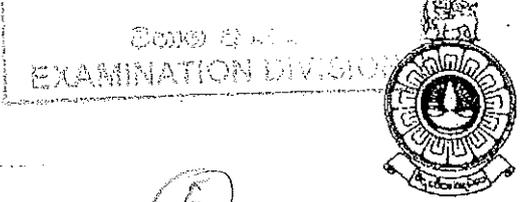


THE OPEN UNIVERSITY OF SRI LANKA  
FACULTY OF HEALTH SCIENCES  
DEPARTMENT OF PHARMACY  
ACADEMIC YEAR 2018/2019 – SEMESTER II  
BACHELOR OF PHARMACY HONOURS  
BPU4242 – PHARMACEUTICS IV – LEVEL 6  
FINAL EXAMINATION  
DURATION: THREE HOURS



DATE: 06<sup>TH</sup> NOVEMBER 2019

TIME: 9.30 A.M. – 12.30 P.M.

Part B – SAQs (40 marks)

There are two (04) Short Answer Questions (SAQs). Answer all.

1.

1.1. Define the term “Pre-formulation” related to dosage form designing. (02 marks)

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1.2. List two (02) techniques used to determine the melting point of substances. (02 marks)

- I. ....
- II. ....

1.3. Write two (02) methods used in determination of flow property of powder. (02 marks)

- I. ....
- II. ....

1.4. Briefly explain following tablet defects.

- a) Picking
- b) Double impression. (04 marks)

- a) .....
- b) .....



Index No: .....

2.

2.1. Write three (03) physical factors that influence the selection of construction materials in a manufacturing plant. (03 marks)

- I. ....
- II. ....
- III. ....

2.2. List two (02) non-metallic materials used for construction of manufacturing plants. (02 marks)

- I. ....
- II. ....

2.3. Briefly explain the “galvanic theory of corrosion”. (05 marks)

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Index No: .....

3.

3.1. State two (02) methods used to prepare ointments. (01 marks)

I. ....

II. ....

3.2. List two (02) types of dosing systems used in filling of hard gelatin capsules in industrial-scale. (02 marks)

I. ....

II. ....

3.3. Explain three (03) factors to be considered in the selection of equipment for manufacturing of emulsions. (03 marks)

I. ....

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II. ....

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III. ....

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3.4. Explain manufacturing procedure of suspensions using precipitation by organic solvent method. (04 marks)

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Index No: .....

4.

4.1. State two (02) methods used to prevent fire hazards in a pharmaceutical manufacturing plant. (02 marks)

- I. ....
- II. ....

4.2. List three (03) raw materials, which are required for manufacturing of lipsticks. (1.5 marks)

- I. ....
- II. ....
- III. ....

4.3. Briefly explain the manufacturing process of lipsticks. (3.5 marks)

- .....
- .....
- .....
- .....
- .....
- .....

4.4. Briefly explain three (03) process variations used in soap manufacturing. (03 marks)

- I. ....
- II. ....
- III. ....

Index No: .....

**Part C – SEQs (30 marks)**There are two (02) Structured Essay Questions (SEQs). **Answer all.**

1.

1.1. State four (04) types of packaging materials used in the pharmaceutical industry. (02 marks)

1.2. State three (03) types of ointment bases used in preparation of semisolid. (03 marks)

1.3. Briefly explain the steps involved in dry granulation process of tablet manufacturing. (05 marks)

1.4. Briefly explain three (03) types of incompatibilities find in dosage forms. (05 marks)

2.

2.1. List four (04) applications of pharmaceutical nanotechnology. (02 marks)

2.2. State three (03) parameters, which control rotary die process in soft gel formation. (03 marks)

2.3. Explain the preparation process of soft gel mass in rotary die process. (06 marks)

2.4. State four (04) important in-process tests to be carried out during manufacturing of soft gelatin capsules. (04 marks)