



**General Certificate of Secondary Education
January 2011**

Health and Social Care

48203

(Specification 4820)

Unit 3: The Nature of Health and Well-Being

Final

Mark Scheme

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Question 1

Question	Part	Sub Part	Marking Guidance	Mark	Comments
1	a		Holistic	1	
1	b		Either Positive or Negative	1	
1	c		<p>If positive: achieving and maintaining physical (1) and mental stability (1) whereas Frank's definition includes social/emotional aspects (1) OR</p> <p>If negative: the absence of (physical) illness/disease/disorder (1) and mental distress AW (1) whereas Frank's definition includes social/emotional aspects (1)</p>	3	

Question 2

Question	Part	Sub Part	Marking Guidance	Mark	Comments
2	a		<p>Any 2 of: Carbohydrates – Sugar – Starches/Fats/Protein for 2 marks with a further mark for a correct link in each case: Carbohydrates – for energy (1) Fat – energy/energy stores/insulation/protection of organs (1) Protein – growth/repair/maintenance of all – tissues AW/hormones/ enzymes/immune system functions (1) max 2</p>	4	Not fibre/NSP
2	b		<p>Any 2 of: Vitamin A/Vitamin C/Calcium/Iron for 2 marks with a further mark for a correct link in each case: Vitamin A – vision at night (1) Vitamin C – maintaining gums – soft tissue/immunity/wound healing (1) Calcium – bone and teeth maintenance/nerve function (1) Iron – making red blood cells/haemoglobin (1) max 2</p>	4	Allow aids from iron absorption

Question 3

Question	Part	Sub Part	Marking Guidance	Mark	Comments
3			Ref to Adrian's vaccinations will introduce weakened AW (1) or dead form of disease organisms (1) that he could catch on his holiday AW (1) Adrian will make antibodies AW (1) specific to these diseases – won't become ill with these diseases (1)	5	

Question 4

Question	Part	Sub Part	Marking Guidance	Mark	Comments
4	a		Ref to Shona having a blood test (1) sample removed by finger prick/needle – from a vein (1) tested for sugar content (1)	3	
4	b		Ref to the use of a digital cuff – arm monitor (all sphygmomanometer) (1) tightened/inflated (1) to stop blood flow (1) records pressure – heart beat pressure (1) releases pressure (1) records pressure between beats (1) Allow – diastolic – systolic as alternatives for pressure marks. Will indicate if blood pressure – high (hypertension), normal or low (Hypotension) (1) possible risk of heart attack if high (1) max 7	7	Allow figures 110/70 – 130/90

Question 5

Question	Part	Sub Part	Marking Guidance	Mark	Comments
5	a		Ref to Down's syndrome being genetic AW (1) caused by an additional chromosome (1) number 21 (1) max 2	2	
5	b		Ref to Rick having lower than average mental ability AW/unusually round face/abnormally small chin/oversized tongue/almond shaped eyes/reduced life expectancy/possible heart disease/short stature. max 6	6	Allow: overly familiar hands – stubby fingers – webbed strong AW

Question 6

Question	Part	Sub Part	Marking Guidance	Mark	Comments
6	a		<p>Likely points will include – increased risk to her physical health due to toxic chemicals – especially as she is addicted – due to nicotine. May progress to more/stronger cigarettes increased change of coronary heart disease AW caused by increased blood pressure possible blocked arteries causing circulatory problems – may well result in heart attack – increased chance of stroke, early menopause, premature skin yellowing/wrinkling, develop respiratory problems, may get cancer of lung – mouth – throat from tar and other chemicals.</p> <p>Mark Ranges 0 marks No response worthy of credit</p> <p>1-3 marks. Answers cover 1-3 points on physical health, but are vague and not reasoned. Generally superficial, lacking structure and may be repetitive. There will be errors in spelling, punctuation and grammar.</p> <p>4-6 marks. Answers cover 4 or more effects on physical health with some reasoning of cause and effect. Answers are organised but lack precision and there may be errors in spelling, punctuation and grammar. There will be some use of appropriate terminology.</p> <p>7-9 marks. Answers cover at least 5 or more effects on physical health in good detail with sound reasoning. Answers are well structured, logical and demonstrate good spelling, punctuation and grammar. There is good use of appropriate terminology.</p>	9	Allow: Social aspect of smoke smells
6	b		<p>Ref to Martine may become addicted – highs/lows AW (1) increase use of drug(s) (1) progress to ‘harder’ drugs (1) cause organ damage (1) may overdose (1) allow may share needles (1) catch infections (1) damaging physical health (1) may be vulnerable at party – to accident/harm by others (1) max 7</p>	7	Allow: may cause mental effects AW

Question 7

Question	Part	Sub Part	Marking Guidance	Mark	Comments
7			<p>Likely points will include Eric’s stress causing physical effects – disturbed sleep, raised blood pressure/fatigue make him irritable – moody as emotional effects. May lose work skills become bored as intellectual effects. Eric’s loss of job – long term unemployment adding to the stress. Causing loss of self confidence, lowered self esteem (emotional) good friends support him, help feel good – but only occasionally, may be affected by poor personal hygiene as social effects. Lack of regular exercise – may cause weight gain, increase risks of weight related illness – heart disease, can survive on money – may feel good - little spare cash – to do what friends do.</p> <p>Mark Ranges 0 marks. No response worthy of credit</p> <p>1-4 marks. Answers cover 1-4 points mainly statements which are not reasoned, and are vague and/or repetitive. Effects not identified as physical, intellectual, emotional or social. Answers superficial, lack structure and there will be errors in spelling, punctuation and grammar.</p> <p>5-8 marks. Answers cover 5 or more points with some reasoning as to how they cause their effects. Some effects identified as physical, intellectual, emotional and/or social. Answers are organised but lack precision. There may be some use of appropriate terminology with some errors in spelling, punctuation and grammar.</p> <p>9-12 marks. Answers cover at least 6 points in good detail identifying physical, intellectual, emotional and social aspects as appropriate. Answers are well structured, logical and demonstrate good spelling, punctuation and grammar. There is good use of appropriate terminology.</p>	12	

Question 8

Question	Part	Sub Part	Marking Guidance	Mark	Comments
8			Ref to environmental pollution such as litter/attracts vermin. carry disease-causing organisms or microbes/may spread to food preparation surfaces – foods/ physical illness/noise pollution/raises stress levels/disturbs sleep AW/causes irritability/may cause hearing problems/physical/emotional effects. max 6	6	Allow: Air pollution if sourced