Example answers plus commentaries

The following student responses are intended to illustrate how the mark scheme can be interpreted and how it is likely that students will respond to the questions, allowing the student and teacher to explore and reflect upon the mark scheme and how answers can be improved.
Specimen Paper 2 A/A: Britain: Health and the people: c1000 to the present day

Question 01

Study Source A.

How useful is Source A to a historian studying vaccination?

Explain your answer using Source A and your contextual knowledge.

[8 marks]

Mark scheme

Target

Analyse sources contemporary to the period (AO3a)

Evaluate sources and make substantiated judgements (AO3b)

In analysing and evaluating sources, candidates will draw on their contextual knowledge to question critically the content and provenance of the source (for example, the context of the time in which source was created, place, author’s situation, knowledge, beliefs, circumstances, access to information, purpose and audience).

Level 4: Complex evaluation of source with sustained judgement based on content and provenance

Extends Level 3.

Candidates may progress from a developed evaluation of the source by sustained, balanced judgements of the source supported by factual knowledge and understanding related to the enquiry point and the broader context of the thematic study.

For example, challenging its usefulness… as we now know Woodville’s patients died because of contaminated equipment and vaccination went on to become widely accepted and was a major cause of the fall in mortality in the late 19th century; but before vaccination became accepted it was treated with fear and deep mistrust.

Level 3: Developed evaluation of source based on content and/or provenance

Extends Level 2.

Candidates may progress from a simple evaluation of the source with extended reasoning supported by factual knowledge and understanding related to the enquiry point and the broader context of the thematic. This may evaluate utility either on the basis of content and/or provenance.

For example, it is useful because at the time it shows that Gillray is playing on people’s fear of a new treatment. Gillray may know that Woodville’s patients died and wants to discredit vaccination in favour of the inoculators.
Level 2  Simple evaluation of source based on content and/or provenance  3-4
Candidates may progress from a basic analysis of the source by reasoning supported with factual knowledge and understanding.
For example, it is useful because it shows that at this point in time people were frightened because they did not understand that vaccination was based on scientific observation and therefore could be trusted.

Level 1  Basic analysis of source  1-2
Answers may show understanding/support for the source, but the case is made by assertion/basic inference
Candidates identify basic features which are valid about the source related to the enquiry point, for example, it is useful because it shows at the time they thought cows would grow out of you if you were vaccinated.

Candidates either submit no evidence or fail to address the question  0
Responses
Student one

Source A shows society’s negative reaction to Edward Jenner’s discovery of the Smallpox vaccination. The cows sprouting from people’s bodies are a representation of the unnatural effects people believed they would develop if they got vaccinated. This is useful because it is a reminder that although the discovery is significant today, it was rejected by a lot of people around the time it was found. The origin of this source states that it was drawn in 1802 by James Gillray only three years after Jenner's discovery. As the vaccination was still relatively new in 1802 many people did not trust it, especially as Jenner had no way of explaining the effects of his work as germs had yet to be discovered. Therefore, the person drawing this may have set out for it to be portrayed negatively so that people may revert to more common treatments such as inoculation. This would stop many doctors going out of business as they weren’t familiar with Jenner’s practice and didn’t trust it.

The purpose of this source is to shine a negative light on Jenner’s vaccination so that people would not rely on his methods of treatment. At this time inoculation was something widely practiced by many doctors throughout Britain. This is useful as it can give us a further explanation as to why his discovery did not take off as quickly as we would presume. This being because if Jenner’s vaccination became popular enough, many doctors would lose money from performing inoculations, hence them spreading rumours such as those seen here. The source is a cartoon and this impacts on its utility as cartoons tend to be exaggerated and for comedic effect thus decreasing their utility to historians. They must be used in combination with a variety of other source types.

