) NOT just arm AW • press start button AW (1) • the monitor will inflate/ tighten the cuff / pump the cuff AW (1)

			<ul style="list-style-type: none"> • stopping the blood flow in Kira’s arm (1) • and taking a reading of the systolic pressure/ pressure of the heart beat (1) • the monitor will then deflate/ loosen the cuff/ release the pressure (1) • to take a diastolic pressure reading/ reading of pressure between heart beats (1) <p>IGNORE takes a pressure reading/ or systolic and/or diastolic if not correctly linked to inflation and deflation NOT using sphygmomanometer with a stethoscope</p>
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4	(b)		<p>Reference to: [3 marks]</p> <ul style="list-style-type: none"> • The GP will take more readings to see if Kira’s readings are accurate AW (1) • Because high blood pressure is dangerous/ life threatening/ could be fatal AW (1) <p>NOT just makes you ill/ sick/ NOT may be serious</p> <ul style="list-style-type: none"> • Kira may be at risk of a heart attack/ may have heart disease/ heart problems/ circulatory problems (1) • May need medical advice or example/preventative care / change diet/ need treatment/ drugs to reduce the pressure/ to see a specialist AW (1) <p style="text-align: right;">Max 3</p>
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5	(a)		<p>Reference to: [2 marks]</p> <ul style="list-style-type: none"> • Down syndrome being genetic (1) <p>NOT inherited as in question</p> <ul style="list-style-type: none"> • caused by an additional/ extra chromosome AW (1) • number 21 (1) <p>NOT additional genes NOT X chromosome</p> <p style="text-align: right;">Max 2</p>
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5	(b)		<p>Accept any five of: [5 marks]</p> <ul style="list-style-type: none"> • small ears/ low set ears (1) • (unusually) round face (1) <p>NOT round head</p> <ul style="list-style-type: none"> • flat back of the head (1) <p>NOT flat face</p> <ul style="list-style-type: none"> • (abnormally)small/ receding chin (1) • stubby-small fingers/ stubby-small toes AW (1) • oversized/protruding tongue (1) • almond shaped eyes/ fold on eyelids AW (1) <p>IGNORE large eyes</p> <ul style="list-style-type: none"> • short stature AW(1) • reduced life expectancy (1) • possible heart disease (1) • flattened nose (1) • crease in palm (1)
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		<ul style="list-style-type: none"> • short neck (1) • weak muscles/ poor muscle tone AW (1) • weaker teeth (1) • gap between first two toes AW (1) 	max 5
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5	(c)	<p>Likely answers:</p> <ul style="list-style-type: none"> • Haemophilia (1) • Huntington's disease (1) <p>Allow any named genetic disease or disorder e.g. sickle cell anaemia/colour blindness/cystic fibrosis/ type 1 diabetes NOT type 2 diabetes/ diabetes</p>	[1 mark]
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6	(a)	<p>Accept any three of:</p> <ul style="list-style-type: none"> • Yellow/stained fingers (1) • (Smokers)cough (1) • Shortness of breath/ wheezing AW (1) • Bad breath AW (1) • Stained/ discoloured teeth (1) NOT tooth decay/ bad teeth • Wrinkled skin/ skin loses elasticity/ premature wrinkling(1) • Allow -reduced sense of smell/ taste (1) NOT premature ageing/ smell of smoke 	[3 marks]
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6	(b)	<p>Likely answers:</p> <ul style="list-style-type: none"> • (Amida will have) – Increased risk of coronary heart disease AW (1) • More chance of heart attack (1) • Increased blood pressure (1) • More likely to have circulatory problems/blocked arteries AW (1) IGNORE damage heart/heart problems/ premature death AW • Increased risk of a stroke AW (1) • Increased risk of respiratory problems or example –emphysema/ bronchitis – or description e.g. increased mucus/ phlegm in airways AW (1) IGNORE lung disease/asthma/breathing problems/ irritating mucus/ just mucus in airway • More chance of cancer of lungs/mouth/throat (1) IGNORE cancer unqualified/ other sites of cancer • Reduced/lower immunity to some infections/ more chance of infections (1) • Lower sperm count (1) • Allow – (increased) addiction/ dependency to tobacco AW (1) 	[6 marks]
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Max 6

6	(c)		Accept: <ul style="list-style-type: none"> • alcohol (1) • illegal drugs or named example (1) • prescription drugs or named example (1) IGNORE just drugs/ recreational drugs • solvents or named example- glue (1) <p>Allow 2 named examples from the same category e.g. cannabis and heroin.</p>	[2 marks]
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7			Likely answers: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; padding: 5px;"> <ul style="list-style-type: none"> • (Dennis will feel) down/depressed/sad AW (1) • Have a loss of (self)-confidence (1) • His self-concept/ self-esteem will be reduced/ feel useless/ feel worthless/ feel a failure AW (1) IGNORE unwanted • May feel anxious/ worried/ fearful AW (about his future) (1) IGNORE embarrassed/ ashamed • Likely to feel under stress/ stressed (1) • May be irritable/angry/ upset/ bad tempered/ frustrated AW(1) • Affecting his emotional health and well-being (1) • (Due to loss of income from work) Dennis may not be able to do what his friends do/ can't afford to go out with friends AW (1) • decreasing his social health and well- being (1) • Dennis may lose/ not maintain/use his work skills (1) IGNORE will not learn new skills/ not gain knowledge • Lack stimulation/ become bored AW (1) • Affecting his intellectual health and well-being (1) </td> <td style="width: 30%; padding: 5px; vertical-align: top;"> <p>Emotional point must be qualified explicitly to gain the mark. Social point must be qualified explicitly related to money to gain the mark. Intellectual point must be qualified explicitly to gain the mark</p> </td> </tr> </table>	<ul style="list-style-type: none"> • (Dennis will feel) down/depressed/sad AW (1) • Have a loss of (self)-confidence (1) • His self-concept/ self-esteem will be reduced/ feel useless/ feel worthless/ feel a failure AW (1) IGNORE unwanted • May feel anxious/ worried/ fearful AW (about his future) (1) IGNORE embarrassed/ ashamed • Likely to feel under stress/ stressed (1) • May be irritable/angry/ upset/ bad tempered/ frustrated AW(1) • Affecting his emotional health and well-being (1) • (Due to loss of income from work) Dennis may not be able to do what his friends do/ can't afford to go out with friends AW (1) • decreasing his social health and well- being (1) • Dennis may lose/ not maintain/use his work skills (1) IGNORE will not learn new skills/ not gain knowledge • Lack stimulation/ become bored AW (1) • Affecting his intellectual health and well-being (1) 	<p>Emotional point must be qualified explicitly to gain the mark. Social point must be qualified explicitly related to money to gain the mark. Intellectual point must be qualified explicitly to gain the mark</p>	[7 marks]
