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UNIVERSITY OF JAFFNA, SRI LANKA
BACHELOR OF PHARMACY
SECOND YEAR SECOND SEMESTER EXAMINATION – January 2013
PHARMACEUTICAL TECHNOLOGY - PHAPT 2204 (Old Syllabus)

Date: 27.02.2013.

Time: 03 Hours

ANSWER ALLTWELVE QUESTIONS

Answer Part A and Part B in a separate answer books.

Part A

1.
 - 1.1. Enumerate the types of compressed tablets? (30 Marks)
 - 1.2. Explain the steps in the processes of tablet punching using 'Single-punch Hand tablet Machine'. (70 Marks)
2.
 - 2.1. List the different types of "powder BP". (20 Marks)
 - 2.2. Describe the different methods of sieving of powder and granules in drug preparation. (80 Marks)
3.
 - 3.1. What is 'Packaging' of drugs? (25 Marks)
 - 3.2. Explain the basic qualities which are required for packaging materials of drugs. (75 Marks)
4.
 - 4.1. Write an account on the factors affecting the size reduction in pharmaceutical substances. (50 Marks)
 - 4.2. Hammer Mill used in pharmaceutical industry. (50 Marks)
5.
 - 5.1. List the factors which influence the evaporation of substances. (40 Marks)
 - 5.2. Explain the pharmaceutical applications of evaporators. (60 Marks)
6.
 - 6.1. Explain the purpose of mixing in pharmaceutical production. (30 Marks)
 - 6.2. Explain the theory of semisolid mixing with its applications in the pharmaceutical industry. (70 Marks)
7.
 - 7.1. Classify the materials which are used in construction of pharmaceutical industry. (50 Marks)
 - 7.2. Describe the usage of stainless steel in the construction of pharmaceutical plant. (50 Marks)

Part B

- 8.
- 8.1. Define relative humidity". (30 Marks)
 - 8.2. List the different process of heat transfer mechanisms and explain their conditions. (70 Marks)
9. Draw a labeled diagram and explain the principle of vapour absorption refrigeration system. (100 Marks)
- 10.
- 10.1. How will you separate serum from blood by using centrifuge. (50 Marks)
 - 10.2. Explain the features of different types of rotors used in centrifuge. (50 Marks)
11. Draw labeled diagram of a fermenter and state the requirements for the anaerobic cultivation of bacterial cells at 42⁰ C. (100 Marks)
- 12.
- 12.1. Explain how the physical parameters effect on Reynold number in fluid dynamics. (40 Marks)
 - 12.2. Discuss the advantages and disadvantages of a rotary filter. (60 Marks)