Practice Question Set For GCSE
Subject : Biology
Paper-1 Topic: B3 Infection And Response

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Name of the Student:_____
Max. Marks : 17 Marks **Time : 17 Minutes**

Q1.

Read the passage about antibiotics.

> People do not always agree about the use of antibiotics in food production.
>
> If we put low doses of antibiotics in feed for animals such as cattle and sheep, it helps to produce high-quality, low-cost food. Antibiotics help to keep animals disease-free. They also help animals to grow. Animals get fatter quicker because they do not waste energy trying to overcome illness.
>
> The use of antibiotics in livestock feed means that there is a higher risk of antibiotic-resistant bacteria developing. The rapid reproduction of bacteria means there is always a chance that a population of bacteria will develop which is antibiotic-resistant. These could be dangerous to human health.

(a) *To gain full marks for this question you should write your ideas in good English. Put them into a sensible order and use the correct scientific words.*

Explain how a population of antibiotic-resistant bacteria might develop from non-resistant bacteria.

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(3)

(b) Do you think that farmers should be allowed to put low doses of antibiotics in animal feed? Explain the reasons for your answer.

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(2)
(Total 5 marks)

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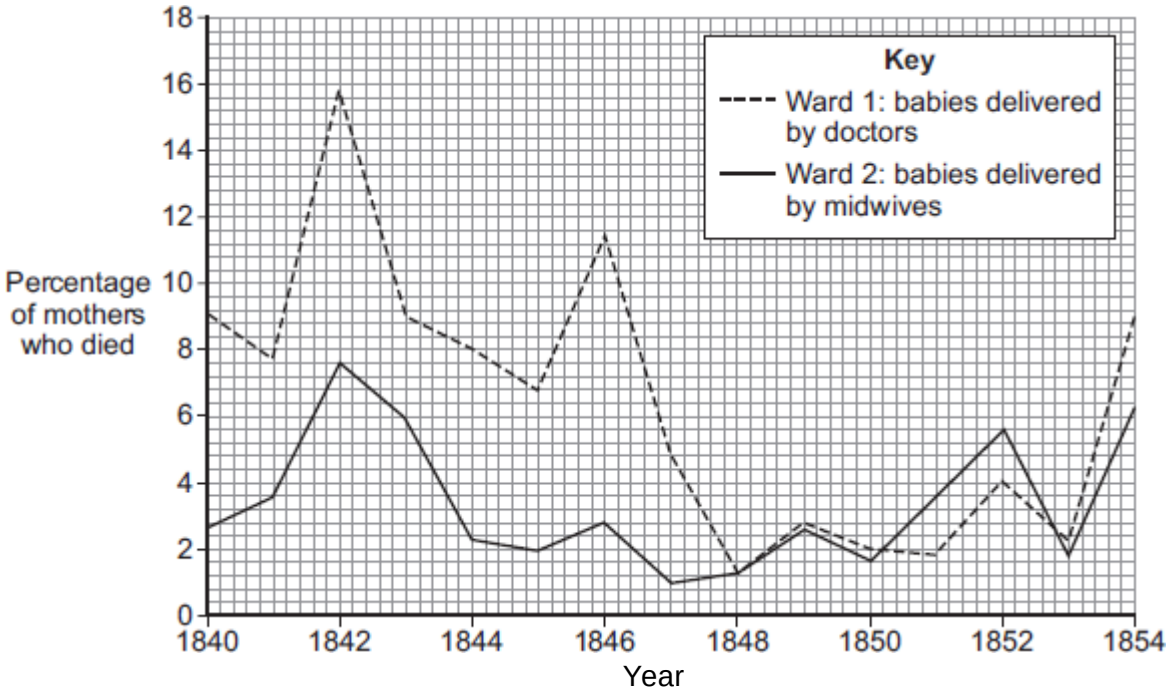
Q2.

In the 1800s, many women died in hospital of childbed fever after giving birth.

The graph shows the percentage of mothers who died from childbed fever each year in a hospital in Vienna.

Death rates are shown for two wards at the hospital.

- In **Ward 1** doctors delivered the babies. The doctors worked in many different wards. The doctors also carried out investigations on dead bodies.
- In **Ward 2** midwives delivered the babies. The midwives only worked in **Ward 2**.



(a) What conclusion can be made from the data between 1840 and 1846?

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Suggest a reason for this.

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(2)

(b) Ignaz Semmelweis was a doctor at the hospital. He was very worried about the number of women who died after child birth.

In 1847, Semmelweis introduced a new policy. This policy led to a reduction in the number of deaths.

