Tutorial N°3: Microbiological Control Techniques

Exercise 1:

The bacteriological analysis of an infected urine sample gives the following results, knowing that 0.1 ml of each dilution was inoculated per Petri dish of culture medium.

Dilution	**10^{-1}**	**10^{-2}**	**10^{-3}**	**10^{-4}**
Test 1	**Inc.**	**490**	**95**	**2**
Test 2	**Inc.**	**501**	**110**	**19**
Test 3	**Inc.**	**520**	**113**	**5**

a) Define a colony.

b) Which dilution should be used to perform the enumeration?

c) Determine the number of bacteria per ml of urine.

d) The bacterial count on the same urine sample, using the direct method under a light microscope, gave 15 x 10^5 bacteria/ml. Compare the two results and interpret.