THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF PHARMACY
ACADEMIC YEAR 2018/2019 – SEMSETER II
BACHELOR OF PHARMACY HONOURS
FMU5504 – PHARMACEUTICAL TECHNOLOGY II– LEVEL 5
FINAL EXAMINATION
DURATION: THREE HOURS

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EXAMINATION DIVISION

DATE: 06TH NOVEMBER 2019 TIME: 9.30 A.M. – 12.30 P.M.

Part B – SAQs (20 marks)

There are two (02) 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) .....

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b) .....

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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: .....

Part C – SEQs (60 marks)

There are two (04) Structured Essay Questions (SEQs). **Answer all.**

1.

1.1. State four (04) types of packing 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 form. (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 a 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)

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3.

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

3.2. List two (02) types of dosing systems used in filling of hard gelatin capsules in industrial-scale. (03 marks)

3.3. Explain five (05) factors to be considered in the selection of equipment for manufacturing of emulsions. (05 marks)

3.4. Explain manufacturing procedure of suspensions using precipitation by organic solvent. method. (05 marks)

4.

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

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

4.3. Briefly explain the manufacturing process of lipsticks. (04 marks)

4.4. Discuss three (03) process variations used in soap manufacturing. (06 marks)