Commentary – level 4

The response shows complex evaluation of the source. Sustained judgment shown in use of specific contextual knowledge in the evaluation of the source’s content and provenance to make points about utility. This answer uses historical knowledge and the provenance to adduce the cartoonist’s purpose. It is complex thinking because it contextualises vaccination to the existing practice of inoculation. There is some generic comment on the general utility of types of sources (eg cartoons) and there appears to be some misunderstanding of how a source which is deliberately exaggerated and comic can still be useful to a historian. However, the response still shows complex thinking, and should be credited at level 4.
Student two

The source is useful because it shows how some people were afraid of Edward Jenner's theory of vaccination. The source shows cows emerging from people's heads, and it shows how frightened people were. For example, the woman being injected in the middle of the cartoon looks very afraid. This shows that many people saw Jenner's idea of giving cowpox to people in order to protect them against smallpox as unnatural, and would only lead to giving people more health problems.

The source is also useful because it shows that some people though that Jenner's ideas could kill people. For example, it says that Jenner was in dispute with William Woodville after some of his patient's died after he used Jenner's technique. This could be because Woodville didn't know what he was doing, so his patients died.

Commentary - level 3

The answer shows developed evaluation, using the content to show how it is useful for showing why some people were opposed to vaccination, and substantiating the explanation using relevant contextual knowledge. The answer is credited at level 3, because two aspects of utility are addressed, though only one evaluation is developed.
Question 02

Explain the significance of anaesthetics in the development of medicine.  

[8 marks]

Target

Explain and analyse historical events and periods studied using second-order concepts (AO2:6)

Demonstrate knowledge and understanding of the key features and characteristics of the period studied (AO1:2)

Level 4  Complex explanation of aspects of significance  7-8

Answer demonstrates specific knowledge and understanding that is relevant to the question.

Extends Level 3.

Candidates may progress from a developed explanation of significance by explaining the relationship between aspects of significance, for example over time, supported by factual knowledge and understanding.

For example, anaesthetics were significant in the 19th century as it meant that patients no longer suffered pain and died of shock. This enabled surgeons to begin to develop more complicated procedures. Today modern anaesthesia is significant as it uses a mixture of chemicals to produce gradual loss of pain and consciousness, thus modern anaesthetics allow brain surgery with consciousness, which in turn enables doctors to gain knowledge about the body.

Level 3  Developed explanation of aspects of significance  5-6

Answer demonstrates specific knowledge and understanding that is relevant to the question.

Extends Level 2.

Candidates may progress from a simple explanation of significance with developed reasoning considering two or more aspects of significance, supported by factual knowledge and understanding.

In addition to a Level 2 response, candidates make additional developed point(s).

For example, anaesthetics were also significant because they enabled more complex surgery such as operations on the eye to be carried out because the surgeons had more time to develop and perform more complicated surgery because the patients were unconscious.

For example, anaesthetics such as chloroform were easy for surgeons to handle and less explosive and inflammable than ether so they could be used during difficult labours, which meant that women did not have to suffer pain when giving birth.
Level 2 Simple explanation of one aspect of significance 3-4

Answer demonstrates specific knowledge and understanding that is relevant to the question.

Candidates may progress from a basic explanation of significance by simple reasoning of one of the identified aspects, supported by factual knowledge and understanding.

For example, anaesthetics were significant because they meant that since James Simpson started using chloroform in 1847, patients no longer were conscious during the operation, so they weren’t at risk of dying from shock of the pain.

Level 1 Basic explanation of aspect(s) of significance 1-2

Answer demonstrates basic knowledge and understanding that is relevant to the question.

Candidates identify aspect(s) of significance, which are relevant to the question. Explanation at this level is likely to be implicit or by assertion.

For example, patients under chloroform no longer suffered pain during operations.

