

Sem VII

Pharmaceutics - IV
(REVISED COURSE)

(2 Hours)

DK-5535

[Total Marks : 40

12/11/10

- N.B. :** (1) Question No. 1 is **compulsory**.
 (2) Attempt any **four** questions out of the remaining **six** questions.
 (3) **All** questions carry **equal** marks.

1. (a) What are pyrogens ? Discuss the principles involved in depyrogenation of components of parenteral products. **5**
- (b) Discuss drug solubility and partition coefficient with respect to design of sustained release dosage forms. **3**
2. State the advantages and limitations of sustained release dosage forms. Discuss in detail matrix systems for sustained release dosage forms. **8**
3. Discuss oxidative degradation in pharmaceuticals and methods for preventing/minimising such degradations. **8**
4. Discuss the layout for a typical injectable section for manufacture of an injection containing a thermolabile drug. Write on environmental control for such facility. **8**
5. Discuss the typical formulation ingredients for an eye drop formulation. Describe the methods for sterilisation of eye drops. **8**
6. (a) Elaborate on sterility testing for injectables. **5**
- (b) Write briefly on preservatives in ophthalmic preparations. **3**
7. Write short notes on any **two** :- **8**
 - (a) Arrhenius equation and its application
 - (b) Osmotically controlled drug delivery system
 - (c) Lens care products
 - (d) Processing of rubber closures.
