Examination of bacterial sensitivity to antibiotics

That antibiotics are an organic compounds formed in microorganisms during metabolism accidental compounds secondary and these compound do not have a specific function within the germ cell and have inhibition effect for the growth of microorganism other or lethel in low concentration and each has a special group of microorganisms that are affected by the when treatment.

The antibiotic is a substance produced from a microorganism is working to discourage the growth of another organism, and the most important producing bacteria to antibiotics is attributable to the class Actinomycetales, and the most important genus that producing antibiotics are *Streptomyces* and most widely used in the manufacture of antibiotics.

As for the industrially important antibiotics are made such as Tetracycline, Neomycin, Streptomycin, Cephalosporin, Penicillin, and Erythromycin.

Of the most important practical applications of antibiotics: -

1 - treatment of diseases in humans and animals
2 - treated in the plant
3 - used as an additional feed and poultry for the purpose of protection against bacterial diseases
4 - used in food preservation with some solutions
Effect of antibiotic on the microorganism
1 - Department works to stop the cell wall synthesis or prevent the process of exuding
2 - and works to block the process of protein synthesis Aagaf
3 - working to stop the synthesis or prevent the synthesis of nucleic acids that make up the code
4 - affect the cell division

Materials for the experiment
1 - Farm liquid bacteria *E.coli* or *Staphylococcus* farm for 24 hours.
2 - Petri dishes infused with nutrient agar, or any culture media can be used

for evaluation and testing
3 – hand drill Corky is a substance platinum sterilize with alcohol
4 - solution of the antibiotic was any concentration or five tablets of antibiotics

There are three ways to test, namely: -
1 – method of the tube
2 - method of digging in agar
3 – method of tablets antibiotics

Way of working: -

- method of dig or hole drilling in agar
  a - Petri dish inoculated with bacteria *E.coli* by the carrier or loop by using way of the mat or streaking way by using sterile swab .
  b - piercing sterility of Cork and work four holes in agar
  c - Transfer 0.02 ml of the antibiotic to the drilling
  d - Leave the dish for half an hour horizontal
  e - incubation upside down for 24-48 hours at a temperature 37 ° C
  f - a record notes from the measurement of diameters of inhibition
- way tablets antibiotics (as in figure)