FirstRanker.com
Firstranker's choice

www.FirstRanker.com www.FirstRanker.com

Rajiv Gandhi University of Health Sciences

First Year M.Pharm Degree Examination – October 2010

[Time: 3 Hours] [Max. Marks: 100]

BULK DRUG TECHNOLOGY

(Revised Scheme 2)

Q.P. CODE : 9203

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

LONG ESSAY (Answer any TWO) **2 X 20 = 40 Marks**

1. Organize a material balance sheet based upon chemical and equipment sequence for the manufacturing of niacinamide. Assume that only the pure readily available reactants are entering into the balance according to chemical reaction

2. Explain the industrial production of phenytoin with respect to
   a) Reaction sequence and flow diagram
   b) Material of construction of equipments
   c) Purification procedure
   d) Possible effluents and its management

3. Design the equipments for the following
   a) molecular sieve-drying
   b) short path distillation
   c) continuous on-line filtration
   d) gas-liquid extraction

SHORT ESSAY (Answer any FIVE) **5 X 10 = 50 Marks**

4. Explain the concept, methodology, application and limitations of cell culture method of drug production

5. Write in detail the industrial production of Piperazine

6. Explain the statutory requirement in establishing a 'repacking unit'

7. What are the probable effluents from a plant manufacturing diclofenac? How will you deal with these effluents?

8. What safety measures will you advise against 'atmospheric contamination' from your plant?

9. Under what conditions are 'anti-dumping duties' levied for a bulk drug supplier

SHORT NOTES **2 X 5 = 10 Marks**

10. Write the concept and method of formulation of Unani system of medicine

11. Explain the applications of fermentation methods in bulk drug industry

* * * * *

FirstRanker.com
Firstranker's choice
www.FirstRanker.com