Rajiv Gandhi University of Health Sciences

First Semester M. Pharm Degree Examination - DEC-2017

[Time: 3 Hours] [Max. Marks: 75]

Pharmaceutical Formulation Development

Q.P. CODE: 5109

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

LONG ESSAY (Answer any Three) **3 X 10 = 30 Marks**

1. Describe preformulation studies carried out for development of a liquid dosage form.
2. Write a model Protocol for physical stability testing process.
3. Discuss the importance of IVIVC towards dissolution studies. Explain various techniques of IVIVC.
4. What is optimization? Describe briefly about simplex method and factorial design in optimization.

SHORT ESSAY (Answer any Nine) **9 X 5 = 45 Marks**

5. Give a brief overview on additives used in pharmaceutical industry.
6. How to design dissolution studies for controlled release formulation?
7. Discuss the different methods adopted to evaluate the particle size of a powder.
8. Write a note on solution stability.
9. Explain micellarsolubilisation with suitable examples.
10. Discuss the methods of drug-excipient compatibility studies.
11. Explain characterization of crystals using DSC and XRD.
12. Add a note on biorelevent media.
13. Discuss the nature of flow properties of pharmaceutical powders.
14. Factors influencing intrinsic dissolution studies

* * * * *