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8	a		Reference to social isolation as: <ul style="list-style-type: none"> • lacking contact with people/ interactions with others / person being-is alone/ person is on their own/ solitary (1) IGNORE isolation/ social (as in question)/ may not see other people/ hides- 	[3 marks]
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			<p>excludes from society/ feeling lonely- feeling alone</p> <ul style="list-style-type: none"> idea that this is all- most of the time/ prolonged period of time/ not for just a short time period AW / on a regular basis(1) <p>ALLOW reverse argument e.g. not having regular/ frequent contact with people</p> <ul style="list-style-type: none"> lacking/ minimal/ superficial communication (in any form)/ no one to talk to (1) person may choose AW not to interact (1) <p style="text-align: right;">max 3</p>
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8	b		<p>Likely effects are (assuming involuntary): [2 marks]</p> <ul style="list-style-type: none"> person likely to feel/be lonely (1) NOT be alone Lack social skills (1) Likely to feel down/sad/depressed (1) NOT upset/ angry Have low self-confidence/ self-esteem AW (1) <p>Allow –(if voluntary)- idea may feel good (chosen to be socially isolated) (1) List rule applies i.e. mark first answer on each line only</p>
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9			<p>Likely answers:</p> <p>Positive factors and their likely effects include:</p> <ul style="list-style-type: none"> Dalia is 25 years old- a young adult / lot of life ahead of her/ helps her to have confidence- benefits her emotional health. Exercises regularly – benefits her physically/ helps maintain healthy weight/ less likely to suffer weight related illness e.g. heart disease. Has good qualifications- gives Dalia a sense of achievement AW/ raises her self-confidence/ self- concept AW/ will help her employment opportunities in the future/ may motivate her to further study. <p>Negative factors and their likely effects include:</p> <ul style="list-style-type: none"> Living close to the busy motorway/ traffic noise- may disturb Dalia’s sleep/ making her tired/ affecting her physically/ making her irritable AW/ affecting her emotionally. Allow idea may affect her interactions with others /affecting her socially. Poor air quality concerns causes anxiety AW/ affecting Dalia emotionally/ may affect her breathing/ cause long term health problems. Low paid part- time job- may be frustrating for Dalia/ lowering her self-confidence/self-esteem AW/ making it difficult to manage on the money/ affecting her emotionally Feeling under stress- may make it hard for Dalia to concentrate/remember/ as intellectual effects/ be irritable AW/ feel down-depressed – unhappy AW / as emotional effects/ suffer raised blood pressure- hair loss/ disturbed
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		<p>sleep/ eat more or less/as physical effects/ not be herself with others AW/ as social effect.</p> <p>To evaluate, the candidates can demonstrate understanding by making judgements about how the positive and negative factors may combine with each other e.g. traffic noise is likely to make the stress that Dalia suffers even worse/ being young and exercising regularly may help reduce Dalia’s stress AND/OR Factors may have a “balancing” effect e.g. regular exercise will help Dalia cope better with stress. AND/OR Candidates can also make judgements about the relative importance of the different factors e.g. having good qualifications is very important for Dalia’s career, living very close to a motorway may be less important as it may only be short term AW AND/OR There are more negative factors than positive factors AW</p> <p>Mark Ranges</p> <p>0 No response worthy of credit</p> <p>1 - 3 marks Answers cover a limited range of points tending to be statements which are not reasoned, and are vague and/or repetitive. Effects on Dalia’s life are not identified as physical, intellectual, emotional or social. There is likely to be more consideration of the negative factors rather than the positive and there will be no attempt at evaluating the factors or their effects. Answers are superficial, lack structure and errors in spelling, punctuation and grammar are likely.</p> <p>4 - 6 marks Answers cover a wider range of points with some reasoning. Some effects on Dalia’s life are identified as physical, intellectual, emotional or social. There is likely to be a more balanced consideration of both the negative and the positive factors. There will be at least one attempt at evaluation. Answers are organised but lack precision and there may be occasional errors in spelling, punctuation and grammar.</p> <p>7 - 9 marks Answers cover a wider range of points and are well reasoned. The effects on Dalia’s life are identified as physical, intellectual, emotional and/or social. There is a balanced consideration of both the negative and the positive factors. Attempts are made to evaluate a number of positive and negative factors and their effects. Answers are well structured, logical and demonstrate good spelling, punctuation and grammar.</p>
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