

# Rajiv Gandhi University of Health Sciences, Karnataka

First Year M. Pharm Degree Examination – MAY 2016

**Time: Three Hours**

**Max. Marks: 100 Marks**

## **ADVANCES IN DRUG DELIVERY SYSTEM (RS 2 & RS 3)**

**Q.P. CODE: 9284**

Your answers should be specific to the questions asked  
Draw neat, labeled diagrams wherever necessary.

### **LONG ESSAYS (Answer any Two)**

**2 x 20 = 40 Marks**

1. List out various controlled release oral drug delivery systems and explain influence of various physicochemical factors that must be, considered in their design.
2. Explain the advantages and disadvantages of sustained release formulations and discuss about diffusional systems.
3. Write various approaches for parenteral controlled release drug delivery systems and discuss about Nanoparticles.

### **SHORT ESSAYS (Answer any Five)**

**5 x 10 = 50 Marks**

4. Discuss about biodegradable and natural polymers.
5. Write about pulmonary drug delivery systems.
6. Explain the preparation and characterization of liposomes.
7. Describe the in vivo methods for buccal absorption.
8. Discuss about formulation aspects ocular controlled drug delivery systems.
9. Discuss about factors influencing permeation through skin.

### **SHORT NOTES**

**2 x 5 = 10 Marks**

10. Permeation enhancers
11. Copper Intra Uterine Devices

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