

Section 3

Ans 1: Write a short note on drug erythromycin.
Erythromycin is a bacteriostatic antibiotic drug produced by a strain of *Saccharopolyspora erythraea*.

USE: Erythromycin is used to treat a wide variety of bacterial infections. It may also be used to prevent certain bacterial infections. It works by stopping growth of bacteria.

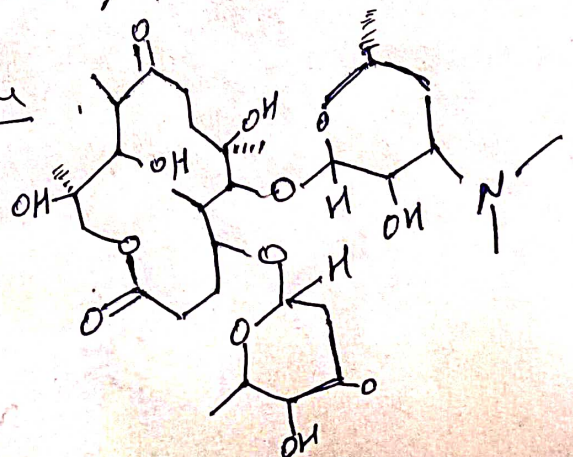
How to Use:
- Mouth.

Side Effects:

Nausea, vomiting, diarrhea, stomach pain.

Mechanism of action:
Erythromycin displays bacteriostatic activity or inhibits the growth of bacteria, especially at higher concentrations by binding to the 50S subunit of rRNA complex. Erythromycin interferes with aminoacyl translocation, preventing the transfer of the tRNA bound at the A site of the rRNA complex without the translocation.

Structure



Composition:

Erythromycin is primarily composed of four related compounds A, B, C and D. Each of the compounds can be present in varying amount and can differ by lot. Erythromycin A has been found to have the most antibacterial activity, followed by erythromycin B, erythromycin C and D are about half as active as erythromycin.