Candidates either submit no evidence or fail to address the 0 question
Responses

Student one

In the 19th century anaesthetics were significant because even though they allowed surgeons to do more complex surgeries, they still brought new problems. This was because Simpson discovered how effective chloroform was in 1847, surgeons did not understand about infection. This meant that many patients had operations which infected them and they died from blood poisoning or hospital sickness. Chloroform also lead to deaths because surgeons did not understand how powerful it was, like when Hannah Greener died in 1848 for an operation to remove her toenail, which led to opposition against anaesthetics by people who thought they were more harm than good.

However, later on anaesthetics became accepted and significant for more positive reasons. After John Snow used chloroform to help Queen Victoria give birth in 1853, the reputation of anaesthetics began to grow and opposition faded away allowing anaesthetics to develop and become safer. For example, in the 21st century surgeons use a safe mixture of chemicals to produce gradual loss of pain and consciousness, which leads to better and quicker patient recovery and more complex operations. For instance, the most advanced modern anaesthetics allow brain surgery with the patient being conscious, like in the treatment of epilepsy.

Commentary – level 4

The answer explains and relates two different aspects of the significance. It explains the short term problems associated with the introduction of anaesthesia in the 19th century, supported with accurate knowledge and understanding. Complex thinking is shown in the substantiated explanation of how the significance of anaesthetics changes over time, with the long-term positive impact of anaesthetics explained and supported with examples in the second paragraph.
Anaesthetics was a very significant discovery in the 19th Century. During the Middle Ages and Renaissance, surgeons had tried various ways to numb pain. Opium and alcohol were used but with mixed success. The patients were still awake and could therefore feel pain so writhed around and made the surgery difficult and extremely dangerous. At the start of the 19th Century, ether was used as an anaesthetic which was an improvement on opium and alcohol. It was used a lot in dentistry but there was a significant drawback – it was highly flammable and with much surgery carried out with the use of candles, it could mean a serious fire risk. Also it irritated the patient’s throat and made them cough and gag.

James Simpson discovered chloroform by chance with his friends. This was very significant as chloroform knocks a patient out completely without the drawbacks of ether. It was a highly significant discovery as it meant that more complicated and longer procedures could be performed on a patient. It put patients to sleep so they were less likely to die from the shock of the pain. However, it needed the chloroform inhaler to be discovered by John Snow to ensure patients received the correct dose. Although patients were now asleep, anaesthetics did not overcome the issue of infection during surgery.

In conclusion I think that the development of anaesthetics in medicine was extremely significant. Anaesthetics (although not from chloroform) are used in modern day surgery and allow for complicated, lengthy surgery to be carried out without any pain felt by the patient.

Commentary – level 3
Developed thinking about the significance of anaesthetics in the development of medicine is shown, with more than one aspect of significance explained. For instance, the response shows how the discovery of chloroform by Simpson was an improvement on what went before, supported with knowledge and understanding.

The response attempts to explain the significance of anaesthetics over time. To progress, this requires further substantiation. For example, the significance of 19th century anaesthetics like ether requires further explanation. Similarly, the explanation of anaesthetics for modern day medicine requires further support or examples.
Question 03

Compare the Black Death in the Middle Ages with the cholera epidemics in the 19th century.

In what ways were they similar?

Explain your answer with reference to both epidemics

[8 marks]

Target Explain and analyse historical events and periods studied using second-order concepts (AO2:4)

Demonstrate knowledge and understanding of the key features and characteristics of the period studied (AO1:4)

Level 4 Complex explanation of similarities

Answer demonstrates a range of accurate and detailed knowledge and understanding that is relevant to the question

Extends Level 3.

Candidates may progress from a developed explanation of similarity by the explanation of the complexities of similarities arising from the broader historical context supported by factual knowledge and understanding.

For example, both Black Death and Cholera had consequences for society and those in power. In the late medieval period the landowning classes had to concede to the labouring class, wages and more freedom because their manual work was in demand. In the nineteenth century the aristocracy and middle classes had to improve conditions for the working class.

Level 3 Developed explanation of similarities

Answer demonstrates a range of accurate knowledge and understanding that is relevant to the question

Extends Level 2.

