

Surname	Centre Number	Candidate Number
Other Names		2



GCE AS/A level

1626/01

HEALTH AND SOCIAL CARE

Unit 6 – Understanding Common Illnesses, Diseases and Disorders

P.M. TUESDAY, 24 May 2011

1½ hours

For Examiner's use only	
1.	
2.	
3.	
4.	
Total	

INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen.

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Write your answers in the spaces provided in this booklet.

INFORMATION FOR CANDIDATES

Each question carries 25 marks.

The number of marks is given in brackets at the end of each question or part-question.

You are reminded of the need for good English and orderly, clear presentation in your answers. Assessment will take into account the quality of written communication used in your answers.



M A Y 1 1 1 6 2 6 0 1 0 1

Answer all questions in the spaces provided.

1. Aging causes many changes in the body, as these changes accumulate they can result in degenerative diseases or disorders.

(a) (i) Define the term disorder. [2]

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(ii) Explain the term degenerative as applied to diseases and disorders. [2]

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(b) (i) Describe how osteoporosis affects the structure of bones. [4]

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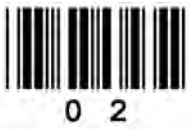
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(ii) Describe a diagnostic test for osteoporosis. [3]

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(iii) Explain how the menopause makes older women especially vulnerable to osteoporosis. [2]

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(iv) Describe one form of treatment for osteoporosis, and explain how it works. [2]

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(c) Increased life expectancy in the developed world is partly attributable to improvements in water treatment and sanitation.

(i) Describe the stages in drinking water treatment. [6]

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(ii) Explain why it is important to prevent drinking water sources becoming contaminated with sewage. [4]

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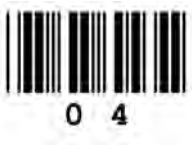
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2. Measles, mumps and rubella (MMR) is a triple vaccine for immunisation against the viral diseases, measles, mumps and rubella.

(a) (i) Describe the standard schedule for MMR vaccination in the UK. [3]

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(ii) Explain how vaccination provides long term immunity to an infectious disease. [3]

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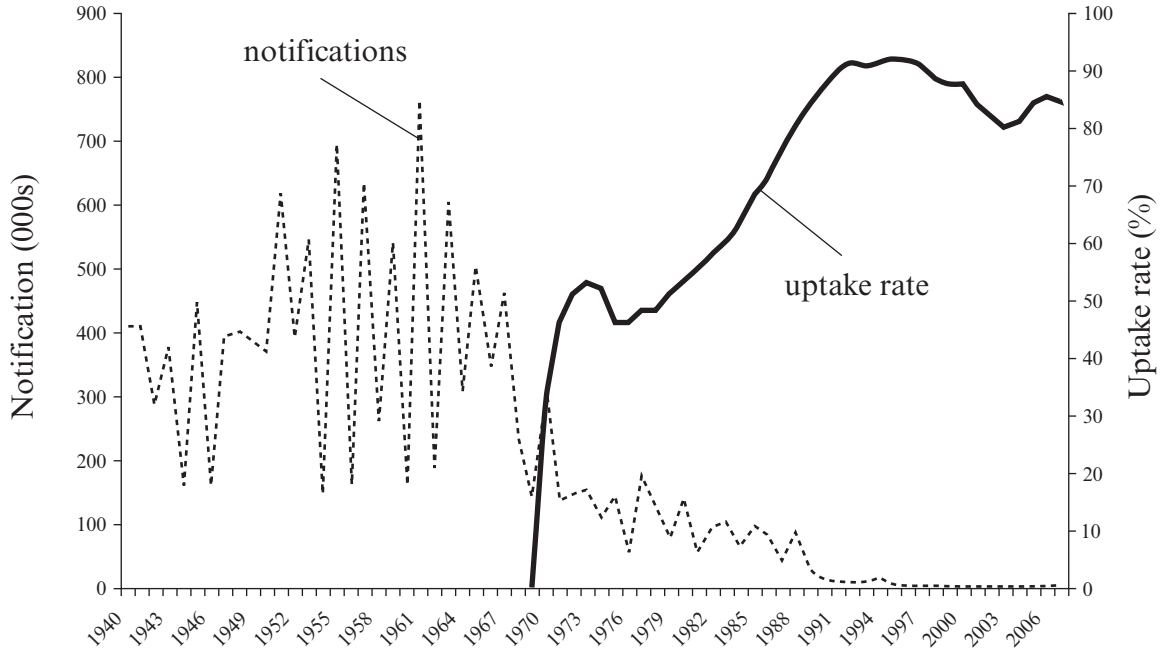
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(b) Study the chart below and answer the following questions.

Measles notifications and vaccination uptake, 1940-2007



Source: Health Protection Agency (HPA) epidemiological data
HPA Approved

(i) Describe the pattern and numbers of measles infections in the UK before vaccination became widely available around 1970. [4]

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(ii) Describe the pattern and numbers of measles infections after 1970. [4]

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(iii) Explain how the MMR vaccination programme could have been effective in reducing measles infection rates in the UK population. [2]

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(c) Outline the issues that may concern individuals about having vaccinations. [3]

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(d) Discuss how individuals refusing vaccination could affect the notification statistics for measles. [6]

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3. Blood pressure testing is a screening test applied to mature adults.

The result of a blood pressure reading is usually written down as follows:

$$\frac{120}{80}$$

(a) (i) Explain what each of these figures represents. [3]

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(ii) Explain how high blood pressure increases the risks associated with cardiovascular disease. [3]

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(b) Obesity is a risk factor in coronary artery disease, and is screened for throughout life using height/weight measurements.

(i) Describe how obesity is a risk factor for coronary artery disease. [3]

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(ii) Explain how height/weight measurements are used to calculate Body Mass Index (BMI). [2]

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(iii) Explain how the results of BMI is used to determine whether a person is obese. [2]

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- (iv) Discuss how the information obtained from blood pressure and height/weight screening can be used to intervene to reduce the risk of cardiovascular disease. [6]

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- (v) Evaluate the costs and benefits to society as a whole of using screening programmes to reduce the risk of cardiovascular disease. [6]

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4. (a) Bacteria such as Chlamydia or MRSA are micro-organisms which cause infectious diseases.

(i) Describe or draw a labelled diagram of the main features of a bacterial cell. [4]

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(ii) Describe four symptoms of either Chlamydia or MRSA. [4]

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(iii) Explain how Chlamydia or MRSA, is transferred between individuals. [2]

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(b) Chlamydia or MRSA may be “carried” by some individuals who show no symptoms.

- (i) Explain the problems that may be caused by “carrier” individuals for controlling transmission of **either** Chlamydia **or** MRSA. [3]

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- (ii) Evaluate a range of strategies that could be used to reduce transmission of either Chlamydia or MRSA by “carrier” individuals.

Your answer should include an assessment of their likely effectiveness in terms of practicality, cost and success. [12]

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