Answer key, quiz part 3

Q1. Why are new business models being explored for antibiotics?

2. Standard business models, which are based on increased profits with higher sales are often considered inappropriate for antibiotics because a high consumption will accelerate resistance development to the drug.

Antibiotics are different from other medicines in that usage will eventually result in that they lose their efficacy due to resistance development. Therefore, business models must not only provide financial incentives for the development of these drugs but also take into account the need for responsible use.

Q2. When was the newest antibiotic class available on the market discovered?

2. In 1987

Q3. It has turned out to be more difficult to find new antibiotics for Gram-negative bacteria than Gram-positive bacteria. Why is that?

3. Gram-negative have two bacterial membranes, which are difficult for the molecules to penetrate, whereas Gram-positive bacteria have only one membrane.

Q4. What does de-linkage mean in the context of business models for antibiotics?

1. It means that profits are not directly linked to the sales volumes or the price of the products.

Sharing responsibility, risks and rewards between several stakeholders could be part of a solution to promote a continuous stream of research and development of new antibiotics while at the same time ensuring restrictive use.