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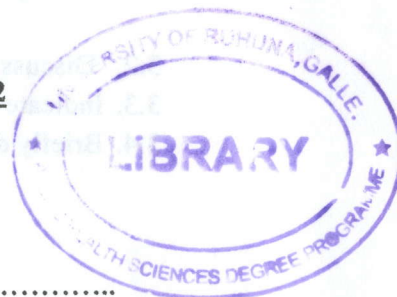


UNIVERSITY OF RUHUNA – FACULTY OF MEDICINE

ALLIED HEALTH SCIENCE DEGREE PROGRAMME

FIRST B PHARM . PART II EXAMINATION- MARCH 2012

PH 1242 PHARMACEUTICS I B



DATE : 20th March 2012

INDEX NO:.....

TIME: 9.00a.m.- 11.00 a.m

INSTRUCTIONS

- Answer all questions.
- No paper should be removed from the examination hall.
- Marks will be deducted for illegible hand writing.
- Do not use any correction fluids.
- Answer each question in a separate book.

Answer all questions

1. Briefly describe the following.
 - 1.1. Advantages and disadvantages of lyophilization. (25 marks)
 - 1.2. Differences between percolation and maceration. (25 marks)
 - 1.3. Theory of steam distillation. (25 marks)
 - 1.4. Crystallization process. (25 marks)

2.
 - 2.1. Define the term suspension. (20 marks)
 - 2.2. Describe the desirable properties of an ideal suspension. (30 marks)
 - 2.3. Discuss the factors that lead to instability of pharmaceutical suspension. (30 marks)
 - 2.4. Indicate the methods that are used to minimize the instability problems of a pharmaceutical suspension. (20 marks)

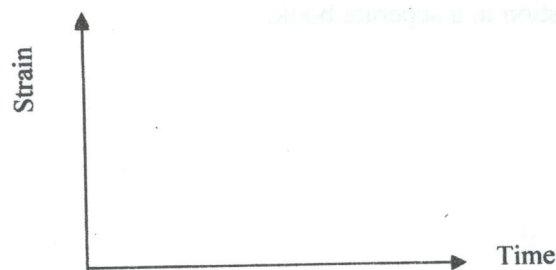
3.

- 3.1 Briefly describe the importance of surfactant as an ingredient in pharmaceuticals. (25 marks)
- 3.2. Discuss the effects of polymorphism in pharmaceutical preparations. (25 marks)
- 3.3. Indicate the methods in chemical decomposition of drug molecules. (25 marks)
- 3.4. Briefly describe the accelerated stability testing used in drug manufacturing process. (25 marks)

4.

- 4.1 Name the three flow types of Non-Newtonian fluids. (15 marks)
- 4.2. Briefly describe the characteristics of the above mentioned flow types. (45 marks)
- 4.3. Viscoelastic flow properties of 2% gelatin gel can be visualized when it is subjected to small constant stress.

- 4.3.1. Complete the following graph for the above gel. (10 marks)



- 4.3.2. Explain the different stages of the graph you have drawn indicating the reasons. (30 marks)