Candidates may progress from a simple explanation of similarity with developed reasoning considering two or more identified similarities, supported by factual knowledge and understanding.

In addition to a Level 2 response, candidates make additional developed point(s).

For example, both the Black Death and Cholera led to changes in the lives of those people who survived it. Cholera drew attention to the conditions in which many lived and contributed to better sanitation through legislation, whereas the wages of labourers in Medieval times increased in the following decades after the Black Death.

For example, in both times and epidemics people did not know
the real cause of the disease and had many theories. The Black Death was thought to be a punishment from God or the result of Jewish poisoning, Cholera was either caused by poison in the air – miasma or contagion – spread by touch. None of these theories was right.

Level 2 Simple explanation of one similarity

Answer demonstrates specific knowledge and understanding that is relevant to the question

Candidates may progress from a basic explanation of similarity by reasoning supported with factual knowledge and understanding which might be related to, for example, one of the identified similarities.

For example, no one knew at the time what really caused either epidemic. In Medieval times people thought the Black Death was a punishment from God, in the 19th century people thought that Cholera was caused by miasma.

Level 1 Basic explanation of similarity/similarities

Answer demonstrates basic knowledge and understanding that is relevant to the question.

Candidates identify similarity/similarities, which are relevant to the question. Explanation at this level is likely to be implicit or by assertion.

For example, both the Black Death and Cholera killed large numbers of people.

Candidates either submit no evidence or fail to address the question

0
Responses

Student one

The cities in both the 19th Century cholera epidemic and Medieval Black Death were extremely dirty. This dirt was the prime cause of both epidemics – dirty water being the cause of cholera and dirty streets attracting the rats that were infested with Black Death carrying fleas. However, with both diseases people didn’t know the true cause (not until John Snow made the link between cholera and dirty water). Instead for both diseases they believed in causes such as miasmas and God punishing people. This caused thousands of people to die in both epidemics.

Even though both epidemics caused a huge loss of life, there were some positive outcomes that improved people’s living and working conditions. Following the Black Death, surviving peasants were able to demand better rights and higher wages from the lords. This was because their labour was in demand due to so many peasants being killed by the Black Death, particularly in farming where peasants knew that the lords were desperate to get their harvests in. Similarly, following the cholera outbreak, the Government passed the first Public Health Act of 1848 which was then followed up by the improved 1875 Public Health Act. Both acts worked to improve the conditions of the poor, though everybody benefitted in the long run because they ended laissez-faire thinking and encouraged the government to take action in public health, leading to later developments like the founding of the NHS.

Commentary – level 4

The response analyses more than one similarity, comparing the causes and consequences of both events. Complex thinking is shown in the analysis of their similar consequences that link the explanation to the broader historical context, such the positive effects on the lives of peasants after the Black Death and increased government action after the outbreak of cholera.
Student two

One similarity was that both cases nobody noticed the link between dirt and disease as to why disease happened connected. In the Black Death many more people believed in supernatural causes and metaphysical evil, so the thought that the position of the planate or bad air/miasma could be the cause was much more believed than during the cholera epidemics in the 19th century. Similarly, people in the early 19th century blamed miasma and didn’t understand the importance of clean water. Pasteur’s germ’s theory was not published until 1861, meaning that people did not yet know why the cholera outbreak took place until the true cause of cholera was eventually discovered.

Another reason why Cholera and the Black Death are similar is because the government showed a laissez-faire attitude towards both diseases from the outbreak of both. Another reason why both diseases were similar is because both were extremely contagious. London was hit the most across Britain. Cholera killed over 21,000 people in Britain and across Britain, the Black Death killed around the same amount.

Commentary – level 3

The response shows developed reasoning, by explaining and substantiating a similarity relating to what people thought caused both diseases. The response also identifies other relevant similarities that remain undeveloped. To progress, the answer could expand upon the point about government attitudes to explain and substantiate how both diseases led to longer term government action in the broader historical context.
Question 04

Has religion been the main factor in the development of medicine in Britain since Medieval times?