(i) What policy did Semmelweis introduce?

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(2)

(ii) Suggest why this policy led to a reduction in the number of deaths.

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(1)
(Total 5 marks)

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Q3.

Many diseases are caused by viruses. Children are given vaccines to protect them against viral disease.

(a) Explain how vaccination protects a child against a viral disease.

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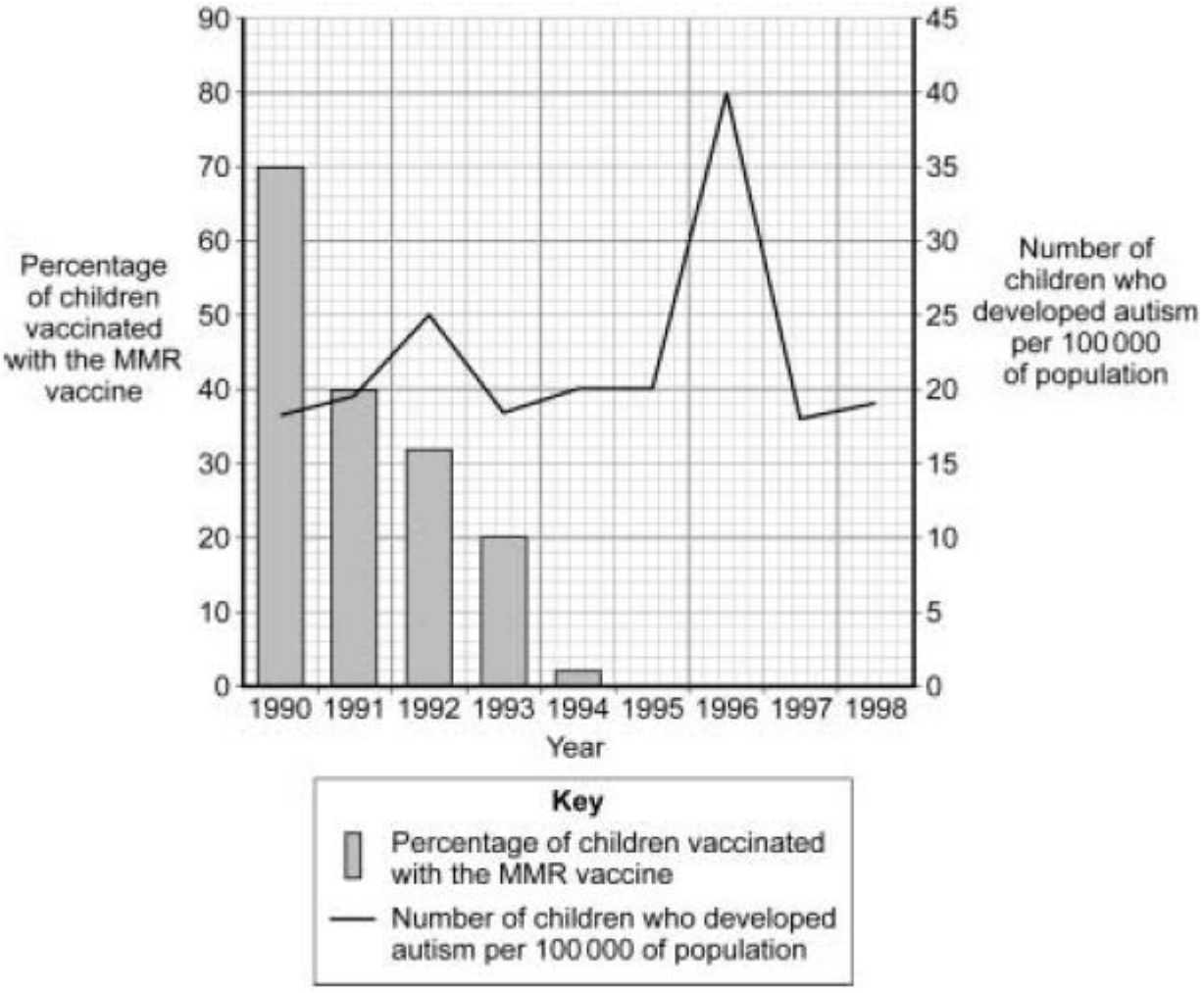
(3)

(b) In the 1990s many people thought that the MMR vaccine caused autism in some children. This is why the Japanese government stopped using the MMR vaccine.

The graph gives information about the percentage of Japanese children who developed autism during the 1990s.



The data in the graph support the view that there is **no** link between MMR vaccination and autism.

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Explain why.

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(4)

(Total 7 marks)

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