



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF PURE AND APPLIED SCIENCES

UNIVERSITY EXAMINATION FOR:

BACHELOR OF TECHNOLOGY IN APPLIED CHEMISTRY (INDUSTRIAL AND ANALYTICAL OPTION)

BTAC 13S SEPT 2013

ACH 4405 Industrial Pharmaceutics.

SPECIAL SUPPLEMENTARY EXAMINATION

SERIES:SEPT 2017

TIME:2 HOURS

DATE:

Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of FIVE questions. Attempt Question one compulsory and any other two question

Do not write on the question paper.

Paper two

QUESTION ONE

- a) Define the uses of the following pharmaceutical ingredients
- i. Coating agent
 - ii. Viscosity-increasing agent
 - iii. wetting agents
- b) Differentiate between :-
- i. Emulsion and suspension
 - ii. hard and soft capsules
- c) Explain autoclave process as a Sterilization method
- d) Differentiate between:-
- i. flocculated and deflocculated suspension
 - ii. Rheopectic and Thixotropic fluid
- e) State advantage of moist granulation over dry granulation
- 9 marks**
- 8 marks**
- 4 marks**
- 3 marks**
- 3 marks**
- 3 marks**

QUESTION TWO

- a) State Characteristic of potential flow **5 marks**
- b) Explain briefly Sterilization by filtration **5 marks**
- c) Describe the working principle of Capillary Viscometer **5 marks**
- d) Explain briefly how you will determine rate of tablet friability **5 Marks**

QUESTION THREE

- a) Define Dosage forms and outline the need for dosage form **6 marks**
- b) State disadvantages of Suppositories as dosage form **4 marks**
- c) Describe two methods of adjusting tonicity **3 marks**
- d) Define (i) Effervescent tablet (ii) Colloid **4 marks**
- e) Define different Mechanism of size reduction **3 marks**

QUESTION FOUR

- a) Differentiate between Sublingual and buccal tablets **4 marks**
- b) Discuss:-
 - i. Stability of Emulsion **4 marks**
 - ii. Different factors which affect Penetration of liquid in tablets **3 marks**
- c) Define Gargles **2 marks**
- d) State different properties suspension **4 marks**
- e) Outline procedures used to determine Disintegration test of tablets **3 marks**

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QUESTION FIVE

- A. Differentiate between Surfactant and Hydrophilic colloids as Emulsion Stabilizers **6 Marks**
- B. state Importance of size reduction **4 marks**
- C. Define
 - i. Parental preparations
 - ii. Aerosols
 - iii. different types of Otic Solutions **6 marks**
- D. Explain tyndallisation process **4 marks**