

General Certificate of Secondary Education
June 2007



HISTORY (SPECIFICATION A)
HISTORY (SPECIFICATION A) (SHORT COURSE)
Schools History Project
Paper 1 Medicine and Public Health Through Time

3041/6/1

Friday 8 June 2007 1.30 pm to 3.15 pm

For this paper you must have:

- a 12 page answer book.

Time allowed: 1 hour 45 minutes

Instructions

- Use blue or black ink or ball-point pen.
- Write the information required on the front of your answer book. The *Examining Body* for this paper is AQA. The *Paper Reference* is 3041/6/1.
- Answer **three** questions.
Answer **Question 1** from **Section A**, **one** question from **Section B** and **one** question from **Section C**.
- Do all rough work in your answer book. Cross through any work you do not want to be marked.

Information

- The maximum mark for this paper is 75.
- The marks for questions are shown in brackets.
- The sources in this question paper have been simplified to make them easier to understand.
- You are reminded of the need for good English and clear presentation in your answers. All questions should be answered in continuous prose. Quality of Written Communication will be assessed in all answers.

Advice

- You are advised to spend about 50 minutes on Section A, 20 minutes on Section B and 35 minutes on Section C.

SECTION A
CHANGES IN SURGERY IN THE NINETEENTH CENTURY

You **must** answer Question 1.

You are advised to spend about 50 minutes on this section.

Total for this question: 35 marks

- 1** Study **Sources A to D** and then answer all the questions which follow. In your answers you should refer to the sources by their letters.

Source A A view of the work of surgeons around 1800



A cartoon by Thomas Rowlandson published at the end of the eighteenth century. He drew many cartoons making fun of rich and famous people.

Source B An example of the use of anaesthetics

- A dentist who has recently had two teeth removed sent me a letter describing his experiences. Ether was used as an anaesthetic to remove the first tooth. It took several minutes for the ether to work and although the patient felt no pain, he did feel the crack as the tooth was removed. Some time later he had more toothache.
- 5 This time his dentist decided to use chloroform. He became unconscious in just a few seconds and felt nothing. He came round much more quickly than he had done from ether and within a few minutes was able to continue his own work as a dentist.

Written by James Simpson in 1847, when he was Professor of Midwifery at the University of Edinburgh.

Source C An interpretation of the importance of Joseph Lister

Ladies and gentlemen! We meet here today to remember a great event which happened a hundred years ago. That great event is the birth of Joseph Lister; a man who must be given a very high place amongst the great people of the world.

5 In the world's history, there have been great politicians, great generals and great religious leaders. Their work has increased the happiness and progress of the human race. But the effect of Lister's work is perhaps greater than that of any other person. We will never be able to calculate how much his antiseptic methods have prevented suffering and ill-health.

From a speech by Sir W Watson Cheyne in 1927. As a young man he had helped Lister with his operations.

Source D Another interpretation of the importance of Joseph Lister

5 Many surgeons soon lost their enthusiasm for Lister's carbolic acid method when they discovered that it was no better for stopping infection than keeping the wards clean using ordinary disinfectants. Lister refused to change his methods. Even in 1883, one of Lister's assistants described Lister as wearing 'an old frock coat stiff and shining with dried blood' when he carried out his operations.

10 Only once did Lister publish statistics to show the effectiveness of his use of carbolic acid. They were based on a very small sample. In 1869 he showed that the death rate after his operations in the hospital in Glasgow fell from 46 per cent to 15 per cent. Unfortunately for Lister, there was another survey of 200 operations which used only disinfectants to keep the wards clean. This survey showed only a 3 per cent death rate!

From a chapter called *Was Joseph Lister Mr Clean?* in a history book published in 2002.

- (a) What does **Source A** suggest about surgery around 1800? (5 marks)
- (b) How much can you learn from **Source B** about the development of anaesthetics in the nineteenth century?
Explain your answer using the evidence in **Source B and your own knowledge**. (6 marks)
- (c) **Source C** suggests that Joseph Lister's work led to great progress in surgery. **Source D** suggests it did not.
Why do you think these two interpretations disagree about the importance of Joseph Lister?
Explain your answer using **Sources C and D and your own knowledge**. (9 marks)
- (d) How safe had surgery become by the end of the nineteenth century?
You should use the evidence in **Sources A to D and your own knowledge** to answer this question. (15 marks)

Turn over ►

SECTION B**MEDICINE THROUGH TIME**

Answer **either** Question 2 **or** Question 3.

