

Marks

Question 27 (8 marks)

Evaluate the contributions made by both Louis Pasteur and Robert Koch to our present understanding of the causes and possible prevention of infectious diseases.

8

Louis Pasteur is well known for creating Swan necked flasks that trapped pathogens in an S bend to avoid contaminating the broth in the flask with pathogens. They are known as Pasteur's flasks. This led to the understanding that pathogens are transported through air and by stopping air reaching the broth, or human, you could stop the broth from turning bad, or the human being infected as a cause of the pathogens.

- Robert Koch wrote Koch's postulates which outline the factors involved from for a disease being spread from ~~an~~ an infected site to a potential host. He deduced that in order to avoid inoculation one must avoid contact from the infected site, ~~or~~ person or animal. This includes a third party eg. A person touches an infected orange, this person touches a healthy orange with fingers that have traces of disease and inoculates healthy orange. This theory is the basis of modern, basic hygiene.