

CHAPTER –5 Microorganisms

Vaccine

When a disease-carrying microbe enters our healthy body, the body produces antibodies, body fights and kills them by these antibodies. The body also remembers how to fight the microbe if it enters again. The antibodies remain in the body for a long time and protect us from the disease causing microbes. The substance which is injected into the body to trigger the body to initiate this entire process is called a vaccine.



Evidence exists that the Chinese employed smallpox inoculation (or variolation, as such use of smallpox material was called) as early as 1000 CE. It was practiced in Africa and Turkey as well, before it spread to Europe and the Americas.

Edward Jenner's innovations, begun with his successful 1796 use of cowpox material to create immunity to smallpox, quickly made the practice widespread. His method underwent medical and technological changes over the next 200 years, and eventually resulted in the eradication of smallpox.

Louis Pasteur's 1885 rabies vaccine was the next to make an impact on human disease. And then, at the dawn of bacteriology, developments rapidly followed. Antitoxins and vaccines against diphtheria, tetanus, anthrax, cholera, plague, typhoid, tuberculosis, and more were developed through the 1930s.

Question 1:- Name one of disease caused by virus ?

Answers: small pox .polio ,aids

Question 2 Vaccine for small pox is discovered by

- I. Louis Pasteur
- II. Alexander Fleming
- III. Edward Jenner
- IV. John Mendal

Answer: option (III)

Question-3 following represent the correct measurements

Scientific assumptions	Correct observation found practically
antibodies remain in the body for a long time	Yes/No
Currently, no preventive HIV vaccines have been approved by Govt.	YES/NO

Answers-both answers are YES