Explain your answer with reference to religion and other factors.

Use a range of examples from across your study of Health and the people: c1000 to the present day.

[16 marks]

[SPaG: 4 marks]

Target
Explain and analyse historical events and periods studied using second-order concepts (AO2: 8)

Demonstrate knowledge and understanding of the key features and characteristics of the period studied (AO1:8)

Level 4
Complex explanation of stated factor and other factor(s) leading to a sustained judgement

Answer demonstrates a range of accurate and detailed knowledge and understanding that is relevant to the question

Answer demonstrates a complex, sustained line of reasoning which has a sharply-focused coherence and logical structure that is fully substantiated, with well-judged relevance.

Extends Level 3.

Candidates may progress from a developed explanation of factors by analysis of the relationship between factors supported by factual knowledge and understanding.

For example, in Medieval times, religious belief was a powerful factor determining medical treatments and understanding of illness, but over time the influence has diminished and scientific discoveries and the state have become more important. The role of the state has changed from one of changing public health infrastructure to communication and providing individuals with information about their health.

Level 3
Developed explanation of the stated factor and other factor(s)

Answer demonstrates a range of accurate knowledge and understanding that is relevant to the question

Answer demonstrates a developed, sustained line of reasoning which has coherence and logical structure; it is well substantiated, and with sustained, explicit relevance.

Extends Level 2.

Answers may suggest that one factor has greater merit.
Candidates may progress from a simple explanation of factors with extended reasoning supported by factual knowledge and understanding which might be related, for example, to the identified consequences.

For example, religion was an important factor because it helped people explain illness. Medieval Christians believed that God caused illness and prayer would make them better. The early hospitals were religious foundations and became centres for expertise. Religion has also hindered progress as science became more widely understood.

Governments have also brought in major changes that have changed a nation's health. The Liberal social reforms (1906–1911) and the NHS from 1948 improved the health of millions. This was done through legislation: governments have money from taxation so they can make changes.

**Level 2 Simple explanation of the stated factor or other factor(s)**

*Answer demonstrates specific knowledge and understanding that is relevant to the question.*

Answer demonstrates a simple, sustained line of reasoning which is coherent, structured, substantiated and explicitly relevant.

Candidates may progress from a basic explanation of factors by reasoning supported with factual knowledge and understanding.

For example, over time different factors have been more important. In the Medieval period religion explained illness and suggested treatments based on faith. Later on science explained and could prove the causes of illness based on observable evidence. Another factor has been changes in communication for example in the 16th century printing allowed new ideas to spread, such as *The fabric of the human body* in 1543.

**Level 1 Basic explanation of one or more factors**

*Answer demonstrates basic knowledge and understanding that is relevant to the question.*

Answer demonstrates a basic line of reasoning, which is coherent, structured with some substantiation; the relevance might be implicit.

Candidates recognise and provide a basic explanation which is relevant to one or more factor.

For example, candidates may offer a basic explanation stating that religion was important because in Medieval monasteries monks were herbalists who could heal the sick.
Candidates may offer a basic explanation of another factor, such as the government was important because it could pass laws that improved the public’s health.

Candidates either submit no evidence or fail to address the question 0
Response

Student one

At the beginning of the Middle Ages, religion hindered medical development as it was used to explain and treat illness. For example, people in Britain believed that God punished people with illness for living sinful lives, and that only God could cure illness and therefore prayers to God were offered in the hope of being relieved of disease. The Medieval Church offered a place for the sick to go and herbal remedies were given by monks and nuns in places like Fountains Abbey, Yorkshire, but the main focus was on prayer and receiving God’s forgiveness. The Church’s strong belief in the theories of Galen also hindered medicine as Galen’s ideas were wrong as they were based on animal dissection. The Church also banned human dissection and even punished critics like the C13th English scientific monk, Roger Bacon.

