CHAPTER V

CONCLUSION

From this research of " Formulation of Clindamycin Hydrochloride Gel" the following conclusions can be drawn:

1. The proper gelling agents for 1% w/w clindamycin hydrochloride gel were 18 % poloxamer 407, 2 % hydroxyethyl cellulose and 3 % hydroxypropyl methylcellulose. All gel preparations were clear, colorless, odourless and free from air bubble.

2. All gel preparations were physically stable after passing Freeze-Thaw cycles test, but drop in viscosity.

3. From the chemical stability point of view, all of the gel formulations were stable at ambient temperature during four months, at Joel-Davis condition and after passing Freeze-Thaw cycles.

4. The general rank order of clindamycin hydrochloride released through all types of membranes and receiving media, considering the diffusion coefficient as the release parameter was: poloxamer 407 > hydroxypropyl methylcellulose > hydroxyethyl cellulose.

5. Any pore membranes could be used for the comparison of drug release from formulations studied.

6. Both polar and nonpolar receiving media yielded different diffusion coefficient values. However, the comparison of drug release from gel preparations could be obtained since the rank order of diffusion coeficient were the same.