You are advised to spend about 20 minutes on this section.

EITHER

Total for this question: 15 marks

- 2 After the fall of the Roman Empire, medicine progressed in the Islamic Empire. Read **Source E** and then answer both the questions which follow.

Source E Rhazes (Al-Razi) writes about Galen

I am sad to oppose and criticise Galen, whose books I have studied so much. Indeed he is the teacher and I am the pupil. But even though I admire him, it should not stop me pointing out what is wrong in his theories of medicine. If he were still alive he would have congratulated me on what I am doing, because I feel deep in my heart that
5 Galen has chosen me to do this work.

From Rhazes' (Al-Razi's) own writings, AD 925

- (a) What does **Source E** tell you about the work of Rhazes (Al-Razi)? *(3 marks)*
- (b) By AD 500 the Roman Empire had fallen.
Why was there more progress in medicine in the Islamic Empire than in Christian Europe between AD 500 and AD 1000?
Support your answer with reasons and examples. *(12 marks)*

OR

Total for this question: 15 marks

- 3** The part played by chance in the development of medicine.
Read **Source F** and then answer both the questions which follow.

Source F A description of the discovery of penicillin

One of the most important medical advances in history began by chance. On the morning of 3 September 1928, Professor Alexander Fleming was tidying up his laboratory. He was sorting through a number of petri dishes used in his research. These had previously been coated with staphylococcus bacteria.

- 5** One of the dishes had mould on it. The mould was in the shape of a ring and the area around the ring did not have the staphylococcus bacteria. Fleming had a life-long interest in ways of killing off bacteria. He decided that the bacteria on the dish around the ring had been killed off by some substance that had come from the mould.

From the *History Learning* website, 2002

- (a) What does **Source F** tell you about the work of Alexander Fleming? (3 marks)
- (b) Chance was a factor in the development of penicillin.
Was chance the only factor which brought about medical development?
You may write about penicillin or any other medical development where chance played a part. (12 marks)

Turn over for the next question

Turn over ▶

SECTION C
PUBLIC HEALTH IN BRITAIN

Answer **either** Question 4 **or** Question 5.

You are advised to spend about 35 minutes on this section.

EITHER

Total for this question: 25 marks

- 4 Public health in Britain during the Roman period and during the later Middle Ages.
Study **Source G** and then answer all the questions which follow.

Source G A lavatory in Roman Britain



An artist's drawing based on archaeological evidence.

- (a) What can you learn from **Source G** about public health facilities in Roman Britain?
Explain your answer using the evidence in **Source G** and **your own knowledge**.
(5 marks)
- (b) Explain **two** reasons why lavatories and other public health facilities were built in Roman Britain.
(4 + 4 marks)
- (c) The Black Death broke out in 1348–1349, nearly a thousand years after the end of Roman Britain. It killed about half the population of Britain.
Does this mean that people did not care about public health in the later Middle Ages as much as they had cared about it in Roman times?
Support your answer with reasons and examples.
(12 marks)

OR

Total for this question: 25 marks

- 5 Public health in Britain during the hundred years from 1850 to 1950.
Study **Source H** and then answer all the questions which follow.

Source H ‘Father Thames introducing his children to the City of London’



This cartoon appeared in *Punch*, a magazine for the middle classes, in around 1850.
The three children are called Cholera, Scrofula and Diphtheria.

- (a) What can you learn from **Source H** about the state of public health in Britain around 1850?
Explain your answer using the evidence in **Source H** and **your own knowledge**.
(5 marks)
- (b) People like Edwin Chadwick, John Snow and Octavia Hill tried to improve public health before 1900.
Explain **two** reasons why they worked so hard to improve public health. (4 + 4 marks)
- (c) Why did people in Britain enjoy better public health after 1900 than before 1900?
Support your answer with reasons and examples. (12 marks)

END OF QUESTIONS

There are no questions printed on this page

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Question 1, Source D: J WALLER, *Fabulous Science*, 2002. By permission of Oxford University Press.

Question 5, Source H: C CULPIN, *Making Modern Britain*, Collins Educational, 1987. Reproduced by permission of Punch Cartoon Library.

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