## Exercise No. (6):

## Gram-negative bacteria (e.g. E. coli)

- Type of sample: Bacterial Culture

- Stain: Gram's staining technique

### - Microscopic characters:

\* Colour: Red.

\* Shape: Bacilli or rods.

\* Size: Small to Medium size.

\* Arrangement: No special arrangement

\* Spore: Absent

\* Special characters: colonies are circular, smooth, glistening, transparent, unpigmented.

#### - Procedures

- 1- Cover the film with crystal violet for 3-5min wash gently with water.
- 2- Add Gram's iodine and leave to act for 1m (fixative or mordant substance) then wash with water.
- 3- With the slide held at 45° angle add decolourizer; absolute ethyl alcohol, drop by drop till faint pink colour appear.
- 4- Rinse immediately with water to avoid decolourizeation.
- 5- Add the counter stain, diluted carbol fuchsin for 0.5 min. then wash with water.
- 6- Blot dry and examine under oil immersion lens.

# **Microscopic Appearance**

