096

THE OPEN UNIVERSITY OF SRI LANKA
17 AUG 2021
EXAMINATION DIVISION

THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF PHARMACY
ACADEMIC YEAR 2019/2020 – SEMSETER II

BACHELOR OF PHARMACY HONOURS
FMU5504 – PHARMACEUTICAL TECHNOLOGY II – LEVEL 5
FINAL EXAMINATION
DURATION: THREE HOURS

DATE: 17TH AUGUST 2021 **TIME: 9.30 A.M. – 12.30 P.M.**

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Part B – SAQs (20 marks)

1.

1.1. Define the term "Pharmaceutical suspension". (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 properties of powder. (02 marks)

I. .....

II. .....

1.4. Briefly explain following tablet defects.

a) Picking (02 marks)

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b) Mottling (02 marks)

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2.

2.1. Write three (03) physical factors considered in selection of construction materials in a pharmaceutical manufacturing plant. (03 marks)

I. .....

II. .....

III. .....

2.2. List two (02) non-ferrous metals used in construction of pharmaceutical manufacturing plants. (02 marks)

I. .....

II. .....

2.3. Briefly explain "Dry theory of corrosion". (05 marks)

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Part C – SEQs (60 marks)

1.

1.1. State two (02) types of incompatibilities found in dosage forms. (02 marks)

1.2. State two (02) types of ointment bases used in preparation of semisolids. (02 marks)

1.3 Describe the manufacturing procedure of suspensions using dispersion method. (05 marks)

1.4. Explain the tableting cycle with aid of a suitable diagram. (06 marks)

2.

2.1. List four (04) applications of nanotechnology in the field of Pharmacy. (02 marks)

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

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

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

3.

3.1. State four (04) air pollutants that can affect on pharmaceutical manufacturing process. (02 marks)

3.2. Describe three (03) precautionary methods that should be taken to reduce air pollution. (06 marks)

3.3. Briefly describe four (04) prevention methods to reduce the metal corrosions. (04 marks)

3.4. Explain three (03) safety measures that could be taken to reduce the chemical hazards in a manufacturing plant. (03 marks)

4.

4.1. State two (02) factors to be considered when formulating a pharmaceutical suspension. (02 marks)

4.2. List three (03) raw materials, 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)