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 two questions from Section A and one question from Section B.

Write your answers in the spaces provided in this booklet. If you run out of space, use the continuation page at the back of the booklet, and if this is not sufficient use supplementary sheets. Write your name at the top of each supplementary sheet, indicating clearly the number of the question you answer. Put the supplementary sheets inside this booklet.

INFORMATION FOR CANDIDATES

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

You are reminded that assessment will take into account the quality of written communication used in your answers that involve extended writing. These are the questions in Section B.

In addition, your ability to spell, punctuate and use grammar accurately will be assessed in your answer to your chosen question in Section B.
1. **This question is focused on developments in medical knowledge.** [20]
   
   (a) Describe the work of Andreas Vesalius in the sixteenth century. [5]
Look at these two sources about improvements in medical knowledge in the nineteenth century and answer the question that follows.

**Source A**

Pasteur found out that germs were responsible for making wine and beer go off. Germs could be removed by boiling and then cooling the liquid. This process is now called pasteurisation.

[From a history textbook]

**Source B**

Koch decided to stain germs with industrial dye, enabling him to photograph them under a microscope. Using this method he was able to prove that different germs caused different diseases.

[From an educational website]
(b) Explain why medical knowledge changed in the nineteenth century.

In your answer, you should use the information in the sources and your own knowledge to show the extent of change and the reasons for this.
(c) Why was the discovery of DNA a turning point in the development of medical knowledge in the twentieth century? [8]
2. This question is focused on changes in the prevention and treatment of disease. [20]

(a) Describe the work of Alexander Fleming in the twentieth century. [5]
Look at these two sources about changes in surgical methods between the medieval period and the sixteenth century and answer the question that follows.

**Source A**

![Image of a medieval medical textbook showing a head operation]

**Source B**

Paré ran out of the boiling oil which was used to seal wounds. This was very painful to the patient in any case. Instead, he made an ointment of egg yolk, turpentine and oil of roses. The following morning, to his amazement, the patients who had been treated with the ointment were in much less pain than those who had been treated with boiling oil.

![From a school history textbook]
(b) Explain why surgical methods had changed by the end of the sixteenth century. [7]

In your answer, you should use the information in the sources and your own knowledge to show the extent of change and the reasons for this.
Why was the work of Christian Barnard in the twentieth century a turning point in the treatment of disease?
3. This question is focused on developments in public health and patient care in Wales and England. [20]

(a) Describe the main features of the work of the NHS in the twentieth century. [5]
Look at these two sources about public health in the nineteenth century and answer the question that follows.

**Source A**

The houses have broken windows, patched up with rags and paper: every room has a different family in it, and sometimes two or three families. There is filth everywhere, an open gutter at the front and an open drain behind. Food slops and human waste are emptied from the windows into the street.

[From a contemporary account of London slums, 1839]

**Source B**

The 1875 Public Health Act ordered councils to make clean water available, as well as street lamps, drainage and sewerage. The same year the Artisans' Dwellings Act was also passed giving councils the power to buy up slums, knock them down easily and rebuild proper housing.

[From a history website]
(b) Explain why public health improved in the nineteenth century. [7]

In your answer, you should use the information in the sources and your own knowledge to show the extent of change and the reasons for this.
(c) Why did the Black Death have such a major impact in the fourteenth century? [8]

END OF QUESTION 3
SECTION B

Answer one question only from this section.

Marks for spelling, punctuation and the accurate use of grammar are allocated to this question. [3]

Either,

4. Have new developments in medical knowledge always led to improvements in health from the Middle Ages to the present day? [12]

In your answer you may wish to discuss the following:

The influence of Renaissance ideas
The contribution of individuals such as Andreas Vesalius
Advances in knowledge such as the discovery of the germ theory and any other relevant factors.

Or,

5. Have methods of prevention and treatment of disease always led to success from the Middle Ages to the present day? [12]

In your answer you may wish to discuss the following:

The use of traditional treatments and remedies
The contribution of individuals such as James Simpson
The development of modern surgical methods, including transplant surgery and any other relevant factors.

Or,

6. Have efforts to improve public health and patient care always had a positive effect on people's health from the Middle Ages to the present day? [12]

In your answer you may wish to discuss the following:

The effectiveness of methods of combatting the plague up to the seventeenth century
Improvements in nursing and patient care
The success of attempts to provide healthier housing and cleaner air in the twentieth century and any other relevant factors.

You may only answer one question from Section B.
Number of the question chosen in Section B: ________________________