Question Number	Answer	Acceptable answers	Mark
1(a)(i)	substitution (1) 4.8 – 2.6 = 2.2 (%) evaluation (1) 2.2 x 600 000 = 1320 000	give full marks for correct answer, no working	**(2)**

Question Number	Answer	Acceptable answers	Mark
1(a)(ii)	Any **two** of the following points • (increase in people who are) overweight / have a high BMI / are obese (1) • (increased number of people) who do not take enough exercise (1) • increased calorie intake (1) • increase in elderly population (1)	(Increased number of people) who eat too much / eat the wrong types of food / eat too much fat / sugar / carbohydrates	**(2)**

Question Number	Answer	Acceptable answers	Mark
1(b)	An explanation including **two** of the following points • diet to lose weight (1) • reduce the amount of carbohydrates / glucose (1) • take more exercise so reduce blood glucose levels (1)	accept sugar for glucose	**(2)**

Question Number		Indicative Content	Mark
QWC	***1(c)**	An explanation linking some of the following points **When blood glucose is high** • insulin is released from the pancreas • the insulin converts the excess glucose • into glycogen • which is stored in the liver • blood glucose levels are reduced **When blood glucose levels are low** • glucagon is released from the pancreas • the glucagon coverts glycogen • from the liver • into glucose • blood glucose levels are raised This is a homeostatic mechanism which maintains the correct glucose levels in the bloodstream	**(6)**
Level	**0**	No rewardable content	
1	**1 - 2**	• a limited explanation of blood glucose regulation including the role of hormones, specific hormones do not need to be mentioned • the answer communicates ideas using simple language and uses limited scientific terminology • spelling, punctuation and grammar are used with limited accuracy	
2	**3 - 4**	• a simple explanation of blood glucose regulation including the role of insulin or glucagon and some of the body organs involved • the answer communicates ideas showing some evidence of clarity and organisation and uses scientific terminology appropriately • spelling, punctuation and grammar are used with some accuracy	
3	**5 - 6**	• a detailed explanation of blood glucose regulation including the role of the liver and pancreas and the methods of reducing and raising blood glucose concentrations • the answer communicates ideas clearly and coherently uses a range of scientific terminology accurately • spelling, punctuation and grammar are used with few errors	