However, during the Renaissance the hold of the Catholic Church got less powerful as people began to challenge old ideas using new techniques and technology. For example, in the 16th Century Vesalius proved by dissection that Galen’s anatomy was wrong. Printing helped because Vesalius’ book came to England and was copied by Thomas Geminus. As the Church became less important in understanding disease, science and technology began to play a greater role. For example, Van Leeuwenhoek developed the microscope in the late 17th century he saw germs for the first time and men like John Hunter in the C18th showed more and more science in their approach to medicine, and surgery.

However, science and technology would have been meaningless if it hadn’t been for the role of individual geniuses using technology to further medical understanding. For example, Louis Pasteur’s swan-necked flask experiments convinced Lister that germs caused disease. But the flawed theory of spontaneous generation used by people like Charlton Bastian to explain germs was influential in Britain and it needed dedicated scientists like John Tyndall to win the argument. Similarly, the technology that was used for mass producing penicillin wouldn’t have mattered if it wasn’t for Florey and Chain’s insight. They saw Fleming’s discovery of penicillin in the 1920s and corrected his conclusions about its ability to destroy bacteria with good science.

Overall, religion made some important contributions to Public Health in the middle ages, because it started hospitals and cared for sick people but it held the understanding of disease and anatomy back because it wouldn't accept any ideas other than Galen’s. Science and technology was more important than religion as it they helped individuals to challenge old ideas and made later discoveries possible. For example, the discovery of the microscope made the Pasteur’s Germ Theory possible. However, without the insight and determination of individuals like Vesalius, Koch and Florey, new technology would not have been used to discover new ideas and new treatments about medicine.

Commentary – level 4

The response shows complex thinking related to change, showing the relationship between the different factors and substantiating an evaluation of relative importance related to the question. For example, the response shows how individuals interacted with technology in order to develop medicine. Supporting examples are detailed and span across the period.
Student two

Although religion was important I do not think it was the main factor in the development of medicine. Religion was an important because it gave people an explanation of illness. Medieval Christians believed that God caused illness and prayer would make them better. In the Islamic world Muslim medicine developed a large number of chemical cures. However, religion has held back medical progress more than it has helped. For example, Christianity supported the knowledge of Hippocrates and Galen for too long because of this any criticism of them was seen as heresy. So religion held back progress as a radical thinker like the life of the mediaeval monk and scientist, Roger Bacon, shows.

Governments have also played a big power and money to make big changes in people’s lives. For example, in Britain governments like the Liberal government from 1906 to 1911 brought in major social reforms – sickness benefit, old age pensions, and unemployment insurance. Later, the Labour government after 1945 introduced the National Health Service in 1948. This brought free healthcare to Britain. Governments make laws: governments have money from taxation so they can make changes.

Although governments can bring about changes to the health of thousands and understanding of what to do to improve health is provided by science and technology. Science has had the biggest influence on the development of medicine in Britain since Medieval times because it has found the way prevent and cure many diseases. It was a scientific approach that allowed Edward Jenner to prove that cowpox protected against smallpox. In the same way, Robert Koch helped to start the study of bacteria by providing the tools to identify which germs cause which diseases. Finally, the scientific work of Florey and Chain meant that by 1945 penicillin was being mass produced.

Religion was not as influential after the 17th century, so it is not the main factor. Governments had the power and money to bring about change and science that finds out what needs to be changed.

Commentary – level 3

This answer has a logical structure and considers the factor identified in the question and two other factors. It gives examples to support the influence of religion. In considering the factors of government and science and technology, the response shows a range of accurate knowledge and understanding that is relevant to the question. At the end of the answer the candidate arrives at a simple concluding statement that contains assertions about the three factors discussed. To progress and move to Level 4, this final evaluation requires more support and explanation.