## UNIVERSITY OF JAFFNA, SRI LANKA BACHELOR OF PHARMACY THIRD YEAR FIRST SEMESTER EXAMINATION – OCTOBER 2019 PHACE 3134 PHARMACEUTICS IV– PAPER II

Date: 05.11.2019 Time: 02 Hours

## Answer all eight questions.

<ol> <li>List five (05) reasons for coating of tablets.</li> <li>Explain how moisture content in granules or powders affects manufacturing of tablets.</li> </ol>	(30 marks) (70 marks)
<ol> <li>2.1 Describe the slugging method for the production of tablets.</li> <li>2.2 List the advantages of slugging method.</li> <li>2.3 Explain the role of disintegrants in the tablets.</li> </ol>	(30 marks) (20 marks) (50 marks)
<ul><li>3.</li><li>3.1 Describe the two (02) independent methods for filling of hard gelatin capsule</li><li>3.2 Explain how fill materials affect properties of soft gelatin capsule shells?</li></ul>	(50 marks) (20 marks)
<b>3.3</b> List five (05) pharmaceutical applications of microencapsulation process.	(30 marks)
<ul><li>4.</li><li>4.1 Explain the role of following in the ophthalmic solutions.</li></ul>	
4.1.1 Tonicity adjusting agents	(20 marks)
4.1.2 Buffering agents	(20 marks)
<b>4.2</b> Describe the different approaches used in the sustained delivery of parenteral preparations.	(60 marks)
<ul><li>5. Define pyrogens.</li></ul>	(10 marks)
5.2 Describe the two methods used to detect pyrogens in parenteral formulations	
3.2 Describe the trie life in the life in	(60 marks)
<b>5.3</b> Explain the Good Manufacturing Practice (GMP) guidelines that should be followed by personnel working in the aseptic area for parenteral production.	(30 marks)
6. Explain	
<ul><li>6.1 the role of propellants in the pressurized metered dose inhalers (pMDI).</li><li>6.2 how particle size affects the pulmonary delivery of drugs from pMDI ?</li></ul>	(40 marks) (60 marks)

7.	
<b>7.1</b> Define the following.	
7.1.1 Targeted drug delivery system	(15 marks)
<b>7.1.2</b> Liposomes	(15 marks)
<b>7.2</b> List the advantages of targeted drug delivery system.	(30 marks)
7.3 Explain the properties of drugs that are suitable for transdermal delivery.	(40 marks)
8. Write an account on	
8.1 ion activated drug delivery system.	(40 marks)
<b>8.2</b> sugar coating process of tablets.	(60 marks)